Request for Bids (RFB)

Former Great Northern Paper Mill Fuel Storage Area West Cleanup 50 Main Street, East Millinocket, Maine

USEPA FY2025 Brownfields Cleanup Grant (BF 4B00A01955)

August 13, 2026

Prepared For:

Town of East Millinocket
53 Main Street
East Millinocket, ME 04430

Prepared By:

TRC
249 Western Ave
Augusta, ME 04330

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Table 1: Bid Form

ATTACHMENTS

Attachment A	Record Documents
Attachment B	Technical Specifications
Attachment C	Contract Drawings Titled, “FY25 Brownfields Cleanup: Former Great Northern Paper Mill – Fuel Storage Area West”, prepared by TRC, dated July 2026
Attachment D	Sample Notice of Award and Contract and U.S. EPA Brownfields Cleanup Grant Cooperative Agreement Terms & Conditions
Attachment E	Davis-Bacon Act Contractor Guide
Attachment F	US Department of Labor: Davis-Bacon Act Wage Rates
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Attachment K	US EPA Green Remediation Policy Requirements

1.0 Instructions to Bidders/Contractors

1.1 Introduction

All bids must conform to the requirements of this Request for Bids (RFB) to be responsive and qualified. Bidder and Contractor shall refer interchangeably to the same entity throughout all bid documents, technical specifications, and contract drawings for the purposes of this RFB. This RFB consists of the following components:

- Section 1.0: Instructions to Bidders/Contractors;
- Section 2.0: Bid Requirements;
- Section 3.0: Site Background;
- Section 4.0: Scope of Work;
- Section 5.0: Project Logistics;
- Section 6.0: Contract Drawings;
- Section 7.0: Contract and Insurance Requirements;
- Section 8.0: Davis-Bacon Act (DBA) and Buy America, Building America (BABA) Requirements; and
- Section 9.0: USEPA Green Remediation Policy Requirements.

BIDDERs should be aware that the Scope of Services being requested by this RFB is limited to the demolition of select features identified within the portion of the former Great Northern Paper Mill in East Millinocket identified as the Fuel Storage Area West (the Site), any earthwork incidental to demolition, and the proper removal and disposal of any #6 fuel oil and potential hazardous waste that may be encountered. The BIDDER is bidding on a project that is being funded, wholly or in part, with a United States Environmental Protection Agency (USEPA) Brownfield Cleanup Grant awarded to the Town of East Millinocket. As a result, all work must comply with USEPA Brownfields requirements including Davis-Bacon Act (DBA) and prevailing wage rates (please see Section 8.0 for more information and details regarding compliance with DBA and other federal Brownfields requirements).

The Owner, the Town of East Millinocket, anticipates awarding the entire Base Bid but reserves the right to select individual bid alternates at its discretion if it's in the Owner's best interest. The Owner may award the project in its entirety, with or without the alternate bid item, to any qualified individual or firm deemed acceptable to the standards stated herein. The Owner reserves the right to reject any or all bids and to accept base bids and bid alternates it determines to be in its best interest.

If BIDDER is in doubt as to the true meaning of any part of the RFB, it shall promptly submit a request for information to the Engineer, TRC Environmental Corporation (TRC). Interpretations and clarifications will be extended to all BIDDERs as responses to the information requests. Clarifications requested by BIDDER must be in writing and received by the Engineer not less than 7 days before the date set for receipt of Bids. The reply will be in the form of an Addendum, a copy of which will be forwarded to known recipients. Addenda may also be issued during the bidding period as deemed advisable by the Owner.

1.2 Bid Instructions

BIDDER is required to familiarize itself with the project information contained in the RFB and Site background and existing conditions and will prepare a bid based on their independent assessment of the Site's condition and the associated project documents and plans. The BIDDER will review and analyze the information contained in this RFB and may request additional information and Site tours as needed to prepare the bid. The BIDDER will assume all costs associated with response to this RFB including pre-award meetings and Site walks.

A Pre-Bid Meeting/Site Tour is scheduled to be held on-Site at 2:00 PM local time on Wednesday, August 26, 2026, which is optional for all BIDDERS to attend. If a BIDDER would like to attend this Pre-Bid Meeting/Site Tour to familiarize themselves with site conditions, as a courtesy, the BIDDER shall give notice to the Engineer at least 48 hours prior to the scheduled Pre-Bid Meeting/Site Tour. Any material volumes contained in the RFB are provided for Owner's convenience and bid leveling purposes, and should not be relied upon by the BIDDER, who will be responsible for final volumes/quantities.

a. Communications During Bidding

All technical questions or requests for clarification shall be sent electronically to the Engineer:

Thomas N. Daniels, Jr. PE
Senior Engineer / Manager
TRC
249 Western Ave
Augusta, Maine 04330
Phone: 207-446-0149
E-mail: TDaniels@trccompanies.com

BIDDERs agree to keep all information relative to this RFB confidential and not disclose to a third party except as may be necessary to prepare a responsive bid.

All identified errors or conflicts in this RFB should promptly be brought to the attention of the Engineer. Immediately notify Engineer upon finding discrepancies or omissions in the Bid Documents.

b. Bid Submission Requirements

Bids shall be submitted as follows:

1. Bids must be submitted on the prescribed form. All blank spaces must be filled in with ink or typewritten, both in words and figures. Erasures or other changes must be explained or noted over the signature of the BIDDER.
2. The **Bid Offering** will be submitted electronically to Engineer, to the attention of:

   Thomas N. Daniels, Jr., PE
   Senior Technical Manager
   TRC
   E-mail: TDaniels@trccompanies.com

The Bid Offering will contain the cost of work, per the format listed in the Bid Form.

c. Bid Format and Contents

The Bidder shall submit its **Bid Offering** as a **Project Plan** in the following format in response to this RFB:

Section 1: Bid Form. This will include an executed copy of the Bid Form specifying the compensation for which BIDDER proposes to perform the Work. Bids shall include all labor, material, equipment, tax, incidentals, and all other indirect and direct costs (including subcontracts and third-party costs) required to perform the activities in accordance with this RFB. In addition, this section shall include the BIDDER's acknowledgment that it has received all addenda to this RFB.

Section 2: Contracts, Payment and Insurance, shall consist of, at a minimum:

Contracts: Each of the BIDDER's exceptions, if any, to the Town of East Millinocket's furnished Contract Terms and Conditions and all Attachments thereto (collectively, the Contract Documents), itemizing the reasons for such exception, and indicating specific alternative wording that the BIDDER would accept. If the BIDDER takes no exceptions to any of the Contract Documents, then the section shall so state. The Owner will evaluate any exceptions or limitations in evaluating competing bids. Exceptions or limitations which result in a significant reallocation of risk may result in a bid being determined to be non-responsive, and such a bid may be excluded from further consideration.

Payment: Provide a proposed or example payment form, to contain quantities/tasks budgeted, completed, in % and units, with rate/unit, and remaining, for each Scope of Work item, on a monthly basis. DBA and prevailing labor wage rates requirements are applicable for this project including Certified Payrolls (Form WH-347, included in **Attachment E**) to be furnished and submitted with the monthly payment form as part of the requisite backup documentation for reimbursement.

If BIDDER does not have an existing example payment form, BIDDER may refer to Form EJCDC-C620 (https://ejcdc.org/product/c-620-contractors-application-for-payment/) as an example. Basis will be Daily Project Reports, for which an example should be submitted in the bid, indicating equipment and personnel employed, visitors, weather, work completed, change order conditions, if any, and resolutions. Daily Project Reports will be signed by BIDDER's Field Team Leader and the Owner's on-Site representative on a daily basis. Weekly meetings shall be held with the Owner's on-Site Representative present to review the past week of work and next two weeks of work.

Insurance: The BIDDER shall assume responsibility and liability for all injuries to persons or damages to property, directly or indirectly due to, or arising out of, his operations under the Contract and shall be responsible for the proper care and protection of all work performed until completion and final acceptable by the Owner.

The BIDDER shall also indemnify and save harmless the Owner against any and all claims of whatever kind and nature due to, or arising out of, his breach or failure to perform any of the terms, conditions, or covenants of the Contract resulting from acceptance of their Bid.

The BIDDER shall furnish certificates of insurance from companies acceptable to the Owner. All Insurance Companies listed on a certificate must be licensed to do business in the State of Maine.

Contracts of insurance (covering all operations under this contract) shall be kept in force until the BIDDER's work is accepted by the Owner.

The BIDDER shall secure, pay for and maintain insurance as necessary to protect themselves against loss of owned or rented capital equipment and tools, with provision for waiver of subrogation against the Owner.

The BIDDER shall require a similar insurance to be taken out and maintained by each Subcontractor. The BIDDER shall be fully responsible for the acts and omissions of their Subcontractors and of persons employed either directly or indirectly by them, as they are for the acts and omissions of persons directly employed by them. Nothing contained in the Contract shall create any contractual relation between any Subcontractor and the Owner.

The forms to be submitted with the Bid Offering will include the following:

1. **Bid Forms in Excel Format, including Assumptions;**
2. **Proposed Bid Payment Form;**
3. **Sample Contract Documents, including Exceptions;**
4. **Statement of Insurance (General Liability, Auto);**
5. **Proof of Worker's Compensation Insurance;**
6. **Proof of Licensure as required in the RFB;**
7. **Certification Statement provided in Section 2.2 of the RFB;**
8. **Safety Questionnaire provided in Section 2.3 of the RFB.**

Section 3: Organization and Technical Approach, shall consist of, at a minimum:

An organizational chart or a comprehensive list and description outlining BIDDER's proposed office and field team for this particular job, showing lines of authority, accountability, responsibility, communication, and key positions identified by title and brief job description, as they relate to this Project, and also how quality assurance/quality control is provided at the corporate and project level.

The identification of the BIDDER's key personnel who will be assigned to the project, together with a brief resume for each person, indicating education, relevant experience and recent client references. (Include names of individual clients with current address and telephone number). Key personnel shall include, at a minimum, the Principal in Charge or Authorized Corporate Officer, Project Manager, Site Superintendent, On-Site Health and Safety Officer, Corporate Health and Safety Officer, and representative full-time operations personnel.

A Project Plan setting forth how the BIDDER proposes to perform the various tasks and meet the requirements outlined in this RFB, including detailed information on the manpower, subcontractors if any, vendors, key equipment, disposal facilities, and means and methods to be

used to complete activities. The BIDDER must include in the Project Plan an initial proposal outlining how the BIDDER plans to access the 750,000-gallon aboveground storage tank (AST) through the existing earthen berm, access and remove the contents of the 750,000-gallon AST, and properly and cost-effectively recycle and/or dispose of all #6 fuel oil removed from the site. Additional details of the tasks to be performed on site can be found in the technical specifications included as **Attachment B** and contract drawings included as **Attachment C**.

An explanation of BIDDER's subcontracting strategy, tasks to be subcontracted, if any; identification of each proposed subcontractor by name, an outline of the qualifications and the experience of each proposed subcontractor for its respective part of the Work.

Section 4: Health and Safety. Health and Safety is paramount to the successful completion of this project. The BIDDER is solely responsible for providing a safe work environment for its employees, BIDDERs, agents, authorized personnel, Town of East Millinocket personnel, authorized representatives, authorized consultants, visitors, and/or similar entities in accordance with all applicable federal, state and local laws and regulations during the completion of this scope of work.

All BIDDERs shall include the following Health and Safety documentation:

- As part of their bid response, BIDDERs shall provide documentation confirming that BIDDER's employees and BIDDERs have received required health and safety training in accordance with applicable federal, state and local laws and regulations;

- Upon award, the BIDDER will be required to submit a representative project-specific Health and Safety Plan (HASP), as outlined in the technical specifications (**Attachment B**), within a minimum of five (5) business days prior to mobilization for Owner records;

- Designate a field Site Health and Safety Officer (HSO) who will be responsible for ensuring that BIDDER's employees and BIDDERs comply with the BIDDER's Site-specific HASP and is implementing appropriate additional health and safety measures as required by on-Site activities. BIDDER shall lead a Project Activities/Daily Safety Meeting prior to work each day. The daily safety meetings should include safety topics that are relevant to the work being conducted.

Section 5: Schedule shall consist of a detailed list of activities to meet the RFB, in bar chart and/or Gantt format (latter preferred). Per Section 5.0, the scope of work under the Base Bid is planned to be substantially completed no later than January 15, 2027 and fully completed no later than January 22, 2027.

Section 6: Qualifications, shall consist of, at a minimum:

The BIDDER's qualifications, experience, and references for performing this work as well as any additional relevant information and assumptions. References for both the organization and the individuals named in Project Plan Section 3 (Organization and Technical Approach,) above should be submitted. Prior experience with the Town of East Millinocket should be noted.

It is the intention of the Owner to obtain bids only from BIDDERs with specialized experience in abatement of hazardous building materials, building demolition, and general earthwork. To be considered for this project the successful BIDDER shall meet the following conditions:

- The successful BIDDER shall have successfully completed projects of similar size and complexity in the last 5 years, involving the abatement and demolition of buildings with hazardous materials. Proof of compliance with this condition, along with references, shall be provided upon request. The Owner may request contacts of any previous projects of a BIDDER deemed necessary to effectively evaluate the bidder's qualifications.

- The successful BIDDER and/or its subcontractors shall possess an active license with the State of Maine as an Asbestos Abatement Contractor.

- The successful BIDDER shall have an onsite construction supervisor with at least 5 years' experience in the abatement and demolition of buildings containing hazardous materials.

- The successful BIDDER shall have an onsite Maine certified Asbestos Abatement Project Supervisor. The onsite construction supervisor may fill this role if they possess an active license with the State of Maine as an Asbestos Abatement Project Supervisor.

- In addition to a skilled construction supervisor, all personnel utilized in significant roles in this project shall be properly trained and experienced in the tasks involved in this project.

- All personnel utilized by the successful BIDDER to physically remove asbestos-containing material and debris must possess an active license with the State of Maine as an Asbestos Abatement Worker.

To receive full consideration, the BIDDER must submit literature and necessary details, when applicable, on the material or service he or she proposes to furnish in order that the Owner may have full information when analyzing the proposals. BIDDER shall review the Technical Specifications provided as **Attachment B** and Contract Drawings provided as **Attachment C** for additional qualifications and associated documentation.

f. Execution and Delivery of the Bid

Bids shall be executed and delivered as follows:

1. One (1) executed copy of the Bid Offering, shall be delivered at the time specified. The bid package can be submitted electronically as a PDF file by e-mail prior to the submittal deadline.

2. The bid shall contain acknowledgment of all Addenda received.

Bids shall remain open to acceptance and shall be irrevocable for a period of ninety (90) days after the Bid closing date.

Bids may be withdrawn personally or by written request at any time prior to the time specified for the opening. Bids may be modified in the same manner. Negligence on the part of the BIDDER in preparing the bid confers no right of withdrawal or modification of their bid after such bid has been opened.

g. Solicitation Schedule and Communications

Pre-Bid Site Walk — **An optional Pre-Bid Site Walk will be held as part of this bid on Wednesday, August 26, 2026, 2:00 pm local time**; as a courtesy, BIDDERs shall give notice to the Engineer of their interest to attend at least 48 hours prior to the scheduled Bid Walk. BIDDERs shall meet at the Site driveway entrance.

Questions and Answers — There will be an open "question" period between beginning with the issuance of this RFB on **Thursday, August 13, 2026, and ending at 5:00pm local time, Monday, August 31, 2026** where the Owner will receive and consolidate all inquiries submitted and will respond to questions in an Addendum to this RFB. During this inquiry period, direct all questions to the Engineer. The Owner and Engineer will issue a formal response to all questions to BIDDERs by **Thursday, September 3, 2026**.

Proposal Due Date — Proposals are due no later than **Wednesday, September 16, 2026, 5:00pm local time**. Please complete your proposal in sufficient time to reach the address presented via email no later than the date and time specified.

Award Notification — At Owner's discretion, BIDDERs may be requested to attend an on-Site meeting at BIDDER's cost, to review the content of their proposal, and to discuss any alternatives presented in their submittal. The Owner reserves the right to reject any or all bids and to accept base bids and bid alternates it determines to be in its best interest to do so. After acceptance by the Owner, the Owner will issue to the successful BIDDER, a letter of Contract Award and a Notice to Proceed (NTP). Bidder must be able to start work within ten (10) days of receipt of the NTP.

h. RFB Responsibility

Prior to submitting a Bid, the BIDDER must examine the RFB, including all Addenda which has been sent to the address given by such BIDDER. It is the responsibility of the BIDDER to thoroughly inform themselves, prior to Bidding, as to the existing conditions and limitations under which the work is to be performed. All Bids submitted shall include a sum to cover any and all items necessary to perform the Work as set forth in the RFB. No allowance will be made to any BIDDER because of his lack of full examination or knowledge of said documents. The BIDDER's submission of his Bid shall be conclusive evidence that he has made such an examination. Complete sets of the RFB must be used in preparing bids. The Owner assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of the RFB. The Owner in making copies of the RFB available on the above terms, does so only for the purpose of obtaining bids on the Work and do not confer or grant license for any other use.

END OF INSTRUCTIONS TO BIDDERS

2.0 Bid Requirements

2.1 Bid Form

The Base Bid Form – Proposed Fuel Storage Area Cleanup of the Former Great Northern Paper Mill (in spread sheet format, see **Table 1**), has been prepared with assumptions noted based on information and specifications as provided in the Scope of Work section of this Request for Proposals.

2.2 Certification Statement

The following Certification Statement is required to be submitted with the Bid:

DATE:_____

ATTN: **Mr. Thomas N. Daniels Jr., PE**
TRC

FOR: Former Great Northern Paper Mill Cleanup & Demolition Services, Town of East Millinocket, ME RFB

1. We, the undersigned, have thoroughly examined the subject RFB dated **August 13, 2026,** attachments, associated bid documents, and all addenda related thereto. We hereby submit our Bid in response to your invitation to Bid for this Project;
2. We verify that this Bid is submitted without qualification based upon the following criteria noted herein;
3. We accept the terms and conditions of the attached Town of East Millinocket Contract (the "AGREEMENT");
4. We have carefully examined the Site of the proposed Work and are fully informed and satisfied as to the existing conditions there, the character and requirements of the proposed Work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this BID, and we have carefully read and examined the Contract Drawings, Prior Site Reports, bid specification sections, scope of work, other project information, the attached AGREEMENT, and any other documents included in this RFB, and which, in entirety, constitute the Bid Documents, and know and understand the terms and provisions thereof;
5. We have examined the documents and materials contained in the RFB including designs, reports, studies and other information regarding the Site, the Work and the conditions and materials at the Site;
6. BIDDER has examined copies of all the Contract Documents and copies of any addenda issued.

   Receipt of Addenda Nos. _____ are acknowledged as received.

7. We have had the opportunity to seek clarifications of any omissions, ambiguities or conflicts in the RFB and clarification of any questions of this BIDDER;

8. We understand that the quantities of work tabulated in this BID or indicated in the RFB are only approximate and are subject to increase or decrease, including elimination of certain bid items as deemed necessary by the Owner or its Representative;
9. We agree that, if this BID is accepted we will contract with the Owner, via the AGREEMENT, so that Contract Documents will result, consisting of an AGREEMENT executed by Owner and BIDDER, the BID and RFB, and that we will perform the work and furnish the materials and equipment, and provide all labor, services, plant, machinery, apparatus, appliances, tools, supplies and other things required by the RFB in the manner and within the time therein prescribed and according to the requirements of the Owner as therein set forth, and that we will take in full payment therefore the lump sum or unit price applicable to each item of the Scope of Work as stated in the schedule below.

In compliance with your invitation for bids for the subject RFB, the undersigned BIDDER, represented by an officer of the firm, authorized to commit the resources of its organization, is a corporation or a partnership consisting of:

Full legal name of Firm: _____

Address of Firm: _____

By (signature): _____

By (printed name): _____

Title: _____

Has examined the Scope of Work and being fully advised as to the extent and character of the work to be performed, and the equipment to be furnished, hereby propose to furnish and pay for all labor, tools, material, plant and equipment necessary for the performance of the above-mentioned work.

In submitting this Bid, the BIDDER agrees to the following points:

The BIDDER will hold open the Bid for ninety (90) days from the date shown above.

The BIDDER will accomplish Work in accordance with the Scope of Work and within the timeframe outlined in the Scope of Work.

The BIDDER has provided a Project Plan and has included the following documents in its BID:

-- **Bid Forms in Excel Format, including Assumptions;**

-- **Proposed Bid Payment Form;**

-- **Signed Contract Documents, including Exceptions;**

-- **Statement of Insurance (General Liability, Auto);**

-- **Proof of Worker's Compensation Insurance;**

-- **Proof of Licensure as required in the RFB;**

-- **Certification Statement provided in Section 2.2;**

-- **Safety Questionnaire provided in Section 2.3.**

2.3 Bidder Pre-Qualification Safety Questionnaire

I. Bidder Information

BIDDER Name _____

Street Address _____

City, State, Zip Code _____

Telephone _____

Fax _____

Date Completed _____

II. Workers Compensation Insurance Information

Please obtain from your Insurance Agent or State Fund your Experience Modification Rate for the last three rating periods.

	Policy Year	Experience Modification Rate (EMR)
Most Recent Year	_____	_____
1 Year Previous	_____	_____
2 Years Previous	_____	_____

III. OSHA Information

A. Furnish a copy of your OSHA 300 Log for the last three (3) years.

Most Recent Year _____

1 Year Previous _____

2 Years Previous _____

B. Referencing your OSHA 300 Log for the last three (3) years. Complete the following:

	2024	2025	2026
Total number of injury/illness related fatalities	_____	_____	_____
Total number of injury/illness with lost workdays	_____	_____	_____
Total number of injury/illness without lost workdays	_____	_____	_____
Total hours worked	_____	_____	_____

END OF SAFETY QUESTIONARE

3.0 Site Background

3.1 Former Great Northern Paper Mill Site Description

The Former Great Northern Paper (GNP) Mill is located at 50 Main Street in East Millinocket, Maine. The approximate 215-acre mill site, identified by the Town of East Millinocket as Parcel Number 0001-2-00000-010, was originally developed in 1906, producing paper products as one of the region's largest employers, until its closure in 2014. The Town of East Millinocket acquired the former GNP Mill parcel on July 21, 2020.

During its operation, the GNP Mill complex comprised numerous buildings, a wood yard, a stormwater pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present.

The subject Site comprises approximately 5.5 acres on the northern portion of the GNP Mill property, the western portion of the Fuel Storage Area (Fuel Storage Area – West) which encompasses an existing 750,000-gallon fuel oil aboveground storage tank (AST) within an earthen berm, an associated heater house, rail car fuel unloading facilities, an approximately 5,000-gallon overflow AST, an oil pump house, subsurface piping/distribution utilities, and paved parking areas. Copies of Prior Site Reports and Record Documents are included as **Attachment A**.

3.2 Former Great Northern Paper Mill Fuel Storage Area Existing Conditions

Existing Site conditions of the Former Great Northern Paper Mill Fuel Storage Area were evaluated based on a survey and existing conditions plan completed and prepared by Stillwater Engineering, inc. dated December 20, 2024. Features identified on this plan were used by TRC to prepare the existing conditions plan provided in the Contract Drawings (**Attachment C**). Aboveground features included in the existing conditions plans were assessed during a site visit conducted by TRC on April 15, 2026. Observed conditions included prolonged lack of maintenance of the site features as well as the surrounding area. Additionally, the assessment confirmed that many of the site features are interconnected. As such, general demolition, removal of the aboveground storage tank (AST) and appurtenances, and earthwork, may be conducted concurrently or in the manner determined by the BIDDER to be the most efficient.

4.0 Scope of Work

The project objective for the Owner is to remove all #6 fuel oil from the site and demolish and remove all site features within the fuel storage area that have been decommissioned or determined to be no long necessary for the site. The demolition of site features and earthwork incidental to demolition may be, when practicable, conducted separately or concurrently, as determined by the BIDDER and confirmed by the Engineer. All features set for demolition are shown in the plan set titled "FY25 Brownfields Cleanup: Former Great Northern Paper Mill", prepared by TRC, dated July 2026 (**Attachment C**).

The facility has existing MDEP Site Location of Development Act (Site Law) permits. During a meeting with the MDEP on May 20, 2026, MDEP confirmed that the proposed demolition work qualifies under the Title 38, §488.7. Exemption for expansion at existing manufacturing facility. Therefore, Site Law permitting will be completed after-the-fact to demonstrate that requirements have been met. The BIDDER shall submit all submittals as specified in this RFB for proper documentation but will not be required to complete after-the-fact Site Law permitting. The BIDDER must acquire all other necessary permits, including but not limited to the MDEP Construction General Permit, prior to initiating the work.

All work must be performed in accordance with applicable local, state, and federal laws and regulations. BIDDER must prepare a work plan and schedule for the proposed fuel oil removal, 750,000-gallon AST access, and demolition work, based on the Prior Site Reports and Contract Drawings. The workplan and schedule shall be submitted to the Owner/Engineer for review prior to initiating the work.

A general description of the work to be performed under this contract shall include, but will not be limited to, the following construction operations:

1. Mobilization of all necessary equipment and personnel, temporary facilities, and temporary utilities necessary to conduct the work in a safe, efficient, and cost-effective manner in accordance with the requirements of the contracted scope of work.

2. Spraying water or other approved dust-suppression methods, if necessary, and covering soil stockpiles when not being actively managed.

3. Preparing material temporary storage and staging areas underlain by 20-mil high density polyethylene (HDPE) sheeting, covered by two-layers of 6-mil polyethylene sheeting, and surrounded by appropriate sediment barriers (e.g., compost filter sock), to prevent run-on and run-off from the stored materials.

4. Performing limited excavation of the earthen berm to provide access to the 750,000-gallon AST.

5. Accessing the contents of the AST in an approved and safe manner.

6. Removing the contents of the AST (estimated at approximately 70,000 gallons), overflow AST (estimated to be approximately 5,000 gallons), and biomass building concrete vault/AST (estimated to be approximately 10,000 gallons), as well as any additional remaining oil within piping, tank systems, and appurtenances, in a

manner determined by the BIDDER and approved by the Engineer, as well as arranging for proper disposal of the materials.

7. Demolition of the AST, overflow AST, and all features and appurtenances associated with them including, but not limited to all aboveground piping, underground piping planned for removal, fuel unloading drip pans, containment sumps, and manholes. Any capping and abandonment of underground piping must be completed in accordance with MDEP approvals and the Maine Chapter 691 Rules for Underground Oil Storage Facilities.

8. Demolition of site features not immediately related to the AST including, but not limited to fencing planned for removal, exterior stairs, rail spurs, the rail car fuel unloading rack, the fuel unloading building, the pump house, the hydrant house, decommissioned utilities, decommissioned utility poles, piping support structures, the concrete retaining wall, and post indicator valves. All demolition wastes shall be segregated and managed for proper disposal based on waste type (including asbestos waste, as applicable).

9. Removal, transportation, and proper disposal of the transformer located on the hydrant house holding a fluid that contains polychlorinated biphenyl (PCBs).

10. Complete removal, transport, and disposal of the building foundation components, including concrete slabs, masonry and granite block walls, brick elements, and associated rebar, with materials transported for proper, off-Site disposal.

11. Reestablishing security fencing where necessary to ensure proper site controls after Work has been completed.

11. Loading, hauling, segregation and temporarily stockpiling soils for on-site reuse and/or offsite disposal where required in accordance with the Soil Management Notes on the Contract Drawings. Soil excavated during construction shall be managed in accordance with the current Environmental Media Management Plan (EMMP) for the former GNP Mill.

14. Furnishing, installing, and compacting minimum backfill and any stockpiled soils. Regrading shall be performed only to the extent that it shall promote safe site/slope stabilization and proper stormwater drainage.

15. Restoring (topsoil and seeding) of disturbed areas, including the former footprint of the demolished buildings, ASTs, rail spurs, and other areas disturbed by construction activities.

16. Furnishing and installing temporary stabilization measures consisting of erosion control blankets if they are determined to be necessary.

17. Removing, disposing, and demobilizing of decontamination pad, erosion and sedimentation controls, onsite equipment, and temporary facilities following completion and final approvals of the work by Owner/Engineer.

5.0 Project Logistics

5.1 Project Contacts

- Project Owner: Town of East Millinocket, Maine
  - Michael Michaud, Town Selectboard Member
    207-746-3376 or at selectmen1@eastmillinocket.org
- Engineer: TRC, Thomas N. Daniels, Jr, PE
  - 207-446-0149 or at TDaniels@trccompanies.com

5.2 Project Sequencing

BIDDER shall coordinate sequencing of the demolition work schedule to accommodate for the abatement work schedule and vice versa.

5.3 Schedule

The preferred project schedule for the Base Bid is as follows:

- Request for Bids (RFB) out to BIDDERS: Thursday, August 13, 2026;
- BIDDERs to give notice to Engineer to attend (optional) Pre-Bid Meeting/Site Tour: Monday, August 24, 2026, 2:00 pm;
- Optional Pre-Bid Site Walk: Wednesday, August 26, 2026, 2:00 pm;
- Bid Questions Due: Monday, August 31, 2026, 5:00 pm;
- Responses to Bid Questions Issued: Thursday, September 3, 2026, 5:00 pm;
- Bid Submission Deadline: Wednesday, September 16, 2026, 5:00 pm;
- Award Notice/Contract/Notice to Proceed: On or about Wednesday, September 23, 2026;
- Site Mobilization: Monday, September 28, 2026;
- Substantial Completion of Work: Friday, January 15, 2027;
- Final Completion of Work: Friday, January 22, 2027; and
- Full Demobilization from Site: Friday, January 29, 2027.

5.4 Submittals

The BIDDER shall submit its Bid Offering as a Project Plan in the format outlined under Section 1.2(c) of this RFB. BIDDER shall provide a schedule as part of their bid. BIDDER shall also provide filled out copies of the Bid Form and the Bidder Pre-Qualification Safety Questionnaire. Following BIDDER's selection, the successful BIDDER shall provide written abatement, demolition, and work sequencing plans for coordination with the project team. The selected BIDDER may also be requested to provide documentation of requisite OSHA training for their employees prior to initiating demolition work.

5.5 Pre-Construction Activities

BIDDER personnel, equipment and materials will be mobilized on-Site in accordance with the project schedule and sequence of construction activities to perform Site preparation activities.

Site preparation activities will include the following:

- Prepare temporary waste accumulation areas including, but not limited to soil stockpiles, concrete, debris, waste storage containers (i.e., drums and/or roll-offs).
- Establish a secure construction perimeter through the use of temporary chain-link fencing, as specified in the bid specifications.

5.6 Site Access

As described in the technical specifications, the BIDDER is responsible for restricting access to the entire work area, including sidewalk and perimeter access. The BIDDER is responsible for coordinating site access and control with existing security personnel as necessary.

5.7 Storm Water and Erosion Controls

The awarded BIDDER shall take all necessary actions to ensure that activities do not result in noticeable erosion of soils during or after construction. Prior to intrusive activities, the awarded BIDDER shall implement the best management practices (BMPs) specified in the Contract Drawings to ensure Site stability throughout the project. During construction, the BIDDER shall implement erosion and stormwater controls and in general, protect Site features. Cationic treatment chemicals, such as polymers, flocculants, or other chemicals that contain an overall positive charge designed to reduce turbidity in stormwater, shall not be used unless authorized by MEDEP.

The completion of work is anticipated to result in greater than 1-acre of earth disturbance therefore the Project will be subject to the requirements of the 2025 Maine Construction General Permit (MCGP). The Contractor shall be considered the Operator of the Site during construction and shall submit a notice of intent (NOI) for coverage under the MCGP a minimum of 30-calendar days prior to commencing earth disturbing activities. A draft Stormwater Pollution Plan (SWPPP_ prepared in accordance with the applicable requirements of the MCGP will be prepared by the Engineer and submitted to the Contractor for review and acceptance prior to the deadline for NOI submittal.

5.8 Dust Controls

Dust controls will be critical to implementation of the demolition of the fuel storage area features. The awarded BIDDER shall take all necessary actions to ensure that activities do not result in fugitive dust emissions during or after construction. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads and work areas once a week or more frequently as needed with a water additive. The BIDDER shall monitor vehicles entering and exiting the project site for evidence of tracking mud onto public or private roadways outside the work area. If necessary, the BIDDER shall provide means for sweeping and cleaning road areas experiencing tracking. If off-site tracking occurs on public roads, they should be swept immediately and no less than once a week and prior to significant storm events. During the mud season it may be necessary to increase the size of stabilized construction entrances or provide a wheel washing station.

5.9 Site Traffic Management

Site vehicular traffic in and around the work zone shall be managed by the awarded BIDDER in an appropriate manner to maintain safe working conditions. If required, a vehicle decontamination

pad and clean stone roadway shall be installed by the BIDDER. Decontamination procedures shall be followed in accordance with the BIDDER's Health & Safety Plan.

5.10 Utilities

The BIDDER shall be responsible for supplying temporary electricity, water, heat (winter months), and sanitary facilities, if necessary, during cleanup and demolition activities.

Before starting the work, the BIDDER shall be solely responsible for making all necessary arrangements and for performing any necessary work involved in connection with the continuance or interruption of all public and private utilities or services under the jurisdiction of the utility companies or corporation, police department, fire department, and public works department such as electricity, low tension system, telephone, police signal, fire alarm, and without limiting the generality of the foregoing, including any system under this contract.

Should any damage occur to a utility which is to remain due to the BIDDER's operation, the BIDDER shall repair all damage to any such utility to the satisfaction of the Town of East Millinocket, at no expense to the Town of East Millinocket.

5.11 Cleanup

BIDDER shall be responsible for proper removal and disposal of all wastes generated under this project, including, but not limited to #6 fuel oil, asbestos waste, and solid wastes. All waste and debris resulting from the operations under this contract and all tools and apparatus are to be removed from the Site at the completion of the work and Site left clear and free of hazards, to the satisfaction of the Town of East Millinocket and TRC.

5.12 Owner Provided Facilities

No Owner provided facilities are applicable to this Scope of Work.

5.13 Security

The BIDDER is solely responsible for all activities within the defined project area upon initiation of mobilization activities. The construction area will be secured in advance of and at the end of each workday. The BIDDER will be required to use temporary fencing and/or barriers to accomplish this, as according to the fencing details provided on the Contract Drawings. It will be the BIDDER's responsibility to install the fencing/barriers during the construction activities. The BIDDER's on-Site personnel who are responsible for Site security will be identified in the BIDDER's Health & Safety Plan.

6.0 Contract Documents

As previously mentioned, TRC has prepared a civil engineering plan set, titled “FY25 Brownfields Cleanup: Former Great Northern Paper Mill”, prepared by TRC, dated July 2026. The drawings in the plan set are collectively referred to as the “Contract Drawings” within this RFB. The Contract Drawings contain additional notes, details, and project specifications that are essential for the BIDDER to develop an appropriate Project Plan that will execute the objectives outlined in Section 4.0 of this RFB.

The following sheets from the Contract Drawings shall be examined carefully by the BIDDER and are included as **Attachment C** of this RFB:

- Civil Cover Sheet (Sheet G1.00)
- General Notes & Legend (Sheet G1.01)
- Existing Conditions Plan (Sheet C1.00)
- Site Demolition Plan (Sheet C2.00)
- Site Restoration Plan (Sheet C2.01)
- Civil Construction Details (Sheet C3.00)
- Site Photos (Sheet C3.01)
- Erosion & Sedimentation Control Notes (Sheet C4.00)
- Erosion & Sedimentation Control Details (Sheet C4.01)
- Erosion & Sedimentation Control Plan (Sheet C4.02)

Technical Specifications for portions of the work have been prepared and are integral to the Contract Drawings and overall Contract Document package. These specifications shall be examined carefully by the BIDDER and are included as **Attachment B** of this RFB:

- 02060 – Demolition
- 02115 – Closure and Removal of Storage Tank Systems
- 02300 – Earthwork

7.0 Contract and Insurance Requirements

A sample Notice of Award and Contract for the Town of East Millinocket along with the US EPA Brownfields Cleanup Grant Terms & Conditions are included as **Attachment D**.

As previously noted in Section 1 of this RFB, each of the BIDDER's exceptions, if any, to the Town of East Millinocket's furnished Contract Terms & Conditions and all Attachments thereto (collectively, the Contract Documents), itemizing the reasons for such exception, and indicating specific alternative wording that the BIDDER would accept should be provided with the Project Plan. The Owner will evaluate any exceptions or limitations in evaluating competing bids. Exceptions or limitations which result in a significant reallocation of risk may result in a bid being determined to be non-responsive, and such a bid may be excluded from further consideration.

The BIDDER, at their own expense, shall maintain the following minimum insurance policies:

1. Workers' compensation insurance, occupational disease, employer's liability, disability benefit, and other similar employee benefit required by the State of Maine.
2. Commercial general liability insurance including BIDDER's protective and contractual liability with a combined single limit of $2,000,000 per occurrence and $5,000,000 aggregate for bodily injury, including death, and property damage.
3. Business comprehensive automobile liability and insurance protection for motor vehicles used by BIDDER either on or away from the Site with a combined single limit of $1,000,000 per occurrence for bodily injury, including death and property damage. The policy shall include coverage for all owned and hired motor vehicles.
4. Contractor pollution liability insurance with a combined single limit of $1,000,000 per occurrence and $2,000,000 aggregate.
5. Property insurance which provides coverage for all tools and equipment used in the work specified.
6. Professional liability insurance in the amount of $1,000,000 per claim and in the aggregate.
7. BIDDER shall furnish The Town of East Millinocket a certificate of insurance as evidence of the coverages.

8.0 Davis-Bacon Act (DBA) and Buy America, Build America (BABA) Act Requirements

The project is funded in whole or in part through a **U.S. Environmental Protection Agency (EPA) Brownfields Cleanup Subgrant**. Accordingly, all work performed under this contract shall comply with the requirements of the **Davis-Bacon Act (DBA)**. Under the DBA, any construction activity exceeding **$2,000** in value requires that all laborers and mechanics employed by the BIDDER and any subcontractors be compensated at wage rates no less than those determined by the **U.S. Department of Labor** to be prevailing for similar types of construction. Applicable Davis-Bacon requirements and supporting documentation are included in **Attachments E through J**. For this project, the selected BIDDER shall comply with the **General Building wage determinations** provided in **Attachment F**.

BIDDERS shall submit **certified payroll records (Form WH-347 – Attachment E)** documenting all hours worked on the project. Payroll submittals shall identify each employee by name, job classification, hours worked, and applicable rate of pay. Firm owners who personally perform work on the project shall be listed by name and classification (including designation as “owner”) and shall document daily and total hours worked; however, disclosure of owner compensation is not required. The BIDDER shall also coordinate with the **Town of East Millinocket and TRC** regarding the project schedule to allow for employee interviews as required.

Any construction materials (e.g., woven geotextile fabrics, marker layers, etc.) permanently installed must comply with federal BABA requirements.

9.0 US EPA Green Remediation Policy Requirements

The demolition and cleanup activities shall be implemented by the BIDDER in accordance with the U.S. EPA's Clean and Greener Policy for Contaminated Sites, Revised February 2012 (Green Remediation Principals). As much as feasible, the BIDDER and subcontractor(s) will use well maintained, appropriate-sized machinery, which may reduce fuel consumption and emissions. The remediation will be conducted in a manner which is ultimately protective of the air (via dust control and minimizing equipment emissions), adjacent water bodies (through stringent erosion and sedimentation control measures), and human receptors (via physical barriers and restrictions to prevent human contact with the impacted areas. Additional information pertaining to the Green Remediation Policy is provided in **Attachment K**.

Tables

Table 1 - Bid Form
Proposed Former Great Northern Paper Mill Fuel Storage Area Cleanup

Town of East Millinocket, Maine
Site Address: 50 Main Street, East Millinocket, ME
Prepared: 7/27/2026

Item	Base Bid Item Description	Quantity	Unit	Unit Rate	Total Cost ($)
1	Mobilization / demobilization (shall be no greater than 10% of total cost)	1	FMLS		
2	Install & maintain erosion & sediment controls	1	LS		
3	Closure and removal of storage tank systems, pumps, piping, and appurtenances.	1	LS		
4	Demolition	1	LS		
5	Earthwork	1	LS		
6	Removal and disposal of residual oil	85,000	GAL		
7	Management and disposal of excavated soil unsuitable for re-use	885	CY		
8	Excavation dewatering liquid disposal	330	GAL		
9	Site restoration (topsoil, seeding, and securing site)	1	LS		
Total Base Bid Amount (Items 1 through 9) in Figures: $					
Total Base Bid Amount (Items 1 through 9) in Words:					

NOTES:

FMLS = Fixed Maximum Lump Sum – Bidder may decrease, but cannot increase the indicated value of this Item, by crossing out the indicated value and substituting a

LS = lump sum

CY = cubic yard

BID ASSUMPTIONS: This Base Bid has been provided according to the following assumptions (attach extra pages as needed):		

Attachment A
Record Documents

DRAFT ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES AND CONCEPTUAL REMEDIAL ACTION PLAN

Fuel Storage Area – West
Former Great Northern Paper Mill
50 Main Street
East Millinocket, Maine 04430

MEDEP Site Remediation No. REM02048

June 18, 2026

TRC Project No. 636165

Prepared For:

The Town of East Millinocket
53 Main Street
East Millinocket, Maine 04430

EPA Brownfields Cleanup Grant
Cooperative Agreement No. 4B00A01955

Prepared By:

TRC Environmental Corporation
63 Marginal Way, 4th Floor
Portland, Maine 04101

Prepared by:
Zachary Bonin, PG
Project Manager/Geologist

Reviewed and Approved by:
Peter Sherr, PE
Brownfields Program Manager

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Figure 3: Site Layout Plan for Alternatives 2 and 3

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Appendix A: Remedial Alternatives Costing Tables for Alternative 2 & 3

1.0 INTRODUCTION

1.1 Background

TRC Environmental Corporation (TRC) has prepared this Analysis of Brownfields Cleanup Alternatives (ABCA) and Conceptual Remedial Action Plan (RAP) on behalf of the Town of East Millinocket (the "Town") for the Fuel Storage Area-West at the former Great Northern Paper (GNP) Mill, located at 50 Main Street in East Millinocket, Maine 04430 (the "Site"). The Fuel Storage Area-West comprises approximately 5.5 acres of the larger 215-acre GNP property, as further described in Section 1.2.

The larger GNP Mill site was previously entered into the Maine Department of Environmental Protection (MEDEP) Voluntary Response Action Program (VRAP), with a No Action Assurance (NAA) Letter generated in 2023 and has been assigned MEDEP Site Remediation Number REM02048.

This ABCA is designed to summarize potential cleanup alternatives for addressing the cleanup and management of impacted media identified during previous investigations. The Town of East Millinocket plans to clean up and redevelop the Fuel Storage Area-West cleanup site to protect human and environmental health and prepare the site for future redevelopment. The cleanup will be funded, in part, by a United States Environmental Protection Agency (EPA) Brownfields Cleanup Grant No. 4B00A01955.

This ABCA includes the following:

- Summary of the evaluation of potential Remedial Alternatives for the Site;
- Summary of the remedial options and evaluation criteria;
- Preliminary cost estimates;
- Evaluation of the degree of effectiveness of the Remedial Alternative;
- Evaluation for ease of implementation for each Remedial Alternative;
- Recommended selection of Remedial Alternative(s); and
- Discussion of the resiliency to extreme weather conditions for the Remedial Alternatives.

The primary purpose of the Conceptual RAP is to outline a structured approach for the selected or recommended cleanup alternative to address contamination at this Brownfields Site. The approach is designed to ensure the Site is safe for reuse and that actions are protective of human health and the environment.

Prior Environmental Site Assessments (ESAs) have been completed for the Site, as summarized in Section 2.0. The prior ESA activities identified comingled hazardous substance and petroleum contaminated soil and groundwater conditions in the Fuel Storage Area-West portion of the Site along with potential hazardous building materials, which must be properly managed during future site cleanup and redevelopment activities. As such, this ABCA/RAP presents a summary of potential cleanup alternatives for addressing management of Site soils and the abatement of hazardous building materials associated with the building structures.

1.2 Site Description

The Former Great Northern Paper (GNP) Mill is located at 50 Main Street in East Millinocket, Maine. The approximate 215-acre mill site, identified by the Town of East Millinocket as Parcel Number 0001-2-00000-010, was originally developed in 1906, producing paper products as one of the region's largest employers, until its closure in 2014. The Town of East Millinocket acquired the former GNP Mill parcel on July 21, 2020.

During its operation, the GNP Mill complex comprised numerous buildings, a wood yard, a stormwater pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present. To assist in the evaluation of environmental conditions at the former mill site, previous environmental investigations have divided the mill parcel into seven "Study Areas." The subject site comprises the western portion of Study Area 4 (Fuel Storage Area).

Comprising approximately 5.5 acres on the northern portion of the GNP Mill property, the western portion of the Fuel Storage Area (Fuel Storage Area – West) encompasses an existing 750,000-gallon fuel oil aboveground storage tank (AST) within an earthen berm, an associated heater house, rail car fuel unloading facilities, an approximately 5,000-gallon overflow AST, an oil pump house, subsurface piping/distribution utilities, and paved parking areas.

A Site Location Plan identifying the general Site vicinity is provided as **Figure 1**. A Site Layout Plan illustrating the general features and existing conditions of the Site is provided as **Figure 2**.

1.3 Historical Site Use

Construction of the fuel storage area occurred circa 1950, prior to which, this portion of the mill consisted of undeveloped land. Fuel storage operations within this area continued until mill operations ceased in 2014. In addition to the 750,000-gallon fuel oil AST located in the western portion of the Fuel Storage Area, a 2.4-million-gallon fuel oil AST was previously located in the eastern portion of the Fuel Storage Area.

No significant previous cleanup/remediation is known to have occurred in the western portion of the Fuel Storage Area. The fuel oil AST currently contains approximately 70,000 gallons of #6 fuel, which exhibits high sulfur content and impurities that prevent its direct recycling. An associated day-tank in the steam plant building to the south currently contains an estimated 10,000 gallons of this same #6 fuel oil.

1.4 Potential Future Site Use

The Town of East Millinocket sees the redevelopment of the GNP Mill as crucial to achieving its goals to revitalize its rural community, including the introduction of new or expanded job opportunities to entice employment and people back to the Town. To this end, the Town has developed a conceptual business and comprehensive plan for the former GNP Mill, which includes the assessment, cleanup, and redevelopment of the entire mill site in a phased approach for future commercial and light industrial use. The specific redevelopment of the Fuel Storage

Area includes the creation of a new main entrance to the future commercial/industrial business park with better access and safety.

Under this plan, the western portion of the Fuel Storage Area will see the remaining fuel storage equipment decommissioned to facilitate additional assessment of soil/groundwater underlying the equipment, as needed, and the removal and/or capping of soil contaminated with petroleum and co-mingled hazardous materials using a combination of both hardscapes (including paved parking areas and reconfigured access roads to improve access to the facility) and softscapes to enhance the appearance of the mill entrance. Dismantling and decommissioning the fuel storage equipment and regrading the site to remove the earthen berm will enhance the aesthetics of the East Millinocket downtown area and improve sightlines.

1.5 Purpose and Scope of Services

The purpose of this ABCA/RAP is to evaluate potential cleanup remedial action alternatives to be implemented at the Site during the proposed redevelopment and recommend/select a proposed remedial option(s), based on the findings of previous investigations and the proposed future use of the Site, as described in Section 1.4. The ABCA/RAP includes the following:

- Evaluation of the available remedial alternatives against evaluation criteria stated herein;
- Selection of the remedial alternative that best meets the objectives and considerations of the project and proposed end use; and
- Presentation of a general plan for implementation of the selected remedial alternative(s).

Prior to developing remedial alternatives for the Site, evaluation of the exposure scenarios to on-Site contaminants is also required, and presented herein, given the new proposed future use of the Site.

1.6 Objectives

Based on the information collected during previous environmental investigations (listed in Section 2.0), remedial options were considered for the Site and evaluated based on feasibility and ease of implementation, resiliency to extreme weather conditions, effectiveness and reliability, preliminary cost and cost effectiveness, schedule and time to implement the remedy and reach an endpoint of “no further action.”

Remedial consideration was given to the following goals:

- Eliminate or reduce potential or current exposure to receptors, to the extent possible;
- Eliminate or reduce the risk of exposure to potential future site users, site workers, and trespassers to the contamination identified based on the proposed future reuse of the Site; and
- Eliminate or reduce potential environmental impacts to off-site receptors, including environmental receptors.

The remedial alternatives evaluated in this ABCA include:

- Alternative 1: No Action.
- Alternative 2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil.
- Alternative 3: Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil.

Alternative 2 assumes that impacted soils will be excavated only, as necessary, to support Site redevelopment activities and implementation of MEDEP-approved engineered cover systems. Excavated contaminated soils will be managed on the mill site to the maximum extent practicable through in-place covering and onsite relocation and consolidation, followed by installation of MEDEP-approved engineered soil cover systems.

Alternative 3 also assumes that impacted soils will be excavated only, as necessary, to support Site redevelopment activities and implementation of a MEDEP-approved engineered cover systems. However, under this alternative, excess contaminated soils will be transported off-Site for disposal at a licensed disposal facility, with remaining soils left in place and subsequently covered by MEDEP-approved engineered cover systems. Additional details for Alternatives 2 and 3 are provided on **Figure 3** and in the preliminary cost estimates provided in **Appendix A**.

Section 2.0 of this report presents a summary of prior Site investigations completed to date and Section 3.0 presents the applicable cleanup goals. Sections 4.0 and 5.0 provide a detailed discussion of the evaluation criteria and evaluation of the proposed remedial alternatives for the identified impacted media. The recommended remedial alternatives are presented in Section 6.0.

2.0 PREVIOUS ENVIRONMENTAL INVESTIGATIONS

TRC reviewed the following previous environmental reports regarding the Site:

- Phase I Environmental Site Assessment (ESA) – prepared by S.W. Cole Engineering (S.W. Cole), dated January 22, 2001;
- Phase I ESA – prepared by TRC, dated September 2014;
- Phase I ESA – prepared by Ransom Consulting, Inc. (Ransom), dated June 2019;
- Phase I ESA – prepared by Ransom, dated February 2020;
- Targeted Brownfields Assessment Report, Great Northern Paper Mill Study Areas 3, 6, 7 – prepared by KGSNE JV II, LLC, dated November 2023;
- Leachate Pipeline Construction Memorandum – prepared by Sevee & Maher Engineers (SME), dated July 15, 2024;
- Environmental Media Management Plan (EMMP), Great Northern Paper, East Millinocket, Maine – prepared by Campbell Environmental Group (CEG), September 24, 2024;
- Site-Specific Quality Assurance Project Plan (SSQAPP) Addendum, East Millinocket-B (Revision 1) – prepared by TRC, dated September 26, 2024;
- Draft Limited Phase II ESA, - prepared by TRC, dated November 2024;
- ABCA – Preliminary Evaluation, Fuel Storage Area – West, Former Great Northern Paper Mill – prepared by the Town of East Millinocket, dated November 2024; and
- Limited Subsurface Investigation and Waste Characterization Summary Report – prepared by TRC, dated June 2025.

Findings specific to the Site from the above previous environmental investigations are summarized below:

Based on previous Phase I ESAs, numerous spill incidents have occurred in the Fuel Storage Area over the years. According to the 2001 Phase I ESA prepared by S.W. Cole, in 1991, following the identification of a significant release of #6 fuel oil caused by a leak in an underground fuel line, SME conducted a subsurface investigation of the area consisting of twenty test pits in two #6 oil outbreak areas, which identified extensive #6 oil impacts of the area including “dense layers of oil and apparently mobile #6 oil in the vicinity of the underground steam pipes and within fill layers.” Based on the investigation, SME estimated that up to 6,500 cubic yards of soil had potentially been impacted by #6 fuel oil; however, no subsequent remediation of this area was completed. During more recent Phase I ESAs performed by TRC and Ransom between 2014 and 2020, ongoing staining and releases of #6 oil were observed within the unlined earthen berm of the 750,000-gallon fuel oil AST and on the ground surface at the adjacent petroleum offloading area.

In October 2015, during trenching for installation of a leachate pipeline through the GNP Mill parcel, separate-phase petroleum product impacting soil and groundwater were encountered within an approximately 140-foot segment of the trench in the parking lot area located directly south of the 750,000-gallon fuel oil AST. MEDEP was notified of the observed conditions and ultimately approved the reuse of the petroleum-impacted soil as backfill around the leachate line and the controlled re-infiltration of the impacted groundwater to the trench.

Based on a Limited Phase II ESA completed by TRC in October 2024, comingled hazardous substances and petroleum were identified in soil and/or groundwater at the Site. Specifically, significant petroleum staining and petroleum-saturated soil is present in the vicinity of the fuel unloading area and within the earthen berm surrounding the 750,000-gallon AST. A total of four hand-excavated soil borings were advanced in the accessible areas around the earthen berm surrounding the 750,000-gallon fuel oil AST. In addition to verifying the presence of petroleum-saturated surficial soil through visual and olfactory observations, results of confirmatory soil sampling and laboratory analysis conducted within accessible areas of the earthen berm area surrounding the fuel oil AST indicate concentrations of arsenic above the MEDEP Remedial Action Guidelines (RAGs), as well as concentrations of lead and polycyclic aromatic hydrocarbons (PAHs) above background levels that are comingled with the identified petroleum contamination. In addition, tank piping/ equipment and associated structures are presumed to be lined and/or to contain asbestos-containing materials (ACM) and lead-based paint (LBP).

3.0 PROPOSED SITE REUSE AND CLEAN-UP GOALS

Prior environmental investigations completed for the Site identified comingled subsurface impacts including separate-phase petroleum product, elevated concentrations of petroleum compounds in soil and groundwater, and concentrations of arsenic above MEDEP RAGS and lead and PAHs above background levels in soil. These investigations are documented and described in Section 2.0. The proposed redevelopment requires management of hazardous building materials (HBMs) to facilitate demolition/dismantlement of the 750,000-gallon AST and associated structures and the management of impacted soil and/or groundwater during earthwork activities.

3.1 Site Use and Site Classification

The Town of East Millinocket intends to redevelop the Site for the purpose of revitalizing its rural community through its conceptual business and comprehensive plan for the former GNP mill, which includes assessment and cleanup activities. The Town anticipates the Site to be redeveloped to include access roads, parking lots, and softscape features to serve as a new main entrance to the mill with better access and safety features. Redeveloping this Brownfields Site with sustainable development goals will be beneficial for the Town of East Millinocket through the beneficial reuse of the industrial property.

3.2 Cleanup Oversight Responsibility

The cleanup will be overseen by the MEDEP VRAP and the EPA. The Town of East Millinocket has contracted with TRC as the cleanup Qualified Environmental Professional (QEP), responsible for ensuring the state and/or federal regulations are adhered to during the cleanup.

3.3 Applicable Cleanup Goals

The project area is anticipated to be reused for access roads, parking lots, and softscape features to serve as a new main entrance to the former mill, which is currently being redeveloped in a phased approach for commercial and light industrial reuse. Therefore, the MEDEP RAGs for the “Commercial Worker” exposure scenarios are applicable to surficial soils (0-2 feet below ground surface [bgs]) and the MEDEP RAGs for the “Construction Worker” exposure scenario are applicable to soils in the subsurface (greater than 2 feet bgs). Additionally, the 2024 MEDEP-approved EMMP must be followed during any earthwork activities related to cleanup and redevelopment of the Site.

Public water is supplied to the Site and vicinity. Therefore, the MEDEP RAGs for the “Construction Worker” exposure scenario would be the most applicable guidance standard for groundwater.

3.4 Risk Evaluation

A comprehensive risk assessment was not performed as part of the previous assessments. However, this section contains a brief overview of the findings for groundwater, soil, and HBMs and a discussion of potential environmental risks based on a comparison to standards.

3.4.1 Groundwater

No groundwater monitoring wells are currently located within the Fuel Storage Area – West site.

TRC reviewed public/private water supply wells within a 2,500-foot radius of the Site. There are no known private wells identified within the search radius. There are numerous domestic wells downgradient from the Site located within the vicinity of Medway, Maine. The closest domestic well (Well No. 20251) is approximately 7,300 feet (1.4 miles) downgradient of the Site, southeast along the Penobscot River. Due to the distance and direction of the wells, likely risks to these wells from the Site are minimal. In addition, public water is supplied to the Site and immediate vicinity.

The Site is outside of the 1,000-foot buffer for water supply wells and associated mapped source water protection areas.

Since groundwater extraction will not be conducted at the Site and will be a prohibited condition under the MEDEP VRAP, groundwater risks are limited, except for potential contact by construction and excavation workers.

3.4.2 Soil

As discussed in Section 2.0, comingled subsurface impacts were previously identified at the Site during prior investigations. Specifically, separate-phase petroleum product and concentrations of associated petroleum compounds were identified in soil and groundwater in several areas of the Fuel Storage Area-West cleanup site. Furthermore, soil screening/sampling performed as part of the prior 2024 Limited Phase II ESA/2025 Limited Subsurface Investigation and Waste Characterization Summary Report identified comingled subsurface soil impacts related to petroleum, PAHs, and metals above MEDEP RAGs.

The presence of these soil impacts could pose a potential risk to public health; therefore, risk reduction measures will need to be implemented during redevelopment, such as removal of soils and/or installation of soil cover systems to prevent or minimize exposure through direct contact to soils. In addition, a risk-based approach will need to be utilized including, but not limited to, a soil management plan (i.e., EMMP) and deed restrictions, if applicable.

3.4.3 Hazardous Building Materials

As summarized in prior sections, presumed ACM and LCP were identified in connection with the tank piping/equipment and associated structures (e.g., pipe insulation, gasket fittings, and paint coatings). Abatement and demolition activities could expose workers to these HBMs. Demolition workers should wear appropriate PPE and take proper safety measures when removing, abating, and/or disposing of these materials from the Site.

4.0 DESCRIPTION OF EVALUATION CRITERIA

Each remedial alternative was evaluated with respect to the comparative evaluation criteria, including effectiveness, short- and long-term reliability, difficulty of implementation, cost, potential risks, timeliness, non-pecuniary effects, and resiliency to extreme weather conditions.

The preliminary cost estimates presented in this document are based on soil quantities calculated utilizing proposed Site grades and the extent of soil contamination, as well as the extent of contamination from HBMs, as identified in previous Site investigations. It was prepared utilizing published data from RS Means, an engineering and construction cost estimating tool, as well as recent Maine Department of Transportation (MDOT) bid tabulations, and includes a 25% contingency to allow for the relative comparison of the identified alternatives. Actual cleanup costs and cost estimates from cleanup contractors may vary from these preliminary engineering costs estimates generated at this time and will ultimately be dependent on final remedial action plans, bid specifications, and competitive contractor bids/quotes to be obtained in the future as part of future cleanup and redevelopment planning activities.

4.1 Identification and Initial Screening of Remedial Technologies

No Action

No Action assumes no additional efforts are undertaken to eliminate potential future exposures to accessible surficial and subsurface soil contaminant impacts at the Site. This alternative would not remove contamination and would not reduce, mitigate, or eliminate compounds identified in the soil. In addition, this alternative would not address the presence of HBMs associated with the tank and related equipment/structures. Therefore, the potential exposure to human health and the environment from impacted soils would remain at the Site. This alternative is not protective of human health and the environment. This alternative will not achieve a “No Further Action” criteria from the MEDEP and will not meet the requirements of VRAP and a Certificate of Completion. However, this alternative will continue to be evaluated as a remedial alternative in this analysis.

Declaration of Environmental Covenant (DEC) / Institutional Controls

Institutional controls establish restrictions on the use of a site that would otherwise result in exposure to the contaminants of concern that remain. This alternative would not be selected alone because it does not fully address existing exposure to contaminated soils at the Site. However, a deed restriction may be used in conjunction with other technologies to achieve a reduction of harm to human health and the environment by limiting the future exposure at the Site. Institutional controls are commonly used to limit the current and future activities and uses. The DEC would prohibit alteration or extraction of groundwater and/or excavation or disturbance of soil without prior notice and approval by MEDEP. Anticipated future use of this Site will be for commercial/industrial purposes. Therefore, institutional controls continue to be evaluated as a remedial alternative in this analysis.

4.2 Remedial Technologies for Hazardous Building Materials

Hazardous Building Material Abatement – Removal & Off-Site Disposal

Abatement and removal of HBMs would eliminate the possibility of exposure for potential future use of the Site. Due to the nature of the construction of the tank, including the use of presumed

asbestos-containing gaskets, flanges, etc., and the structural integrity of the components, it is not possible to separately abate ACM prior to demolition/dismantlement. When these conditions are encountered, an experienced demolition contractor will demolish the building or specific component without first abating the ACM. Following demolition and dismantling inert material, ACM will be segregated and managed for proper disposal to the maximum extent practicable; however, in these situations an increased volume of bulk waste is generated due to the co-mingling of ACM and demolition waste materials. Abatement and demolition consists of hiring experienced contractors to identify and remove HBMs from the project Site. Abatement of HBMs through removal and off-site disposal continue to be evaluated as a remedial alternative in this analysis.

Hazardous Building Material Abatement - On-Site Encapsulation

HBMs may also be abated through encapsulation or barrier, which would physically prevent direct exposure contact and allow for continued use of the structure. The alternative of abating and disposing of HBMs off-site can be difficult and expensive, particularly when the volume of impacted building materials is large. Therefore, encapsulating HBMs in-place with a barrier/cap, if applicable and/or acceptable, without removing for off-site disposal generally provides a cost-effective and proven method of containment for managing large volumes of HBMs. When encapsulation is selected for a remedial solution, it is also typically implemented in conjunction with an institutional control or Declaration of Environmental Covenant (DEC), i.e., deed restriction, that would require long-term encapsulant/barrier maintenance and prohibit uncontrolled encapsulant/barrier removal and/or penetration.

However, for the Fuel Storage Area-West site, the tank and related equipment/structures will be fully demolished as part of the proposed redevelopment; therefore, encapsulation will not be considered further as an alternative in this ABCA.

4.3 Remedial Technologies for Soil

Soil Containment

Containment measures are designed to isolate contaminants to prevent direct contact, erosion, and, depending on the chemicals of concern, leaching. The alternative of excavating and disposing of soil off-site can be difficult and expensive, particularly when the volume of impacted soil is large. Therefore, containing or encapsulating soil in-place with a barrier/cap, if applicable and/or acceptable, without significant excavation and off-site disposal, generally provides a cost-effective and proven method of containment for managing large volumes of impacted soil.

A containment remedy (cap) could consist of a layer of soil, pavement, or other impervious materials, which will eliminate or minimize direct contact with the underlying soils and will address contaminants. When containment/encapsulation is selected for a remedial solution, it is also typically implemented in conjunction with an institutional control or DEC (i.e., deed restriction) that would require cap/barrier maintenance and prohibit uncontrolled cap/barrier removal or penetration. Containment continues to be evaluated as a remedial alternative in this analysis.

Soil Consolidation and Containment

Consolidation measures are designed to limit the onsite footprint of contaminated soils and minimize the area requiring containment. Consolidation also allows for use of the remainder of the property without restriction.

When consolidation is selected as a remedial solution, it is implemented in conjunction with a containment remedy (cap) and institutional controls. The combination of consolidation and containment continues to be evaluated as a remedial alternative in this analysis.

Soil Excavation / Removal

Physical removal addresses risk-driving compounds in soil by physically removing impacted media from the Site for disposal or recycling at an appropriately licensed off-Site facility.

Excavation and off-site disposal is a proven and commonly used method of site remediation that addresses all contaminants. This alternative often targets small volumes due to the increased costs associated with excavation, transportation, and disposal. In addition, site restoration would be necessary, thereby further increasing costs.

Given the proven performance of excavation as a remedy at similar sites, this technology continues to be evaluated as a remedial alternative in this analysis.

4.4 Remedial Action Alternatives Development and Evaluation

The proposed cleanup and redevelopment includes the removal and off-site disposal of HBMs and management of impacted soil during earthwork. Certain subsurface utilities and clean corridors may also be installed as part of cleanup activities to minimize the need for excavating or disturbing contaminated soils at the Site. In the event that contaminated soils will be disturbed during earthwork, technologies were identified that have the potential to eliminate direct contact with contaminated soils at the Site. TRC identified the following potentially applicable technologies to achieve these objectives, which are:

- **Reuse of any disturbed Site soils on-Site and cover via a MEDEP-approved engineered cover system, with a DEC** – This alternative uses a combination of limited soil excavation to facilitate utility installations, consolidation and reuse of these soils on-Site, the implementation of engineering controls (i.e., a cap/cover system), and institutional controls (i.e., deed restrictions). This alternative allows a limited area of the Site to be subject to engineering controls and institutional controls.

- **Off-site disposal of disturbed Site soils, cover of remaining soil via a MEDEP-approved engineered cover system, and a DEC** – This alternative uses a combination of limited soil excavation to facilitate utility installations, off-Site disposal of these soils, the implementation of engineering controls on the remaining soil (i.e., a cap/cover system), and institutional controls (i.e., deed restrictions).

The remedial alternatives identified above were evaluated with respect to the comparative evaluation criteria including effectiveness, short and long-term reliability, difficulty of implementation, cost, potential risks, timeliness, non-pecuniary effects, and resiliency to extreme weather conditions. This evaluation is presented in the following section (Section 5.0).

5.0 EVALUATION OF REMEDIATION ALTERNATIVES

The process for identified viable remedial actions focused on technologies that exhibited the potential to eliminate or significantly reduce exposure to the elevated levels of petroleum and metals in shallow/surficial soil and groundwater, and to the HBMs at the Site. The remediation technologies to be employed by the alternative were considered using the following:

- Effectiveness
- Reliability
- Ability to Implement
- Feasibility
- Risk Reduction (Toxicity, Mobility, Quantity)
- Preliminary Costs
- Resiliency to Extreme Weather Conditions

Based on the evaluation criteria presented above, potential exposure pathways evaluated during previous environmental assessments and summaries presented herein, the remedial action alternatives selected for the Site should accomplish the following objectives.

- Remove the HBMs from the Site and minimize the potential for direct contact or incidental ingestion or inhalation of HBMs during abatement and demolition; and
- Minimize the potential for direct contact or incidental ingestion or inhalation of impacted soils.

To achieve these objectives, a total of three remedial options were considered to address the environmental conditions previously described and are discussed below.

5.1 Considered Remediation Alternatives for Site Soils and HBMs

To address contaminated soils and HBMs identified at the Site, and in consideration of the proposed building renovations, three different cleanup alternatives were considered and are described below:

- Alternative #1: No Action.
- Alternative #2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil.
- Alternative #3: Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil.

5.1.1 Alternative #1: No Action

A “No Action” alternative indicates that no remedial activities will be conducted at the Site. The “No Action” alternative does not include activities to mitigate, eliminate or reduce exposure to contaminated material; therefore, the potential for human exposure through direct contact,

ingestion, and inhalation has not been controlled and therefore continues to exist for potential future Site users, visitors, workers (construction/utility), and or trespassers.

The “No Action” alternative does not involve any remedial activities; therefore, the “No Action” response is not protective of human health and the environment and does not meet the threshold criteria as previously discussed. However, this alternative has been included to demonstrate a comparison between the alternatives.

5.1.2 Alternative #2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil

The remaining fuel storage equipment (750,000-gallon fuel oil AST, rail car loading rack, and associated aboveground/underground piping and appurtenances) will be decommissioned to facilitate additional assessment and/or cleanup of subsurface conditions underlying the equipment, as needed, including the removal and/or capping of soil contaminated with co-mingled petroleum and hazardous materials to facilitate redevelopment of the main entrance to the mill site for better access and safety features. In addition, it is assumed that the remaining fuel oil (approximately 70,000 gallons in the exterior tank and approximately 10,000 gallons in the associated interior tank) will need to be disposed of as waste oil due to its high sulfur content and impurities; however, alternative disposal or recycling approaches will be pursued to potentially reduce disposal costs. For the purposes of estimating costs of this alternative, it is assumed that the waste oil will be transported by tanker truck to a fuel blending facility.

This alternative includes targeted soil removal in previously identified impacted soil areas, along with onsite management of remaining impacted soils through in-place covering and onsite relocation and consolidation, followed by installation of MEDEP-approved engineered soil cover systems. Impacted soils managed onsite would be compacted and encapsulated beneath hardscape cover systems (e.g., paved parking areas, reconfigured access roads, concrete sidewalks), softscape soil cover systems, or other MEDEP-approved soil cover systems. Onsite encapsulation would eliminate exposure. Softscape soil cover systems will likely be in the form of a marker geotextile fabric and 12-inches of structural gravel or 8-inches of common borrow with 4-inches of loam. Environmental personnel would be present during Site activities to oversee the excavation, movement, and encapsulation of soil. During excavation, excavated soils will be visually examined for the presence of contamination. Targeted soil removal/disposal will take place in areas shown on **Figure 3**.

5.1.3 Alternative #3: Tank Demolition/Dismantlement, Soil Cover Systems, and Offsite Disposal of Disturbed Soil

The remaining fuel storage equipment (750,000-gallon fuel oil AST, rail car loading rack, and associated aboveground/underground piping and appurtenances) will be decommissioned to facilitate additional assessment and/or cleanup of subsurface conditions underlying the equipment, as needed, including the removal and/or capping of soil contaminated with co-mingled petroleum and hazardous materials to facilitate redevelopment of the main entrance to the mill site for better access and safety features. In addition, it is assumed that the remaining fuel oil (approximately 70,000 gallons in the exterior tank and approximately 10,000 gallons in the associated interior tank) will need to be disposed of as waste oil due to its high sulfur content and impurities; however, alternative disposal or recycling approaches will be pursued to potentially

reduce disposal costs. For the purposes of estimating costs of this alternative we have assumed that the waste oil will be transported by tanker truck to a fuel blending facility.

This alternative includes excavation and offsite disposal of disturbed and previously identified impacted soils, combined with installation of MEDEP-approved engineered soil cover systems over remaining onsite soils. Offsite disposal of impacted soils would eliminate exposure pathways associated with those materials. Environmental personnel would be present during Site activities to oversee the excavation, stockpiling (if necessary), and offsite transport of soil. During excavation, excavated soils will be visually examined for the presence of contamination. Soil may be stockpiled pending disposal characterization/facility acceptance or may be directly loaded onto trucks for transportation to the disposal facilities. When characterization of the soil is required, the soil will be stockpiled on polyethylene sheeting and sampled for characterization parameters as required by the selected facilities. Stormwater controls will be implemented including a row of hay bales will be placed around the stockpile and the bottom layer of plastic sheeting will be draped over the hay bales to create a berm to contain the soil and stormwater run-off. The soil stockpile will be covered with polyethylene sheeting that will be held in place using hay bales, or a similar weighting object. **Figure 3** shows the areas of proposed excavation.

5.2 Effectiveness, Feasibility, and Cost of Alternatives

The effectiveness, feasibility, and cost of each alternative were considered prior to selecting a recommended cleanup alternative, in accordance with the EPA requirements.

5.2.1 Effectiveness

- Alternative #1 (No action): This alternative is not effective in controlling or preventing the exposure of receptors to contamination at the Site, or in the elimination of a potential continuing contaminant source at the Site. This alternative does not provide a reduction in risk.
- Alternative #2 (Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil): This alternative includes removing HBMs, either covering impacted soils in-place with MEDEP-approved soil cover systems and/or excavation, and relocation of Site soils followed by covering with an engineered cover system in another area of the mill site. Excess soils which cannot be encapsulated/covered, would need to be managed through temporary stockpiling and cover, and/or off-Site disposal. Covering of impacted soil with a MEDEP-approved soil cover system is an effective alternative for eliminating the direct contact exposure pathway. The alternative will be effective at consolidating the source of contamination and minimizing potential exposure while protecting the nearby environmental receptors. This alternative provides resiliency to extreme weather events change by minimizing the likelihood of contaminants mobilizing during higher frequency flood events.
- Alternative #3 (Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil): This alternative includes removing HBMs and excavation and offsite disposal of previously identified contaminated soils, combined with installation of MEDEP-approved engineered soil cover systems over remaining onsite soils. Removal and offsite disposal of contaminated soils would eliminate the direct contact exposure pathway and remove a significant portion of the contaminant mass from the Site. This alternative will

protect environmental receptors. This alternative provides resiliency to extreme weather conditions by minimizing the likelihood of contaminants mobilizing during higher frequency flood events.

5.2.2 Feasibility and Ease of Implementation

- Alternative #1 (No action): This alternative would be easy to implement as no remedial actions will be conducted at the Site.
- Alternative #2 (Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil): This alternative is relatively easy to implement. The necessary services and materials to complete the remedial tasks are readily available, including the necessary equipment and contractors. This remedial alternative would utilize standard abatement and demolition/dismantlement, earthwork, excavation, and transportation techniques for encapsulation impacted soils in-place and/or moving soils to other areas of the redevelopment site for on-Site management and encapsulation via paved parking or other MEDEP-approved soil cover system. This alternative is technically practical, easily implementable at the Site, but may require the coordination of off-Site soil transportation of excess soils. Additionally, this alternative would require periodic surveillance of cover systems and preparation of institutional controls.
- Alternative #3 (Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil): This alternative is the most difficult to implement; while the necessary services and materials to complete the remedial tasks are available, including the necessary equipment and contractors, the removal of large soil volumes will require the greatest effort on the part of the contractor. This remedial alternative would utilize standard abatement and demolition/dismantlement and excavation and transportation techniques for impacted soil containerization, off-Site transport, and disposal. The collection and analysis of verification and field screening samples, if necessary, from the remainder of the Site would be easily conducted using standard environmental sampling techniques.

5.2.3 Cost

- Alternative #1 (No action): No cost as no remedial activities will be implemented.
- Alternative #2 (Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil): Cost of Alternative #2 is estimated to be approximately $2,250,000 to $2,650,000. Assumptions for preliminary costing purposes include:
    - Demolition/dismantlement of the 750,000-gallon AST and associated equipment/structures
    - Targeted excavation of impacted soil within areas identified by the preliminary soil cut-fill balance analysis
    - Cover in-place and/or excavation, relocation on-Site, then covering/capping of remaining impacted soils
    - Management of remaining excavated soils on-Site
    - Grading of relocated soil and capping with paved parking/roads, softscape cover system, or other MEDEP-approved engineered soil cover system, including appropriate gravel base and subbase

- Waste Oil will be disposed of at a fuel blending facility.
- Mobilization
- Engineering, construction oversight, & reporting
- A 20% contingency

- Alternative #3 (Tank Demolition/Dismantlement, Soil Cover Systems, and Offsite Disposal of Disturbed Soil): Cost of Alterative #3 is estimated to be approximately $3,800,000 to 4,500,000. Assumptions for preliminary costing purposes include:
  - Demolition/dismantlement of the 750,000-gallon AST and associated equipment/structures
  - Targeted excavation of impacted soil within areas identified by the preliminary soil cut-fill balance analysis
  - Off-Site trucking and disposal of the limited targeted impacted soils to a disposal facility
  - Waste Oil will be disposed of at a fuel blending facility.
  - Mobilization
  - Backfill and grading, including appropriate gravel base and subbase
  - Engineering, construction oversight, & reporting
  - A 20% contingency

The preliminary cost estimates presented in this document are based on the extent of contamination as identified in previous site investigations and costs associated with abatement, demolition, and/or waste transportation and disposal. They were prepared utilizing recent project experience and RS Means data and include a 20% contingency to allow for the relative comparison of the identified alternatives and to account for the possibility of encountering previously unidentified HBMs, impacted soil, and/or higher transportation and disposal costs, once cleanup begins. A breakdown of preliminary remedial costs is included on the estimated cost tables presented in **Appendix A**. Please note that actual cleanup costs may vary from these preliminary engineering cost estimates prepared at this time and will ultimately be dependent on final remedial action plans, bid specifications, and competitive contractor bids/quotes to be obtained in the future as part of future cleanup and redevelopment planning activities.

5.3 Overall Comparison of Comparative Evaluation Criteria

This section presents a relative comparison of the selected remedial alternatives.

Effectiveness – Alternative #3 is the most effective means to mitigate exposure to both HBMs and to soil contamination, as all disturbed soils would be removed from the Site. Alternatives #1 and #2 do not include the removal and disposal of all disturbed soil in its entirety from the Site. Alternative #2 includes excavation of soil for on-Site management under an engineered cap/cover system, which is also an effective mitigation measure; however, additional inspections and adherence to an EMMP would be required. Therefore, Alternative #3 is considered slightly more effective than Alternative #2. Alternative #1 is considered the least effective as exposure is not mitigated.

Reliability – Alternatives #2 and #3 are more reliable than Alternative #1 in preventing exposure to future users of the Site because HBMs are removed and soils are either removed or isolated/contained. Alternative #1 is not reliable as no remedial action is implemented. Because of the relatively simple nature of the excavation work and design and construction of a cap/cover system, there is low potential for failure associated with Alternatives #2 and #3. However, Alternative #2 and Alternative #3 require future inspection and maintenance of the cover systems to ensure long-term reliability. Alternative #1 is not reliable as no remedial action is implemented. Therefore, Alternative #2 and Alternative #3 are considered equally reliable.

Difficulty of Implementation – There is no difficulty associated with Alternative #1, as no actions are taken. There is more difficulty associated with Alternatives #2 and #3, as additional measures are required to remove and cover soils to remain on-Site. However, Alternative #3 is the most difficult to implement; while the necessary services and materials to complete the remedial tasks are available, including the necessary equipment and contractors, the removal of large soil volumes will require the greatest effort on the part of the contractor.

Cost-Benefit –There is no cost associated with Alternative #1 as no remedial activities would occur. The cost to implement Alternative #3 is significantly higher than Alternative #2, due to the higher volumes of impacted soils to be managed and the costs associated with off-Site disposal of all impacted surficial soils.

Resiliency to Extreme Weather Events – Alternative #1 is effective from an extreme weather resiliency standpoint, as no actions are taken. Alternatives #2 and #3 provide resiliency to extreme weather by minimizing the possibility of contaminated soils being mobilized during higher frequency flood events and the stormwater controls and mitigation measures to be implemented during construction activities under these alternatives. For the Site area, such weather conditions include days of extreme precipitation and/or season precipitation above the 33% average (per CMRA).

Potential Risks – The potential short-term and long-term risks associated with each alternative are considered low, except for Alternative #1, which is a No Action Alternative, and therefore, no remedial activities are conducted. Potential short-term risks associated with Alternatives #2 and #3 include possible accidently spills of petroleum during demolition/dismantlement of the tank and associated equipment/structures. However, any accidental spill of contaminated soil would be immediately remediated, and therefore, the duration of potential human exposure to the contaminated soil would be extremely short-term. Additional potential short-term risks associated with Alternative #3 soil excavation/disposal include possible accidental spills of contaminated soil during soil transport, which could result in short-term exposure to the contaminated soil by surrounding human populations. However, again, any accidental spill of contaminated soil would be immediately remediated, and therefore, the duration of potential human exposure to the contaminated soil would be extremely short-term. Alternative #2 and Alternative #3 require future inspection and maintenance of the cover systems to prevent potential risks. Assuming those inspections and maintenance are completed, there is a low potential risk associated with those alternatives.

Timeliness – The following estimated time frames are associated with implementation of each alternative:

- Alternative #1: No associated timeframe.

- Alternative #2: Estimated two to three months (dependent on selected contractors and concurrent cleanup and redevelopment schedules).
- Alternative #3: Estimated two to three months (dependent on selected contractors and concurrent cleanup and redevelopment schedules).

Based on the above, Alternative #1 is the timeliest of the alternatives. However, the additional time required for Alternatives #2 and #3 are associated with greater protection of future Site use and protection of Site construction workers.

Conclusion – Alternatives #2 and 3 are nearly equally effective and reliable. Excluding Alternative #1 (which is not recommended because it does not address the risks posed by the HBMs and soil contamination), Alternative #3 is logistically the least difficult to implement, except for additional logistics related to management of off-site soil disposal activities, and has low potential risks. However, Alternative #2 also has a relatively low difficulty of implementation, low potential risk, and is significantly much more cost-effective. Therefore, Alternative #2 is the recommended Alternative.

5.4 Green and Sustainable Remediation

The following measures will be implemented where applicable, beneficial or feasible to improve the overall sustainability of the proposed remedial alternative as recommended by the U.S. EPA Region 1 Green and Sustainable Remediation Guidance.

Administrative

- Green remediation principles will be incorporated into the contracting process, as possible.
- Interim and final documents will be submitted in digital rather than hardcopy format, unless otherwise requested by EPA or required by law, to save paper. This is especially applicable to voluminous data reports.
- Optimize the use of electronic and centralized communication and outreach to the local community.

General Site Operations

- Use energy efficient equipment
- Reuse or recycle waste in the visual and access control berms
- Protect and conserve water
- Use alternative fuel vehicles (e.g., hybrid-electric, biodiesel, and/or ultra-low sulfur diesel)
- Carpool for Site visits and project meetings and/or use public transportation
- Schedule activities efficiently to minimize travel to and from the Site

Remediation Operations

- Encourage use of fuel-efficient / alternative fuel vehicles and equipment
- Minimize mobilizations
- Provide for erosion control to minimize runoff into environmentally sensitive areas

- Encourage use of diesel engines that meet the most stringent EPA on-road emissions standards available upon time of project's implementation
- Have idle reduction policy and idle reduction devices installed on machinery
- Use ultra-low sulfur diesel and/or fuel-grade biodiesel as fuel on machinery
- Maximize use of machinery equipped with advanced emission controls
- Maximize efficiency in transport/disposal of soils and backfill, utilizing practices such as backloading.

5.5 Additional Permitting

Final local and State permits, as necessary, will be obtained prior to initiating the selected/proposed cleanup alternatives.

5.6 Recommended Cleanup Alternative

Alternative #2 is the recommended cleanup alternative for the mitigation of shallow/surficial impacted soils at the Site, as it is the most cost-effective and equally effective and reliable in comparison to Alternative #3.

Alternative #1 is not recommended because it does not address the risks posed by the soil contamination (no action taken).

Alternative #3 is not recommended because it is not cost-effective.

5.6.1 Evaluation and Comparison of Alternatives

Table 1 (on the following page) provides Evaluation and Comparison Summaries of the Remedial Alternatives.

Table 1. Evaluation and Comparison Summary of Alternatives

Remedial Action	Alternative #1: No Action	Alternative #2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil	Alternative #3: Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil
Overall protection of Human Health and the Environment	Not protective of human health and the environment. Does not meet threshold criteria.	Provides protection of human health and the environment concerns through mitigating/ eliminating the risk of exposure to humans and the environment to impacted soil identified on the Site.	Provides protection of human health and the environment concerns through mitigating/eliminating the risk of exposure to humans and the environment to impacted soil identified on the Site.
Technical Practicality	Not Applicable.	Completing the remedial alternative identified is technically practical.	Completing the remedial alternative identified is technically practical.

Table 1. Evaluation and Comparison Summary of Alternatives

Remedial Action	Alternative #1: No Action	Alternative #2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil	Alternative #3: Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil
Ability to Implement	Not Applicable.	Containment of the in-place contaminated soil is technically feasible and is an effective action for reducing or eliminating the risk of direct contact to contamination. The activities and materials to complete the alternative are readily available. Equipment and contactors are available and have the expertise to complete.	Off-Site disposal of disturbed soil at the Site is technically feasible and is an effective action for reducing or eliminating the risk of direct contact to contamination. The activities and materials to complete the alternative are readily available. Equipment and contactors are available and have the expertise to complete.
Reduction of Toxicity, Mobility, and Volume	No Reduction.	Alternative achieves a reduction risk of contact.	Alternative achieves a reduction risk of contact.
Short Term Effectiveness	Not Applicable.	Cover placement reduces the risk of contact but limits the future development options for the Site.	Cover placement reduces the risk of contact but limits the future development options for the Site.
Estimated Cost	Not Applicable.	$2,250,000 - $2,650,000	$3,800,000 - $4,500,000

As previously noted, the preliminary cost estimates presented in this document are based on the extent of contamination as identified in previous site investigations and costs associated with abatement, demolition, and/or waste transportation and disposal. They were prepared utilizing recent project experience and RS Means data and include a 20% contingency to allow for the relative comparison of the identified alternatives and to account for the possibility of encountering previously unidentified HBMs, impacted soil, and/or higher transportation and/or disposal costs, once cleanup begins. A breakdown of preliminary remedial costs is included on the estimated cost tables presented in **Appendix A**. Please note that actual cleanup costs may vary from these preliminary engineering cost estimates prepared at this time and will ultimately be dependent on final remedial action plans, bid specifications, and competitive contractor bids/quotes to be obtained in the future as part of future cleanup and redevelopment planning activities.

6.0 CONCLUSIONS AND RECOMMENDATIONS

HBMs and contaminated soil are present at the Site and require proper management to facilitate cleanup and redevelopment. While the proposed redevelopment of the Site is for pavement/softscape landscaping, additional remedial actions are necessary to mitigate the identified contamination at the Site, in accordance with State of Maine and MEDEP cleanup guidelines.

The three total remedial alternatives evaluated in this ABCA include:

- Alternative 1: No Action.
- Alternative 2: Tank Decommissioning, Soil Cover Systems, and Onsite Management of Disturbed Soil.
- Alternative 3: Tank Decommissioning, Soil Cover Systems, and Offsite Disposal of Disturbed Soil.

Alternative #2 is the recommended cleanup alternative for the abatement of HBMs and mitigation of shallow/surficial impacted soils at the Site, as it is the most cost-effective and equally effective and reliable in comparison to Alternative #3. Alternative #2 is also considered to be an equally practical alternative to mitigate the risk posed by the contamination considering the proposed renovation scenario from a feasibility and ease of implementation standpoint.

7.0 CONCEPTUAL REMEDIAL ACTION PLAN

Potential remedial action alternatives were outlined. evaluated, compared to one another for feasibility, cost, and implementation ability in this ABCA/RAP. The selected remedial actions have been outlined herein. The purpose of the selected remedial actions is to address the identified environmental concerns identified in the prior assessment activities, as outlined above. Media addressed by these actions includes shallow soils and hazardous building materials.

1. *Hazardous Building Materials Abatement and Tank Decommissioning* – TRC will assist the Town with obtaining quotes and the selection of reputable and qualified contractors for the abatement of HBMs (e.g., ACM, LBP, etc.) in conjunction with the demolition/dismantlement of the 750,000-gallon AST and associated equipment/ structures. The abatement of HBMs is expected to occur concurrently with the demolition/dismantlement of the tank and associated equipment/structure and will be conducted in accordance with state (MEDEP) and federal (EPA and OSHA) guidelines and regulations. The remaining fuel storage equipment (750,000-gallon fuel oil AST, rail car loading rack, and associated aboveground/underground piping and appurtenances) will be decommissioned to facilitate additional assessment and/or cleanup of subsurface conditions underlying the equipment, as needed, including the removal and/or capping of soil contaminated with co-mingled petroleum and hazardous materials to facilitate redevelopment of the main entrance to the mill site for better access and safety features. It is assumed that the remaining fuel oil (approximately 70,000 gallons in the exterior tank and approximately 10,000 gallons in the associated interior tank) will need to be disposed of as waste oil due to its high sulfur content and impurities; however, alternative disposal or recycling approaches will be pursued to potentially reduce disposal costs. Any capping and abandonment of underground piping will be completed in accordance with MEDEP approvals and the Maine Chapter 691 Rules for Underground Oil Storage Facilities.

2. *Soil Excavation, Soil Cover Systems, and Onsite Management of Disturbed Soil* – Existing soils and/or cover systems (asphalt-paved parking areas and/or landscaped areas), which are disturbed during Site redevelopment, will either be covered in-place with a MEDEP-approved soil cover system and/or removed and consolidated to another portion of the Site property to be regraded and then covered by an asphalt parking lot and/or other MEDEP-approved soil cover system. Proper erosion and sedimentation controls and soil stockpile management (Best Management Practices) will be implemented during earthwork, as applicable. A Deed Restriction will be put in place prohibiting the disturbance of the encapsulated soil. Periodic inspections of the cover systems will be a requirement of this remedial action to ensure that a good cover remains in place over the impacted soils to reduce potential for exposure.

3. *EMMP* – The site-specific EMMP will be adhered to, which will guide 1) the management of impacted soils (if disturbed during Site redevelopment), 2) the management of groundwater (if encountered) during disturbance of the Site subsurface, and 3) the on- and off-Site management of HBMs. The EMMP additionally outlines notifications of Site owner and MEDEP personnel in the instance that media are disturbed, as well as appropriate personal protective equipment to be considered during the redevelopment activities. In addition, the EMMP will be updated at the

conclusion of cleanup activities to include as-builts and/or other relevant Site information, as requested by the MEDEP.

4. *Deed Restriction and Declaration of Environmental Covenant* – Once the remedial actions are completed, a DEC will serve as a deed restriction for the Site, which will notify future owners/occupants of the existence and location of the installed MEDEP-approved engineered cover systems (e.g., parking lot and concrete sidewalk, landscape areas), prohibition of digging into subsurface soils or extraction of groundwater on Site, adherence to the EMMP, and a long-term monitoring schedule for the soil cover systems, as applicable.

8.0 CLOSING

8.1 Schedule

The owner plans to begin remedial actions in late Summer of 2026, once the cleanup contractors have been procured over the later Spring/early Summer of 2026. The remedial actions outlined herein are anticipated to be the first activities to occur for this redevelopment, with an anticipated completion of initial cleanup activities in 2027. The remainder of the redevelopment activities will likely continue through 2027/2028.

8.2 Completion and Closure

As previously noted, the larger GNP Mill site was previously entered into the MEDEP VRAP, with a NAA Letter generated in 2023 and has been assigned MEDEP Site Remediation Number REM02048. Once the proposed remedial actions are completed to the satisfaction of the VRAP, it is anticipated the MEDEP VRAP will issue a Closure Report and a Certificate of Completion for the portion of the Site subject to the proposed cleanup actions. The owner (and their members and/or assigns) will thereby be granted liability protections provided by 38 M.R.S. §343-E.1. for the Site and the MEDEP will take no action against the Town (or its members and/or assigns), as identified in 38 M.R.S. §343-E.6.

9.0 LIMITATIONS

TRC's study was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and TRC observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. TRC's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied is made. Specifically, TRC does not and cannot represent that the subject property contains no hazardous material, oil, or other latent condition beyond that observed by TRC during its study. Additionally, TRC makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by a MEDEP audit.

The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Town. The work described in this report was carried out in accordance with the Terms and Conditions referenced in our contract with the Town.

In preparing this report, TRC has relied on certain information obtained from previous reports, and on information contained in the files of state and/or local agencies available to TRC at the time of the study. Although there may have been some degree of overlap in the information provided by these various sources, TRC did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.

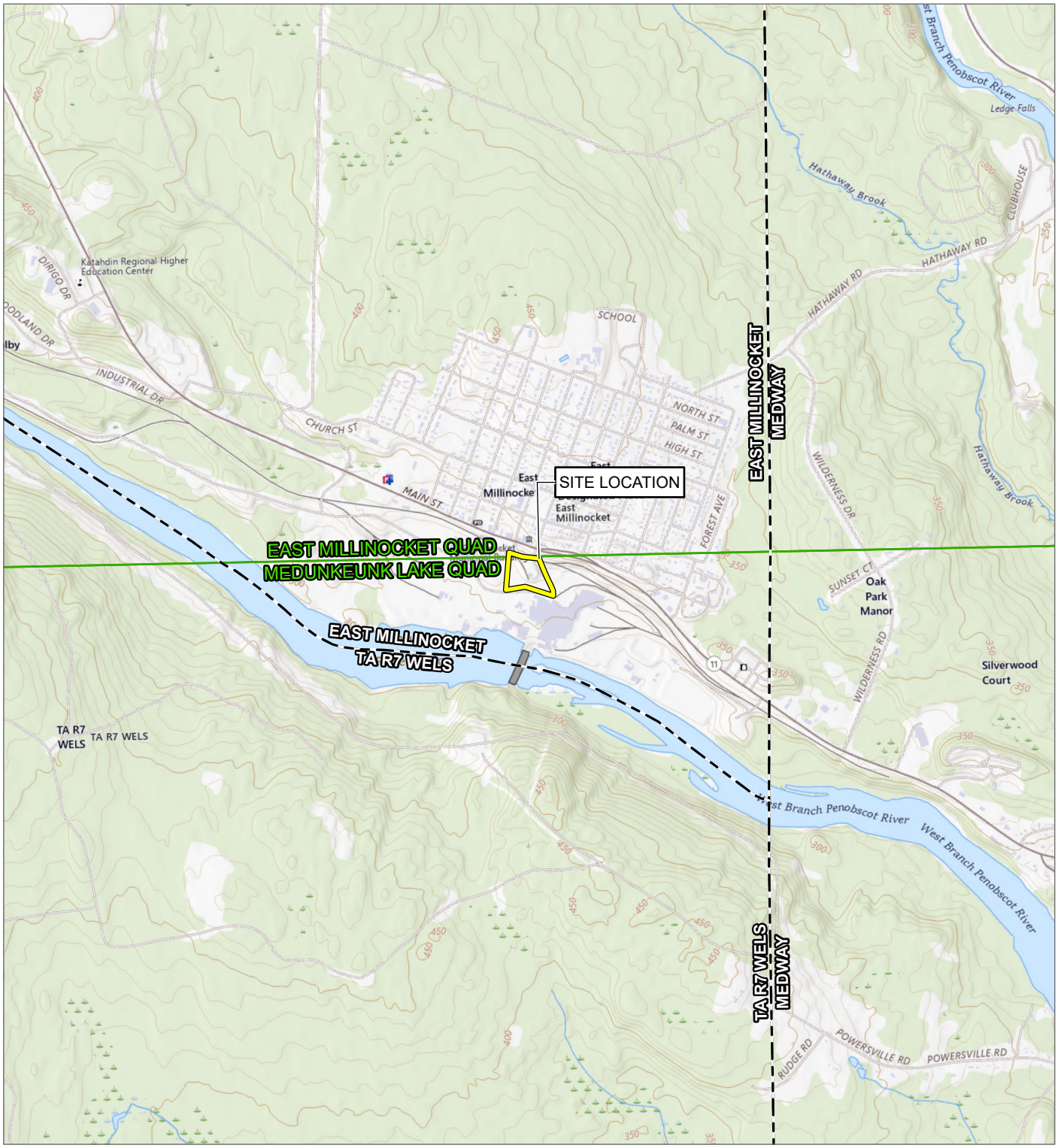
No specific attempt was made to check on the compliance of present or past owners or operators of the Site with federal, state, or local laws and regulations, environmental or otherwise. The conclusions and recommendations contained in this report are based in part upon the data obtained from a limited number of soil samples and groundwater samples obtained from widely spread subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

TRC has relied upon the quantitative laboratory analyses data provided by various laboratories and has not conducted an independent evaluation of the reliability of these data.

The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their migration pathways may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by TRC and the conclusions and recommendations presented herein modified accordingly.

Historic chemical analyses have been performed for specific parameters as described in the text. However, it should be noted that additional chemical constituents not searched for during the referenced studies might be present at the subject property. Nothing herein limits, changes or modifies TRC’s contract with the Town.

FIGURES



SITE BOUNDARY

MUNICIPAL BOUNDARY

USGS 7.5 MINUTE QUADRANGLE MAP BOUNDARY

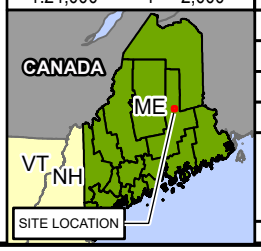
BASE MAP: USGS NATIONAL MAP
DATA SOURCES: USGS, ESRI, TRC

N

0 1,000 2,000

FEET

1:24,000 1" = 2,000'



PROJECT: **TOWN OF EAST MILLINOCKET, MAINE**
FUEL STORAGE AREA – WEST, FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET,
EAST MILLINOCKET, MAINE 04430

TITLE:

SITE LOCATION MAP

DRAWN BY:	R. BARBER	PROJ. NO.:	636165.0000.0000
CHECKED BY:	J. FREDENBURG		
APPROVED BY:	Z. BONIN		**FIGURE 1**
DATE:	JUNE 2026		

TRC
63 MARGINAL WAY
4TH FLOOR
PORTLAND, ME 04101
PHONE: 207.879.1930

FILE: FuelStorageAreaWest

Coordinate System: NAD 1983 StatePlane Maine West FIPS 1802 Feet; Map Rotation: 0
-- Saved By: RBARBER on 6/2/2026, 10:14:45 AM; File Path: T:\1-PROJECTS\Town_of_East_Millinocket\636165_FuelStorageArea_West_FGNPM\2-APRX\FuelStorageAreaWest.aprx; Layout Name: Fuel Storage Area West Fig1 Site Location Map

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING OVERHEAD LINES
- EXISTING TREE LINE
- EXISTING/ABANDONED RAIL LINE
- EXISTING FENCE
- EXISTING GUARD RAIL
- EXISTING STORMDRAIN
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING LEACHATE LINE
- APPROXIMATE FEMA FLOOD ZONE LIMIT
- USF TEST PIT LOCATION
- EXISTING UTILITY POLE
- EXISTING HYDRANT
- EXISTING BOLLARD
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING WELL
- SURVEY CONTROL POINT
- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE

PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

0 60 120 180 240
SCALE IN FEET

PROJECT: **TOWN OF EAST MILLINOCKET, MAINE**
BROWNFIELDS CLEAN-UP ALTERNATIVES
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE: **EXISTING CONDITIONS & SITE LAYOUT PLAN FOR ALTERNATIVE 1**

DRAWN BY:	AJG/TRC	PROJ. NO.:	636165.0000
CHECKED BY:	ARD		
APPROVED BY:	ARD		**FIGURE 2**
DATE:	JUNE 2026		

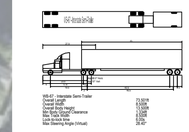
TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - ABCA Figures.dwg

20-24 -- USER: AGryska -- ATTACHED XREFS: XR_EastMillinocket Infrastructure SEE Works 3.2025 -- ATTACHED IMAGES:
DRAWING NAME: \\AUGUST-A-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - ABCA Figures.dwg -- PLOT DATE: June 08, 2026 - 10:00AM -- LAYOUT: FIG 2
Version: 2017.10-21

20-24 -- USER: AGamba -- ATTACHED XREFS: XR #pathlineXsl Infrastructure SEE Working 3.2025 -- ATTACHED IMAGES:
DRAWING NAME: \\AUGUSTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - ABCA Figures.dwg -- PLOT DATE: June 08, 2026 - 10:02AM -- LAYOUT: FIG 3
Version: 2017-10-21

DESIGN VEHICLE (WB-67)



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING OVERHEAD LINES
- EXISTING TREE LINE
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- APPROXIMATE FEMA FLOOD ZONE LIMIT
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- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING WELL
- SURVEY CONTROL POINT
- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE
- PROPOSED ACCESS ENTRANCE
- PROPOSED DIRECTION OF TRAFFIC
- PROPOSED SIDEWALK
- PROPOSED CROSSWALK
- PROPOSED GUARD HOUSE
- PROPOSED GATE
- PROPOSED LIGHT POLE
- PROPOSED SIGN
- PROPOSED DECIDUOUS TREES
- PROPOSED SHRUBS/LANDSCAPING
- PROPOSED GRASSED AREA

FLOOD ZONE A

WOOD LOT AREA - WEST
POTENTIAL LOCATION OF ONSITE ENCAPSULATION OF SURPLUS IMPACTED SOILS WITH APPROVED SOIL COVER SYSTEM (ALTERNATIVE #2) OR TEMPORARY IMPACTED SOIL STOCKPILE LOCATION (ALTERNATIVE #3)

APPROXIMATE LOCATION OF REDEVELOPMENT

ONSITE ENCAPSULATION OF IMPACTED SOILS TO REMAIN WITH COMBINATION OF HARDSCAPES AND APPROVED SOIL COVER SYSTEM (ALTERNATIVES #2 & #3)

PROPOSED GRASSED AREA (TYP.)

PROPOSED GUARD HOUSE

PROPOSED GATE

PROVIDE APPROX. 90' CLEAR DISTANCE BETWEEN RAILROAD TRACKS AND PROPOSED ENTRY GATE TO ACCOMMODATE ONE QUEUED FULL-LENGTH TRACTOR-TRAILER.

ENTRANCE WIDTH TO BEGIN AT APPROX. 39' TO ACCOMMODATE TWO TRUCKS QUEUED PARALLEL PRIOR TO GATE, THEN TAPER TO 26'.

PROPOSED TRAFFIC CONTROL SIGNAGE

ACCESS ENTRANCE AND SIDEWALK TO BE COORDINATED WITH RAILROAD

FINAL SIDEWALK TERMINATION POINTS TO BE DETERMINED PENDING REDEVELOPMENT PLANS (TYP.)

PROPOSED SIGNAGE ADVERTISING NEW DEVELOPMENTS

ADDITIONAL QUEUING SPACE FOR VEHICLES ENTERING SITE

MAIN ST

MAPLE ST

PROPOSED TRAFFIC CONTROL SIGNAGE

ACCESS ENTRANCE DESIGNED FOR WB-67 TRACTOR-TRAILER (TOTAL LENGTH 73.5')

PROPOSED STOP SIGN

PROPOSED GATE

50' BUILDING SETBACK

SNOW STORAGE AREA

GLHA, LLC

POTENTIAL LOCATION OF ONSITE ENCAPSULATION OF SURPLUS IMPACTED SOILS WITH APPROVED SOIL COVER SYSTEM (ALTERNATIVE #2) OR TEMPORARY IMPACTED SOIL STOCKPILE LOCATION (ALTERNATIVE #3)

TWO-WAY PARKING LOT ENTRANCES/EXITS

PROPOSED CROSSWALKS CONNECTING SIDEWALKS (TYP.)

PROPOSED PARKING LOT WITH 16 STANDARD SPACES, 1 ADA SPACE

FINAL SIDEWALK TERMINATION POINTS TO BE DETERMINED PENDING REDEVELOPMENT PLANS (TYP.)

EXISTING GUARD HOUSE

FINAL SIDEWALK TERMINATION POINTS TO BE DETERMINED PENDING REDEVELOPMENT PLANS (TYP.)

PROPOSED SIDEWALK (TYP.)

PROPOSED LIGHT POLE (TYP.)

PROPOSED LANDSCAPING ALONG SIDEWALK (TYP.)

PROPOSED DECIDUOUS TREES (TYP.)

PROPOSED 26' WIDE ACCESS ENTRANCE TO ACCOMMODATE TRACTOR TRAILER TURNING MOVEMENTS

GLHA, LLC
EASEMENT EXCEPTION AREA
0.836 ACRES±
PARCEL 3.13.4.2
934/9/ 1

PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED. HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.
5. EXISTING EDGE OF PAVEMENT IS BASED ON PUBLICLY AVAILABLE AERIAL IMAGERY AND SHOULD BE CONSIDERED APPROXIMATE.

0 100 200 300 400
SCALE IN FEET

PROJECT: **TOWN OF EAST MILLINOCKET, MAINE**
BROWNFIELDS CLEAN-UP ALTERNATIVES
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE: **SITE LAYOUT PLAN FOR ALTERNATIVES 2 & 3**

DRAWN BY:	AJG/TRC	PROJ. NO.:	636165.0000
CHECKED BY:	ARD		
APPROVED BY:	ARD		
DATE:	JUNE 2026		

FIGURE 3

TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - ABCA Figures.dwg

Appendix A: Remedial Alternatives Costing

PROJECT: Fuel Storage Area Brownfields Cleanup - East Millinocket, ME

DESCRIPTION: Preliminary Eligible Brownfields Cleanup Cost Estimates Alternative 2

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES & ASSUMPTIONS
SITE WORK AND COVER SYSTEM					
Erosion Control Geotextile/Marker Layer	13097	SY	$ 5	$ 65,486	Recent MaineDOT bids
Granular Borrow	3424	CY	$ 70	$ 239,698	Recent MaineDOT bids
Crushed Stone	9	CY	$ 100	$ 891	Recent MaineDOT bids
Aggregate Subbase Course	468	CY	$ 55	$ 25,761	Recent MaineDOT bids
Aggregate Base Course	306	CY	$ 100	$ 30,569	Recent MaineDOT bids
HMA 9.5mm Surface Course	250	TON	$ 150	$ 37,560	Assume 145 pcf, price per recent MaineDOT bids
HMA 12.5mm Base Course	255	TON	$ 175	$ 44,570	Assume 145 pcf, price per recent MaineDOT bids
Bituminous Tack Coat	277	G	$ 18	$ 4,988	Assume 0.1 gal/SY, price per recent MaineDOT bids
4" White or Yellow Painted Pavement Marking Line	1570	LF	$ 4	$ 5,495	Recent MaineDOT bids
Crosswalk Pavement Markings	320	LF	$ 2	$ 512	RS Means 32 17 23.13 0600
Vertical Curb Type 1	1725	LF	$ 95	$ 163,875	Recent MaineDOT bids
12 Inch Culvert Pipe Type III	900	LF	$ 100	$ 90,000	Recent MaineDOT bids
Catch Basin Type A1-C	9	EA	$ 7,000	$ 63,000	Recent MaineDOT bids
Common Excavation	6140	CY	$ 25	$ 153,500	Recent MaineDOT bids
Backfilling	6140	CY	$ 12	$ 71,224	RS Means 31 23 23.20 3084
Finish Grade	13097	SY	$ 3	$ 33,398	RS Means 31 22 16.10 1150
Drum	50	EA	$ 70	$ 3,500	Recent MaineDOT bids
Cone	50	EA	$ 25	$ 1,250	Recent MaineDOT bids
Maintenance of Traffic Control Devices	100	CD	$ 125	$ 12,500	Recent MaineDOT bids
Signage	40	SF	$ 40	$ 1,600	Assume 10 sings 2'x2' Recent MaineDOT bids
Advanced Solar Powered Flashing Warning Sign	2	EA	$ 10,000	$ 20,000	Recent MaineDOT bids
Rectangular Rapid Flashing Beacon	6	EA	$ 14,000	$ 84,000	Recent MaineDOT bids
Curb Ramp Detectable Warning Field	48	SF	$ 125	$ 6,000	Recent MaineDOT bids, assume 2'x3'
Field Office	1	EA	$ 10,000	$ 10,000	Recent MaineDOT bids
Building Slab	9	CY	$ 320	$ 2,850	Slab on grade, 6" thick, RS Means 03 30 53.40 4700
Foundation Wall	14	CY	$ 730	$ 10,490	RS Means 03 30 53.40 4200 Assume 6'Hx8"W
Footings	7	CY	$ 490	$ 3,521	RS Means 03 30 53.40 3940 Assume 12"Hx24"W
Evergreen Trees 6'-8' B&B	10	EA	$ 390	$ 3,900	Recent MaineDOT bids
Deciduous Trees 6'-8'	10	EA	$ 220	$ 2,200	Recent MaineDOT bids
Evergreen Shrubs	33	EA	$ 240	$ 7,920	Recent MaineDOT bids
Deciduous Shrubs	33	EA	$ 215	$ 7,095	Recent MaineDOT bids
Topsoil	1141	CY	$ 80	$ 91,314	Recent MaineDOT bids
Seed	92	UN	$ 50	$ 4,623	Recent MaineDOT bids, 1 unit=1000 SF
Mulch	92	UN	$ 60	$ 5,547	Recent MaineDOT bids, 1 unit=1000 SF
Temporary Erosion Controls	1	LS	$ 65,442	$ 65,442	5% subtotal
Mobilization	1	LS	$ 130,884	$ 130,884	10% subtotal
ABATEMENT AND UNIVERSAL WASTE DISPOSAL					
LCP Abatement	1	LS	$ 10,000	$ 10,000	Recent project experience.
Asbestos Abatement	1	LS	$ 16,500	$ 16,500	Recent project experience.
Railtrack Removal	141	LF	$ 22	$ 3,032	RS Means Building Construction Costs 02 41 13.33 3500
Waste #6 Oil Disposal	1	LS	$ 375,000	$ 375,000	Assumes disposal via tanker trucks at Fuel Blending Facility
Demo of Tank	1	EA	$ 54,223	$ 54,223	RS Means 130505.75-0540, multiplied by factor of 25
			SUBTOTAL	**$ 1,963,915**	
			Contingency (20%)	$ 392,783	
			Engineering and Environmental Oversight (15%)	$ 294,587	Includes Brownfields documentation
			TOTAL	**$ 2,651,000**	

Notes:

Unit pricing obtained from recent MaineDOT bid tabulations, published RS Means Data, and Project Experience.

Total cost is rounded to the nearest multiple of 1,000.

PROJECT: Fuel Storage Area Brownfields Cleanup - East Millinocket, ME
DESCRIPTION: Preliminary Eligible Brownfields Cleanup Cost Estimates Alternative 3

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	NOTES & ASSUMPTIONS
SITE WORK AND COVER SYSTEM					
Erosion Control Geotextile/Marker Layer	9264	SY	$ 5	$ 46,319	Recent MaineDOT bids
Granular Borrow	2146	CY	$ 70	$ 150,254	Recent MaineDOT bids
Crushed Stone	9	CY	$ 100	$ 891	Recent MaineDOT bids
Aggregate Subbase Course	468	CY	$ 55	$ 25,761	Recent MaineDOT bids
Aggregate Base Course	306	CY	$ 100	$ 30,569	Recent MaineDOT bids
HMA 9.5mm Surface Course	250	TON	$ 150	$ 37,560	Assume 145 pcf, price per recent MaineDOT bids
HMA 12.5mm Base Course	255	TON	$ 175	$ 44,570	Assume 145 pcf, price per recent MaineDOT bids
Bituminous Tack Coat	277	G	$ 18	$ 4,988	Assume 0.1 gal/SY, price per recent MaineDOT bids
4" White or Yellow Painted Pavement Marking Line	1570	LF	$ 4	$ 5,495	Recent MaineDOT bids
Crosswalk Pavement Markings	320	LF	$ 2	$ 512	RS Means 32 17 23.13 0600
Vertical Curb Type 1	1725	LF	$ 95	$ 163,875	Recent MaineDOT bids
12 Inch Culvert Pipe Type III	900	LF	$ 100	$ 90,000	Recent MaineDOT bids
Catch Basin Type A1-C	9	EA	$ 7,000	$ 63,000	Recent MaineDOT bids
Finish Grade	9264	SY	$ 3	$ 23,623	RS Means 31 22 16.10 1150
Drum	50	EA	$ 70	$ 3,500	Recent MaineDOT bids
Cone	50	EA	$ 25	$ 1,250	Recent MaineDOT bids
Maintenance of Traffic Control Devices	100	CD	$ 125	$ 12,500	Recent MaineDOT bids
Signage	40	SF	$ 40	$ 1,600	Assume 10 sings 2'x2' Recent MaineDOT bids
Advanced Solar Powered Flashing Warning Sign	2	EA	$ 10,000	$ 20,000	Recent MaineDOT bids
Rectangular Rapid Flashing Beacon	6	EA	$ 14,000	$ 84,000	Recent MaineDOT bids
Curb Ramp Detectable Warning Field	48	SF	$ 125	$ 6,000	Recent MaineDOT bids, assume 2'x3'
Field Office	1	EA	$ 10,000	$ 10,000	Recent MaineDOT bids
Building Slab	9	CY	$ 320	$ 2,850	Slab on grade, 6" thick, RS Means 03 30 53.40 4700
Foundation Wall	14	CY	$ 730	$ 10,490	RS Means 03 30 53.40 4200 Assume 6'Hx8"W
Footings	7	CY	$ 490	$ 3,521	RS Means 03 30 53.40 3940 Assume 12"Hx24"W
Evergreen Trees 6'-8' B&B	10	EA	$ 390	$ 3,900	Recent MaineDOT bids
Deciduous Trees 6'-8'	10	EA	$ 220	$ 2,200	Recent MaineDOT bids
Evergreen Shrubs	33	EA	$ 240	$ 7,920	Recent MaineDOT bids
Deciduous Shrubs	33	EA	$ 215	$ 7,095	Recent MaineDOT bids
Topsoil	715	CY	$ 80	$ 57,240	Recent MaineDOT bids
Seed	58	UN	$ 50	$ 2,898	Recent MaineDOT bids, 1 unit=1000 SF
Mulch	58	UN	$ 60	$ 3,477	Recent MaineDOT bids, 1 unit=1000 SF
Temporary Erosion Controls	1	LS	$ 46,393	$ 46,393	5% subtotal
Mobilization	1	LS	$ 92,786	$ 92,786	10% subtotal
ABATEMENT AND UNIVERSAL WASTE DISPOSAL					
LCP Abatement	1	LS	$ 10,000	$ 10,000	Recent project experience.
Asbestos Abatement	1	LS	$ 16,500	$ 16,500	Recent project experience.
Disposal of Special Waste	9947	TON	$ 180	$ 1,790,424	Assume 120 pcf, Recent MaineDOT bids
Railtrack Removal	141	LF	$ 22	$ 3,032	RS Means Building Construction Costs 02 41 13.33 3500
Waste #6 Oil Disposal	1	LS	$ 375,000	$ 375,000	Assumes disposal via tanker trucks at Fuel Blending Facility
Demo of Tank	1	EA	$ 54,223	$ 54,223	RS Means 130505.75-0540, multiplied by factor of 25
			SUBTOTAL	**$ 3,316,213**	
			Contingency (20%)	$ 663,243	
			Engineering and Environmental Oversight (15%)	$ 497,432	Includes Brownfields documentation
			TOTAL	**$ 4,477,000**	

Notes:
Unit pricing obtained from recent MaineDOT bid tabulations, published RS Means Data, and Project Experience.
Total cost is rounded to the nearest multiple of 1,000.

ENVIRONMENTAL MEDIA MANANGEMENT PLAN
GREAT NORTHERN PAPER
EAST MILLINOCKET, MAINE
#REMO2048

Prepared for:
Eastern Maine Development Corporation
Bangor, Maine

and

The Town of East Millinocket, Maine

Prepared By:
Campbell Environmental Group
173 Gray Road, Falmouth, Maine 04105

Revision 2

September 24, 2024

CAMPBELL
ENVIRONMENTAL GROUP

September 24, 2024

Ms. Jennifer King
Eastern Maine Development Corporation
40 Harlow Street
Bangor, Maine 04401

Mr. Michael Michaud
Town of East Millinocket
53 Main Street
East Millinocket, Maine 04430

Re: Environmental Media Management Plan
Great Northern Paper
50 Main Street, East Millinocket, Maine

Dear Jennifer and Michael,

Campbell Environmental Group, Inc., (CEG) has prepared this Environmental Management Plan (EMMP) at your request to complete services necessary to adhere to Maine Department of Environmental Protection (MEDEP) Voluntary Response Action Program (VRAP) requirements. These requirements were documented in a letter that referenced, *Great Northern Paper (GNP) Site, 50 Main Street, East Millinocket, Maine No Action Assurance Letter - Voluntary Response Action Program*, dated February 14, 2023 from Mr. Ted Wolfertz, of the MEDEP, to Michael, Michaud, East Millinocket Town Select Chair.

If you have any questions or comments, please do not hesitate to contact us. We appreciate the opportunity to work with you on this project.

Sincerely,

Richard Campbell
Maine Licensed Geologist
President

173 Gray Road, Falmouth, Maine 04105 207-253-1990 ceg@cegenvironmental.com

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1.0 INTRODUCTION

This Environmental Media Management Plan (EMMP) has been prepared for Eastern Maine Development Corporation as the United States Environmental Protection Agency (USEPA or EPA) Brownfields Grant recipient, and the Town of East Millinocket as the current owner of the Great Northern Paper property located at 50 Main Street in East Millinocket, Maine (Site) (**Figure 1**). This EMMP is intended to fulfill anticipated requirements outlined in a Maine Department of Environmental Protection (MEDEP) No Action Assurance Letter, issued by the Voluntary Response Action Program (VRAP) and dated February 14, 2023.

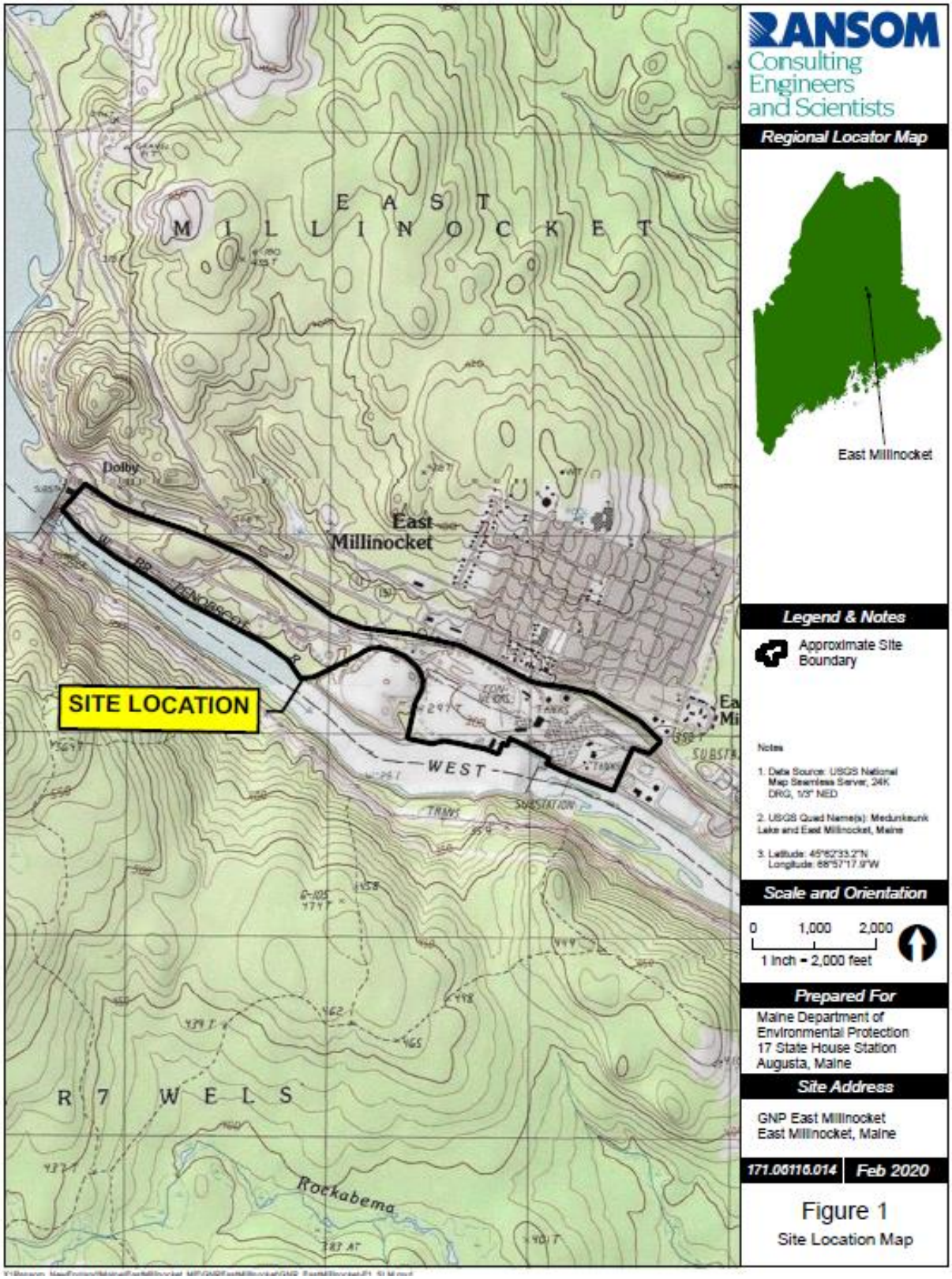
This EMMP is to be used by future users of the Site to properly conduct any actions that may disturb soil or groundwater within the Site. These activities could include but are not limited to construction and maintenance that involves subsurface disturbance, excavation of soil, or groundwater extraction. This EMMP describes actions that should be followed when any soil disturbance activities are conducted. In addition, activities associated with building remodeling or demolition that may encounter hazardous building materials such as asbestos containing materials (ACM), lead-based paint (LBP), and universal wastes are also included within this EMMP.

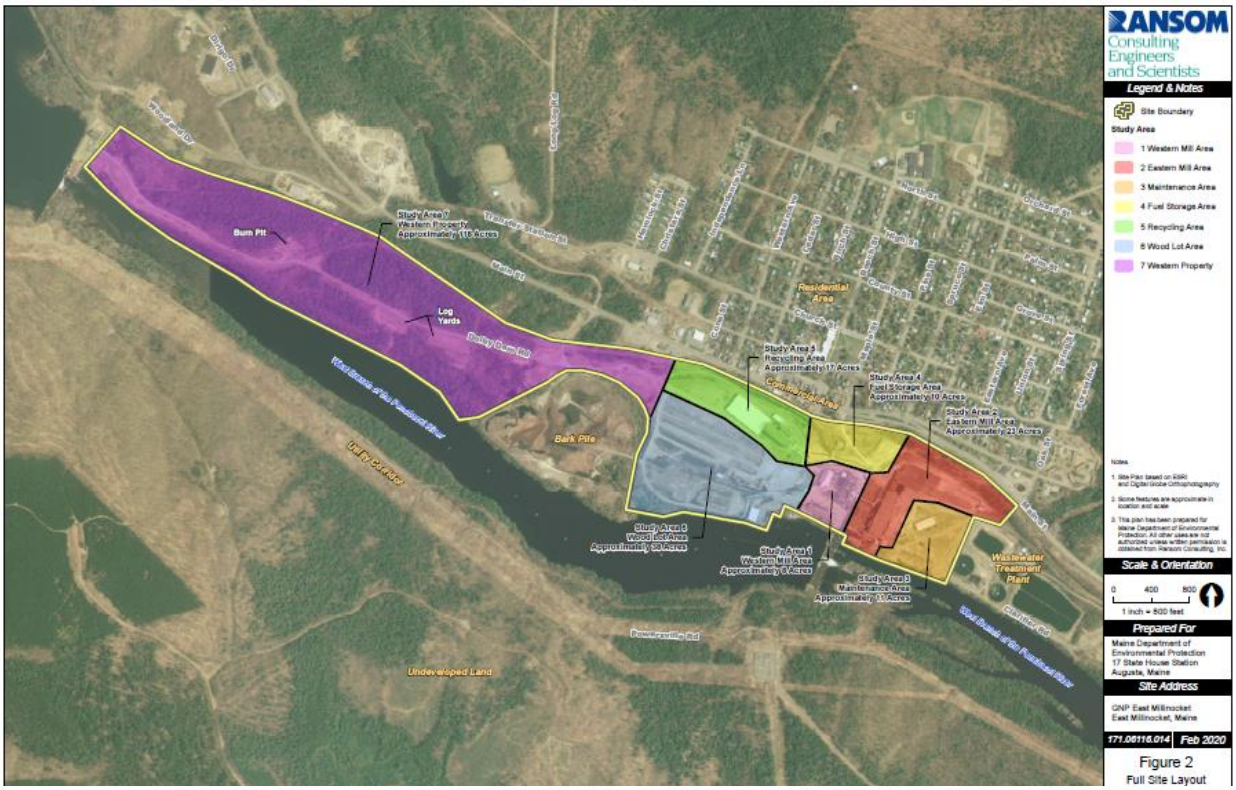
1.1 Background

According to the MEDEP VRAP application prepared by TRC Companies, Inc., and dated November 23, 2022, "*The approximately 215-acre Site, identified by the Town of East Millinocket as Parcel Number 0001-2-00000-010, was developed as the Great Northern Paper Mill (GNP) in 1907, producing paper products as one of the region's largest employers until its closure in 2014. The Town of East Millinocket acquired the former GNP Site on July 21, 2020.*

During its operation, the GNP mill complex comprised numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the Site is currently vacant, numerous building and structures associated with the former mill operations remain present. A Site Location Map and Site Layout Plan prepared in conjunction with a previous Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting, LLC on behalf of the Town of East Millinocket in February 2020 are included as Figures 1 and 2, respectively (Figures shown below). To assist in the evaluation of the former mill site, previous environmental investigations performed by others have divided the Site into seven "Study Areas," which are depicted in Figure 2.

The former GNP Site is situated between East Millinocket's Main Street (State Route 157) and the West Branch of the Penobscot River. The Site is located in a residential/commercial and undeveloped area of north-central Maine.


EAST MILLINOCKET
Dolby
East Millinocket
SITE LOCATION
WEST
R 7 W E L S
Rockabema
RANSOM
Consulting Engineers and Scientists
Regional Locator Map
East Millinocket
Legend & Notes
Approximate Site Boundary
Notes
1. Data Source: USGS National Map Seamless Server, 24K DRG, 1/3" NED
2. USGS Quad Name(s): Medunkeunk Lake and East Millinocket, Maine
3. Latitude: 45°62'33.2"N Longitude: 68°57'17.9"W
Scale and Orientation
0 1,000 2,000
1 inch = 2,000 feet
Prepared For
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine
Site Address
GNP East Millinocket
East Millinocket, Maine
171.06116.014 Feb 2020
Figure 1
Site Location Map



CAMPBELL ENVIRONMENTAL GROUP

The proposed redevelopment of the former GNP Site will be for Municipality of East Millinocket, light industrial and commercial uses to be built in phases. No residential uses are proposed.

The Site buildings, while currently vacant, were historically serviced by municipal water. The surrounding properties are serviced by the East Millinocket Water Works. Currently the Town's water sources are three gravel-packed wells located off Hathaway Road, the closest of which is located over 1.25 miles northeast of the Site.

Based on TRC's review of the Maine Geological Survey's Private Well Database, there are no private wells located within 2,500 feet of the Site. According to the Maine Public Water Resource Information System KMZ files (downloaded for Google Earth on November 23, 2022), there are no source water protection areas or public drinking water supply wells located within 2,500-feet of the Site."

1.2 Previous Site Work

A significant number of environmental reports and documents have been generated for the Site, some of which are listed below. These documents are not included in this EMMP, but are available at the MEDEP file room or through the MEDEP DocuWare Online Records Portal.

1. Administrative Consent Agreement and Enforcement Order, Hazardous Waste Activities, Great Northern Paper Company, a division of Great Northern Nekoosa Corporation (MEDEP, August 22, 1988);
2. Closure Report for the Drum Storage Facility at East Millinocket Mill, Great Northern Paper (Sevee & Maher Engineers, Inc., December 1989);
3. Review Comments and Conditional Approval for the PCB Remediation Project, East Millinocket Mill (MEDEP, June 14, 1989);
4. Report of PCB Cleanup Activities and Groundwater Monitoring, East Millinocket Mill (Stone and Webster Engineering Corporation, March 1991);
5. Consent Agreement and Final Order, Great Northern Nekoosa Corporation, EPA Docket No. TSCA-I-87-1041 (United States Environmental Protection Agency [USEPA], September 27, 1991);
6. Environmental Audit of the Georgia-Pacific Property, Millinocket, Maine (Sirrine Environmental Consultants, December 1991);
7. Phase I ESA, Great Northern Paper, Inc. Mill Properties (S.W. Cole Engineering, Inc., January 22, 2001);
8. Geology Report for the Mini Site Inspection of the Great Northern Paper Mill #2 (MEDEP, September 27, 2001);
9. Final Site Inspection Report for Great Northern Paper Mill #2 (MEDEP, July 18, 2002);
10. VRAP, Great Northern Paper East Millinocket Mill, No Action Assurance Letter – Certificate of Completion (MEDEP, April 24, 2003);
11. Phase I ESA, Katahdin Paper Mill – East (S.W. Cole Engineering, Inc., August 26, 2011);
12. Phase I ESA, Conceptual Site Model, and Data Gap Analysis, Great Northern Paper #2 (TRC, September 2014);
13. Data Review of the No. 5 Paper Machine Site at the East Millinocket Operations of Great Northern Paper Company (Earthcon, August 2015);

14. PCB Assessment and Remediation at the East Millinocket Site Memo (Tetra Tech, June 6, 2018);
15. Phase I ESA, Great Northern Paper – East Millinocket Mill (Ransom Consulting, Inc., June 12, 2019);
16. Preliminary Remediation Cost Estimate – Great Northern Paper Mill (Ransom Consulting Inc., September 17, 2019);
17. Phase I ESA, Great Northern Paper – East Millinocket Mill (Ransom Consulting, LLC, February 13, 2020);
18. Hazardous Substances Inventory & Disposal Estimating, Steam Plant and Boiler Buildings, Great Northern Paper Mill (Ransom Consulting, LLC, April 10, 2020);
19. Needs Assessment & Preliminary Scope of Work, Phase II ESA, Priority Development Areas, Former GNP East Millinocket Mill (Ransom Consulting, LLC, May 28, 2020);
20. Annual Groundwater Monitoring Report, Former Great Northern Paper Company, East Millinocket Operations (Tetra Tech, December 2020);
21. Target Brownfields Assessment, Great Northern Paper Mill – Study Area 5 (KGSNE JV, LLC, April 13, 2021);
22. Target Brownfields Assessment, Great Northern Paper Mill – Study Area 2 North (KGSNE JV, LLC, February 16, 2022);
23. Fessenden Geo-Technical, LLC, Phase II Site Investigation Results E-railZ Lease Area, Mill #2 Property, East Millinocket ME, dated September 6, 2022;
24. Great Northern Paper (GNP) Site, 50 Main Street, East Millinocket, Maine, No Action Assurance Letter - Voluntary Response Action Program (MEDEP, February 14, 2023); and
25. Targeted Brownfields Assessment Report, Great Northern Paper Mill – Study Areas 3, 6, and 7 East Millinocket, ME, (KGSNE JV, LLC, November 27, 2023)

According to the Targeted Brownfields Assessment (TBA) Report, titled Great Northern Paper Mill-Study Area 5 East Millinocket, Maine and prepared by KGSNE JV, LLC (KGSNE) dated, April 13, 2021, "*Prior environmental investigations conducted at the former mill site have identified numerous potential environmental concerns. To address some of these concerns and prioritize investigation and potential remedial action, prior investigators divided the former mill site into "Study Areas" as described below:*

- ***Study Area 1 – Western Mill Area:*** *Located in the south-central portion of the mill site and includes the biomass and petroleum boilers, the precipitator, wastewater treatment, electrical maintenance, the fire safety building, and a biomass storage structure. The former Grinder Room has been largely demolished.*
- ***Study Area 2 – No. 2 Train Shed and Shipping Area:*** *Located in the northeastern portion of the former mill, this area includes the Nos. 5 and 6 Finishing Rooms, the No. 2 Train Shed, the Paper Warehouse, the Former Drum Storage Area, and the Former Hazardous Waste Storage Area.*
- ***Study Area 3 – Maintenance Area:*** *Located east of Study Area 1 and along the West Branch of the Penobscot River, this area includes the former Paint Shop, a vehicle maintenance garage, a training center, a warehouse, a former power substation, and a former salvage area. Demolished infrastructure in this area includes a former vehicle maintenance garage.*
- ***Study Area 4 – Fuel Storage Area:*** *Located in the northern central portion of the former mill site and includes a 750,000-gallon fuel oil aboveground storage tank (AST) and containment features, a heater house, fuel unloading facilities, a hydrant house, the fuel pump house, a security building, a concrete retention pond, and a 5,000-gallon overflow AST. This AST reportedly decants water from*

the No. 6 fuel oil, which is then pumped to the concrete pond and drains to the wastewater treatment plant located east of the mill site. The area formerly contained a 1.7-million-gallon fuel oil AST and associated appurtenances, but these structures have been demolished.

- ***Study Area 5 – Recycle Fiber Warehouse Area:*** *Located in the northwestern portion of the former mill, this area includes the Recycle Fiber Warehouse, the Chemical Storage Plant, and the Switch House. Now-demolished structures include the Recycle Fiber Plant, and the Flotation Cell Building Extension. The area located to the west of the Recycle Fiber Warehouse was used as a temporary asphalt batch plant, which is no longer present and has been removed.*
- ***Study Area 6 – Wood Lot Area:*** *Located south of Study Area 5 and along the West Branch of the Penobscot River, contains the slasher control building, the slasher maintenance building, the bark dump building, the wood room, the bark preparation building, and the former wood storage lot. Demolished features formerly located in this study area include the Chemi-Groundwood building, the sorter building, the wood hopper, the bark classifier, the transfer house, and associated conveyor systems.*
- ***Study Area 7 – Western Property:*** *A large area located west of the former bark pile and Study Areas 5 and 6. The area contains a scale house, a guard shack, wood laydown areas, a sluice dump, and a former burn area.*

The mill site has been the setting for numerous releases of petroleum and/or hazardous materials throughout its operational history. Most of these releases and the investigation and remedial actions associated with them occurred in Study Areas 1, 2, 3, and 4."

1.3 Key Site Assessments

1.3.1 Stone & Webster Engineering Corporation, Report of PCB Cleanup Activities and Groundwater Monitoring, dated March 1991

Chemi-Groundwood Site

According to the Stone & Webster report dated March 29, 1991, "*On August 17, 1970, a transformer located in an exterior alcove on the north side of the white liquor building failed due to a corrosion-related coolant loss of approximately 100 gallons. At the time of the failure, the transformer was energized and carried a light electrical load; it serviced areas of the mill outside the Chemi-Groundwood plant.*

The transformer was removed and disposed of in accordance with applicable EPA and MEDEP requirements in December 1981. From a total capacity of 920 gallons, only about 30 gallons of fluid remained in the unit at the time it was removed. The fluid was identified from Great Northern Nekoosa (GNN) (the owner at that time) records as Askarel, a mixture of polychlorinated biphenyls (PCBs) congeners and chlorobenzene solvents.

During the period April 1986 through December 1987, a subsurface investigation that included 48 rotary soil borings and eight monitoring wells was conducted at the Chemi-Groundwood site to determine the extent of PCB contamination."

No. 6 Paper Machine Site

"The spill at the No. 6 Paper Machine site occurred on January 3, 1978, when a spare Allis-Chalmers 500 kVa transformer, stored outside the southeast corner of the No. 6 Paper Machine room, was accidentally damaged by heavy equipment plowing snow. The impact broke off a drain valve at the bottom of the transformer, releasing some of the cooling fluid. Based upon a review of records, the fluid was identified to be Askarel, consisting of a mixture of PCB congeners and chlorobenzene solvents. GNN's best estimate of the spill volume was 600 gallons.

The spilled fluid was contained by construction of an earth dike, and sand was spread over the spill area to absorb free Askarel. Within 24 hours, the spread sand was collected and stored in barrels. The dike was left in place until the following spring to contain snowmelt. Additional cleanup efforts were completed in the springtime.

In mid-June 1985, excavation in this portion of the mill yard was started in connection with modernization of No. 5 and 6 Paper Machines. On August 16, 1985, an odor characteristic of Askarel was noticed in an excavation for the removal of old fire-line piping. Testing of soils within the excavation showed the presence of polychlorinated biphenyls (PCBs). Follow-up investigations to identify the extent of the contamination were begun immediately.

During the period September 1985 to November 1987, a subsurface investigation that included 75 rotary soil borings and eight monitoring wells was conducted at the site to determine the extent of PCB contamination."

No. 5 Paper Machine Site

"*The spill at the No. 5 Paper Machine site occurred on May 14, 1981. As a result of an electrical failure, the lid of a transformer located in the courtyard at the northwest corner of the No. 5 Paper Machine room lifted on one side, splashing transformer fluid against the building and onto the ground. Based upon a review of records, the fluid was identified to be Askarel, consisting of a mixture of PCB congeners and chlorobenzene solvents. GNN's estimate of the spill volume based upon discussion with workers who removed the transformer was 150 gallons.*

Two periods of activity preceded final cleanup at this site. During the period August 28, 1985 through December 1985, a soil sampling program was initiated and a considerable amount of contaminated soil was removed.

During the period June 1987 through January 1988, 14 additional borings were drilled and six monitoring wells were installed to gather more data needed to devise additional cleanup plans. In August 1987, surface wipe samples were taken on the north side of the No. 5 Paper Machine building to determine the extent of PCB surface contamination."

Groundwater

"As a part of the site investigations, 22 monitoring wells were installed near the three spill sites during the summer and fall of 1988. These wells were supplemented by 22 additional wells installed throughout the mill site in early summer 1989. The initial 22 wells were sampled on a quarterly basis, from winter 1988

through December, 1989. Water levels were monitored in all wells from installation through August 1990. Samples were analyzed for PCB and chlorobenzene."

1.3.2 EPA Memorandum of Consent Agreement, November 21, 1991

Per the EPA Memorandum of Consent Agreement, it is required that both EPA and MEDEP are notified of proposed excavation activities in areas identified as containing PCBs.

1.3.3 Earthcon, Data Review, dated August 2015

According to the Data Review of the No.5 Paper Machine Site at the East Millinocket Operations of Great Northern Paper Company East Millinocket, Maine, dated August 26, 2015 prepared by Earthcon, "*The spill at the No. 5 Paper Machine Site occurred on May 14, 1981 as the result of an electrical failure…… There was no soil clean-up performed at that time (Stone and Webster, 1988a: Data Package for No. 5 Paper Machine. Stone and Webster Engineering Corporation. April 6, 1988).*

On August 28, 1985, as a result of the discovery of PCB contamination near the southeast corner of the No. 6 Paper Machine building, soil samples were collected from excavations for pier footings near the location of transformer T-122, to determine whether PCBs were present. Laboratory analytical results indicated PCB concentrations were less than 50 milligrams per kilogram (mg/kg). To confirm these results, three test pits were excavated around transformer T-122 and soil samples were collected and analyzed for PCBs. The analytical results for one of the six samples indicated a PCB concentration of 320 mg/kg; the others had PCB concentrations of 8 mg/kg or less (Stone and Webster 1988a).

Additional soil samples were then collected by GNP to determine the extent of PCB Impacted soils. The samples were obtained at numerous locations by drilling with a power ice auger to specified depths, sampling the cuttings, excavating to that depth, and repeating the process to the bottom of the auger hole. The locations of the borings are shown on Figure 3 (shown below).

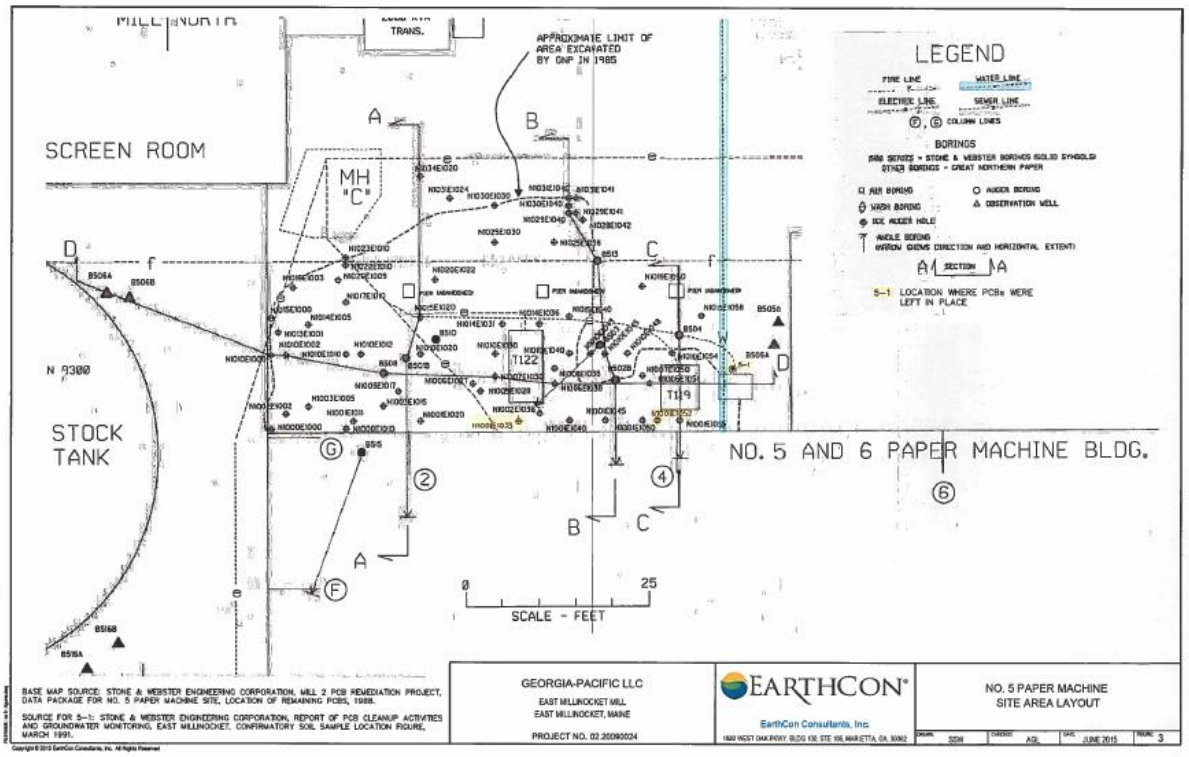
In November and December 1985, GNP removed PCB impacted soil to depths of approximately 7 to 10 feet near the wall of the No. 5 Paper Machine building, and to lesser depths north of the building (E.C. Jordan, 1986). This excavation removed much of the PCB impacted soils; however, the excavation immediately adjacent to the No. 5 Paper Machine building wall footing was limited to a depth of approximately 7 feet to prevent undermining the wall foundation. The excavation around the foundations for transformers T119 and T122 (Figure 3) was also limited to depths that would not undermine the transformers, which were still in service at the time (Stone and Webster 1988a).

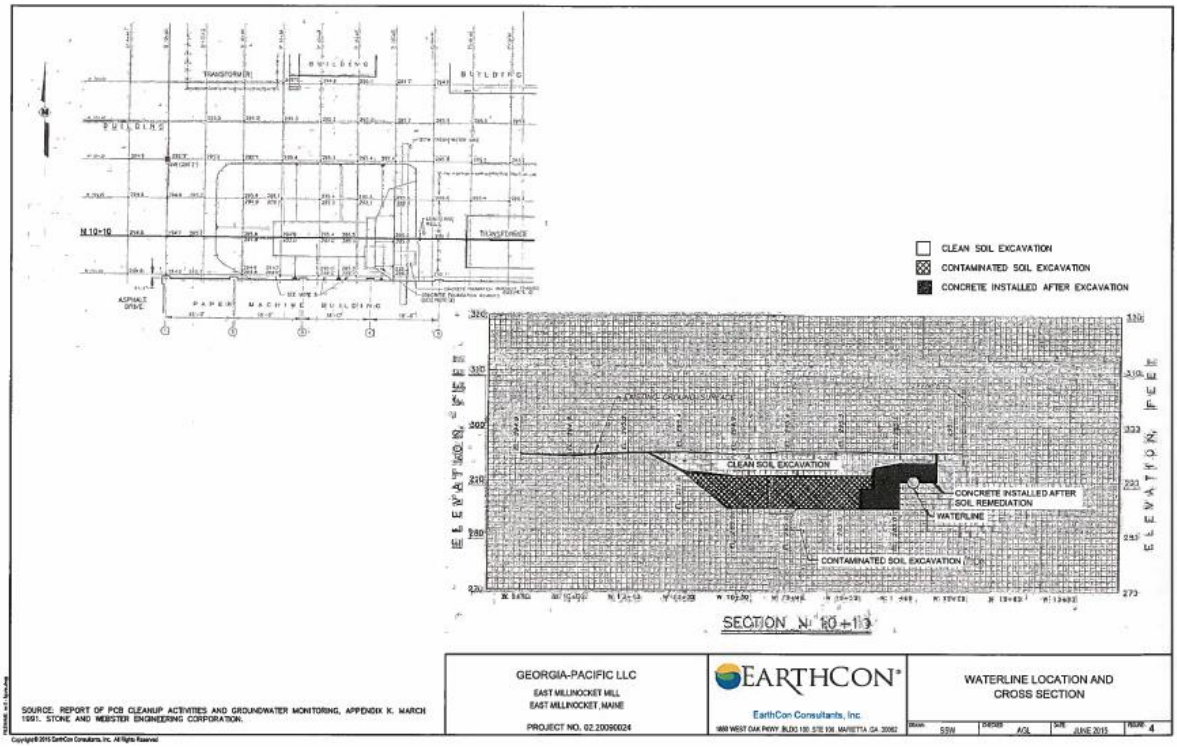
From June 1987 through January 1988, 14 additional soil borings were drilled and six monitoring wells were installed to collect additional soil and groundwater data (Figure 3). Based on this data, a Remediation Plan for No. 5 Paper Machine Site, dated July 22, 1988 was prepared and submitted to USEPA. From July 1989 to January 1990, additional excavation/soil remediation activities were performed in accordance with this plan. Laboratory analytical results for samples collected from the surfaces of the excavations confirmed that soils with PCB concentrations in excess of 50 mg/kg had been removed and no additional excavation was necessary (Stone and Webster, 1991: Report of PCB Cleanup

Activities and Groundwater Monitoring, East Millinocket Mill. Stone and Webster Engineering Corporation. March 1991). However, the Remediation Plan for No. 5 Paper Machine Site noted that a small volume of soils containing PCBs were left in place along the wall of the No. 5 Paper Machine building, below the level of the wall foundation, to avoid undermining the building. The two locations, N1001 E1033 and N1001 E1052 are shown on Figure 3. PCB concentrations remaining at these locations are as follows: 85 mg/kg at a depth of 10.78 feet at boring N1001 E1033 and 82 mg/kg at a depth of 10.33 feet at boring N1001 E1052.

The Remediation Plan for No. 5 Paper Machine Site also called for the removal of a section of the water line pipe as shown on Figure 3. This could not be accomplished so instead, the soil surrounding the top of the pipe was excavated and removed to an elevation of 290.3 feet. Post excavation confirmation samples collected from around the pipe indicated the presence of PCBs (Aroclor-1260) at a concentration of 70 mg/kg and chlorobenzene (1,2,3,4-tetrachlorobenzene) at a concentration of 4.5 mg/kg at sample location 5-1 which is located adjacent to the west side and under the pipe as shown on Figure 3. A cross section illustrating a section of the excavation around the water line and the concentrations of PCBs left in place is shown on Figure 4 (shown below)*. Once excavation activities were complete, clean backfill was placed along the pipe and concrete was placed along the west side as well as along the top of the pipe, as shown on Figure 4. Upon completion of the remediation activities, the surface of the No. 5 Paper Machine Site was paved."*

Historical analytical data was collected from monitoring wells MW-803S and MW-803O since 1993. These wells are located down gradient of the No. 5 Paper Machine Site. With the exception of one detection of 1,2,3,4- tetrachlorobenzene reported in March 1994, which was flagged as suspect due to blank contamination, groundwater samples collected since August 1993 from the wells downgradient of the No. 5 Paper Machine Site have been non-detect for both chlorobenzenes and PCBs.


APPROXIMATE LIMIT OF AREA EXCAVATED BY GNP IN 1985
LEGEND
SCREEN ROOM
MH "C"
STOCK TANK
N 9300
NO. 5 AND 6 PAPER MACHINE BLDG.
T122
T119
SCALE - FEET
BASE MAP SOURCE: STONE & WEBSTER ENGINEERING CORPORATION, MILL 2 PCB REMEDIATION PROJECT, DATA PACKAGE FOR NO. 5 PAPER MACHINE SITE, LOCATION OF REMAINING PCBS, 1988.
SOURCE FOR S-1: STONE & WEBSTER ENGINEERING CORPORATION, REPORT OF PCB CLEANUP ACTIVITIES AND GROUNDWATER MONITORING, EAST MILLINOCKET, CONFIRMATORY SOIL SAMPLE LOCATION FIGURE, MARCH 1991.
GEORGIA-PACIFIC LLC
EAST MILLINOCKET MILL
EAST MILLINOCKET, MAINE
PROJECT NO. 02.20090024
EARTHCON
EarthCon Consultants, Inc.
NO. 5 PAPER MACHINE SITE AREA LAYOUT
JUNE 2015
3


CLEAN SOIL EXCAVATION
CONTAMINATED SOIL EXCAVATION
CONCRETE INSTALLED AFTER EXCAVATION
PAPER MACHINE BUILDING
CLEAN SOIL EXCAVATION
CONCRETE INSTALLED AFTER SOIL REMEDIATION
WATERLINE
CONTAMINATED SOIL EXCAVATION
SECTION N 10+13
ELEVATION, FEET
SOURCE: REPORT OF PCB CLEANUP ACTIVITIES AND GROUNDWATER MONITORING, APPENDIX K. MARCH 1991. STONE AND WEBSTER ENGINEERING CORPORATION.
GEORGIA-PACIFIC LLC
EAST MILLINOCKET MILL
EAST MILLINOCKET, MAINE
PROJECT NO. 02.20090024
EARTHCON
EarthCon Consultants, Inc.
WATERLINE LOCATION AND CROSS SECTION
JUNE 2015
4

1.3.4 Ransom Consulting LLC, Needs Assessment & Preliminary Scope of Work Phase II Environmental Site Assessment Priority Development Areas Former GNP East Millinocket Mill, East Millinocket, Maine, dated May 28, 2020

Ransom Consulting LLC, identified the following potential contaminants of concern (CoPC) to be evaluated at select portions of the Site. The CoPC referenced in the table below include: extractable petroleum hydrocarbons (EPH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), various metals, and air-phase petroleum hydrocarbon (APH). TO-15 refers to an analytical method used to evaluate VOCs in air.

Table 1: Preliminary Sampling Plan

SOURCE / RECEPTOR AREA	MEDIA & QUANTITY	CONTAMINANTS OF CONCERN / ANALYTICAL PARAMETERS	RATIONALE
Study Area 5 - Recycle Fiber Warehouse Area			
Recycle Fiber Warehouse Building	6 to 8 Soil Borings and/or Surficial Soil Samples (0 to 2 feet below grade)	EPH, PAHs, Metals	To assess the perimeter and downgradient soil conditions in the vicinity of the building.
	4 to 6 Groundwater Monitoring Wells	EPH, PAHs, Metals	To evaluate hydraulic gradient and groundwater conditions in the vicinity of the building.
	2 to 4 sub-slab or near-slab Soil Vapor Samples	Petroleum / APH	To assess soil vapor conditions in the vicinity of the warehouse building and potential exposure risks for re-occupation or redevelopment.
Chemical Storage Plant	4 to 6 Soil borings and/or Surficial Soil Samples (0 to 2 feet below grade)	VOCs, SVOCs, Metals	To assess shallow and deep zone soil conditions in the vicinity of the Chemical Storage Plant building.
	3 to 4 Groundwater Monitoring Wells	VOCs, SVOCs, Metals	To evaluate groundwater conditions in the vicinity of the Chemical Storage Plant.
	2 to 3 sub-slab or near-slab Soil Vapor Samples	VOCs / TO-15	To assess soil vapor conditions in the vicinity of the Chemical Storage Plant.
Former Recycle Fiber Plant and Flotation Cell Buildings	5 to 7 Soil borings and/or Surficial Soil Samples (0 to 2 feet below grade)	VOCs, SVOCs, EPH, PCBs, Metals	To assess shallow and deep zone soil conditions within the footprint and in the area of the former buildings.
	3 to 4 Groundwater Monitoring Wells	VOCs, SVOCs, EPH, PCBs, Metals	To evaluate groundwater conditions in the vicinity and downgradient of the former buildings.
	2 to 3 Soil Vapor Samples	VOCs / TO-15	To understand soil vapor conditions in this area in the event that this area is developed with inhabitable structures in the future.
Former Asphalt Plant	3 to 6 Soil Borings	EPH, SVOCs, Metals	To assess shallow and deep zone soil conditions in the area of the former asphalt plant.
	8 to 16 Surficial Soil Samples (0 to 2-feet below grade)	EPH, SVOCs, Metals	To evaluate surface soil conditions in the area of the former asphalt plant.

Northern Portion of Study Area 2 - No. 2 Train Shed & Shipping Area			
No. 5 & 6 Finishing Room and No. 6 Transformer Release Area	4 to 8 Soil Borings	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate soil conditions within the footprint of the former No. 5 & 6 Paper Machine building and vicinity of the previous No. 6 electrical transformer oil spill.
	3 to 5 Groundwater Monitoring Wells	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate groundwater conditions in the area of the No. 5 and 6 Finishing Room, within the footprint of the former No. 5 & 6 Paper Machine building, and in the vicinity of the previous No. 6 electrical transformer oil spill.
	2 to 3 Soil Vapor samples	Petroleum/APH and VOCs/TO-15	To evaluate soil vapor conditions in the vicinity of the No. 5 & 6 Finishing Room which is proposed for reuse.
Drum Storage Area	4 To 8 Soil Borings and/or surficial Soil Samples (0 to 2 feet below grade)	SVOCs, EPH, Metals	To evaluate soil conditions beneath currently paved areas, upgradient, and at depth, in the Drum Storage Area.
	1 to 3 Groundwater Monitoring Wells	SVOCs, EPH, Metals	To evaluate upgradient groundwater conditions, and potential impacts from railroad and delivery operations.
	2 to 3 Soil Vapor samples	Petroleum/APH and VOCs/TO-15	To evaluate soil vapor conditions for potential future development and reuse.
Hazardous Waste Storage Buildings	4 to 6 Soil Borings and/or Surficial Soil Samples (0 to 2 feet below grade)	VOCs, SVOCs, PCBs, Metals, EPH,	To evaluate potential releases and redevelopment options in the area of the hazardous waste storage buildings.
	1 to 3 Groundwater Monitoring Wells	VOCs, SVOCs, PCBs, Metals, EPH,	To evaluate groundwater conditions on the eastern portion of the site in relation to previous hazardous waste storage and railroad operations.
	1 to 2 Soil Vapor Samples	Petroleum/APH and VOCs/TO-15	To evaluate soil vapor conditions for potential future development and reuse.
Railroad Operations	12 to 16 Surficial Soil Samples (0 to 2-feet below grade)	EPH, SVOCs, Metals	To evaluate surficial soil conditions in relation to historic railroad operations and future shipping and receiving operations.
	1 to 3 Groundwater Monitoring Wells	VOCs, SVOCs, EPH, Metals	To evaluate groundwater conditions in the eastern portion of the site in relation to previous railroad operations and future development opportunities.

Study Area 6 - Wood Lot Area			
Former Chemi-groundwood Building	4 to 8 Soil Borings	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate soil conditions within the footprint and vicinity of the Former Chemi-groundwood Building.
	3 to 4 Groundwater Monitoring Wells	VOCs, SVOCs, PCBs, Metals, EPH	To assess groundwater conditions in relation to historic operations at the Former Chemi-groundwood building and evaluate potential redevelopment scenarios.
	1 to 2 Soil Vapor Samples	Petroleum/APH and VOCs/TO-15	To evaluate soil vapor conditions for future development and reuse in the area of the Former Chemi-groundwood Building.
Slasher Control Room / Wood Room	6 to 10 Soil Borings and/or Surficial Soil Samples (0- to 2 feet below grade)	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate shallow and deep zone soil conditions in the vicinity and downgradient of the Slasher Control Building and Wood Room Building.
	3 to 5 Groundwater Monitoring Wells	VOCs, SVOCs, PCBs, Metals, EPH	To assess groundwater conditions in relation to apparent spills/releases and historic operations in the vicinity and downgradient of the Slasher Control Building and Wood Room Building.
	2 to 3 Soil Vapor Samples	Petroleum/APH and VOCs/TO-15	To evaluate soil vapor conditions for future development and reuse in the area of the Slasher Control Building and Wood Room Building.
Wood Lot & Lagoon	3 to 6 Soil Borings	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate shallow and deep zone soil conditions throughout the Wood Lot area.
	3 to 6 Groundwater Monitoring Wells and/or Surface Water Samples	VOCs, SVOCs, PCBs, Metals, EPH	To assess groundwater conditions in relation to historic operations in the area of the Wood Lot and Lagoon.
	12 to 16 Surficial Soil Samples (0 to 2-feet below grade)	VOCs, SVOCs, PCBs, Metals, EPH	To evaluate surficial soil conditions in relation to Wood Lot operations and future development of commercial / industrial operations in this area.

1.3.5 KGSNE JV, LLC, Targeted Brownfields Assessment Great Northern Paper Mill-Study Area 5, East Millinocket, Maine, dated April 13, 2021

According to this report, soil samples were collected to evaluate potential impacts to shallow soils in an area of the site that was used as a temporary asphalt batching plant. 18 hollow stem auger soil borings were completed to depths approximately 6 to 20 feet below grade. 46 soil samples were analyzed for various contaminants including VOCs, SVOCs, PCBs, EPH, metals, and hexavalent chromium. One soil sample from each boring location, collected from the 0-2 foot below ground surface interval, was analyzed to evaluate near-surface soil for direct-contact exposure potential and an additional soil sample was analyzed from the deeper vadose zone based on visual/olfactory evidence, or photoionization detector (PID) headspace evidence suggesting possible contamination. If no such evidence was identified, a soil sample was analyzed from the approximate groundwater surface. 10 of the soil borings were completed as overburden monitoring wells and sampled for CoPC.

KGSNE collected soil gas samples from temporary soil gas grab points through the concrete building foundations and analyzed for VOCs and air phase petroleum hydrocarbons.

Soil encountered consisted of gravelly sand deposits throughout the study area. Thicknesses ranged between 4 and 14 feet were noted in the soil borings. Thinner bands of silty sand, silty clay, clayey silt, and gravely silt were noted in several soil borings. Some of the gravelly sand contained evidence of fill materials including plastic, metal, wood, roots, and stumps. Therefore, it may be concluded that at least some of this deposit is landfill. Bedrock was not encountered in any of the soil borings advanced.

Groundwater flow direction is towards the southwest, and the adjacent river at an approximate hydraulic gradient of 0.03 feet per foot.

Relatively few soil samples exhibited CoPC concentrations exceeding MEDEP Remedial Action Guideline (RAG) for commercial workers and construction workers. Acetone (likely a laboratory contaminant), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, and toluene were detected in soil samples collected from the former Chemical Plant area. None of these detections exceeded MEDEP RAGs. Therefore, based on these results, VOCs are not considered a soil contamination concern.

Numerous polynuclear aromatic hydrocarbons (PAHs) were detected in the former asphalt plant area. The majority of the soil samples collected were within the top 2 feet of soil; however, the maximum PAH concentrations were reported in a soil sample collected from between 4 and 6 feet below grade. Benzo(a)pyrene at 17,000 micrograms per kilogram (µg/kg) in a soil sample collected from FAP-9 at between 4 and 6 feet below grade was the lone substance that exceeded the MEDEP RAG for the Construction Worker Scenario. None of the other PAH detections exceeded the MEDEP RAG for the Commercial Worker Scenario.

Detectable concentrations of EPH substances were reported in each of the areas investigated, however, none of these concentrations exceeded MEDEP RAGs. Based on these results, EPH contamination in soil does not appear to be significant.

Arsenic is the sole metal that exceeded the Undeveloped MEDEP Background Upper Prediction Limit (UPL) value of 16 milligrams per kilogram (mg/kg), however, none of the concentrations exceeded the MEDEP Commercial Worker or Construction Worker RAG. The highest arsenic concentration (28.9 mg/kg) is reported in the former asphalt batch plant area. This sample was collected from between 0 and 2 feet below grade at soil boring FAP-9.

Only one VOC (dichlorodifluoromethane) was detected in groundwater samples. Dichlorodifluoromethane (a refrigerant) was detected at 19 micrograms per liter (µg/L) in monitoring well CSP-2, located slightly south of the former Chemical Storage Plant. Although the reported concentration is well below the MEDEP RAG and the Maine Center for Disease Control Maximum Exposure Guidelines for drinking water (MEGs), the VOC was also detected at elevated concentrations in nearby soil vapor samples. The source of the dichlorodifluoromethane is not known.

No SVOCs were detected above reporting limits in groundwater samples collected. Of the three groundwater samples collected for EPH analysis, only one (RFW-3) reported a detection. This sample contained naphthalene at 5.7 µg/L, which does not exceed the MEDEP Commercial Worker RAG or MEG. Therefore, the presence of naphthalene does not appear to be significant.

Although arsenic was detected in several samples; however, only the CSP-1 sample (at 38 µg/L) exceeded the MEGs. This monitoring well is located east of the former Chemical Storage Plant adjacent to former storage tanks. The source of the arsenic is not known but may be related to past site operations or natural deposits. At 9.1 µg/L, this lead concentration is well below the MEG and the U.S. EPA Primary Drinking Water Maximum Contaminant Level (MCL). Groundwater at the former mill complex is not a drinking water source, therefore, the presence of these metals in groundwater is not considered significant.

Numerous substances were detected in soil vapor samples collected from Study Area 5. These results were compared to the Maine Air RAGs for the Commercial Exposure Scenario. Although 30 VOCs were detected in soil gas samples, only dichlorodifluoromethane was detected at a concentration exceeding the Maine Commercial Worker Air RAG in the sample collected from RFP-6 at a concentration of 19,000 micrograms per cubic meter (µg/m^3). Application of the sub-slab indoor air attenuation factor (0.03) to the measured concentration results in an adjusted concentration of 570 µg/m^3, which still exceeds the Maine Commercial Worker Air RAG of 440 µg/m^3. This refrigerant was also detected in a nearby groundwater sample (CSP-2); however, it was not detected in soil samples. As dichlorodifluoromethane has an extremely high vapor pressure, it is possible that the act of collecting soil samples was sufficient to volatilize low concentrations of the substance. The source of the dichlorodifluoromethane is not known but appears to be limited to the former Chemical Storage Plant and former Recycle Fiber Plant areas.

Several petroleum hydrocarbons were detected in the soil vapor samples collected from the former Recycle Fiber Warehouse, however, no concentrations exceeded respective Maine Commercial Worker RAGs.

The report describes that elevated PAH contamination detected in soil samples collected from the former asphalt batch plant area may require remediation as part of the site redevelopment program. Additionally, the detection of dichlorodifluoromethane at elevated concentration in soil gas samples may also require management prior to redevelopment. The benzo(a)pyrene concentration detected in FAP-9 between 4 and 6 feet below grade exceeds the Maine Construction Worker RAG. As residential use of this and other areas are not anticipated as part of the site redevelopment, it does not appear that active soil remediation will be necessary to address the detected substances. Institutional controls such as Activity and Use Limitations (AULs) and soil management may be necessary to prevent unrestricted reuse of the area.

The presence of dichlorodifluoromethane in soil gas in the former Chemical Storage and Recycling Fiber Plants may require management should occupied structures be built over the area. Assuming the source of the dichlorodifluoromethane impacts remains unknown, sub-slab vapor management systems would adequately address potential risks for indoor air contamination due to this substance. A system may be passive (e.g., sub-slab vapor barriers, or a passive vacuum pit and piping) or active, a sub-slab pit or pipe gallery with active pumping of accumulated vapors. The simplest mitigation approach is to install a vapor barrier. This barrier would be approximately 20 mil in thickness and be a high-density polyethylene product. Assuming that a single sheet is not feasible to underlie the entire footprint, it may be necessary to weld several seams with an epoxy or similar material.

1.3.6 KGSNE JV, LLC, Targeted Brownfields Assessment Great Northern Paper Mill-Study Area 2 North, East Millinocket, Maine, dated February 16, 2022

According to this report, Study Area 2 includes former railroad operations, drum storage operations, a hazardous waste storage area, finishing rooms and a paper warehouse and the contaminants of concern are based on the past uses in the area and prior investigations. The CoPC include:

Railroad Operations/Train Shed No. 2
"Given its use in the transfer of mill feedstock and products, spills and small releases of process chemicals and/or petroleum products to the ground surface are possible. Therefore, the following CoPC are identified: SVOCs, EPH, PCBs, the 13-priority pollutant (PP13) metals, and hexavalent chromium."

No. 5 and 6 Finishing Room
"Based on prior evaluations, the building itself is not weatherproof and exhibited petroleum staining on the concrete floors that appeared to be associated with mill equipment. This staining may have been transported to environmental media. Additionally, an estimated 600-gallon 1978 PCB (Aroclor-1260)-containing dielectric fluid release impacted surface and subsurface soil adjacent to the No. 5 and 6 Finishing Rooms. The fluid also reportedly contained chlorobenzene compounds. Based on these conditions, the following CoPC are identified: VOCs, SVOCs, EPH, PCBs, PP13 metals, and hexavalent chromium."

Hazardous Waste Storage Area
"During mill operations, hazardous wastes including corrosives, ignitable wastes, various metals, chlorinated solvents, waste oil, and PCB-containing materials were temporarily stored within these sheds

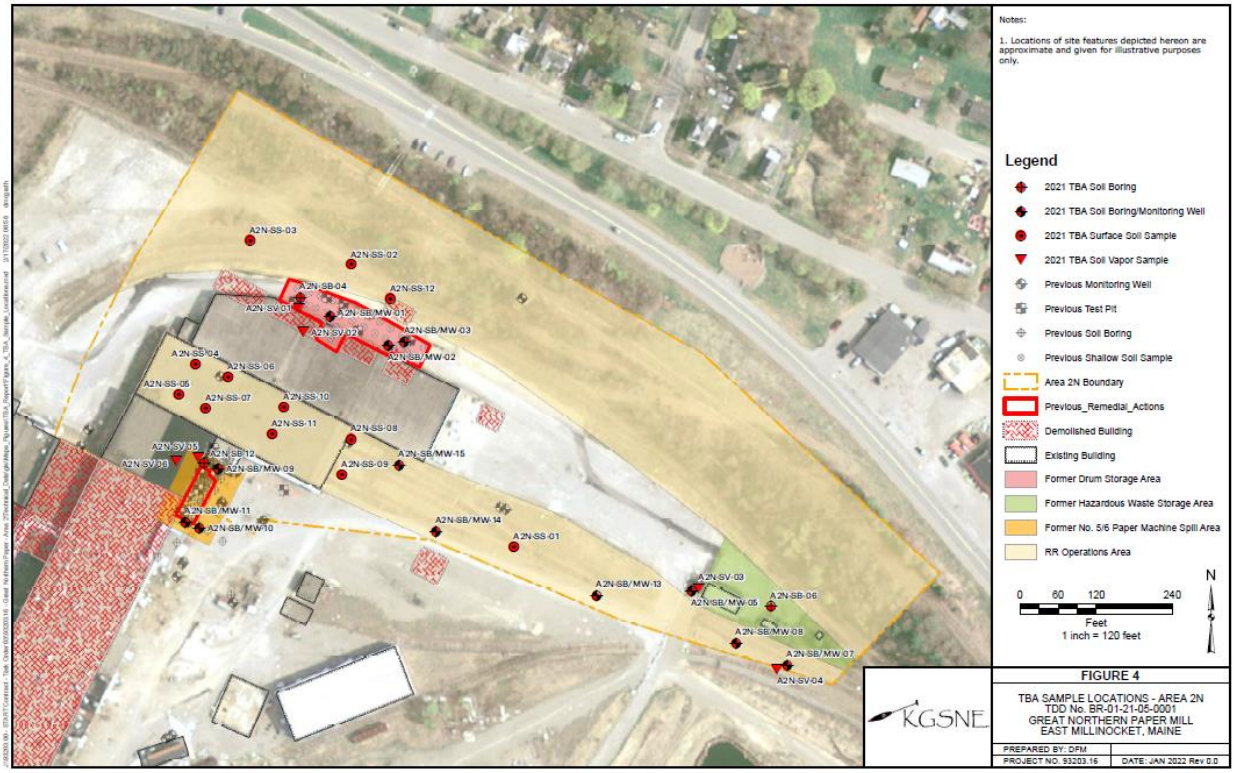
for proper disposal. Additionally, radioactive-source-containing equipment (likely β particle emitters used to measure product weight) were also reportedly present. Such equipment is generally shielded by using thin sheets of metal or thicker wood blocks. β particle sources included in the equipment are likely well shielded and if present are within the storage shed which provides additional shielding. The presence/absence of this equipment is not known but is not likely present. No investigations are planned in the area around this shed; however, refer to the health and safety plan for further details regarding monitoring etc. Based on these conditions, the following CoPC are identified: VOCs, SVOCs, EPH, PCBs, PP13 metals, and hexavalent chromium."

Drum Storage Area

"The Drum Storage Area formerly contained drums of waste oil, some of which had other hazardous materials intermixed. Remedial excavations in the area were conducted in the late 1980s which removed primarily petroleum-contaminated soil. However, low concentrations of PCBs (Aroclor-1260) and 1,1,1-TCA were also encountered. Based on the known releases at the site, the following CoPC are identified: VOCs, SVOCs, EPH, PCBs, PP13 metals, and hexavalent chromium."

Work Completed and Results

15 soil borings were completed to between approximately 8 and 16 feet below grade (Figure 4 shown below). Soil and groundwater samples for CoPC were collected from each boring and well location.



Soil vapor samples from 6 temporary soil vapor grab points were collected by using a hammer drill to core through the concrete building foundations or a slide hammer to penetrate surface soil.

Gravelly sand deposits were observed throughout the study area. Thicknesses ranging between 4 and 14 feet were noted in the soil borings. Thinner bands of silty sand, silty clay, clayey silt, and gravely silt were noted in several soil borings. Some of the gravelly sand contained evidence of fill materials including wood, and ash material. Therefore, it may be concluded that at least some of this deposit is landfill. Bedrock was not encountered in any of the soil borings advanced.

Based on the groundwater depth measurements, the approximate groundwater flow direction is towards the southwest, and the adjacent river. The approximate hydraulic gradient is estimated at 0.02 feet per foot.

Relatively few soil samples exhibited CoPC concentrations exceeding Maine Remedial Action Guidelines (RAGs). The vast majority of the detections were well below MEDEP RAGs, while 1,2,4-trichlorobenzene (1,2,4-TCB), 1,4-dichlorobenzene (1,4-DCB), and 1,2,3-trichloropropane (1,2,3-TCP) were detected above their respective groundwater leachability RAGs. Each of these parameters was well below the residential, commercial, construction worker direct contract RAGs. The presence of the chlorobenzene compounds is related to the transformer dielectric fluid spill in the late 1970s and appears to be focused in that area. 1,2,3-TCP was detected (32 micrograms per kilogram (µg/kg) in soil boring A2N-SB-06 from between 6 and 8 feet below grade. This sample is located in the former hazardous waste storage area. No detectable concentrations of 1,2,3-TCP were reported in the shallow soil sample collected from A2N-SB-06, and it was not detected in other nearby soil borings, groundwater, or soil vapor samples. Therefore, it is likely that this release is very localized and does not appear to impact other media.

PAHs represent the majority of the SVOC detections in soil samples. The following PAHs were reported at concentrations exceeding at least one of the MEDEP RAGs: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene. The PAH impacts appear to be limited to surface soil within the former transformer oil spill location, near-surface soil beneath a paved road located immediately south of the rail sidings accessing the train shed, and surface soil located along the rail sidings accessing the train shed. Surface and near-surface soil samples collected from the former transformer oil spill location include A2N-SB/MW-10 (0-2 ft) and A2N-SB/MW-11 (2-4 ft). The samples from these locations exhibited benzo(a)pyrene concentrations exceeding only the MEDEP RAG for the residential scenario. Only the surface soil samples (A2N-SB/MW-13 and A2N-SB/MW-14) collected from the paved road south of the rail sidings contained concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeding the MEDEP RAG for the residential scenario. Of these, the concentrations of benzo(a)anthracene and benzo(a)pyrene also exceeded the MEDEP RAG construction worker, commercial/industrial worker, and/or the leaching to groundwater criteria. Layers of asphalt and ash-containing fill materials were identified beneath the asphalt pavement. Based on the presence of the asphalt and ash materials in the fill and the lack of a field headspace response or petroleum odor, it appears likely that the asphalt and ash debris may be the cause of the elevated PAH contamination rather than a fuel-related release.

Several surface soil samples collected from within the train shed contained concentrations of benzo(a)pyrene or naphthalene or both that exceed the MEDEP RAG for the residential scenario (benzo(a)pyrene) or the Maine leaching to groundwater RAG (naphthalene). Slightly elevated (e.g., less

than 10 ppm headspace measurements were recorded with these samples suggesting a possible fuel-related source. Based on the proximity of each of these samples adjacent to the rail sidings, it is possible that the source may be railroad related. The PAH contamination does not appear to be significant, with only a small area of PAH impacts beneath a paved access road exceeding the MEDEP RAG for the commercial/industrial use scenario. However, sample composition included asphalt and ash debris which is the likely cause of the elevated PAH concentrations. Therefore, as long as site redevelopment is limited to commercial/industrial uses, no remedial actions related to PAH impacts are anticipated.

EPH substances were reported in each of the areas investigated; however, only one sample (surface soil sample collected from A2N-SB/MW-14) exceeded the MEDEP RAG for leaching to groundwater for the C11-C22 aromatic fraction. This sample contained quantities of asphalt and ash debris within the sample matrix. As with the PAH contamination described above, it is also likely that this debris also resulted in the elevated EPH fraction concentration. This EPH impact does not appear to be widespread, and therefore no further action is anticipated.

PCB aroclor-1260 was detected in soil samples collected throughout the former transformer oil spill area and within the train shed. The majority of these concentrations were low (e.g., less than 1 mg/kg) with the exception of a sample collected from between 8 and 10 feet below grade from boring A2N-SB-12. This boring is located slightly northeast of the PCB release excavation area. Although low concentrations of PCBs were identified in surface soil and near-surface soil samples collected from the perimeter of the PCB remediation area, no PCB detections were identified in the surface soil sample collected from boring A2N-SB-12. This PCB distribution fits the conceptual site model expressed by Tetra Tech in their June 6, 2018 Technical Memorandum regarding the PCB Assessment and Remediation at the East Millinocket Site. This memorandum suggested that PCB impacted soil remaining after the remedial action was present at depths of 5 feet or greater. This coupled with the MEDEP's prohibition of soil excavation in the PCB release areas as expressed in the VRAP no action assurance letter and certificate of completion continue to provide sufficient protectiveness. Should excavation of this area be contemplated during site redevelopment, correspondence with MEDEP will be necessary, and the soil management should be comprehensively planned.

Each of the metals analyzed was detected at least once; however, only arsenic and hexavalent chromium were detected above one (or more) of the MEDEP RAGs. Every arsenic concentration exceeded the MEDEP RAG for leaching to groundwater (0.83 mg/kg), and several of these also exceeded the MEDEP RAG for the residential scenario. One surface soil sample collected from A2N-SS-01 (located along the train shed rail siding) also exceeded the MEDEP commercial and construction worker scenarios RAGs.

Arsenic is a naturally occurring metal for which Maine has estimated an undeveloped rural background concentration of 16 mg/kg. This value may be used to represent background conditions should the presence of arsenic in on-site soil samples be unrelated to anthropogenic influence. The arsenic detected in the majority of site soil samples are below 16 mg/kg which suggests that it is related to natural background conditions. Potential arsenic sources include arsenic-based pesticide/herbicide usage in/around the rail sidings to preserve wooden ties, the use of arsenic-based pressure treated ties, or possibly in inks historically used in the printed paper industry (although the East Millinocket mill produced newsprint and not printed paper). Therefore, the rail sidings may represent a source of arsenic

contamination. The arsenic concentrations nearest the railroads exhibited significantly higher arsenic concentrations than those collected from elsewhere within Area 2 N and from elsewhere on the mill complex. Therefore, it may be assumed that the elevated arsenic concentrations are likely related to rail operations. The vertical extent of the arsenic presence has not been fully established; however, deeper soil samples did not exhibit elevated arsenic concentrations in soil borings. The release of arsenic-containing materials during rail operations likely occurred at the surface and would not be expected to substantially migrate vertically.

The hexavalent chromium species represented a miniscule amount of the total chromium detected in soil samples. All of the hexavalent chromium results were well below the MEDEP RAG for the residential, commercial, and construction worker scenarios. However, eight of the samples contained hexavalent chromium concentrations exceeding the MEDEP RAG for leaching to groundwater. Additionally, many of the laboratory reporting limits exceeded this value as well. Groundwater samples collected from the newly installed monitoring wells did not contain detectable concentrations of hexavalent chromium. Therefore, it is unlikely that hexavalent chromium presence represents a potential risk to groundwater. No further action is recommended to address the hexavalent chromium in soil.

Relatively few groundwater samples exhibited CoPC concentrations exceeding MEDEP RAG criteria and/or MEGs for drinking water. One groundwater sample exhibited VOC concentrations exceeding MEDEP RAGs and/or MEGs. The sample collected from A2N-SB/MW-11 contained several chlorobenzene concentrations that exceed criteria. This monitoring well is located slightly downgradient of the transformer dielectric fluid release and remedial action area. The dielectric fluid reportedly contained significant quantities of chlorobenzene compounds, which is also reflected in several soil samples collected as part of this" assessment *"from this area. The extent of the VOC contamination has not been established. Samples collected from nearby monitoring wells did not detect significant VOC impacts; however additional monitoring wells better positioned to detect such a plume may be necessary to adequately define the extent of this contamination.*

Chlorobenzene compounds were also detected in the SVOC analysis conducted on the groundwater sample collected from A2N-SB/MW-11. The concentrations reported in the SVOC analysis were slightly lower than their partner VOC analytical fraction and also exceed MEDEP RAGs and/or MEGs. As stated above, additional characterization of this release will be necessary to establish an extent of contamination. No other SVOCs were detected above the reporting limits in groundwater samples.

No PCBs or EPHs were detected above laboratory reporting limits in groundwater samples. Several metals were detected in groundwater; however, only arsenic and lead exceeded MEDEP RAG/MEGs. Arsenic exceeded the Maine Residential Tapwater RAG of 0.52 µg/L in most samples, but exceeded the MEG of 10 µg/L in only one sample (A2-MW-07 at 11 µg/L). Similarly, lead exceeded the Maine Residential Tapwater RAG of 5 µg/L in two samples, but the MEG of 10 µg/L in only one sample (A2-MW-01 at 11.6 µg/L). The sample collected from monitoring well A2N-MW-07 is located the furthest east and downgradient of the former hazardous waste storage area. The arsenic concentration in this well is slightly above the MEG, and no drinking water supplies are located nearby. Therefore, no active human health risks are associated with this arsenic contamination. The sample collected from monitoring well A2N-MW-01 is the most upgradient sample collected as part of this TBA. No lead-related soil impacts

were identified in soil samples collected. The lead concentration in the groundwater sample is slightly above the MEG, and no drinking water supplies are located nearby. Therefore, no active human health risks are associated with this lead contamination.

Numerous substances were detected in soil vapor samples collected from Study Area 2. These results were compared to the MEDEP Air RAGs for the Commercial and Residential Indoor Air Exposure Pathways. Numerous VOCs were detected in soil vapor samples; however, only two VOCs were detected above their respective MEDEP RAGs for the residential scenario: 1,4-Dichlorobenzene at 8.4 micrograms per cubic meter (µg/m³) in sample SV-04, and tetrachloroethylene (PCE) at 80.7 µg/m³. The established MEDEP RAGs are 2.6 µg/m³ and 42.0 µg/m³, respectively. PCE was not detected in soil or groundwater. Neither of these concentrations exceeded the MEDEP RAG for Commercial Indoor Air, therefore, no active human health risk potential exists as long as the area remains developed/redeveloped for commercial or industrial use. As with the VOCs in soil vapor samples, several petroleum hydrocarbons were detected in the soil vapor samples as well. Some of these detections exceeded MEDEP RAGs for the residential exposure scenario. These include:1,3-butadine, C5-C8 aliphatics, and C9-C12 aliphatics. None of these concentrations exceed the MEDEP RAG for the commercial/industrial scenario. Therefore, as long as the property remains commercial/industrial in its usage, no further action is necessary."

CONCLUSIONS & RECOMMENDATIONS

"Elevated PAH contamination detected in soil samples collected from the former asphalt batch plant area may require remediation as part of the site redevelopment program. Additionally, the detection of dichlorodifluoromethane at elevated concentration in soil vapor samples may also require management prior to redevelopment.

<u>Former Drum Storage Area</u>

The Former Drum Storage Area exhibited minimal soil contamination, mainly by arsenic and hexavalent chromium concentrations that exceeded only the MEDEP RAGs for leaching to groundwater. Groundwater samples collected from this area identified arsenic at a concentration exceeding the Maine Tapwater RAG but below the MEG. Lead was also detected above the Maine Tapwater RAG and the MEG in one of two groundwater samples collected from this area. Lead was not detected in soil samples above any MEDEP RAGs. No other contaminants were detected in groundwater samples exceeding either the MEDEP RAG or the MEGs."

Soil vapor samples collected from this area detected concentrations of PCE, 1,3-butadine, and C5-C8 aliphatic hydrocarbons above their respective MEDEP RAGs for the residential indoor air scenario only.

Based on these results, as well as the December 1989 closure report, as long as the area remains developed for commercial/industrial uses, and groundwater is not used for drinking purposes, no further actions are necessary to address contaminants associated with the Former Drum Storage Area.

<u>Former Hazardous Waste Storage Area</u>

The Former Hazardous Waste Storage Area exhibited minimal soil contamination, primarily by arsenic concentrations that exceeded the MEDEP RAG for leaching to groundwater and/or for the residential use

scenario. Groundwater samples collected from this area identified arsenic at a concentration exceeding the Maine Tapwater RAG but below the MEG. No other contaminants were detected in groundwater samples exceeding either the MEDEP RAGs or the MEGs.

Soil vapor samples collected from this area detected concentrations of 1,4-dichlorobenzene and C9-C12 aliphatic hydrocarbons above their respective MEDEP RAGs for the residential indoor air scenario only. Based on these results, as long as the area remains developed for commercial/industrial uses, no further actions are necessary to address contaminants associated with the Former Hazardous Waste Storage Area.

No. 5 and 6 Finishing Room and Transformer Spill Area

The historical transformer spill area located adjacent to the former No. 5 and 6 paper machine building remains a source of chlorobenzene, PCB, and PAH contamination in soil. Arsenic concentrations in soil were detected above only the MEDEP RAG for leaching to groundwater. Of the soil contaminants, the chlorobenzenes and arsenic were detected at concentrations exceeding their respective MEDEP RAGs/MEGs in groundwater. Only 1,2,4-TCB and 1,3-DCB were detected above the MEGs and 1,2,4-TBC was also detected above the MEDEP RAGs for the construction worker scenario. The extent of this contamination has not yet been determined; however, based on the data collected, the impacts appear to be limited to depths of greater than 4 feet below existing grade. Investigations beneath the adjacent floor slabs could not be conducted as the No. 5 and 6 Paper Machine Building demolition debris prevented access to that portion of the slab, and insufficient height clearance was afforded in the former No. 5 and 6 Finishing Building to be able to conduct investigations. Additional soil characterization is necessary to the north and west of the release area, and additional groundwater characterization is necessary downgradient and cross-gradient of the release area. Additionally, as the chlorobenzene substances have a higher specific density than that of water, migration may be both lateral and vertical. Therefore, deeper monitoring wells should be installed to evaluate the groundwater conditions at depth.

Soil vapor samples collected from beneath the floor slab in the former No. 5 and 6 Finishing Building did not detect any chlorobenzene compounds, but did identify C5-C8 aliphatic and C9-C12 aliphatic hydrocarbons at concentrations exceeding their respective MEDEP RAGs for the residential indoor air scenario.

The PCB remedial action was completed in compliance with Toxic Substances Control Act (TSCA) and an associated Consent Agreement and Final Order (CAFO) issued by EPA. In 2003, MEDEP issued a VRAP "no action assurance letter and certificate of completion" related to this PCB remedial action. Routine groundwater monitoring was required by EPA as part of the CAFO, but had not detected PCBs in groundwater (except on two occasions) during the ensuing 25 years. Georgia Pacific issued a document stating that it believed that the obligations outlined in the CAFO were completed and that remaining contamination would not serve as a risk to human health unless the soil in the area is excavated. Furthermore, as a condition of the liability limitation, the VRAP letter requires that MEDEP be notified if such excavation activities are contemplated. Based on the available data, and the available file information, KGSNE agrees that the PCB contamination is controlled by the existing concrete floor slab and the MEDEP excavation preclusion. Further investigation of soil and groundwater conditions will be

necessary to establish the limit of chlorobenzene impacts in soil and groundwater and ultimately on the redevelopment approach for this area.

Railroad Operations/Train Shed No. 2

The historical rail operations occupy a large swath of Area 2 North. Investigations targeted a portion of the historical rail operations areas to identify whether the former rail operations may have resulted in releases to the environment. Investigations were conducted along the rail sidings as well as within the No. 2 Train Shed. PAH concentrations varied significantly within the former railroad operations area. The highest concentrations detected in surface soil samples came from directly beneath a paved access road (A2N-SB/MW-13 and A2N-SB/MW-13). Debris including asphalt and cinders were included in the matrix. Soil samples collected from other portions of the railroad operations area were significantly lower. It is likely that the debris encountered in the surface soil samples from the two soil borings noted above impacted the PAH concentrations. Additional surface soil characterization in the area of the two anomalously elevated concentrations may be required as these anomalously elevated concentrations have a significant impact on the 95% UCL concentration. None of the subsurface soil samples (collected from 8-10 feet below grade) reported positive detections.

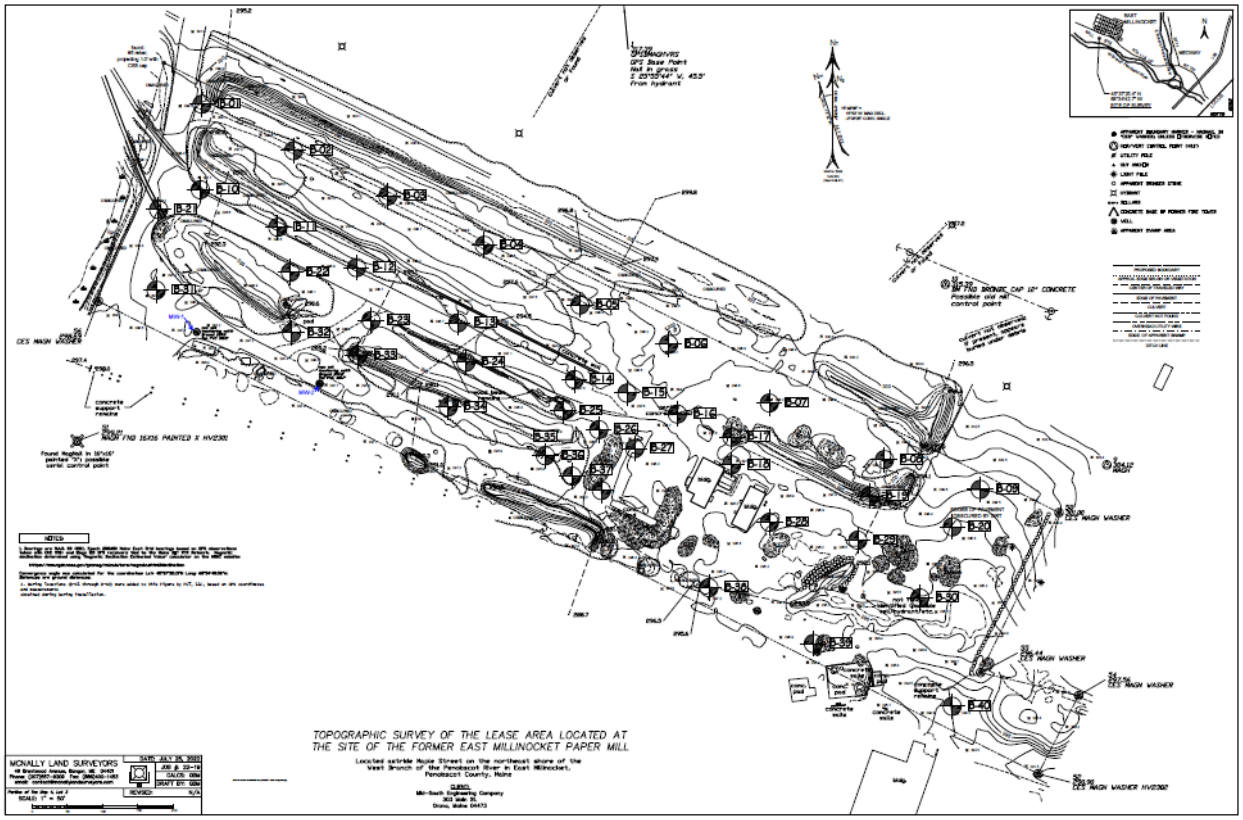
Arsenic concentrations proximal to the former rail operations are higher than the arsenic concentrations detected away from the rail operations. This suggests that the rail operations may have contributed to the elevated arsenic concentrations. The source of the arsenic is not known; however, it could have resulted from application of arsenic-based pesticides/herbicides or railroad tie preservation, or via releases of cargo from rolling stock. The 95% UCL on the mean of the surface soil (e.g., 0-2 feet below grade) sample arsenic concentrations within the railroad operations area is 40.85 mg/kg, which is approaching the MEDEP RAG for the commercial/industrial use scenario. However, this value appears to be highly sensitive to an outlier concentration of 80.6 mg/kg collected from the surface soil sample A2N-SS-01. Subsurface soil samples collected from between 8 and 10 feet below grade reported arsenic concentrations well below the MEDEP RAG background concentrations. Additional characterization of the surface soil within the former railroad areas not previously investigated, particularly in and around the A2N-SS-01 location, will be necessary to establish a basis for potential remedial action."

1.3.7 Fessenden Geo-Technical, LLC, Phase II Site Investigation Results E-railZ Lease Area, Mill #2 Property, East Millinocket ME, dated September 6, 2022

According to this report, "*the area located on the western portion of the former East Millinocket Mill identified as the "Lease Area" is a subtenant to E-railZ, Inc. The Lease Area is approximately 11.4 acres in size and the work is to assess the nature and extent of potential contamination related to historical operations in the Wood Yard area of the former Great Northern Paper mill site. Levels of soil and groundwater contamination for the CoPC included in this investigation do not exceed applicable site cleanup standards or present a human exposure risk associated with the proposed construction activities. Soil and groundwater laboratory analytical results did not indicate that soil and groundwater conditions contain concentrations of EPH, benzene, toluene, ethyl benzene, and xylene (BTEX), PCBs, or RCRA 8 Metals that would require special handling or would require additional or advanced remediation.*

In general, shallow soils in the Lease Area in the 0 to 6 ft below grade surface depth range consist of heterogeneous silty sand with gravel fill, with varied amounts of cobbles, brick, asphalt, clay, organics, and woody debris mixed in. A layer of wood chips was observed in several borings. Material tested from this layer resulted in the highest PID screening readings obtained on the Site. Laboratory analytical results for material (primarily ground up wood chips) tested from these layers did not result in exceedance of applicable site cleanup standards. Shallow soils (0 to 6 ft below grade surface) and soils at depth (6 to 14 ft below grade surface) in the Lease Area do not indicate the presence of the CoPC at concentrations which would warrant remediation or revision to the proposed development area due to contamination levels exceeding applicable Site cleanup standards for the MEDEP construction worker or commercial worker human exposure pathway RAGs. In deeper borings, native soils were observed at depth beginning between 14 ft and 15 ft below grade surface and consisted primarily of dense or very dense, fine to coarse silty sand with gravel, with gravel and silt composition increasing with depth. Groundwater quality results in the Lease Area (Study Area 6) align with results from upgradient Study Area 5, indicating the CoPC are minimally present or not detected in groundwater at the Site.

Based on field screening and laboratory analytical confirmation results for the CoPC in soil and groundwater samples, the existing environmental soil and groundwater conditions within the Lease Area do not warrant remediation and will not place environmental constraints on the proposed development plans."



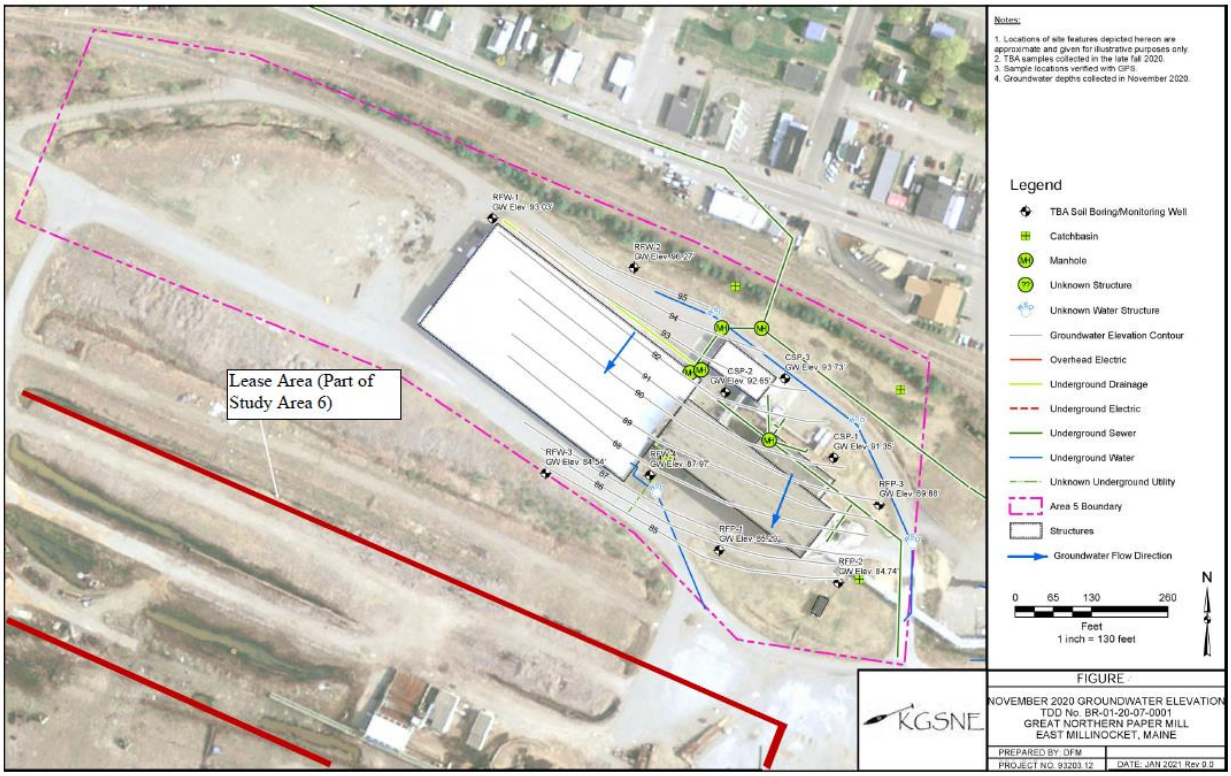


FIGURE 2: GROUNDWATER FLOW DIRECTION FROM STUDY AREA 5 EPA PHASE II INVESTIGATION RESULTS

1.3.8 Maine Department of Environmental Protection, Great Northern Paper (GNP) Site, 50 Main Street, East Millinocket, Maine, No Action Assurance Letter - Voluntary Response Action Program, dated February 14, 2023

This letter summarized the status of the site and based on the data compiled, recommended the following actions for redeveloping the Site with light industrial and commercial developments:

1. Prepare and implement an Environmental Media Management Plan (EMMP) for the Site that will be submitted to the Department for review and approval is anticipated to include:

a. Soils and groundwater at the Site that may be disturbed and/or encountered during redevelopment must be managed according to the EMMP and may not be moved off-Site without the express written permission of the Department.

b. The EMMP must include provisions for the further identification, assessment, confirmatory sampling, and/or characterization of potentially contaminated soils and/or groundwater that may be identified during future redevelopment activities.

c. The EMMP must be updated at the conclusion of each redevelopment project to reflect “as-built” information related to identification of any new contamination and/or the installation of any cover systems. The updated EMMP will be submitted to the Department for review and approval.

2. Submit a plan, subject to Department review and approval, to install a vapor barrier and/or sub-slab depressurization system for any new structures constructed and/or existing structures renovated for human occupancy at the Site. Upon Department approval, install and effectively operate the approved system. Alternatively, collect, in accordance with a Department-approved sampling plan, samples demonstrating that such a vapor barrier and/or sub-slab depressurization system is not necessary.

3. A Declaration of Environmental Covenants, in accordance with the Maine *Uniform Environmental Covenants Act*, 38 M.R.S. §§ 3001–3013 (2005), incorporating conditions of approval contained in this VRAP No Action Assurance (NAA) Letter, for a portion and/or the entire Site, and that is subject to Department review and approval, must be executed for the Site and must be recorded at the Penobscot County Registry of Deeds. A copy of the recorded Declaration of Environmental Covenants must be supplied to the Department's VRAP within thirty (30) days of being recorded. Provided that the actions proposed above are completed to the satisfaction of the Department, the DEC is anticipated to include:

a. The Site must only be used for industrial and/or commercial purposes, and must not be used for residences, schools, childcare facilities, or long-term health care facilities unless the express written permission of the Department is obtained to use the Site for those purposes.

b. The extraction of groundwater at the Site is prohibited without the express written permission of the Department.

c. Soils and groundwater that may be disturbed and/or encountered during redevelopment of the Site must be managed according to a Department-approved EMMP and may not be moved off-Site without the express written permission of the Department.

d. New structures constructed and/or existing structures renovated for human occupancy at the Site must include a Department-approved sub-slab depressurization system that is effectively operated and maintained, unless the express written permission of the Department is obtained to exclude such a system from the design of a new building or terminate its operation.

1.3.9 KGSNE JV, LLC, Quality Assurance Project Plan Addendum For Soil, Soil Vapor, and Groundwater Sampling and UST Removal, Great Northern Paper Mill Targeted Brownfields Assessment East Millinocket, Maine, dated April 17,2023

According to this document, "*Based on past uses of the area, and previous environmental investigations and remedial actions conducted at Study Areas 3, 6 and 7, the following represents a list of CoPC.*

Study Area 3 paint shop/warehouse area/UST removal
CoPC include VOCs, SVOCs including PAHs, PCBs, EPH, and metals due to the presence of a gasoline UST, the reported past detections of VOCs in soil and TPH in groundwater in this area, and the potential past operations at the "oil and paint house", which is also known as "warehouse J".

Study Area 3 training center/warehouse

CoPC include SVOCs, EPH, and metals at the based on the reported past use as a temporary storage location for hazardous substances and/or petroleum products and the past salvage area located adjacent to the building.

Study Area 3 maintenance garages

CoPC include VOCs, SVOCs, PCBs, EPH, and metals based on the past use for vehicle maintenance activities and the reported detection of metals, including arsenic, barium, cadmium, chromium, and lead in soil samples collected near the former garage.

Study Area 3 transformer substation

CoPC include SVOCs, PCBs, EPH, and metals based on the presence of electrical equipment and the reported past observation of an oil sheen in the containment structure surrounding the former transformer bank.

Study Area 6 wood lot

CoPC include VOCs, SVOCs, PCBs, EPH, and metals based on the suspected past release of hydraulic oil in this area, the presence of fill debris, and the reported past release of PCB-containing oil from an electrical transformer housed at the former Chemi-Groundwood Building.

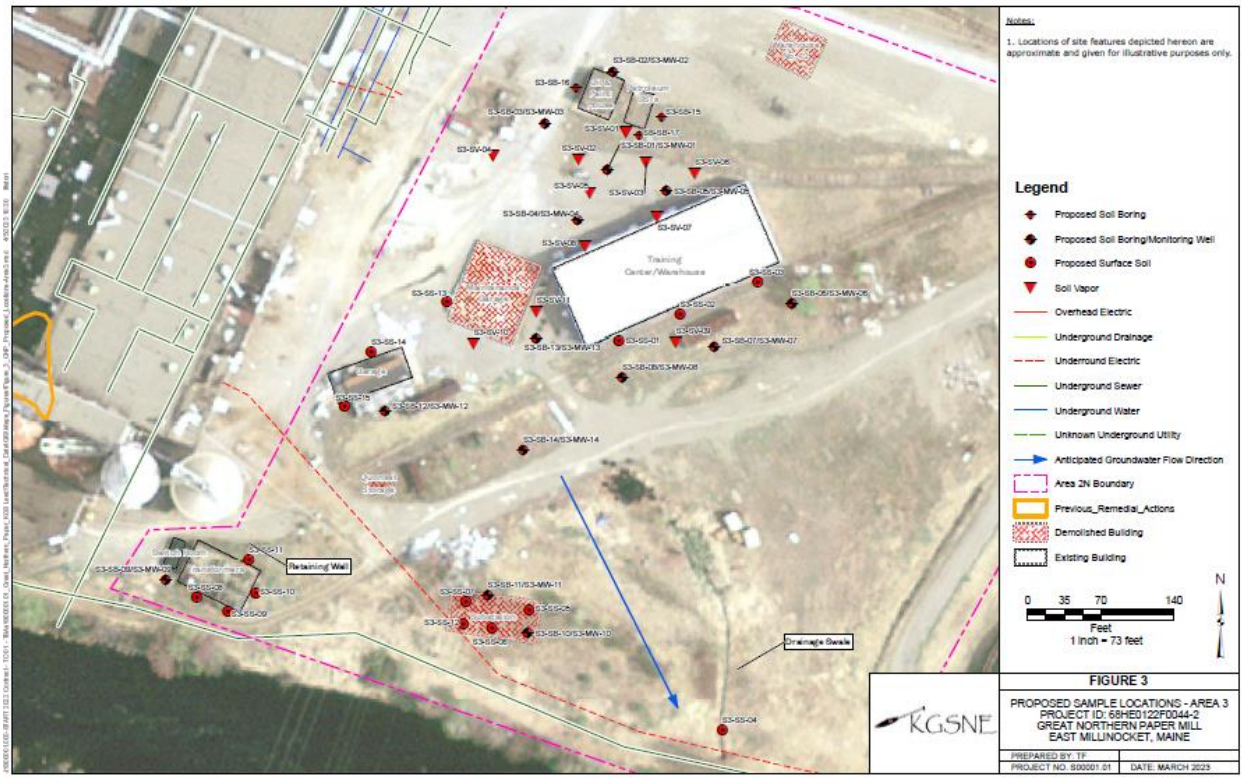
Study Area 7 log yard

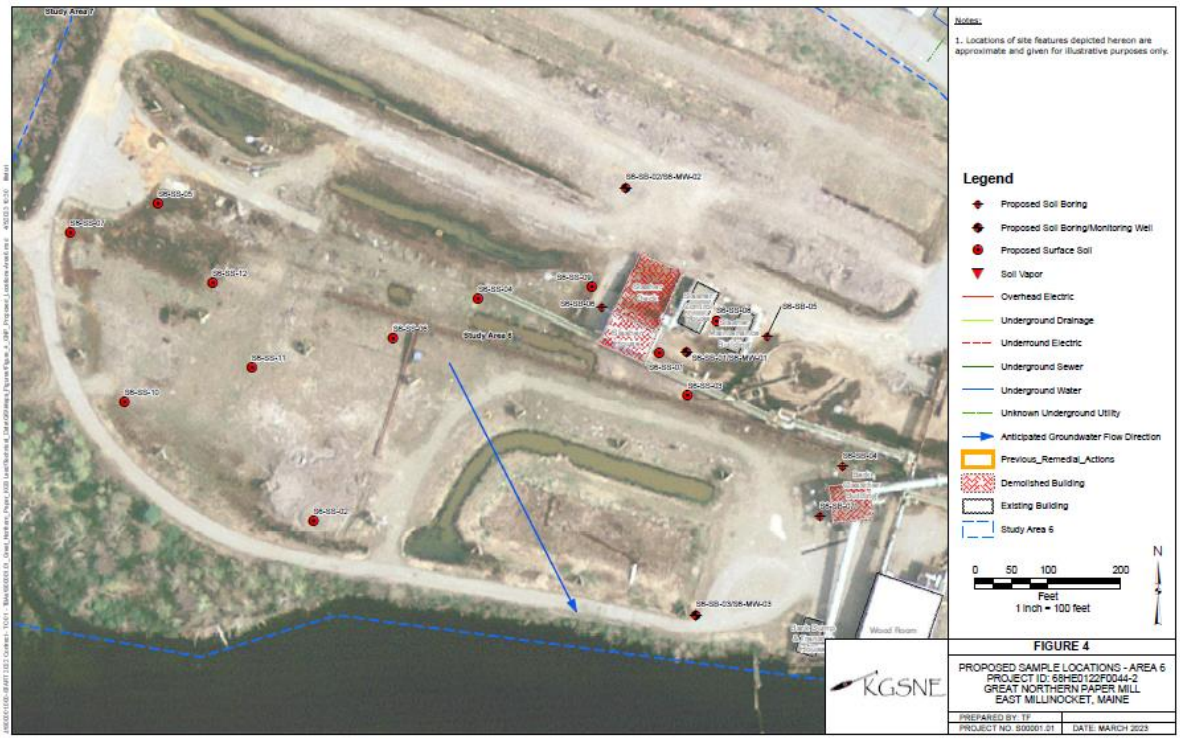
CoPC include VOCs, SVOCs, PCBs, EPH, and metals based on the reported disposal of significant quantities of solid waste debris disposed in this area.

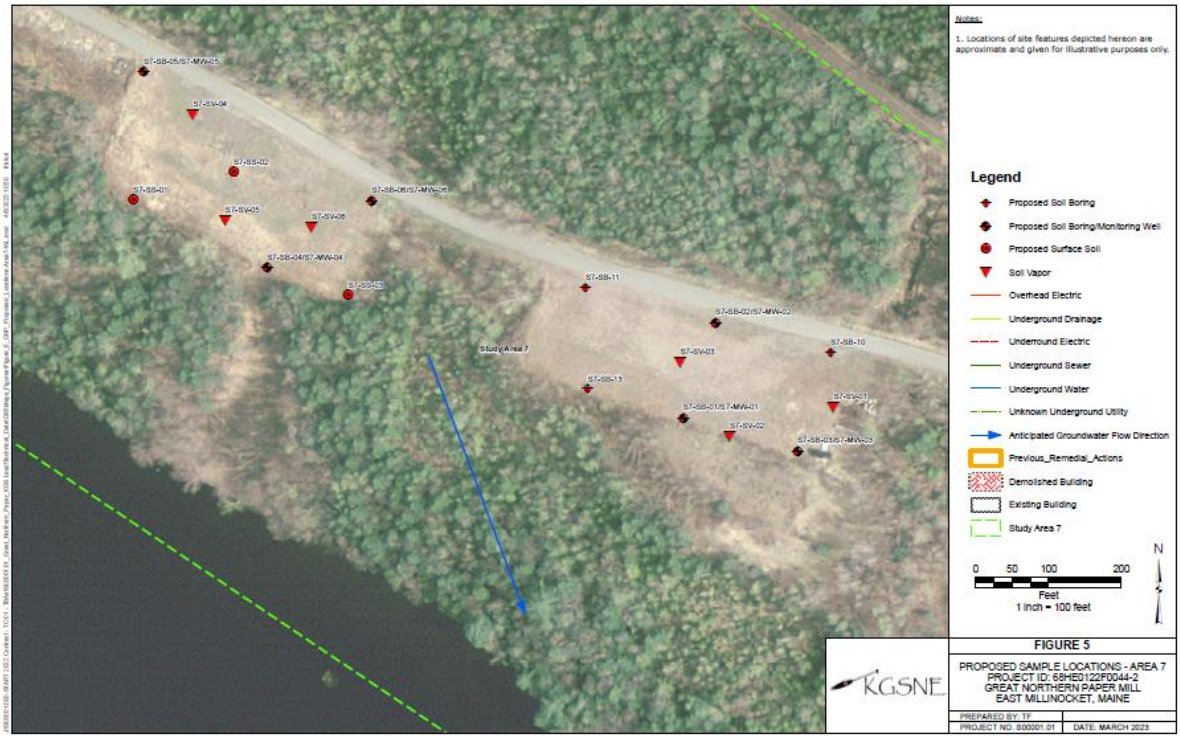
Study Area 7 burn pit

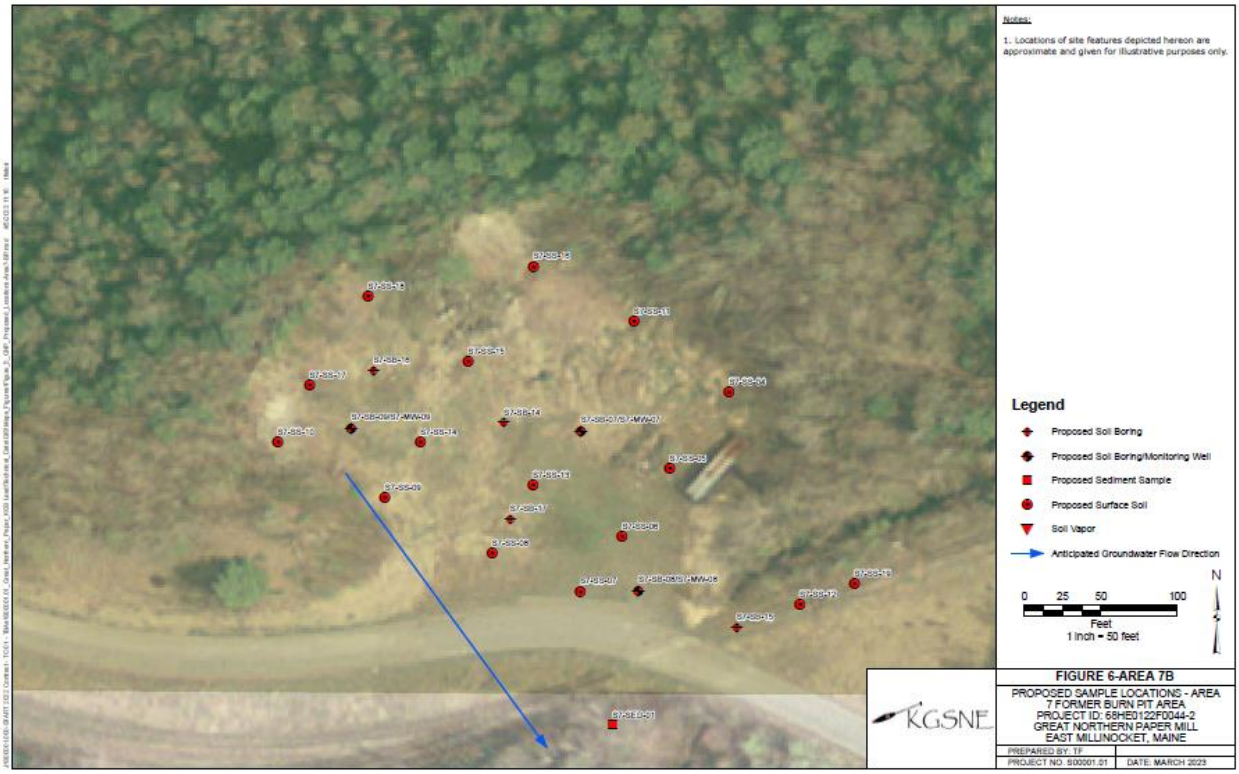
CoPC include VOCs, SVOCs, PCBs, EPH, and metals based on the presence of fill debris, the signs of previous burning in this area, and the reported past detection of TPH in soil at the former burn pit."

Sample locations of soil, groundwater and soil vapor for Study Areas 3, 6, and 7 are included below in Figures 3, 4, 5 and 6.


Notes:
1. Locations of site features depicted hereon are approximate and given for illustrative purposes only.
Legend
Proposed Soil Boring
Proposed Soil Boring/Monitoring Well
Proposed Surface Soil
Soil Vapor
Overhead Electric
Underground Drainage
Underround Electric
Underground Sewer
Underground Water
Unknown Underground Utility
Anticipated Groundwater Flow Direction
Area 2N Boundary
Previous_Remedial_Actions
Demolished Building
Existing Building
0 35 70 140
Feet
1 inch = 73 feet
N
Retaining Wall
Drainage Swale
Training Center/Warehouse
KGSNE
FIGURE 3
PROPOSED SAMPLE LOCATIONS - AREA 3
PROJECT ID: 68HE0122F0044-2
GREAT NORTHERN PAPER MILL
EAST MILLINOCKET, MAINE
PREPARED BY: TF
PROJECT NO. S00001.01
DATE: MARCH 2023


Study Area 7
Study Area 6
Notes:
1. Locations of site features depicted hereon are approximate and given for illustrative purposes only.
Legend
Proposed Soil Boring
Proposed Soil Boring/Monitoring Well
Proposed Surface Soil
Soil Vapor
Overhead Electric
Underground Drainage
Underround Electric
Underground Sewer
Underground Water
Unknown Underground Utility
Anticipated Groundwater Flow Direction
Previous_Remedial_Actions
Demolished Building
Existing Building
Study Area 6
0 50 100 200
Feet
1 inch = 100 feet
N
Wood Room
KGSNE
FIGURE 4
PROPOSED SAMPLE LOCATIONS - AREA 6
PROJECT ID: 68HE0122F0044-2
GREAT NORTHERN PAPER MILL
EAST MILLINOCKET, MAINE
PREPARED BY: TF
PROJECT NO. S00001.01
DATE: MARCH 2023


Notes:
1. Locations of site features depicted hereon are approximate and given for illustrative purposes only.
Legend
Proposed Soil Boring
Proposed Soil Boring/Monitoring Well
Proposed Surface Soil
Soil Vapor
Overhead Electric
Underground Drainage
Underground Electric
Underground Sewer
Underground Water
Unknown Underground Utility
Anticipated Groundwater Flow Direction
Previous_Remedial_Actions
Demolished Building
Existing Building
Study Area 7
0 50 100 200
Feet
1 inch = 100 feet
N
KGSNE
FIGURE 5
PROPOSED SAMPLE LOCATIONS - AREA 7
PROJECT ID: 68HE0122F0044-2
GREAT NORTHERN PAPER MILL
EAST MILLINOCKET, MAINE
PREPARED BY: TF
PROJECT NO. 500001.01
DATE: MARCH 2023


Notes:
1. Locations of site features depicted hereon are approximate and given for illustrative purposes only.
Legend
Proposed Soil Boring
Proposed Soil Boring/Monitoring Well
Proposed Sediment Sample
Proposed Surface Soil
Soil Vapor
Anticipated Groundwater Flow Direction
0 25 50 100
Feet
1 inch = 50 feet
N
KGSNE
FIGURE 6-AREA 7B
PROPOSED SAMPLE LOCATIONS - AREA 7 FORMER BURN PIT AREA
PROJECT ID: 68HE0122F0044-2
GREAT NORTHERN PAPER MILL
EAST MILLINOCKET, MAINE
PREPARED BY: TF
PROJECT NO. 500001.01
DATE: MARCH 2023

1.3.10 KGSNE JV, LLC, Targeted Brownfields Assessment Report Great Northern Paper Mill – Study Areas 3, 6, and 7 East Millinocket, Maine, dated November 27, 2023

This report includes a summary of the data collection focused on Study Area 3 (Maintenance Area), Study Area 6 (Wood Lot Area), and Study Area 7 (Western Property which includes wood laydown areas and a former burn area). The following table is a summary of the analytes detected above commercial/industrial and residential RAGs in environmental media at Study Areas 3, 6, and 7.

Study Area	Soil		Groundwater		Soil Vapor	
	Comm./Ind.	Residential	Comm./Ind.	Residential	Comm./Ind.	Residential
3	Arsenic benzo(a)pyrene	Arsenic benzo(a)pyrene dibenzo(a,h)anthracene C11-C22 aromatics	--	Arsenic	VOCs APH	VOCs APH
6	--	Arsenic Thallium C11-C22 aromatics	--	Arsenic	--	--
7	Thallium	Thallium Arsenic benzo(a)pyrene	--	Arsenic	VOCs APH	VOCs APH

The removal of the former 2,000-gallon gasoline UST was conducted from May 16-17, 2023. Approximately 5 cubic yards (CY) of suspected contaminated soil was also disposed offsite along with the UST at this time. Prior to backfilling the excavated area, a warning (marker) layer was put down over suspected residual contaminated soil.

1.4 Site Regulatory History

As documented in the Site's November 23, 2022 VRAP application, "*three releases of polychlorinated biphenyls (PCBs) have occurred at the Site. Long- term groundwater monitoring was conducted in these areas beginning in the early 1990s. In 2003, the MEDEP VRAP provided a letter stating that since none of the groundwater results were above drinking water standards, the area had been considered remediated to the satisfaction of the MEDEP. MEDEP issued a No Action Assurance Letter and Certificate of Completion under VRAP on April 24, 2003. The locations of the PCB-impacted areas associated with the 2003 VRAP filing are shown on Figure 3 (prepared in conjunction with a previous Phase I ESA performed by Ransom Consulting, LLC on behalf of the Town of East Millinocket in February 2020). According to annual groundwater monitoring reports prepared for the Site, PCBs have not been detected in groundwater at concentrations above laboratory reporting limits since the late 1990s.*

In addition, and as summarized in the above-referenced reports, previous environmental investigations have identified metals (including arsenic, barium, cadmium, chromium, and lead), volatile organic compounds (VOCs), and petroleum hydrocarbons in soil and/or groundwater across the Site. Numerous petroleum releases have occurred at the Site in that past, consisting of fuel oils, hydraulic oils, transformer oils, and lubricating oils ranging in volume from less than a gallon to thousands of gallons."

2.0 CONTAMINANTS OF CONCERN AND APPLICABLE REGULATORY CRITERIA

2.1 Areas and Contaminants of Concern

The approximate 215-acre site has been organized into seven study areas that include: **Study Area 1** Western Mill Area, **Study Area 2** Northern No. 2 Train Shed and Shipping Area, **Study Area 3** Maintenance Area, **Study Area 4** Fuel Storage Area, **Study Area 5** Recycle Fiber Warehouse Area, **Study Area 6** Wood Lot Area, and **Study Area 7** Western Property. The areas deemed most likely to be developed were the focus of the recent assessments described in this document. As a result, assessments were conducted on Study Areas 2, 3, 5, 6, and 7. Only limited data was available or reviewed for Study Areas 1 and 4.

Generally, based on sampling results of soil, groundwater, and air, there are relatively few CoPC that exceed a MEDEP RAG at the Site. Several CoPC were detected in specific locations at elevated concentrations, however, these instances may be isolated and do not necessarily represent more widespread contamination. Since the Site has been used for industrial purposes for over 100 years, the potential for spills of hazardous materials and petroleum is significant. In addition, the potential for unreported spills, especially before the advent of environmental regulations, is also significant. Therefore, although the site assessments may not have detected CoPC, there is a potential that these contaminants are present, but have not been discovered. Therefore, this EMMP will take a conservative approach as it relates to the presence of CoPC across the entire Site. CoPC that have been identified or are likely to be found include: asbestos containing materials, lead-based paint, universal wastes, VOCs, SVOCs, APH, EPH, volatile petroleum hydrocarbons (VPH), metals, and PCBs. These contaminants have the potential to be found in either soil, groundwater, building materials, or air. While additional assessment or remediation of portions of the Site is not warranted at this time, any future soil disturbance activities and or groundwater extraction should be undertaken with caution. The primary intent of this EMMP is to inform relevant parties of potential environmental hazards and ensure that any suspect material is evaluated in a manner adequately protective of human health and the environment.

2.2 Contaminants of Concern Exposure Pathways

<u>Asbestos Containing Material (ACM)</u>

Asbestos is a collection of naturally occurring minerals once popular in construction for its durable, fire-retardant, corrosion-resistant and insulate properties. Asbestos has historically been used in many building materials including but not limited to insulation, floor tiles, mastic/adhesive, shingles, building siding, and fabrics that resist heat. If asbestos-containing materials are damaged, disturbed, or deteriorate over time, there is a health risk because the microscopic fibers can be inhaled into the lungs. The mechanisms by which ACM could migrate at the Site include air, mechanical transport, and surface water runoff. Exposure routes at the Site may include: inhalation of ACM through short or long-term mechanism that creates air born particulates to be suspended in the air. Contaminant migration into air can occur by dust generation. Migration via mechanical transport can occur via site workers or trespassers and surface water has the potential to transport ACM as well.

Lead-based Paint and Universal Wastes

Lead-based Paint (LBP) typically coats older surfaces of building materials. Lead within the paint can be exposed to humans when chipped or sanded and can cause a health risk via inhalation or ingestion. Universal wastes consist of a range of products and materials including cathode ray tubes, fluorescent light bulbs; mercury devices like switches or lamps, mercury thermostats; totally enclosed, non-leaking polychlorinated biphenyl (PCB) ballasts, and certain batteries. CoPC within Universal wastes are primarily metals. The fate and transport of releases of these metals are described below in the following section.

Polychlorinated Biphenyls (PCBs), Metals, and Semi-Volatile Organic Compounds (SVOCs)

The fate and transport of PCBs, metals, and SVOCs in the environment are similar. In general, these constituents tend to have very low solubility and mobility and will, therefore, tend to stay adsorbed to the soil particles and not migrate substantially into the water column. Metal solubility is affected by environmental factors including soil pH and soil temperature. If, for instance, an area exhibits very acidic soil conditions, the mobility of metals will greatly increase. The solubility of SVOCs is affected by their molecular weights. As a result, it is likely that some SVOCs will mobilize more readily.

PCBs in general tend to have low water solubility and low vapor pressures. Despite the low volatility of PCBs, they can migrate through a variety of mechanisms. They are hydrophobic (low water soluble) and lipophilic (dissolve in fats, oils, lipids, and non-polar solvents such as toluene) so they tend to adsorb to organic matter. Environmental transport is compound-specific due to the unique structure of each PCB compound. This allows PCBs to move in “grasshopper patterns,” in which in warm weather they partition from soil, sediment or building materials to water and air and then fall to earth as temperatures cool, a process which allows PCBs to be dispersed over great distances.

Numerous factors can affect the mobility of PCBs in building materials, sediments and soil that include density, moisture content, as well as climate and chemical characteristics such as rainfall and organic carbon content. The presence of organic solvents can also modify the water solubility of PCBs. Over time, changes to the composition of PCB mixtures occur. These biological, chemical, and physical changes, known as weathering, affects different PCB types in different ways. Biodegradation by microorganisms is specific to different PCB compounds. Generally, de-chlorination of PCBs can occur naturally under anaerobic conditions.

PCBs in building materials can migrate from into air, dust, surrounding building materials, and soil. Inhalation exposure to PCBs is also possible when PCBs volatilize directly from source materials (e.g., PCB caulk varnish, and ballasts containing PCBs) into indoor air.

When an individual comes into direct contact with settled particulates, a portion of the PCBs (e.g., PCB caulk or varnish) may absorb through the skin. Ingestion is also possible if particulates are transferred to the mouth. Exposure through direct contact and ingestion are also possible through other means. Ingestion is also possible if building materials or soil is ingested directly through hand-mouth transfer.

Caulk or varnish that is peeling, brittle, cracking, or deteriorating visibly in some way may have the highest potential for creating dust and subsequent human exposure. Once PCBs are released to the environment, they have the potential to negatively impact sensitive receptors including commercial workers, construction workers, and fauna.

Once a contaminant has entered the groundwater, the rate of contaminant movement is influenced by many factors. These factors include physical and chemical properties of the contaminant and the aquifer. In general, once a contaminant reaches the groundwater, the contaminant will move as the groundwater moves through the process of advection (travel in the direction of groundwater flow) and dispersion (spreading vertically and horizontally).

Volatile Organic Compounds (VOCs), Volatile Petroleum Hydrocarbons (VPH), and Air-Phase Petroleum Hydrocarbons (APH)

Visual evidence of petroleum impacts to soil and groundwater have been documented at the Site. The fate and transport of petroleum hydrocarbons within soil and groundwater is controlled by a number conditions including: the quantity and duration of the release, soil type, depth to water table, redox potential, pH, oxygen concentration, the potential for biodegradation, temperature and rainfall. Once petroleum or VOC contamination has occurred, the substance will partition into three phases; the dissolved phase, the liquid phase, and the gaseous phase. A fraction of the mixture will dissolve into the soil moisture and groundwater, a liquid fraction will remain in the soil voids in its pure form (otherwise known as non-aqueous phase liquids or NAPLs), and a gaseous fraction will occupy the air spaces within the soil pores.

Following a spill, the liquid compounds will migrate downwards under the influence of gravity (with some lateral spreading). Lateral spreading can be caused by less permeable substances such as clay or a dense till. Once released, low molecular weight volatile petroleum compounds with the highest vapor pressure held within the air voids will escape rapidly. Migration into groundwater can occur by percolating surface water or groundwater through waste materials or contaminated soils, which enters the groundwater in a dissolved-phase. If the contaminant has a specific gravity less than 1.0 (the specific gravity of water), associated liquid-phase product will float on the groundwater surface. Conversely, if the specific gravity of the contaminant is greater than 1.0 (such as with chlorinated solvents), associated liquid-phase product will sink to the bottom of the groundwater column. Liquid-phase product is a continued source of dissolved-phase contamination. Once dissolved-phase contamination enters the groundwater, it will move with the groundwater in the direction of flow. As petroleum compounds are NAPLs, a pool of NAPLs will form on the surface of the water table. The soluble components in contact with the water table will slowly dissolve and form a contamination plume moving downstream of the contaminated area. The soluble fractions of NAPLs will form the leading edge of the contamination plume. The residual pure product is held within the soil by capillary forces or physical barriers and unless removed remains within the soil, acting as a long-term source of pollution. Volatile components of petroleum may pose a vapor intrusion risk to indoor air and related occupants.

Some VOCs, such as toluene and xylene, have a greater persistence than other VOCs, and are, therefore, expected to remain in the soil profile for a longer duration. Processes that naturally reduce

VOC concentrations include volatilization, biodegradation, and dilution. Collectively, these processes are known as natural attenuation and given favorable conditions, can reduce the concentrations of VOCs over time.

VOCs and APH also pose a risk to inhalation within buildings from a process called vapor intrusion (VI). VI requires five components to be considered a health threat. These are: 1) a source, 2) a pathway between the source, 3) a building susceptible to vapor intrusion, 4) vapors in the building; and 5) building occupants when the vapor-forming chemical(s) is (are) present indoors.

2.3 Applicable or Relevant and Appropriate Regulatory Requirements

The primary applicable or relevant and appropriate regulatory requirements related to the Site include:

- MEDEP RAGs, Commercial Worker and Construction Worker exposure scenarios;
- MEDEP Solid Waste Management Rules which includes 06-096 Department of Environmental Protection Maine Solid Waste Management Rules, February, 2011, detailing ACM requirements
- The National Emission Standard for Hazardous Air Pollutants (NESHAP), as applicable;
- MEDEP Universal Wastes: Universal waste is regulated under 06-096 CMR Chapter 858;
- Occupational Safety and Health Act (OSHA) (Part 1910 of Title 29 of the Code of Federal Regulations [29 CFR 1910]); and
- Toxic Substances Control Act (TSCA) for PCBs at high occupancy clean up criteria of greater than 1 milligram per kilogram (mg/kg).

According to reports, the Site is to be re-developed into commercial and or industrial space. There is no planned residential or groundwater use proposed. As a result, potential sensitive receptors at the Site include humans or other organisms that may come into direct contact with site soils through dermal contact, inhalation, or ingestion. Risk based exposure scenarios and corresponding guidelines for contaminant concentrations are presented in the MEDEP Remedial Action Guidelines for Contaminated Sites (RAGs), dated May 1, 2021. These guidelines (or the most recent iteration) are intended to assess the potential threat specific constituents may pose to sensitive receptors. Exposure scenarios are considered for a range of potential land uses including residential, recreational, commercial, and construction activities. **On site soils should initially be evaluated** relative to **Commercial Worker** and or **Construction Worker** exposure scenarios, depending on proposed activities. Relevant corresponding guidelines are presented in Table 5 of the MEDEP RAGs. A description of **Commercial Worker** and **Construction Worker** exposure scenarios include;

Commercial Worker Exposure Scenario

"The Soils cleaned to the RAGs for the Outdoor Commercial Worker Exposure Scenario are protective of all indoor and outdoor commercial uses of sites, including full-time industrial and maintenance workers whose jobs require that they be outdoors for a portion of the workday such as groundskeepers, loading dock workers, parking lot attendants, and mechanics. This scenario can also be used to conservatively evaluate indoor workers who may be routinely exposed to soil briefly during work breaks and outdoor lunches. These RAGs assume exposures to soil by incidental ingestion, dermal contact, and inhalation of contaminants in fugitive dust and ambient air occur over 25 years for the workdays of the year when the

ground is not frozen or snow covered. Using Maine specific climate data adjusted for the work week, the RAGs assume a soil exposure frequency of 183 days per year. Contact with soil is assumed to be of lower intensity than assumed for an excavation or construction work scenario since these workers are unlikely to be displacing soil (i.e., digging)".

Excavation or Construction Worker Exposure Scenario

"Note that the RAGs are superseded by any applicable OSHA standards. Exceedance of RAGs should trigger an evaluation of whether OSHA standards apply. If OSHA standards are not applicable, the RAGs should be used to assess the threat posed by the contaminant. The Excavation or Construction Worker Scenario is protective of exposures to soil during high intensity soil disturbance activities such as digging, grading, and back-filling for a construction project lasting up to one year. This scenario can be used to conservatively evaluate a utility worker or landscaper whose exposure may be as intense as an excavation or construction worker, but is expected to be of a lesser duration than a year. Exposures to soil by incidental ingestion, dermal contact and inhalation of contaminants on fugitive dust and in ambient air are assumed to occur at a greater intensity than that assumed for the Outdoor Commercial Worker due to the degree of soil disturbance and displacement anticipated. Due to the exposure intensity and use of sub chronic toxicity factors, for some compounds the Construction Worker soil guideline will be lower than a residential or leaching to groundwater guidelines."

3.0 ENVIRONMENTAL MEDIA MANAGEMENT PLAN IMPLEMENTATION

This section provides protocols and procedures for management of known and potentially impacted soil during any infrastructure improvements/redevelopment activities conducted at the Site. These protocols and procedures have been developed for implementation by workers who could be exposed to known and potentially contaminated soil and groundwater. This section describes protocols and procedures for worker safety, site preparation, identification of potentially contaminated soil during excavation activities, confirmation sampling and analysis, and proper handling and management of known and potentially contaminated soil. Management of known and potentially contaminated soil at the Site will be performed under the direction of an owner and or Site Representative. **It is highly recommended that the owner or Site Representative responsible for any Site improvements or redevelopment contract with an environmental professional prior to undertaking this work.** This will better ensure human health and the environment are protected from adverse conditions created by CoPC and to better comply with MEDEP rules and regulations.

As necessary, composite sample(s) shall be collected for waste characterization based on the anticipated quantity of CoPC impacted material to be remediated and disposed off-site. Analytical parameters and analyses shall be selected based on the designated licensed facility's criteria. The depth and extent of the remediation by excavation shall be determined based on characterization data and any other features such as porosity of the media and elevated CoPC concentrations that may infiltrate to greater depths.

In any area where PCBs are known or presumed to be located proper notification to both USEPA and MEDEP will be required prior to activation of activities. Any activity that could create an exposure to PCBs whether assessment, cleanup, maintenance, or Post-removal PCB confirmation sampling will be conducted in accordance with Code of Federal Regulations (CFR), Title 40, Chapter 1, Subchapter R, Part 761

Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. **No soil should be moved off-site without appropriate characterization and or consultation with the MEDEP.**

According to annual groundwater monitoring reports prepared for the Site, PCBs have not been detected in groundwater at concentrations above laboratory reporting limits since the late 1990s. Evaluation on whether to sample groundwater should be considered and agreed upon with USEPA and MEDEP for proposed activities that have the potential to disturb soil, groundwater, or building materials at the Site, including but not limited to construction activities, remodeling, utility work, and emergency repairs.

3.1 Potential Infrastructure Improvements

Potential future infrastructure improvements and or redevelopment at the Site may include installation or repair of subsurface utilities, construction of building foundations, remodeling of structures, and or other subsurface improvements that may result in the exposure for receptors to known and potentially contaminated media. Prior to any redevelopment activities, the owner should consult this EMMP to determine if and at what depth any CoPC were identified or thought to be present during previous assessments. **Summaries of the assessments and fate and transport of these CoPC are presented in Sections 1.3 and 2.2 of this EMMP respectively**.

3.2 Worker Safety

Each contractor will be responsible for ensuring the safety of its employees, including compliance with applicable Maine OSHA regulations and project plans and specifications. The contractor will prepare and implement a Site-specific Health and Safety Plan in accordance with OSHA requirements to ensure adequate protection for workers on the Site. **Contractors performing excavation of known or potentially contaminated soil will have successfully completed the 40-hour Hazardous Waste Operations and Emergency Response training in accordance with 29 CFR 1910.120.**

3.3 Site Preparation

Prior to any soil disturbance activities, preparation activities will be conducted, including installation of Site security measures as necessary to ensure traffic control and protection of workers. Prior to earthwork activities that are subject to erosion and sediment control requirements, erosion and sediment control procedures and protocols will be conducted in accordance with applicable best management practices and federal, state, and local requirements.

3.4 Soil Screening

Known and potentially contaminated soil will be field screened prior to or during excavation for a petroleum odor, an unusual appearance, and/or liquid-phase product. Work will be suspended and the property owner and or Site Representative will be contacted immediately if a petroleum odor, an unusual appearance, and or liquid-phase product is detected. The owner and or Site Representative will also be contacted immediately if transformers, drums, other containers, or USTs are encountered during earthwork activities. The property owner and or Site Representative will perform follow-up field screening

of soil for the presence of VOCs using a photoionization detector. The results of the field screening will be evaluated to determine whether characterization sampling is necessary to determine the appropriate soil management protocols for potentially contaminated soil. If contamination is encountered, the owner or Site Representative will report to MEDEP as necessary. The approach to deciding whether to perform characterization sampling for potentially contaminated soil will be conservative (for instance, if uncertainty exists whether soil may be contaminated, characterization screening and or sampling will be conducted).

3.5 Characterization Sampling

The MEDEP should be contacted prior to any soil disturbance or redevelopment activities at the Site. All future soil disturbance activities have the potential to encounter uncharacterized soil impacted by CoPC. MEDEP personnel should be a part of all decisions related to materials impacted or thought to be impacted by CoPC. Soils suspected to be impacted with CoPCs that are to be characterized, should be placed on an impermeable surface or at least 6-mil polyethylene sheeting and covered. A berm or other appropriate barrier should be placed around the perimeter of the stockpile to prevent soil migration or precipitation runoff from the soil.

In the event that no material will be leaving the site, actively monitor soils for evidence of potential environmental hazards through visual and olfactory means by on-site personnel. If suspicious material or evidence of a potential release is encountered, the MEDEP should be contacted immediately. For petroleum related contaminants, soil may then be evaluated using a PID and bag headspace testing or an oleophilic dye shake test. Field screening results should be interpreted using guidelines presented in the MEDEPs *Compendium of Field Testing of Soil Samples for Gasoline and Fuel Oil*, dated, October 25, 2012. These guidelines include action levels for both screening techniques, presented below.

PID Guidelines

SOP No.TS004
Date: October 15, 2012
Revision: 2.1

Table 1: Approved PID Field Cleanup and Notification Guidelines

Cleanup Scenario	Soil size [grams]	Ion	Thermo	Passport	Foxboro	MiniRAE	Photon
Leaching to GW/ Notification	200	80	60	60	50	40	40
Resident/ Park User	20	700	275	500	250	350	300
Outdoor Commercial Worker/ Excavation-Construction Worker	5	1200	500	850	375	1500	400

Note: No adjustment is made for set points; the response factor should be 1.0 for all instruments.

Instrument Descriptions

Ion: Ion Science PhoCheck Series
Thermo: Thermo Environmental OVM 580 Series
Passport: MSA Passport PID II OVM
Foxboro PID: Foxboro TVA-1000 PID mode
MiniRAE: RAE Systems MiniRAE 2000 and MiniRAE 3000
Photon: MSA Photon Gas Detector

Oleophilic Dye Test Guidelines

Results are reported as saturated, positive, slightly positive and undetected as described below:

- Saturated when obvious red (or blue) dye is observed in the soil matrix, or in/on the water (may stain the side of the jar);
- Positive when only the EPS bead is dyed dark pink/ red or blue and there is no coloration in the soil or water;
- Slightly Positive when only the EPS bead is dyed light pink or blue and there is no coloration in the soil or water; or
- Undetected when there is no coloration in the soil or water and the EPS bead remains white.

Results are interpreted as described below:

- Undetected result indicates no cleanup is required unless laboratory results indicate an exceedance of a leaching to groundwater exposure criteria.
- Positive/ Slightly Positive result indicates cleanup is needed for leaching to groundwater, excavations less than 200 cubic yards, and resident/park user scenarios.
- Saturated results indicate cleanup is needed for leaching to groundwater, resident/park user and outdoor commercial/ excavation-construction worker scenarios.

If soil is not impacted with CoPC then it may be reused on-Site. If it is determined to be impacted with CoPC, it may remain on-Site, but should be buried at least 2 feet below the ground surface or capped under asphalt pavement or an appropriate and approved by MEDEP cap. If the soil is deemed saturated with CoPC or poses a significant threat to human health or the environment, and it cannot be mitigated through capping, then it should be immediately addressed using other remedial alternatives. One potential alternative is to properly characterize and dispose of the impacted soil off-Site at a licensed disposal facility.

If proposed Site activities are anticipated to result in **the removal, disposal, or off-site relocation of any Site soils**, additional assessment or characterization should be conducted as appropriate, regardless of observed soil conditions or field screening results. Characterization and sampling parameters may vary depending on the proposed and or final destination of the excavated material.

Licensed Disposal Facility – **This is the preferred destination for any soil leaving the Site**. Prior to transporting material off site for disposal, the owner, Site Representative, or an assigned contractor should contact licensed disposal facilities regarding acceptance criteria and any associated waste characterization sampling. Disposal rates and acceptance criteria are likely to vary.

Samples will be analyzed for the appropriate CoPC identified according to MEDEP guidelines and or the requirements of the licensed disposal facility.

The owner and or Site Representative will obtain analytical results from the laboratory in both electronic and hard-copy formats. Laboratory analytical data will undergo a quality assurance/quality control review

at the time of receipt. Hard copies of the analytical data should be maintained in the owner or Site Representative's project files.

3.6 Soil Handling and Disposal

Contaminated soil that is required to be transported off the Site to an approved licensed disposal facility based on the additional characterization, will be handled in accordance with the protocols described below.

- The owner, Site Representative, and or designated personnel must be on the Site during all stockpiling, loading, and hauling operations.
- Erosion and sediment control will be performed in accordance with best management practices.
- Dust control measures will be performed as appropriate.
- Contaminated soil that cannot be immediately transported off the Site will be stockpiled on impermeable plastic sheeting (a minimum of 6-mil thick) with a berm around the perimeter of the stockpile. The plastic sheeting and berm prevent the runoff of contaminated stockpiled soil to surrounding areas. The berm may be constructed with hay bales or other equivalent methods approved by owner and or Site Representative. If the soil is not placed on an impermeable layer, the bottom plastic sheeting will be lapped over the berm materials, and the soil stockpile within the berm will also be covered with plastic sheeting to prevent erosion or leaching of contaminants from the soil stockpile impacting the underlying soil. The upper plastic sheeting covering the soil stockpile will be secured using sand bags or an equivalent to prevent the stockpiled soil from being exposed to precipitation and wind.
- For both on- and off-Site soil transportation activities, the contractor will exercise care during loading of contaminated soil into trucks to minimize spillage of the soil onto the ground surface.
- Contaminated soil loaded into trucks and transported off the Site will be covered if weather conditions (e.g., dry, warm, or windy conditions) could cause soil to blow out during transport to the disposal facility.
- Trucks leaving the Site will be free of loose soil on the exterior of the trucks and may require covers.
- Trucks will not be allowed to leave the Site if liquids are draining from the load. The contractor will use care not to track soil onto city roads and must routinely wash down the roads if soil is being tracked onto them.
- Transport tracking tickets will be required, which document the haul to the approved disposal facility for each truck leaving the Site.

3.7 Groundwater Extraction

Groundwater extraction and excavation of soil to depths that intercept the groundwater table should be avoided if possible. If unavoidable, measures should be taken to characterize the water prior to pumping and or dewatering any trenches. If characterization indicates CoPC are present, the owner or Site Representative following consultation with MEDEP may be able to infiltrate the water back into the Site with or without treatment, pump the water to the East Millinocket Waste Water Treatment Plant with proper approval from the facility and MEDEP, or containerize the water in temporary tanks for off-Site disposal to a licensed facility.

3.8 Building Materials and Universal Wastes

If any significant building maintenance, redevelopment, or demolition of existing buildings is to take place, then a proper ACM inspection should be completed by licensed personnel. ACM needs to be managed according to MEDEP rules and regulations.

To protect future workers from LBP, the owner or Site Representative may remove or cover the paint to prevent direct contact. Any corrective LBP abatement options should be conducted in compliance with OSHA standards.

All universal waste should be removed and disposed of at a licensed facility following MEDEP rules and regulations.

3.9 Capping Options

The owner or Site Representative will discuss soil capping options with MEDEP prior to the on-Site disposal of any impacted soil. Any impacted soils remaining in-situ at the site must be properly covered by at least 2 feet of clean fill material and/or a MEDEP approved soil cover system (e.g., concrete/asphalt/paver hardscape system and/or landscaped softscape systems, etc.). The basic option, as discussed earlier in this EMMP, is to bury CoPC impacted soil at a minimum of two-feet below grade and cover it with clean fill. The owner or Site Representative also has the option, pending consultation with and approval from MEDEP, to install 12 inches of clean material on top of the CoPC impacted soil. The 12-inches of material typically consists of 4 to 8 inches of compacted clean fill below 4 inches of loam or topsoil. A marker layer such as a plastic snow fence is typically installed on top of the impacted soil layer. Another option is to install the marker layer on top of the impacted soil and construct 4 inches of fill with a 2 to 4-inch layer of pavement or concrete on top of the fill. The last option is to place a building foundation, asphalt parking lot, or other MEDEP approved hardscape cover system on top of the impacted material. MEDEP VRAP also requires that a sub-slab vapor mitigation system be installed under any new buildings constructed at the mill site. Annual inspections of all caps would be required and any corrections or repairs to the cap would be required upon discovery.

4.0 DOCUMENTATION REQUIREMENTS

This section describes the requirements for documentation of infrastructure improvements on the Site that may encounter known and or potentially contaminated soil and groundwater. These documentation requirements include providing notifications to MEDEP prior to commencing infrastructure improvements, documenting construction activities, health and safety planning, and preparing a post-construction summary report.

4.1 Notification to the Maine Department of Environmental Protection

The owner and or Site Representative will provide written notification to MEDEP of infrastructure improvements and or redevelopment that require soil disturbances (see contact data below). The notifications will include a general description of the proposed activities and how material will be

managed. This EMMP is intended to address specific environmental conditions at the Site and assumes all soil disturbance activities are being conducted according to good commercial and customary practices in conformance with relevant state and federal regulations. USEPA notification is required when working in areas containing PCBs. **If at any point contractors or on-site personnel encounter evidence of a release or have concerns regarding potential hazards to human health or the environment**, they may also contact MEDEP at;

Mr. Ted Wolfertz
Division of Remediation and Waste Management
Maine Department of Environmental Protection
State House Station 17
Augusta, Maine 04333-017
207-629-8130 email: ted.wolfertz@maine.gov

4.2 Health & Safety

A Health and Safety Plan will be prepared for all infrastructure improvement projects or soil disturbance activities on the Site that may encounter known and/or potentially contaminated soil and groundwater.

4.3 Contractor Reporting Requirements

The contractor performing infrastructure improvements/redevelopment will prepare detailed records of soil excavation, stockpiling, re-use, or disposal. This includes the origin, destination, and volume of soil that is loaded and hauled to an approved off-Site disposal or treatment facility, and or re-used as fill on the Site. Soil excavation, handling, and disposal activities will be documented in the daily field reports. Depending on project scope, the daily field reports and results of soil sampling and analysis may be summarized in a final report prepared by the contractor and submitted by the owner and or Site Representative to MEDEP.

4.4 Field Documentation

All work covered under the EMMP must be documented, including daily and/or weekly field reports and a final summary report that documents and summarizes all field activities, on-site and off-site soil/groundwater management, and includes disposal documentation, as applicable. Field notes will be as descriptive and inclusive as possible, allowing independent parties to reconstruct the sampling activities from the recorded information. At a minimum, field documentation will include the date, location of the work, weather conditions, sample collection data, field equipment used, and any activities performed in a manner other than specified in the EMMP. In addition, other forms completed or used (e.g., Chain of Custody form, maps) will be referred to and included. Field personnel will sign the reports and these should be kept on file by the owner and or Site Representative.

4.5 Summary Reporting

Upon completion of future infrastructure improvement activities on the Site, a Summary Report may be prepared and submitted to MEDEP. This report is strongly suggested, but is not mandatory. A Summary Report would present the results of the activities completed at the Site, including the following:

- ▲ Summary of infrastructure improvement/redevelopment activities completed at the Site;
- ▲ Preparation of plan map and summary tables for confirmation sampling, as necessary; and
- ▲ Conclusions regarding the final construction or redevelopment activities.

4.6 EMMP Updates

Per the VRAP No Action Assurance Letter dated February 14, 2023, The EMMP must be updated at the conclusion of each redevelopment project to reflect “as-built” information related to identification of any new contamination and/or the installation of any cover systems. The updated EMMP will be submitted to the MEDEP for review and approval.

5.0 ANTICIPATED QUESTIONS

The following are examples of anticipated questions and answers and are provided as guidance to the grounds and maintenance staff and other potential users of the Site.

Why are there restrictions on soil disturbance?

Historical operations at the Site included the use and or storage and release of many CoPC. Previous assessment activities confirmed the presence of CoPC in soil and groundwater. It remains possible that future soil disturbance activities encounter contaminants at concentrations that pose a risk to human health or the environment. The intent is also to limit potential exposure, including the possibility that potentially impacted material is moved off-site, where it may pose a greater risk to sensitive receptors including unsuspecting individuals.

Future land use or redevelopment should be limited to commercial or industrial uses. Owners and or Site Representatives at the Site should consult MEDEP or a Qualified Environmental Professional prior to advancing any reuse for residential purposes, schools, childcare facilities, or long-term health care facilities.

Why is there a restriction on groundwater extraction?
Groundwater at the Site has the potential to contain CoPC and as a result, the extraction of groundwater is not advised without additional analytical testing.

Will all subcontractors need to comply with this EMMP?
Yes, contractors that will be disturbing the surface, subsurface, or conducting significant or pertinent building modifications should be made aware of the potential environmental hazards at the Site as well as

the limitation and or concerns on transporting soil off-site. It is the current property owner's responsibility to make contractors aware of this EMMP.

What does this mean for future development?

Any future development should involve consultation with a Qualified Environmental Professional and or MEDEP. Based on current available data, the majority of the on-Site soils do not pose a significant risk to inhabitants of the property or individuals participating in construction and or excavation activities at the Site. However, the potential for encountering unknown or unquantified contaminants remains elevated at the Site. The property should not be used for residential purposes, schools, childcare facilities, or long-term health care facilities without further consideration and or assessment activates.

If I have any questions, who do I call?

1. Michael Michaud, Town of East Millinocket (207) 746-355, or
2. Ted Wolfertz, Maine Department of Environmental Protection (207-629-8130), or
3. Rich Campbell, Campbell Environmental Group, (207-253-1990).

Maine Environmental Laboratory

One Main Street, Yarmouth, ME 04096 Tel.: 207-846-6569 FAX: 207-846-9066 Email: melab@mel-lab.com

Report of Analyses

Report Prepared for:

Matthew Richard
USEcology /NRC
31 Waldron Way
Portland, ME 04103

R1: Eastern report revised to include Sulfur

Report Information:

Batch ID: ENP 18375
Report ID: 18375-240828-0903
Date of Issue: August 28, 2024

The complete report consists of the following parts:

Maine Environmental Laboratory Chain of Custody form
Eastern Analytical, Inc. report
Sterling Analytical report

REPORT NARRATIVE:

Enclosed are results of the analyses for your samples as received by the laboratory. Results are for the exclusive use of the client named on the report and will not be released to a third party without written consent. This report shall not be reproduced except in full without the written consent of the laboratory.

Maine Environmental Laboratory is accredited by the States of Maine (Cert. #ME00028) and New Hampshire (NH ELAP) (Cert. #2031) and is TNI/NELAP accredited. Please refer to our website www.maineenvironmentallaboratory.com for a copy of our Maine and NH ELAP certificates and accreditied parameters. When a subcontracted laboratory is listed above, the data produced is by a Maine accredited laboratory accredited for the fields of testing performed.

Unless otherwise noted:
- Samples were received in acceptable condition and analyzed within method hold times.
- Soils, sediment, solids and tissues are reported on dry weight basis. Wipes are reported on an "as received" basis.
- All quality control data demonstrated acceptable limits.
- The results reported herein conform to the 2009 TNI standards where applicable.
- Analysis of solids for pH, flash point, ignitability, paint filter, corrosivity, alkalinity, conductivity and specific gravity are reported on an “as received” basis.
- Results for “immediate” field parameters tested at the lab such as pH were run outside of the EPA-recommended hold time.
- %RPD is not calculated when the native sample concentration is below 5 x LOQ.

DEFINITIONS:
LOQ / RL - The Limit of Quantitation / Reporting Limit is the minimum level for reporting quantitative data.
LOD / MDL - The Limit of Detection / Method Detection Limit is the minimum level for reporting estimated data.
J - Data reported between the Limit of Quantitation and Limit of Detection is J-flagged as “estimated.”
ND or U – Not detected below the LOD / MDL
B – Detected in QC blank
S – Detection Limits increased due to sample matrix
4X – Native sample concentration was greater than 4 times the spike concentration so the spike added could not be distinguished from the native concentration.
% Rec – Percent Recovery; RPD - Relative Percent Difference
D – Duplicate sample
R – Reanalysis

This report has been reviewed and authorized by Jacquelyn R. Villinski, Laboratory Director: Jacquelyn R. Villinski

MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, ME 04096-6716 Tel: (207) 846-6569 Fax: (207) 846-9066
Email: info@mel-lab.com Web: MaineEnvironmentalLaboratory.com

REPORT TO: Matt Richard | EMAIL: MRichard@RepublicServices.com | TELEPHONE: 945-8307
COMPANY: Republic Services | BILL TO / PURCHASE ORDER #:
ADDRESS: 31 Waldron Way Portland, Me
PROJECT NAME: East Millinocket 6011 | SAMPLER NAME: P. McCusker | QUOTE #:

SAMPLE IDENTIFICATION	# CONTAINERS	TYPE OF CONTAINERS	FIELD FILTRATION YES	FIELD FILTRATION NO	SAMPLE TYPE	GRAB	COMP.	METHOD PRESERVED	SAMPLING DATE	SAMPLING TIME	ANALYSES: Maine Waste Oil	ANALYSES: Total Metals	ANALYSES: GRPAB per phone call w/ matt	LABORATORY ID
EM-VAULT	1	G			L		X		8/5	1205	X	X		2408091002
EM-TANK	1	G			L		X		8/5	1327	X	X		003

ANALYSES: RCRA, NPDES, SDWA or required method

LABORATORY REPORT #: ENP18375

SAMPLE RECEIVING
Within Hold Time? [X] Yes [ ] No [ ] N/A
Good Condition? [X] Yes [ ] No [ ] N/A
Preserved? [X] Yes [ ] No [ ] N/A
Custody Seal? [ ] Yes [X] No [ ] N/A
Del. by: Matt → OK, in cooler w/ice
Temp. °C 8.1

TURNAROUND REQUEST
[ ] Standard
[ ] Priority (SURCHARGE)

REPORTING REQUIREMENTS?
[X] Standard Report
[ ] ME DEP EGAD EDD [ ] DEP ToxSheet
[ ] DW Compliance (sent to State)
[ ] CC Results to _____

COMMENTS
#6 0.1 Sampled from tank & VAULT
Maine Waste Oil: AS, CD, CR, Total Halogens, Flashpoint, PCB

MEL reserves the right to subcontract analyses at MEL's discretion.

	DATE	TIME	
RELINQUISHED BY SAMPLER: P McCusker	8/9/24	1050	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	8/9/24	1050	RECEIVED BY LABORATORY:

COC 112122 It is the client's responsibility to check for accuracy prior to relinquishing samples. By executing this COC, the client has read and agrees to be bound by MEL's Terms & Conditions.

MEL Combined Report - Revised Page 2 of 13

Eastern Analytical, Inc.
professional laboratory and drilling services

Jackie Villinski
Maine Environmental Laboratory, LLC
One Main Street
Yarmouth , ME 04096

Laboratory Report for:

Eastern Analytical, Inc. ID:	283753
Client Identification:	ENP 18375
Date Received:	8/13/2024
Report revision/reissue:	Revision, replaces report dated 8/23/2024
Revision information:	Per customers request, Sulfur has been analyzed.

Enclosed are the analytical results per the Chain of Custody for sample(s) in the referenced project. All analyses were performed in accordance with our QA/QC Program, NELAP and other applicable state requirements. All quality control criteria was within acceptance criteria unless noted on the report pages. Results are for the exclusive use of the client named on this report and will not be released to a third party without consent.

The following information is contained within this report: Sample Conditions summary, Analytical Results/Data, Quality Control data (if requested) and copies of the Chain of Custody. This report may not be reproduced except in full, without the written approval of the laboratory.

The following standard abbreviations and conventions apply to all EAI reports:
< : "less than" followed by the reporting limit
> : "greater than" followed by the reporting limit
%R : % Recovery

Certifications:
Eastern Analytical, Inc. maintains certification in the following states: Connecticut (PH-0492), Maine (NH005), Massachusetts (M-NH005), New Hampshire/NELAP (1012), Rhode Island (269), Vermont (VT1012), New York (12072) and West Virginia (9910C). Please refer to our website at www.easternanalytical.com for a copy of our certificates and accredited parameters.

References:
- EPA 600/4-79-020, 1983
- Standard Methods for Examination of Water and Wastewater, 20th, 21st, 22nd & 23rd edition or noted revision year.
- Test Methods for Evaluating Solid Waste SW 846 3rd Edition including updates IVA and IVB
- Hach Water Analysis Handbook, 4th edition, 1992

If you have any questions regarding the results contained within, please feel free to contact customer service. Unless otherwise requested, we will dispose of the sample(s) 6 weeks from the sample receipt date.

We appreciate this opportunity to be of service and look forward to your continued patronage.

Sincerely,

Lorraine Olashaw, Lab Director — Date: 9.9.24

SAMPLE CONDITIONS PAGE

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**

Client Designation: **ENP 18375**

Temperature upon receipt (°C): 4.0 **Received on ice or cold packs (Yes/No): Y**

Acceptable temperature range (°C): 0-6

Lab ID	Sample ID	Date Received	Date/Time Sampled		Sample Matrix	% Dry Weight	Exceptions/Comments (other than thermal preservation)
283753.01	Em-Vault	8/13/24	8/5/24	12:05	oil		Adheres to Sample Acceptance Policy Flash Point canceled.
283753.02	Em-Tank	8/13/24	8/5/24	13:27	oil		Adheres to Sample Acceptance Policy Flash Point canceled.

All results contained in this report relate only to the above listed samples.

Unless otherwise noted:

- *Hold times, preservation, container types, and sample conditions adhered to EPA Protocol.*
- *Solid samples are reported on a dry weight basis, unless otherwise noted. pH/Corrosivity, Flashpoint, Ignitability, Paint Filter, Conductivity and Specific Gravity are always reported on an "as received" basis.*
- *Analysis of pH, Total Residual Chlorine, Dissolved Oxygen and Sulfite were performed at the laboratory outside of the recommended 15 minute hold time.*
- *Samples collected by Eastern Analytical, Inc. (EAI) were collected in accordance with approved EPA procedures.*

LABORATORY REPORT

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**
Client Designation: **ENP 18375**

Client Sample ID:	Em-Vault
Lab Sample ID:	283753.01
Matrix:	oil
Date Sampled:	8/5/24
Date Received:	8/13/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Date Prepared	Method Prep	Method Analytical	Analyst
PCB-1016	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1221	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1232	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1242	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1248	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1254	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1260	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1262	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
PCB-1268	< 2	2	1	mg/kg	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
TMX (surr)	**42 %R**			%	8/21/24	12:53	8/20/24	3580A	3580/8082	MB
DCB (surr)	**30 %R**			%	8/21/24	12:53	8/20/24	3580A	3580/8082	MB

Acid clean-up was performed on the sample and associated batch QC.

LABORATORY REPORT

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**
Client Designation: **ENP 18375**

Client Sample ID:	Em-Tank
Lab Sample ID:	283753.02
Matrix:	oil
Date Sampled:	8/5/24
Date Received:	8/13/24

	Result	RL	Dilution Factor	Units	Date / Time Analyzed		Date Prepared	Method Prep	Method Analytical	Analyst
PCB-1016	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1221	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1232	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1242	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1248	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1254	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1260	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1262	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
PCB-1268	< 2	2	1	mg/kg	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
TMX (surr)	**45 %R**			%	8/21/24	13:03	8/20/24	3580A	3580/8082	MB
DCB (surr)	**31 %R**			%	8/21/24	13:03	8/20/24	3580A	3580/8082	MB

Acid clean-up was performed on the sample and associated batch QC.

QC REPORT

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**

Batch ID: 638597-36885/O082024PCB1

Client Designation: **ENP 18375**

Parameter Name	Blank	LCS	LCSD	Analysis Date	Units	Limits	RPD	Method
PCB-1016	< 2	13 (84 %R)	13 (83 %R) (1 RPD)	8/21/2024	mg/kg	40 - 140	30	3580/8082
PCB-1221	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1232	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1242	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1248	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1254	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1260	< 2	14 (87 %R)	14 (86 %R) (1 RPD)	8/21/2024	mg/kg	40 - 140	30	3580/8082
PCB-1262	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
PCB-1268	< 2	< 2 (%R N/A)	< 2 (%R N/A) (RPD N/A)	8/21/2024	mg/kg			3580/8082
TMX (surr)	84 %R	86 %R	85 %R	8/21/2024	% Rec	30 - 150		3580/8082
DCB (surr)	90 %R	93 %R	92 %R	8/21/2024	% Rec	30 - 150		3580/8082

*/! Flagged analyte recoveries deviated from the QA/QC limits. Data that impacts sample results are noted on the sample report.

LABORATORY REPORT

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**

Client Designation: **ENP 18375**

Client Sample ID:	Em-Vault
Lab Sample ID:	283753.01
Matrix:	oil
Date Sampled:	8/5/24
Date Received:	8/13/24

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Arsenic	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Barium	**1.9**	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Cadmium	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Chromium	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Lead	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Mercury	< 0.1	0.1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Selenium	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Silver	< 1	1	49	Oil	mg/kg	8/19/24	20:08	6020B	DS
Sulfur	**8700**	400	10	Oil	mg/kg	9/5/24	17:56	6010C	RJ

Client Sample ID:	Em-Tank
Lab Sample ID:	283753.02
Matrix:	oil
Date Sampled:	8/5/24
Date Received:	8/13/24

	Result	RL	Dilution Factor	Analytical Matrix	Units	Date Analyzed	Time	Method	Analyst
Arsenic	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Barium	**1**	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Cadmium	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Chromium	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Lead	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Mercury	< 0.1	0.1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Selenium	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Silver	< 1	1	49	Oil	mg/kg	8/19/24	20:13	6020B	DS
Sulfur	**3400**	400	10	Oil	mg/kg	9/5/24	18:06	6010C	RJ

QC REPORT

EAI ID#: **283753**

Client: **Maine Environmental Laboratory, LLC**

Client Designation: **ENP 18375**

Parameter Name	Blank	LCS	LCSD		Units	Date of Analysis	Limits	RPD	Method
Arsenic	< 0.5	38 (95 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Barium	< 0.5	38 (95 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Cadmium	< 0.5	39 (97 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Chromium	< 0.5	38 (95 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Lead	< 0.5	36 (91 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Mercury	< 0.1	0.36 (90 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Selenium	< 0.5	38 (96 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Silver	< 0.5	38 (96 %R)		NA	mg/kg	8/15/24	80 - 120	20	6020B
Sulfur	< 200	340 (86 %R)		NA	mg/kg	8/16/24	80 - 120	20	6010C

*/! Flagged analyte recoveries deviated from the QA/QC limits. Unless noted, flagged data does not impact the sample data.

Sterling Analytical, Inc.
15 Agawam Avenue
West Springfield, MA 01089
Phone (413) 214-6541 Fax (413) 214-6842

Visit our website: www.sterlinganalytical.com

Report Date August 21, 2024

Customer	Contact	Laboratory Supervisor	eMail
Eastern Analytical	A. Blay	Dale Percoski	customerservice@sterlinganalytical.com

Sample Description
Analysis of Oil Samples

Samples Analyzed

Enclosed are Report No(s): 83804, 83805

Blank = <50mg/kg
ICV 100 = 103mg/kg
CCV 50 = 51.5mg/kg

Thank you for your business

Dale Percoski
Dale Percoski, Laboratory Supervisor

8/21/2024
Date

ALL the information contained in this report has been reviewed for accuracy and checked against all quality control requirements outlined in each applicable method.
This report may not be reproduced, except in full, without written approval from Sterling Analytical, Inc.

Visit our website: www.sterlinganalytical.com **Sample Analysis** **Work Order** 24-2088

Sample	Description	Source	Taken/Time	Received
83804	283753-01 EM-Vault	Eastern Analytical	8/5/24 12:05	8/16/24

Parameter		Results		RDL	Method	Analyzed/Time	Tech
Total Halogens		75.1	mg/kg	50.00	SW846 9076(1)	08/20/24	sjr

Sample	Description	Source	Taken/Time	Received
83805	283753-02 EM-Tank	Eastern Analytical	8/5/24 13:27	8/16/24

Parameter		Results		RDL	Method	Analyzed/Time	Tech
Total Halogens	Less Than	50.0	mg/kg	50.00	SW846 9076(1)	08/20/24	sjr

(1) MA & CT do not certify this parameter

CHAIN-OF-CUSTODY RECORD

Eastern Analytical, Inc.
professional laboratory and drilling services

EAI ID# 283753 Page 1

Sample ID	Date Sampled	Matrix	aParameters	Sample Notes
Em-Vault	8/5/2024 12:05	oil	Subcontract - Total Halogens Oil (SA)	
Em-Tank	8/5/2024 13:27	oil	Subcontract - Total Halogens Oil (SA)	

EAI ID# 283753 **Project State: ME**

Project ID: 4247

Company Sterling Analytical
Address 15 Agawam Ave
Address West Springfield, MA 01089
Account #
Phone # 413-214-6541

Results Needed: **Preferred Date: Standard**

RUSH Due Date: _____

QC Deliverables

☐ A ☐ A+ ☒ B ☐ B+ ☐ C ☐ MA MCP

Notes about project:

Email login confirmation, pdf of results and invoice to customerservice@easternanalytical.com.

PO #: **US0543851144** **EAI ID# 283753**

Data Deliverable (circle)

Excel NH EMD EQuIS ME EGA

Call prior to analyzing, if RUSH charges will be applied.

Samples Collected by: _____

Relinquished by	Date/Time	Received by
Relinquished by	**Date/Time**	**Received by**

As a subcontract lab to EAI, you will defend, indemnify and hold Eastern Analytical, Inc., its officers, employees, and agents harmless from and against any and all liability, loss, expense or claims for injury or damage arising out of the performance against this chain of custody but only in proportion to and to the extent such liability, loss, expense, or claims for injury or damages are caused by or result from the negligent or intentiona acts or omissions of you as a subcontract lab, your officers, agents or employees

E241

Maine Environmental Laboratory - Subcontract Chain of Custody

283753

Report To: J. Villinski **Email:** sub-lab-reports@mel-lab.com **Phone:** (207) 846-6569

Project: ENP 18375 **Requested Due Date:** 8/21/2024

Project		Customer Sample ID	Matrix	Collected		Notes
ENP	18375	Em-Vault	O	8/5/2024	12:05	

Flash Point - subcontracted _____ Metals in Oil - subcontracted _____ PCB - subcontracted _____

TOX - subcontracted _____

Project		Customer Sample ID	Matrix	Collected		Notes
ENP	18375	Em-Tank	O	8/5/2024	13:27	

Flash Point - subcontracted _____ Metals in Oil - subcontracted _____ PCB - subcontracted _____

TOX - subcontracted _____

As, Cd, Cr, Pb and RCRA 8 Metals

4.0 °C

Report Format & Comments:

Quote: MEL3120101-25

- [x] Standard
- [ ] Level II QC
- [ ] ME EGAD EDD

EDD Project Name:

- [ ] NH DES EMD EDD

UF	8/13/24 10:30	8/15/24
Relinquished	Date, Time	Received
Mark Cattran	8/13/24 2:20pm	
Relinquished	Date, Time	Received
Relinquished	Date, Time	Received

Faxed 8/9 - UF

SME
SEVEE & MAHER
ENGINEERS

4 Blanchard Road, P.O. Box 85A
Cumberland, ME 04021
Tel: 207.829.5016 • Fax: 207.829.5692
info@sme-engineers.com
sme-engineers.com

MEMO TO: Mike Michaud (East Millinocket Board of Selectman)

From: Matt Muzzy (SME)

DATE: July 15, 2024

Subject: **LEACHATE PIPELINE CONSTRUCTION, FORMER GNP MILL SITE**

Mike, you asked that Sevee & Maher Engineers, Inc. (SME) document management of oily soil and oily water conditions encountered in October 2015 while overseeing construction of a portion of (below ground) leachate transport pipeline located at the former GNP millsite in East Millinocket Maine.

The area you are interested in occurred between pipeline stations Sta. 7+50 and 8+90. The approximate location of the area is shown on Figures 1 and 2. No other areas of oily soil or oily water were encountered during construction of the pipeline. Photos 1 and 2 show views of the trench conditions where the oily soil and oily water were encountered.

This paragraph summarizes the event. On Friday afternoon, October 2, 2015, trench excavation for the leachate pipeline encountered oily soil and oily water. The Maine Department of Environmental Protection (MEDEP) was immediately alerted and over the next several days the oily soil and oily water condition was contained and controlled. The portion of the trench where the oily soil and oily water was encountered was blocked off using soil trench dams to resist water movement within the trench alignment. The soil removed from the trench was staged beside the trench such that any water released from the excavated soil would flow back into the trench. The oily water in the trench was pumped to portable frac tanks and contained, which allowed the pipeline construction to continue in dry conditions and minimized release of the oily water to otherwise unaffected areas. Ultimately, and with MEDEP's approval, the oily soil and oily water were returned to the trench excavation; the oily soil was used as backfill and the oily water was allowed to slowly drain from the frac tanks into the trench (and seep into the adjacent ground) at a rate that did not cause the trench excavation to overflow. In short, the oily soil and oily water were returned to where they came from.

A number of calls and emails occurred with respect to managing the oily soil and water. Most of the calls (many initiated by this writer, i.e., Matt Muzzy) were not documented directly, however inferences to several of the calls are made in the emails. Persons/groups involved with managing the oily soil and water were mainly as follows:

- Sevee & Maher Engineers, Inc. (SME) – Matt Muzzy (Project Manager), Brian Pierce (Design Engineer), Brian Johnson(on-site);
- Maine Department of Economic and Community Development (MEDECD) – Mike Barden (acting as owner's [i.e., State of Maine] representative);
- MEDEP – Lou Pizzuti (Project Manager- Solid Waste), Peter Blanchard (Oil and Hazardous Material Response), Paul Nichols (Remediation and Waste Management); and

- Clean Harbors (waste mitigation contractor) – Jason Babbidge

The following are chronological excerpts from emails occurring between October 2, 2015 and October 16, 2015, which document the activities implemented for managing the oily soil and oily water encountered in the pipeline trench. The complete emails are available, however the excepts below are provided for clarity and brevity.

10/2/15 EMAIL FROM SME (BRIAN PIERCE, ~1418 HRS)

> "Lou, we have some oily water and possibly soil to deal with at the GNP site. Please give me a call at your earliest convenience and I can update you. I left messages on both of your emails."

10/2/15 EMAIL FROM MEDEP (PETER BLANCHARD, ~1606 HRS)

> "Bob Shannon, DEP Response Bangor, reports that Seavey and Maher, contractors overseeing the installation of the new leachate line between the landfill and the municipal wastewater treatment plant, contacted DEP to report free product oil in the excavation. The source of this petroleum is being investigated. Right now we are working with the contractors to contain the oil. We will have more information later this PM."

10/2/15 EMAIL FROM SME (BRIAN PIERCE, ~1649 HRS)

> "Project Update:
>
> DEP Response said there is about 9000 gallons of groundwater with a sheen on it. MDEP can't handle that volume of water in their treatment system.
>
> Lou said that SME will have to deal with it through Clean Harbors or others...Lou said to ask Blaine if they would accept the water at the [East Millinocket] WWTP....probably not but worth a try.
>
> Adding insult to injury the impacted soils were NOT deemed virgin so that soil cannot go to Dolby. Probably juniper ridge as a disposal site.
>
> We need to have a teleconference Monday morning to get everyone on the same page and formulate a game plan."

10/2/15 EMAIL FROM SME (BRIAN PIERCE, ~1928 HRS)

> "FYI....Brian Johnson indicates that Matt talked with the DEP and they are now allowing excavated fill to be placed back in excavation after pipe is installed. No disposal required."

10/2/15 EMAIL FROM SME (MATT MUZZY, ~1924 HRS)

> With Jason [Clean Harbors]...

"Please go ahead with frac tank(s) for Monday
Please call me when you get on site tomorrow."

10/3/15 EMAIL FROM SME (MATT MUZZY, ~0924 HRS)

"Please set time aside Monday morning (10/5) at 0815 hours to discuss going forward with handling oily water/soil associated with ongoing leachate pipeline construction at the East Millinocket mill. Discussion will be to fine tune aspects of earlier email [from Matt M] and put schedule together for getting through the oily area."

10/5/15 EMAIL FROM SME (MATT MUZZY, ~0907 HRS)

"Attached is signed frack tank Acknowledgement. Thanks for your help with this….we do appreciate it."

10/5/2015 EMAIL FROM MEDECD (MIKE BARDEN, ~0948)

"We have been working with DEP on process for dealing with the oil contamination. Clean Harbors will be delivering two tanks today. Tomorrow we plan to pump the contaminated water to tanks, isolate the trench area with temp till dams to allow installation of leachate pipe and bleed the water from the tanks back into to the trench area. Any contaminated soils would be used as trench fill. DEP will be on site tomorrow to observe. The area that we encountered the contaminated ground water in the trench is directly downhill from the above-ground tank near the guard house. That is a low area in our route- we have ~1000' of trenching left, and higher elevation area, so hopefully no additional groundwater contamination will be encountered. We are still on track to have the pipeline install completed by 10/31."

10/5/2015 EMAIL FROM MEDECD (MIKE BARDEN,~1433)

"The groundwater contamination encountered during our trenching is likely historical release and typical for a 50-year+ industrial site that was storing/using petroleum products. Lou or Paul, feel free to correct me if you think otherwise."

10/6/2015 EMAIL FROM SME (MATT MUZZY,~0749 HRS)

"Word from field is that pipe going in and looks good to have worst part of the oily [conditions is] behind"

10/6/2015 EMAIL FROM SME (BRIAN JOHNSON, ~0749 HRS)

"Report in from site…
Pipe in in ground …backfilling is in progress.
Paul Nichols (DEP) visited site and is happy with what he observed.
The two frack tanks are full of water (~40,000 gallons)…draining them will start later this week.

You may add, petroleum impacted soil is all back between the till Dams where it came from; and the stone chimney has been installed with a sump for water reintroduction which will start later today."

10/7/15 EMAIL FROM MEDEP (LOU PIZZUTI,~0655 HRS)

"You are correct Mike. I had requested that a MDEP responder look at the petroleum product found in the trench being dug for the Dolby Landfill leachate pipeline for the purpose of seeing if it could be characterized as a "virgin petroleum product". This would have allowed for the contaminated soils to be disposed at the Dolby Landfill, in accordance with a revision to the landfill license. Since there was no oil pipeline or oil storage unit associated with the spill, the spilled material could not be characterized as virgin and is being characterized as Mike has described below. The next concern was what to do with the contaminated water and soil so that the project could continue to move forward and that concern has been adequately addressed with minimal disruption and cost."

10/8/15 EMAIL FROM SME (MATT MUZZY,~1327 HRS)

"One frack tank is fully drained and the other is half empty…should finish draining tomorrow. Plan to keep tanks onsite until air testing complete just in case a need to make a repair in the oily area occurs."

10/15/15 EMAIL FROM SME (MATT MUZZY, ~0932 HRS)

"I was on site Tuesday and Wednesday, filling in for Brain J. …progress continues to be made. Initially I was thinking to keep the Frack Tanks at the site until pipeline testing was complete just in case the oily area needs to be re-excavated…however testing could be several weeks away. With your approval I will contact Clean Harbors and request that tanks be removed from site. Removal will consist of pressure washing inside of each tank, and then vacuuming out water and sediment. Water will be drained to the pipe trench (same as that used to drain Frack Tanks) and sediment will be placed in pipe trench (same original trench material)."

10/15/15 EMAIL FROM SME (MATT MUZZY, ~0947 HRS)

"All…we are planning to remove the frac tanks used to help with the oily area for the leachate pipeline at the former GNP mill site. … Unless I hear different from you, I plan to ask Clean Harbors to remove the tanks early next week."

10/15/15 EMAIL FROM MEDEP (PAUL NICHOLS – OHMR, ~0947HRS)

"Sounds good to me."

10/16/15 EMAIL FROM MEDEP (LOU PIZZUTI – SWM, ~0848 HRS)

"I have no objections."

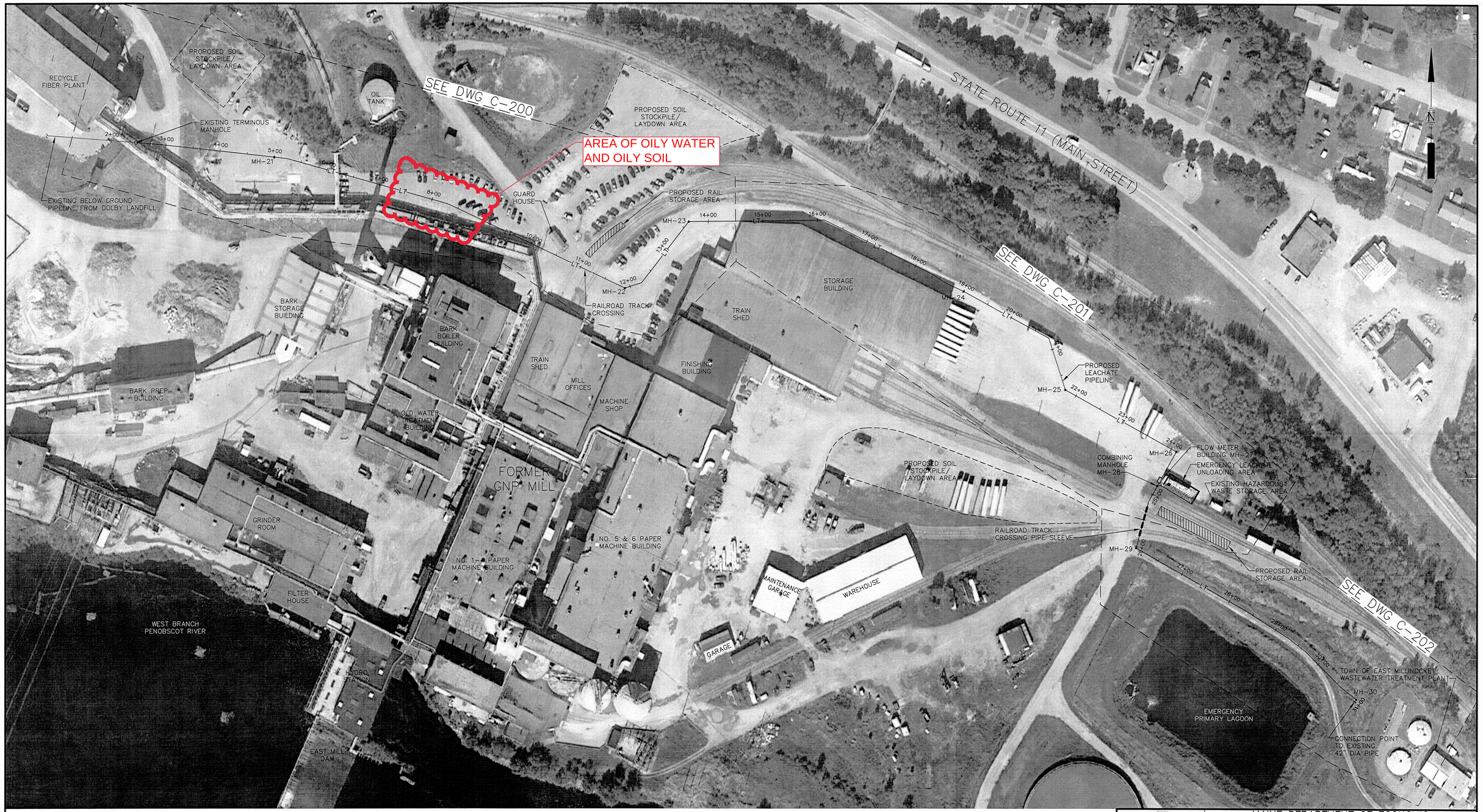
Mike, please let me know if you have any questions regarding the information provided.

Sincerely,

SEVEE & MAHER ENGINEERS, INC.

Matthew Muzzy, P.E.
Principal/Senior Geotechnical Engineer

Attachments



NOTES

1. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
2. AERIAL PHOTO FROM GOOGLE EARTH PRO, DATED SEPTEMBER 17, 2013. IMAGE ALIGNMENT ADJUSTED TO MATCH EXISTING GROUND SURVEY BY SEVEE & MAHER ENGINEERS, INC.

40 0 80 160

FIGURE 1

REV.	BY	DATE	STATUS
	BDP	8/15	REVISED PER CHANGE ORDER 1
	BDP	7/15	ISSUED FOR CONSTRUCTION
	BDP	6/15	ISSUED FOR BID

STATE OF MAINE — GUY H. ALCOTE JR. — No. 5149 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

SITE OVERVIEW PLAN

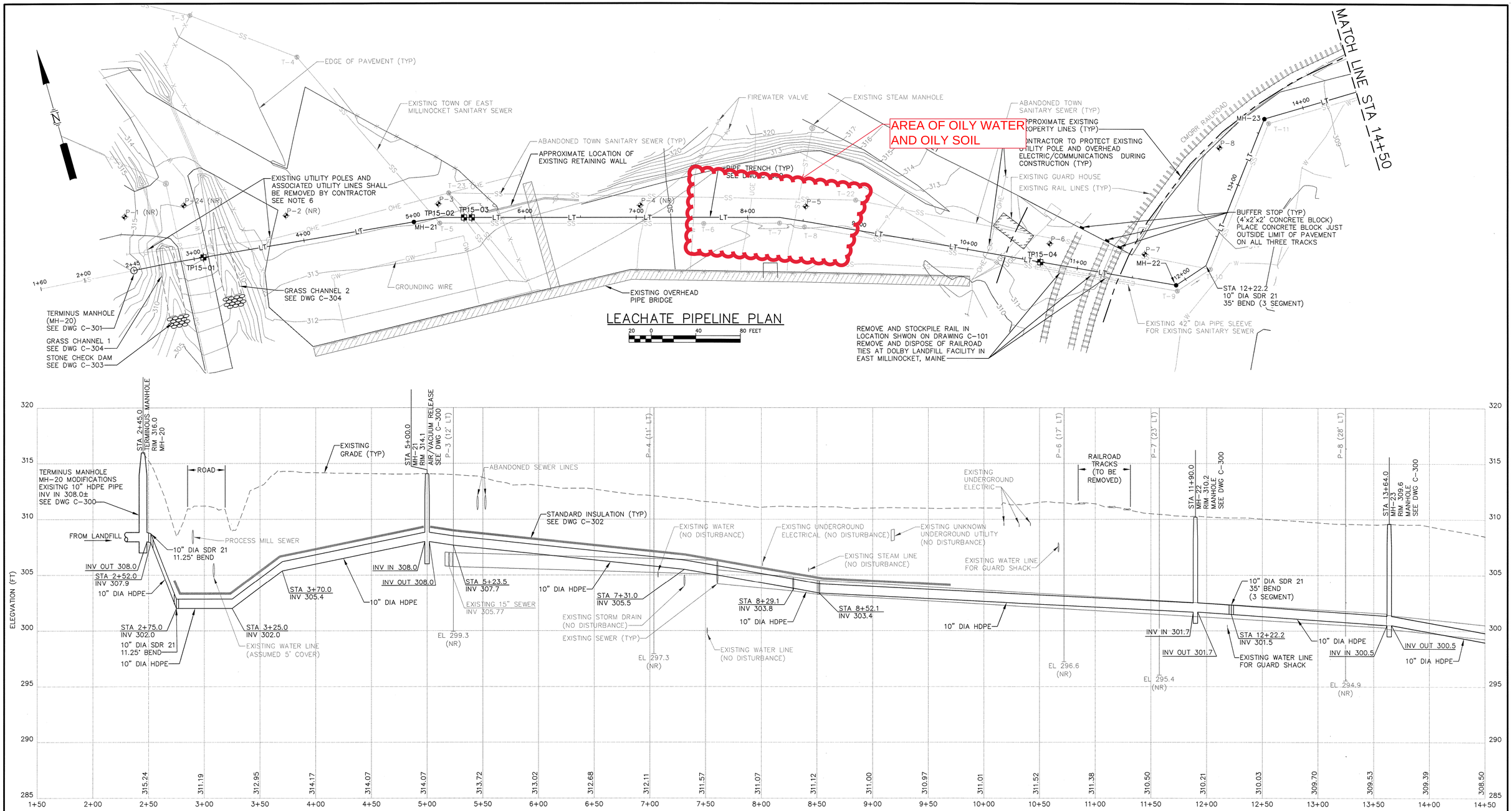
SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY:	BDP
DRAWN BY:	SJM
DATE:	5/2015
CHECKED BY:	GHC
LMN:	SITE-OVER
CTB:	SME-STD

JOB NO. 14134.09 DWG FILE BASE

C-101

\\sevee\c$\Projects\MEDeptEconDev\Acad\Plans\BASE.dwg, 8/25/2015 10:03:42 AM, gm



LEACHATE PIPELINE PROFILE

20 0 40 80 FEET (HORZ)

2 0 4 8 FEET (VERT)

NOTES

1. BASE MAP PREPARED BY SEVEE & MAHER ENGINEERS, INC, CUMBERLAND, MAINE. HORIZONTAL DATUM MAINE STATE COORDINATE SYSTEM EAST ZONE, SPC 1801. VERTICAL DATUM IS NAVD 88, GEOID 12.
2. BORING LOCATIONS AND TOWN OF EAST MILLINOCKET SANITARY SEWER PIPE INVERTS FIELD SURVEYED BY SEVEE & MAHER ENGINEERS, INC. OF CUMBERLAND MAINE. BORING DESIGNATION NR=NO REFUSAL. LOCATIONS OF ALL OTHERS IS APPROXIMATE AND ARE BASED ON HISTORICAL PLANS AND ON UTILITY SURVEY BY DIGSMART.
3. ALL SITE AND CONSTRUCTION ACTIVITIES SHALL BE IN COMPLIANCE WITH MEDEP BEST MANAGEMENT PRACTICES AND EXISTING FEDERAL, STATE, AND LOCAL PERMITS AND PERMITTING REQUIREMENTS FOR THE SITE.
4. CONTRACTOR SHALL TEST PIT TO A DEPTH OF 15-FEET BELOW GROUND SURFACE OR TO UNKNOWN UTILITY AT ALL TEST PIT LOCATIONS SHOWN.
5. UTILITIES AND STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE UTILITY OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. THE PROPERTY OWNER HAS EXPRESSED NO OBJECTION TO REMOVAL OF POWER LINES AND POLES. CONTRACTOR SHALL CONFIRM ALL LINES TO BE REMOVED ARE DEENERGIZED PRIOR TO REMOVAL.

FIGURE 2

REV.	BY	DATE	STATUS
	BDP	8/15	REVISED PER CHANGE ORDER 1
	BDP	7/15	ISSUED FOR CONSTRUCTION
	BDP	7/15	REVISED PER ADDENDUM 1
	BDP	6/15	ISSUED FOR BID

STATE OF MAINE — GUY H. COTE JR. — No. 5082 — LICENSED PROFESSIONAL ENGINEER

MAINE DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT
LEACHATE PIPELINE RELOCATION
GNP MILL FACILITY
EAST MILLINOCKET, MAINE

LEACHATE PIPELINE PLAN AND PROFILE

SME
Sevee & Maher Engineers, Inc.
ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE
4 Blanchard Road, PO Box 85A, Cumberland Center, Maine 04021
Phone 207.829.5016 • Fax 207.829.5692 • www.smemaine.com

DESIGN BY:	BDP
DRAWN BY:	SJM
DATE:	5/2015
CHECKED BY:	KPM
LMN:	LT-PLAN-PROF
CTB:	SME-STD

JOB NO. 14134.09 DWG FILE BASE

C-200

W:\sevee\Jobs\MMS\Rail\pipeline\Acad\Plans\BASE.dwg, 9/25/2015 9:57:27 AM, sjm

Leachate Pipeline Construction Photos
Former GNP Mill Site

Photo 1 - Trench with oily water and oil-stained soil (taken 10/2/2015).

Photo 2 - Trench with oily water. Note soil dam across trench at top of photo (taken 10/5/2015).

LIMITED SUBSURFACE INVESTIGATION AND WASTE CHARACTERIZATION SUMMARY REPORT

Former Great Northern Paper Mill
Study Areas 4 and 6
50 Maine Street
East Millinocket, ME 04430

June 11, 2025

Prepared For:
Town of East Millinocket
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EXECUTIVE SUMMARY

The Former Great Northern Paper (GNP) Mill is located at 50 Main Street in East Millinocket, Maine. The 215-acre mill site, identified by the Town of East Millinocket as Parcel Number 0001-2-00000-010, was developed in 1907, producing paper products as one of the region's largest employers until its closure in 2014. The Town of East Millinocket acquired the former GNP Site on July 21, 2020.

During its operation, the GNP mill complex comprised numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present. To assist in the evaluation of environmental conditions at the former mill site, previous environmental investigations performed by TRC and others have divided the site into seven primary "Study Areas."

This report applies to portions of Study Area 4 (Fuel Storage Area), which is located on the north-central portion of the mill site and contains petroleum-impacted soil associated with the former fuel storage and transfer operations, as well as fill materials, suspect hazardous building materials, and debris piles consisting of accumulated parking lot sweepings and roofing gravel, The report also covers a portion of Study Area 6 (Wood Lot Area), which is located on the southwest portion of the mill site and contains debris piles of residual paper waste (all of which are collectively referred to as the "Site" for the purposes of this report. A Site Location Map and a Site Layout Plan are provided as **Figures 1** and **Figure 2**, respectively.

The purpose of this assessment is to assess soil in Study Area 4 to further evaluate petroleum- and/or other hazardous substance-impacted soil associated with the former fuel storage and transfer operations in this area, and sampling of the debris piles in Study Areas 4 and 6 to facilitate proper handling and disposal of these materials. Accordingly, the assessment included a limited subsurface investigation of soil in the Fuel Storage Area and characterization sampling of the on-Site debris piles. This assessment is being funded by the Town of East Millinocket Brownfields FY23 Assessment Grant number BF00A1159.

In addition to the above tasks, as previously discussed and described in the approved Site-Specific Quality Assurance Project Plan (SSQAPP) Addendum East Millinocket-B QA Tracking #23175 A14 (TRC, 2024), TRC also managed the performance of a hazardous building materials assessment (HBMS) to assess building materials associated with and within several structures, including a portion of Study Area 1 (Western Mill Area), which is located in the south-central portion of the mill site and contains the Plant Protection Building/Fire Chief Building and a portion of Study Area 2 (East Mill Area), which is located in the east/east-central portion of the mill site and contains the contiguous Original Train Shed (No. 1) / Original Finishing Building (No. 1-4) / Mills Offices. The HBMS was conducted between October 2024 and February 2025 and is summarized under a separate cover.

The following conclusions are based on the results of this limited subsurface investigation and waste characterization program:

- **Overburden Geology (Study Area 4)** – Based on conditions observed in the soil borings advanced within the Fuel Storage Area during this assessment, subsurface soil consists of light brown/gray fine sand with some fine to coarse gravel, and some to trace silt to a maximum depth of 3 feet below ground surface (bgs).

- **Soil Screening Results (Study Area 4)** – Soil samples were screened in the field for the presence of volatile organic compounds (VOCs) during sampling using a photoionization detector (PID), per the Maine Department of Environmental Protection (MEDEP) bag headspace method. PID screening results for the soil samples were below the instrument detection limit. No odors were identified in the soil samples. It is noted that petroleum-saturated soil was observed in surficial soils surrounding the existing 750,000-gallon fuel oil aboveground storage tank (AST); however, these areas were not sampled given that they are known to be significantly impacted.

  Fuel Storage Area Soil Analytical Results (Study Area 4) – In addition to verifying the presence of petroleum-saturated surficial soil in areas surrounding the existing 750,000-gallon fuel oil AST, results of the subject soil sampling program conducted within accessible areas of the earthen berm area surrounding the existing 750,000-gallon AST and in the footprint of the former 1,700,000-gallon AST indicate concentrations of arsenic above the MEDEP Remedial Action Guidelines (RAGs), as well as concentrations of lead and polycyclic aromatic hydrocarbons (PAHs) above background levels.

- **Soil/Debris Stockpile Analytical Results (Study Area 4)** – Concentrations of VOCs (Naphthalene) and PAHs (Naphthalene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)Pyrene) were detected above MEDEP RAGs for the Residential and/or Commercial Work Construction Scenarios in waste characterization sample WC-2. The concentration of the PAH compound Benzo(a)pyrene in the duplicate sample collected at WC-1 also exceeded the MEDEP RAG for the Residential Scenario. Several metals were detected in both samples WC-1 and WC-2 and were below the applicable MEDEP RAGs with the exception of total chromium, which exceeded the MEDEP Residential RAG for hexavalent chromium. As the chromium data were not speciated for the stockpile waste characterization samples, the results were conservatively compared to the MEDEP RAGs for hexavalent chromium. Detected analytes of remaining waste characterization parameters were below the applicable MEDEP RAGs

- **Paper Waste Analytical Results (Study Area 6)** – Detected concentrations of semi-volatile organic compounds (SVOCs) and metals and the measured pH for the paper waste samples did not exceed the Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels.

Based on the findings of the limited subsurface investigation and waste characterization, TRC recommends the following:

- **Notify MEDEP of Soil RAG Exceedances** – Because this investigation was funded by the Town of East Millinocket's EPA Brownfields Program, MEDEP will be notified of the results upon issuance of this report.

- **Properly Manage Soil with the Fuel Storage Area (Study Area 4) During Redevelopment** – Based on the presence of both petroleum-saturated soil and impacted soils containing concentrations arsenic above the MEDEP RAGs, as well as concentrations of lead and PAHs above background levels, and in consideration of the proposed redevelopment of the Fuel Storage Area, soil excavated during construction should be managed properly and either be removed and disposed at an appropriate licensed receiving facility and/or managed on-site in accordance with the current Environmental Media Management Plan (EMMP) for the former GNP Mill. Additional engineering and/or institutional controls may be necessary, such as cover systems and/or the implementation of a deed restriction to prevent exposure to impacted soil.

  In addition, following the future removal of the existing 750,000-gallon fuel oil AST, further sampling of soil and/or groundwater beneath the AST is recommended to verify the extent of impacted soil in this area.

- **Properly Manage Soil/Debris Stockpile (Study Area 4)** - Based on the presence of VOCs, PAHs, and Chromium above the MEDEP Residential/Commercial Worker RAGs, the soil/debris stockpiles should be managed properly and either be removed and disposed at an appropriate licensed receiving facility and/or managed on-site in accordance with the current EMMP for the former GNP Mill.

- **Dispose of Paper Waste (Study Area 6)** - As analytical parameters for the paper waste material did not exceed the RCRA TCLP Regulatory Levels, no specific disposal restrictions apply to this material and it may be properly recycled or disposed of at an appropriate licensed receiving facility. It is recommended that MEDEP be notified of the anticipated receiving facility prior to removal, recycling, and disposal of the material.

This Executive Summary is part of this complete report; any findings, opinions, or conclusions in this Executive Summary are made in context with the complete report. TRC recommends that the User read the entire report for supporting information related to findings, opinions, and conclusions.

1.0 INTRODUCTION

TRC Environmental Corporation (TRC) was retained by the Town of East Millinocket (the Town, also known as "Client" or "User") to perform a limited subsurface investigation and waste characterization sampling program on a portion of the Former Great Northern Paper (GNP) Mill property located at 50 Main Street in East Millinocket, Maine 04430 (the "Site"). Specifically, TRC conducted this assessment to further evaluate subsurface media in the Fuel Storage Area (Study Area 4) and to evaluate various debris piles and waste debris at the Site (Study Areas 4 and 6) in support of future Site redevelopment.

The objective of this report is to summarize the methods and results of the limited subsurface investigation and waste characterization sampling activities, which took place at the Site in October 2024. In conjunction with the assessment, TRC also managed the performance of a hazardous building materials survey (HBMS) to assess building materials associated with and within several structures, including the Original Train Shed/Original Finishing Building/Mill Offices and Plant Protection Building; this HBMS was conducted between October 2024 and February 2025 and is summarized under separate cover.

The specific objectives of this assessment are included in the Maine Department of Environmental Protection (MEDEP) and EPA-approved (on September 26, 2024) Brownfields Program Site-Specific Quality Assurance Project Plan (SSQAPP) Addendum East Millinocket-B (Revision 1); QA Tracking #23175 A14.

1.1 Site Location and Description

The Former GNP Mill is located at 50 Main Street in East Millinocket, Maine. The 215-acre mill site, identified by the Town of East Millinocket as Parcel Number 0001-2-00000-010, was developed in 1907, producing paper products as one of the region's largest employers until its closure in 2014. The Town of East Millinocket acquired the former GNP Site on July 21, 2020.

During its operation, the GNP mill complex comprised numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present. To assist in the evaluation of environmental conditions at the former mill site, previous environmental investigations performed by TRC and others have divided the site into seven "Study Areas."

This assessment applies to portions of Study Area 4 (Fuel Storage Area), which is located on the north-central portion of the mill site and contains potential petroleum-impacted soil associated with the former fuel storage and transfer operations as well as debris piles consisting of accumulated parking lot sweepings and roofing gravel. The assessment also covers a portion of Study Area 6 (Wood Lot Area), which is located on the southwest portion of the mill site and contains debris piles of residual paper waste (all of which are collectively referred to as the "Site" for the purposes of this assessment).

A Site Location Map is included as **Figure 1**. A Site Layout map is included as **Figure 2**. A Photographic Log is included in **Appendix A**.

1.2 Surrounding Area Description

Surrounding properties generally include mixed residential and commercial entities to the north, and east of the Site. The Site is located directly north of and along the West Branch of the Penobscot River.

1.3 Geologic and Hydrogeologic Conditions

1.3.1 Topographic Setting

According to United States Geological Survey (USGS) topographic maps reviewed during the Phase I ESA, the Site topographic elevation ranges from approximately 270 to 340 feet above mean sea level. The topographic downward slope observed at the Site is generally south toward the West Branch of the Penobscot River.

1.3.2 Observed Geologic Conditions

Based on conditions observed in the soil borings advanced within the Fuel Storage Area during this assessment, subsurface soil consists of light brown/gray fine sand with some fine to coarse gravel, and some to trace silt to a maximum depth of 3 feet below ground surface (bgs).

1.3.3 Hydrogeologic Conditions

Groundwater was not encountered in the soil borings advanced within the Fuel Storage Area. Based on the topography of the site and surrounding area, local groundwater flow at and in the vicinity of the site is estimated to be to the south-southwest, towards the West Branch of the Penobscot River.

2.0 SITE HISTORY

2.1 Historical Site Use

The GNP Mill was developed in 1907, producing paper products as one of the region's largest employers until its closure in 2014. The Town of East Millinocket acquired the former GNP Site on July 21, 2020. During its operation, the GNP mill complex comprised numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present.

As previously noted, to assist in the evaluation of environmental conditions at the former mill site, previous environmental investigations performed by TRC and others have divided the site into seven "Study Areas." This assessment applies to portions of Study Area 4 (Fuel Storage Area) and Study Area 6 (Wood Lot Area).

2.2 Previous Environmental Site Investigations

Previous environmental investigations conducted at the former GNP mill site that include specific information related to Study Areas 4 and 6, the subject study areas of this report, are described below. These investigations include four Phase I Environmental Site Assessments (ESAs) completed between 2001 and 2020 and subsurface observations made during construction trenching completed in October 2015. Information directly quoted from these investigations are presented in italics.

2.2.1 January 2001, *Phase I ESA*, prepared by S.W. Cole Engineering

This 2001 Phase I ESA was prepared for several GNP, Inc. Mill Properties in Millinocket and East Millinocket, Maine. These properties included the Millinocket Mill, Woodlands Office, GNP Airport Parcel, East Millinocket Mill, and Dolby Landfill. As this QAPP is being prepared for a section of the East Millinocket Mill, On-Site Potential Issues for the East Millinocket Mill are as follows:

> *The Oil Farm and Off-Loading Area consists of #6 bulk oil storage and a railroad track off-loading station. Numerous spill incidents have occurred at these facilities over the years. In 1991, [Sevee and Maher Engineers, Inc. (SME)] conducted a subsurface investigation of the area consisting of twenty test pits in two #6 oil outbreak areas and found extensive #6 oil impacts of the area including dense layers of oil and apparently mobile #6 oil in the vicinity of the underground steam pipes and within fill layers. No Drinking water wells are located in the vicinity of the site. It does not appear that the existence of #6 oil-impacted soils or possible free product at the sire endangers public health. It is likely that #6 oil-impacted soils and possibly free product exist at the site. We recommend further review of [MEDEP] and GNP documentation of spills and investigations associated with the Oil Farm and Off-Loading Area. Based on this information, we recommend subsurface explorations of the area to further assess the extent of the contamination and potential existence of free product.*

2.2.2 September 2014, Phase I ESA, prepared by TRC

This Phase I ESA was performed for the entirety of the former East Millinocket GNP Mill site. TRC documented the presence of five Recognized Environmental Conditions (RECs) and three Historical Recognized Environmental Conditions (HRECs) at the Former GNP Mill site.

1. *REC #1: Likely Impacts from Historical Site Use – The likely presence of petroleum products and hazardous materials in the subsurface from historical releases and Site use constitutes a REC in association with the Site.*

2. *REC #2: Soil impacts Around the Refueling Station – Volatile organic compound (VOC) impacted soil was discovered in 2003 approximately 6 feet below ground surface beneath the existing 2,000-gallon steel gasoline underground storage tank (UST) next to the old paint shop. Impacted soil was left in place until the existing tank system is removed or replaced; therefore, this impact is considered a REC in association with the Site.*

3. *REC #3: Observation of #6 Oil Release within Unlined Eastern Berm – During Site reconnaissance on July 15, 2014, a release of #6 oil was observed within the unlined earthen berm of the 750,000-gallon #6 oil aboveground storage tank (AST). In addition, #6 oil was observed on the ground surface at the adjacent petroleum offloading area. This release of #6 oil to the environment constitutes a REC in association with the Site.*

4. *REC #4: Staining on Structure and Soil in the Vicinity of the Slasher – During Site reconnaissance on July 15, 2014, heavy staining was observed in the area of the Slasher from hydraulic and lubrication oil releases; this constitutes a REC in association with the Site.*

5. *REC #5: Undocumented UST Closures – Three of the five historical USTs at the Site were reportedly abandoned in place before 1995. It is reported that these three USTs contained #2 fuel oil. Based on the lack of available records and unknown condition of the tank and/or subsurface at the time of abandonment; these three USTs constitutes a REC in association with the Site.*

6. *HREC #1: Historical PCB Impacts to Groundwater – Historically three releases of polychlorinated biphenyl (PCBs) have occurred at the Site. Long term groundwater monitoring has been conducted in these areas since the early 1990s. During the 2012 and 2013 sampling events, analytical results indicated concentrations below that of detectable concentrations. In 2003, the MEDEP Voluntary Response Action Program (VRAP)] provided a letter stating that since none of the groundwater results were above drinking water standards, the area has been considered remediated to the satisfaction of the MEDEP. Based on the recent analytical data and the 2003 MEDEP VRAP letter; these spills constitute a HREC in conjunction with the Site.*

7. *HREC #2: Historical #6 Oil Release within Unlined Eastern Berms – In the early 1990s, three spills of #6 oil within the earthen berms around the two large #6 oil tanks (in the rail car offloading area and on the south side of the railroad embankment) occurred and were subsequently remediated. Based on the remediation documented in the spill*

report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.

8. *HREC #3: Historical Off-Site Releases – A portion of the Mill complex is immediately down-gradient of off-Site historical leaking underground gasoline storage tanks at the Dead River Gasoline Station (formerly Exxon) and McLaughlin's Auto Repair (formerly Dave's Auto Repair). There are three Spill Reports in conjunction with the Dead River Gasoline Station and one in conjunction with McLaughlin's Auto Repair. Based on the response actions and/or remedial efforts documented in the spill report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.*

2.2.3 June 2019, Phase I ESA, prepared by Ransom Consulting, Inc. (Ransom)

This 2019 ESA was prepared by Ransom for the entirety of the 250-acre former GNP Mill. Four RECs were identified for the mill site, as listed below:

1. *Historic paper mill operations occurred at the Site for over a century including the use, handling, and storage of many types of hazardous materials and petroleum products. Several spills have been recorded at the property, but other unknown and/or undocumented releases may also have occurred at the Site, potentially impacting subsurface conditions including soil, soil vapor, and/or groundwater.*

2. *Staining suspected to be hydraulic oil was observed on the ground surface near the former slasher and oil sheens were observed in the basement of the woodshed and containment area of the former transformer bank. Significant black staining was observed on and around the former Number 5 and 6 paper machine building, fuel unloading equipment, and inside the oil pump house near the bulk fuel storage tanks. Each of these releases have the potential to impact soil and/or groundwater in the vicinity.*

3. *A 2,000-gallon gasoline UST, piping, and dispenser exist to the east of the paint shop. Previous investigations have shown impacts to soil and groundwater related to gasoline storage in this area.*

4. *Containers of various sizes and in various states of disrepair were observed in many of the Site buildings. Additionally, several large ASTs containing process polymers, acids, and chemicals were observed at the Site. The exact volume of chemical product remaining inside the containers could not be determined, but if significant product remains, these containers and ASTs represent a material threat of release, given the current condition of the Site buildings.*

One Business Environmental Risk (BER) pertaining to the Site was noted by Ransom, as follows:

Certain [American Society for Testing and Materials] (ASTM) non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk, including known and suspect [asbestos-containing material (ACM)], [lead-based paint (LBP)], [PCB]-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and/or other potential universal wastes. ACM investigatory activities conducted by others in 2015 identified ACM at various locations throughout the

Site buildings, and the ACM within the Site buildings reportedly has not been fully abated. Depending on potential future Site development or renovation plans, these hazardous building materials, if confirmed, may require abatement, special handling, and/or proper management and disposal, prior to and/or during future renovation and/or demolition activities. Therefore, Ransom further recommends a Hazardous Building Materials Inventory (HBMI) be performed to identify potential remaining hazardous building materials and to identify mitigation measures, if necessary, in order to support the current and future utilization of the Site.

2.2.4 February 2020, *Phase I ESA*, prepared by Ransom

This 2020 Phase I ESA is an update of the 2019 Phase I ESA prepared by Ransom. This ESA was prepared for the entirety of the 250-acre former GNP Mill site. Four RECs were identified for the mill site, which were consistent with those identified in the 2019 Phase I ESA described in Section 2.2.3.

In addition, one BER pertaining to the mill site was identified by Ransom:

Certain ASTM non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk. Ransom completed a supplemental [HBMI] for the Site in 2019. The HBMI took place within the bark boiler building, former steam plant, old boiler house, and water treatment plant (Buildings 25, 26, 39 and 40 on Figure 3) and was performed as a supplemental HBMI to the asbestos renovation/demolition impact survey performed by Environmental Management, Inc. of Brunswick Maine in March of 2015.

The HBMI concluded that large quantities of [ACM] still exist within the Site buildings and should be abated and managed appropriately during any future demolition work. [LBP] coated surfaces were also identified within the Site buildings and if future demolition was to occur, these surfaces coated with LBP should be handled in accordance with all applicable Occupational Safety and Health Administration (OSHA) guidelines. PCBs were not found to be present at concentrations that would be considered "unauthorized use" meaning concentrations greater than 50 parts per million (ppm) PCBs and remedial action regarding the presence of PCBs within building materials at these Site buildings is not required.

2.2.5 Leachate Pipeline Construction Memorandum, prepared by Sevee & Maher Engineers (SME), July 15, 2024

In October 2015, during trenching for the installation of a leachate pipeline through the GNP Mill parcel, separate-phase petroleum product impacting soil and groundwater were encountered within an approximately 140-foot segment of the trench in the parking lot area located directly south of the 750,000-gallon fuel oil AST. MEDEP was notified of the observed conditions and approved the reuse of the petroleum-impacted soil as backfill around the leachate line and the controlled re-infiltration of the impacted groundwater to the trench. The observations made at the time of the construction activities were later documented in a memorandum prepared by SME in July 2024.

2.3 Summary

Based on the historical uses of the subject property and the identified environmental concerns/impacts, additional environmental investigation is necessary before utilizing Brownfields Cleanup funding and/or other funding sources for the remediation, redevelopment, and repurposing of the property. In particular, soil sampling with the former fuel storage areas will facilitate cleanup planning in these areas and characterization sampling of the various debris piles at the mill site will facilitate proper handling and disposal of these materials.

3.0 SITE INVESTIGATION

3.1 Objectives

The objectives of this investigation were to 1) assess subsurface conditions in the Fuel Storage Area relative to the former fuel storage and transfer operations (Study Area 4); 2) sample and characterize debris/soil stockpiles to facilitate disposal (Study Area 4); and 3) to assess stockpiled residual paper waste (Study Area 6).

The specific tasks were as follows:

- Prepare a Site-specific Health and Safety Plan (HASP) and Dig Safe the Site;
- Collect six (6) soil samples (HB-1 through HB-6) from the Fuel Storage Area to further assess soil impacts in this area (Study Area 4);
- Collect two (2) soil samples (WC-1 and WC-2) from the stockpiles of soil/debris for waste characterization (Study Area 4); and
- Collected two (2) samples from the residual paper waste (Study Area 6) for hazardous materials potentially associated with the debris.

In addition to the above tasks, as previously discussed and described in the approved SSQAPP Addendum East Millinocket-B QA Tracking #23175 A14 (TRC, 2024), TRC also managed the performance of a HBMS to assess building materials associated with and within several structures, including the Original Train Shed/Original Finishing Building/Mill Offices and Plant Protection Building; this HBMS was conducted between October 2024 and February 2025 and is summarized under a separate cover.

3.2 Technical Approach

The technical approach for this assessment program was outlined in the approved SSQAPP Addendum East Millinocket-B, QA Tracking #23175 A14 (TRC, 2024). It should be noted that some deviations from the approved QAPP scope of work occurred during the assessment activities, as follows:

- Due to the dense nature of the soil adjacent to/beneath the fuel oil aboveground storage tanks (ASTs) in the Fuel Storage Area, TRC was not able to advance the soil borings in this area to the maximum anticipated depth of 4 feet bgs. Where applicable, the soil borings were advanced to a maximum depth of 3 feet bgs.
- Soil boring HB-3 could not be sampled at its originally planned location due to the presence of petroleum-saturated surficial soil and a concrete subsurface feature located approximately 6 inches below surface at the planned location. Therefore, HB-3 was relocated approximately 10 feet west of the proposed sample location, partially within the earthen berm surrounding the tank, and a soil sample was successfully collected from the 2-3 foot sample depth interval.

3.3 Site-Specific HASP and Dig Safe

Prior to initiating assessment fieldwork, TRC prepared a Site-specific HASP to ensure the safety of TRC employees performing environmental investigations on Site. The HASP was developed in accordance with the requirements set forth in 29 Code of Federal Regulations (CFR) 1910.120, Hazardous Waste Operations and Emergency Response. Specifically, the HASP identified and detailed potential Site hazards, appropriate action limits for each hazard, required task-specific personal protective equipment, decontamination procedures, and proper protocols for emergency events if encountered. The HASP was provided to project personnel and adhered to during on-Site investigation activities. A copy of the HASP was maintained on Site during investigation activities.

In addition, prior to the advancement of the soil borings, TRC reviewed available site plans and contacted Dig Safe and the Maine Public Utilities Commission's "OK-TO-DIG" directory to identify subsurface utilities at the Site.

3.4 Fuel Storage Area Soil Borings, Screening, and Sampling (Study Area 4)

On October 23, 2024, TRC advanced a total of six (6) soil borings (HB-1 through HB-6) in the Fuel Storage Area (Study Area 4) to further assess potential impacts to subsurface soils relative to the historical fuel oil storage and transfer operations in this area. Four (4) soil borings were advanced around the existing 750,000-gallon fuel oil AST (HB-1 through HB-4) and two (2) soil borings were advanced in the footprint of the former 1,700,000-gallon fuel oil AST (HB-5 and HB-6). The soil boring locations are shown on **Figure 2**.

The soil borings were advanced to depths ranging from 2 to 3 feet bgs using a stainless-steel hand auger. Soils samples were recovered in 1-foot intervals, continuously from the ground surface to the bottom of the soil boring. As noted above in Section 3.2, soil boring HB-3 could not be sampled at its originally planned location due to the presence of petroleum-saturated surficial soil and a concrete subsurface feature located approximately 6 inches below surface at its planned location; therefore, HB-3 was relocated approximately 10 feet west of the proposed sample location, partially within the earthen berm surrounding the tank.

Prior to sample collection, each soil sample was evaluated for physical characteristics and inspected for visual and/or olfactory evidence of contamination. Samples were also screened in the field for the presence of volatile organic compounds (VOCs) using a photo-ionization detector (PID) via the MEDEP bag headspace method per MEDEP standard operating procedure [SOP] TS004.

One (1) soil sample was collected from each soil boring location; thus, a total of six (6) soil samples were collected. Four (4) soil samples were collected from the 0 to 2-foot depth interval to evaluate shallow accessible soils (HB-1, HB-2, HB-4, and HB-6) and two (2) samples were collected from the 2 to 3-foot depth interval to evaluate vertical distribution of contaminants of concern (HB-3 and HB-5). A field duplicate was collected from HB-3 (2-3').

Soil samples were placed into stainless-steel bowls using stainless-steel spoons (equipment was decontaminated properly prior to use) and subsequently homogenized. These homogenized samples were then transferred to appropriate sample containers with a stainless-steel spoon and immediately placed on ice.

Following sample collection, excavated soils were returned to their place of origin (either placed inside the boreholes or dispersed near the borehole location in unpaved areas).

The soil samples were submitted to Pace Analytical of Westborough, Massachusetts (Pace) and analyzed for extractable petroleum hydrocarbons (EPH) ranges plus target analytes and total Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver), plus speciation for chromium (hexavalent chromium, trivalent chromium, pH, and oxidation-reduction potential [ORP]). Soil sample results are discussed in Section 4.2 and presented in **Table 1**.

3.5 Soil/Debris Stockpile Waste Characterization Sampling (Study Area 4)

On October 23, 2024, TRC collected two (2) waste characterization samples (designated WC-1 and WC-2) and one (1) duplicate sample from the two soil/debris stockpiles in Study Area 4 (Fuel Storage Area) at the location shown on **Figure 2** for the purposes of pre-characterizing the materials for disposal. The number of soil samples was selected based on the estimated quantity of approximately 400 tons of soil/debris to be disposed (i.e., 1 sample per 200 tons of excess soil/debris).

The two stockpiles varied in material composition and size. The northern stockpile (characterized by WC-1), comprising accumulated parking lot sweepings, consisted of brown fine to coarse sand and some gravel. The dimensions of the stockpile were approximately 27 feet long by 20 feet wide by 4 feet tall. The southern stockpile (characterized by WC-2), comprising roofing gravel, consisted of black pea stone material with some black fine sand. The dimensions of the stockpile were approximately 29 feet long by 18 feet wide by 4 feet tall.

Samples collected from each stockpile for waste characterization were analyzed for VOCs, semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, herbicides, total RCRA 8 Metals, ignitability, pH, reactive sulfide, and reactive cyanide. The samples were collected as eight-point composite samples, with the exception of the samples collected for VOC analysis, which were collected in the manner described below.

Prior to sample collection, each discrete soil sample was evaluated for physical characteristics and inspected for visual and/or olfactory evidence of contamination. Samples were also screened in the field for the presence of VOCs using a PID via the MEDEP bag headspace method, per MEDEP SOP TS004). Elevated PID readings and/or visual or olfactory indications of contamination were used to guide the selection of discrete samples for VOC analysis. Soil samples selected for VOC analysis were immediately and carefully placed (in a manner to minimize volatilization) in preserved vials upon collection, and then immediately placed on ice.

Soils selected for non-volatile analyses were placed into stainless-steel bowls using stainless-steel spoons (equipment was decontaminated properly prior to use) and subsequently homogenized. These homogenized samples were transferred to appropriate sample containers with a stainless-steel spoon for each composite sample, and immediately placed on ice.

The samples were submitted to Pace for analysis noted above. The waste characterization sample results are discussed in Section 4.3 and presented in **Table 2**.

3.6 Paper Waste Characterization Sampling (Study Area 6)

On October 23, 2024, TRC collected two (2) solid samples (designated PW-1 through PW-2) and one (1) duplicate sample from the paper waste materials located in Study Area 6 (Wood Lot), as depicted in **Figure 2**, for the purpose of pre-characterizing the paper waste for disposal. The number of samples was selected based on the estimated quantity of approximately 400 tons of material to be disposed (i.e., 1 sample per 200 tons of excess material).

The paper waste material, which was comingled with inert wood debris, primarily consisted of paper/carboard waste and measured approximately 160 feet in length by approximately 15 feet in width. The paper waste was thus separated into two halves for the purposes of sampling, with each half representing an area measuring approximately 80 feet long by 15 feet wide.

A 10-point composite sample was collected from each half of the material. At each discrete location, a chisel was used to remove the surficial material (i.e., the top 6 to 12 inches) and the underlying paper waste was then sampled directly. The material was placed into stainless-steel bowls using stainless-steel spoons (equipment was decontaminated properly prior to use) and subsequently homogenized. These homogenized samples were then transferred to appropriate sample containers with a stainless-steel spoon for each sample location selected and immediately placed on ice.

The samples were submitted to Pace and analyzed for SVOCs, total RCRA 8 metals, and pH. Soil sample results are discussed in Section 4.4 and presented in **Table 3**.

4.0 RESULTS

A summary of the soil and waste characterization laboratory analytical results is provided below. The laboratory analytical reports are provided as **Appendix D**, and a data usability assessment (DUA) is provided as **Appendix E**.

4.1 Applicable Regulatory Categories

Results of the soil samples and soil/debris stockpile samples were compared to the criteria listed below to evaluate contaminant conditions, evaluate locations for potential additional sampling, and evaluate remedial options, if necessary.

Maine Remedial Action Guidelines (Revised/Effective November 15, 2023)

Maine Remedial Action Guidelines (RAGs) for the Soil Exposure Pathway:

- Residential scenario
- Commercial worker scenario
- Construction worker scenario

At this time, the Town does not plan to redevelop the Site for residential use. However, the analytical results are conservatively compared to the MEDEP RAGs for the residential scenario in the event that residential use maybe proposed in the future.

Results for the paper waste samples, as well as the soil/debris stockpile samples, were compared to the following:

- EPA RCRA Toxicity Characteristic Leaching Procedure (TCLP) Regulatory Levels Criteria per 40 CFR Part 261 as of September 10, 2015.

4.2 Fuel Storage Area Soil Results

As discussed above in Section 3.4, one (1) soil sample was collected from each of the six (6) soil boring locations in the Fuel Storage Area. Four (4) soil samples were collected from the 0 to 2-foot depth interval to evaluate shallow accessible soils (HB-1, HB-2, HB-4, and HB-6) and two (2) samples were collected from the 2 to 3-foot depth interval to evaluate vertical distribution of contaminants of concern (HB-3 and HB-5). A summary of the soil samples, field screening results, and soil descriptions are provided in the table below.

Sample Location	Laboratory Sample Identification	PID Reading (ppmv)	Soil Description
HB-1	L2461846-01	0.0 (0-2 bgs)	Light brown sand, fine gravel. No odor or moisture.
HB-2	L2461846-02	0.0 (0-2 bgs)	Light brown fine sand. No odor or moisture.
HB-3 / DUP-SOIL	L2461846-03 / L2461846-07	0.0 (2-3 bgs)	Light brown/gray fine with trace silt and trace fine gravel. No odor or moisture.
HB-4	L2461846-04	0.0 (0-2 bgs)	Light brown fine sand, some silt with fine/medium gravel. No odor or moisture.

Sample Location	Laboratory Sample Identification	PID Reading (ppmv)	Soil Description
HB-5	L2461846-05	0.0 (2-3 bgs)	Light brown/gray fine sand and course gravel. No odor or moisture.
HB-6	L2461846-06	0.0 (0-2 bgs)	Light brown/gray fine sand and course gravel. No odor or moisture.

Notes: ppmv – parts per million by volume

Soil samples were submitted for analysis of EPH (ranges and target analytes) and total RCRA 8 metals, including speciation of chromium (hexavalent chromium, trivalent chromium, pH, and ORP). Laboratory analytical results were compared to the MEDEP RAGs for the Soil Exposure Pathway for the Residential, Commercial Worker, and Construction Worker Scenarios. A summary of the soil analytical results is presented in **Table 1**.

4.2.1 EPHs

Several EPH analytes and polycyclic aromatic hydrocarbons (PAHs) were detected above the laboratory reporting limits at each sampling location but were below the applicable MEDEP RAGs.

4.2.2 Metals

RCRA 8 Metals were detected above the laboratory detection limit in each of the soil samples. Concentrations of metals exceeded the MEDEP RAGs for the Residential in the following samples:

- HB-1 (0-2') - Arsenic: 13.2 mg/kg

4.3 Soil/Debris Stockpile Waste Characterization Results

The soil/debris samples collected from each stockpile (WC-1 and WC-2) were analyzed for VOCs, SVOCs, PCBs, pesticides, herbicides, total RCRA 8 Metals, ignitability, pH, reactive sulfide, and reactive cyanide. Laboratory analytical results of soil/debris stockpile samples were compared to the MEDEP RAGs for the Soil Exposure Pathway for the Residential, Commercial Worker, and Construction Worker Scenarios and the RCRA TCLP Regulatory Levels. A summary of the soil analytical results is presented in **Table 2**.

4.3.1 VOCs

No concentrations of VOCs were detected in sample WC-1. VOCs were detected above the laboratory detection limit in WC-2 sample and exceeded the MEDEP RAGs for the Residential Scenario for:

WC-2
- Naphthalene: 39 mg/kg

4.3.2 SVOCs

SVOCs were detected above the laboratory detection limits in both the WC-1 and WC-2 samples. The following concentrations of SVOCs exceeded the Residential and/or Commercial RAGs:

DUP-WC (Duplicate of samples WC-1)
- Benzo(a)pyrene: 2.1 mg/kg (Above Residential)

WC-2
- Naphthalene: 31 mg/kg (Above Residential)
- Benzo(a)anthracene: 290 mg/kg (Above Residential and Commercial)
- Benzo(a)pyrene: 250 mg/kg (Above Residential and Commercial)
- Benzo(b)fluoranthene: 340 mg/kg (Above Residential and Commercial)
- Dibenzo(a,h)anthracene: 38 mg/kg (Above Residential and Commercial)
- Indeno(1,2,3-cd)Pyrene: 150 mg/kg (Above Residential)

4.3.3 PCBs

PCBs were not detected in sample WC-1. PCBs detected in sample WC-2 were below the applicable MEDEP RAGs.

4.3.4 Pesticides

Pesticides were not detected in sample WC-2. Pesticides detected in sample WC-1 were below the applicable MEDEP RAGs.

4.3.5 Herbicides

Herbicides were not detected above the laboratory reporting limits in samples WC-1 or WC-2.

4.3.6 Metals

Several metals were detected in both samples WC-1 and WC-2. Detected concentrations were below the applicable MEDEP RAGs with the exception of total chromium, which exceeded the MEDEP Residential RAG for hexavalent chromium. As the chromium data were not speciated for the stockpile samples, the results were conservatively compared to the MEDEP RAGs for hexavalent chromium.

4.4 Paper Waste Characterization Results

The two (2) samples collected from the paper waste material (PW-1 and PW-2) were analyzed for SVOCs, total RCRA 8 Metals, and pH. Laboratory analytical results of paper waste samples were compared to the RCRA TCLP Regulatory Levels. A summary of the soil analytical results is presented in **Table 3**.

4.4.1 SVOCs

No SVOCs were detected in sample PW-2. The SVOC compound bis(2-Ethylhexyl)phthalate was detected above laboratory limits in sample PW-1 (and its duplicate, DUP-PW); however, there is no RCRA TCLP Regulatory Level established for this compound DUP-PW.

4.4.2 Metals

Lead and barium were detected above the laboratory reporting limits in samples PW-1 (and its duplicate, DUP-PW) and PW-2, respectively, but below the RCRA TCLP Regulatory Levels.

4.4.2 pH

The paper waste samples exhibited pH ranging from 6.93 to 7.22, indicating a neutral pH.

4.5 Data Usability Assessment

The data associated with the soil samples collected on October 23, 2024, were reviewed. In general, data are usable for project decisions based on a review of accuracy, precision, and sensitivity of the data. The data are valid as reported and may be used for decision-making purposes. In general, except as noted in the DUA, data are usable for project decisions based on a review of accuracy, precision, and sensitivity of the data. The DUA is provided as **Appendix E.**

The data are valid as reported and may be used for decision-making purposes with the following limitations.

- Caution should be used with the results for total arsenic in samples HB-2 (0-2), HB-3 (2-3), and HB-6 (0-2) due to laboratory duplicate variability. The results for total arsenic in these samples are slightly below the Maine Department of Environmental Protection Remedial Action Guideline (MEDEP RAG) for the Residential scenario. The decision-making process may be affected as the results for total arsenic in these samples could have been higher and above the MEDEP RAG for the Residential scenario.

- Caution should be used with the detected SVOC results in samples WC-1 and DUP-WC due to field duplicate variability. The results for detected SVOCs in the duplicate sample, DUP-WC, are significantly higher than the parent sample, WC-1. In order to remain conservative, the higher results from the duplicate sample should be used for project objectives.

5.0 CONCEPTUAL SITE MODEL

The following section provides a current Conceptual Site Model (CSM) for the area of the subsurface investigation completed at the Site (i.e., the Fuel Storage Area). This CSM represents TRC's current Site understanding based on existing data. The CSM may evolve over time as additional information becomes available.

5.1 Historical Information

The former GNP Mill was first developed in 1907, producing paper products as one of the region's largest employers until its closure in 2014. During its operation, the GNP mill complex comprised numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a wastewater treatment plant. Although the site is largely vacant at this time, numerous buildings and structures associated with the former mill operations remain present. The Town of East Millinocket acquired the former GNP Site on July 21, 2020.

As previously noted, to assist in the evaluation of environmental conditions at the former mill site, previous environmental investigations performed by TRC and others have divided the site into seven "Study Areas." The Fuel Storage Area (Study Area 4) comprises approximately 10 acres on the northern portion of the GNP Mill property. The western portion of the Fuel Storage Area, comprising approximately 5.5 acres, encompasses an existing 750,000-gallon fuel oil AST within a large earthen containment berm, an associated heater enclosure, rail car fuel unloading rack structure and approximately 50 square-foot fuel unloading building, an approximately 5,000-gallon overflow AST, a 550-square foot oil pump and fuel service house, subsurface piping and distribution utilities, and paved parking areas. The eastern portion of the Fuel Storage Area, comprising approximately 4.5 acres, encompasses the location of the former 1,700,000-gallon fuel oil AST (removed in 2012) and the remaining oil pump house. Construction of the fuel storage area including the tank farm, berms, and ancillary systems occurred circa 1950, prior to which, this portion of the mill consisted of undeveloped land.

5.2 Current Site Use

Active fuel storage and use operations continued until mill operations ceased in 2014. The remaining fuel oil AST currently contains approximately 70,000 gallons of #6 fuel, which exhibits high sulfur content and impurities that may prevent its recycling. The remaining structures noted above in Section 5.1 are currently vacant and some are in a deteriorated state.

5.3 Anticipated Future Site Use

Under the Town of East Millinocket's current redevelopment plan, the former GNP Mill site is proposed to be redeveloped for commercial/light industrial uses. With specific regard to the Fuel Storage Area, it anticipated that the western portion of this area will see the remaining fuel storage equipment decommissioned to facilitate additional assessment of soil/groundwater underlying the equipment. Following assessment, it is anticipated that soil contaminated with petroleum and co-mingled hazardous materials will be removed and/or capped using a combination of both hardscapes (including paved parking areas and reconfigured access roads to improve access to the facility) and softscapes to enhance the appearance of the mill entrance.

As previously noted, the Town does not plan to redevelop the Site for residential use at this time. However, the analytical results provided herein have been conservatively compared to the MEDEP RAGs for the residential scenario in the event that residential use may be proposed in the future.

5.4 Geologic and Hydrogeologic Conditions

Based on conditions observed in the soil borings advanced within the Fuel Storage Area during this assessment, subsurface soil consists of light brown/gray fine sand with some fine to coarse gravel, and some to trace silt to a maximum depth of 3 feet bgs.

Groundwater was not encountered in the soil borings advanced within the Fuel Storage Area. Based on the topography of the site and surrounding area, local groundwater flow at and in the vicinity of the site is estimated to be to the south-southwest, towards the West Branch of the Penobscot River.

5.5 Nature and Extent of Impacts

Based on this and prior assessments performed at the Site, significant petroleum staining and petroleum-saturated soil is present in the vicinity of the fuel unloading area and within the earthen berm surrounding the 750,000-gallon AST. Petroleum-contaminated subsurface soil and groundwater extends to the parking area to the south of the fuel oil AST. In addition to verifying the presence of petroleum-saturated surficial soil, results of the subject soil sampling program conducted within accessible areas of the earthen berm area surrounding the existing 750,000-gallon AST and in the footprint of the former 1,700,000-gallon AST indicate concentrations of arsenic above the MEDEP RAGs, as well as concentrations of lead and PAHs above background levels and comingled with the petroleum contamination.

5.6 Potential Sources of Impacts

Housekeeping practices and environmental regulations were not at today's standards during the majority of the former GNP Mill operations and petroleum impacts within the Fuel Storage Area are the result of improper handling, spills, and leakage of fuel oil during the active mill operations.

The identified lead impacts in shallow soils are likely the result of hazardous building materials including lead-based paint used on the exterior surfaces of the current and former tanks, rail car loading rack, and other ancillary structures and appurtenances within the tank farm that have been released into the adjacent soils. In addition, the elevated concentrations of arsenic, PAHs, and lead (detected in deeper subsurface soils) appear to be the result of imported fill used to construct the fuel storage area circa 1950, including the large earthen berm that surrounds the 750,000-gallon AST, as well as historical atmospheric deposition associated with the mill's combustion boilers. Petroleum and hazardous materials are also likely partially attributable to the former rail operations that occurred in this portion of the mill.

6.0 FINDINGS AND CONCLUSIONS

The following conclusions are based on the results of TRC's assessment at the Site:

- **Overburden Geology (Study Area 4)** – Based on conditions observed in the soil borings advanced within the Fuel Storage Area during this assessment, subsurface soil consists of light brown/gray fine sand with some fine to coarse gravel, and some to trace silt to a maximum depth of 3 feet bgs.

- **Soil Screening Results (Study Area 4)** – Soil samples were screened in the field for the presence of VOCs during sampling using a PID per, the MEDEP bag headspace method. PID screening results were below the instrument detection limit. No odors were identified in the soil samples. It is noted that petroleum-saturated soil was observed in surficial soils surrounding the existing 750,000-gallon fuel oil AST; however, these areas were not sampled given that they are known to be significantly impacted.

  Fuel Storage Area Soil Analytical Results (Study Area 4) – In addition to verifying the presence of petroleum-saturated surficial soil in areas surrounding the existing 750,000-gallon fuel oil AST, results of the subject soil sampling program conducted within accessible areas of the earthen berm area surrounding the existing 750,000-gallon AST and in the footprint of the former 1,700,000-gallon AST indicate concentrations of arsenic above the MEDEP RAGs, as well as concentrations of lead and PAHs above background levels.

- **Soil/Debris Stockpile Analytical Results (Study Area 4)** – Concentrations of VOCs (Naphthalene) and PAHs (Naphthalene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)Pyrene) were detected above MEDEP RAGs for the Residential and/or Commercial Work Construction Scenarios in waste characterization sample WC-2. The concentration of the PAH compound Benzo(a)pyrene in the duplicate sample collected at WC-1 also exceeded the MEDEP RAG for the Residential Scenario. Several metals were detected in both samples WC-1 and WC-2 and were below the applicable MEDEP RAGs with the exception of total chromium, which exceeded the MEDEP Residential RAG for hexavalent chromium. As the chromium data were not speciated for the stockpile waste characterization samples, the results were conservatively compared to the MEDEP RAGs for hexavalent chromium. Detected analytes of remaining waste characterization parameters were below the applicable MEDEP RAGs.

- **Paper Waste Analytical Results (Study Area 6)** – Detected concentrations of SVOCs and metals and the measured pH for the paper waste samples did not exceed the RCRA TCLP Regulatory Levels.

7.0 RECOMMENDATIONS

Based on the results of this assessment program, TRC recommends the following:

- **Notify MEDEP of Soil RAG Exceedances** – Because this investigation was funded by the Town of East Millinocket's EPA Brownfields Program, MEDEP will be notified of the results upon issuance of this report.

- **Properly Manage Soil with the Fuel Storage Area (Study Area 4) During Redevelopment** – Based on the presence of both petroleum-saturated soil and impacted soils containing concentrations arsenic above the MEDEP RAGs, as well as concentrations of lead and PAHs above background levels, and in consideration of the proposed redevelopment of the Fuel Storage Area, soil excavated during construction should be managed properly and either be removed and disposed at an appropriate licensed receiving facility and/or managed on-site in accordance with the current Environmental Media Management Plan (EMMP) for the former GNP Mill. Additional engineering and/or institutional controls may be necessary, such as cover systems and/or the implementation of a deed restriction to prevent exposure to impacted soil.

  In addition, following the future removal of the existing 750,000-gallon fuel oil AST, further sampling of soil and/or groundwater beneath the AST is recommended to verify the extent of impacted soil in this area.

- **Properly Manage Soil/Debris Stockpile (Study Area 4)** - Based on the presence of VOCs, PAHs, and Chromium above the MEDEP Residential/Commercial Worker RAGs, the soil/debris stockpiles should be managed properly and either be removed and disposed at an appropriate licensed receiving facility and/or managed on-site in accordance with the current Environmental Media Management Plan (EMMP) for the former GNP Mill.

- **Dispose of Paper Waste (Study Area 6)** - As analytical parameters for the paper waste material did not exceed the RCRA TCLP Regulatory Levels, no specific disposal restrictions apply to this material and it may be properly recycled or disposed of at an appropriate licensed receiving facility. It is recommended that MEDEP be notified of the anticipated receiving facility prior to removal, recycling, and disposal of the material.

8.0 LIMITATIONS

1. TRC's study was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and TRC observed that the degree of care and skill was generally exercised by other consultants under similar circumstances and conditions. TRC's findings and conclusions must be considered not as scientific certainties, but rather as a professional opinion concerning the significance of the limited data gathered during the course of the study. No other warranty, express or implied, is made. Specifically, TRC does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by TRC during its study. Additionally, TRC makes no warranty that any response action or recommended action will achieve all of its objectives or that the findings of this study will be upheld by an MEDEP audit.

2. This study and report have been prepared on behalf of and for the exclusive use of the Town of East Millinocket (the Town, also known as “Client”) solely for use in a limited subsurface investigation and waste characterization program for portions of the Former GNP Mill located at 50 Main Street in East Millinocket, Maine. This submittal and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of TRC or the Clients.

3. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Clients. The work described in this report was carried out in accordance with the Terms and Conditions referenced in our proposal to the Clients.

4. In the event that the Clients or others authorized to use this report obtain information on environmental or hazardous waste issues at the Site not contained in this report, such information shall be brought to TRC's attention forthwith. TRC will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.

9.0 REFERENCES

ASTM, 2019 — ASTM E1903-19, Standard Practice for Environmental Site Assessments: *Phase II Environmental Site Assessment Process,* updated January 2020.

EPA, 2015 — Identification and Listing of Hazardous Waste, Resource Conservation and Recovery Act, 40 CFR Part 261, dated September 10, 2015

MEDEP, 2023 — MEDEP, *Maine RAGs*, revised/effective November 15, 2023.

Ransom, 2019 — Ransom Consulting Inc., *Phase I ESA*, dated June 2019.

Ransom, 2020 — Ransom Consulting Inc., *Phase I ESA*, dated February 2020

SME, 2024 — Sevee & Maher Engineers, Leachate Pipeline Construction Memorandum, dated July 15, 2024

S.W. Cole, 2001 — S.W. Cole Engineering, *Phase I ESA*, dated January 2001.

TRC, 2014 — TRC, *Phase I ESA,* dated September 2014.

TRC, 2024 — TRC, *Brownfields Program Site-Specific Quality Assurance Project Plan Addendum, East Millinocket-B (Revision 1); QA Tracking #23175 A14*, dated September 26, 2024.

FIGURES

SITE BOUNDARY

USGS 7.5 MINUTE QUADRANGLE MAP BOUNDARY

MUNICIPAL BOUNDARY

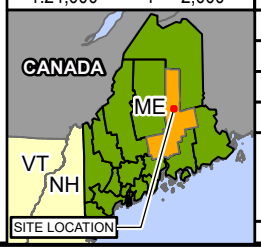
BASE MAP: USGS NATIONAL MAP
DATA SOURCES: USGS, ESRI, TRC

N

0 1,000 2,000

FEET

1:24,000 1" = 2,000'



PROJECT: FORMER GREAT NORTHERN PAPER MILL
STUDY AREA 1, 2, 4, AND 6
LIMITED PHASE II REPORT ADDENDUM EAST MILLINOCKET-B
50 MAIN STREET, EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE 04430

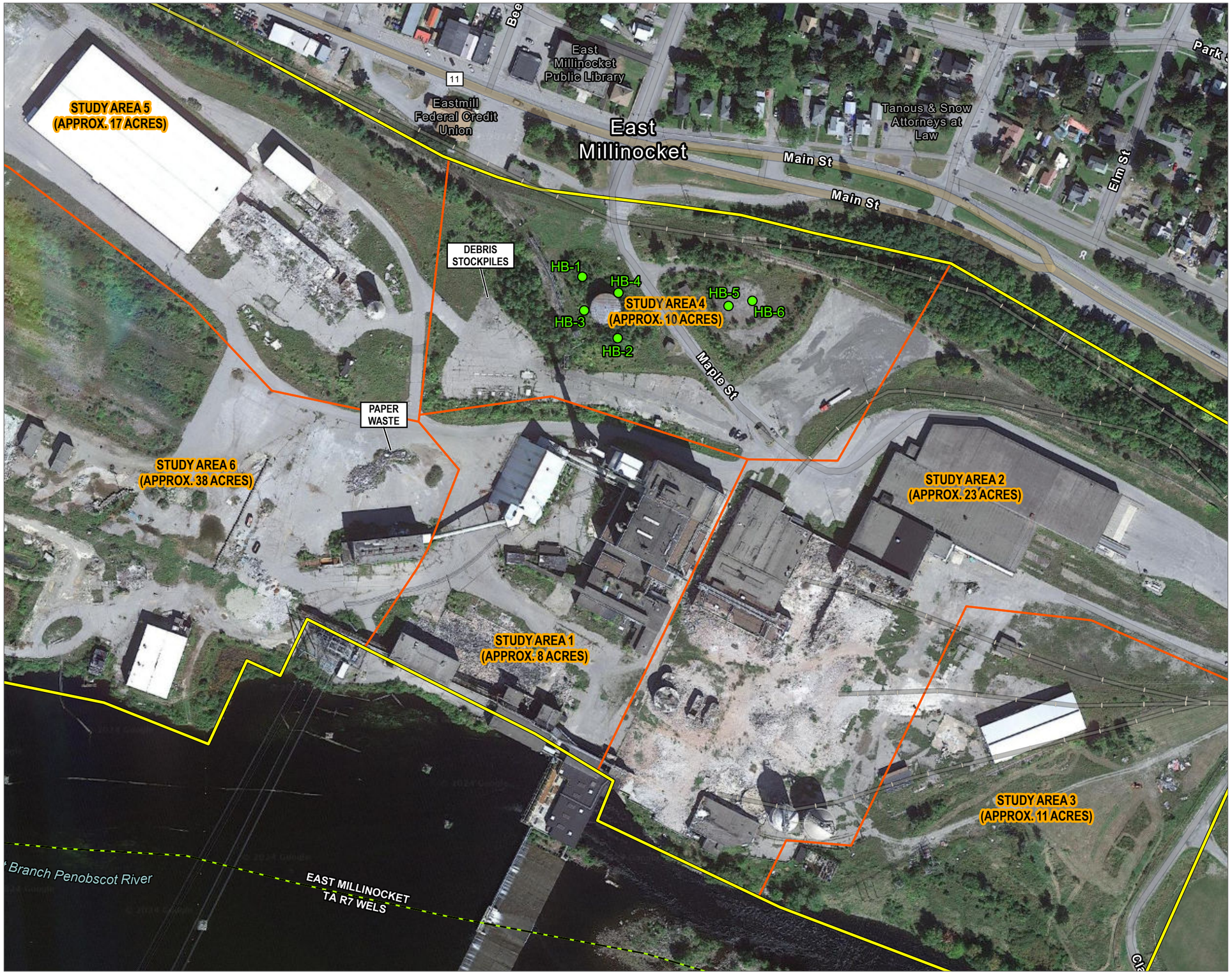
TITLE: SITE LOCATION MAP

DRAWN BY:	E. YPSILANTIS	PROJ. NO.:	549784.0000.0000
CHECKED BY:	R. BARBER		
APPROVED BY:	A. BURNS		FIGURE 1
DATE:	SEPTEMBER 2024		

TRC
63 MARGINAL WAY
4TH FLOOR
PORTLAND, ME 04101
PHONE: 207.879.1930

FILE: 549784_FormerGreatNorthernPaperMill

Coordinate System: NAD 1983 StatePlane Maine East FIPS 1801 Feet: Map Rotation: 0
-- Saved By: EYPSILANTIS on 9/3/2024, 11:35:02 AM: File Path: T:\1-PROJECTS\Town_of_East_Millinocket\2-APRX\549784_FormerGreatNorthernPaperMill\549784_FormerGreatNorthernPaperMill.aprx: Layout Name: EastMillinocket_SiteLocationMap_Figure1



SITE STUDY AREAS
SITE BOUNDARY
MUNICIPAL BOUNDARY
HAND-AUGER SOIL BORING

BASE MAP: GOOGLE IMAGERY SERVICE
DATA SOURCES: USGS, ESRI, TRC

1:2,400
1" = 200'

0 200 400 FEET

PROJECT:
FORMER GREAT NORTHERN PAPER MILL
STUDY AREA 1, 2, 4, AND 6
LIMITED PHASE II REPORT ADDENDUM EAST MILLINOCKET-B
50 MAIN STREET, EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE 04430

TITLE:
SITE LAYOUT PLAN

DRAWN BY:	E. YPSILANTIS	PROJ. NO.:	549784.0000.0000
CHECKED BY:	R. BARBER		**FIGURE 2**
APPROVED BY:	A. BURNS		
DATE:	SEPTEMBER 2024		

TRC
63 MARGINAL WAY
4TH FLOOR
PORTLAND, ME 04101
PHONE: 207.879.1930

FILE: 549784_FormerGreatNorthernPaperMill.aprx

Coordinate System: NAD 1983 StatePlane Maine East FIPS 1801 Feet; Map Rotation: 0
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TABLES

Table 1
Summary of Analytical Results for Soil Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

					Sample Location:	**HB-1**		**HB-2**		**HB-3**				**HB-4**		**HB-5**		**HB-6**	
					Sample Name:	HB-1 (0-2)		HB-2 (0-2)		HB-3 (2-3)		DUP-SOIL		HB-4 (0-2)		HB-5 (2-3)		HB-6 (0-2)	
					Lab Sample ID:	L2461846-01		L2461846-02		L2461846-03		L2461846-07		L2461846-04		L2461846-05		L2461846-06	
					Sample Depth:	0-2 ft		0-2 ft		2-3 ft		2-3 ft		0-2 ft		2-3 ft		0-2 ft	
					Sample Date:	10/23/2024		10/23/2024		10/23/2024		10/23/2024		10/23/2024		10/23/2024		10/23/2024	
Analysis	Analyte	Unit	Residential*	Commercial Worker*	Construction Worker*							Field Dup							
EPH																			
	C9-C18 Aliphatics	mg/kg	2,500	14,000	4,800	7.44	U	6.78	U	7.69	U	7.57	U	6.91	U	**9.18**		**22.8**	
	C19-C36 Aliphatics	mg/kg	100,000	100,000	1,200,000	7.44	U	6.78	U	**19.6**		7.57	U	6.91	U	**23.2**		**140**	
	C11-C22 Aromatics	mg/kg	2,600	33,000	74,000	**12.0**		**7.93**		**42.0**		**10.6**		6.91	U	**18.7**		**89.1**	
	Naphthalene	mg/kg	29	120	130	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	**0.046**	
	2-Methylnaphthalene	mg/kg	330	4,100	960	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	**0.033**		**0.106**	
	Acenaphthylene	mg/kg	4,900	45,000	48,000	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	**0.035**	
	Acenaphthene	mg/kg	4,900	62,000	48,000	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	0.028	U
	Fluorene	mg/kg	3,300	41,000	96,000	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	0.028	U
	Phenanthrene	mg/kg	2,500	23,000	72,000	**0.035**		0.027	U	0.031	U	0.030	U	**0.045**		**0.053**		**0.263**	
	Anthracene	mg/kg	25,000	100,000	100,000	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	0.028	U
	Fluoranthene	mg/kg	3,300	41,000	24,000	**0.054**		**0.040**		**0.052**		**0.038**		**0.086**		**0.030**		**0.206**	
	Pyrene	mg/kg	2,500	31,000	72,000	**0.049**		**0.034**		**0.056**		**0.043**		**0.085**		**0.039**		**0.269**	
	Benzo(a)anthracene	mg/kg	16	280	1,700	0.030	U	0.027	U	**0.032**		0.030	U	**0.033**		0.027	U	**0.093**	
	Chrysene	mg/kg	1,600	29,000	100,000	**0.033**		0.027	U	**0.041**		**0.032**		**0.049**		0.027	U	**0.184**	
	Benzo(b)fluoranthene	mg/kg	16	290	1,700	**0.042**		**0.030**		**0.051**		**0.051**		**0.060**		**0.032**		**0.171**	
	Benzo(k)fluoranthene	mg/kg	160	2,900	17,000	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	**0.041**	
	Benzo(a)pyrene	mg/kg	1.6	29	9.9	0.030	U	0.027	U	**0.039**		**0.039**		**0.045**		0.027	U	**0.119**	
	Indeno(1,2,3-cd)Pyrene	mg/kg	16	290	1,700	0.030	U	0.027	U	0.031	U	0.030	U	**0.031**		0.027	U	**0.083**	
	Dibenzo(a,h)anthracene	mg/kg	1.6	29	170	0.030	U	0.027	U	0.031	U	0.030	U	0.028	U	0.027	U	0.028	U
	Benzo(ghi)perylene	mg/kg	2,500	23,000	72,000	0.030	U	0.027	U	**0.032**		0.030	U	**0.032**		0.027	U	**0.096**	
Metals, total																			
	Arsenic	mg/kg	9.3	41	54	**13.2**		**8.18**		**8.56**		**6.66**		**7.17**		**7.74**		**8.42**	
	Barium	mg/kg	21,000	100,000	20,000	**22.6**		**24.2**		**27.6**		**22.0**		**19.5**		**27.2**		**19.1**	
	Cadmium	mg/kg	9.8	140	42	0.876	U	0.827	U	0.922	U	0.910	U	0.859	U	0.806	U	0.849	U
	Chromium (Total)	mg/kg	4.2**	89**	46**	**15.8**		**14.1**		**16.9**		**13.1**		**14.6**		**39.1**		**29.4**	
	Chromium (III)	mg/kg	100,000	100,000	27,000	**15.8**		**14.1**		**16.9**		**13.1**		**13.4**		**39.1**		**29.4**	
	Chromium (VI)	mg/kg	4.2	89	46	0.899	U	0.866	U	0.943	U	0.929	U	**1.16**		0.849	U	0.857	U
	Lead	mg/kg	200	440	460	**13.2**		**11.6**		**24.5**		**12.6**		**11.7**		**44.4**		**181**	
	Selenium	mg/kg	540	8,000	1,700	1.75	U	1.65	U	1.84	U	1.82	U	1.72	U	1.61	U	1.70	U
	Silver	mg/kg	540	8,000	1,700	0.438	U	0.414	U	0.461	U	0.455	U	0.429	U	0.403	U	0.424	U
	Mercury	mg/kg	3.1	3.1	3.1	0.077	U	0.076	U	**0.103**		**0.118**		0.077	U	0.076	U	0.070	U
General Chemistry																			
	pH	su	NS	NS	NS	**7.23**		**6.85**		**6.54**		NA		**6.71**		**7.10**		**7.21**	
	Oxidation Reduction Potential	mV	NS	NS	NS	**220**		**250**		**290**		NA		**270**		**270**		**270**	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

mV - milliVolt.

su - Standard unit.

NA - Sample not analyzed for the listed analyte.

NS - No listed standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded in green exceed the listed Residential standard.

EPH - Extractable Petroleum Hydrocarbons.

* - Maine DEP Remedial Action Guidelines (RAGs) for Contaminated Sites
Effective November 15, 2023; Table 4: Maine RAGs for the Soil Exposure Pathway.

** - RAG for chromium(VI) used.

Table 2
Summary of Analytical Results for Soil/Debris Waste Characterization Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

							Sample Location:	WC-1		WC-2
							Sample Name:	WC-1/WC-1 (VOC)	DUP-WC/DUP-WC (VOC)	WC-2/WC-2 (VOC)
							Lab Sample ID:	L2461852-01/05	L2461852-03/07	L2461852-02/08
							Sample Date:	10/23/2024	10/23/2024	10/23/2024
Analysis	Analyte	Unit	20x TCLP**	Residential*	Commercial Worker*	Construction Worker*			Field Dup	
VOCs										
	Methylene chloride	mg/kg	NS	490	2,500	1,900	0.0062 U		0.0069 U	0.5 U
	1,1-Dichloroethane	mg/kg	NS	53	230	850	0.0012 U		0.0014 U	0.1 U
	Chloroform	mg/kg	120	4.7	21	75	0.0019 U		0.0021 U	0.15 U
	Carbon tetrachloride	mg/kg	10	9.7	43	160	0.0012 U		0.0014 U	0.1 U
	1,2-Dichloropropane	mg/kg	NS	23	99	32	0.0012 U		0.0014 U	0.1 U
	Dibromochloromethane	mg/kg	NS	110	530	3,000	0.0012 U		0.0014 U	0.1 U
	1,1,2-Trichloroethane	mg/kg	NS	2.2	9.4	68	0.0012 U		0.0014 U	0.1 U
	Tetrachloroethene	mg/kg	14	120	160	84	0.00062 U		0.00069 U	0.05 U
	Chlorobenzene	mg/kg	2,000	410	740	740	0.00062 U		0.00069 U	0.05 U
	Trichlorofluoromethane	mg/kg	NS	32,000	100,000	940	0.0050 U		0.0055 U	0.4 U
	1,2-Dichloroethane	mg/kg	10	6.9	30	110	0.0012 U		0.0014 U	0.1 U
	1,1,1-Trichloroethane	mg/kg	NS	640	640	640	0.00062 U		0.00069 U	0.05 U
	Bromodichloromethane	mg/kg	NS	4.4	19	70	0.00062 U		0.00069 U	0.05 U
	trans-1,3-Dichloropropene	mg/kg	NS	27(b)	120(b)	120(b)	0.0012 U		0.0014 U	0.1 U
	cis-1,3-Dichloropropene	mg/kg	NS	27(b)	120(b)	120(b)	0.00062 U		0.00069 U	0.05 U
	1,3-Dichloropropene, Total	mg/kg	NS	27	120	120	0.00062 U		0.00069 U	0.05 U
	1,1-Dichloropropene	mg/kg	NS	NS	NS	NS	0.00062 U		0.00069 U	0.05 U
	Bromoform	mg/kg	NS	280	790	890	0.0050 U		0.0055 U	0.4 U
	1,1,2,2-Tetrachloroethane	mg/kg	NS	8.9	39	150	0.00062 U		0.00069 U	0.05 U
	Benzene	mg/kg	10	17	75	240	0.00062 U		0.00069 U	0.05 U
	Toluene	mg/kg	NS	750	810	820	0.0012 U		0.0014 U	0.1 U
	Ethylbenzene	mg/kg	NS	86	380	470	0.0012 U		0.0014 U	0.1 U
	Chloromethane	mg/kg	NS	160	690	1,300	0.0050 U		0.0055 U	0.4 U
	Bromomethane	mg/kg	NS	10	45	120	0.0025 U		0.0028 U	0.2 U
	Vinyl chloride	mg/kg	4	0.64	24	80	0.0012 U		0.0014 U	0.1 U
	Chloroethane	mg/kg	NS	2,100	2,100	2,000	0.0025 U		0.0028 U	0.2 U
	1,1-Dichloroethene	mg/kg	14	340	1,200	4.2	0.0012 U		0.0014 U	0.1 U
	trans-1,2-Dichloroethene	mg/kg	NS	100	450	1,200	0.0019 U		0.0021 U	0.15 U
	Trichloroethene	mg/kg	10	6.1	28	4.2	0.00062 U		0.00069 U	0.05 U
	1,2-Dichlorobenzene	mg/kg	NS	360	380	380	0.0025 U		0.0028 U	0.2 U
	1,3-Dichlorobenzene	mg/kg	NS	290	300	280	0.0025 U		0.0028 U	0.2 U
	1,4-Dichlorobenzene	mg/kg	150	39	170	620	0.0025 U		0.0028 U	0.2 U
	Methyl tert butyl ether	mg/kg	NS	690	3,000	8,300	0.0025 U		0.0028 U	0.2 U
	p/m-Xylene	mg/kg	NS	260(a)	260(a)	260(a)	0.0025 U		0.0028 U	0.2 U
	o-Xylene	mg/kg	NS	260(a)	260(a)	260(a)	0.0012 U		0.0014 U	0.1 U
	Xylenes (Total)	mg/kg	NS	260	260	260	0.0012 U		0.0014 U	0.1 U
	cis-1,2-Dichloroethene	mg/kg	NS	90	540	800	0.0012 U		0.0014 U	0.1 U
	1,2-Dichloroethene (total)	mg/kg	NS	NS	NS	NS	0.0012 U		0.0014 U	0.1 U
	Dibromomethane	mg/kg	NS	35	150	190	0.0025 U		0.0028 U	0.2 U
	1,4-Dichlorobutane	mg/kg	NS	NS	NS	NS	0.012 U		0.014 U	1 U
	1,2,3-Trichloropropane	mg/kg	NS	0.07	1.5	4.3	0.0025 U		0.0028 U	0.2 U
	Styrene	mg/kg	NS	830	870	860	0.0012 U		0.0014 U	0.1 U
	Dichlorodifluoromethane	mg/kg	NS	130	550	730	0.012 U		0.014 U	1 U
	Acetone	mg/kg	NS	96,000	100,000	100,000	0.031 U		0.034 U	1 U
	Carbon disulfide	mg/kg	NS	690	740	720	0.012 U		0.014 U	1 U
	2-Butanone	mg/kg	4,000	20,000	28,000	11,000	0.012 U		0.014 U	1 U
	Vinyl Acetate	mg/kg	NS	1,400	2,700	140	0.012 U		0.014 U	1 U
	4-Methyl-2-pentanone	mg/kg	NS	3,400	3,400	3,300	0.012 U		0.014 U	1 U
	2-Hexanone	mg/kg	NS	290	2,000	300	0.012 U		0.014 U	1 U
	Ethyl methacrylate	mg/kg	NS	1,100	1,100	830	0.012 U		0.014 U	1 U
	Acrylonitrile	mg/kg	NS	3.7	17	14	0.0050 U		0.0055 U	0.4 U
	Bromochloromethane	mg/kg	NS	220	940	330	0.0025 U		0.0028 U	0.2 U
	Tetrahydrofuran	mg/kg	NS	27,000	100,000	20,000	0.0050 U		0.0055 U	0.4 U
	2,2-Dichloropropane	mg/kg	NS	NS	NS	NS	0.0025 U		0.0028 U	0.2 U
	1,2-Dibromoethane	mg/kg	NS	0.54	2.4	8.9	0.0012 U		0.0014 U	0.1 U
	1,3-Dichloropropane	mg/kg	NS	2,100	32,000	68,000	0.0025 U		0.0028 U	0.2 U
	1,1,1,2-Tetrachloroethane	mg/kg	NS	30	130	480	0.00062 U		0.00069 U	0.05 U
	Bromobenzene	mg/kg	NS	380	650	620	0.0025 U		0.0028 U	0.2 U
	n-Butylbenzene	mg/kg	NS	5,400	80,000	34,000	0.0012 U		0.0014 U	0.1 U
	sec-Butylbenzene	mg/kg	NS	11,000	100,000	34,000	0.0012 U		0.0014 U	0.1 U
	tert-Butylbenzene	mg/kg	NS	11,000	100,000	34,000	0.0025 U		0.0028 U	0.2 U
	1,3,5-Trichlorobenzene	mg/kg	NS	NS	NS	NS	0.0025 U		0.0028 U	0.2 U
	o-Chlorotoluene	mg/kg	NS	2,100	32,000	800	0.0025 U		0.0028 U	0.2 U
	p-Chlorotoluene	mg/kg	NS	2,100	32,000	68,000	0.0025 U		0.0028 U	0.2 U
	1,2-Dibromo-3-chloropropane	mg/kg	NS	0.078	1	3.5	0.0037 U		0.0041 U	0.3 U
	Hexachlorobutadiene	mg/kg	10	15	16	17	0.0050 U		0.0055 U	0.4 U
	Isopropylbenzene	mg/kg	NS	260	270	270	0.0012 U		0.0014 U	0.1 U
	p-Isopropyltoluene	mg/kg	NS	660(d)	3,500(d)	2,600(d)	0.0012 U		0.0014 U	0.1 U
	Naphthalene	mg/kg	NS	29	120	130	0.0050 U		0.0055 U	**39**
	n-Propylbenzene	mg/kg	NS	260	260	260	0.0012 U		0.0014 U	0.1 U
	1,2,3-Trichlorobenzene	mg/kg	NS	86	1,300	2,700	0.0025 U		0.0028 U	0.2 U
	1,2,4-Trichlorobenzene	mg/kg	NS	86	380	400	0.0025 U		0.0028 U	0.2 U
	1,3,5-Trimethylbenzene	mg/kg	NS	160	180	180	0.0025 U		0.0028 U	0.2 U
	1,2,4-Trimethylbenzene	mg/kg	NS	180	220	220	0.0025 U		0.0028 U	0.2 U
	trans-1,4-Dichloro-2-butene	mg/kg	NS	0.11	0.48	1.8	0.0062 U		0.0069 U	0.5 U
	Ethyl ether	mg/kg	NS	21,000	100,000	8,100	0.0025 U		0.0028 U	0.2 U
	Methyl Acetate	mg/kg	NS	100,000	100,000	740	0.0050 U		0.0055 U	0.4 U
	Ethyl Acetate	mg/kg	NS	NS	NS	NS	0.012 U		0.014 U	1 U
	Isopropyl Ether	mg/kg	NS	2,300	2,300	2,000	0.0025 U		0.0028 U	0.2 U
	Cyclohexane	mg/kg	NS	120	120	120	0.012 U		0.014 U	1 U
	Ethyl-Tert-Butyl-Ether	mg/kg	NS	1,900	2,900	2,900	0.0025 U		0.0028 U	0.2 U
	Tertiary-Amyl Methyl Ether	mg/kg	NS	NS	NS	NS	0.0025 U		0.0028 U	0.2 U
	1,4-Dioxane	mg/kg	NS	74	340	1,700	0.099 U		0.11 U	8 U
	Methyl cyclohexane	mg/kg	NS	1,700(c)	11,000(c)	430(c)	0.0050 U		0.0055 U	0.4 U
	1,1,2-Trichloro-1,2,2-Trifluoroethane	mg/kg	NS	910	910	910	0.0050 U		0.0055 U	0.4 U
	1,4-Diethylbenzene	mg/kg	NS	660(d)	3,500(d)	2,600(d)	0.0025 U		0.0028 U	**0.21**
	p-Ethyltoluene	mg/kg	NS	660(d)	3,500(d)	2,600(d)	0.0025 U		0.0028 U	0.2 U
	1,2,4,5-Tetramethylbenzene	mg/kg	NS	660(d)	3,500(d)	2,600(d)	0.0025 U		0.0028 U	0.2 U
SVOCs										
	Acenaphthene	mg/kg	NS	4,900	62,000	48,000	0.14 U		0.69 U	**110**
	Benzidine	mg/kg	NS	NS	NS	NS	0.57 U		2.8 U	12 U
	1,2,4-Trichlorobenzene	mg/kg	NS	86	380	400	0.17 U		0.86 U	3.6 U
	Hexachlorobenzene	mg/kg	2.6	1.1	14	3.4	0.1 U		0.52 U	2.2 U
	Bis(2-chloroethyl)ether	mg/kg	NS	3.3	15	62	0.15 U		0.78 U	3.2 U
	2-Chloronaphthalene	mg/kg	NS	6,500	82,000	48,000	0.17 U		0.86 U	3.6 U
	1,2-Dichlorobenzene	mg/kg	NS	360	380	380	0.17 U		0.86 U	3.6 U
	1,3-Dichlorobenzene	mg/kg	NS	290	300	280	0.17 U		0.86 U	3.6 U
	1,4-Dichlorobenzene	mg/kg	150	39	170	620	0.17 U		0.86 U	3.6 U
	3,3'-Dichlorobenzidine	mg/kg	NS	17	70	400	0.17 U		0.86 U	3.6 U
	2,4-Dinitrotoluene	mg/kg	2.6	24	100	600	0.17 U		0.86 U	3.6 U
	2,6-Dinitrotoluene	mg/kg	NS	5	21	130	0.17 U		0.86 U	3.6 U
	Azobenzene	mg/kg	NS	NS	NS	NS	0.17 U		0.86 U	3.6 U
	Fluoranthene	mg/kg	NS	3,300	41,000	24,000	**1.2**		**2.8**	**700**
	4-Chlorophenyl phenyl ether	mg/kg	NS	NS	NS	NS	0.17 U		0.86 U	3.6 U
	4-Bromophenyl phenyl ether	mg/kg	NS	NS	NS	NS	0.17 U		0.86 U	3.6 U

Table 2
Summary of Analytical Results for Soil/Debris Waste Characterization Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

							WC-1				WC-2	
						Sample Location:	WC-1/WC-1 (VOC)		DUP-WC/DUP-WC (VOC)		WC-2/WC-2 (VOC)	
						Sample Name:						
						Lab Sample ID:	L2461852-01/05		L2461852-03/07		L2461852-02/08	
						Sample Date:	10/23/2024		10/23/2024		10/23/2024	
Analysis	Analyte	Unit	20x TCLP**	Residential*	Commercial Worker*	Construction Worker*			Field Dup			
	Bis(2-chloroisopropyl)ether	mg/kg	NS	NS	NS	NS	0.21	U	1	U	4.3	U
	Bis(2-chloroethoxy)methane	mg/kg	NS	NS	NS	NS	0.18	U	0.93	U	3.9	U
	Hexachlorobutadiene	mg/kg	10	15	16	17	0.17	U	0.86	U	3.6	U
	Hexachlorocyclopentadiene	mg/kg	NS	NS	NS	NS	0.49	U	2.5	U	10	U
	Hexachloroethane	mg/kg	60	27	120	450	0.14	U	0.69	U	2.9	U
	Isophorone	mg/kg	NS	7,800	33,000	100,000	0.15	U	0.78	U	3.2	U
	Naphthalene	mg/kg	NS	29	120	130	0.17	U	0.86	U	**31**	
	Nitrobenzene	mg/kg	40	NS	NS	NS	0.15	U	0.78	U	3.2	U
	NitrosoDiPhenylAmine(NDPA)/DPA	mg/kg	NS	1,500	6,400	37,000	0.14	U	0.69	U	2.9	U
	n-Nitrosodi-n-propylamine	mg/kg	NS	NS	NS	NS	0.17	U	0.86	U	3.6	U
	Bis(2-Ethylhexyl)phthalate	mg/kg	NS	530	2,200	26	0.17	U	0.86	U	3.6	U
	Butyl benzyl phthalate	mg/kg	NS	3,900	17,000	99,000	0.17	U	0.86	U	3.6	U
	Di-n-butylphthalate	mg/kg	NS	8,600	100,000	100,000	0.17	U	0.86	U	3.6	U
	Di-n-octylphthalate	mg/kg	NS	860	11,000	26,000	0.17	U	0.86	U	3.6	U
	Diethyl phthalate	mg/kg	NS	69,000	100,000	100,000	0.17	U	0.86	U	3.6	U
	Dimethyl phthalate	mg/kg	NS	NS	NS	NS	0.17	U	0.86	U	3.6	U
	Benzo(a)anthracene	mg/kg	NS	16	280	1,700	**0.59**		**1.7**		**290**	
	Benzo(a)pyrene	mg/kg	NS	1.6	29	9.9	**0.76**		**2.1**		**250**	
	Benzo(b)fluoranthene	mg/kg	NS	16	290	1,700	**0.94**		**2.5**		**340**	
	Benzo(k)fluoranthene	mg/kg	NS	160	2,900	17,000	**0.29**		**0.91**		**110**	
	Chrysene	mg/kg	NS	1,600	29,000	100,000	**0.62**		**1.6**		**290**	
	Acenaphthylene	mg/kg	NS	4,900	45,000	48,000	**0.48**		**0.8**		**3.7**	
	Anthracene	mg/kg	NS	25,000	100,000	100,000	**0.31**		**0.59**		**140**	
	Benzo(ghi)perylene	mg/kg	NS	2,500	23,000	72,000	**0.47**		**1.5**		**140**	
	Fluorene	mg/kg	NS	3,300	41,000	96,000	0.17	U	0.86	U	**82**	
	Phenanthrene	mg/kg	NS	2,500	23,000	72,000	**0.37**		**0.89**		**660**	
	Dibenzo(a,h)anthracene	mg/kg	NS	1.6	29	170	0.1	U	0.52	U	**38**	
	Indeno(1,2,3-cd)Pyrene	mg/kg	NS	16	290	1,700	**0.4**		**1.3**		**150**	
	Pyrene	mg/kg	NS	2,500	31,000	72,000	**1.1**		**2.6**		**540**	
	Biphenyl	mg/kg	NS	71	300	400	0.39	U	2	U	8.2	U
	Aniline	mg/kg	NS	610	5,500	1,700	0.21	U	1	U	4.3	U
	4-Chloroaniline	mg/kg	NS	37	160	130	0.17	U	0.86	U	3.6	U
	1-Methylnaphthalene	mg/kg	NS	240	990	6,000	0.17	U	0.86	U	**21**	
	2-Nitroaniline	mg/kg	NS	NS	NS	NS	0.17	U	0.86	U	3.6	U
	3-Nitroaniline	mg/kg	NS	NS	NS	NS	0.17	U	0.86	U	3.6	U
	4-Nitroaniline	mg/kg	NS	350	1,600	2,500	0.17	U	0.86	U	3.6	U
	Dibenzofuran	mg/kg	NS	110	1,600	1,400	0.17	U	0.86	U	**67**	
	2-Methylnaphthalene	mg/kg	NS	330	4,100	960	0.21	U	1	U	**28**	
	n-Nitrosodimethylamine	mg/kg	NS	NS	NS	NS	0.34	U	1.7	U	7.2	U
	2,4,6-Trichlorophenol	mg/kg	40	86	1,100	1,300	0.1	U	0.52	U	2.2	U
	P-Chloro-M-Cresol	mg/kg	NS	8,600	100,000	26,000	0.17	U	0.86	U	3.6	U
	2-Chlorophenol	mg/kg	NS	540	8,000	2,700	0.17	U	0.86	U	3.6	U
	2,4-Dichlorophenol	mg/kg	NS	260	3,400	5,100	0.15	U	0.78	U	3.2	U
	2,4-Dimethylphenol	mg/kg	NS	1,700	22,000	13,000	0.17	U	0.86	U	3.6	U
	2-Nitrophenol	mg/kg	NS	NS	NS	NS	0.37	U	1.9	U	7.8	U
	4-Nitrophenol	mg/kg	NS	NS	NS	NS	0.24	U	1.2	U	5	U
	2,4-Dinitrophenol	mg/kg	NS	170	2,200	5,100	0.83	U	4.2	U	17	U
	4,6-Dinitro-o-cresol	mg/kg	NS	NS	NS	NS	0.45	U	2.2	U	9.4	U
	Pentachlorophenol	mg/kg	2,000	14	54	340	0.14	U	0.69	U	2.9	U
	Phenol	mg/kg	NS	26,000	100,000	100,000	0.17	U	0.86	U	3.6	U
	2-Methylphenol	mg/kg	4,000	4,300	56,000	51,000	0.17	U	0.86	U	3.6	U
	3/4-Methylphenol	mg/kg	4,000(e)	1,700(e)	22,000(e)	5,100(e)	0.25	U	1.2	U	5.2	U
	2,4,5-Trichlorophenol	mg/kg	8,000	8,600	100,000	77,000	0.17	U	0.86	U	3.6	U
	Benzoic Acid	mg/kg	NS	100,000	100,000	11,000	0.56	U	2.8	U	12	U
	Benzyl Alcohol	mg/kg	NS	8,600	100,000	77,000	0.17	U	0.86	U	3.6	U
	Carbazole	mg/kg	NS	270	110	6,700	0.17	U	0.86	U	**110**	
	Pyridine	mg/kg	100	NS	NS	NS	0.18	U	0.93	U	3.9	U
PCBs												
	Aroclor-1016	mg/kg	NS	5.6	70	16	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1221	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1232	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1242	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1248	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1254	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1260	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	**0.135**	
	Aroclor-1262	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Aroclor-1268	mg/kg	NS	NS	NS	NS	0.0494	U	0.0511	U	0.0522	U
	Total PCBs	mg/kg	50***	3.1	13	74	0.0494	U	0.0511	U	**0.135**	
Pesticides												
	Delta-BHC	mg/kg	NS	NS	NS	NS	0.00158	U	0.00165	U	0.00168	U
	Lindane	mg/kg	8	7.8	35	200	0.000658	U	0.000688	U	0.000701	U
	Alpha-BHC	mg/kg	NS	1.2	5	29	0.000658	U	0.000688	U	0.000701	U
	Beta-BHC	mg/kg	NS	4.1	17	100	0.00158	U	0.00165	U	0.00168	U
	Heptachlor	mg/kg	0.16	1.9	8.7	34	0.000790	U	0.000826	U	0.000841	U
	Aldrin	mg/kg	NS	0.54	2.5	14	0.00158	U	0.00165	U	0.00168	U
	Heptachlor epoxide	mg/kg	0.16	1	4.5	4.4	0.00296	U	0.00310	U	0.00315	U
	Endrin	mg/kg	0.4	26	340	150	0.000658	U	0.000688	U	0.000701	U
	Endrin aldehyde	mg/kg	NS	NS	NS	NS	0.00197	U	0.00206	U	0.00210	U
	Endrin ketone	mg/kg	NS	NS	NS	NS	0.00158	U	0.00165	U	0.00168	U
	Dieldrin	mg/kg	NS	0.46	2	12	0.000987	U	0.00103	U	0.00105	U
	4,4'-DDE	mg/kg	NS	27	130	100	0.00158	U	**0.00207**		0.00168	U
	4,4'-DDD	mg/kg	NS	31	130	130	0.00158	U	0.00165	U	0.00168	U
	4,4'-DDT	mg/kg	NS	26	120	160	**0.00543**		**0.00751**		0.00315	U
	Endosulfan I	mg/kg	NS	640(g)	9,600(g)	1,700(g)	0.00158	U	0.00165	U	0.00168	U
	Endosulfan II	mg/kg	NS	640(g)	9,600(g)	1,700(g)	0.00158	U	0.00165	U	0.00168	U
	Endosulfan sulfate	mg/kg	NS	640(g)	9,600(g)	1,700(g)	0.000658	U	0.000688	U	0.000701	U
	Methoxychlor	mg/kg	200	430	5,600	1,300	0.00296	U	0.00310	U	0.00315	U
	Toxaphene	mg/kg	10	NS	NS	NS	0.0296	U	0.0310	U	0.0315	U
	Chlordane	mg/kg	0.6	24(f)	110(f)	100(f)	0.0132	U	0.0138	U	0.0140	U
	cis-Chlordane	mg/kg	NS	NS	NS	NS	0.00197	U	0.00206	U	0.00210	U
	trans-Chlordane	mg/kg	NS	NS	NS	NS	0.00197	U	0.00206	U	0.00210	U
Herbicides												
	MCPP	mg/kg	NS	86	1,100	2,600	3.44	U	3.44	U	3.55	U
	MCPA	mg/kg	NS	43	560	130	3.44	U	3.44	U	3.55	U
	Dalapon	mg/kg	NS	2,600	34,000	7,700	0.0344	U	0.0344	U	0.0355	U
	Dicamba	mg/kg	NS	NS	NS	NS	0.0344	U	0.0344	U	0.0355	U
	Dichloroprop	mg/kg	NS	NS	NS	NS	0.0344	U	0.0344	U	0.0355	U
	2,4-D	mg/kg	200	NS	NS	NS	0.172	U	0.172	U	0.177	U
	2,4-DB	mg/kg	NS	NS	NS	NS	0.172	U	0.172	U	0.177	U
	2,4,5-T	mg/kg	NS	860	11,000	26,000	0.172	U	0.172	U	0.177	U
	2,4,5-TP (Silvex)	mg/kg	20	690	9,000	2,100	0.172	U	0.172	U	0.177	U
Metals, total												
	Arsenic	mg/kg	100	9.3	41	54	**5.47**		**5.44**		**5.42**	
	Barium	mg/kg	2,000	21,000	100,000	20,000	**25.3**		**18.5**		**19.1**	
	Cadmium	mg/kg	20	9.8	140	42	0.797	U	0.799	U	0.857	U
	Chromium	mg/kg	100	4.2(h)	89(h)	46(h)	**13.4**		**15.2**		**13.6**	

Table 2
Summary of Analytical Results for Soil/Debris Waste Characterization Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

						Sample Location:	**WC-1**					**WC-2**		
						Sample Name:	WC-1/WC-1 (VOC)		DUP-WC/DUP-WC (VOC)			WC-2/WC-2 (VOC)		
						Lab Sample ID:	L2461852-01/05		L2461852-03/07			L2461852-02/08		
						Sample Date:	10/23/2024		10/23/2024			10/23/2024		
Analysis	Analyte	Unit	20x TCLP**	Residential*	Commercial Worker*	Construction Worker*			Field Dup					
	Lead	mg/kg	100	200	440	460	**12.8**		**12.6**			**43.8**		
	Mercury	mg/kg	4	3.1	3.1	3.1	**0.153**		0.067	U		**0.072**		
	Selenium	mg/kg	20	540	8,000	1,700	1.59	U	1.60	U		1.71	U	
	Silver	mg/kg	100	540	8,000	1,700	0.398	U	0.400	U		0.428	U	
General Chemistry														
	Ignitability		> 140 deg F	NS	NS	NS	NI		NI			NI		
	pH	su	2-12.5	NS	NS	NS	**8.97**		**7.96**			**6.47**		
	Reactive Cyanide	mg/kg	NR	NS	NS	NS	10	U	10	U		10	U	
	Reactive Sulfide	mg/kg	NR	NS	NS	NS	10	U	10	U		10	U	

Notes:

mg/kg - milligrams per kilogram (dry weight) or parts per million (ppm).

su - Standard unit.

NIT - Not ignitable.

NR - Not reactive.

NS - No listed standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

Values shown in bold and shaded in green exceed the listed Residential standard.

Values shown in bold and shaded in green exceed the listed Commercial Worker standard.

VOCs - Volatile Organic Compounds.

SVOCs - Semivolatile Organic Compounds.

PCBs - Polychlorinated Biphenyls.

TCLP - Toxicity Characteristic Leaching Procedure.

* - Maine DEP Remedial Action Guidelines (RAGs) for Contaminated Sites
Effective November 15, 2023; Table 4: Maine RAGs for the Soil Exposure Pathway.

** - 20x TCLP Limits; TCLP limits are provided in 40 CFR 261.24(b), Table 1 - Maximum Concentration of Contaminants for Toxicity Characteristic.

*** - Toxic Substances Control Act (TSCA)

(a) - Criteria applicable to xylene (total), the sum of the xylene isomers.

(b) - The cis and trans isomers should be summed and compared to the RAG of 1,3-Dichloropropene.

(c) - RAG for C5-C8 Aliphatics used.

(d) - RAG for C9-C10 Aromatics used.

(e) - RAG and 20x TCLP limit for 4-Methylphenol (Cresol, p-) used.

(f) - RAG for Chlordane (technical) used.

(g) - RAG for Endosulfan used.

(h) - RAG for chromium(VI) used.

Quantitation limit value exceeds 20x TCLP.

Table 3
Summary of Analytical Results for Paper Waste Characterization Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

				Sample Location:	**PW-1**				**PW-2**	
				Sample Name:	PW-1		DUP-PW		PW-2	
				Lab Sample ID:	L2461842-01		L2461842-03		L2461842-02	
				Sample Date:	10/23/2024		10/23/2024		10/23/2024	
Analysis	Analyte	Unit	20x TCLP*				Field Dup			
SVOCs										
	Acenaphthene	mg/kg	NS		0.13	U	0.37	U	0.37	U
	Benzidine	mg/kg	NS		0.55	U	1.5	U	1.5	U
	1,2,4-Trichlorobenzene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Hexachlorobenzene	mg/kg	2.6		0.1	U	0.28	U	0.28	U
	Bis(2-chloroethyl)ether	mg/kg	NS		0.15	U	0.42	U	0.42	U
	2-Chloronaphthalene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	1,2-Dichlorobenzene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	1,3-Dichlorobenzene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	1,4-Dichlorobenzene	mg/kg	150		0.16	U	0.46	U	0.47	U
	3,3'-Dichlorobenzidine	mg/kg	NS		0.16	U	0.46	U	0.47	U
	2,4-Dinitrotoluene	mg/kg	2.6		0.16	U	0.46	U	0.47	U
	2,6-Dinitrotoluene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Azobenzene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Fluoranthene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	4-Chlorophenyl phenyl ether	mg/kg	NS		0.16	U	0.46	U	0.47	U
	4-Bromophenyl phenyl ether	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Bis(2-chloroisopropyl)ether	mg/kg	NS		0.2	U	0.56	U	0.56	U
	Bis(2-chloroethoxy)methane	mg/kg	NS		0.18	U	0.5	U	0.5	U
	Hexachlorobutadiene	mg/kg	10		0.16	U	0.46	U	0.47	U
	Hexachlorocyclopentadiene	mg/kg	NS		0.47	U	1.3	U	1.3	U
	Hexachloroethane	mg/kg	60		0.13	U	0.37	U	0.37	U
	Isophorone	mg/kg	NS		0.15	U	0.42	U	0.42	U
	Naphthalene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Nitrobenzene	mg/kg	40		0.15	U	0.42	U	0.42	U
	NitrosoDiPhenylAmine(NDPA)/DPA	mg/kg	NS		0.13	U	0.37	U	0.37	U
	n-Nitrosodi-n-propylamine	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Bis(2-Ethylhexyl)phthalate	mg/kg	NS		**0.17**		**0.48**		0.47	U
	Butyl benzyl phthalate	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Di-n-butylphthalate	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Di-n-octylphthalate	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Diethyl phthalate	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Dimethyl phthalate	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Benzo(a)anthracene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Benzo(a)pyrene	mg/kg	NS		0.13	U	0.37	U	0.37	U
	Benzo(b)fluoranthene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Benzo(k)fluoranthene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Chrysene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Acenaphthylene	mg/kg	NS		0.13	U	0.37	U	0.37	U
	Anthracene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Benzo(ghi)perylene	mg/kg	NS		0.13	U	0.37	U	0.37	U
	Fluorene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	Phenanthrene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Dibenzo(a,h)anthracene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Indeno(1,2,3-cd)Pyrene	mg/kg	NS		0.13	U	0.37	U	0.37	U
	Pyrene	mg/kg	NS		0.1	U	0.28	U	0.28	U
	Biphenyl	mg/kg	NS		0.38	U	1.1	U	1.1	U
	Aniline	mg/kg	NS		0.2	U	0.56	U	0.56	U
	4-Chloroaniline	mg/kg	NS		0.16	U	0.46	U	0.47	U
	1-Methylnaphthalene	mg/kg	NS		0.16	U	0.46	U	0.47	U
	2-Nitroaniline	mg/kg	NS		0.16	U	0.46	U	0.47	U
	3-Nitroaniline	mg/kg	NS		0.16	U	0.46	U	0.47	U
	4-Nitroaniline	mg/kg	NS		0.16	U	0.46	U	0.47	U

Table 3
Summary of Analytical Results for Paper Waste Characterization Samples -- October 2024
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine

			Sample Location:	PW-1				PW-2	
			Sample Name:	PW-1		DUP-PW		PW-2	
			Lab Sample ID:	L2461842-01		L2461842-03		L2461842-02	
			Sample Date:	10/23/2024		10/23/2024		10/23/2024	
Analysis	Analyte	Unit	20x TCLP*			Field Dup			
	Dibenzofuran	mg/kg	NS	0.16	U	0.46	U	0.47	U
	2-Methylnaphthalene	mg/kg	NS	0.2	U	0.56	U	0.56	U
	n-Nitrosodimethylamine	mg/kg	NS	0.33	U	0.93	U	0.94	U
	2,4,6-Trichlorophenol	mg/kg	40	0.1	U	0.28	U	0.28	U
	P-Chloro-M-Cresol	mg/kg	NS	0.16	U	0.46	U	0.47	U
	2-Chlorophenol	mg/kg	NS	0.16	U	0.46	U	0.47	U
	2,4-Dichlorophenol	mg/kg	NS	0.15	U	0.42	U	0.42	U
	2,4-Dimethylphenol	mg/kg	NS	0.16	U	0.46	U	0.47	U
	2-Nitrophenol	mg/kg	NS	0.36	U	1	U	1	U
	4-Nitrophenol	mg/kg	NS	0.23	U	0.65	U	0.66	U
	2,4-Dinitrophenol	mg/kg	NS	0.8	U	2.2	U	2.2	U
	4,6-Dinitro-o-cresol	mg/kg	NS	0.43	U	1.2	U	1.2	U
	Pentachlorophenol	mg/kg	2,000	0.13	U	0.37	U	0.37	U
	Phenol	mg/kg	NS	0.16	U	0.46	U	0.47	U
	2-Methylphenol	mg/kg	4,000	0.16	U	0.46	U	0.47	U
	3/4-Methylphenol	mg/kg	4,000**	0.24	U	0.67	U	0.67	U
	2,4,5-Trichlorophenol	mg/kg	8,000	0.16	U	0.46	U	0.47	U
	Benzoic Acid	mg/kg	NS	0.54	U	1.5	U	1.5	U
	Benzyl Alcohol	mg/kg	NS	0.16	U	0.46	U	0.47	U
	Carbazole	mg/kg	NS	0.16	U	0.46	U	0.47	U
	Pyridine	mg/kg	100	0.18	U	0.5	U	0.5	U
Metals, total									
	Arsenic	mg/kg	100	0.752	U	0.763	U	0.765	U
	Barium	mg/kg	2,000	0.752	U	0.763	U	**2.67**	
	Cadmium	mg/kg	20	0.752	U	0.763	U	0.765	U
	Chromium	mg/kg	100	0.752	U	0.763	U	0.765	U
	Lead	mg/kg	100	3.76	U	3.81	U	3.82	U
	Mercury	mg/kg	4	**0.065**		**0.069**		0.064	U
	Selenium	mg/kg	20	1.50	U	1.52	U	1.53	U
	Silver	mg/kg	100	0.376	U	0.381	U	0.382	U
General Chemistry									
	pH	mg/kg	2-12.5	**7.09**		**6.93**		**7.22**	

Notes:

mg/kg - milligrams per kilogram or parts per million (ppm).

su - Standard unit.

NS - No listed standards exist for this analyte.

U - Analyte was not detected at specified quantitation limit.

Values in **bold** indicate the analyte was detected.

SVOCs - Semivolatile Organic Compounds.

RCRA - EPA Resource Conservation and Recovery Act. 20 x TCLP rules are applied.

TCLP - Toxicity Characteristic Leaching Procedure.

* - 20x TCLP Limits are provided in 40 CFR 261.24(b), Table 1 - Maximum Concentration of Contaminants for Toxicity Characteristic.

** - Value for 4-Methylphenol (Cresol, p-) used.

APPENDIX A:
PHOTOGRAPHIC LOG

Photograph Log

Client Name:	Site Location:	Project No.:
Town of East Millinocket, Maine	Former Great Northern Paper Mill 50 Main Street, East Millinocket, ME	549784.1.306

Photo No.	Date
1	October 23, 2024

Description:
Former location of 1,700,000-gallon fuel oil aboveground storage tank (AST) and location of soil boring locations HB-5 and HB-6, as viewed looking southeast (Study Area 4).

Photo No.	Date
2	October 23, 2024

Description:
Area of petroleum-saturated soil on the western side of the 700,000-gallon fuel oil AST and initial location of HB-3 (relocated due to the presence of concrete approximately 6 inches below grade), as looking generally east. Soil boring HB-3 was subsequently relocated approximately 10 feet to the west (Study Area 4).

Photograph Log

Client Name:	Site Location:	Project No.:
Town of East Millinocket, Maine	Former Great Northern Paper Mill 50 Main Street, East Millinocket, ME	549784.1.306

Photo No.	Date
3	October 23, 2024

Description:
Location of the soil/debris stockpile represented by waste characterization sample WC-1 (Study Area 4).

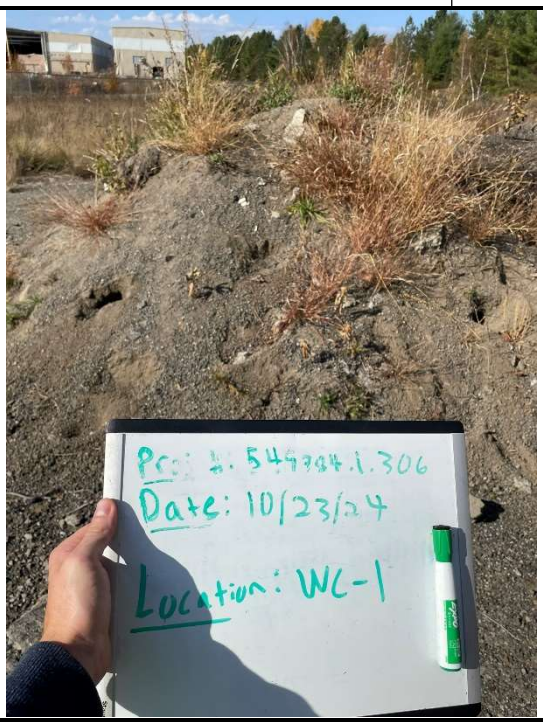
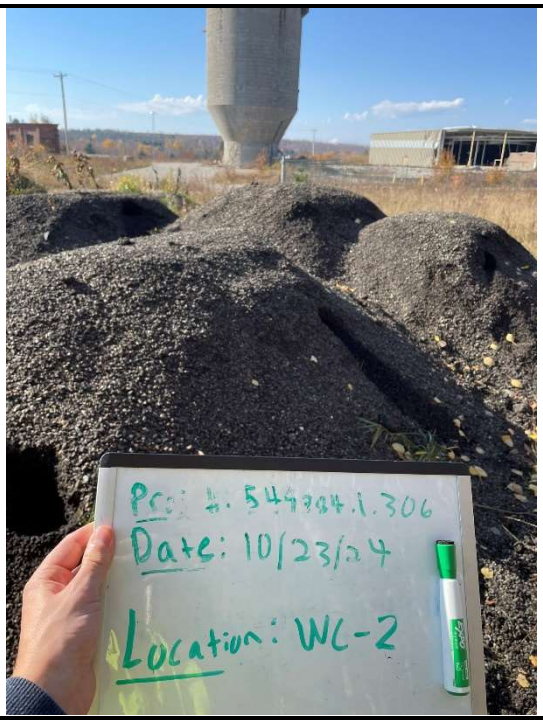


Photo No.	Date
4	October 23, 2024

Description:
Location of the soil/debris stockpile represented by waste characterization sample WC-2 (Study Area 4).



Photograph Log

Client Name:	Site Location:	Project No.:
Town of East Millinocket, Maine	Former Great Northern Paper Mill 50 Main Street, East Millinocket, ME	549784.1.306

Photo No.	Date
5	October 23, 2024

Description:
Residual paper waste characterized by samples PW-1 and PW-2 (Study Area 6).

Photo No.	Date
6	October 23, 2024

Description:
Residual paper waste characterized by samples PW-1 and PW-2 (Study Area 6).

APPENDIX B:
LABORATORY REPORTS

ANALYTICAL REPORT

Lab Number:	L2461846
Client:	TRC Environmental Corp 63 Marginal Way, 4th Floor Portland, ME 04101
ATTN:	Zachary Bonin
Phone:	(207) 205-2830
Project Name:	FORMER GNP MILL
Project Number:	549784.1.306
Report Date:	11/01/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2461846-01	HB-1 (0-2')	SOIL	EAST MILLINOCKET, ME	10/23/24 09:15	10/23/24
L2461846-02	HB-2 (0-2')	SOIL	EAST MILLINOCKET, ME	10/23/24 11:00	10/23/24
L2461846-03	HB-3 (2-3')	SOIL	EAST MILLINOCKET, ME	10/23/24 11:50	10/23/24
L2461846-04	HB-4 (0-2')	SOIL	EAST MILLINOCKET, ME	10/23/24 10:40	10/23/24
L2461846-05	HB-5 (2-3')	SOIL	EAST MILLINOCKET, ME	10/23/24 09:50	10/23/24
L2461846-06	HB-6 (0-2')	SOIL	EAST MILLINOCKET, ME	10/23/24 10:20	10/23/24
L2461846-07	DUP-SOIL	SOIL	EAST MILLINOCKET, ME	10/23/24 12:50	10/23/24

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461846
Project Number:	549784.1.306	**Report Date:**	11/01/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461846
Project Number:	549784.1.306	**Report Date:**	11/01/24

Case Narrative (continued)

Total Metals

L2461846-01 through -07: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1988927-3 MS recoveries, performed on L2461846-05, are outside the acceptance criteria for chromium (0%) and lead (38%). A post digestion spike was performed and was within acceptance criteria.

The WG1988927-4 Laboratory Duplicate RPDs for arsenic (24%), barium (41%), chromium (88%), and lead (106%), performed on L2461846-05, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 11/01/24

ORGANICS

PETROLEUM HYDROCARBONS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-01			Date Collected:	10/23/24 09:15
Client ID:	HB-1 (0-2')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 09:59	M.S. Analytical Date:	10/30/24 08:00	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	89%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.44	--	1
C19-C36 Aliphatics	ND		mg/kg	7.44	--	1
C11-C22 Aromatics	12.2		mg/kg	7.44	--	1
C11-C22 Aromatics, Adjusted	12.0		mg/kg	7.44	--	1
Naphthalene	ND		mg/kg	0.030	--	1
2-Methylnaphthalene	ND		mg/kg	0.030	--	1
Acenaphthylene	ND		mg/kg	0.030	--	1
Acenaphthene	ND		mg/kg	0.030	--	1
Fluorene	ND		mg/kg	0.030	--	1
Phenanthrene	0.035		mg/kg	0.030	--	1
Anthracene	ND		mg/kg	0.030	--	1
Fluoranthene	0.054		mg/kg	0.030	--	1
Pyrene	0.049		mg/kg	0.030	--	1
Benzo(a)anthracene	ND		mg/kg	0.030	--	1
Chrysene	0.033		mg/kg	0.030	--	1
Benzo(b)fluoranthene	0.042		mg/kg	0.030	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.030	--	1
Benzo(a)pyrene	ND		mg/kg	0.030	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.030	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.030	--	1
Benzo(ghi)perylene	ND		mg/kg	0.030	--	1

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-01
Client ID: HB-1 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 09:15
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	56		40-140
o-Terphenyl	70		40-140
2-Fluorobiphenyl	80		40-140
2-Bromonaphthalene	83		40-140
O-Terphenyl-MS	76		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-02			Date Collected:	10/23/24 11:00
Client ID:	HB-2 (0-2')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 10:24	M.S. Analytical Date:	10/30/24 08:17	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	92%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	6.78	--	1
C19-C36 Aliphatics	ND		mg/kg	6.78	--	1
C11-C22 Aromatics	8.03		mg/kg	6.78	--	1
C11-C22 Aromatics, Adjusted	7.93		mg/kg	6.78	--	1
Naphthalene	ND		mg/kg	0.027	--	1
2-Methylnaphthalene	ND		mg/kg	0.027	--	1
Acenaphthylene	ND		mg/kg	0.027	--	1
Acenaphthene	ND		mg/kg	0.027	--	1
Fluorene	ND		mg/kg	0.027	--	1
Phenanthrene	ND		mg/kg	0.027	--	1
Anthracene	ND		mg/kg	0.027	--	1
Fluoranthene	0.040		mg/kg	0.027	--	1
Pyrene	0.034		mg/kg	0.027	--	1
Benzo(a)anthracene	ND		mg/kg	0.027	--	1
Chrysene	ND		mg/kg	0.027	--	1
Benzo(b)fluoranthene	0.030		mg/kg	0.027	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.027	--	1
Benzo(a)pyrene	ND		mg/kg	0.027	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.027	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.027	--	1
Benzo(ghi)perylene	ND		mg/kg	0.027	--	1

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-02
Client ID: HB-2 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 11:00
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	61		40-140
o-Terphenyl	72		40-140
2-Fluorobiphenyl	78		40-140
2-Bromonaphthalene	81		40-140
O-Terphenyl-MS	77		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-03			Date Collected:	10/23/24 11:50
Client ID:	HB-3 (2-3')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 11:39	M.S. Analytical Date:	10/30/24 08:33	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	85%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		mg/kg	7.69	--	1
C19-C36 Aliphatics	19.6		mg/kg	7.69	--	1
C11-C22 Aromatics	42.3		mg/kg	7.69	--	1
C11-C22 Aromatics, Adjusted	42.0		mg/kg	7.69	--	1
Naphthalene	ND		mg/kg	0.031	--	1
2-Methylnaphthalene	ND		mg/kg	0.031	--	1
Acenaphthylene	ND		mg/kg	0.031	--	1
Acenaphthene	ND		mg/kg	0.031	--	1
Fluorene	ND		mg/kg	0.031	--	1
Phenanthrene	ND		mg/kg	0.031	--	1
Anthracene	ND		mg/kg	0.031	--	1
Fluoranthene	0.052		mg/kg	0.031	--	1
Pyrene	0.056		mg/kg	0.031	--	1
Benzo(a)anthracene	0.032		mg/kg	0.031	--	1
Chrysene	0.041		mg/kg	0.031	--	1
Benzo(b)fluoranthene	0.051		mg/kg	0.031	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.031	--	1
Benzo(a)pyrene	0.039		mg/kg	0.031	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.031	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.031	--	1
Benzo(ghi)perylene	0.032		mg/kg	0.031	--	1

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-03
Client ID: HB-3 (2-3')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 11:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	72		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	84		40-140
O-Terphenyl-MS	78		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-04			Date Collected:	10/23/24 10:40
Client ID:	HB-4 (0-2')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 10:49	M.S. Analytical Date:	10/30/24 08:50	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	92%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	ND		mg/kg	6.91	--	1
C19-C36 Aliphatics	ND		mg/kg	6.91	--	1
C11-C22 Aromatics	ND		mg/kg	6.91	--	1
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.91	--	1
Naphthalene	ND		mg/kg	0.028	--	1
2-Methylnaphthalene	ND		mg/kg	0.028	--	1
Acenaphthylene	ND		mg/kg	0.028	--	1
Acenaphthene	ND		mg/kg	0.028	--	1
Fluorene	ND		mg/kg	0.028	--	1
Phenanthrene	0.045		mg/kg	0.028	--	1
Anthracene	ND		mg/kg	0.028	--	1
Fluoranthene	0.086		mg/kg	0.028	--	1
Pyrene	0.085		mg/kg	0.028	--	1
Benzo(a)anthracene	0.033		mg/kg	0.028	--	1
Chrysene	0.049		mg/kg	0.028	--	1
Benzo(b)fluoranthene	0.060		mg/kg	0.028	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.028	--	1
Benzo(a)pyrene	0.045		mg/kg	0.028	--	1
Indeno(1,2,3-cd)Pyrene	0.031		mg/kg	0.028	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.028	--	1
Benzo(ghi)perylene	0.032		mg/kg	0.028	--	1

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-04
Client ID: HB-4 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 10:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	72		40-140
2-Fluorobiphenyl	81		40-140
2-Bromonaphthalene	84		40-140
O-Terphenyl-MS	78		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-05			Date Collected:	10/23/24 09:50
Client ID:	HB-5 (2-3')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 12:04	M.S. Analytical Date:	10/30/24 09:06	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	94%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

EPH w/Targets via GCMS-SIM - Westborough Lab

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
C9-C18 Aliphatics	9.18		mg/kg	6.80	--	1
C19-C36 Aliphatics	23.2		mg/kg	6.80	--	1
C11-C22 Aromatics	18.8		mg/kg	6.80	--	1
C11-C22 Aromatics, Adjusted	18.7		mg/kg	6.80	--	1
Naphthalene	ND		mg/kg	0.027	--	1
2-Methylnaphthalene	0.033		mg/kg	0.027	--	1
Acenaphthylene	ND		mg/kg	0.027	--	1
Acenaphthene	ND		mg/kg	0.027	--	1
Fluorene	ND		mg/kg	0.027	--	1
Phenanthrene	0.053		mg/kg	0.027	--	1
Anthracene	ND		mg/kg	0.027	--	1
Fluoranthene	0.030		mg/kg	0.027	--	1
Pyrene	0.039		mg/kg	0.027	--	1
Benzo(a)anthracene	ND		mg/kg	0.027	--	1
Chrysene	ND		mg/kg	0.027	--	1
Benzo(b)fluoranthene	0.032		mg/kg	0.027	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.027	--	1
Benzo(a)pyrene	ND		mg/kg	0.027	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.027	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.027	--	1
Benzo(ghi)perylene	ND		mg/kg	0.027	--	1

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-05
Client ID: HB-5 (2-3')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 09:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	65		40-140
o-Terphenyl	81		40-140
2-Fluorobiphenyl	86		40-140
2-Bromonaphthalene	89		40-140
O-Terphenyl-MS	87		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-06			Date Collected:	10/23/24 10:20
Client ID:	HB-6 (0-2')			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 12:28	M.S. Analytical Date:	10/30/24 09:23	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	93%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	22.8		mg/kg	6.96	--	1
C19-C36 Aliphatics	140		mg/kg	6.96	--	1
C11-C22 Aromatics	90.8		mg/kg	6.96	--	1
C11-C22 Aromatics, Adjusted	89.1		mg/kg	6.96	--	1
Naphthalene	0.046		mg/kg	0.028	--	1
2-Methylnaphthalene	0.106		mg/kg	0.028	--	1
Acenaphthylene	0.035		mg/kg	0.028	--	1
Acenaphthene	ND		mg/kg	0.028	--	1
Fluorene	ND		mg/kg	0.028	--	1
Phenanthrene	0.263		mg/kg	0.028	--	1
Anthracene	ND		mg/kg	0.028	--	1
Fluoranthene	0.206		mg/kg	0.028	--	1
Pyrene	0.269		mg/kg	0.028	--	1
Benzo(a)anthracene	0.093		mg/kg	0.028	--	1
Chrysene	0.184		mg/kg	0.028	--	1
Benzo(b)fluoranthene	0.171		mg/kg	0.028	--	1
Benzo(k)fluoranthene	0.041		mg/kg	0.028	--	1
Benzo(a)pyrene	0.119		mg/kg	0.028	--	1
Indeno(1,2,3-cd)Pyrene	0.083		mg/kg	0.028	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.028	--	1
Benzo(ghi)perylene	0.096		mg/kg	0.028	--	1

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-06
Client ID: HB-6 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 10:20
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	58		40-140
o-Terphenyl	78		40-140
2-Fluorobiphenyl	91		40-140
2-Bromonaphthalene	92		40-140
O-Terphenyl-MS	75		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID:	L2461846-07			Date Collected:	10/23/24 12:50
Client ID:	DUP-SOIL			Date Received:	10/23/24
Sample Location:	EAST MILLINOCKET, ME			Field Prep:	Not Specified
Sample Depth:					
Matrix:	Soil			Extraction Method:	EPA 3546
Analytical Method:	135,EPH-19-2.1			Extraction Date:	10/28/24 09:35
Analytical Date:	10/30/24 11:14	M.S. Analytical Date:	10/30/24 09:40	Cleanup Method1:	EPH-19-2.1
Analyst:	CRE	M.S. Analyst:	JJW	Cleanup Date1:	10/30/24
Percent Solids:	86%				

Quality Control Information

Condition of sample received:	Satisfactory
Sample Temperature upon receipt:	Received on Ice
Sample Extraction method:	Extracted Per the Method

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
EPH w/Targets via GCMS-SIM - Westborough Lab						
C9-C18 Aliphatics	ND		mg/kg	7.57	--	1
C19-C36 Aliphatics	ND		mg/kg	7.57	--	1
C11-C22 Aromatics	10.8		mg/kg	7.57	--	1
C11-C22 Aromatics, Adjusted	10.6		mg/kg	7.57	--	1
Naphthalene	ND		mg/kg	0.030	--	1
2-Methylnaphthalene	ND		mg/kg	0.030	--	1
Acenaphthylene	ND		mg/kg	0.030	--	1
Acenaphthene	ND		mg/kg	0.030	--	1
Fluorene	ND		mg/kg	0.030	--	1
Phenanthrene	ND		mg/kg	0.030	--	1
Anthracene	ND		mg/kg	0.030	--	1
Fluoranthene	0.038		mg/kg	0.030	--	1
Pyrene	0.043		mg/kg	0.030	--	1
Benzo(a)anthracene	ND		mg/kg	0.030	--	1
Chrysene	0.032		mg/kg	0.030	--	1
Benzo(b)fluoranthene	0.051		mg/kg	0.030	--	1
Benzo(k)fluoranthene	ND		mg/kg	0.030	--	1
Benzo(a)pyrene	0.039		mg/kg	0.030	--	1
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.030	--	1
Dibenzo(a,h)anthracene	ND		mg/kg	0.030	--	1
Benzo(ghi)perylene	ND		mg/kg	0.030	--	1

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-07
Client ID: DUP-SOIL
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 12:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

EPH w/Targets via GCMS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	63		40-140
o-Terphenyl	75		40-140
2-Fluorobiphenyl	82		40-140
2-Bromonaphthalene	86		40-140
O-Terphenyl-MS	81		40-140

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 10/30/24 09:35
Analyst: CRE

M.S. Analytical Date: 10/30/24 07:11
M.S. Analyst: JJW

Extraction Method: EPA 3546
Extraction Date: 10/28/24 09:35
Cleanup Method: EPH-19-2.1
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1989859-1					
C9-C18 Aliphatics	ND		mg/kg	6.32	--
C19-C36 Aliphatics	ND		mg/kg	6.32	--
C11-C22 Aromatics	ND		mg/kg	6.32	--
C11-C22 Aromatics, Adjusted	ND		mg/kg	6.32	--
Naphthalene	ND		mg/kg	0.025	--
2-Methylnaphthalene	ND		mg/kg	0.025	--
Acenaphthylene	ND		mg/kg	0.025	--
Acenaphthene	ND		mg/kg	0.025	--
Fluorene	ND		mg/kg	0.025	--
Phenanthrene	ND		mg/kg	0.025	--
Anthracene	ND		mg/kg	0.025	--
Fluoranthene	ND		mg/kg	0.025	--
Pyrene	ND		mg/kg	0.025	--
Benzo(a)anthracene	ND		mg/kg	0.025	--
Chrysene	ND		mg/kg	0.025	--
Benzo(b)fluoranthene	ND		mg/kg	0.025	--
Benzo(k)fluoranthene	ND		mg/kg	0.025	--
Benzo(a)pyrene	ND		mg/kg	0.025	--
Indeno(1,2,3-cd)Pyrene	ND		mg/kg	0.025	--
Dibenzo(a,h)anthracene	ND		mg/kg	0.025	--
Benzo(ghi)perylene	ND		mg/kg	0.025	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 135,EPH-19-2.1
Analytical Date: 10/30/24 09:35
Analyst: CRE

M.S. Analytical Date: 10/30/24 07:11
M.S. Analyst: JJW

Extraction Method: EPA 3546
Extraction Date: 10/28/24 09:35
Cleanup Method: EPH-19-2.1
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL
EPH w/Targets via GCMS-SIM - Westborough Lab for sample(s): 01-07 Batch: WG1989859-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Chloro-Octadecane	55		40-140
o-Terphenyl	63		40-140
2-Fluorobiphenyl	75		40-140
2-Bromonaphthalene	77		40-140
O-Terphenyl-MS	76		40-140

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461846

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1989859-2 WG1989859-3								
C9-C18 Aliphatics	57		54		40-140	5		25
C19-C36 Aliphatics	72		68		40-140	6		25
C11-C22 Aromatics	70		74		40-140	6		25
Naphthalene	65		68		40-140	5		25
2-Methylnaphthalene	71		75		40-140	5		25
Acenaphthylene	72		76		40-140	5		25
Acenaphthene	68		74		40-140	8		25
Fluorene	74		79		40-140	7		25
Phenanthrene	77		83		40-140	8		25
Anthracene	81		86		40-140	6		25
Fluoranthene	80		88		40-140	10		25
Pyrene	81		88		40-140	8		25
Benzo(a)anthracene	72		76		40-140	5		25
Chrysene	71		76		40-140	7		25
Benzo(b)fluoranthene	75		81		40-140	8		25
Benzo(k)fluoranthene	81		87		40-140	7		25
Benzo(a)pyrene	80		87		40-140	8		25
Indeno(1,2,3-cd)Pyrene	75		79		40-140	5		25
Dibenzo(a,h)anthracene	73		78		40-140	7		25
Benzo(ghi)perylene	75		78		40-140	4		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461846

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
EPH w/Targets via GCMS-SIM - Westborough Lab Associated sample(s): 01-07 Batch: WG1989859-2 WG1989859-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Chloro-Octadecane	61		57		40-140
o-Terphenyl	65		70		40-140
2-Fluorobiphenyl	73		78		40-140
2-Bromonaphthalene	77		83		40-140
O-Terphenyl-MS	82		89		40-140
% Naphthalene Breakthrough	0		0		
% 2-Methylnaphthalene Breakthrough	0		0		

METALS

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-01
Client ID: HB-1 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 09:15
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	13.2		mg/kg	0.876	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Barium, Total	22.6		mg/kg	0.876	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.876	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Chromium, Total	15.8		mg/kg	0.876	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Lead, Total	13.2		mg/kg	4.38	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.077	--	1	10/29/24 22:30	10/30/24 12:40	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.75	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.438	--	2	10/29/24 21:35	11/01/24 16:36	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	15.8		mg/kg	0.899	--	1		11/01/24 16:36	NA	107,-	

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-02
Client ID: HB-2 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 11:00
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	8.18		mg/kg	0.827	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Barium, Total	24.2		mg/kg	0.827	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.827	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Chromium, Total	14.1		mg/kg	0.827	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Lead, Total	11.6		mg/kg	4.14	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.076	--	1	10/29/24 22:30	10/30/24 12:44	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.65	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.414	--	2	10/29/24 21:35	11/01/24 16:39	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	14.1		mg/kg	0.866	--	1		11/01/24 16:39	NA	107,-	

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-03
Client ID: HB-3 (2-3')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 11:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	8.56		mg/kg	0.922	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Barium, Total	27.6		mg/kg	0.922	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.922	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Chromium, Total	16.9		mg/kg	0.922	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Lead, Total	24.5		mg/kg	4.61	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Mercury, Total	0.103		mg/kg	0.084	--	1	10/29/24 22:30	10/30/24 12:47	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.84	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.461	--	2	10/29/24 21:35	11/01/24 16:43	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	16.9		mg/kg	0.943	--	1		11/01/24 16:43	NA	107,-	

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-04
Client ID: HB-4 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 10:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	7.17		mg/kg	0.859	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Barium, Total	19.5		mg/kg	0.859	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.859	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Chromium, Total	14.6		mg/kg	0.859	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Lead, Total	11.7		mg/kg	4.29	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.077	--	1	10/29/24 22:30	10/30/24 12:50	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.72	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.429	--	2	10/29/24 21:35	11/01/24 16:07	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13.4		mg/kg	0.868	--	1		11/01/24 16:07	NA	107,-	

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-05
Client ID: HB-5 (2-3')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 09:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 94%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	7.74		mg/kg	0.806	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Barium, Total	27.2		mg/kg	0.806	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.806	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Chromium, Total	39.1		mg/kg	0.806	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Lead, Total	44.4		mg/kg	4.03	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.076	--	1	10/29/24 22:30	10/30/24 11:02	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.61	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.403	--	2	10/29/24 21:35	11/01/24 16:46	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	39.1		mg/kg	0.849	--	1		11/01/24 16:46	NA	107,-	

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-06
Client ID: HB-6 (0-2')
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 10:20
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	8.42		mg/kg	0.849	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Barium, Total	19.1		mg/kg	0.849	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.849	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Chromium, Total	29.4		mg/kg	0.849	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Lead, Total	181		mg/kg	4.24	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Mercury, Total	ND		mg/kg	0.070	--	1	10/29/24 22:30	10/30/24 12:54	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.70	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.424	--	2	10/29/24 21:35	11/01/24 16:11	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	29.4		mg/kg	0.857	--	1		11/01/24 16:11	NA	107,-	

Project Name: FORMER GNP MILL
Lab Number: L2461846
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-07
Client ID: DUP-SOIL
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 12:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	6.66		mg/kg	0.910	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Barium, Total	22.0		mg/kg	0.910	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.910	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Chromium, Total	13.1		mg/kg	0.910	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Lead, Total	12.6		mg/kg	4.55	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Mercury, Total	0.118		mg/kg	0.084	--	1	10/29/24 22:30	10/30/24 12:57	EPA 7471B	1,7471B	JWN
Selenium, Total	ND		mg/kg	1.82	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
Silver, Total	ND		mg/kg	0.455	--	2	10/29/24 21:35	11/01/24 16:14	EPA 3050B	1,6010D	DMC
General Chemistry - Mansfield Lab											
Chromium, Trivalent	13.1		mg/kg	0.929	--	1		11/01/24 16:14	NA	107,-	

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1988927-1										
Arsenic, Total	ND		mg/kg	0.400	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Barium, Total	ND		mg/kg	0.400	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Cadmium, Total	ND		mg/kg	0.400	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Chromium, Total	ND		mg/kg	0.400	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Lead, Total	ND		mg/kg	2.00	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Selenium, Total	ND		mg/kg	0.800	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC
Silver, Total	ND		mg/kg	0.200	--	1	10/29/24 21:35	11/01/24 16:29	1,6010D	DMC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-07 Batch: WG1988928-1										
Mercury, Total	ND		mg/kg	0.083	--	1	10/29/24 22:30	10/30/24 10:31	1,7471B	JWN

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461846

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1988927-2								
Arsenic, Total	98		-		80-120	-		
Barium, Total	102		-		80-120	-		
Cadmium, Total	100		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Lead, Total	96		-		80-120	-		
Selenium, Total	97		-		80-120	-		
Silver, Total	106		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-07 Batch: WG1988928-2								
Mercury, Total	88		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1988927-3 QC Sample: L2461846-05 Client ID: HB-5 (2-3')												
Arsenic, Total	7.74	9.63	15.4	80		-	-		75-125	-		20
Barium, Total	27.2	160	164	85		-	-		75-125	-		20
Cadmium, Total	ND	4.25	3.81	90		-	-		75-125	-		20
Chromium, Total	39.1	16	30.1	**0**	Q	-	-		75-125	-		20
Lead, Total	44.4	42.5	60.7	**38**	Q	-	-		75-125	-		20
Selenium, Total	ND	9.63	8.27	86		-	-		75-125	-		20
Silver, Total	ND	4.01	3.89	97		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1988928-3 QC Sample: L2461846-05 Client ID: HB-5 (2-3')												
Mercury, Total	ND	1.47	1.33	91		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1988927-4 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
Arsenic, Total	7.74	9.84	mg/kg	**24**	Q	20
Barium, Total	27.2	17.9	mg/kg	**41**	Q	20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	39.1	15.2	mg/kg	**88**	Q	20
Lead, Total	44.4	13.6	mg/kg	**106**	Q	20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1988928-4 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-01
Client ID: HB-1 (0-2')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 09:15
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	7.23		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	ND		mg/kg	0.899	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	220		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-02
Client ID: HB-2 (0-2')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 11:00
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.4		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	6.85		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	ND		mg/kg	0.866	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	250		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-03
Client ID: HB-3 (2-3')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 11:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.8		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	6.54		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	ND		mg/kg	0.943	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	290		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-04
Client ID: HB-4 (0-2')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 10:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92.2		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	6.71		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	1.16		mg/kg	0.868	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	270		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-05
Client ID: HB-5 (2-3')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 09:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.2		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	7.10		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	ND		mg/kg	0.849	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	270		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-06
Client ID: HB-6 (0-2')
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 10:20
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.3		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	7.21		SU	-	NA	1	-	10/24/24 19:34	1,9045D	AAS
Chromium, Hexavalent	ND		mg/kg	0.857	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
Oxidation/Reduction Potential	270		mv	-	NA	1	-	10/24/24 21:06	68,1498	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461846-07
Client ID: DUP-SOIL
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:50
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.1		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
Chromium, Hexavalent	ND		mg/kg	0.929	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1988973-1										
Chromium, Hexavalent	ND		mg/kg	0.800	--	1	10/25/24 10:20	10/25/24 14:07	1,7196A	RDS
General Chemistry - Westborough Lab for sample(s): 01-07 Batch: WG1989049-1										
Solids, Total	100		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461846

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1988795-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1988796-1								
Oxidation/Reduction Potential	102		-		90-110	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 Batch: WG1988973-2								
Chromium, Hexavalent	93		-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1988973-4 WG1988973-5 QC Sample: L2461846-05 Client ID: HB-5 (2-3')												
Chromium, Hexavalent	ND	1570	1490	95		1270	98		75-125	4		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461846

Report Date: 11/01/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1988795-2 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
pH (H)	7.10	7.14	SU	1		5
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1988796-2 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
Oxidation/Reduction Potential	270	280	mv	4		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1988973-7 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
Chromium, Hexavalent	ND	ND	mg/kg	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-07 QC Batch ID: WG1989049-2 QC Sample: L2461846-05 Client ID: HB-5 (2-3')						
Solids, Total	94.2	94.2	%	0		20

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461846
Report Date: 11/01/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2461846-01A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-01B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-01C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)
L2461846-01D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)
L2461846-02A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-02B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-02C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-02D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-03A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-03B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461846-03C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-03D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-04A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-04B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461846-04C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-04D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2461846-05A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-05A1	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-05A2	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-05B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-05B1	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-05B2	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-05C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-05C1	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-05C2	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-05D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),EPH-MS-20(14),HEXCR-7196(30)
L2461846-06A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-06B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461846-06C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)
L2461846-06D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		ORP-9045(28),PH-9045(1),EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)
L2461846-07A	Plastic 2oz unpreserved for TS	B	NA		4.5	Y	Absent		ME-TS-2540(7)
L2461846-07B	Metals Only-Glass 60mL/2oz unpreserved	B	NA		4.5	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461846-07C	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)
L2461846-07D	Glass 120ml/4oz unpreserved	B	NA		4.5	Y	Absent		EPHD-GC-20(14),HEXCR-7196(30),EPH-MS-20(14)

*Values in parentheses indicate holding time in days

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461846
Project Number:	549784.1.306	**Report Date:**	11/01/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461846
Project Number:	549784.1.306	**Report Date:**	11/01/24

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461846
Project Number:	549784.1.306	**Report Date:**	11/01/24

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461846
Report Date: 11/01/24

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

68 Annual Book of ASTM (American Society for Testing and Materials) Standards following extraction by SW-846 EPA Method 9045C under the requirements of MADEP BWSC, WSC-CAM-VIB. August 2004.

107 Calculation method.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

135 Method for the Determination of Extractable Petroleum Hydrocarbons (EPH), MassDEP, December 2019, Revision 2.1 with QC Requirements & Performance Standards for the Analysis of EPH under the Massachusetts Contingency Plan, WSC-CAM-IVB, March 1, 2020.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine, 2,6-Dichlorophenol.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/23/24

ALPHA Job #: L2461846

Westborough, MA
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: TRC
Address: 63 Marginal Way, Fourth Floor
Portland, ME 04101
Phone: 207-719-5576
Fax:
Email: zbonin@trccompanies.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Former GNP Mill
Project Location: East Millinocket, ME
Project #: 549784.1.306
Project Manager: Zachary Bonin
ALPHA Quote #: 29032

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 223128

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MEDEP // Refer to SSQAPP prepared by TRC	RAGs // Table K-Soil/Debris Waste Characterization (page 41 - 45)

Other Project Specific Requirements/Comments/Detection Limits:

Refer to SSQAPP for specific reporting limits and regulatory requirements.
Refer to SSQAPP for specific analytical methods.
SHORT HOLD TIME: pH and ORP
Please cc results to Nbarker@trccompanies.com

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done ☐ Not Needed ☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RCRA 8 Metals(3050B/6010D/7471B)	EPH Ranges & Targets (MADEP)	pH (Method 9045D)	Hex/Tri Chromium (3060A/7196A)	ORP (ASTM Method D 1498-00 Mod)								Sample Specific Comments	TOTAL # BOTTLES
61846-01	HB-1 (0-2')	10/23/24	9:15	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐		4
02	HB-2 (0-2')	10/23/24	11:00	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐		4
03	HB-3 (2-3')	10/23/24	11:50	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐		4
04	HB-4 (0-2')	10/23/24	10:40	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐		4
05	HB-5 (2-3')	10/23/24	9:50	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	MS/LAB DUP	4
06	HB-6 (0-2')	10/23/24	10:20	Soil	NB	☒	☒	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐		4
07	DUP-SOIL	10/23/24	12:50	Soil	NB	☒	☒	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐		4
05	HB-5(2-3')MS	10/23/24	9:50	Soil	NB	☒	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐		3
05	HB-5(2-3')LAB DUP	10/23/24	9:50	Soil	NB	☒	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐		3
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
	Container Type					A	A	A	A	A	-	-	-	-	-	-	-		
	Preservative					A	A	A	A	A	-	-	-	-	-	-	-		

Relinquished By:	Date/Time	Received By:	Date/Time
N. Barker	10/23/24 15:22	Jenny Bailey Pace	10/23/24 15:22
Jenny Bailey Pace	10/23/24 17:00	Colby Rundell PACE	10/23/24 17:00
Colby Rundell	10/23/24 19:54	D Ellerd CAT	10/23/24 19:54
D Ellerd	10/23/24 22:15		10/23/24 22:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I)-NJ) (rev. 5-JAN-12)

ANALYTICAL REPORT

Lab Number:	L2461852
Client:	TRC Environmental Corp 63 Marginal Way, 4th Floor Portland, ME 04101
ATTN:	Zachary Bonin
Phone:	(207) 205-2830
Project Name:	FORMER GNP MILL
Project Number:	549784.1.306
Report Date:	11/01/24

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2461852-01	WC-1	SOIL	EAST MILLINOCKET, ME	10/23/24 12:40	10/23/24
L2461852-02	WC-2	SOIL	EAST MILLINOCKET, ME	10/23/24 13:10	10/23/24
L2461852-03	DUP-WC	SOIL	EAST MILLINOCKET, ME	10/23/24 13:40	10/23/24
L2461852-04	TRIP BLANK	SOIL	EAST MILLINOCKET, ME	10/23/24 00:00	10/23/24
L2461852-05	WC-1 (VOC)	SOIL	EAST MILLINOCKET, ME	10/23/24 12:40	10/23/24
L2461852-06	WC-2 (VOC)	SOIL	EAST MILLINOCKET, ME	10/23/24 13:10	10/23/24
L2461852-07	DUP-WC (VOC)	SOIL	EAST MILLINOCKET, ME	10/23/24 13:40	10/23/24

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461852
Project Number:	549784.1.306	**Report Date:**	11/01/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: FORMER GNP MILL **Lab Number:** L2461852
Project Number: 549784.1.306 **Report Date:** 11/01/24

Case Narrative (continued)

Semivolatile Organics

L2461852-01: The surrogate recovery is outside the individual acceptance criteria for 2-fluorobiphenyl (24%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

L2461852-02D: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

L2461852-02D: The sample was re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

L2461852-02D: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%) and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

L2461852-03D: The sample has elevated detection limits due to the dilution required by the sample matrix.

The WG1990058-3 LCS recoveries, associated with L2461852-01, -02D, and -03D, are below the acceptance criteria for hexachlorocyclopentadiene (10%/12%), aniline (33%34%) and 4,6-dinitro-o-cresol (LCS at 9%); however, they have been identified as "difficult" analytes. The results of the associated samples are reported.

PCBs

L2461852-02: The surrogate recovery is outside the individual acceptance criteria for decachlorobiphenyl (167%), but within the overall method allowances. The results of the original analysis are reported; however, all associated compounds are considered to have a potential bias.

WG1989915: An MS/MSD was not analyzed because the dilution required by the native sample would have caused the spike compounds to be diluted below the range of calibration.

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461852
Project Number:	549784.1.306	**Report Date:**	11/01/24

Case Narrative (continued)

Pesticides

L2461852-02: The surrogate recoveries are above the acceptance criteria for decachlorobiphenyl (10800%, 18400%). Since the sample was non-detect for all associated target analytes, re-analysis was not required.

Total Metals

L2461852-01, -02 and -03 : The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1988662-30 MS recovery, performed on L2461852-02, is outside the acceptance criteria for arsenic (130%), A post digestion spike was performed and was within acceptance criteria.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 11/01/24

ORGANICS

VOLATILES

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00
Client ID: TRIP BLANK Date Received: 10/23/24
Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:45
Analyst: JIC
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.0	--	1
1,1-Dichloroethane	ND		ug/kg	1.0	--	1
Chloroform	ND		ug/kg	1.5	--	1
Carbon tetrachloride	ND		ug/kg	1.0	--	1
1,2-Dichloropropane	ND		ug/kg	1.0	--	1
Dibromochloromethane	ND		ug/kg	1.0	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	--	1
Tetrachloroethene	ND		ug/kg	0.50	--	1
Chlorobenzene	ND		ug/kg	0.50	--	1
Trichlorofluoromethane	ND		ug/kg	4.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.0	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	--	1
Bromodichloromethane	ND		ug/kg	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--	1
1,1-Dichloropropene	ND		ug/kg	0.50	--	1
Bromoform	ND		ug/kg	4.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--	1
Benzene	ND		ug/kg	0.50	--	1
Toluene	ND		ug/kg	1.0	--	1
Ethylbenzene	ND		ug/kg	1.0	--	1
Chloromethane	ND		ug/kg	4.0	--	1
Bromomethane	ND		ug/kg	2.0	--	1
Vinyl chloride	ND		ug/kg	1.0	--	1
Chloroethane	ND		ug/kg	2.0	--	1
1,1-Dichloroethene	ND		ug/kg	1.0	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00

Client ID: TRIP BLANK Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.50	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	--	1
Methyl tert butyl ether	ND		ug/kg	2.0	--	1
p/m-Xylene	ND		ug/kg	2.0	--	1
o-Xylene	ND		ug/kg	1.0	--	1
Xylenes, Total	ND		ug/kg	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--	1
Dibromomethane	ND		ug/kg	2.0	--	1
1,4-Dichlorobutane	ND		ug/kg	10	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	--	1
Styrene	ND		ug/kg	1.0	--	1
Dichlorodifluoromethane	ND		ug/kg	10	--	1
Acetone	ND		ug/kg	25	--	1
Carbon disulfide	ND		ug/kg	10	--	1
2-Butanone	ND		ug/kg	10	--	1
Vinyl acetate	ND		ug/kg	10	--	1
4-Methyl-2-pentanone	ND		ug/kg	10	--	1
2-Hexanone	ND		ug/kg	10	--	1
Ethyl methacrylate	ND		ug/kg	10	--	1
Acrylonitrile	ND		ug/kg	4.0	--	1
Bromochloromethane	ND		ug/kg	2.0	--	1
Tetrahydrofuran	ND		ug/kg	4.0	--	1
2,2-Dichloropropane	ND		ug/kg	2.0	--	1
1,2-Dibromoethane	ND		ug/kg	1.0	--	1
1,3-Dichloropropane	ND		ug/kg	2.0	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--	1
Bromobenzene	ND		ug/kg	2.0	--	1
n-Butylbenzene	ND		ug/kg	1.0	--	1
sec-Butylbenzene	ND		ug/kg	1.0	--	1
tert-Butylbenzene	ND		ug/kg	2.0	--	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	--	1
o-Chlorotoluene	ND		ug/kg	2.0	--	1
p-Chlorotoluene	ND		ug/kg	2.0	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00

Client ID: TRIP BLANK Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Hexachlorobutadiene	ND		ug/kg	4.0	--	1
Isopropylbenzene	ND		ug/kg	1.0	--	1
p-Isopropyltoluene	ND		ug/kg	1.0	--	1
Naphthalene	ND		ug/kg	4.0	--	1
n-Propylbenzene	ND		ug/kg	1.0	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--	1
Ethyl ether	ND		ug/kg	2.0	--	1
Methyl Acetate	ND		ug/kg	4.0	--	1
Ethyl Acetate	ND		ug/kg	10	--	1
Diisopropyl Ether	ND		ug/kg	2.0	--	1
Cyclohexane	ND		ug/kg	10	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	--	1
1,4-Dioxane	ND		ug/kg	80	--	1
Methyl cyclohexane	ND		ug/kg	4.0	--	1
Freon-113	ND		ug/kg	4.0	--	1
p-Diethylbenzene	ND		ug/kg	2.0	--	1
p-Ethyltoluene	ND		ug/kg	2.0	--	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	102		70-130

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00
Client ID: TRIP BLANK Date Received: 10/23/24
Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/28/24 13:11
Analyst: JIC
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	250	--	1
1,1-Dichloroethane	ND		ug/kg	50	--	1
Chloroform	ND		ug/kg	75	--	1
Carbon tetrachloride	ND		ug/kg	50	--	1
1,2-Dichloropropane	ND		ug/kg	50	--	1
Dibromochloromethane	ND		ug/kg	50	--	1
1,1,2-Trichloroethane	ND		ug/kg	50	--	1
Tetrachloroethene	ND		ug/kg	25	--	1
Chlorobenzene	ND		ug/kg	25	--	1
Trichlorofluoromethane	ND		ug/kg	200	--	1
1,2-Dichloroethane	ND		ug/kg	50	--	1
1,1,1-Trichloroethane	ND		ug/kg	25	--	1
Bromodichloromethane	ND		ug/kg	25	--	1
trans-1,3-Dichloropropene	ND		ug/kg	50	--	1
cis-1,3-Dichloropropene	ND		ug/kg	25	--	1
1,3-Dichloropropene, Total	ND		ug/kg	25	--	1
1,1-Dichloropropene	ND		ug/kg	25	--	1
Bromoform	ND		ug/kg	200	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--	1
Benzene	ND		ug/kg	25	--	1
Toluene	ND		ug/kg	50	--	1
Ethylbenzene	ND		ug/kg	50	--	1
Chloromethane	ND		ug/kg	200	--	1
Bromomethane	ND		ug/kg	100	--	1
Vinyl chloride	ND		ug/kg	50	--	1
Chloroethane	ND		ug/kg	100	--	1
1,1-Dichloroethene	ND		ug/kg	50	--	1
trans-1,2-Dichloroethene	ND		ug/kg	75	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00

Client ID: TRIP BLANK Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	25	--	1
1,2-Dichlorobenzene	ND		ug/kg	100	--	1
1,3-Dichlorobenzene	ND		ug/kg	100	--	1
1,4-Dichlorobenzene	ND		ug/kg	100	--	1
Methyl tert butyl ether	ND		ug/kg	100	--	1
p/m-Xylene	ND		ug/kg	100	--	1
o-Xylene	ND		ug/kg	50	--	1
Xylenes, Total	ND		ug/kg	50	--	1
cis-1,2-Dichloroethene	ND		ug/kg	50	--	1
1,2-Dichloroethene, Total	ND		ug/kg	50	--	1
Dibromomethane	ND		ug/kg	100	--	1
1,4-Dichlorobutane	ND		ug/kg	500	--	1
1,2,3-Trichloropropane	ND		ug/kg	100	--	1
Styrene	ND		ug/kg	50	--	1
Dichlorodifluoromethane	ND		ug/kg	500	--	1
Acetone	ND		ug/kg	500	--	1
Carbon disulfide	ND		ug/kg	500	--	1
2-Butanone	ND		ug/kg	500	--	1
Vinyl acetate	ND		ug/kg	500	--	1
4-Methyl-2-pentanone	ND		ug/kg	500	--	1
2-Hexanone	ND		ug/kg	500	--	1
Ethyl methacrylate	ND		ug/kg	500	--	1
Acrylonitrile	ND		ug/kg	200	--	1
Bromochloromethane	ND		ug/kg	100	--	1
Tetrahydrofuran	ND		ug/kg	200	--	1
2,2-Dichloropropane	ND		ug/kg	100	--	1
1,2-Dibromoethane	ND		ug/kg	50	--	1
1,3-Dichloropropane	ND		ug/kg	100	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--	1
Bromobenzene	ND		ug/kg	100	--	1
n-Butylbenzene	ND		ug/kg	50	--	1
sec-Butylbenzene	ND		ug/kg	50	--	1
tert-Butylbenzene	ND		ug/kg	100	--	1
1,3,5-Trichlorobenzene	ND		ug/kg	100	--	1
o-Chlorotoluene	ND		ug/kg	100	--	1
p-Chlorotoluene	ND		ug/kg	100	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-04 Date Collected: 10/23/24 00:00

Client ID: TRIP BLANK Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Hexachlorobutadiene	ND		ug/kg	200	--	1
Isopropylbenzene	ND		ug/kg	50	--	1
p-Isopropyltoluene	ND		ug/kg	50	--	1
Naphthalene	ND		ug/kg	200	--	1
n-Propylbenzene	ND		ug/kg	50	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	100	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	100	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	100	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	100	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	--	1
Ethyl ether	ND		ug/kg	100	--	1
Methyl Acetate	ND		ug/kg	200	--	1
Ethyl Acetate	ND		ug/kg	500	--	1
Diisopropyl Ether	ND		ug/kg	100	--	1
Cyclohexane	ND		ug/kg	500	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--	1
1,4-Dioxane	ND		ug/kg	4000	--	1
Methyl cyclohexane	ND		ug/kg	200	--	1
Freon-113	ND		ug/kg	200	--	1
p-Diethylbenzene	ND		ug/kg	100	--	1
p-Ethyltoluene	ND		ug/kg	100	--	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	98		70-130

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-05 Date Collected: 10/23/24 12:40
Client ID: WC-1 (VOC) Date Received: 10/23/24
Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/28/24 17:02
Analyst: JIC
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.2	--	1
1,1-Dichloroethane	ND		ug/kg	1.2	--	1
Chloroform	ND		ug/kg	1.9	--	1
Carbon tetrachloride	ND		ug/kg	1.2	--	1
1,2-Dichloropropane	ND		ug/kg	1.2	--	1
Dibromochloromethane	ND		ug/kg	1.2	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	--	1
Tetrachloroethene	ND		ug/kg	0.62	--	1
Chlorobenzene	ND		ug/kg	0.62	--	1
Trichlorofluoromethane	ND		ug/kg	5.0	--	1
1,2-Dichloroethane	ND		ug/kg	1.2	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	--	1
Bromodichloromethane	ND		ug/kg	0.62	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	--	1
1,1-Dichloropropene	ND		ug/kg	0.62	--	1
Bromoform	ND		ug/kg	5.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	--	1
Benzene	ND		ug/kg	0.62	--	1
Toluene	ND		ug/kg	1.2	--	1
Ethylbenzene	ND		ug/kg	1.2	--	1
Chloromethane	ND		ug/kg	5.0	--	1
Bromomethane	ND		ug/kg	2.5	--	1
Vinyl chloride	ND		ug/kg	1.2	--	1
Chloroethane	ND		ug/kg	2.5	--	1
1,1-Dichloroethene	ND		ug/kg	1.2	--	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-05 Date Collected: 10/23/24 12:40

Client ID: WC-1 (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.62	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	--	1
Methyl tert butyl ether	ND		ug/kg	2.5	--	1
p/m-Xylene	ND		ug/kg	2.5	--	1
o-Xylene	ND		ug/kg	1.2	--	1
Xylenes, Total	ND		ug/kg	1.2	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	--	1
Dibromomethane	ND		ug/kg	2.5	--	1
1,4-Dichlorobutane	ND		ug/kg	12	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	--	1
Styrene	ND		ug/kg	1.2	--	1
Dichlorodifluoromethane	ND		ug/kg	12	--	1
Acetone	ND		ug/kg	31	--	1
Carbon disulfide	ND		ug/kg	12	--	1
2-Butanone	ND		ug/kg	12	--	1
Vinyl acetate	ND		ug/kg	12	--	1
4-Methyl-2-pentanone	ND		ug/kg	12	--	1
2-Hexanone	ND		ug/kg	12	--	1
Ethyl methacrylate	ND		ug/kg	12	--	1
Acrylonitrile	ND		ug/kg	5.0	--	1
Bromochloromethane	ND		ug/kg	2.5	--	1
Tetrahydrofuran	ND		ug/kg	5.0	--	1
2,2-Dichloropropane	ND		ug/kg	2.5	--	1
1,2-Dibromoethane	ND		ug/kg	1.2	--	1
1,3-Dichloropropane	ND		ug/kg	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	--	1
Bromobenzene	ND		ug/kg	2.5	--	1
n-Butylbenzene	ND		ug/kg	1.2	--	1
sec-Butylbenzene	ND		ug/kg	1.2	--	1
tert-Butylbenzene	ND		ug/kg	2.5	--	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.5	--	1
o-Chlorotoluene	ND		ug/kg	2.5	--	1
p-Chlorotoluene	ND		ug/kg	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-05 Date Collected: 10/23/24 12:40

Client ID: WC-1 (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Hexachlorobutadiene	ND		ug/kg	5.0	--	1
Isopropylbenzene	ND		ug/kg	1.2	--	1
p-Isopropyltoluene	ND		ug/kg	1.2	--	1
Naphthalene	ND		ug/kg	5.0	--	1
n-Propylbenzene	ND		ug/kg	1.2	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	--	1
Ethyl ether	ND		ug/kg	2.5	--	1
Methyl Acetate	ND		ug/kg	5.0	--	1
Ethyl Acetate	ND		ug/kg	12	--	1
Diisopropyl Ether	ND		ug/kg	2.5	--	1
Cyclohexane	ND		ug/kg	12	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.5	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.5	--	1
1,4-Dioxane	ND		ug/kg	99	--	1
Methyl cyclohexane	ND		ug/kg	5.0	--	1
Freon-113	ND		ug/kg	5.0	--	1
p-Diethylbenzene	ND		ug/kg	2.5	--	1
p-Ethyltoluene	ND		ug/kg	2.5	--	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	104		70-130

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-06
Client ID: WC-2 (VOC)
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/28/24 21:20
Analyst: JIC
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Methylene chloride	ND		ug/kg	500	--	1
1,1-Dichloroethane	ND		ug/kg	100	--	1
Chloroform	ND		ug/kg	150	--	1
Carbon tetrachloride	ND		ug/kg	100	--	1
1,2-Dichloropropane	ND		ug/kg	100	--	1
Dibromochloromethane	ND		ug/kg	100	--	1
1,1,2-Trichloroethane	ND		ug/kg	100	--	1
Tetrachloroethene	ND		ug/kg	50	--	1
Chlorobenzene	ND		ug/kg	50	--	1
Trichlorofluoromethane	ND		ug/kg	400	--	1
1,2-Dichloroethane	ND		ug/kg	100	--	1
1,1,1-Trichloroethane	ND		ug/kg	50	--	1
Bromodichloromethane	ND		ug/kg	50	--	1
trans-1,3-Dichloropropene	ND		ug/kg	100	--	1
cis-1,3-Dichloropropene	ND		ug/kg	50	--	1
1,3-Dichloropropene, Total	ND		ug/kg	50	--	1
1,1-Dichloropropene	ND		ug/kg	50	--	1
Bromoform	ND		ug/kg	400	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	50	--	1
Benzene	ND		ug/kg	50	--	1
Toluene	ND		ug/kg	100	--	1
Ethylbenzene	ND		ug/kg	100	--	1
Chloromethane	ND		ug/kg	400	--	1
Bromomethane	ND		ug/kg	200	--	1
Vinyl chloride	ND		ug/kg	100	--	1
Chloroethane	ND		ug/kg	200	--	1
1,1-Dichloroethene	ND		ug/kg	100	--	1
trans-1,2-Dichloroethene	ND		ug/kg	150	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-06 Date Collected: 10/23/24 13:10

Client ID: WC-2 (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Trichloroethene	ND		ug/kg	50	--	1
1,2-Dichlorobenzene	ND		ug/kg	200	--	1
1,3-Dichlorobenzene	ND		ug/kg	200	--	1
1,4-Dichlorobenzene	ND		ug/kg	200	--	1
Methyl tert butyl ether	ND		ug/kg	200	--	1
p/m-Xylene	ND		ug/kg	200	--	1
o-Xylene	ND		ug/kg	100	--	1
Xylenes, Total	ND		ug/kg	100	--	1
cis-1,2-Dichloroethene	ND		ug/kg	100	--	1
1,2-Dichloroethene, Total	ND		ug/kg	100	--	1
Dibromomethane	ND		ug/kg	200	--	1
1,4-Dichlorobutane	ND		ug/kg	1000	--	1
1,2,3-Trichloropropane	ND		ug/kg	200	--	1
Styrene	ND		ug/kg	100	--	1
Dichlorodifluoromethane	ND		ug/kg	1000	--	1
Acetone	ND		ug/kg	1000	--	1
Carbon disulfide	ND		ug/kg	1000	--	1
2-Butanone	ND		ug/kg	1000	--	1
Vinyl acetate	ND		ug/kg	1000	--	1
4-Methyl-2-pentanone	ND		ug/kg	1000	--	1
2-Hexanone	ND		ug/kg	1000	--	1
Ethyl methacrylate	ND		ug/kg	1000	--	1
Acrylonitrile	ND		ug/kg	400	--	1
Bromochloromethane	ND		ug/kg	200	--	1
Tetrahydrofuran	ND		ug/kg	400	--	1
2,2-Dichloropropane	ND		ug/kg	200	--	1
1,2-Dibromoethane	ND		ug/kg	100	--	1
1,3-Dichloropropane	ND		ug/kg	200	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	50	--	1
Bromobenzene	ND		ug/kg	200	--	1
n-Butylbenzene	ND		ug/kg	100	--	1
sec-Butylbenzene	ND		ug/kg	100	--	1
tert-Butylbenzene	ND		ug/kg	200	--	1
1,3,5-Trichlorobenzene	ND		ug/kg	200	--	1
o-Chlorotoluene	ND		ug/kg	200	--	1
p-Chlorotoluene	ND		ug/kg	200	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-06 Date Collected: 10/23/24 13:10

Client ID: WC-2 (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Hexachlorobutadiene	ND		ug/kg	400	--	1
Isopropylbenzene	ND		ug/kg	100	--	1
p-Isopropyltoluene	ND		ug/kg	100	--	1
Naphthalene	32000	E	ug/kg	400	--	1
n-Propylbenzene	ND		ug/kg	100	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	200	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	200	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	200	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	500	--	1
Ethyl ether	ND		ug/kg	200	--	1
Methyl Acetate	ND		ug/kg	400	--	1
Ethyl Acetate	ND		ug/kg	1000	--	1
Diisopropyl Ether	ND		ug/kg	200	--	1
Cyclohexane	ND		ug/kg	1000	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	200	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	200	--	1
1,4-Dioxane	ND		ug/kg	8000	--	1
Methyl cyclohexane	ND		ug/kg	400	--	1
Freon-113	ND		ug/kg	400	--	1
p-Diethylbenzene	210		ug/kg	200	--	1
p-Ethyltoluene	ND		ug/kg	200	--	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	200	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-06 D
Client ID: WC-2 (VOC)
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/29/24 20:19
Analyst: LAC
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 High - Westborough Lab						
Naphthalene	39000		ug/kg	2000	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	101		70-130

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-07
Client ID: DUP-WC (VOC)
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260D
Analytical Date: 10/28/24 17:27
Analyst: JIC
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	6.9	--	1
1,1-Dichloroethane	ND		ug/kg	1.4	--	1
Chloroform	ND		ug/kg	2.1	--	1
Carbon tetrachloride	ND		ug/kg	1.4	--	1
1,2-Dichloropropane	ND		ug/kg	1.4	--	1
Dibromochloromethane	ND		ug/kg	1.4	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	--	1
Tetrachloroethene	ND		ug/kg	0.69	--	1
Chlorobenzene	ND		ug/kg	0.69	--	1
Trichlorofluoromethane	ND		ug/kg	5.5	--	1
1,2-Dichloroethane	ND		ug/kg	1.4	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.69	--	1
Bromodichloromethane	ND		ug/kg	0.69	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.4	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.69	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.69	--	1
1,1-Dichloropropene	ND		ug/kg	0.69	--	1
Bromoform	ND		ug/kg	5.5	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.69	--	1
Benzene	ND		ug/kg	0.69	--	1
Toluene	ND		ug/kg	1.4	--	1
Ethylbenzene	ND		ug/kg	1.4	--	1
Chloromethane	ND		ug/kg	5.5	--	1
Bromomethane	ND		ug/kg	2.8	--	1
Vinyl chloride	ND		ug/kg	1.4	--	1
Chloroethane	ND		ug/kg	2.8	--	1
1,1-Dichloroethene	ND		ug/kg	1.4	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.1	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-07 Date Collected: 10/23/24 13:40

Client ID: DUP-WC (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.69	--	1
1,2-Dichlorobenzene	ND		ug/kg	2.8	--	1
1,3-Dichlorobenzene	ND		ug/kg	2.8	--	1
1,4-Dichlorobenzene	ND		ug/kg	2.8	--	1
Methyl tert butyl ether	ND		ug/kg	2.8	--	1
p/m-Xylene	ND		ug/kg	2.8	--	1
o-Xylene	ND		ug/kg	1.4	--	1
Xylenes, Total	ND		ug/kg	1.4	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.4	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.4	--	1
Dibromomethane	ND		ug/kg	2.8	--	1
1,4-Dichlorobutane	ND		ug/kg	14	--	1
1,2,3-Trichloropropane	ND		ug/kg	2.8	--	1
Styrene	ND		ug/kg	1.4	--	1
Dichlorodifluoromethane	ND		ug/kg	14	--	1
Acetone	ND		ug/kg	34	--	1
Carbon disulfide	ND		ug/kg	14	--	1
2-Butanone	ND		ug/kg	14	--	1
Vinyl acetate	ND		ug/kg	14	--	1
4-Methyl-2-pentanone	ND		ug/kg	14	--	1
2-Hexanone	ND		ug/kg	14	--	1
Ethyl methacrylate	ND		ug/kg	14	--	1
Acrylonitrile	ND		ug/kg	5.5	--	1
Bromochloromethane	ND		ug/kg	2.8	--	1
Tetrahydrofuran	ND		ug/kg	5.5	--	1
2,2-Dichloropropane	ND		ug/kg	2.8	--	1
1,2-Dibromoethane	ND		ug/kg	1.4	--	1
1,3-Dichloropropane	ND		ug/kg	2.8	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.69	--	1
Bromobenzene	ND		ug/kg	2.8	--	1
n-Butylbenzene	ND		ug/kg	1.4	--	1
sec-Butylbenzene	ND		ug/kg	1.4	--	1
tert-Butylbenzene	ND		ug/kg	2.8	--	1
1,3,5-Trichlorobenzene	ND		ug/kg	2.8	--	1
o-Chlorotoluene	ND		ug/kg	2.8	--	1
p-Chlorotoluene	ND		ug/kg	2.8	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.1	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-07 Date Collected: 10/23/24 13:40

Client ID: DUP-WC (VOC) Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Hexachlorobutadiene	ND		ug/kg	5.5	--	1
Isopropylbenzene	ND		ug/kg	1.4	--	1
p-Isopropyltoluene	ND		ug/kg	1.4	--	1
Naphthalene	ND		ug/kg	5.5	--	1
n-Propylbenzene	ND		ug/kg	1.4	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.8	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.8	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.8	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.8	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.9	--	1
Ethyl ether	ND		ug/kg	2.8	--	1
Methyl Acetate	ND		ug/kg	5.5	--	1
Ethyl Acetate	ND		ug/kg	14	--	1
Diisopropyl Ether	ND		ug/kg	2.8	--	1
Cyclohexane	ND		ug/kg	14	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.8	--	1
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.8	--	1
1,4-Dioxane	ND		ug/kg	110	--	1
Methyl cyclohexane	ND		ug/kg	5.5	--	1
Freon-113	ND		ug/kg	5.5	--	1
p-Diethylbenzene	ND		ug/kg	2.8	--	1
p-Ethyltoluene	ND		ug/kg	2.8	--	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.8	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	105		70-130

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04-05,07 Batch: WG1990435-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--
Trichloroethene	ND		ug/kg	0.50	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04-05,07 Batch: WG1990435-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,4-Dichlorobutane	ND		ug/kg	10	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
2-Butanone	ND		ug/kg	10	--
Vinyl acetate	ND		ug/kg	10	--
4-Methyl-2-pentanone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Ethyl methacrylate	ND		ug/kg	10	--
Acrylonitrile	ND		ug/kg	4.0	--
Bromochloromethane	ND		ug/kg	2.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04-05,07 Batch: WG1990435-5					
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
Ethyl ether	ND		ug/kg	2.0	--
Methyl Acetate	ND		ug/kg	4.0	--
Ethyl Acetate	ND		ug/kg	10	--
Diisopropyl Ether	ND		ug/kg	2.0	--
Cyclohexane	ND		ug/kg	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	--
1,4-Dioxane	ND		ug/kg	80	--
Methyl cyclohexane	ND		ug/kg	4.0	--
Freon-113	ND		ug/kg	4.0	--
p-Diethylbenzene	ND		ug/kg	2.0	--
p-Ethyltoluene	ND		ug/kg	2.0	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 04-05,07 Batch: WG1990435-5					
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04,06 Batch: WG1990436-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04,06 Batch: WG1990436-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,4-Dichlorobutane	ND		ug/kg	500	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
2-Butanone	ND		ug/kg	500	--
Vinyl acetate	ND		ug/kg	500	--
4-Methyl-2-pentanone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Ethyl methacrylate	ND		ug/kg	500	--
Acrylonitrile	ND		ug/kg	200	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04,06 Batch: WG1990436-5					
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
1,3,5-Trichlorobenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	--
Ethyl ether	ND		ug/kg	100	--
Methyl Acetate	ND		ug/kg	200	--
Ethyl Acetate	ND		ug/kg	500	--
Diisopropyl Ether	ND		ug/kg	100	--
Cyclohexane	ND		ug/kg	500	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--
Methyl cyclohexane	ND		ug/kg	200	--
Freon-113	ND		ug/kg	200	--
p-Diethylbenzene	ND		ug/kg	100	--
p-Ethyltoluene	ND		ug/kg	100	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/28/24 12:20
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 04,06 Batch: WG1990436-5					
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/29/24 12:05
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1990925-5					
Methylene chloride	ND		ug/kg	250	--
1,1-Dichloroethane	ND		ug/kg	50	--
Chloroform	ND		ug/kg	75	--
Carbon tetrachloride	ND		ug/kg	50	--
1,2-Dichloropropane	ND		ug/kg	50	--
Dibromochloromethane	ND		ug/kg	50	--
1,1,2-Trichloroethane	ND		ug/kg	50	--
Tetrachloroethene	ND		ug/kg	25	--
Chlorobenzene	ND		ug/kg	25	--
Trichlorofluoromethane	ND		ug/kg	200	--
1,2-Dichloroethane	ND		ug/kg	50	--
1,1,1-Trichloroethane	ND		ug/kg	25	--
Bromodichloromethane	ND		ug/kg	25	--
trans-1,3-Dichloropropene	ND		ug/kg	50	--
cis-1,3-Dichloropropene	ND		ug/kg	25	--
1,3-Dichloropropene, Total	ND		ug/kg	25	--
1,1-Dichloropropene	ND		ug/kg	25	--
Bromoform	ND		ug/kg	200	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	25	--
Benzene	ND		ug/kg	25	--
Toluene	ND		ug/kg	50	--
Ethylbenzene	ND		ug/kg	50	--
Chloromethane	ND		ug/kg	200	--
Bromomethane	ND		ug/kg	100	--
Vinyl chloride	ND		ug/kg	50	--
Chloroethane	ND		ug/kg	100	--
1,1-Dichloroethene	ND		ug/kg	50	--
trans-1,2-Dichloroethene	ND		ug/kg	75	--
Trichloroethene	ND		ug/kg	25	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/29/24 12:05
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1990925-5					
1,2-Dichlorobenzene	ND		ug/kg	100	--
1,3-Dichlorobenzene	ND		ug/kg	100	--
1,4-Dichlorobenzene	ND		ug/kg	100	--
Methyl tert butyl ether	ND		ug/kg	100	--
p/m-Xylene	ND		ug/kg	100	--
o-Xylene	ND		ug/kg	50	--
Xylenes, Total	ND		ug/kg	50	--
cis-1,2-Dichloroethene	ND		ug/kg	50	--
1,2-Dichloroethene, Total	ND		ug/kg	50	--
Dibromomethane	ND		ug/kg	100	--
1,4-Dichlorobutane	ND		ug/kg	500	--
1,2,3-Trichloropropane	ND		ug/kg	100	--
Styrene	ND		ug/kg	50	--
Dichlorodifluoromethane	ND		ug/kg	500	--
Acetone	ND		ug/kg	500	--
Carbon disulfide	ND		ug/kg	500	--
2-Butanone	ND		ug/kg	500	--
Vinyl acetate	ND		ug/kg	500	--
4-Methyl-2-pentanone	ND		ug/kg	500	--
2-Hexanone	ND		ug/kg	500	--
Ethyl methacrylate	ND		ug/kg	500	--
Acrylonitrile	ND		ug/kg	200	--
Bromochloromethane	ND		ug/kg	100	--
Tetrahydrofuran	ND		ug/kg	200	--
2,2-Dichloropropane	ND		ug/kg	100	--
1,2-Dibromoethane	ND		ug/kg	50	--
1,3-Dichloropropane	ND		ug/kg	100	--
1,1,1,2-Tetrachloroethane	ND		ug/kg	25	--
Bromobenzene	ND		ug/kg	100	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/29/24 12:05
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1990925-5					
n-Butylbenzene	ND		ug/kg	50	--
sec-Butylbenzene	ND		ug/kg	50	--
tert-Butylbenzene	ND		ug/kg	100	--
1,3,5-Trichlorobenzene	ND		ug/kg	100	--
o-Chlorotoluene	ND		ug/kg	100	--
p-Chlorotoluene	ND		ug/kg	100	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	150	--
Hexachlorobutadiene	ND		ug/kg	200	--
Isopropylbenzene	ND		ug/kg	50	--
p-Isopropyltoluene	ND		ug/kg	50	--
Naphthalene	ND		ug/kg	200	--
n-Propylbenzene	ND		ug/kg	50	--
1,2,3-Trichlorobenzene	ND		ug/kg	100	--
1,2,4-Trichlorobenzene	ND		ug/kg	100	--
1,3,5-Trimethylbenzene	ND		ug/kg	100	--
1,2,4-Trimethylbenzene	ND		ug/kg	100	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	250	--
Ethyl ether	ND		ug/kg	100	--
Methyl Acetate	ND		ug/kg	200	--
Ethyl Acetate	ND		ug/kg	500	--
Diisopropyl Ether	ND		ug/kg	100	--
Cyclohexane	ND		ug/kg	500	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	100	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	100	--
1,4-Dioxane	ND		ug/kg	4000	--
Methyl cyclohexane	ND		ug/kg	200	--
Freon-113	ND		ug/kg	200	--
p-Diethylbenzene	ND		ug/kg	100	--
p-Ethyltoluene	ND		ug/kg	100	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 10/29/24 12:05
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 High - Westborough Lab for sample(s): 06 Batch: WG1990925-5					
1,2,4,5-Tetramethylbenzene	ND		ug/kg	100	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	109		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	98		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04-05,07 Batch: WG1990435-3 WG1990435-4								
Methylene chloride	100		100		70-130	0		30
1,1-Dichloroethane	110		110		70-130	0		30
Chloroform	107		107		70-130	0		30
Carbon tetrachloride	106		106		70-130	0		30
1,2-Dichloropropane	110		112		70-130	2		30
Dibromochloromethane	108		108		70-130	0		30
1,1,2-Trichloroethane	105		106		70-130	1		30
Tetrachloroethene	109		108		70-130	1		30
Chlorobenzene	107		107		70-130	0		30
Trichlorofluoromethane	111		108		70-139	3		30
1,2-Dichloroethane	106		107		70-130	1		30
1,1,1-Trichloroethane	110		110		70-130	0		30
Bromodichloromethane	109		110		70-130	1		30
trans-1,3-Dichloropropene	109		110		70-130	1		30
cis-1,3-Dichloropropene	112		113		70-130	1		30
1,1-Dichloropropene	115		112		70-130	3		30
Bromoform	104		104		70-130	0		30
1,1,2,2-Tetrachloroethane	101		103		70-130	2		30
Benzene	111		110		70-130	1		30
Toluene	104		103		70-130	1		30
Ethylbenzene	108		107		70-130	1		30
Chloromethane	128		123		52-130	4		30
Bromomethane	124		121		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04-05,07 Batch: WG1990435-3 WG1990435-4								
Vinyl chloride	125		122		67-130	2		30
Chloroethane	125		123		50-151	2		30
1,1-Dichloroethene	107		107		65-135	0		30
trans-1,2-Dichloroethene	107		108		70-130	1		30
Trichloroethene	112		111		70-130	1		30
1,2-Dichlorobenzene	107		105		70-130	2		30
1,3-Dichlorobenzene	109		107		70-130	2		30
1,4-Dichlorobenzene	108		106		70-130	2		30
Methyl tert butyl ether	102		104		66-130	2		30
p/m-Xylene	112		111		70-130	1		30
o-Xylene	110		111		70-130	1		30
cis-1,2-Dichloroethene	107		105		70-130	2		30
Dibromomethane	105		107		70-130	2		30
1,4-Dichlorobutane	105		107		70-130	2		30
1,2,3-Trichloropropane	102		100		68-130	2		30
Styrene	112		112		70-130	0		30
Dichlorodifluoromethane	111		111		30-146	0		30
Acetone	116		108		54-140	7		30
Carbon disulfide	106		102		59-130	4		30
2-Butanone	129		130		70-130	1		30
Vinyl acetate	115		114		70-130	1		30
4-Methyl-2-pentanone	104		105		70-130	1		30
2-Hexanone	127		128		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04-05,07 Batch: WG1990435-3 WG1990435-4								
Ethyl methacrylate	100		103		70-130	3		30
Acrylonitrile	110		111		70-130	1		30
Bromochloromethane	108		106		70-130	2		30
Tetrahydrofuran	111		98		66-130	12		30
2,2-Dichloropropane	112		109		70-130	3		30
1,2-Dibromoethane	103		104		70-130	1		30
1,3-Dichloropropane	105		106		69-130	1		30
1,1,1,2-Tetrachloroethane	110		110		70-130	0		30
Bromobenzene	103		103		70-130	0		30
n-Butylbenzene	118		112		70-130	5		30
sec-Butylbenzene	111		109		70-130	2		30
tert-Butylbenzene	107		106		70-130	1		30
1,3,5-Trichlorobenzene	113		108		70-139	5		30
o-Chlorotoluene	110		121		70-130	10		30
p-Chlorotoluene	106		104		70-130	2		30
1,2-Dibromo-3-chloropropane	97		98		68-130	1		30
Hexachlorobutadiene	109		106		67-130	3		30
Isopropylbenzene	107		106		70-130	1		30
p-Isopropyltoluene	112		109		70-130	3		30
Naphthalene	100		100		70-130	0		30
n-Propylbenzene	110		108		70-130	2		30
1,2,3-Trichlorobenzene	106		105		70-130	1		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 04-05,07 Batch: WG1990435-3 WG1990435-4								
1,3,5-Trimethylbenzene	108		106		70-130	2		30
1,2,4-Trimethylbenzene	109		107		70-130	2		30
trans-1,4-Dichloro-2-butene	110		114		70-130	4		30
Ethyl ether	104		106		67-130	2		30
Methyl Acetate	109		109		65-130	0		30
Ethyl Acetate	108		110		70-130	2		30
Diisopropyl Ether	115		114		66-130	1		30
Cyclohexane	112		111		70-130	1		30
Ethyl-Tert-Butyl-Ether	107		108		70-130	1		30
Tertiary-Amyl Methyl Ether	104		106		70-130	2		30
1,4-Dioxane	88		91		65-136	3		30
Methyl cyclohexane	108		108		70-130	0		30
Freon-113	106		105		70-130	1		30
p-Diethylbenzene	112		108		70-130	4		30
p-Ethyltoluene	109		107		70-130	2		30
1,2,4,5-Tetramethylbenzene	110		107		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	100		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04,06 Batch: WG1990436-3 WG1990436-4								
Methylene chloride	100		100		70-130	0		30
1,1-Dichloroethane	110		110		70-130	0		30
Chloroform	107		107		70-130	0		30
Carbon tetrachloride	106		106		70-130	0		30
1,2-Dichloropropane	110		112		70-130	2		30
Dibromochloromethane	108		108		70-130	0		30
1,1,2-Trichloroethane	105		106		70-130	1		30
Tetrachloroethene	109		108		70-130	1		30
Chlorobenzene	107		107		70-130	0		30
Trichlorofluoromethane	111		108		70-139	3		30
1,2-Dichloroethane	106		107		70-130	1		30
1,1,1-Trichloroethane	110		110		70-130	0		30
Bromodichloromethane	109		110		70-130	1		30
trans-1,3-Dichloropropene	109		110		70-130	1		30
cis-1,3-Dichloropropene	112		113		70-130	1		30
1,1-Dichloropropene	115		112		70-130	3		30
Bromoform	104		104		70-130	0		30
1,1,2,2-Tetrachloroethane	101		103		70-130	2		30
Benzene	111		110		70-130	1		30
Toluene	104		103		70-130	1		30
Ethylbenzene	108		107		70-130	1		30
Chloromethane	128		123		52-130	4		30
Bromomethane	124		121		57-147	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04,06 Batch: WG1990436-3 WG1990436-4								
Vinyl chloride	125		122		67-130	2		30
Chloroethane	125		123		50-151	2		30
1,1-Dichloroethene	107		107		65-135	0		30
trans-1,2-Dichloroethene	107		108		70-130	1		30
Trichloroethene	112		111		70-130	1		30
1,2-Dichlorobenzene	107		105		70-130	2		30
1,3-Dichlorobenzene	109		107		70-130	2		30
1,4-Dichlorobenzene	108		106		70-130	2		30
Methyl tert butyl ether	102		104		66-130	2		30
p/m-Xylene	112		111		70-130	1		30
o-Xylene	110		111		70-130	1		30
cis-1,2-Dichloroethene	107		105		70-130	2		30
Dibromomethane	105		107		70-130	2		30
1,4-Dichlorobutane	105		107		70-130	2		30
1,2,3-Trichloropropane	102		100		68-130	2		30
Styrene	112		112		70-130	0		30
Dichlorodifluoromethane	111		111		30-146	0		30
Acetone	116		108		54-140	7		30
Carbon disulfide	106		102		59-130	4		30
2-Butanone	129		130		70-130	1		30
Vinyl acetate	115		114		70-130	1		30
4-Methyl-2-pentanone	104		105		70-130	1		30
2-Hexanone	127		128		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04,06 Batch: WG1990436-3 WG1990436-4								
Ethyl methacrylate	100		103		70-130	3		30
Acrylonitrile	110		111		70-130	1		30
Bromochloromethane	108		106		70-130	2		30
Tetrahydrofuran	111		98		66-130	12		30
2,2-Dichloropropane	112		109		70-130	3		30
1,2-Dibromoethane	103		104		70-130	1		30
1,3-Dichloropropane	105		106		69-130	1		30
1,1,1,2-Tetrachloroethane	110		110		70-130	0		30
Bromobenzene	103		103		70-130	0		30
n-Butylbenzene	118		112		70-130	5		30
sec-Butylbenzene	111		109		70-130	2		30
tert-Butylbenzene	107		106		70-130	1		30
1,3,5-Trichlorobenzene	113		108		70-139	5		30
o-Chlorotoluene	110		121		70-130	10		30
p-Chlorotoluene	106		104		70-130	2		30
1,2-Dibromo-3-chloropropane	97		98		68-130	1		30
Hexachlorobutadiene	109		106		67-130	3		30
Isopropylbenzene	107		106		70-130	1		30
p-Isopropyltoluene	112		109		70-130	3		30
Naphthalene	100		100		70-130	0		30
n-Propylbenzene	110		108		70-130	2		30
1,2,3-Trichlorobenzene	106		105		70-130	1		30
1,2,4-Trichlorobenzene	109		105		70-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 04,06 Batch: WG1990436-3 WG1990436-4								
1,3,5-Trimethylbenzene	108		106		70-130	2		30
1,2,4-Trimethylbenzene	109		107		70-130	2		30
trans-1,4-Dichloro-2-butene	110		114		70-130	4		30
Ethyl ether	104		106		67-130	2		30
Methyl Acetate	109		109		65-130	0		30
Ethyl Acetate	108		110		70-130	2		30
Diisopropyl Ether	115		114		66-130	1		30
Cyclohexane	112		111		70-130	1		30
Ethyl-Tert-Butyl-Ether	107		108		70-130	1		30
Tertiary-Amyl Methyl Ether	104		106		70-130	2		30
1,4-Dioxane	88		91		65-136	3		30
Methyl cyclohexane	108		108		70-130	0		30
Freon-113	106		105		70-130	1		30
p-Diethylbenzene	112		108		70-130	4		30
p-Ethyltoluene	109		107		70-130	2		30
1,2,4,5-Tetramethylbenzene	110		107		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		99		70-130
Toluene-d8	100		101		70-130
4-Bromofluorobenzene	95		96		70-130
Dibromofluoromethane	100		102		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1990925-3 WG1990925-4								
Methylene chloride	90		90		70-130	0		30
1,1-Dichloroethane	97		99		70-130	2		30
Chloroform	94		95		70-130	1		30
Carbon tetrachloride	87		93		70-130	7		30
1,2-Dichloropropane	99		100		70-130	1		30
Dibromochloromethane	99		99		70-130	0		30
1,1,2-Trichloroethane	105		104		70-130	1		30
Tetrachloroethene	89		93		70-130	4		30
Chlorobenzene	94		97		70-130	3		30
Trichlorofluoromethane	94		102		70-139	8		30
1,2-Dichloroethane	98		96		70-130	2		30
1,1,1-Trichloroethane	90		94		70-130	4		30
Bromodichloromethane	94		96		70-130	2		30
trans-1,3-Dichloropropene	105		106		70-130	1		30
cis-1,3-Dichloropropene	101		101		70-130	0		30
1,1-Dichloropropene	96		100		70-130	4		30
Bromoform	95		96		70-130	1		30
1,1,2,2-Tetrachloroethane	110		106		70-130	4		30
Benzene	95		97		70-130	2		30
Toluene	94		96		70-130	2		30
Ethylbenzene	95		98		70-130	3		30
Chloromethane	108		108		52-130	0		30
Bromomethane	97		99		57-147	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1990925-3 WG1990925-4								
Vinyl chloride	95		98		67-130	3		30
Chloroethane	98		84		50-151	15		30
1,1-Dichloroethene	92		95		65-135	3		30
trans-1,2-Dichloroethene	91		96		70-130	5		30
Trichloroethene	92		97		70-130	5		30
1,2-Dichlorobenzene	101		100		70-130	1		30
1,3-Dichlorobenzene	100		100		70-130	0		30
1,4-Dichlorobenzene	97		98		70-130	1		30
Methyl tert butyl ether	101		100		66-130	1		30
p/m-Xylene	96		99		70-130	3		30
o-Xylene	94		97		70-130	3		30
cis-1,2-Dichloroethene	94		96		70-130	2		30
Dibromomethane	96		95		70-130	1		30
1,4-Dichlorobutane	112		109		70-130	3		30
1,2,3-Trichloropropane	110		106		68-130	4		30
Styrene	98		99		70-130	1		30
Dichlorodifluoromethane	117		122		30-146	4		30
Acetone	101		96		54-140	5		30
Carbon disulfide	91		96		59-130	5		30
2-Butanone	99		97		70-130	2		30
Vinyl acetate	108		104		70-130	4		30
4-Methyl-2-pentanone	101		98		70-130	3		30
2-Hexanone	105		93		70-130	12		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1990925-3 WG1990925-4								
Ethyl methacrylate	100		99		70-130	1		30
Acrylonitrile	107		103		70-130	4		30
Bromochloromethane	98		92		70-130	6		30
Tetrahydrofuran	126		106		66-130	17		30
2,2-Dichloropropane	90		94		70-130	4		30
1,2-Dibromoethane	106		105		70-130	1		30
1,3-Dichloropropane	104		103		69-130	1		30
1,1,1,2-Tetrachloroethane	93		96		70-130	3		30
Bromobenzene	94		96		70-130	2		30
n-Butylbenzene	107		109		70-130	2		30
sec-Butylbenzene	100		102		70-130	2		30
tert-Butylbenzene	98		99		70-130	1		30
1,3,5-Trichlorobenzene	99		100		70-139	1		30
o-Chlorotoluene	104		116		70-130	11		30
p-Chlorotoluene	102		103		70-130	1		30
1,2-Dibromo-3-chloropropane	91		88		68-130	3		30
Hexachlorobutadiene	87		89		67-130	2		30
Isopropylbenzene	100		102		70-130	2		30
p-Isopropyltoluene	102		103		70-130	1		30
Naphthalene	106		104		70-130	2		30
n-Propylbenzene	103		105		70-130	2		30
1,2,3-Trichlorobenzene	102		101		70-130	1		30
1,2,4-Trichlorobenzene	101		101		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 High - Westborough Lab Associated sample(s): 06 Batch: WG1990925-3 WG1990925-4								
1,3,5-Trimethylbenzene	100		100		70-130	0		30
1,2,4-Trimethylbenzene	102		102		70-130	0		30
trans-1,4-Dichloro-2-butene	103		108		70-130	5		30
Ethyl ether	104		100		67-130	4		30
Methyl Acetate	106		104		65-130	2		30
Ethyl Acetate	112		109		70-130	3		30
Diisopropyl Ether	107		106		66-130	1		30
Cyclohexane	99		104		70-130	5		30
Ethyl-Tert-Butyl-Ether	104		104		70-130	0		30
Tertiary-Amyl Methyl Ether	104		101		70-130	3		30
1,4-Dioxane	98		100		65-136	2		30
Methyl cyclohexane	96		99		70-130	3		30
Freon-113	96		100		70-130	4		30
p-Diethylbenzene	104		105		70-130	1		30
p-Ethyltoluene	101		103		70-130	2		30
1,2,4,5-Tetramethylbenzene	103		104		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	108		106		70-130
4-Bromofluorobenzene	118		106		70-130
Dibromofluoromethane	103		102		70-130

SEMIVOLATILES

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/30/24 09:38
Analyst: SLR
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 20:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	--	1
Benzidine	ND		ug/kg	570	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	--	1
Hexachlorobenzene	ND		ug/kg	100	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	--	1
2-Chloronaphthalene	ND		ug/kg	170	--	1
1,2-Dichlorobenzene	ND		ug/kg	170	--	1
1,3-Dichlorobenzene	ND		ug/kg	170	--	1
1,4-Dichlorobenzene	ND		ug/kg	170	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	--	1
2,4-Dinitrotoluene	ND		ug/kg	170	--	1
2,6-Dinitrotoluene	ND		ug/kg	170	--	1
Azobenzene	ND		ug/kg	170	--	1
Fluoranthene	1200		ug/kg	100	--	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--	1
Hexachlorobutadiene	ND		ug/kg	170	--	1
Hexachlorocyclopentadiene	ND		ug/kg	490	--	1
Hexachloroethane	ND		ug/kg	140	--	1
Isophorone	ND		ug/kg	150	--	1
Naphthalene	ND		ug/kg	170	--	1
Nitrobenzene	ND		ug/kg	150	--	1
NDPA/DPA	ND		ug/kg	140	--	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	170	--	1
Butyl benzyl phthalate	ND		ug/kg	170	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01 Date Collected: 10/23/24 12:40

Client ID: WC-1 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	170	--	1
Di-n-octylphthalate	ND		ug/kg	170	--	1
Diethyl phthalate	ND		ug/kg	170	--	1
Dimethyl phthalate	ND		ug/kg	170	--	1
Benzo(a)anthracene	590		ug/kg	100	--	1
Benzo(a)pyrene	760		ug/kg	140	--	1
Benzo(b)fluoranthene	940		ug/kg	100	--	1
Benzo(k)fluoranthene	290		ug/kg	100	--	1
Chrysene	620		ug/kg	100	--	1
Acenaphthylene	480		ug/kg	140	--	1
Anthracene	310		ug/kg	100	--	1
Benzo(ghi)perylene	470		ug/kg	140	--	1
Fluorene	ND		ug/kg	170	--	1
Phenanthrene	370		ug/kg	100	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	--	1
Indeno(1,2,3-cd)pyrene	400		ug/kg	140	--	1
Pyrene	1100		ug/kg	100	--	1
Biphenyl	ND		ug/kg	390	--	1
Aniline	ND		ug/kg	210	--	1
4-Chloroaniline	ND		ug/kg	170	--	1
1-Methylnaphthalene	ND		ug/kg	170	--	1
2-Nitroaniline	ND		ug/kg	170	--	1
3-Nitroaniline	ND		ug/kg	170	--	1
4-Nitroaniline	ND		ug/kg	170	--	1
Dibenzofuran	ND		ug/kg	170	--	1
2-Methylnaphthalene	ND		ug/kg	210	--	1
n-Nitrosodimethylamine	ND		ug/kg	340	--	1
2,4,6-Trichlorophenol	ND		ug/kg	100	--	1
p-Chloro-m-cresol	ND		ug/kg	170	--	1
2-Chlorophenol	ND		ug/kg	170	--	1
2,4-Dichlorophenol	ND		ug/kg	150	--	1
2,4-Dimethylphenol	ND		ug/kg	170	--	1
2-Nitrophenol	ND		ug/kg	370	--	1
4-Nitrophenol	ND		ug/kg	240	--	1
2,4-Dinitrophenol	ND		ug/kg	830	--	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	--	1
Pentachlorophenol	ND		ug/kg	140	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01 Date Collected: 10/23/24 12:40

Client ID: WC-1 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/kg	170	--	1
2-Methylphenol	ND		ug/kg	170	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	--	1
2,4,5-Trichlorophenol	ND		ug/kg	170	--	1
Benzoic Acid	ND		ug/kg	560	--	1
Benzyl Alcohol	ND		ug/kg	170	--	1
Carbazole	ND		ug/kg	170	--	1
Pyridine	ND		ug/kg	180	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	28		25-120
Phenol-d6	21		10-120
Nitrobenzene-d5	25		23-120
2-Fluorobiphenyl	**24**	Q	30-120
2,4,6-Tribromophenol	18		10-136
4-Terphenyl-d14	18		18-120

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02 D2
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/30/24 23:33
Analyst: SLR
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 20:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	700000		ug/kg	11000	--	100
Benzo(a)anthracene	290000		ug/kg	11000	--	100
Benzo(a)pyrene	250000		ug/kg	14000	--	100
Benzo(b)fluoranthene	340000		ug/kg	11000	--	100
Benzo(k)fluoranthene	110000		ug/kg	11000	--	100
Chrysene	290000		ug/kg	11000	--	100
Anthracene	140000		ug/kg	11000	--	100
Phenanthrene	660000		ug/kg	11000	--	100
Indeno(1,2,3-cd)pyrene	150000		ug/kg	14000	--	100
Pyrene	540000		ug/kg	11000	--	100

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02 D
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/30/24 23:09
Analyst: SLR
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 20:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	110000		ug/kg	2900	--	20
Benzidine	ND		ug/kg	12000	--	20
1,2,4-Trichlorobenzene	ND		ug/kg	3600	--	20
Hexachlorobenzene	ND		ug/kg	2200	--	20
Bis(2-chloroethyl)ether	ND		ug/kg	3200	--	20
2-Chloronaphthalene	ND		ug/kg	3600	--	20
1,2-Dichlorobenzene	ND		ug/kg	3600	--	20
1,3-Dichlorobenzene	ND		ug/kg	3600	--	20
1,4-Dichlorobenzene	ND		ug/kg	3600	--	20
3,3'-Dichlorobenzidine	ND		ug/kg	3600	--	20
2,4-Dinitrotoluene	ND		ug/kg	3600	--	20
2,6-Dinitrotoluene	ND		ug/kg	3600	--	20
Azobenzene	ND		ug/kg	3600	--	20
Fluoranthene	470000	E	ug/kg	2200	--	20
4-Chlorophenyl phenyl ether	ND		ug/kg	3600	--	20
4-Bromophenyl phenyl ether	ND		ug/kg	3600	--	20
Bis(2-chloroisopropyl)ether	ND		ug/kg	4300	--	20
Bis(2-chloroethoxy)methane	ND		ug/kg	3900	--	20
Hexachlorobutadiene	ND		ug/kg	3600	--	20
Hexachlorocyclopentadiene	ND		ug/kg	10000	--	20
Hexachloroethane	ND		ug/kg	2900	--	20
Isophorone	ND		ug/kg	3200	--	20
Naphthalene	31000		ug/kg	3600	--	20
Nitrobenzene	ND		ug/kg	3200	--	20
NDPA/DPA	ND		ug/kg	2900	--	20
n-Nitrosodi-n-propylamine	ND		ug/kg	3600	--	20
Bis(2-ethylhexyl)phthalate	ND		ug/kg	3600	--	20
Butyl benzyl phthalate	ND		ug/kg	3600	--	20

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02 D
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	3600	--	20
Di-n-octylphthalate	ND		ug/kg	3600	--	20
Diethyl phthalate	ND		ug/kg	3600	--	20
Dimethyl phthalate	ND		ug/kg	3600	--	20
Benzo(a)anthracene	300000	E	ug/kg	2200	--	20
Benzo(a)pyrene	270000	E	ug/kg	2900	--	20
Chrysene	270000	E	ug/kg	2200	--	20
Acenaphthylene	3700		ug/kg	2900	--	20
Anthracene	140000	E	ug/kg	2200	--	20
Benzo(ghi)perylene	140000		ug/kg	2900	--	20
Fluorene	82000		ug/kg	3600	--	20
Phenanthrene	470000	E	ug/kg	2200	--	20
Dibenzo(a,h)anthracene	38000		ug/kg	2200	--	20
Indeno(1,2,3-cd)pyrene	160000	E	ug/kg	2900	--	20
Pyrene	380000	E	ug/kg	2200	--	20
Biphenyl	ND		ug/kg	8200	--	20
Aniline	ND		ug/kg	4300	--	20
4-Chloroaniline	ND		ug/kg	3600	--	20
1-Methylnaphthalene	21000		ug/kg	3600	--	20
2-Nitroaniline	ND		ug/kg	3600	--	20
3-Nitroaniline	ND		ug/kg	3600	--	20
4-Nitroaniline	ND		ug/kg	3600	--	20
Dibenzofuran	67000		ug/kg	3600	--	20
2-Methylnaphthalene	28000		ug/kg	4300	--	20
n-Nitrosodimethylamine	ND		ug/kg	7200	--	20
2,4,6-Trichlorophenol	ND		ug/kg	2200	--	20
p-Chloro-m-cresol	ND		ug/kg	3600	--	20
2-Chlorophenol	ND		ug/kg	3600	--	20
2,4-Dichlorophenol	ND		ug/kg	3200	--	20
2,4-Dimethylphenol	ND		ug/kg	3600	--	20
2-Nitrophenol	ND		ug/kg	7800	--	20
4-Nitrophenol	ND		ug/kg	5000	--	20
2,4-Dinitrophenol	ND		ug/kg	17000	--	20
4,6-Dinitro-o-cresol	ND		ug/kg	9400	--	20
Pentachlorophenol	ND		ug/kg	2900	--	20
Phenol	ND		ug/kg	3600	--	20
2-Methylphenol	ND		ug/kg	3600	--	20

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02 D
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
3-Methylphenol/4-Methylphenol	ND		ug/kg	5200	--	20
2,4,5-Trichlorophenol	ND		ug/kg	3600	--	20
Benzoic Acid	ND		ug/kg	12000	--	20
Benzyl Alcohol	ND		ug/kg	3600	--	20
Carbazole	110000		ug/kg	3600	--	20
Pyridine	ND		ug/kg	3900	--	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**0**	Q	25-120
Phenol-d6	**0**	Q	10-120
Nitrobenzene-d5	**0**	Q	23-120
2-Fluorobiphenyl	**0**	Q	30-120
2,4,6-Tribromophenol	**0**	Q	10-136
4-Terphenyl-d14	**0**	Q	18-120

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03 D
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270E
Analytical Date: 10/30/24 22:45
Analyst: SLR
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 20:02

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	690	--	5
Benzidine	ND		ug/kg	2800	--	5
1,2,4-Trichlorobenzene	ND		ug/kg	860	--	5
Hexachlorobenzene	ND		ug/kg	520	--	5
Bis(2-chloroethyl)ether	ND		ug/kg	780	--	5
2-Chloronaphthalene	ND		ug/kg	860	--	5
1,2-Dichlorobenzene	ND		ug/kg	860	--	5
1,3-Dichlorobenzene	ND		ug/kg	860	--	5
1,4-Dichlorobenzene	ND		ug/kg	860	--	5
3,3'-Dichlorobenzidine	ND		ug/kg	860	--	5
2,4-Dinitrotoluene	ND		ug/kg	860	--	5
2,6-Dinitrotoluene	ND		ug/kg	860	--	5
Azobenzene	ND		ug/kg	860	--	5
Fluoranthene	2800		ug/kg	520	--	5
4-Chlorophenyl phenyl ether	ND		ug/kg	860	--	5
4-Bromophenyl phenyl ether	ND		ug/kg	860	--	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	--	5
Bis(2-chloroethoxy)methane	ND		ug/kg	930	--	5
Hexachlorobutadiene	ND		ug/kg	860	--	5
Hexachlorocyclopentadiene	ND		ug/kg	2500	--	5
Hexachloroethane	ND		ug/kg	690	--	5
Isophorone	ND		ug/kg	780	--	5
Naphthalene	ND		ug/kg	860	--	5
Nitrobenzene	ND		ug/kg	780	--	5
NDPA/DPA	ND		ug/kg	690	--	5
n-Nitrosodi-n-propylamine	ND		ug/kg	860	--	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	860	--	5
Butyl benzyl phthalate	ND		ug/kg	860	--	5

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03 D
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	860	--	5
Di-n-octylphthalate	ND		ug/kg	860	--	5
Diethyl phthalate	ND		ug/kg	860	--	5
Dimethyl phthalate	ND		ug/kg	860	--	5
Benzo(a)anthracene	1700		ug/kg	520	--	5
Benzo(a)pyrene	2100		ug/kg	690	--	5
Benzo(b)fluoranthene	2500		ug/kg	520	--	5
Benzo(k)fluoranthene	910		ug/kg	520	--	5
Chrysene	1600		ug/kg	520	--	5
Acenaphthylene	800		ug/kg	690	--	5
Anthracene	590		ug/kg	520	--	5
Benzo(ghi)perylene	1500		ug/kg	690	--	5
Fluorene	ND		ug/kg	860	--	5
Phenanthrene	890		ug/kg	520	--	5
Dibenzo(a,h)anthracene	ND		ug/kg	520	--	5
Indeno(1,2,3-cd)pyrene	1300		ug/kg	690	--	5
Pyrene	2600		ug/kg	520	--	5
Biphenyl	ND		ug/kg	2000	--	5
Aniline	ND		ug/kg	1000	--	5
4-Chloroaniline	ND		ug/kg	860	--	5
1-Methylnaphthalene	ND		ug/kg	860	--	5
2-Nitroaniline	ND		ug/kg	860	--	5
3-Nitroaniline	ND		ug/kg	860	--	5
4-Nitroaniline	ND		ug/kg	860	--	5
Dibenzofuran	ND		ug/kg	860	--	5
2-Methylnaphthalene	ND		ug/kg	1000	--	5
n-Nitrosodimethylamine	ND		ug/kg	1700	--	5
2,4,6-Trichlorophenol	ND		ug/kg	520	--	5
p-Chloro-m-cresol	ND		ug/kg	860	--	5
2-Chlorophenol	ND		ug/kg	860	--	5
2,4-Dichlorophenol	ND		ug/kg	780	--	5
2,4-Dimethylphenol	ND		ug/kg	860	--	5
2-Nitrophenol	ND		ug/kg	1900	--	5
4-Nitrophenol	ND		ug/kg	1200	--	5
2,4-Dinitrophenol	ND		ug/kg	4200	--	5
4,6-Dinitro-o-cresol	ND		ug/kg	2200	--	5
Pentachlorophenol	ND		ug/kg	690	--	5

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03 D
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/kg	860	--	5
2-Methylphenol	ND		ug/kg	860	--	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1200	--	5
2,4,5-Trichlorophenol	ND		ug/kg	860	--	5
Benzoic Acid	ND		ug/kg	2800	--	5
Benzyl Alcohol	ND		ug/kg	860	--	5
Carbazole	ND		ug/kg	860	--	5
Pyridine	ND		ug/kg	930	--	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	31		25-120
Phenol-d6	30		10-120
Nitrobenzene-d5	30		23-120
2-Fluorobiphenyl	31		30-120
2,4,6-Tribromophenol	39		10-136
4-Terphenyl-d14	33		18-120

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/29/24 17:59
Analyst: MRG

Extraction Method: EPA 3546
Extraction Date: 10/28/24 16:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990058-1					
Acenaphthene	ND		ug/kg	130	--
Benzidine	ND		ug/kg	540	--
1,2,4-Trichlorobenzene	ND		ug/kg	160	--
Hexachlorobenzene	ND		ug/kg	98	--
Bis(2-chloroethyl)ether	ND		ug/kg	150	--
2-Chloronaphthalene	ND		ug/kg	160	--
1,2-Dichlorobenzene	ND		ug/kg	160	--
1,3-Dichlorobenzene	ND		ug/kg	160	--
1,4-Dichlorobenzene	ND		ug/kg	160	--
3,3'-Dichlorobenzidine	ND		ug/kg	160	--
2,4-Dinitrotoluene	ND		ug/kg	160	--
2,6-Dinitrotoluene	ND		ug/kg	160	--
Azobenzene	ND		ug/kg	160	--
Fluoranthene	ND		ug/kg	98	--
4-Chlorophenyl phenyl ether	ND		ug/kg	160	--
4-Bromophenyl phenyl ether	ND		ug/kg	160	--
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--
Hexachlorobutadiene	ND		ug/kg	160	--
Hexachlorocyclopentadiene	ND		ug/kg	470	--
Hexachloroethane	ND		ug/kg	130	--
Isophorone	ND		ug/kg	150	--
Naphthalene	ND		ug/kg	160	--
Nitrobenzene	ND		ug/kg	150	--
NDPA/DPA	ND		ug/kg	130	--
n-Nitrosodi-n-propylamine	ND		ug/kg	160	--
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	--
Butyl benzyl phthalate	ND		ug/kg	160	--
Di-n-butylphthalate	ND		ug/kg	160	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/29/24 17:59
Analyst: MRG

Extraction Method: EPA 3546
Extraction Date: 10/28/24 16:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990058-1					
Di-n-octylphthalate	ND		ug/kg	160	--
Diethyl phthalate	ND		ug/kg	160	--
Dimethyl phthalate	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	98	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	98	--
Benzo(k)fluoranthene	ND		ug/kg	98	--
Chrysene	ND		ug/kg	98	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	98	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	98	--
Dibenzo(a,h)anthracene	ND		ug/kg	98	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	98	--
Biphenyl	ND		ug/kg	370	--
Aniline	ND		ug/kg	200	--
4-Chloroaniline	ND		ug/kg	160	--
1-Methylnaphthalene	ND		ug/kg	160	--
2-Nitroaniline	ND		ug/kg	160	--
3-Nitroaniline	ND		ug/kg	160	--
4-Nitroaniline	ND		ug/kg	160	--
Dibenzofuran	ND		ug/kg	160	--
2-Methylnaphthalene	ND		ug/kg	200	--
n-Nitrosodimethylamine	ND		ug/kg	330	--
2,4,6-Trichlorophenol	ND		ug/kg	98	--
p-Chloro-m-cresol	ND		ug/kg	160	--
2-Chlorophenol	ND		ug/kg	160	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/29/24 17:59
Analyst: MRG

Extraction Method: EPA 3546
Extraction Date: 10/28/24 16:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990058-1					
2,4-Dichlorophenol	ND		ug/kg	150	--
2,4-Dimethylphenol	ND		ug/kg	160	--
2-Nitrophenol	ND		ug/kg	350	--
4-Nitrophenol	ND		ug/kg	230	--
2,4-Dinitrophenol	ND		ug/kg	790	--
4,6-Dinitro-o-cresol	ND		ug/kg	420	--
Pentachlorophenol	ND		ug/kg	130	--
Phenol	ND		ug/kg	160	--
2-Methylphenol	ND		ug/kg	160	--
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	--
2,4,5-Trichlorophenol	ND		ug/kg	160	--
Benzoic Acid	ND		ug/kg	530	--
Benzyl Alcohol	ND		ug/kg	160	--
Carbazole	ND		ug/kg	160	--
Pyridine	ND		ug/kg	180	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	80		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990058-2 WG1990058-3								
Acenaphthene	86		85		31-137	1		50
Benzidine	48		51		10-66	6		50
1,2,4-Trichlorobenzene	84		87		38-107	4		50
Hexachlorobenzene	88		87		40-140	1		50
Bis(2-chloroethyl)ether	82		82		40-140	0		50
2-Chloronaphthalene	87		86		40-140	1		50
1,2-Dichlorobenzene	78		80		40-140	3		50
1,3-Dichlorobenzene	76		78		40-140	3		50
1,4-Dichlorobenzene	78		79		28-104	1		50
3,3'-Dichlorobenzidine	85		89		40-140	5		50
2,4-Dinitrotoluene	86		88		40-132	2		50
2,6-Dinitrotoluene	85		88		40-140	3		50
Azobenzene	93		93		40-140	0		50
Fluoranthene	89		87		40-140	2		50
4-Chlorophenyl phenyl ether	92		91		40-140	1		50
4-Bromophenyl phenyl ether	93		90		40-140	3		50
Bis(2-chloroisopropyl)ether	86		89		40-140	3		50
Bis(2-chloroethoxy)methane	83		83		40-117	0		50
Hexachlorobutadiene	83		87		40-140	5		50
Hexachlorocyclopentadiene	**10**	Q	**12**	Q	40-140	18		50
Hexachloroethane	64		66		40-140	3		50
Isophorone	85		88		40-140	3		50
Naphthalene	82		84		40-140	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990058-2 WG1990058-3								
Nitrobenzene	88		91		40-140	3		50
NDPA/DPA	91		90		36-157	1		50
n-Nitrosodi-n-propylamine	84		85		32-121	1		50
Bis(2-ethylhexyl)phthalate	101		100		40-140	1		50
Butyl benzyl phthalate	100		100		40-140	0		50
Di-n-butylphthalate	96		95		40-140	1		50
Di-n-octylphthalate	95		94		40-140	1		50
Diethyl phthalate	92		90		40-140	2		50
Dimethyl phthalate	87		86		40-140	1		50
Benzo(a)anthracene	91		88		40-140	3		50
Benzo(a)pyrene	89		89		40-140	0		50
Benzo(b)fluoranthene	90		86		40-140	5		50
Benzo(k)fluoranthene	85		87		40-140	2		50
Chrysene	87		85		40-140	2		50
Acenaphthylene	91		92		40-140	1		50
Anthracene	89		88		40-140	1		50
Benzo(ghi)perylene	86		85		40-140	1		50
Fluorene	91		88		40-140	3		50
Phenanthrene	87		84		40-140	4		50
Dibenzo(a,h)anthracene	86		85		40-140	1		50
Indeno(1,2,3-cd)pyrene	87		87		40-140	0		50
Pyrene	88		87		35-142	1		50
Biphenyl	88		88		37-127	0		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990058-2 WG1990058-3								
Aniline	**33**	Q	**34**	Q	40-140	3		50
4-Chloroaniline	81		80		40-140	1		50
1-Methylnaphthalene	87		89		26-130	2		50
2-Nitroaniline	117		115		47-134	2		50
3-Nitroaniline	114		111		26-129	3		50
4-Nitroaniline	117		112		41-125	4		50
Dibenzofuran	88		88		40-140	0		50
2-Methylnaphthalene	85		85		40-140	0		50
n-Nitrosodimethylamine	74		75		22-100	1		50
2,4,6-Trichlorophenol	96		96		30-130	0		50
p-Chloro-m-cresol	94		94		26-103	0		50
2-Chlorophenol	86		86		25-102	0		50
2,4-Dichlorophenol	90		90		30-130	0		50
2,4-Dimethylphenol	76		77		30-130	1		50
2-Nitrophenol	63		70		30-130	11		50
4-Nitrophenol	96		98		11-114	2		50
2,4-Dinitrophenol	10		10		4-130	0		50
4,6-Dinitro-o-cresol	**9**	Q	10		10-130	7		50
Pentachlorophenol	77		76		17-109	1		50
Phenol	79		80		26-90	1		50
2-Methylphenol	85		87		30-130.	2		50
3-Methylphenol/4-Methylphenol	90		91		30-130	1		50
2,4,5-Trichlorophenol	98		98		30-130	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990058-2 WG1990058-3								
Benzoic Acid	31		33		10-110	6		50
Benzyl Alcohol	86		87		40-140	1		50
Carbazole	86		85		54-128	1		50
Pyridine	61		62		10-93	2		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		89		25-120
Phenol-d6	83		89		10-120
Nitrobenzene-d5	93		101		23-120
2-Fluorobiphenyl	83		89		30-120
2,4,6-Tribromophenol	91		99		10-136
4-Terphenyl-d14	87		93		18-120

PCBS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/30/24 15:50
Analyst: MEO
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 18:20
Cleanup Method: EPA 3665A
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	49.4	--	1	A
Aroclor 1221	ND		ug/kg	49.4	--	1	A
Aroclor 1232	ND		ug/kg	49.4	--	1	A
Aroclor 1242	ND		ug/kg	49.4	--	1	A
Aroclor 1248	ND		ug/kg	49.4	--	1	A
Aroclor 1254	ND		ug/kg	49.4	--	1	A
Aroclor 1260	ND		ug/kg	49.4	--	1	B
Aroclor 1262	ND		ug/kg	49.4	--	1	A
Aroclor 1268	ND		ug/kg	49.4	--	1	A
PCBs, Total	ND		ug/kg	49.4	--	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	41		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	42		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/30/24 15:58
Analyst: MEO
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 18:20
Cleanup Method: EPA 3665A
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	52.2	--	1	A
Aroclor 1221	ND		ug/kg	52.2	--	1	A
Aroclor 1232	ND		ug/kg	52.2	--	1	A
Aroclor 1242	ND		ug/kg	52.2	--	1	A
Aroclor 1248	ND		ug/kg	52.2	--	1	A
Aroclor 1254	ND		ug/kg	52.2	--	1	A
Aroclor 1260	135		ug/kg	52.2	--	1	B
Aroclor 1262	ND		ug/kg	52.2	--	1	A
Aroclor 1268	ND		ug/kg	52.2	--	1	A
PCBs, Total	135		ug/kg	52.2	--	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	40		30-150	A
Decachlorobiphenyl	44		30-150	A
2,4,5,6-Tetrachloro-m-xylene	39		30-150	B
Decachlorobiphenyl	**167**	Q	30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 10/30/24 16:05
Analyst: MEO
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 18:20
Cleanup Method: EPA 3665A
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	51.1	--	1	A
Aroclor 1221	ND		ug/kg	51.1	--	1	A
Aroclor 1232	ND		ug/kg	51.1	--	1	A
Aroclor 1242	ND		ug/kg	51.1	--	1	A
Aroclor 1248	ND		ug/kg	51.1	--	1	A
Aroclor 1254	ND		ug/kg	51.1	--	1	A
Aroclor 1260	ND		ug/kg	51.1	--	1	B
Aroclor 1262	ND		ug/kg	51.1	--	1	A
Aroclor 1268	ND		ug/kg	51.1	--	1	A
PCBs, Total	ND		ug/kg	51.1	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	43		30-150	A
Decachlorobiphenyl	39		30-150	A
2,4,5,6-Tetrachloro-m-xylene	43		30-150	B
Decachlorobiphenyl	33		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/29/24 10:20
Analyst: RMP

Extraction Method: EPA 3546
Extraction Date: 10/28/24 11:31
Cleanup Method: EPA 3665A
Cleanup Date: 10/29/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/29/24

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1989915-1						
Aroclor 1016	ND		ug/kg	48.7	--	A
Aroclor 1221	ND		ug/kg	48.7	--	A
Aroclor 1232	ND		ug/kg	48.7	--	A
Aroclor 1242	ND		ug/kg	48.7	--	A
Aroclor 1248	ND		ug/kg	48.7	--	A
Aroclor 1254	ND		ug/kg	48.7	--	A
Aroclor 1260	ND		ug/kg	48.7	--	A
Aroclor 1262	ND		ug/kg	48.7	--	A
Aroclor 1268	ND		ug/kg	48.7	--	A
PCBs, Total	ND		ug/kg	48.7	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	62		30-150	B
Decachlorobiphenyl	58		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1989915-2 WG1989915-3									
Aroclor 1016	63		63		40-140	0		50	A
Aroclor 1260	64		65		40-140	2		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		65		30-150	A
Decachlorobiphenyl	72		75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		68		30-150	B
Decachlorobiphenyl	66		64		30-150	B

PESTICIDES

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/30/24 14:17
Analyst: JAG
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 17:43
Cleanup Method: EPA 3620B
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.58	--	1	A
Lindane	ND		ug/kg	0.658	--	1	A
Alpha-BHC	ND		ug/kg	0.658	--	1	A
Beta-BHC	ND		ug/kg	1.58	--	1	A
Heptachlor	ND		ug/kg	0.790	--	1	A
Aldrin	ND		ug/kg	1.58	--	1	A
Heptachlor epoxide	ND		ug/kg	2.96	--	1	A
Endrin	ND		ug/kg	0.658	--	1	A
Endrin aldehyde	ND		ug/kg	1.97	--	1	A
Endrin ketone	ND		ug/kg	1.58	--	1	A
Dieldrin	ND		ug/kg	0.987	--	1	A
4,4'-DDE	ND		ug/kg	1.58	--	1	A
4,4'-DDD	ND		ug/kg	1.58	--	1	A
4,4'-DDT	5.43		ug/kg	2.96	--	1	A
Endosulfan I	ND		ug/kg	1.58	--	1	A
Endosulfan II	ND		ug/kg	1.58	--	1	A
Endosulfan sulfate	ND		ug/kg	0.658	--	1	A
Methoxychlor	ND		ug/kg	2.96	--	1	A
Toxaphene	ND		ug/kg	29.6	--	1	A
Chlordane	ND		ug/kg	13.2	--	1	A
cis-Chlordane	ND		ug/kg	1.97	--	1	A
trans-Chlordane	ND		ug/kg	1.97	--	1	A

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01 Date Collected: 10/23/24 12:40

Client ID: WC-1 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	120		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/26/24 10:34
Analyst: JAG
Percent Solids: 95%
Methylation Date: 10/25/24 19:44

Extraction Method: EPA 8151A
Extraction Date: 10/24/24 19:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3440	--	1	A
MCPA	ND		ug/kg	3440	--	1	A
Dalapon	ND		ug/kg	34.4	--	1	A
Dicamba	ND		ug/kg	34.4	--	1	A
Dichloroprop	ND		ug/kg	34.4	--	1	A
2,4-D	ND		ug/kg	172	--	1	A
2,4-DB	ND		ug/kg	172	--	1	A
2,4,5-T	ND		ug/kg	172	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	172	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	44		30-150	A
DCAA	47		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/30/24 14:04
Analyst: JAG
Percent Solids: 92%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 17:43
Cleanup Method: EPA 3620B
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.68	--	1	A
Lindane	ND		ug/kg	0.701	--	1	A
Alpha-BHC	ND		ug/kg	0.701	--	1	A
Beta-BHC	ND		ug/kg	1.68	--	1	A
Heptachlor	ND		ug/kg	0.841	--	1	A
Aldrin	ND		ug/kg	1.68	--	1	A
Heptachlor epoxide	ND		ug/kg	3.15	--	1	A
Endrin	ND		ug/kg	0.701	--	1	A
Endrin aldehyde	ND		ug/kg	2.10	--	1	A
Endrin ketone	ND		ug/kg	1.68	--	1	A
Dieldrin	ND		ug/kg	1.05	--	1	A
4,4'-DDE	ND		ug/kg	1.68	--	1	A
4,4'-DDD	ND		ug/kg	1.68	--	1	A
4,4'-DDT	ND		ug/kg	3.15	--	1	A
Endosulfan I	ND		ug/kg	1.68	--	1	A
Endosulfan II	ND		ug/kg	1.68	--	1	A
Endosulfan sulfate	ND		ug/kg	0.701	--	1	A
Methoxychlor	ND		ug/kg	3.15	--	1	A
Toxaphene	ND		ug/kg	31.5	--	1	A
Chlordane	ND		ug/kg	14.0	--	1	A
cis-Chlordane	ND		ug/kg	2.10	--	1	A
trans-Chlordane	ND		ug/kg	2.10	--	1	A

Project Name: FORMER GNP MILL **Lab Number:** L2461852

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02 Date Collected: 10/23/24 13:10

Client ID: WC-2 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	A
Decachlorobiphenyl	**10800**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	**18400**	Q	30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/26/24 10:53
Analyst: JAG
Percent Solids: 92%
Methylation Date: 10/25/24 19:44

Extraction Method: EPA 8151A
Extraction Date: 10/24/24 19:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3550	--	1	A
MCPA	ND		ug/kg	3550	--	1	A
Dalapon	ND		ug/kg	35.5	--	1	A
Dicamba	ND		ug/kg	35.5	--	1	A
Dichloroprop	ND		ug/kg	35.5	--	1	A
2,4-D	ND		ug/kg	177	--	1	A
2,4-DB	ND		ug/kg	177	--	1	A
2,4,5-T	ND		ug/kg	177	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	177	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	66		30-150	A
DCAA	110		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 10/30/24 13:52
Analyst: JAG
Percent Solids: 95%

Extraction Method: EPA 3546
Extraction Date: 10/28/24 17:43
Cleanup Method: EPA 3620B
Cleanup Date: 10/30/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/30/24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.65	--	1	A
Lindane	ND		ug/kg	0.688	--	1	A
Alpha-BHC	ND		ug/kg	0.688	--	1	A
Beta-BHC	ND		ug/kg	1.65	--	1	A
Heptachlor	ND		ug/kg	0.826	--	1	A
Aldrin	ND		ug/kg	1.65	--	1	A
Heptachlor epoxide	ND		ug/kg	3.10	--	1	A
Endrin	ND		ug/kg	0.688	--	1	A
Endrin aldehyde	ND		ug/kg	2.06	--	1	A
Endrin ketone	ND		ug/kg	1.65	--	1	A
Dieldrin	ND		ug/kg	1.03	--	1	A
4,4'-DDE	2.07		ug/kg	1.65	--	1	A
4,4'-DDD	ND		ug/kg	1.65	--	1	A
4,4'-DDT	7.51		ug/kg	3.10	--	1	B
Endosulfan I	ND		ug/kg	1.65	--	1	A
Endosulfan II	ND		ug/kg	1.65	--	1	A
Endosulfan sulfate	ND		ug/kg	0.688	--	1	A
Methoxychlor	ND		ug/kg	3.10	--	1	A
Toxaphene	ND		ug/kg	31.0	--	1	A
Chlordane	ND		ug/kg	13.8	--	1	A
cis-Chlordane	ND		ug/kg	2.06	--	1	A
trans-Chlordane	ND		ug/kg	2.06	--	1	A

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	128		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 10/30/24 09:47
Analyst: PEG
Percent Solids: 95%
Methylation Date: 10/30/24 03:00

Extraction Method: EPA 8151A
Extraction Date: 10/28/24 18:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3440	--	1	A
MCPA	ND		ug/kg	3440	--	1	A
Dalapon	ND		ug/kg	34.4	--	1	A
Dicamba	ND		ug/kg	34.4	--	1	A
Dichloroprop	ND		ug/kg	34.4	--	1	A
2,4-D	ND		ug/kg	172	--	1	A
2,4-DB	ND		ug/kg	172	--	1	A
2,4,5-T	ND		ug/kg	172	--	1	A
2,4,5-TP (Silvex)	ND		ug/kg	172	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	55		30-150	A
DCAA	56		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 10/25/24 10:27
Analyst: EJL

Extraction Method: EPA 8151A
Extraction Date: 10/24/24 11:11

Methylation Date: 10/25/24 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1988799-1						
MCPP	ND		ug/kg	3270	--	A
MCPA	ND		ug/kg	3270	--	A
Dalapon	ND		ug/kg	32.7	--	A
Dicamba	ND		ug/kg	32.7	--	A
Dichloroprop	ND		ug/kg	32.7	--	A
2,4-D	ND		ug/kg	164	--	A
2,4-DB	ND		ug/kg	164	--	A
2,4,5-T	ND		ug/kg	164	--	A
2,4,5-TP (Silvex)	ND		ug/kg	164	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	88		30-150	A
DCAA	89		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/29/24 18:13
Analyst: JAG

Extraction Method: EPA 3546
Extraction Date: 10/28/24 10:52
Cleanup Method: EPA 3620B
Cleanup Date: 10/29/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/29/24

Parameter	Result	Qualifier	Units	RL	MDL	Column
Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1989893-1						
Delta-BHC	ND		ug/kg	1.54	--	A
Lindane	ND		ug/kg	0.640	--	A
Alpha-BHC	ND		ug/kg	0.640	--	A
Beta-BHC	ND		ug/kg	1.54	--	A
Heptachlor	ND		ug/kg	0.768	--	A
Aldrin	ND		ug/kg	1.54	--	A
Heptachlor epoxide	ND		ug/kg	2.88	--	A
Endrin	ND		ug/kg	0.640	--	A
Endrin aldehyde	ND		ug/kg	1.92	--	A
Endrin ketone	ND		ug/kg	1.54	--	A
Dieldrin	ND		ug/kg	0.960	--	A
4,4'-DDE	ND		ug/kg	1.54	--	A
4,4'-DDD	ND		ug/kg	1.54	--	A
4,4'-DDT	ND		ug/kg	2.88	--	A
Endosulfan I	ND		ug/kg	1.54	--	A
Endosulfan II	ND		ug/kg	1.54	--	A
Endosulfan sulfate	ND		ug/kg	0.640	--	A
Methoxychlor	ND		ug/kg	2.88	--	A
Toxaphene	ND		ug/kg	28.8	--	A
Chlordane	ND		ug/kg	12.8	--	A
cis-Chlordane	ND		ug/kg	1.92	--	A
trans-Chlordane	ND		ug/kg	1.92	--	A

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/29/24 18:13
Analyst: JAG

Extraction Method: EPA 3546
Extraction Date: 10/28/24 10:52
Cleanup Method: EPA 3620B
Cleanup Date: 10/29/24
Cleanup Method: EPA 3660B
Cleanup Date: 10/29/24

Parameter	Result	Qualifier	Units	RL	MDL	Column
Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1989893-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	72		30-150	B

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 10/30/24 08:51
Analyst: PEG

Extraction Method: EPA 8151A
Extraction Date: 10/28/24 18:25

Methylation Date: 10/30/24 03:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 03 Batch: WG1990102-1						
MCPP	ND		ug/kg	3260	--	A
MCPA	ND		ug/kg	3260	--	A
Dalapon	ND		ug/kg	32.6	--	A
Dicamba	ND		ug/kg	32.6	--	A
Dichloroprop	ND		ug/kg	32.6	--	A
2,4-D	ND		ug/kg	163	--	A
2,4-DB	ND		ug/kg	163	--	A
2,4,5-T	ND		ug/kg	163	--	A
2,4,5-TP (Silvex)	ND		ug/kg	163	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	62		30-150	A
DCAA	63		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1988799-2 WG1988799-3									
MCPP	87		93		30-150	7		30	A
MCPA	93		98		30-150	5		30	A
Dalapon	69		75		30-150	8		30	A
Dicamba	92		97		30-150	5		30	A
Dichloroprop	88		92		30-150	4		30	A
2,4-D	88		93		30-150	6		30	A
2,4-DB	100		104		30-150	4		30	A
2,4,5-T	93		98		30-150	5		30	A
2,4,5-TP (Silvex)	93		98		30-150	5		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	83		89		30-150	A
DCAA	92		99		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1989893-2 WG1989893-3									
Delta-BHC	68		78		30-150	14		30	A
Lindane	68		81		30-150	17		30	A
Alpha-BHC	64		76		30-150	17		30	A
Beta-BHC	66		78		30-150	17		30	A
Heptachlor	66		78		30-150	17		30	A
Aldrin	66		79		30-150	18		30	A
Heptachlor epoxide	47		53		30-150	12		30	A
Endrin	71		83		30-150	16		30	A
Endrin aldehyde	54		62		30-150	14		30	A
Endrin ketone	70		80		30-150	13		30	A
Dieldrin	72		85		30-150	17		30	A
4,4'-DDE	66		79		30-150	18		30	A
4,4'-DDD	72		85		30-150	17		30	A
4,4'-DDT	71		83		30-150	16		30	A
Endosulfan I	64		76		30-150	17		30	A
Endosulfan II	70		80		30-150	13		30	A
Endosulfan sulfate	66		74		30-150	11		30	A
Methoxychlor	68		79		30-150	15		30	A
cis-Chlordane	62		73		30-150	16		30	A
trans-Chlordane	72		84		30-150	15		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1989893-2 WG1989893-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		64		30-150	A
Decachlorobiphenyl	53		60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	65		74		30-150	B
Decachlorobiphenyl	59		69		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 03 Batch: WG1990102-2 WG1990102-3									
MCPP	79		83		30-150	5		30	A
MCPA	68		71		30-150	4		30	A
Dalapon	48		53		30-150	10		30	A
Dicamba	62		66		30-150	6		30	A
Dichloroprop	66		68		30-150	3		30	A
2,4-D	66		67		30-150	2		30	A
2,4-DB	90		91		30-150	1		30	A
2,4,5-T	69		70		30-150	1		30	A
2,4,5-TP (Silvex)	65		67		30-150	3		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	60		65		30-150	A
DCAA	66		73		30-150	B

METALS

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.47		mg/kg	0.797	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Barium, Total	25.3		mg/kg	0.797	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.797	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Chromium, Total	13.4		mg/kg	0.797	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Lead, Total	12.8		mg/kg	3.98	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Mercury, Total	0.153		mg/kg	0.066	--	1	10/29/24 13:20	10/30/24 11:07	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.59	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.398	--	2	10/29/24 10:40	10/31/24 20:39	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.42		mg/kg	0.857	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Barium, Total	19.1		mg/kg	0.857	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.857	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Chromium, Total	13.6		mg/kg	0.857	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Lead, Total	43.8		mg/kg	4.28	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Mercury, Total	0.072		mg/kg	0.070	--	1	10/29/24 13:20	10/30/24 10:04	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.71	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.428	--	2	10/29/24 10:40	10/31/24 20:07	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Lab Number: L2461852
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 95%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	5.44		mg/kg	0.799	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Barium, Total	18.5		mg/kg	0.799	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.799	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Chromium, Total	15.2		mg/kg	0.799	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Lead, Total	12.6		mg/kg	4.00	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Mercury, Total	ND		mg/kg	0.067	--	1	10/29/24 13:20	10/30/24 11:17	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.60	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.400	--	2	10/29/24 10:40	10/31/24 20:35	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1988662-24										
Arsenic, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Barium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Chromium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Lead, Total	ND		mg/kg	2.00	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Selenium, Total	ND		mg/kg	0.800	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Silver, Total	ND		mg/kg	0.200	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1988668-1										
Mercury, Total	ND		mg/kg	0.083	--	1	10/29/24 13:20	10/30/24 09:41	1,7471B	MJR

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1988662-25								
Arsenic, Total	98		-		80-120	-		
Barium, Total	100		-		80-120	-		
Cadmium, Total	97		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Lead, Total	97		-		80-120	-		
Selenium, Total	97		-		80-120	-		
Silver, Total	100		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1988668-2								
Mercury, Total	107		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988662-30 QC Sample: L2461852-02 Client ID: WC-2												
Arsenic, Total	5.42	9.97	18.4	**130**	Q	-	-		75-125	-		20
Barium, Total	19.1	166	179	96		-	-		75-125	-		20
Cadmium, Total	ND	4.4	4.19	95		-	-		75-125	-		20
Chromium, Total	13.6	16.6	27.7	85		-	-		75-125	-		20
Lead, Total	43.8	44	82.9	89		-	-		75-125	-		20
Selenium, Total	ND	9.97	9.39	94		-	-		75-125	-		20
Silver, Total	ND	4.16	4.09	98		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988668-5 QC Sample: L2461852-02 Client ID: WC-2												
Mercury, Total	0.072	1.37	1.40	97		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988662-31 QC Sample: L2461852-02 Client ID: WC-2						
Arsenic, Total	5.42	5.88	mg/kg	8		20
Barium, Total	19.1	20.0	mg/kg	5		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	13.6	13.7	mg/kg	1		20
Lead, Total	43.8	36.4	mg/kg	18		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988668-6 QC Sample: L2461852-02 Client ID: WC-2						
Mercury, Total	0.072	0.082	mg/kg	13		20

INORGANICS
&
MISCELLANEOUS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	10/25/24 15:15	1,1030	GEF

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Coarse
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	10/25/24 15:16	1,1030	GEF

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME
Sample Depth:
Matrix: Soil

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	10/25/24 15:16	1,1030	GEF

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-01
Client ID: WC-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.1		%	0.100	NA	1	-	10/26/24 19:17	121,2540G	KJL
pH (H)	8.97		SU	-	NA	1	-	10/25/24 03:08	1,9045D	CAR
Cyanide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:32	125,7.3	BAY
Sulfide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:04	125,7.3	BAY

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-02
Client ID: WC-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	91.7		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
pH (H)	6.47		SU	-	NA	1	-	10/25/24 03:08	1,9045D	CAR
Cyanide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:32	125,7.3	BAY
Sulfide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:04	125,7.3	BAY

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-03
Client ID: DUP-WC
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	94.7		%	0.100	NA	1	-	10/26/24 19:17	121,2540G	KJL
pH (H)	7.96		SU	-	NA	1	-	10/25/24 03:08	1,9045D	CAR
Cyanide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:33	125,7.3	BAY
Sulfide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:04	125,7.3	BAY

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-05
Client ID: WC-1 (VOC)
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 12:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.0		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-06
Client ID: WC-2 (VOC)
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:10
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90.0		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461852-07
Client ID: DUP-WC (VOC)
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:40
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	95.0		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 02,05-07 Batch: WG1989049-1										
Solids, Total	100		%	0.100	NA	1	-	10/25/24 11:26	121,2540G	MAW
General Chemistry - Westborough Lab for sample(s): 01,03 Batch: WG1989489-1										
Solids, Total	100		%	0.100	NA	1	-	10/26/24 19:17	121,2540G	KJL
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1989888-1										
Cyanide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:30	125,7.3	BAY
General Chemistry - Westborough Lab for sample(s): 01-03 Batch: WG1989890-1										
Sulfide, Reactive	ND		mg/kg	10	--	1	10/28/24 11:55	10/28/24 13:00	125,7.3	BAY

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461852

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1988866-1								
pH	100		-		99-101	-		
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1989888-2								
Cyanide, Reactive	86		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1989890-2								
Sulfide, Reactive	94		-		60-125	-		40

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2461852-01A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461852-01B	Glass 250ml/8oz unpreserved	A	NA		3.1	Y	Absent		8270TCL(14),REACTS(14),IGNIT-1030(14),PH-9045(1),PEST-8081(14),PCB-8082(365),REACTCN(14),HERB-8151(14),ME-TS-2540(7)
L2461852-01C	Glass 500ml/16oz unpreserved	A	NA		3.1	Y	Absent		8270TCL(14),REACTS(14),IGNIT-1030(14),PH-9045(1),PEST-8081(14),PCB-8082(365),REACTCN(14),HERB-8151(14),ME-TS-2540(7)
L2461852-02A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461852-02A1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461852-02A2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD-TI(180)
L2461852-02B	Glass 250ml/8oz unpreserved	A	NA		3.1	Y	Absent		REACTS(14),IGNIT-1030(14),8270TCL(14),PH-9045(1),PEST-8081(14),PCB-8082(365),REACTCN(14),HERB-8151(14),ME-TS-2540(7)
L2461852-02B1	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		ME-TS-2540(7)
L2461852-02B2	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		ME-TS-2540(7)
L2461852-02C	Glass 500ml/16oz unpreserved	A	NA		3.1	Y	Absent		REACTS(14),IGNIT-1030(14),8270TCL(14),PH-9045(1),PEST-8081(14),PCB-8082(365),REACTCN(14),HERB-8151(14),ME-TS-2540(7)
L2461852-03A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461852
Report Date: 11/01/24

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2461852-03B	Glass 250ml/8oz unpreserved	A	NA		3.1	Y	Absent		REACTS(14),IGNIT-1030(14),8270TCL(14),PH-9045(1),PEST-8081(14),ME-TS-2540(7),HERB-8151(14),REACTCN(14),PCB-8082(365)
L2461852-03C	Glass 500ml/16oz unpreserved	A	NA		3.1	Y	Absent		REACTS(14),IGNIT-1030(14),8270TCL(14),PH-9045(1),PEST-8081(14),ME-TS-2540(7),HERB-8151(14),REACTCN(14),PCB-8082(365)
L2461852-04A	Vial MeOH preserved	A	NA		3.1	Y	Absent		8260HLW(14),8260H(14)
L2461852-04B	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14),8260H(14)
L2461852-04C	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14),8260H(14)
L2461852-05A	Vial MeOH preserved	A	NA		3.1	Y	Absent		8260HLW(14)
L2461852-05B	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-05C	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-05D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		ME-TS-2540(7)
L2461852-06A	Vial MeOH preserved	A	NA		3.1	Y	Absent		8260HLW(14)
L2461852-06B	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-06C	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-06D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		ME-TS-2540(7)
L2461852-07A	Vial MeOH preserved	A	NA		3.1	Y	Absent		8260HLW(14)
L2461852-07B	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-07C	Vial water preserved	A	NA		3.1	Y	Absent	24-OCT-24 02:06	8260HLW(14)
L2461852-07D	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		ME-TS-2540(7)

*Values in parentheses indicate holding time in days

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461852
Project Number:	549784.1.306	**Report Date:**	11/01/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461852
Project Number:	549784.1.306	**Report Date:**	11/01/24

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461852
Project Number:	549784.1.306	**Report Date:**	11/01/24

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461852
Report Date: 11/01/24

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine, 2,6-Dichlorophenol.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L2461852 300CT24
TRC – ME

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/23/24

Westborough, MA
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: TRC
Address: 63 Marginal Way, Fourth Floor
Portland, ME 04101
Phone: 207-719-5576
Fax:
Email: zbonin@trccompanies.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Former GNP Mill
Project Location: East Millinocket, ME
Project #: 549784.1.306
Project Manager: Zachary Bonin
ALPHA Quote #: 29032

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverable

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MEDEP // Refer to SSQAPP prepared by TRC	RAGs // Table K-Soil/Debris Waste Characterization (page 41 - 45)

Other Project Specific Requirements/Comments/Detection Limits:

Refer to SSQAPP for specific reporting limits and regulatory requirements.
Refer to SSQAPP for specific analytical methods. ONLY run TCLP metals if concentrations exceed the 20x Rule (contact PM prior to).
SHORT HOLD TIME: pH
Please cc results to Nbarker@trccompanies.com

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RCRA 8 Metals(3050B/6010D/7471B)	SVOCs (Method 3546/ 8270E)	pH (Method 9045D)	PCB Aroclors (Methods 3546/8082A)	VOCs (Methods 5035A/8260D)	Pesticides (Methods 3546/8081D)	Herbicides (Method 8151A)	Ignitability (Method 1030)	Reactive Sulfide (Chap 7, Sec 7.3.3)	Reactive Cyanide (Chap 7, Sec 7.3.4)	TCLP Metals (1311, 3015A/6010D)		Sample Specific Comments	TOTAL # BOTTLES
61852-01	WC-1	10/23/24	12:40	Soil	NB	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☐	☐		13
-02	WC-2	10/23/24	13:10	Soil	NB	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☐	☐	MS/LAB Dup	13
-03	DUP-WC	10/23/24	13:40	Soil	NB	☒	☒	☒	☒	☐	☒	☒	☒	☒	☒	☐	☐		13
-02	WC-2 MS	10/23/24	13:10	Soil	NB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
-02	WC-2 LAB DUP	10/23/24	13:10	Soil	NB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
-04	Trip Blank	10/23/24	—	AQ	NB	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐		3
-05	WC-1 (VOC)	10/23/24	12:40	Soil	NB	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐		4
-06	WC-2 (VOC)	10/23/24	13:10	Soil	NB	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐		4
-07	DUP-WC (VOC)	10/23/24	13:40	Soil	NB	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐		4
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
	Container Type					A	A	A	A	V	A	A	A	A	A	A	-		
	Preservative					A	A	A	A	F	A	A	A	A	A	A	-		

Relinquished By	Date/Time	Received By:	Date/Time
N. Barker	10/23/24 15:22	Danny Boyle, PACE	10/23/24 15:22
Danny Boyle, PACE	10/23/24 17:00	Cody Murrell PACE	10/23/24 17:00
Cody Murrell 19:54	10/23/24	D Colodo	10/23/24 19:54
D Colodo	10/23/24 22:15		10/23/24 22:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms

FORM NO: 01-01(I-NJ) (rev. 5-(AN-12))

ANALYTICAL REPORT

Lab Number:	L2461842
Client:	TRC Environmental Corp 63 Marginal Way, 4th Floor Portland, ME 04101
ATTN:	Zachary Bonin
Phone:	(207) 205-2830
Project Name:	FORMER GNP MILL
Project Number:	549784.1.306
Report Date:	11/01/24

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2461842-01	PW-1	SOLID	EAST MILLINOCKET, ME	10/23/24 13:35	10/23/24
L2461842-02	PW-2	SOLID	EAST MILLINOCKET, ME	10/23/24 13:45	10/23/24
L2461842-03	DUP-PW	SOLID	EAST MILLINOCKET, ME	10/23/24 13:45	10/23/24

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461842
Project Number:	549784.1.306	**Report Date:**	11/01/24

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments and solids are reported on a dry weight basis unless otherwise noted. Tissues are reported "as received" or on a wet weight basis, unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

Case Narrative (continued)

Semivolatile Organics

L2461842-02 and -03: The sample has elevated detection limits due to the limited sample volume utilized during extraction, as required by the sample matrix.

The WG1990005-2/-3 LCS/LCSD RPD, associated with L2461842-01 through -03, is above the acceptance criteria for benzoic acid (53%).

Total Metals

L2461842-01, -02 and -03: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by the sample matrix.

The WG1988662-27 Laboratory Duplicate RPD for barium (84%), performed on L2461842-02, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 11/01/24

ORGANICS

SEMIVOLATILES

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-01
Client ID: PW-1
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:35
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270E
Analytical Date: 10/30/24 09:20
Analyst: IM
Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	130	--	1
Benzidine	ND		ug/kg	550	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	160	--	1
Hexachlorobenzene	ND		ug/kg	100	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	--	1
2-Chloronaphthalene	ND		ug/kg	160	--	1
1,2-Dichlorobenzene	ND		ug/kg	160	--	1
1,3-Dichlorobenzene	ND		ug/kg	160	--	1
1,4-Dichlorobenzene	ND		ug/kg	160	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	160	--	1
2,4-Dinitrotoluene	ND		ug/kg	160	--	1
2,6-Dinitrotoluene	ND		ug/kg	160	--	1
Azobenzene	ND		ug/kg	160	--	1
Fluoranthene	ND		ug/kg	100	--	1
4-Chlorophenyl phenyl ether	ND		ug/kg	160	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	160	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--	1
Hexachlorobutadiene	ND		ug/kg	160	--	1
Hexachlorocyclopentadiene	ND		ug/kg	470	--	1
Hexachloroethane	ND		ug/kg	130	--	1
Isophorone	ND		ug/kg	150	--	1
Naphthalene	ND		ug/kg	160	--	1
Nitrobenzene	ND		ug/kg	150	--	1
NDPA/DPA	ND		ug/kg	130	--	1
n-Nitrosodi-n-propylamine	ND		ug/kg	160	--	1
Bis(2-ethylhexyl)phthalate	170		ug/kg	160	--	1
Butyl benzyl phthalate	ND		ug/kg	160	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461842

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-01 Date Collected: 10/23/24 13:35

Client ID: PW-1 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	160	--	1
Di-n-octylphthalate	ND		ug/kg	160	--	1
Diethyl phthalate	ND		ug/kg	160	--	1
Dimethyl phthalate	ND		ug/kg	160	--	1
Benzo(a)anthracene	ND		ug/kg	100	--	1
Benzo(a)pyrene	ND		ug/kg	130	--	1
Benzo(b)fluoranthene	ND		ug/kg	100	--	1
Benzo(k)fluoranthene	ND		ug/kg	100	--	1
Chrysene	ND		ug/kg	100	--	1
Acenaphthylene	ND		ug/kg	130	--	1
Anthracene	ND		ug/kg	100	--	1
Benzo(ghi)perylene	ND		ug/kg	130	--	1
Fluorene	ND		ug/kg	160	--	1
Phenanthrene	ND		ug/kg	100	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	100	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--	1
Pyrene	ND		ug/kg	100	--	1
Biphenyl	ND		ug/kg	380	--	1
Aniline	ND		ug/kg	200	--	1
4-Chloroaniline	ND		ug/kg	160	--	1
1-Methylnaphthalene	ND		ug/kg	160	--	1
2-Nitroaniline	ND		ug/kg	160	--	1
3-Nitroaniline	ND		ug/kg	160	--	1
4-Nitroaniline	ND		ug/kg	160	--	1
Dibenzofuran	ND		ug/kg	160	--	1
2-Methylnaphthalene	ND		ug/kg	200	--	1
n-Nitrosodimethylamine	ND		ug/kg	330	--	1
2,4,6-Trichlorophenol	ND		ug/kg	100	--	1
p-Chloro-m-cresol	ND		ug/kg	160	--	1
2-Chlorophenol	ND		ug/kg	160	--	1
2,4-Dichlorophenol	ND		ug/kg	150	--	1
2,4-Dimethylphenol	ND		ug/kg	160	--	1
2-Nitrophenol	ND		ug/kg	360	--	1
4-Nitrophenol	ND		ug/kg	230	--	1
2,4-Dinitrophenol	ND		ug/kg	800	--	1
4,6-Dinitro-o-cresol	ND		ug/kg	430	--	1
Pentachlorophenol	ND		ug/kg	130	--	1

Project Name: FORMER GNP MILL
Lab Number: L2461842
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-01
Client ID: PW-1
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:35
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/kg	160	--	1
2-Methylphenol	ND		ug/kg	160	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	--	1
2,4,5-Trichlorophenol	ND		ug/kg	160	--	1
Benzoic Acid	ND		ug/kg	540	--	1
Benzyl Alcohol	ND		ug/kg	160	--	1
Carbazole	ND		ug/kg	160	--	1
Pyridine	ND		ug/kg	180	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	63		18-120

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-02
Client ID: PW-2
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270E
Analytical Date: 10/30/24 08:10
Analyst: IM
Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	370	--	1
Benzidine	ND		ug/kg	1500	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	470	--	1
Hexachlorobenzene	ND		ug/kg	280	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	420	--	1
2-Chloronaphthalene	ND		ug/kg	470	--	1
1,2-Dichlorobenzene	ND		ug/kg	470	--	1
1,3-Dichlorobenzene	ND		ug/kg	470	--	1
1,4-Dichlorobenzene	ND		ug/kg	470	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	470	--	1
2,4-Dinitrotoluene	ND		ug/kg	470	--	1
2,6-Dinitrotoluene	ND		ug/kg	470	--	1
Azobenzene	ND		ug/kg	470	--	1
Fluoranthene	ND		ug/kg	280	--	1
4-Chlorophenyl phenyl ether	ND		ug/kg	470	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	470	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	560	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	500	--	1
Hexachlorobutadiene	ND		ug/kg	470	--	1
Hexachlorocyclopentadiene	ND		ug/kg	1300	--	1
Hexachloroethane	ND		ug/kg	370	--	1
Isophorone	ND		ug/kg	420	--	1
Naphthalene	ND		ug/kg	470	--	1
Nitrobenzene	ND		ug/kg	420	--	1
NDPA/DPA	ND		ug/kg	370	--	1
n-Nitrosodi-n-propylamine	ND		ug/kg	470	--	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	470	--	1
Butyl benzyl phthalate	ND		ug/kg	470	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461842

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-02 Date Collected: 10/23/24 13:45

Client ID: PW-2 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	470	--	1
Di-n-octylphthalate	ND		ug/kg	470	--	1
Diethyl phthalate	ND		ug/kg	470	--	1
Dimethyl phthalate	ND		ug/kg	470	--	1
Benzo(a)anthracene	ND		ug/kg	280	--	1
Benzo(a)pyrene	ND		ug/kg	370	--	1
Benzo(b)fluoranthene	ND		ug/kg	280	--	1
Benzo(k)fluoranthene	ND		ug/kg	280	--	1
Chrysene	ND		ug/kg	280	--	1
Acenaphthylene	ND		ug/kg	370	--	1
Anthracene	ND		ug/kg	280	--	1
Benzo(ghi)perylene	ND		ug/kg	370	--	1
Fluorene	ND		ug/kg	470	--	1
Phenanthrene	ND		ug/kg	280	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	280	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	370	--	1
Pyrene	ND		ug/kg	280	--	1
Biphenyl	ND		ug/kg	1100	--	1
Aniline	ND		ug/kg	560	--	1
4-Chloroaniline	ND		ug/kg	470	--	1
1-Methylnaphthalene	ND		ug/kg	470	--	1
2-Nitroaniline	ND		ug/kg	470	--	1
3-Nitroaniline	ND		ug/kg	470	--	1
4-Nitroaniline	ND		ug/kg	470	--	1
Dibenzofuran	ND		ug/kg	470	--	1
2-Methylnaphthalene	ND		ug/kg	560	--	1
n-Nitrosodimethylamine	ND		ug/kg	940	--	1
2,4,6-Trichlorophenol	ND		ug/kg	280	--	1
p-Chloro-m-cresol	ND		ug/kg	470	--	1
2-Chlorophenol	ND		ug/kg	470	--	1
2,4-Dichlorophenol	ND		ug/kg	420	--	1
2,4-Dimethylphenol	ND		ug/kg	470	--	1
2-Nitrophenol	ND		ug/kg	1000	--	1
4-Nitrophenol	ND		ug/kg	660	--	1
2,4-Dinitrophenol	ND		ug/kg	2200	--	1
4,6-Dinitro-o-cresol	ND		ug/kg	1200	--	1
Pentachlorophenol	ND		ug/kg	370	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461842

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-02 Date Collected: 10/23/24 13:45

Client ID: PW-2 Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/kg	470	--	1
2-Methylphenol	ND		ug/kg	470	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	670	--	1
2,4,5-Trichlorophenol	ND		ug/kg	470	--	1
Benzoic Acid	ND		ug/kg	1500	--	1
Benzyl Alcohol	ND		ug/kg	470	--	1
Carbazole	ND		ug/kg	470	--	1
Pyridine	ND		ug/kg	500	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	104		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	80		18-120

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-03
Client ID: DUP-PW
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Analytical Method: 1,8270E
Analytical Date: 10/30/24 08:34
Analyst: IM
Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	370	--	1
Benzidine	ND		ug/kg	1500	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	460	--	1
Hexachlorobenzene	ND		ug/kg	280	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	420	--	1
2-Chloronaphthalene	ND		ug/kg	460	--	1
1,2-Dichlorobenzene	ND		ug/kg	460	--	1
1,3-Dichlorobenzene	ND		ug/kg	460	--	1
1,4-Dichlorobenzene	ND		ug/kg	460	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	460	--	1
2,4-Dinitrotoluene	ND		ug/kg	460	--	1
2,6-Dinitrotoluene	ND		ug/kg	460	--	1
Azobenzene	ND		ug/kg	460	--	1
Fluoranthene	ND		ug/kg	280	--	1
4-Chlorophenyl phenyl ether	ND		ug/kg	460	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	460	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	560	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	500	--	1
Hexachlorobutadiene	ND		ug/kg	460	--	1
Hexachlorocyclopentadiene	ND		ug/kg	1300	--	1
Hexachloroethane	ND		ug/kg	370	--	1
Isophorone	ND		ug/kg	420	--	1
Naphthalene	ND		ug/kg	460	--	1
Nitrobenzene	ND		ug/kg	420	--	1
NDPA/DPA	ND		ug/kg	370	--	1
n-Nitrosodi-n-propylamine	ND		ug/kg	460	--	1
Bis(2-ethylhexyl)phthalate	480		ug/kg	460	--	1
Butyl benzyl phthalate	ND		ug/kg	460	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461842

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-03 Date Collected: 10/23/24 13:45

Client ID: DUP-PW Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Di-n-butylphthalate	ND		ug/kg	460	--	1
Di-n-octylphthalate	ND		ug/kg	460	--	1
Diethyl phthalate	ND		ug/kg	460	--	1
Dimethyl phthalate	ND		ug/kg	460	--	1
Benzo(a)anthracene	ND		ug/kg	280	--	1
Benzo(a)pyrene	ND		ug/kg	370	--	1
Benzo(b)fluoranthene	ND		ug/kg	280	--	1
Benzo(k)fluoranthene	ND		ug/kg	280	--	1
Chrysene	ND		ug/kg	280	--	1
Acenaphthylene	ND		ug/kg	370	--	1
Anthracene	ND		ug/kg	280	--	1
Benzo(ghi)perylene	ND		ug/kg	370	--	1
Fluorene	ND		ug/kg	460	--	1
Phenanthrene	ND		ug/kg	280	--	1
Dibenzo(a,h)anthracene	ND		ug/kg	280	--	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	370	--	1
Pyrene	ND		ug/kg	280	--	1
Biphenyl	ND		ug/kg	1100	--	1
Aniline	ND		ug/kg	560	--	1
4-Chloroaniline	ND		ug/kg	460	--	1
1-Methylnaphthalene	ND		ug/kg	460	--	1
2-Nitroaniline	ND		ug/kg	460	--	1
3-Nitroaniline	ND		ug/kg	460	--	1
4-Nitroaniline	ND		ug/kg	460	--	1
Dibenzofuran	ND		ug/kg	460	--	1
2-Methylnaphthalene	ND		ug/kg	560	--	1
n-Nitrosodimethylamine	ND		ug/kg	930	--	1
2,4,6-Trichlorophenol	ND		ug/kg	280	--	1
p-Chloro-m-cresol	ND		ug/kg	460	--	1
2-Chlorophenol	ND		ug/kg	460	--	1
2,4-Dichlorophenol	ND		ug/kg	420	--	1
2,4-Dimethylphenol	ND		ug/kg	460	--	1
2-Nitrophenol	ND		ug/kg	1000	--	1
4-Nitrophenol	ND		ug/kg	650	--	1
2,4-Dinitrophenol	ND		ug/kg	2200	--	1
4,6-Dinitro-o-cresol	ND		ug/kg	1200	--	1
Pentachlorophenol	ND		ug/kg	370	--	1

Project Name: FORMER GNP MILL **Lab Number:** L2461842

Project Number: 549784.1.306 **Report Date:** 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-03 Date Collected: 10/23/24 13:45

Client ID: DUP-PW Date Received: 10/23/24

Sample Location: EAST MILLINOCKET, ME Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenol	ND		ug/kg	460	--	1
2-Methylphenol	ND		ug/kg	460	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	670	--	1
2,4,5-Trichlorophenol	ND		ug/kg	460	--	1
Benzoic Acid	ND		ug/kg	1500	--	1
Benzyl Alcohol	ND		ug/kg	460	--	1
Carbazole	ND		ug/kg	460	--	1
Pyridine	ND		ug/kg	500	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	92		25-120
Phenol-d6	95		10-120
Nitrobenzene-d5	102		23-120
2-Fluorobiphenyl	96		30-120
2,4,6-Tribromophenol	105		10-136
4-Terphenyl-d14	91		18-120

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/30/24 03:07
Analyst: SLR

Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990005-1					
Acenaphthene	ND		ug/kg	130	--
Benzidine	ND		ug/kg	540	--
1,2,4-Trichlorobenzene	ND		ug/kg	160	--
Hexachlorobenzene	ND		ug/kg	97	--
Bis(2-chloroethyl)ether	ND		ug/kg	150	--
2-Chloronaphthalene	ND		ug/kg	160	--
1,2-Dichlorobenzene	ND		ug/kg	160	--
1,3-Dichlorobenzene	ND		ug/kg	160	--
1,4-Dichlorobenzene	ND		ug/kg	160	--
3,3'-Dichlorobenzidine	ND		ug/kg	160	--
2,4-Dinitrotoluene	ND		ug/kg	160	--
2,6-Dinitrotoluene	ND		ug/kg	160	--
Azobenzene	ND		ug/kg	160	--
Fluoranthene	ND		ug/kg	97	--
4-Chlorophenyl phenyl ether	ND		ug/kg	160	--
4-Bromophenyl phenyl ether	ND		ug/kg	160	--
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	--
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--
Hexachlorobutadiene	ND		ug/kg	160	--
Hexachlorocyclopentadiene	ND		ug/kg	460	--
Hexachloroethane	ND		ug/kg	130	--
Isophorone	ND		ug/kg	150	--
Naphthalene	ND		ug/kg	160	--
Nitrobenzene	ND		ug/kg	150	--
NDPA/DPA	ND		ug/kg	130	--
n-Nitrosodi-n-propylamine	ND		ug/kg	160	--
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	--
Butyl benzyl phthalate	ND		ug/kg	160	--
Di-n-butylphthalate	ND		ug/kg	160	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/30/24 03:07
Analyst: SLR

Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990005-1					
Di-n-octylphthalate	ND		ug/kg	160	--
Diethyl phthalate	ND		ug/kg	160	--
Dimethyl phthalate	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	97	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	97	--
Benzo(k)fluoranthene	ND		ug/kg	97	--
Chrysene	ND		ug/kg	97	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	97	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	97	--
Dibenzo(a,h)anthracene	ND		ug/kg	97	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	97	--
Biphenyl	ND		ug/kg	370	--
Aniline	ND		ug/kg	190	--
4-Chloroaniline	ND		ug/kg	160	--
1-Methylnaphthalene	ND		ug/kg	160	--
2-Nitroaniline	ND		ug/kg	160	--
3-Nitroaniline	ND		ug/kg	160	--
4-Nitroaniline	ND		ug/kg	160	--
Dibenzofuran	ND		ug/kg	160	--
2-Methylnaphthalene	ND		ug/kg	190	--
n-Nitrosodimethylamine	ND		ug/kg	320	--
2,4,6-Trichlorophenol	ND		ug/kg	97	--
p-Chloro-m-cresol	ND		ug/kg	160	--
2-Chlorophenol	ND		ug/kg	160	--

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/30/24 03:07
Analyst: SLR

Extraction Method: EPA 3540C
Extraction Date: 10/28/24 14:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1990005-1					
2,4-Dichlorophenol	ND		ug/kg	150	--
2,4-Dimethylphenol	ND		ug/kg	160	--
2-Nitrophenol	ND		ug/kg	350	--
4-Nitrophenol	ND		ug/kg	230	--
2,4-Dinitrophenol	ND		ug/kg	780	--
4,6-Dinitro-o-cresol	ND		ug/kg	420	--
Pentachlorophenol	ND		ug/kg	130	--
Phenol	ND		ug/kg	160	--
2-Methylphenol	ND		ug/kg	160	--
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	--
2,4,5-Trichlorophenol	ND		ug/kg	160	--
Benzoic Acid	ND		ug/kg	530	--
Benzyl Alcohol	ND		ug/kg	160	--
Carbazole	ND		ug/kg	160	--
Pyridine	ND		ug/kg	180	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	77		10-136
4-Terphenyl-d14	83		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990005-2 WG1990005-3								
Acenaphthene	79		70		31-137	12		50
Benzidine	19		27		10-66	35		50
1,2,4-Trichlorobenzene	81		69		38-107	16		50
Hexachlorobenzene	82		73		40-140	12		50
Bis(2-chloroethyl)ether	76		65		40-140	16		50
2-Chloronaphthalene	84		74		40-140	13		50
1,2-Dichlorobenzene	76		66		40-140	14		50
1,3-Dichlorobenzene	77		65		40-140	17		50
1,4-Dichlorobenzene	75		67		28-104	11		50
3,3'-Dichlorobenzidine	73		77		40-140	5		50
2,4-Dinitrotoluene	100		92		40-132	8		50
2,6-Dinitrotoluene	96		86		40-140	11		50
Azobenzene	90		82		40-140	9		50
Fluoranthene	82		75		40-140	9		50
4-Chlorophenyl phenyl ether	80		71		40-140	12		50
4-Bromophenyl phenyl ether	82		73		40-140	12		50
Bis(2-chloroisopropyl)ether	69		60		40-140	14		50
Bis(2-chloroethoxy)methane	78		68		40-117	14		50
Hexachlorobutadiene	82		72		40-140	13		50
Hexachlorocyclopentadiene	55		48		40-140	14		50
Hexachloroethane	82		68		40-140	19		50
Isophorone	82		72		40-140	13		50
Naphthalene	80		69		40-140	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990005-2 WG1990005-3								
Nitrobenzene	87		75		40-140	15		50
NDPA/DPA	83		75		36-157	10		50
n-Nitrosodi-n-propylamine	80		70		32-121	13		50
Bis(2-ethylhexyl)phthalate	91		82		40-140	10		50
Butyl benzyl phthalate	92		83		40-140	10		50
Di-n-butylphthalate	86		79		40-140	8		50
Di-n-octylphthalate	93		83		40-140	11		50
Diethyl phthalate	88		79		40-140	11		50
Dimethyl phthalate	87		78		40-140	11		50
Benzo(a)anthracene	81		74		40-140	9		50
Benzo(a)pyrene	83		76		40-140	9		50
Benzo(b)fluoranthene	81		74		40-140	9		50
Benzo(k)fluoranthene	80		73		40-140	9		50
Chrysene	82		74		40-140	10		50
Acenaphthylene	87		78		40-140	11		50
Anthracene	81		74		40-140	9		50
Benzo(ghi)perylene	79		72		40-140	9		50
Fluorene	81		73		40-140	10		50
Phenanthrene	79		73		40-140	8		50
Dibenzo(a,h)anthracene	78		70		40-140	11		50
Indeno(1,2,3-cd)pyrene	78		70		40-140	11		50
Pyrene	82		75		35-142	9		50
Biphenyl	85		75		37-127	13		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990005-2 WG1990005-3								
Aniline	40		40		40-140	0		50
4-Chloroaniline	62		63		40-140	2		50
1-Methylnaphthalene	92		81		26-130	13		50
2-Nitroaniline	99		89		47-134	11		50
3-Nitroaniline	78		82		26-129	5		50
4-Nitroaniline	91		84		41-125	8		50
Dibenzofuran	82		73		40-140	12		50
2-Methylnaphthalene	79		69		40-140	14		50
n-Nitrosodimethylamine	74		69		22-100	7		50
2,4,6-Trichlorophenol	92		84		30-130	9		50
p-Chloro-m-cresol	90		84		26-103	7		50
2-Chlorophenol	79		70		25-102	12		50
2,4-Dichlorophenol	86		76		30-130	12		50
2,4-Dimethylphenol	75		67		30-130	11		50
2-Nitrophenol	94		81		30-130	15		50
4-Nitrophenol	108		95		11-114	13		50
2,4-Dinitrophenol	94		83		4-130	12		50
4,6-Dinitro-o-cresol	107		96		10-130	11		50
Pentachlorophenol	80		74		17-109	8		50
Phenol	75		66		26-90	13		50
2-Methylphenol	82		73		30-130.	12		50
3-Methylphenol/4-Methylphenol	86		79		30-130	8		50
2,4,5-Trichlorophenol	95		84		30-130	12		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1990005-2 WG1990005-3								
Benzoic Acid	72		42		10-110	**53**	Q	50
Benzyl Alcohol	91		80		40-140	13		50
Carbazole	82		74		54-128	10		50
Pyridine	58		55		10-93	5		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	81		70		25-120
Phenol-d6	82		72		10-120
Nitrobenzene-d5	88		76		23-120
2-Fluorobiphenyl	83		73		30-120
2,4,6-Tribromophenol	85		76		10-136
4-Terphenyl-d14	78		70		18-120

METALS

Project Name: FORMER GNP MILL
Lab Number: L2461842
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-01
Client ID: PW-1
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:35
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results are reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/kg	0.752	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Barium, Total	ND		mg/kg	0.752	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.752	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Chromium, Total	ND		mg/kg	0.752	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Lead, Total	ND		mg/kg	3.76	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Mercury, Total	0.065		mg/kg	0.063	--	1	10/29/24 13:20	10/30/24 11:00	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.50	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.376	--	2	10/29/24 10:40	10/31/24 20:25	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-02
Client ID: PW-2
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results are reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/kg	0.765	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Barium, Total	2.67		mg/kg	0.765	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.765	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Chromium, Total	ND		mg/kg	0.765	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Lead, Total	ND		mg/kg	3.82	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Mercury, Total	ND		mg/kg	0.064	--	1	10/29/24 13:20	10/30/24 09:48	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.53	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.382	--	2	10/29/24 10:40	10/31/24 18:23	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Lab Number: L2461842
Project Number: 549784.1.306
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-03
Client ID: DUP-PW
Sample Location: EAST MILLINOCKET, ME
Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results are reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Arsenic, Total	ND		mg/kg	0.763	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Barium, Total	ND		mg/kg	0.763	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.763	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Chromium, Total	ND		mg/kg	0.763	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Lead, Total	ND		mg/kg	3.81	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Mercury, Total	0.069		mg/kg	0.064	--	1	10/29/24 13:20	10/30/24 11:04	EPA 7471B	1,7471B	MJR
Selenium, Total	ND		mg/kg	1.52	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL
Silver, Total	ND		mg/kg	0.381	--	2	10/29/24 10:40	10/31/24 20:28	EPA 3050B	1,6010D	DHL

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1988662-24										
Arsenic, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Barium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Cadmium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Chromium, Total	ND		mg/kg	0.400	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Lead, Total	ND		mg/kg	2.00	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Selenium, Total	ND		mg/kg	0.800	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL
Silver, Total	ND		mg/kg	0.200	--	1	10/29/24 10:40	10/31/24 18:05	1,6010D	DHL

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1988668-1										
Mercury, Total	ND		mg/kg	0.083	--	1	10/29/24 13:20	10/30/24 09:41	1,7471B	MJR

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1988662-25								
Arsenic, Total	98		-		80-120	-		
Barium, Total	100		-		80-120	-		
Cadmium, Total	97		-		80-120	-		
Chromium, Total	98		-		80-120	-		
Lead, Total	97		-		80-120	-		
Selenium, Total	97		-		80-120	-		
Silver, Total	100		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1988668-2								
Mercury, Total	107		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988662-26 QC Sample: L2461842-02 Client ID: PW-2												
Arsenic, Total	ND	9.32	8.21	88		-	-		75-125	-		20
Barium, Total	2.67	155	146	92		-	-		75-125	-		20
Cadmium, Total	ND	4.12	3.60	87		-	-		75-125	-		20
Chromium, Total	ND	15.5	13.7	88		-	-		75-125	-		20
Lead, Total	ND	41.2	36.8	89		-	-		75-125	-		20
Selenium, Total	ND	9.32	8.57	92		-	-		75-125	-		20
Silver, Total	ND	3.88	3.65	94		-	-		75-125	-		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988668-3 QC Sample: L2461842-02 Client ID: PW-2												
Mercury, Total	ND	1.28	1.31	102		-	-		80-120	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988662-27 QC Sample: L2461842-02 Client ID: PW-2						
Arsenic, Total	ND	ND	mg/kg	NC		20
Barium, Total	2.67	1.09	mg/kg	**84**	Q	20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	ND	ND	mg/kg	NC		20
Lead, Total	ND	ND	mg/kg	NC		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1988668-4 QC Sample: L2461842-02 Client ID: PW-2						
Mercury, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-01
Client ID: PW-1
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:35
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.09		SU	-	NA	1	-	10/28/24 18:07	1,9045D	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-02
Client ID: PW-2
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	7.22		SU	-	NA	1	-	10/28/24 18:07	1,9045D	AAS

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

SAMPLE RESULTS

Lab ID: L2461842-03
Client ID: DUP-PW
Sample Location: EAST MILLINOCKET, ME

Date Collected: 10/23/24 13:45
Date Received: 10/23/24
Field Prep: Not Specified

Sample Depth:
Matrix: Solid
Percent Solids: Results reported on an 'AS RECEIVED' basis.

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	6.93		SU	-	NA	1	-	10/28/24 18:07	1,9045D	AAS

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 Batch: WG1990070-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: FORMER GNP MILL

Project Number: 549784.1.306

Lab Number: L2461842

Report Date: 11/01/24

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1990070-2 QC Sample: L2461842-02 Client ID: PW-2						
pH (H)	7.22	7.57	SU	5		5

Project Name: FORMER GNP MILL
Project Number: 549784.1.306

Lab Number: L2461842
Report Date: 11/01/24

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2461842-01A	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS100()
L2461842-01B	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		8270TCL(14),PH-9045(1)
L2461842-01C	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461842-02A	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS100()
L2461842-02A1	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS100()
L2461842-02A2	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS100()
L2461842-02B	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		8270TCL(14),PH-9045(1)
L2461842-02C	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461842-02C1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461842-02C2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)
L2461842-03A	Plastic 2oz unpreserved for TS	A	NA		3.1	Y	Absent		TS100()
L2461842-03B	Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		8270TCL(14),PH-9045(1)
L2461842-03C	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.1	Y	Absent		BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),PB-TI(180),SE-TI(180),HG-T(28),CD-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461842
Project Number:	549784.1.306	**Report Date:**	11/01/24

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461842
Project Number:	549784.1.306	**Report Date:**	11/01/24

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	FORMER GNP MILL	**Lab Number:**	L2461842
Project Number:	549784.1.306	**Report Date:**	11/01/24

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name: FORMER GNP MILL
Project Number: 549784.1.306
Lab Number: L2461842
Report Date: 11/01/24

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine, 2,6-Dichlorophenol.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:11012410:41

L2461842 300CT24
TRC – ME

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 10/23/24

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: TRC
Address: 63 Marginal Way, Fourth Floor
Portland, ME 04101
Phone: 207-719-5576
Fax:
Email: zbonin@trccompanies.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Former GNP Mill
Project Location: East Millinocket, ME
Project #: 549784.1.306
Project Manager: Zachary Bonin
ALPHA Quote #: 29032

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL
☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #: 223128

Regulatory Requirements/Report Limits

State/Fed Program: Refer to SSQAPP prepared by TRC
Criteria: Table K-Paper Waste (page 39 - 40)

Other Project Specific Requirements/Comments/Detection Limits:

Refer to SSQAPP for specific reporting limits and regulatory requirements.
Refer to SSQAPP for specific analytical methods.
SHORT HOLD TIME: pH
Please cc results to Nbarker@trccompanies.com

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RCRA 8 Metals(3050B/6010D/7471B)	SVOCs (Method 3540C/ 8270E)	pH (Method 9045D)	Sample Specific Comments	TOTAL # BOTTLES
61842-01	PW-1	10/23/24	13:35	Bulk	NB	☒	☒	☒		3
-02	PW-2	10/23/24	13:45	Bulk	NB	☒	☒	☒	MS/LAB DUP	3
-03	DUP-PW	10/23/24	14:35	Bulk	NB	☒	☒	☒		3
-02	PW-2 MS	10/23/24	13:45	Bulk	NB	☒	☐	☐		2
2	PW-2 LAB DUP	10/23/24	13:45	Bulk	NB	☒	☐	☐		2
						☐	☐	☐		
						☐	☐	☐		
						☐	☐	☐		
						☐	☐	☐		
						☐	☐	☐		
Container Type						A	A	A		
Preservative						A	A	A		

Relinquished By:	Date/Time	Received By:	Date/Time
N. Barker	10/23/24 15:22	Barry Boyle, Pace	10/23/24 15:22
Barry Boyle, Pace	10/23/24 17:40	Cody Murrell PACE	10/23/24 17:40
Cody Murrell	10/23/24 19:54	Dcolon	10/23/24 1954
Dcolon	10/23/24 2215		10/23/24 22:15

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-NJ) (rev. 5-JAN-12)

APPENDIX C:
DATA USABILITY ASSESSMENT

Soil, Waste Characterization, and Paper Waste Sampling
Former Great Northern Paper Mill
50 Main Street, East Millinocket, Maine
Data Usability Assessment
Prepared: April 23, 2025

A. Overall Summary

The data associated with soil, waste characterization (WC), and paper waste (PW) samples collected on October 23, 2024 were reviewed. In general, data are usable for project decisions based on a review of accuracy, precision, and sensitivity of the data. The data are valid as reported and may be used for decision-making purposes with the following limitations.

- Caution should be used with the results for total arsenic in samples HB-2 (0-2), HB-3 (2-3), and HB-6 (0-2) due to laboratory duplicate variability. The results for total arsenic in these samples are slightly below the Maine Department of Environmental Protection Remedial Action Guideline (MEDEP RAG) for the Residential scenario. The decision-making process may be affected as the results for total arsenic in these samples could have been higher and above the MEDEP RAG for the Residential scenario.

- Caution should be used with the detected SVOC results in samples WC-1 and DUP-WC due to field duplicate variability. The results for detected SVOCs in the duplicate sample, DUP-WC, are significantly higher than the parent sample, WC-1. In order to remain conservative, the higher results from the duplicate sample should be used for project objectives.

Samples Included in the Data Usability Assessment

Soil: HB-1 (0-2), HB-2 (0-2), HB-3 (2-3), HB-4 (0-2), HB-5 (2-3), HB-6 (0-2), DUP-SOIL[1]

WC: WC-1/WC-1 (VOC), WC-2/WC-2 (VOC), DUP-WC/DUP-WC (VOC)[2]

PW: PW-1, PW-2, DUP-PW[3]

Field Duplicates:
[1]Field duplicate of HB-3 (2-3)
[2]Field duplicate of WC-1/WC-1 (VOC)
[3]Field duplicate of PW-1

Trip Blank: TRIP BLANK (WC)

Analyses Performed:
Soil: EPH, total metals, pH, oxidation-reduction potential (ORP), hexavalent chromium, trivalent chromium
WC: VOCs, SVOCs, PCBs, pesticides, herbicides, total metals, ignitability, pH, reactive cyanide, reactive sulfide
PW: SVOCs, total metals, pH

Matrix Spikes (MSs), MS Duplicates (MSDs), and/or Laboratory Duplicates:
Soil: HB-5 (2-3) (MS/Laboratory duplicate: metals; MS/MSD: hexavalent chromium; laboratory duplicate: hexavalent chromium, pH, ORP)

WC: WC-2 (MS/Laboratory duplicate: metals)
PW: PW-2 (MS/Laboratory duplicate: metals; laboratory duplicate: pH)

Laboratory Data Packages: L2461842, L2461846*, L2461852 (Pace Analytical, Mansfield and/or Westborough, MA)

*The laboratory reported EPH target analytes using selective ion monitoring (SIM) which was not requested or required per the QAPP. Although this is a deviation from the QAPP, there is no impact on data usability due to this issue.

Criteria Reviewed: Holding times/sample preparation, blanks, surrogates, LCS, LCSDs, laboratory duplicates, MS, MSDs, post digestion spikes (PDS)**, field duplicates, reporting limits (RLs)

**Based on narrative comments only

B. Sensitivity Evaluation

Sensitivity was acceptable for all analyses of soil samples (i.e., the RLs for nondetect results were below the Maine Department of Environmental Protection Remedial Action Guidelines [MEDEP RAGs] for the Soil Exposure Pathway, November 15, 2023, for Residential, Commercial Worker, and Construction Worker scenarios).

Sensitivity was acceptable for the PCB, pesticide, herbicide, total metals, hexavalent chromium, and trivalent chromium analyses of WC samples (i.e., the RLs for nondetect results were below the MEDEP RAGs for the Soil Exposure Pathway, November 15, 2023, for Residential, Commercial Worker, and Construction Worker scenarios and 20x the Toxicity Characteristic Leaching Procedure [TCLP] limits, as applicable). The nondetect RLs for select VOCs and SVOCs in WC samples were above the MEDEP RAGs for the Soil Exposure Pathway for Residential and/or Commercial Worker scenarios and/or 20x the TCLP limits as summarized in the table below.

Analyte Affected	Affected Sample	Criteria Exceeded (mg/Kg)	RL(s) (mg/Kg)
1,2,3-Trichloropropane	WC-2 (VOC)	0.07[1]	0.2
1,2-Dibromo-3-chloropropane		0.078[1]	0.3
trans-1,4-Dichloro-2-butene		0.11[1] 0.48[2]	0.5
Hexachlorobenzene (SVOC)		1.1[1]	2.2
2,4-Dinitrotoluene		2.6[3]	3.6

[1] MEDEP Residential RAG
[2] MEDEP Commercial Worker RAG
[3] 20x TCLP limit

In general, these sensitivity issues were due to limitations of the analytical methods and/or dilution due to the concentrations of other target VOC and SVOCs that exceeded one or more of the project action levels. Since other detected VOCs and SVOCs were above the project action levels in this sample or since the listed analytes are not contaminants of concern at the site, these RL issues do not affect the overall achievement of project objectives.

Sensitivity was acceptable for the analyses of PW samples (i.e., the RLs for nondetect results were below 20x the TCLP limits, as applicable).

C. Evaluation of Accuracy and Precision

Biases and uncertainties associated with the EPH, metals, and pH analyses of the soil samples, SVOC, PCB, pesticide, reactive cyanide and sulfide, and metals analyses of the WC samples, and SVOC, metals, and pH analyses of the PW samples are discussed below. There were no biases or uncertainty associated with the remaining analyses of samples in this data set.

Note that data usability is not impacted by the following issues; therefore, nonconformances related to these items were not evaluated and/or summarized in this DUA.

- When original and field duplicate, or laboratory duplicate results were <5x the RL, and the absolute difference was (AbsD) ≤ 2x the RL, duplicate precision was deemed acceptable.
- When original and field duplicate samples were analyzed at two different dilutions, one or both results were <5x the RL, and the AbsD ≤ 2x the RLs of one or both samples, duplicate precision was deemed acceptable.
- SVOC surrogate recoveries are deemed acceptable when only one surrogate per acid or base/neutral class is outside of the acceptance limits.
- SVOC surrogate recoveries are not used to evaluate data usability when diluted >5-fold.

C-1. Low-Biased Results

Potential low bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by the QC nonconformances, as shown in the table below.

Associated Samples	Analytes Affected	Reason for Low Bias	Reason Data Usability or Decision-making Process Not Affected
WC-1, WC-2, DUP-WC	Hexachlorocyclopentadiene, aniline, 4,6-dinitro-o-cresol	Low LCS and/or LCSD recovery	Either no project action levels exist or results for affected analytes significantly below the project action levels in the associated samples.

C-2. High-Biased Results

Potential high bias exists for select results due to various QC nonconformances. In general, the overall data usability and decision-making process were not affected by the QC nonconformances, as shown in the table below.

Associated Sample	Analytes Affected	Reason for High Bias	Reason Data Usability or Decision-making Process Not Affected
WC-2	Aroclor 1260, Total PCBs	High surrogate recovery	Either no project actions levels exist or results for affected analyte below the project action levels in the associated sample.
	All reported pesticides	High surrogate recoveries	Affected analytes not detected in associated sample.

C-3. Potential Uncertainty

Potential uncertainty exists for the results for total arsenic in samples HB-2 (0-2), HB-3 (2-3), and HB-6 (0-2) due to laboratory duplicate variability. The results for total arsenic in these samples are slightly below the MEDEP RAG for the Residential scenario and should be used with caution. The decision-making process may be affected as the results for total arsenic in these samples could have been higher and above the MEDEP RAG for the Residential scenario.

Potential uncertainty exists for the detected SVOC results in samples WC-1 and DUP-WC due to field duplicate variability. The results for detected SVOCs in the duplicate sample, DUP-WC, are significantly higher than the parent sample, WC-1. In order to remain conservative, the higher results from the duplicate sample should be used for project objectives.

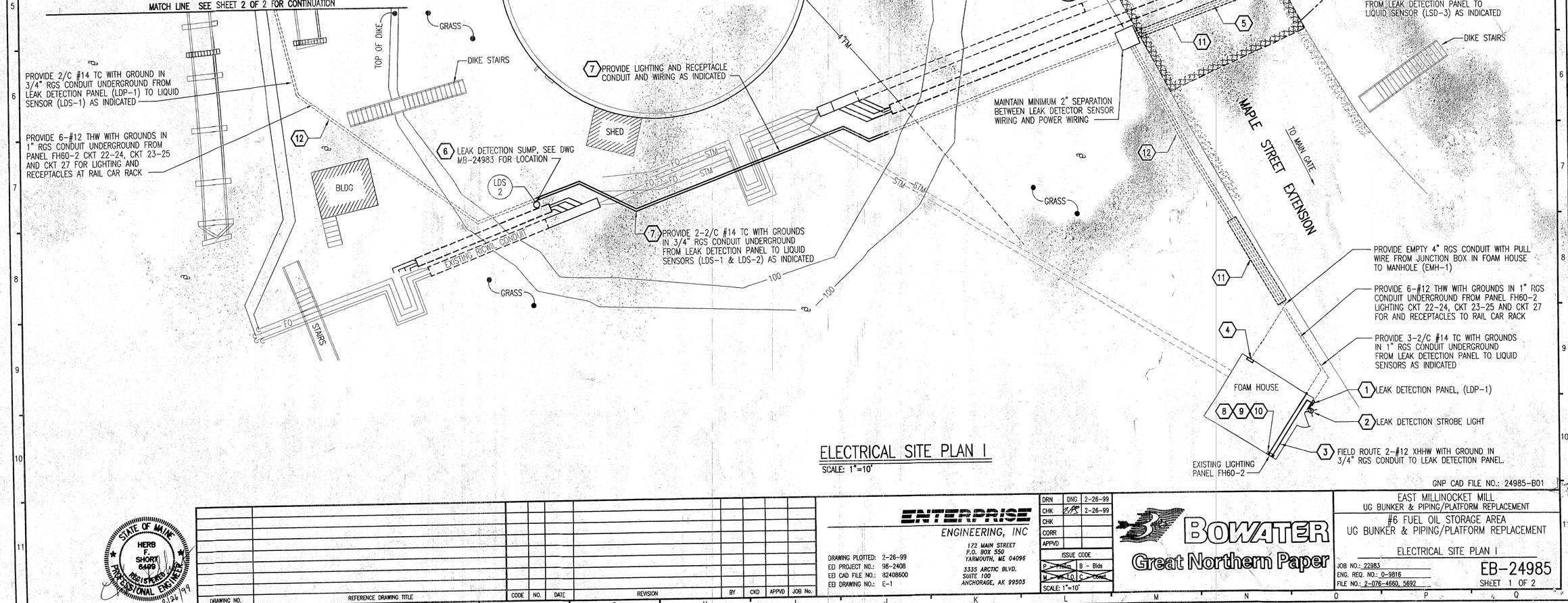
In general, the overall data usability and decision-making process were not affected by the remaining QC nonconformances, as shown in the table below.

Associated Samples	Analytes Affected	Reason for Uncertainty	Reason Data Usability or Decision-making Process Not Affected
PW-1, PW-2, DUP-PW	Benzoic acid	LCS/LCSD variability	No project action level exists for benzoic acid.
	Barium	Laboratory duplicate variability	Results for affected analyte significantly below the project action levels in the associated samples.
	pH	Holding time exceedance	Results for pH well within the project action level range in the associated samples.
HB-1 (0-2), HB-2 (0-2), HB-3 (2-3), HB-4 (0-2), HB-5 (2-3), HB-6 (0-2)	pH	Holding time exceedance	No project action levels exist for pH.
HB-3 (2-3), DUP-SOIL	C11-C22 Aromatics	Field duplicate variability	Results for affected analytes significantly below the project action levels in the associated samples.
HB-1 (0-2), HB-2 (0-2), HB-3 (2-3), HB-4 (0-2), HB-5 (2-3), HB-6 (0-2), DUP-SOIL	Total lead		
	Total chromium* (also impacting trivalent chromium) and lead	Low MS recoveries with acceptable PDS recoveries	Results for affected analytes significantly above or below the project action levels in the associated samples.
	Total barium, chromium*, and lead	Laboratory duplicate variability	Results for affected analytes significantly above or below the project action levels in the associated samples.
HB-1 (0-2), HB-4 (0-2), HB-5 (2-3), DUP-SOIL	Total arsenic		
WC-1, WC-2, DUP-WC	Total arsenic	High MS recovery with acceptable PDS recovery	Results for affected analyte significantly below the project action levels in the associated samples.
	pH	Holding time exceedance	Results for pH well within the project action level range in the associated samples.
	Reactive cyanide, reactive sulfide		No project action levels exists for the affected analytes.

*Results for chromium (total) were compared to the more stringent MEDEP RAGs for chromium (VI); however, since chromium (VI) was not detected in the affected samples, it is assumed that the chromium (total) is chromium (III). Results for chromium (total) are significantly below the MDEP RAGs for chromium (III).

WORK NOTES:

1. PROVIDE A 120VAC 4 CHANNEL LEAK DETECTION PANEL (LDP-1) WITH A NEMA 3R ENCLOSURE, A POWER "NORMAL" INDICATOR LIGHT, A SILENCE PUSHBUTTON AND A TEST PUSHBUTTON. EACH CHANNEL SHALL HAVE A "LEAK DETECTED" INDICATOR LIGHT AND A SPDT AUXILIARY CONTACT RATED 10A AT 120V, SIMILAR TO WARRICK MODEL NO. DMS 474-4-A-2. ATTACH TO SOUTHEAST EXTERIOR WALL OF FOAM HOUSE, APPROXIMATELY 5'-0" TO CENTER OF PANEL ABOVE FINISH GRADE, USING GALVANIZED OR STAINLESS STEEL HARDWARE. PROVIDE 1" RGS CONDULET SEAL FITTING APPROXIMATELY 1'-0" ABOVE FINISH GRADE IN CONDUIT TO LIQUID SENSORS.
2. PROVIDE 120V DOUBLE FLASH STROBE LIGHT WITH A RED FRESNEL LENS AND A FLASH RATE BETWEEN 75-85 FLASHES PER MINUTE, SIMILAR TO FEDERAL SIGNAL CORP. MODEL NO. 131DST. MOUNT ON TOP 1 INCH RGS CONDUIT, EXTENDING APPROXIMATELY 1'-0" ABOVE THE ROOF AT LOCATION SHOWN, SUPPORT USING GALVANIZED OR STAINLESS STEEL HARDWARE.
3. UTILIZE EXISTING SPARE 20A CIRCUIT BREAKER IN CIRCUIT 21 FOR 120V POWER SUPPLY TO LEAK DETECTION PANEL (LDP-1) SEAL WALL AT CONDUIT PENETRATION TO MAINTAIN CURRENT FIRE RATING, USING ELASTA-SEAL 600 BY FIRE STOP SYSTEMS, OR EQUAL.
4. PROVIDE 14"x12"x6" NEMA 3R, JUNCTION BOX MOUNT ON WALL APPROXIMATELY 1'-0" ABOVE FINISHED FLOOR TO BOTTOM OF BOX. SEAL WALL AROUND CONDUIT PENETRATION TO MAINTAIN WALL'S CURRENT FIRE RATING USING ELASTA-SEAL 600 BY FIRE STOP SYSTEMS, OR EQUAL.
5. PROVIDE EMPTY 4" RGS CONDUIT WITH PULL WIRE (FOR FUTURE USE) FROM MANHOLE EMH-1 AS INDICATED. CAP CONDUIT AFTER IT EXITS THE EDGE OF DIKE TO PREVENT THE ENTRANCE OF WILDLIFE AND DEBRIS.
6. PROVIDE WARRICK MODEL DLP-2 LIQUID SENSOR WITH NEMA 4 MONITORING WELL CAP MODEL DSC-12B. WIRE PER MANUFACTURER'S INSTRUCTIONS.
7. FIELD ROUTE RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE WITHIN DIKE AREA. UTILIZE EXISTING PIPE SUPPORTS WHERE POSSIBLE. PROVIDE ADDITIONAL CONDUIT SUPPORTS WHERE NECESSARY TO MEET THE NATIONAL ELECTRICAL CODE CONDUIT SUPPORT REQUIREMENTS.
8. MODIFY EXISTING SPARE SINGLE POLE 120V, 20A CIRCUIT BREAKERS IN SLOTS 22 & 24 TO PROVIDE A GANGED 240V POWER SUPPLY TO THE TYPE "A" LIGHTING FIXTURES ON TOP OF THE PLATFORM.
9. MODIFY EXISTING SPARE SINGLE POLE 120V, 20A CIRCUIT BREAKERS IN SLOTS 23 & 25 TO PROVIDE A GANGED 240V POWER SUPPLY TO THE TYPE "B" LIGHTING FIXTURES UNDER THE PLATFORM.
10. REPLACE EXISTING SPARE SINGLE POLE 120V, 20A CIRCUIT BREAKER IN SLOT 27 WITH A 120V GROUND FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKER FOR 120V POWER SUPPLY TO THE RECEPTACLES AT THE PLATFORM.
11. PROVIDE CONCRETE DUCT BANK UNDER ROADWAY AND PARKING LOT ENTRANCE AS INDICATED. EXTEND DUCT BANK A MINIMUM OF 2'-0" BEYOND EDGES OF ROAD AND PARKING LOT. PROVIDE A MINIMUM OF 3" OF CONCRETE SURROUNDING CONDUITS. INSTALL TOP OF DUCT BANK A MINIMUM OF 2'-0" BELOW GRADE AND WARNING TAPE APPROXIMATELY 1'-0" BELOW GRADE. SEE CIVIL DRAWINGS FOR SURFACE RESTORATION DETAILS.
12. DIRECT BURY RIGID GALVANIZED STEEL CONDUIT IN NON-TRAFFIC AREAS A MINIMUM OF 18" BELOW GRADE WITH A MINIMUM 3" LAYER OF SAND SURROUNDING CONDUIT. INSTALL WARNING TAPE APPROXIMATELY 1'-0" BELOW GRADE. SEE CIVIL DRAWINGS FOR SURFACE RESTORATION DETAILS.



ELECTRICAL SITE PLAN I

SCALE: 1"=10'

GNP CAD FILE NO.: 24985-B01

STATE OF MAINE
HERB E SHORT 6499
REGISTERED PROFESSIONAL ENGINEER
8/26/99

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.

ENTERPRISE
ENGINEERING, INC
172 MAIN STREET
P.O. BOX 550
YARMOUTH, ME 04096
3335 ARCTIC BLVD.
SUITE 100
ANCHORAGE, AK 99503

DRAWING PLOTTED: 2-26-99
EEI PROJECT NO.: 98-2408
EEI CAD FILE NO.: 82408600
EEI DRAWING NO.: E-1

DRN	DNG	2-26-99
CHK	[illegible]	2-26-99
CHK		
CORR		
APPVD		

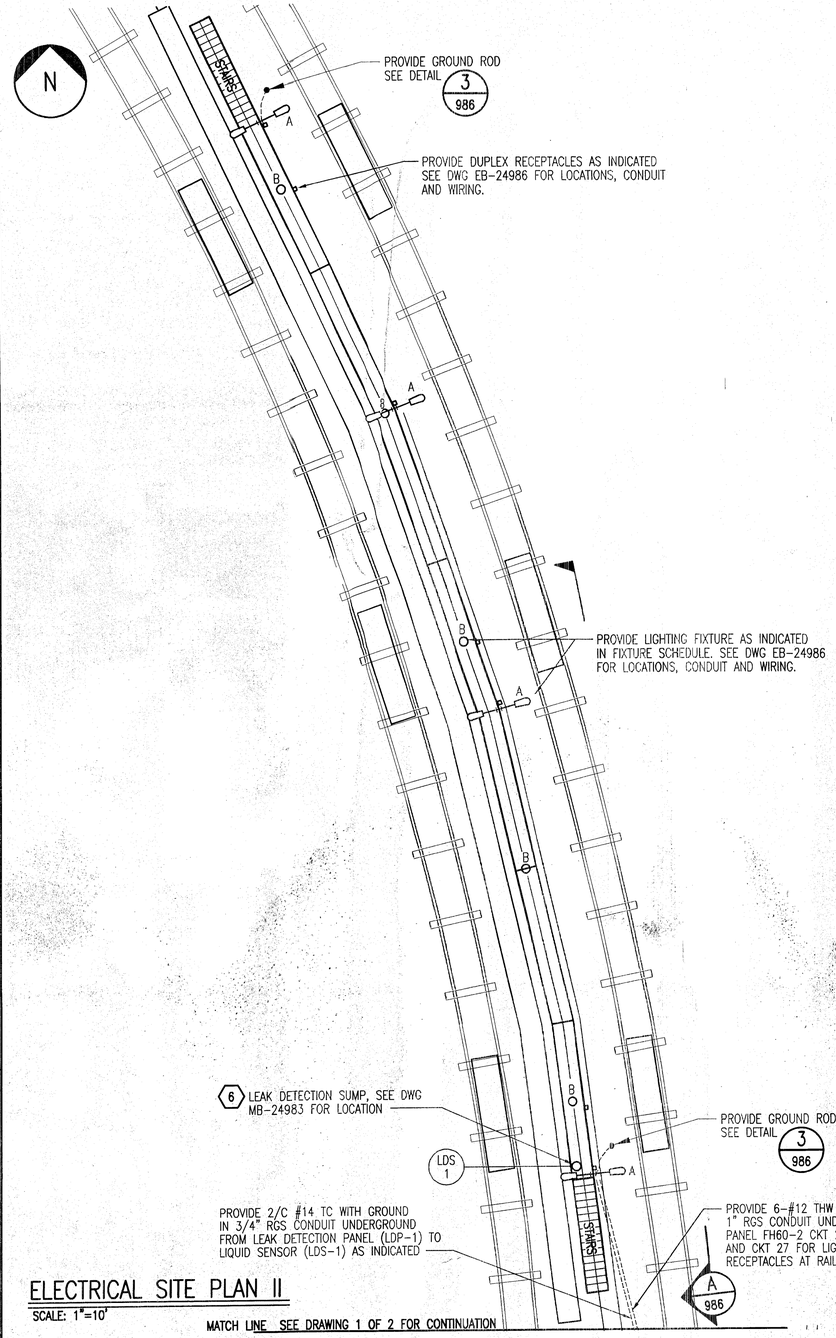
ISSUE CODE
P - Prelim B - Bids
M - Mill T.O. C - Const.
SCALE: 1"=10'

BOWATER
Great Northern Paper

EAST MILLINOCKET MILL
UG BUNKER & PIPING/PLATFORM REPLACEMENT
#6 FUEL OIL STORAGE AREA
UG BUNKER & PIPING/PLATFORM REPLACEMENT
ELECTRICAL SITE PLAN I

JOB NO.: 22983
ENG. REQ. NO.: 0-9816
FILE NO.: 2-076-4660, 5692

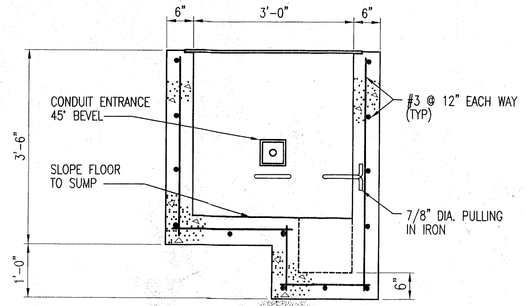
EB-24985
SHEET 1 OF 2



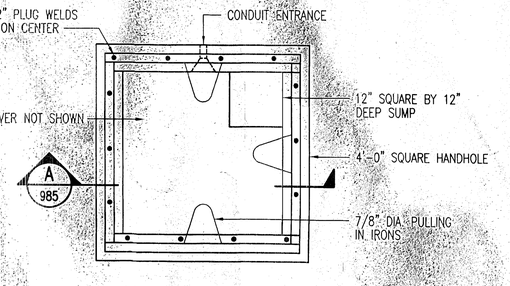
ELECTRICAL SITE PLAN II

SCALE: 1"=10'

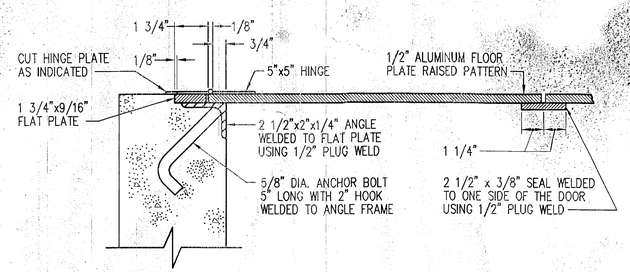
MATCH LINE SEE DRAWING 1 OF 2 FOR CONTINUATION



A 985 SECTION



HANDHOLE PLAN



B 985 SECTION
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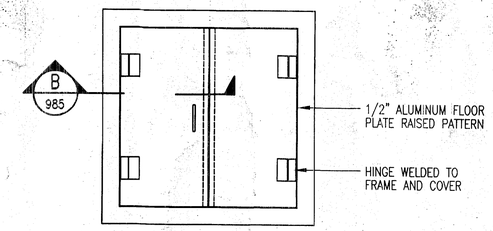


PLAN OF COVER

1 985 NONTRAFFIC HANDHOLE DETAILS
SCALE: 3/4"=1'-0"

STATE OF MAINE HERB F. SHORT 6409 REGISTERED PROFESSIONAL ENGINEER 12/6/99

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.

ENTERPRISE ENGINEERING, INC
172 MAIN STREET
P.O. BOX 550
YARMOUTH, ME 04096
3335 ARCTIC BLVD.
SUITE 100
ANCHORAGE, AK 99503

DRAWING PLOTTED: 2-26-99
EEI PROJECT NO.: 98-2408
EEI CAD FILE NO.: 82408601
EEI DRAWING NO.: E-2

DRN	DNG	2-26-99
CHK		2-26-99
CHK		
CORR		
APPVD		

ISSUE CODE: P – Prelim; B – Bids; M – Mill T.O.; C – Const.
SCALE: AS NOTED

BOWATER Great Northern Paper

GNP CAD FILE NO.: 24985-B02

EAST MILLINOCKET MILL
UG BUNKER & PIPING/PLATFORM REPLACEMENT
#6 FUEL OIL STORAGE AREA
UG BUNKER & PIPING/PLATFORM REPLACEMENT
ELECTRICAL SITE PLAN II & DETAILS

JOB NO.: 22983
ENG. REQ. NO.: 0-9816
FILE NO.: 2-076-4660.5692

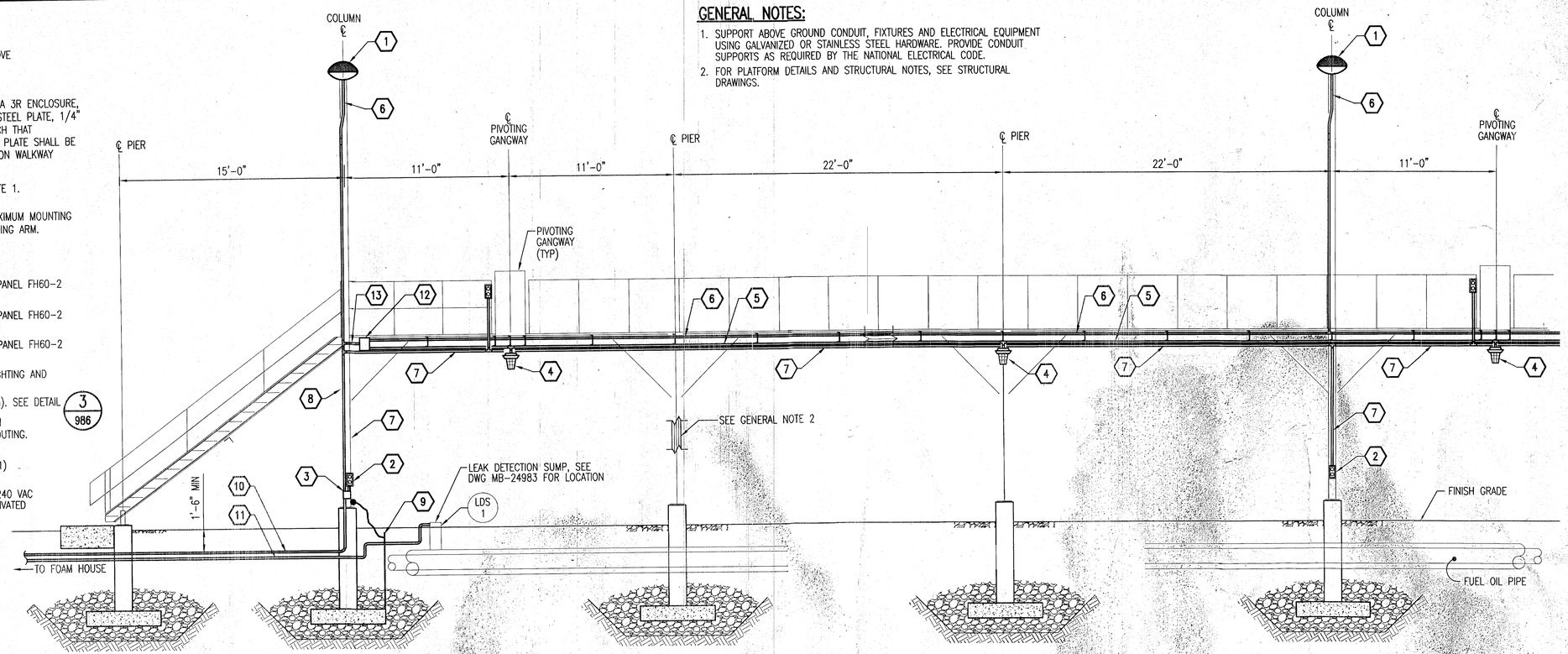
EB-24985
SHEET 2 OF 2

WORK NOTES

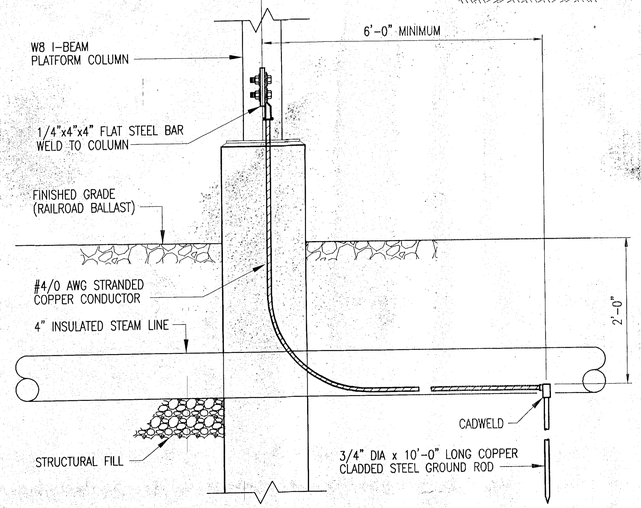
1. MOUNT TYPE A COBRAHEAD FIXTURES TO EXTENDED EAST COLUMN, APPROXIMATELY 30 FEET ABOVE FINISHED GRADE (17 1/2 FEET ABOVE WALKWAY GRATING). SEE DETAIL 2/986
2. PROVIDE DUPLEX RECEPTACLE, TYPE 5-15R, WITH WATERPROOF NEMA 3R ENCLOSURE, HBL5262 (TYPICAL OF 7). MOUNT RECEPTACLES TO 4"x6" CARBON STEEL PLATE, 1/4" THICK. WELD PLATE TO RAIL OR COLUMN, WHERE APPROPRIATE, SUCH THAT RECEPTACLE IS APPROXIMATELY 3 FEET ABOVE GRADE OR WALKWAY. PLATE SHALL BE PAINTED WITH CORROSION INHIBITOR, COLOR BEIGE. RECEPTACLES ON WALKWAY SHALL FACE OUTWARD AS SHOWN.
3. PROVIDE NEMA 3R JUNCTION BOX, SIZE TO SUIT. SEE GENERAL NOTE 1.
4. SUSPEND TYPE B FIXTURE FROM JUNCTION BOX; POSITION FOR MAXIMUM MOUNTING HEIGHT ABOVE GRADE TO PROVIDE ADEQUATE CLEARANCE FOR LOADING ARM. CENTER FIXTURE UNDER WALKWAY. SEE DETAIL 1/986
5. PROVIDE 2-#12 THW WITH GROUND IN 3/4" RGS CONDUIT FROM PANEL FH60-2 CIRCUIT 23,25 VIA LIGHTING CONTACTOR.
6. PROVIDE 2-#12 THW WITH GROUND IN 3/4" RGS CONDUIT FROM PANEL FH60-2 CIRCUIT 22,24 VIA LIGHTING CONTACTOR.
7. PROVIDE 2-#12 THW WITH GROUND IN 3/4" RGS CONDUIT FROM PANEL FH60-2 CIRCUIT 27. (RECEPTACLE WIRING)
8. PROVIDE 6-#12 THW WITH GROUND'S IN 1" RGS CONDUIT FOR LIGHTING AND RECEPTACLE WIRING.
9. PROVIDE GROUNDING SYSTEM (TYPICAL AT EACH END OF PLATFORM). SEE DETAIL 3/986
10. PROVIDE 6-#12 THW WITH GROUNDS IN 1" RGS CONDUIT TO FOAM HOUSE LIGHTING PANEL FH60-2. SEE DRAWING EB-24985 FOR ROUTING.
11. PROVIDE 2/C #14 TC IN 3/4" RGS CONDUIT TO LEAK DETECTION SENSOR (LDS-1). FIELD ROUTE TO LEAK DETECTION PANEL (LDP-1) LOCATED AT THE FOAM HOUSE. SEE DRAWING EB-24985.
12. PROVIDE MECHANICALLY HELD, 4 POLE 20A LIGHTING CONTACTOR 240 VAC COIL, SUCH AS CUTLER-HAMMER C30BNM4B, WITH PHOTOCELL ACTIVATED CONTROL. MOUNT INSIDE 8"Wx10"Hx6"D NEMA 12 ENCLOSURE, SUCH AS HOFFMAN A-10086SC WITH A10P8 PANEL. INSTALL 240 VAC SWIVEL TYPE PHOTOCELL ON TOP OF PANEL. POWER SUPPLY TO PHOTOEYE TO BE SUPPLIED FROM LIGHTING CIRCUIT 22,24 IN PANEL FH60-2.
13. PROVIDE 6-#12 THW WITH GROUNDS IN 1" RGS CONDUIT (POWER FROM CIRCUITS 23-25, 22-24 TO CONTACTOR AND POWER TO LIGHTING FIXTURE "A".

GENERAL NOTES:

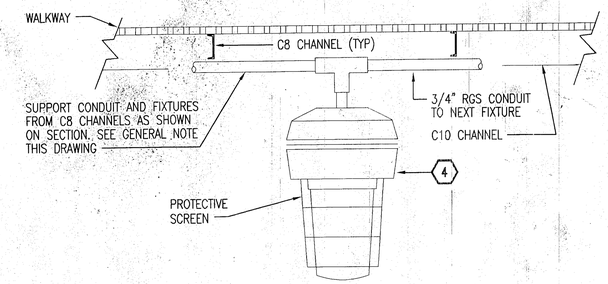
1. SUPPORT ABOVE GROUND CONDUIT, FIXTURES AND ELECTRICAL EQUIPMENT USING GALVANIZED OR STAINLESS STEEL HARDWARE. PROVIDE CONDUIT SUPPORTS AS REQUIRED BY THE NATIONAL ELECTRICAL CODE.
2. FOR PLATFORM DETAILS AND STRUCTURAL NOTES, SEE STRUCTURAL DRAWINGS.



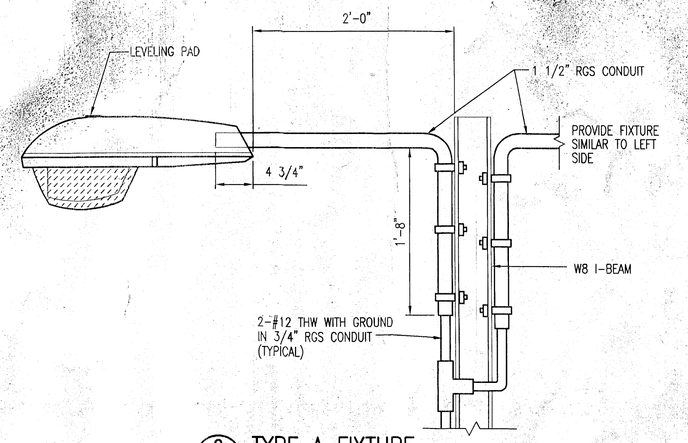
A 985 SECTION
SCALE: 1/4"=1'-0"



3 986 GROUNDING DETAIL
NOT TO SCALE



1 986 TYPE B FIXTURE
NOT TO SCALE



2 986 TYPE A FIXTURE
NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

FIXTURE IDENT.	MANUFACTURER	FIXTURE CATALOG NO.	LAMP DESCRIPTION	LOCATION
A	GENERAL ELECTRIC	M-250AR 25 M 3M1LMS22U	250 WATT METAL HALIDE 240 VAC	ABOVE WALKWAY ILLUMINATION MEDIUM TYPE II CUTOFF
B	HOLOPHANE	PETROLUX II PTA-175MH-24-P-545 WITH GUARD	175 WATT METAL HALIDE 240 VAC	UNDER WALKWAY ILLUMINATION

STATE OF MAINE
HERB F. SHORT 6499
REGISTERED PROFESSIONAL ENGINEER

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.

ENTERPRISE ENGINEERING, INC
172 MAIN STREET
P.O. BOX 550
YARMOUTH, ME 04096
3335 ARCTIC BLVD.
SUITE 100
ANCHORAGE, AK 99503

DRAWING PLOTTED: 2-26-99
EED PROJECT NO.: 98-2408
EED CAD FILE NO.: 82408602
EED DRAWING NO.: , E-3

DRN	KAV	2-26-99
CHK		2-26-99
CHK		
CORR		
APPVD		

ISSUE CODE
P - Prelim B - Bids
M - Mill T.O. C - Const.
SCALE: AS NOTED

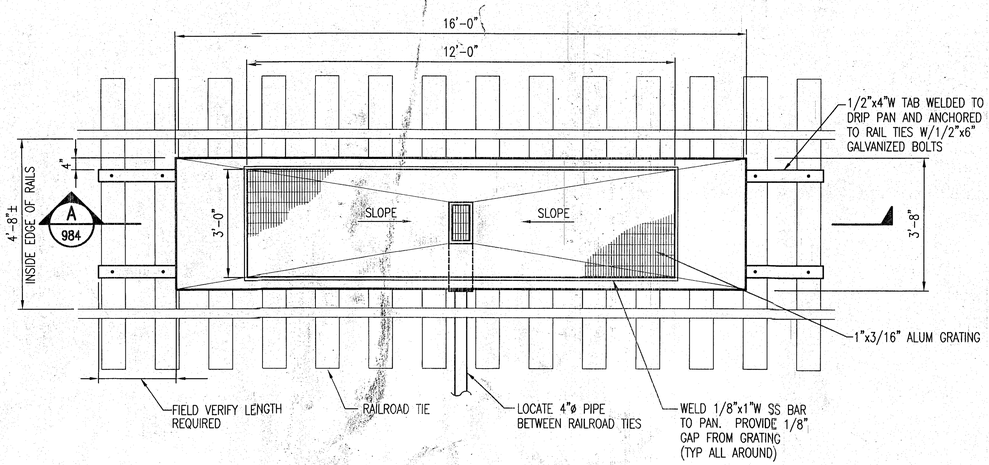
BOWATER
Great Northern Paper

GNP CAD FILE NO.: 24986-B00

EAST MILLINOCKET MILL
UG BUNKER & PIPING/PLATFORM REPLACEMENT
#6 FUEL OIL STORAGE AREA
UG BUNKER & PIPING/PLATFORM REPLACEMENT
ELEVATED PLATFORM
LIGHTING DETAILS

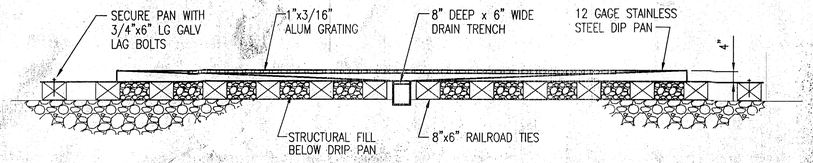
JOB NO.: 22983
ENG. REQ. NO.: 0-9816
FILE NO.: 2-076-4660, 5692

EB-24986
SHEET 1 OF 1



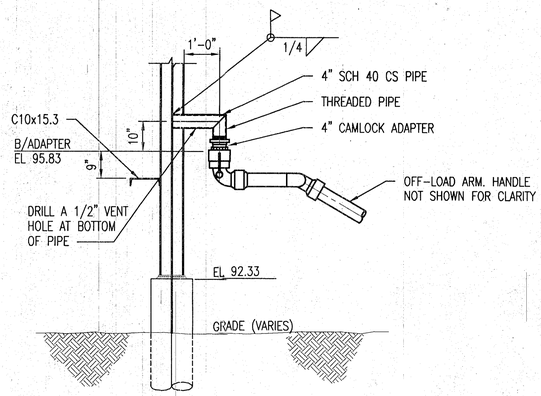
1/977 ENLARGED PART PLAN-DRIP PAN

SCALE: 1/2"=1'-0"



A/984 SECTION

SCALE: 1/2"=1'-0"



NOTE:

INSTALL SUPPORT AFTER LOADING ARMS HAVE BEEN INSTALLED- CONSULT OPERATORS FOR EXACT LOCATION.

2/983 OFF LOAD ARM STORAGE SUPPORT

SCALE: 1/2"=1'-0"

STATE OF MAINE
Jeremiah E. Ferguson #8380
REGISTERED PROFESSIONAL ENGINEER

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.

ENTERPRISE
ENGINEERING, INC
172 MAIN STREET
P.O. BOX 550
YARMOUTH, ME 04096
3335 ARTIC BLVD.
SUITE 100
ANCHORAGE, AK 99515

DRAWING PLOTTED: 02-26-99
EEI PROJECT NO.: 98-2408
EEI CAD FILE NO.: 82408408
EEI DRAWING NO.: M-8

DRN	TWG	02-26-99
CHK		02-26-99
CHK		
CORR		
APPVD		

ISSUE CODE: P - Prelim | B - Bids | M - Mill Rev | C - Const

SCALE: AS NOTED

BOWATER
Great Northern Paper

GNP CAD FILE NO.: 24984-B02

EAST MILLINOCKET MILL
UG BUNKER & PIPING/PLATFORM REPLACEMENT
#6 FUEL OIL STORAGE AREA
UG BUNKER & PIPING/PLATFORM REPLACEMENT
SECTIONS AND DETAILS II

JOB NO.: 22983
FILE NO.: 0-9816
FILE NO.: 2-076-4660, 5692

MB-24984
SHEET 2 OF 2

PHASE I ENVIRONMENTAL SITE ASSESSMENT
GREAT NORTHERN PAPER – EAST MILLINOCKET MILL
50 MAIN STREET
EAST MILLINOCKET, MAINE

Prepared for:

Maine Department of Environmental Protection
17 State House Station
Augusta, Maine
(Using U.S. EPA Brownfields Funding
Under MEDEP's Assessment Grant No. BF00A00302)

Prepared for:

Town of East Millinocket
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Project 171.06116.004

July 11, 2019

EXECUTIVE SUMMARY

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting Inc. (Ransom) for the former Great Northern Paper Mill located at 50 Main Street in the Town of East Millinocket, Maine (the "Site"). This Phase I ESA was performed in accordance with the requirements of ASTM International (ASTM) Designation: E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, which meets the requirements of the United States Environmental Protection Agency (U.S. EPA) All Appropriate Inquiry (AAI), 40 CFR Part 312. The purpose of this Phase I ESA was to document the environmental history of the Site, evaluate the likelihood that a release of hazardous substances and/or petroleum (HSP) has occurred or has the potential to impact the Site, and to provide our professional opinion regarding evidence of *recognized environmental conditions (RECs)* in connection with the Site.

The approximately 250-acre Site, identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, was developed with over 60 buildings (the "Site buildings") constructed in several phases between 1906 and 1991. The Site buildings included several industrial buildings housing paper mill operations, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Paper mill operations ceased in February 2014 and the Site is currently vacant. However, several buildings have been demolished by the current owners for equipment and building materials reclamation (e.g., scrap steel, wood, and brick). Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping. To facilitate the overall site reconnaissance and review of the large paper mill site, the property was divided into seven smaller study areas, Study Areas 1 through 7 identified as the Western Mill Area, Eastern Mill Area, Maintenance Area, Fuel Storage Area, Wood Lot Area, Recycling Area, and Western Property respectively.

As part of this assessment of the Site, Environmental Data Resources, Inc. (EDR) and Ransom conducted an environmental database search. Ransom also reviewed the Maine Department of Environmental Protection (MEDEP) online databases. The Site was identified on the MEDEP Sites List, Registered Underground Storage Tanks database (UST), and the Hazardous and Oil Spill database. Spills noted at the Site ranged from less than a gallon to several hundred gallons of petroleum products, hydraulic oil, transformer oil, and/or lubricating oil. According to the MEDEP spill reports, the spills were immediately cleaned up to the satisfaction of the MEDEP. Other properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon the locations of these properties, which are considered to be downgradient from the Site with respect to the inferred groundwater flow direction(s),or are located at distances that make it unlikely for these properties to have impacted environmental conditions at the Site.

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2018. According to the available information, the Site also came to the attention of the MEDEP and U.S. EPA, due to three reported historic polychlorinated biphenyl (PCB) spills or releases. The first release was documented in 1970 when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released in the years since the initial failure in 1970. A second release occurred in January 1978 when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented

in May of 1981 near the Number 5 Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The drum storage facility was closed (including excavation of approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and backfilled with clean fill material, as further described in a 1991 Report of PCB Cleanup Activities and Groundwater Monitoring, prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA in September 1991.

Previous investigations conducted across the Site between 1991 and 2002 also identified metals, including arsenic, barium, cadmium, chromium, and lead in soil samples collected near the former maintenance garage. Volatile organic compounds (VOCs) were detected in a soil sample collected near the former paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area and in a groundwater, sample collected near the paint shop.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified several RECs associated with the former industrial operations at the Site including petroleum impacted soil, a stormwater catch basin which discharges to the nearby river, former petroleum storage tanks, a leachate transfer pipe running beneath the Site, and ongoing groundwater monitoring related to PCBs.

On behalf of MEDEP, TRC Environmental Corporation (TRC) completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed #6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. Historical recognized environmental conditions (HRECs) identified by TRC included historical groundwater monitoring for PCBS, historical #6 oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential contaminant of concern (COCs) present at the Site during historic operations.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met all of its obligations,

as specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property.

During Ransom's Site reconnaissance, the Site buildings were observed to be either demolished or in varying states of disrepair; specifically, the fiber recycling building was currently in the process of being demolished. Key observations made in each of the 7 study areas during the site reconnaissance are described below:

1. Study Area 1 – Western Mill Area: Various containers and buckets of HSP were observed within the Site buildings; drums with unknown quantities of liquid inside were observed in the southwest corner of the oil boiler house; several transformers and one petroleum aboveground storage tank (AST) were observed within the boiler buildings and around the exterior areas of these buildings; and floor drains with significant staining were observed in the Site buildings.

2. Study Area 2 – Eastern Mill Area: The former paper machine buildings have been demolished, but the materials remain on Site; signs were posted prohibiting excavation of soil in the known PCB remediation area; unidentified black staining, appearing to originate on the second floor of the former Number 5 and 6 finishing building, was observed on the exterior of this building and extended to the ground surface; and a drainage pad that drains to the adjoining wastewater treatment plant was observed, which is reportedly used for delivery of leachate from the nearby Dolby Landfill.

3. Study Area 3 – Maintenance Area: Evidence of a gasoline UST, including vent and fill pipes, as well as a dispenser was observed to the east of the paint shop; the maintenance garage has been demolished and building materials appear to have been removed from the Site; the training building was described as a temporary storage location for HSP being consolidated at the Site (unknown for what length of time); and an oil sheen was observed within the containment structure surrounding a former transformer bank.

4. Study Area 4 – Fuel Storage Area: One bulk fuel oil above ground storage tank (AST) was observed, as well as the location of a second previous tank; significant petroleum staining was observed in the vicinity of the fuel unloading area near the existing AST; significant oil staining was also observed in the oil pump house; a former transformer, which appeared to have been burnt and a sign labelling the building as "Foam House" were observed attached to the hydrant house; and several totes were observed with a black liquid inside, suspected to be oil.

5. Study Area 5 – Recycling Area: The fiber recycling plant is currently in the process of active demolition; several ASTs were observed in the chemical storage plant, including storage of sulfuric acid and polymers; and a temporary asphalt plant was observed to the west of the recycle fiber warehouse.

6. Study Area 6 – Wood Lot Area: Significant staining, suspected to be hydraulic oil, was observed in the vicinity of the slasher control building; a limited sheen, suspected to be hydraulic oil, was observed on water surface in the floor drains in the basement of the wood room building; and limited fill debris was observed in the wood lots.

7. Study Area 7 – Western Property: Significant solid waste debris was observed along the banks of Spencer Brook, and fill debris and signs of previous burning were observed in the far western clearing of the Site.

Based on the age of the buildings and Ransom's observations during our Site reconnaissance, there is the potential for the presence of hazardous building materials within the remaining Site buildings, including asbestos-containing materials (ACM), lead-based paint (LBP), PCB-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and other universal wastes (fluorescent bulbs and ballasts, etc.). These materials will require proper characterization, abatement, and disposal, if disturbed during future building renovations and/or demolition activities.

Ransom has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 and U.S. EPA AAI (40 CFR Part 312) for the Site identified by the Town of East Millinocket Assessor's Office as Lot 10 on Block 1 on Tax Map 2, which corresponds to 50 Main Street, in the Town of East Millinocket, Penobscot County, Maine. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. Based on the information obtained during this Phase I ESA, this assessment has revealed no evidence of *RECs* in connection with the Site, except for the following:

1. Historic paper mill operations occurred at the Site for over a century including the use, handling, and storage of many types of hazardous materials and petroleum products. Several spills have been recorded at the property, but other unknown and/or undocumented releases may also have occurred at the Site, potentially impacting subsurface conditions including soil, soil vapor, and/or groundwater.

2. Staining suspected to be hydraulic oil was observed on the ground surface near the slasher control building and oil sheens were observed in the basement of the wood room building and containment area of the former transformer bank. Significant black staining was observed on and around the remaining portions of the former Number 5 and 6 paper machine building, fuel unloading equipment, and inside the oil pump house near the bulk fuel storage tanks. Each of these releases have the potential to impact soil and/or groundwater in the vicinity.

3. A 2,000-gallon gasoline UST, piping, and dispenser exist to the east of the paint shop. Previous investigations have shown impacts to soil and groundwater related to gasoline storage in this area.

4. Containers of various sizes and in various states of disrepair were observed in many of the Site buildings. Additionally, several large ASTs containing process polymers, acids, and chemicals were observed at the Site. The exact volume of chemical product remaining inside the containers could not be determined, but if significant product remains, these containers and ASTs represent a material threat of release, given the current condition of the Site buildings.

In accordance with the 1991 Consent Agreement and Final Order, the historic PCB spills and resulting PCB-contaminated soil and groundwater remaining at depth beneath clean surficial soil cover materials at the Site, constitutes a *Controlled REC (CREC)*. The remediation was completed under the oversight of MEDEP and U.S. EPA with the understanding the Site would continue to be used for industrial purposes. Should the proposed use change and/or the PCB-impacted areas are to be disturbed during future site

redevelopment activities, additional assessment may be required. Currently, excavation of soil is prohibited within the PCB spill areas.

Based on the findings of this assessment, it is Ransom's opinion that soil, groundwater, and soil vapor conditions have potentially been impacted by historic paper mill operations at the Site and that additional investigations and response action are warranted and recommended to address the above-stated RECs, further document Site conditions in relation to current regulatory clean up guidelines, and evaluate the suitability of the Site property for potential future redevelopment. It is also Ransom's opinion that additional investigation and/or remediation actions related to the historic PCB spills are not necessary at this time. However, if the Site is to be redeveloped in the future, the redevelopment plans should be evaluated, and additional investigation may be necessary with respect to potential changes in PCB exposure risks and receptors and/or if the covered and contained PCB-impacted areas are to be disturbed in the future.

Specifically, Ransom recommends the following actions to address the identified environmental concerns associated with the Site:

1. Conduct a Phase II ESA, which would include targeted explorations to evaluate soil, groundwater, and/or soil vapor conditions at the Site in the areas of observed releases mentioned above and within areas of historic paper mill operations. The results of a Phase II ESA will assist in evaluating and documenting current Site conditions and to what extent, if any, the identified *RECs* and environmental concern have adversely impacted environmental conditions at the Site. Additionally, the recommended Phase II investigation will assist in evaluating potential risks to construction workers and potential costs related to managing contaminated soil and/or groundwater or implementing vapor mitigation measures for future building(s) at the Site. Please note that if U.S. EPA Brownfields funding is proposed to be utilized for conducting the recommended Phase II ESA, a Site-Specific Quality Assurance Project Plan (SSQAPP) will also need to be prepared and approved by the U.S. EPA and MEDEP, prior to conducting the Phase II ESA.

2. The 2,000-gallon gasoline UST and any accessible associated buried piping currently in-place at the Site should be removed by a MEDEP-approved contractor with oversight provided by a qualified environmental professional in accordance with the requirements of CMR Chapter 691.

3. Chemical containers and ASTs observed within the Site buildings should be properly consolidated and disposed and/or removed by a MEDEP-approved contractor.

4. In the event that the Site property is redeveloped in the future, an environmental media management plan should be developed to outline the necessary health and safety procedures, and appropriate soil and groundwater management strategies that will be required to protect human health and the environment.

Furthermore, certain ASTM non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk, including known and suspect ACM, LBP, PCB-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and/or other potential universal wastes. ACM investigatory activities conducted by others in 2015 identified ACM at various locations throughout the Site buildings, and the ACM within the Site buildings reportedly has not been fully abated. Depending on potential future Site development or renovation plans, these hazardous

building materials, if confirmed, may require abatement, special handling, and/or proper management and disposal, prior to and/or during future renovation and/or demolition activities. Therefore, Ransom further recommends a Hazardous Building Materials Inventory (HBMI) be performed to identify potential remaining hazardous building materials and to identify mitigation measures, if necessary, in order to support the current and future utilization of the Site.

This summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in decisions made or actions taken based on this information.

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1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting Inc. (Ransom) for the former Great Northern Paper mill located at 50 Main Street in the Town of East Millinocket, Maine (the "Site"). The Phase I ESA was prepared for the Maine Department of Environmental Protection (MEDEP) on behalf of the Town of East Millinocket, using the United States Environmental Protection Agency (U.S. EPA) Brownfields funding under MEDEP's Brownfields Assessment Grant No. BF00A00302.

Please refer to Figure 1, Site Location Map, to view the general location of the Site on a 7.5-minute topographic quadrangle.

1.1 Purpose

The purpose of this Phase I ESA was to assess the environmental condition of the Site by performing "all appropriate inquiry" into the previous ownership and uses of the Site consistent with good commercial or customary practice, considering commonly known and reasonably ascertainable information. The goal of the assessment was to identify "*recognized environmental conditions" (RECs)* in connection with the Site. The term *RECs* means:

> *The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

The term *REC* includes both *controlled RECs (CRECs)* and *historical RECs (HRECs)*, as further defined below:

The term *CRECs* means:

> *A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.*

The term *HRECs* means:

> *A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.*

By performing a Phase I ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §9601) and petroleum products, a user satisfies one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

1.2 Scope of Work

This Phase I ESA was performed in general accordance with the requirements of the American Society for Testing and Materials International Designation: E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2013* (ASTM E1527-13), U.S. EPA All Appropriate Inquiry (AAI), 40 CFR Part 312, and Ransom's contract with MEDEP, dated December 1, 2017, and included the completion of the following tasks:

1. Review municipal records and search state and federal environmental databases for sites or conditions of environmental concern;

2. Review historical land use records to evaluate past use of the Site and adjoining properties;

3. Perform a site reconnaissance to visually and/or physically observe current conditions of the Site and the general land use of surrounding properties; and

4. Conduct interviews with readily available past and present owners, operators, and occupants of the Site.

1.3 Significant Assumptions

No significant assumptions were made during the performance of this Phase I ESA.

1.4 Limitations, Exceptions, Deviations and Data Gaps

Along with the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report is limited by the following:

1. Access Limitations: The Recycle Fiber Plant building and immediate vicinity were not accessible during the Site visit due to active demolition of the building. This area was viewed by Ransom personnel from the boundaries of the demolition site. Based on the information obtained during this assessment, these conditions are not expected to limit Ransom's ability to identify RECs in connection with the Site.

2. Physical Obstructions to Observations: None

3. Outstanding Information Requests: Ransom contacted the Town of East Millinocket Assessor, Code Enforcement Officer, and Fire Chief as part of municipal research and has not received a response as of the date of this report. Interviews conducted with staff at the Town Office and Fire Department indicated that these departments did not maintain records related to the Site. Based on the information obtained during this assessment, these conditions are not expected to limit Ransom's ability to identify RECs in connection with the Site.

4. Historical Data Source Failure: None

5. Exceptions: None

6. Deviations: None

7. Data Gaps: None

8. Other: None

The findings provided by Ransom in this report are based solely on the information reported in this document. Should additional information become available in the future, this information should be reviewed by Ransom and the findings presented herein may be modified. Information obtained from state and local agencies is not necessarily all-inclusive and files may have been reviewed and purged by officials prior to review by the public.

1.5 Special Terms and Conditions

This Phase I ESA was conducted in accordance with our executed contract with MEDEP, dated December 1, 2017. Authorization was provided in writing by the MEDEP, as described above, and site access was coordinated through Katahdin KI 50 LLC (the Site owner) and the Town of East Millinocket, who provided an explanation of the Site and facilities to be assessed.

1.6 User Reliance

This report was prepared using MEDEP's U.S. EPA Brownfields Assessment Grant funding, and therefore, is a public document. However, the services, findings, and conclusions, noted herein, and associated documents provided to the client by Ransom are solely for the benefit of the MEDEP and the Town of East Millinocket, their affiliates and subsidiaries and their successors, assigns, and grantees. Other than for public informational purposes, reliance or any use of this report by anyone other than MEDEP and the Town of East Millinocket, for whom it was prepared, is prohibited. Reliance or use by any such third party, without explicit authorization, does not make said third party a third-party beneficiary to Ransom's contract with MEDEP. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The Site consists of a single, irregular-shaped parcel of land on the south of Main Street in the Town of East Millinocket, Penobscot County, Maine. The Site encompasses approximately 250 acres and is identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, which corresponds to a street address of 50 Main Street. The Site location is shown on Figure 1.

2.2 Site and Vicinity Characteristics

The Site is located on the southern side of Main Street along the West Branch of the Penobscot River in East Millinocket. The Site is currently vacant but includes several industrial buildings, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Based on available information, the Site operated as a paper mill prior to February 2014. Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping.

The Site is surrounded by residential and commercial properties to the north, east, and west. The topography in the vicinity of the Site slopes downward to the south and toward the West Branch of the Penobscot River, located along the southern boundary of the Site. The Site and surrounding properties are shown on Figure 2 and Figure 3. A photograph log is included as Appendix A.

2.3 Current Use of the Site

The Site is currently vacant. Several of the existing paper mill buildings have been demolished. The recycle fiber plant is actively being demolished by the Site owners. For the purpose of this Phase I ESA, the Site was divided into seven Study Areas as described below. Figure 2 shows the seven Study Areas on the Site Plan.

1. Study Area 1 – Western Mill Area: The western portion of the central mill buildings includes biomass and petroleum boilers, precipitator, water treatment, electrical maintenance, fire safety building, and an A-frame for biomass storage. Previously demolished portions of this Study Area include almost all of the Grinder Room. Only the southern portion remains due to an existing electrical cable tray which connects the adjoining hydroelectric plant to its substation before the transmission lines cross the river.

2. Study Area 2 – Eastern Mill Area: The eastern portion of the central mill buildings includes the mill offices, finishing buildings, train sheds, warehouse space, shipping and receiving, tradesman workspaces (welding, machine shop, and electrical), employee locker rooms, hydropulper, and two storage silos. Previously demolished portions of this Study Area include both paper machine buildings, the grinder roll, the sulphite plant, screen room building and two former storage silos. Much of the debris from these demolition activities remains in place.

3. Study Area 3 – Maintenance Area: This area on the eastern portion of the Site includes the former paint shop (Warehouse J), a vehicle maintenance garage, training center, Warehouse W, a former substation with limited remaining components and the former salvage area. Previously demolished portions of this Study Area include one former vehicle maintenance garage.

4. Study Area 4 – Fuel Storage Area: This area on the northern portion of the Site includes a 750,000-gallon aboveground fuel oil storage tank and associated heater house, fuel unloading facilities, the hydrant house, the oil pump house, and the security building. Previously demolished portions of this Study Area include a 1,700,000-gallon aboveground fuel oil storage tank and associated heater house.

5. Study Area 5 – Recycling Area: This area on the northern portion of the Site includes the recycle fiber warehouse, chemical plant, asphalt plant, and the switch house. Previously demolished portions of this Study Area include the flotation cell building extension and portions of the recycle fiber plant. The remaining portions of the recycle fiber plant were actively being demolished during Ransom's Site reconnaissance.

6. Study Area 6 – Wood Lot Area: This area on the western portion of the Site includes the slasher control building, slasher maintenance building, bark dump building, wood room, bark prep building, and the former wood storage lot. Previously demolished portions of this Study Area include the chemi-greenwood building, sorter building, hopper, bark classifier, transfer house, and associated conveyors.

7. Study Area 7 – Western Property: This area on the far western portion of the Site includes a scale house, additional wood laydown areas, a sluice dump, and former burn area.

2.4 Description of Structures, Roads, Other Improvements on the Site

The Site is improved with approximately 60 buildings (the "Site buildings") and exterior portions of the Site are improved with an asphalt-paved parking area and driveways. The Site building appears to have been constructed in multiple phases. The original Site buildings from the early 1900s are typically brick and the more recent structures were generally steel construction.

Utilities

The Site buildings are serviced with municipal water and sanitary sewer services, provided by the Town of East Millinocket. Electricity is available through Brookfield; however, the power has been turned off for an unknown period of time. The Site buildings were heated by various sources including electric heat and/or fuel oil-fired furnace/boilers. Many of the Site buildings were unheated.

2.5 Current Uses of Adjoining Properties

As part of Ransom's reconnaissance, observations were made of adjoining properties from the Site or public right-of-way. Observations included current use of adjoining properties and potential visible evidence of environmental impacts. Properties to the north, east, and west of the Site are used for commercial and residential purposes. The abutting property across the West Branch of the Penobscot River to the South is undeveloped land.

3.0 USER-PROVIDED INFORMATION

An ASTM User Questionnaire, completed by Ms. Peggy Daigle, Chairman of the Selectmen for the Town of East Millinocket, is included in Appendix B, as Supplemental Documentation.

3.1 Title Records

No title records in connection with the Site were provided by MEDEP or the Town of East Millinocket.

3.2 Environmental Liens or Activity and Use Limitations (AULs)

No environmental liens in connection with the Site were identified by MEDEP or the Town of East Millinocket. Excavation of soil in known polychlorinated biphenyl (PCB) impacted areas of the Site is listed as an AUL recorded at the Penobscot county Registry of Deeds. More information on the source and extent of the PCB areas is provided in Section 4.3.

3.3 Specialized Knowledge

No specialized knowledge in connection with the Site was provided by the Town of East Millinocket.

3.4 Commonly Known or Reasonably Ascertainable Information

It is Ransom's understanding that MEDEP and the Town of East Millinocket have provided Ransom with commonly known or reasonably ascertainable information pertinent to recognized environmental conditions in connection with the Site.

3.5 Valuation Reduction for Environmental Issues

The Town of East Millinocket did not identify a reduction in the purchase price, as compared to the fair market value, that was due to the Site being impacted by hazardous substances or petroleum products. It was noted that the price is being determined by negotiation without and appraisal.

3.6 Owner, Property Manager, and Occupant Information

It is Ransom's understanding that the Katahdin KI 50 LLC has provided Ransom with available information pertinent to recognized environmental conditions in connection with the Site. Previous owners were not available for interview; however, several previous employees were available for interview during Ransom's reconnaissance. Information from these interviews is summarized in Section 6.0 below and included throughout the pertinent sections of this report.

3.7 Reason for Performing Phase I ESA

This Phase I ESA was performed to support the Town of East Millinocket's environmental due diligence of the Site, in anticipation of acquiring the property in order to redevelop the Site.

3.8 Previous Environmental Reports

Several previous environmental reports were provided by the Town of East Millinocket and MEDEP in relation to the Site's previous paper mill operations and environmental assessments. Previous environmental reports are summarized in Section 4.3 below.

4.0 RECORDS REVIEW

4.1 Standard Environmental Record Sources

Ransom contracted Environmental Data Resources, Inc. (EDR) to conduct a search of federal and state databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the federal and state environmental records database listings specified in ASTM E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided in Sections 4.1.1 and 4.1.2, along with an opinion about the significance of the listing to the analysis of RECs in connection with the Site. A copy of the EDR research data and descriptions of the databases is included in Appendix C of this report.

DATABASE RECORD	AMSD (Miles)	Total Sites Found	On Subject Property	On Adjoining Property
Federal National Priorities (NPL) List	1	0	No	No
Federal Delisted NPL List	0.5	0	No	No
Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List	0.5	0	No	No
Federal comprehensive environmental response – no further action response (CERC-NFRAP) List	0.5	1	**Yes**	No
Federal Resource Conservation and Recovery Act corrective action sites (RCRA CORRACTS) Facilities List	1	1	**Yes**	No
Federal RCRA Non-CORRACTS treatment, storage and disposal (TSD) Facilities List	0.5	1	**Yes**	No
Federal RCRA Generators List	Property and Adjoining	3	**Yes**	No
Federal Institutional/Engineering Controls Registries	0.5	0	No	No
Federal Emergency Response Notification System (ERNS) List	Property Only	3	**Yes**	No
State-Equivalent NPL List	1	0	No	No
State-Equivalent CERCLIS/State Hazardous Waste Site (SHWS) List or Delisted SHWS	1	2	**Yes**	No
State Landfill and/or Solid Waste Disposal Site List	0.5	1	No	No
State Leaking AST List (LAST)	0.5	25	**Yes**	**Yes**
State Registered AST List	Property and Adjoining	8	**Yes**	**Yes**
State Leaking UST List (LUST)	0.5	13	**Yes**	**Yes**

DATABASE RECORD	AMSD (Miles)	Total Sites Found	On Subject Property	On Adjoining Property
State Registered underground storage tank (UST) List	Property and Adjoining	11	**Yes**	**Yes**
State Institutional/Engineering Controls Registries	Property Only	0	No	No
State Voluntary Cleanup Sites	0.5	2	**Yes**	**Yes**
State Brownfield Sites	0.5	0	No	No

The following presents a discussion of the Site and pertinent surrounding properties identified within the databases outlined above. Discussions have not been included for databases in which no properties were identified, or for properties which were determined not to represent a threat to the environmental condition of the Site, based on their location with respect to the Site, or the significance of the environmental concern represented by the identified property.

4.1.1 Site

The Site, with 25 listed former occupants, was identified in the following environmental databases: UST, CORRACTS, PCB Activity Data System (PADS), Resource Conservation and Recovery Act -Large Quantity Generator (RCRA-LQG), RCRA-Treatment, Storage, and Disposal (TSDF), Potentially Responsible Parties (PRP), Superfund Enterprise Management System (SEMS)-ARCHIVE, Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), SPILLS, National Pollutant Discharge Elimination System (NPDES), Integrated Compliance Information System (ICIS), SHWS, LAST, Aerometric Information Retrieval System (AIRS), TIER 2, ALLSITES, Voluntary Cleanup (VCP), Recovered Government Archive (RGA) Solid Waste Facilities (LF), MANIFEST, RGA LUST, RCRA-Conditionally Exempt Small Quantity Generators (CESQ), ERNS, Aboveground Storage Tank (AST), and Material Licensing Tracking System (MLTS) databases.

These database listings likely are related to historic paper mill operations conducted at the Site, equipment malfunctions/releases, and environmental response actions and investigations associated with these activities. Previous response actions and investigations are summarized below in Section 4.3.

4.1.2 Discussion of Database Findings

Federal CERC-NFRAP List

The Site was identified as a Federal CERC-NFRAP property based on its listing within the SEMS-ARCHIVE database. This listing is likely related to historic Site operations and generation of hazardous and/or potentially hazardous wastes (discussed further below).

Federal RCRA-CORRACTS List

The Site was identified as a Federal RCRA-CORRACTS property based on corrective action activities related to generation of hazardous and/or potentially hazardous wastes (discussed further in Section 4.3).

Federal RCRA Non-CORRACTS TSD Facilities List

The Site property was identified within the Federal RCRA Non-CORRACTS TSD database in connection with historic generation of various hazardous and/or potentially hazardous wastes including, but not limited to, corrosive and ignitable wastes, various metals, and chlorinated solvents.

Federal RCRA Generator's List

The Site property was identified twice within the Federal CESQ RCRA database and once within the Federal RCRA LQG database in connection with historic generation of various hazardous and/or potentially hazardous wastes including, but not limited to, corrosive and ignitable wastes, various metals, and chlorinated solvents.

Federal ERNS List

The Site property was identified three times within the Federal ERNS database in connection with various releases from transformers. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

State-Equivalent CERCLIS/SHWS

The Site was identified twice as a SHWS in connection with historic operations and releases that have occurred at the Site. Remedial actions and environmental investigations associated with the Site are discussed in Section 4.3 below.

State Landfill and/or Solid Waste Disposal Sites List

One SWF/LF property (East Millinocket Landfill, Route 11) is located within 0.5 mile of the Site. Based on the significant distance between this property and the Site (approximately 1,330 ft), adverse impacts to environmental conditions at the Site from this property are not anticipated.

State LAST Sites

EDR identified the Site property within the State LAST database for Sill No. B-35-2013. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

EDR identified the upgradient, adjoining property to the north (1 Elm Street) within the State LAST database for Spill No. B-195-1983. Approximately 175 gallons of No. 2 fuel oil were released within the basement of this adjoining residence on December 14, 1983. Approximately 50 gallons of released product were subsequently recovered by the East Millinocket Fire Department; however, the remaining volume of released product was unaccounted for. Based on the town-wide connection to public drinking water, the MEDEP closed this case without further remedial efforts. Although adverse impacts to drinking water within the spill vicinity are not anticipated, adverse impacts associated with this spill to environmental conditions at the Site are possible.

EDR identified 23 additional State LAST properties within 0.5 miles of the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they have been properly investigated and/or remediated with prior MEDEP oversight/guidance or are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State AST Sites

EDR identified the Site twice within the State Registered AST database in connection with on-Site storage of various products and chemicals including, but not limited to, gasoline, transformer oil, various fuel oils, and corrosive liquids. Please refer to section 4.3 for a detailed summary of releases from ASTs and other structures located at the Site.

EDR identified six additional State AST properties adjoining to the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State LUST Sites

EDR identified the Site within the LUST database for Spill No. B-483-2003. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

EDR identified 12 additional LUST sites within 0.5 mile of the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they have been properly investigated and/or remediated with prior MEDEP oversight/guidance, are associated with clean UST closures, or are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State Registered UST Sites

EDR identified the Site within the State UST database in connection with on-Site storage of various products including, but not limited to, gasoline and fuel oils.

EDR identified 18 additional properties as Registered UST sites within 0.25 miles of the Site. These Registered UST properties are not expected to represent a threat to the environmental condition of the Site due to the distance and/or location of these properties with respect to the Site.

State Voluntary Cleanup Sites

The Site was identified in the State VCP database in connection with prior remediation conducted at the Site in accordance with the MEDEP's Voluntary Response Action Program (VRAP).

EDR identified one additional VCP property located immediately south of the Site; however, this property is not anticipated to have adversely impacted the Site, since it is located in a position that is inferred to be hydraulically downgradient from the Site. Remedial actions and environmental investigations associated with this adjoining Site are discussed in Section 4.3 below.

Orphan Sites

EDR orphan site designation indicates insufficient address information for the site to be plotted. Ransom reviewed the 9 Orphan Sites identified by EDR. The Site, identified as "Katahdin Paper", was identified by EDR as an Orphan Site within the State LAST database. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

4.2 Additional Environmental Record Sources

4.2.1 State Regulatory Agency File Review

Ransom reviewed the following MEDEP online databases for information pertaining to the Site and/or properties in the vicinity of the Site with known and/or suspected environmental contamination and their potential to adversely impact environmental conditions at the Site.

1. "Division of Remediation Sites List" (MEDEP "Sites List") online database;
2. "Non-Conforming Tanks" online database;
3. "Registered Underground Oil Storage Tanks" online database;
4. "Active and Out of Service Underground Oil Storage Tanks Including Tanks That Have Not Been Properly Abandoned" online database; and
5. "Oil Storage Tank Search & Operator Training" online database;
6. "Hazardous and Oil Spill" online database.

The Site was identified on the MEDEP Sites List, Registered Underground Oil Storage Tanks database, and the Hazardous and Oil Spill database. The adjoining property to the west (East Millinocket Bark Pile) was identified on the MEDEP Sites List and the adjoining property to the south (Dolby Dam) was identified on the Hazardous and Oil Spill database.

The following table summarizes releases documented within the MEDEP's online database that appear to have occurred at the Site.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-252-2008	5/8/2008	Railroad Loading Area	#6 Oil	50 Gallons	Groundwater	Sorbents	No further action expected.
B-42-1981	5/2/1981	Great Northern Paper Mill - Tank Car Unloading Rack	Bunker C Oil	200-300 Gallons	Holding Pond, Nearby Soil, Nearby Vegetation	Controlled burn	No further action expected.
B-102-1994	3/8/1994	West Operations Steam Plant	Sulfuric Acid	20 Gallons	None Documented.	Washed into process sewer	Corrective action taken, MEDEP final status not listed
B-104-2008	2/25/2008	Chemical Storage Building	Sulfuric Acid	400 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Corrective action taken, MEDEP final status not listed

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-157-1994	3/30/1994	Wastewater Treatment Plant	Diesel fuel	1-2 Gallons	None Documented.	Sorbents	"No report needed"
B-179-1994	4/8/1994	East Operation	Sulfuric Acid	3 Gallons	None Documented.	Neutralized with soda ash, washed to process sewer	Corrective action taken, MEDEP final status not listed
B-241-1994	5/4/1994	Mill Service Road near Dolby Dam	Diesel Fuel	60 Gallons	None Documented.	Absorbed with sawdust, subsequently burned	Corrective action taken, MEDEP final status not listed
B-259-1984	11/30/1984	Behind Old Boiler House	Transformer Fluid	2 Gallons	None Documented.	Sorbents	Case closed.
B-276-1994	5/11/1994	Wood Yard	Hydraulic Oil	98 Gallons	None Documented.	Burned impacted wood chips where spill occurred	Corrective action taken, MEDEP final status not listed
B-291-2009	5/25/2009	275-Gallon Day AST	Hydraulic Oil	50 Gallons	None Documented.	Absorbed with wood chips, subsequently burned	No further action expected.
B-338-1991	6/4/1991	Steam Plant & Process Sewer	Sulfuric Acid	1900 Gallons	None Documented.	Neutralized with soda ash, disposed offsite.	Corrective action taken, MEDEP final status not listed
B-35-2013	1/25/2013	Unspecified	Ferric Sulfate	40-50 Gallons	None Documented.	Drummed/hauled offsite	No further action expected.
B-462-1993	9/15/2003	Wastewater Treatment Plant	Sodium Hydroxide	330 Gallons	None Documented.	All of released product washed into process sewer	No further action expected.
B-493-2007	9/18/2007	Unspecified	#6 Fuel Oil	20 Gallons	None Documented.	Sorbents	No further action expected.
B-497-1989	8/24/1989	Wood Yard	Hydraulic Oil	12 Gallons	None Documented.	Absorbed with wood chips, subsequently burned	Corrective action taken, MEDEP final status not listed

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-553-1995	9/13/1990	Steam Plant - Overfill Tank	#6 Fuel Oil	200 Gallons	None Documented.	Absorbed with wood chips, subsequently burned	Corrective action taken, MEDEP final status not listed
B-56-2011	2/1/2011	Unspecified	Lubricant Oil	1 Gallon	None Documented.	Sorbents	No further action expected.
B-568-1999	9/14/1999	Bunker Oil Heating Plant	#6 Fuel Oil	200 Gallons	None Documented.	Sorbents	Report final.
B-58-1994	1/3/1994	East Millinocket - Recycling Plant	Sulfuric Acid	10 Gallons	None Documented.	Neutralized/washed from concrete surface into process sewer	Corrective action taken, MEDEP final status not listed
B-656-2010	12/8/2010	Day AST	# 6 Fuel Oil	400 Gallons	None Documented.	Absorbed with wood chips, subsequently burned	No further action expected.
B-663-2009	11/17/2009	Loader	Hydraulic Oil	30 Gallons	None Documented.	Sorbents	Report final.
B-718-1998	11/5/1998	Unspecified	Sulfuric Acid	1200 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Report final.
B-759-1991	12/10/1991	Water Deionizing Facility	Sulfuric Acid	1000 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Corrective action taken, MEDEP final status not listed
B-77-1994	2/16/1994	Great Northern Paper Mill - Railroad Bed	#6 Oil	1000-1500 Gallons	None Documented.	Oil-soaked debris hauled offsite	Corrective action taken, MEDEP final status not listed
B-92-1994	2/22/1994	Recycling Mill Pipeline	Sulfuric Acid	2 Gallons	None Documented.	Soda Ash	Corrective action taken, MEDEP final status not listed

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-145-1989	4/5/1989	Woodyard Culvert	Vehicle/wood equipment runoff	5 Gallons	Penobscot River	Report filed, no additional action was documented	MEDEP final status not listed.
B-163-1988	5/4/1988	Grinder Generator	Heavy Duty Gear Oil	0.125 Gallon	Penobscot River	None (oil not found)	MEDEP final status not listed.
B-187-1988	5/17/1988	Paper Machines #5 and #6	Lubricant Oil	1 Gallon	Penobscot River	None listed	MEDEP final status not listed.
B-218-1990	2/27/1990	#4 Generator	Hydraulic Oil	0.5 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-260-1989	5/20/1989	Dolby Power Station	Diesel Fuel	5.9 Gallons	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-27-1992	1/14/1992	NL	Lubricant Oil	0.19 Gallons	Penobscot River	No recovery attempted	Corrective action taken, MEDEP final status not listed.
B-309-1996	6/13/1996	Filter Plant Riverbank	Hydraulic Oil	0.25 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-644-1991	10/11/1991	Wastewater Treatment Plant	Hydraulic Oil	0.5 Gallon	Penobscot River	None documented	MEDEP final status not listed.
B-82-1993	5/16/1983	Great Northern Paper Mill - Grinding Room	Lubricant Oil	0.25 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-91-1985	5/17/1985	Mill Yard Drain System	#1 Fuel Oil	Un-known	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-79-1994	2/15/1994	Great Northern Paper Mill - Tank Truck	#6 Oil	500-600 Gallons	Snow within Earthen Dike	Mixed with wood chips, burned	Corrective action taken, MEDEP final status not listed.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-187-2008	4/10/2008	Dike Drain near Transformer	Silicon Transformer Oil	350 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-189-1985	1/13/1978	Paper Machines #5 and #6	Askarel	700 Gallons	Soil	Excavated/hauled offsite	Case Closed.
B-222-1989	9/5/2008	Wood Yard	Hydraulic Oil	10 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-230-1995	5/16/1995	Coal Ash Road	Diesel Fuel	4 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-28-1996	1/18/1996	1 Katahdin Ave – Transformer No. T124	Dielectric Oil	5.99 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-322-1989	6/21/1989	Mill Yard - T-118 Transformer	Askaral Fluid	0.125 Gallon	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-483-2003	9/29/2003	Old Paint Shop	Gasoline	Unspecified	Soil	Contaminated soil left in place	MEDEP final status not listed.
B-614-1989	10/13/1989	Mill Yard	Hydraulic Oil	5 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-725-1994	11/15/1994	Unspecified	Transformer Fluid	25 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-523-1989	9/6/1989	Storeroom	PCB Oil	Unspecified	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-708-1996	12/6/1996	Silo	Hydrated Lime	92 Gallons	Soil & Penobscot River	Excavated/reused where able	Report final.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-167-1985	7/8/1985	Transformer Valve	Transformer Fluid	0.125 Gallon	Soil within diked area	None listed	MEDEP final status not listed.
B-682-2010	12/20/2010	# 6 Paper Machine Basement	Lubricant Oil	1000-1200 Gallons	Water within Aeration Lagoon	Sorbents	No further action expected.

In addition, 23 releases documented within the MEDEP's database occurred on impervious surfaces (i.e. concrete pads, asphalt pavement, within structures, etc.) or existing piles of wood chips. Releases with no documented impacts to environmental media have been excluded from the summary table. Spill Reports are provided in Appendix B.

Several releases were documented within the MEDEP's online database that appear to have occurred at the Dolby Dam located immediately south of the Site. Releases documented at this property are not anticipated to have adversely impacted the Site, since it is located in a position that is inferred to be hydraulically downgradient from the Site. Spill Reports are provided in Appendix B.

In addition to the on-line databases, Ransom personnel conducted a file review of available files in the MEDEP File Room in Augusta, Maine. Information available at the MEDEP File Room included numerous reports documenting investigation and response actions associated with the Site's historic use as a paper mill. The findings of these reports and the environmental status of the Site are discussed in Section 4.3 below.

4.2.2 Local Regulatory Agency File Review

Assessor's Office

On April 23, 2019, the Town of East Millinocket Assessor's Office informed Ransom that the Town Office does not maintain records including property cards, deed information, or other applicable documentation related to the Site. On May 9, 2019, Ransom contacted Mr. William VanTuinen, Assessor for the Town of East Millinocket. As of the date of this report, Ransom Consulting has not received a response from Mr. VanTuinen.

Code Enforcement Department

On May 9, 2019, Ransom contacted Mr. Michael Noble, Code Enforcement Officer for the Town of East Millinocket. As of the date of this report, Ransom Consulting has not received a response from Mr. Noble but staff at the East Millinocket Town Office indicated no records were maintained by the Town of East Millinocket related to the Site.

Fire Department

On May 9, 2019, Ransom personnel spoke with Firefighter Anthony White of the East Millinocket Fire Department. Mr. White indicated that to his knowledge the Fire Department did not maintain files related to the Site. Ransom Consulting also contacted Chief Leslie C. Brown of

the East Millinocket Fire Department. As of the date of this report, Ransom Consulting has not received a response from Chief Brown.

4.3 Previous Investigations/Assessments

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2018. Key documents related to these investigations include the following:

1. Administrative Consent Agreement and Enforcement Order, Hazardous Waste Activities, Great Northern Paper Company, a division of Great Northern Nekoosa Corporation, Millinocket, Penobscot County, Maine, August 22, 1988;

2. Closure Report for the Drum Storage Facility at East Millinocket Mill, Great Northern Paper, Millinocket, Maine, prepared by Sevee & Mahar Engineers, Inc, December 1989;

3. Review Comments and Conditional Approval for the PCB Remediation Project, East Millinocket Mill, prepared by MEDEP, June 14, 1989;

4. Report of PCB Cleanup Activities and Groundwater Monitoring, East Millinocket Mill, prepared by Stone and Webster Engineering Corporation, March 1991;

5. Consent Agreement and Final Order, Great Northern Nekoosa Corporation, EPA Docket No. TSCA-I-87-1041, United States Environmental Protection Agency, September 27, 1991;

6. Environmental Audit of the Georgia-Pacific Property, Millinocket, Maine, prepared by Sirrine Environmental Consultants, December 1991;

7. Phase I Environmental Site Assessment, Great Northern Paper, Inc. Mill Properties, Millinocket and East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc. January 22, 2001;

8. Geology Report for the Mini Site Inspection of the Great Northern Paper Mill #2, East Millinocket, Maine, prepared by MEDEP, September 27, 2001;

9. Final Site Inspection Report for Great Northern Paper Mill #2, East Millinocket, Maine, prepared by MEDEP, July 18, 2002;

10. Voluntary Response Action Program, Great Northern Paper East Millinocket Mill, No Action Assurance Letter – Certificate of Completion, prepared by MEDEP, April 24, 2003;

11. Phase I Environmental Site Assessment, Katahdin Paper Mill – East, 50 Main Street, East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc., August 26, 2011;

12. Phase I Environmental Site Assessment, Conceptual Site Model, and Data Gap Analysis, Great Northern Paper #2, 50 Main Street, East Millinocket, Maine, prepared by TRC Environmental Corporation, September 2014;

13. Data Review of the No. 5 Paper Machine Site at the East Millinocket Operations of Great Northern Paper Company, East Millinocket, Maine, prepared by Earthcon, August 2015;

14. 2015 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program, East Millinocket Operations of Great Northern Paper Company, prepared by Earthcon, December 2015; and

15. PCB Assessment and Remediation at the East Millinocket Site Memo, prepared by Tetra Tech, June 6, 2018.

According to the available information, the Site came to the attention of the MEDEP and U.S. EPA due to three reported historic PCB spills or releases. The first release was documented in 1970 when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released in the years since the initial failure in 1970. A second release occurred in 1978 when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented in May of 1981 near the Number 5 Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The former warehouses and drum storage area were located to the north of the large warehouse in Study Area 2. The drum storage facility was closed (including excavation of approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and backfilled with clean fill material, as further described in the 1991 Report of PCB Cleanup Activities and Groundwater Monitoring prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA in September 1991.

In December1991, Sirrine Environmental Consultants (Sirrine) conducted an Environmental Audit of the Georgia-Pacific properties on behalf of Bowater Incorporated. The environmental audit reviewed existing conditions at the Site and included collection of soil and groundwater samples in various areas across the Site. Sirrine collected soil and groundwater samples from the burn pit in Study Area 7, the paint shop and former maintenance garage in Study Area 3, a former train shed and the bulk fuel off-loading area in Study Area 4, the former drum storage area in Study Area 2, and in the vicinity of the recycle fiber plant in Study Area 5. Metals including arsenic, barium, cadmium, chromium, and lead were detected in soil samples collected near the former maintenance garage. Volatile organic compounds

(VOCs) were detected in the soil sample collected near the paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area and in the groundwater, sample collected near the paint shop.

In 2001, S.W. Cole Engineering, Inc. (S.W. Cole) completed a Phase I ESA for the Great Northern Paper, Inc. properties in both Millinocket and East Millinocket, including the Site. S.W. Cole noted the previous cleanups related to PCBs and the former drum storage facility, along with the historic spills and site operations and did not recommend further assessment at the Site, with the exception of the bulk fuel off-loading area, where numerous releases of #6 oil have been reported.

At the request of U.S. EPA, MEDEP staff conducted a Final Site Inspection in 2002 to evaluate the existing conditions at the Site and assess the potential threats to human health and the environment. MEDEP summarized the historic soil detections of PCBs, chlorobenzenes, 111-trichloroethane, and petroleum compounds and noted a detection of PCBs in a soil sample collected by MEDEP in the snow dump area of Study Area 7. MEDEP also noted elevated levels of VOCs, PCBs, and dioxins in sediment samples collected in the vicinity of the Site along the West Branch of the Penobscot River.

In April 2003, the MEDEP Voluntary Response Action Program (VRAP) issued a No Action Assurance Letter – Certificate of Completion for portions of the property including the former PCB spills included in the current Site boundaries. Conditions of the No Action Assurance Letter - Certificate of Completion related to the PCB spills included the following:

1. No groundwater extraction wells will be installed as a potable water source in the PCB spill areas;

2. No excavation will be conducted in the area of the PCB spills;

3. Monitoring of the PCB spills will continue as required by EPA;

4. No buildings will be constructed on the PCB spill areas without written approval from MEDEP;

5. A copy of this letter will be filed at the Penobscot County Registry of Deeds;

6. A copy of the recorded documents will be provided to the VRAP Project Manager;

7. A plan showing the PCB spill areas will be recorded at the Penobscot County Registry of Deeds; and

8. The MEDEP and its contractors will be provided access to the Site, as requested, to conduct inspections and/or investigations, as necessary.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified the following RECs associated with the former industrial operations at the Site:

1. Number 6 oil observed on the ground surface in Study Area 4;

2. Gasoline-impacted soil in the vicinity of the existing UST beside the paint shop;

3. A stormwater catch basin in the vicinity of vehicle maintenance and gasoline filling operations which discharges to the nearby river;

4. Ongoing groundwater monitoring related to the PCB spills;

5. A (since removed) 4,000-gallon diesel aboveground storage tank and refueling pump in the wood yard without secondary containment;

6. Off-Site historical releases from leaking underground gasoline storage tanks;

7. A leachate transfer pipe which runs beneath the Site from the off-Site Dolby Landfill to the adjoining wastewater treatment facility; and

8. Former USTs previously removed or abandoned without documentation at the Site.

On behalf of MEDEP, TRC Environmental Corporation (TRC) completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed #6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. HRECs identified by TRC included historical groundwater monitoring for PCBS, historical #6 oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential contaminant of concern (COCs) present at the Site during historic operations.

In 2015, Georgia-Pacific submitted a Data Review Summary prepared by Earthcon Consultants, Inc. (Earthcon) to compile available data related to PCBs in the vicinity of the Number 5 paper machine and recommend modification to the groundwater monitoring program, which has been ongoing since the early 1990s. Based on the depth at which PCBs were left in place (due to nearby building structural concerns), the detected chlorobenzene concentration, and the groundwater elevation in the immediate vicinity, Earthcon recommended ending groundwater monitoring in the vicinity of the Number 5 paper machine spill. Georgia-Pacific and Earthcon presented these conclusions in the 2015 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program, as well.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met all of its obligations, as specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property. Tetra Tech noted the following items as the basis for this conclusion:

1. Remediation was completed as specified in the 1991 Consent Agreement and Final Order and was acknowledged by MEDEP in the 2003 No Action Assurance Letter – Certificate of Completion;

2. PCB-contaminated soils remaining at the Site are buried at depths not easily reached and are covered by clean backfill and/or cement to isolate them from potential contact;

3. Site groundwater monitoring results do not indicate PCB impacted groundwater exists at the Site;

4. No significant exposure risks to human health and the environment related to PCBs exist at the Site; and

5. No benefit is gained by excavating PCB-contaminated soils buried at the Site for transport and disposal elsewhere.

Copies of the relevant reports are included in Appendix B.

4.4 Physical Setting

4.4.1 Topography

The topography of the Site and regional topography slopes downward to the south, towards the West Branch of the Penobscot River. Based on the East Millinocket, Maine USGS Quadrangle, the general elevation of the Site ranges from approximately 340 to 280 feet above mean sea level, as referenced to the National Geodetic Vertical Datum (NGVD).

4.4.2 Geology

According to the 1987 *Surficial Geology of the Millinocket, 1° by 2° Quadrangle, Maine*, surficial soils at the Site are identified as till (t). These soils consist of sand and gravel deposited by glacial meltwater. According to the *Geology Report for the Mini Site Inspection of the Great Northern Paper Mill #2, East Millinocket*, Maine prepared by MEDEP staff, surficial deposits at the Site consist of stream alluvium deposits and ribbed moraine deposits consisting of a heterogenous mixture of sand, gravel, and silt.

According to the 1981 *Reconnaissance Bedrock Geology of the Millinocket Quadrangle, Maine,* bedrock at the Site is identified as the Slate Member of the Allsbury Formation (Sas), which consists of thin bedded, quartzofeldspathic graywacke interbedded with pyritic slate or phyllite.

4.4.3 Surface Water Bodies/Floodplains

The closest water bodies are Spencer Brook which crosses the Site and the West Branch of the Penobscot River, which is located along the southern boundary of the Site. Based on the Penobscot County, Maine, National Flood Insurance Program Map (Community Panel Number 2301630004B) portions of the Site along Spencer Brook are within the 100-year flood zone.

4.4.4 Hydrogeology

Based on field observations and Site topography and descriptions in previous reports, the localized groundwater flow at Site has been shown to be to the southeast towards the downstream directions of the West Branch of the Penobscot River. Shallow groundwater flow may also be influenced by heterogeneous subsurface soil strata, and/or other subsurface structures, which may act as preferred pathways of flow.

4.5 Historical Use Information for the Site

The history of the Site was researched to ascertain past use from the present back to the property's first developed use, or back to 1940, whichever was earlier. Reasonably ascertainable historical information sources researched in this assessment allowed uses of the Site to be traced from the present back to 1906, at which time the Site appears to have been undeveloped. The following standard historical sources were reviewed by Ransom:

1. Information provided by Town of East Millinocket officials and municipal offices;
2. Interviews with previous employees;
3. Historical City Directories, provided by EDR, dated 1977 to 2014 (Appendix C);
4. Sanborn Fire Insurance Maps, provided by EDR, dated 1916 to 1954 (Appendix D);
5. Historical topographic maps, provided by EDR, dated 1951, 1988 and 2014 (Appendix D);
6. Aerial photographs, provided by EDR, dated 1947 to 2015 (Appendix E);

The following table presents a summary of the historical use of the Site over time.

Year(s)	Property Use and Observed Details	Reference Source
circa 2014 to Present	Paper mill operations ceased. Demolition of paper machine buildings, slasher, portion of grinder, several smaller maintenance buildings and recycle fiber plant.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1997 to circa 2014	Continued paper mill operations.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1991 to circa 1997	Expansion of paper mill operations (predominantly around 1991) including construction of A-frame for biomass storage, biomass boiler, fiber recycling warehouse, fiber recycling plant, and the paper warehouse.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1952 to circa 1991	Expansion of paper mill operations including construction of grinder, slasher, steam plant, paper machines 5 and 6, train shed, several mill buildings and largely expanded log yard.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1947 to circa 1952	Continued paper mill operations, additional clearing on the western portion of the Site.	Municipal Offices, Sanborn Maps, Aerial Photos
circa 1906 to circa 1947	Paper mill operation including paper machine 1-4 building, finishing building, log yards, 2 storage silos, railroad tracks.	Sanborn Maps, Aerial Photos
Prior to 1906	Undeveloped Land	Historic Documents, Municipal offices.

4.6 Historical Use Information for Adjoining Properties

Historical uses of the adjoining properties to the Site are presented in the table below and were identified in the standard historical sources listed above during the course of researching the Site.

Year(s)	Property Use and Observed Details	Reference Source
North		
Circa 1906 to Present	Town of East Millinocket. Commercial and municipal properties including autobody shop, drugstore, general store, and town office, beyond which are residential properties.	Municipal Offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps.
Prior to circa 1906	Undeveloped Land	Historical Documents
West		
Circa 1960 to Present	Bark pile disposal area.	Municipal Offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps.
Circa 1906 to circa 1960	Undeveloped Land	Sanborn Maps, Aerial Photos, Topo Maps.
East		
circa 1975 to Present	Wastewater treatment plant for the paper mill and town of East Millinocket	Municipal offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps
Circa 1906 to circa 1975	Undeveloped Land	Sanborn Maps, Aerial Photos, Topo Maps.
South		
Circa 1906 to present	Hydroelectric Dam and West Branch of Penobscot River	Sanborn Maps, Aerial Photos, Topo Maps
Prior to 1906	Undeveloped Land	Sanborn Maps

4.7 Chain of Title

According to the Town of East Millinocket, the Site is currently owned by Katahdin KI 50 LLC (Book 14606, Page 72). The following chain of title information was identified at the Penobscot County Registry of Deeds.

Owner	Date	Book	Page
Katahdin KI 50 LLC	9/12/2017	14606	72
GNP East, Inc	9/28/2011	12608	59
Katahdin Paper Company LLC	--	--	--

Prior deed information included in Book 12608, Page 59 indicates that this Site parcel was acquired by GNP East, Inc from Katahdin Paper Company LLC as a portion of multiple parcels of land. For this reason, prior ownership research and uses were deemed not "reasonably ascertainable" per ASTM E 1527–13 section 3.2.77 (including not obtainable from the source within reasonable time and costs constraints) and sections 8.1.4 and 8.3.2. No environmental liens regarding this Site property were noted in the title records provided during our online research at the Penobscot County Registry of Deeds. Activity and Use Limitations were noted in the title records restricting excavation of soil within the designated PCB areas without prior notification to the U.S. EPA and MEDEP.

5.0 SITE RECONNAISSANCE

On March 22 and 23, 2019, Ransom conducted a reconnaissance of the Site. Mr. John Chaisson, former Great Northern Paper employee and current Site Manager for Katahdin KI 50 LLC, provided an explanation of the Site and facilities to be assessed. A photograph log is included in Appendix A.

5.1 Methodology and Limiting Conditions

The Site reconnaissance included observations of the property grounds for evidence of releases, or potential releases of hazardous substances and/or petroleum (HSP), or a material threat of releases of HSP. Weather conditions at the time of the reconnaissance were overcast with temperatures around 45˚F. Much of the interior first floor of the Steam Plant and Boiler buildings was covered in ice/water from snow melt. The ground surface covering of the former paper machine buildings and immediate vicinity was not observable due to demolition debris remaining on Site. Floor and ground surface conditions and features in these areas could not be directly observed.

5.2 General Site Setting

The Site is an industrial Site located in a mixed commercial and residential area of East Millinocket. The Site consists of several large brick and/or steel buildings, two storage silos, an aboveground bulk fuel storage tank, multiple smaller outbuildings and storage buildings, parking areas, driveways/roads, a former salvage area, and a large open space previously used as a wood lot. Please refer to Figure 2 and Figure 3 for Site location details and Appendix A for a photograph log of Ransom's Site observations. For the purpose of this Phase I ESA, the Site was divided into seven Study Areas as described below. Figure 2 shows the seven Study Areas on the Site Plan. Observations made in each Study Area during Ransom's Site reconnaissance are described in the following sections.

5.2.1 Hazardous Substances and Petroleum Products

Several large capacity tanks (greater than 500 gallons) of various hazardous materials used for fiber recycling including sulfuric acid, sodium silicate, non-surfactant material, secondary polymers, and sludge polymers were observed in the chemical storage plant. One approximately 1,000-gallon sulfuric acid AST was observed in the old water treatment plant building.

Numerous containers of various substances were observed throughout the Site buildings. The containers were generally observed to be a volume of 1 gallon or less and were predominantly found in the vicinity of the laboratories in the steam plant and old water treatment building. The containers were not properly stored and were generally not in good condition.

The hydrant house in Study Area 4 (Fuel Storage Area) was also labelled the "Foam House" as it was once the control/storage building for the fire-protection foam system installed around the large ASTs.

5.2.2 Storage Tanks

<u>Underground Storage Tanks</u>

Ransom observed evidence of vent/fill pipes and an existing gasoline dispenser in the vicinity of the previously identified UST to the east of the former paint shop in Study Area 3 during our reconnaissance. Please also refer to Section 4.3 for additional details regarding information previously identified in relation to this UST.

Aboveground Storage Tanks

Within Study Area 1, several ASTs were observed. One approximately 6,000-gallon fuel oil AST was observed in the vicinity of the biomass boiler. Due to a layer of ice beneath the tanks, it was difficult to determine if staining was present on the concrete floor beneath the AST. A faint petroleum odor was observed in the vicinity of this AST at the time of the reconnaissance. One approximately 3,000-gallon diesel AST was observed in a secondary containment structure attached to the remaining portion of the grinder building. De minimus staining was observed beneath the AST and a faint petroleum odor was observed in the vicinity of this AST at the time of the reconnaissance. No staining or odors associated with this AST were observed at the time of reconnaissance.

In Study Area 4, the 750,000-gallon out-of-service fuel oil AST remains on Site; Ransom also observed the former location of the 1,700,000-gallon former fuel oil AST in this Study Area, as well.

5.2.3 Odors

No strong, pungent, or noxious odors, indicative of a release of HSP, were noted at the Site during our reconnaissance.

5.2.4 Pools of Liquid

No obvious pools of liquid chemicals were observed during the Site reconnaissance. However, standing water and/or ice was observed in many areas on the concrete slab foundations of the Site buildings.

5.2.5 Drums

Ransom observed several drums at the Site during our reconnaissance. Most of the drums were being used for trash storage. Two drums in the southwest corner of the old boiler house were marked “check for PCBs” with no other indicator of contents or volume inside.

5.2.6 Unidentified Substance Containers

Several unidentified substance containers were identified throughout the Site including chemical storage totes in the Fuel Storage Area (Study Area 4) containing what appears to be oil drained from equipment or other supply lines. Trash cans containing what appeared to be oil were observed in the old boiler house building, one trash can appeared to have leaked or spilled some of its contents onto the nearby floor. In addition, several small volumes (less than 1-gallon) oil and chemical containers were observed in buildings throughout the Site.

5.2.7 Polychlorinated Biphenyls

Transformers

Electrical equipment, including large transformers, was observed in several locations within Study Areas 1 and 3 during our reconnaissance, particularly to the north of the biomass boiler building, west of the steam plant, on the second floor of the steam plant, and next to the Weldon building on the southern portion of Study Area 3. Pole mounted transformers were observed on

Site, and one transformer was observed mounted to the side of the hydrant house in Study Area 4. Only the hydrant house transformer showed signs of damage indicative of a potential historic release.

Other

Potentially PCB-containing fluorescent light ballasts were observed within the recycle fiber warehouse (Study Area 5) and the No. 1-4 finishing building (Study Area 2) stockpiled for off-Site disposal.

5.3 Interior Observations

5.3.1 Heating/Cooling

The Site buildings were not heated at the time of the Site reconnaissance. The Site buildings which were previously heated appeared to have previously been heated by electrical or oil-fired heat.

5.3.2 Stains or Corrosion

Several obvious stains, due to HSP, were observed during Ransom's reconnaissance in the Site buildings. In general these stains did not appear to have a complete pathway to the environment with the exception of the extensive staining observed within the oil pump house building in Study Area 4 and staining on the exterior of the remaining portion of the Number 5 and 6 paper machine building in Study Area 2, which appears to originate from an upper floor inside the building which was inaccessible due to the previous demolition.

5.3.3 Drains and Sumps

Floor drains and sumps were observed in all Site buildings. Floor drains within the Site buildings reportedly carry collected liquids and sediments to the wastewater treatment plant adjacent to the Site. Within the wood room in Study Area 5 (Wood Lot Area), a sheen of suspected hydraulic oil was observed on the water surface in the vicinity of the basement floor drains.

5.3.4 Other Hazardous Building Materials

Based on the age of the buildings, it is possible that asbestos-containing materials, lead-based paint, PCB-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and other potential universal wastes exist in connection with the Site buildings.

5.4 Exterior Observations

5.4.1 Pits, Ponds or Lagoons

No pits, ponds, or lagoons reported to have been utilized for waste disposal or waste treatment purposes were observed on the Site during the site reconnaissance.

5.4.2 Stained Soil or Pavement

Stained soil was observed in Study Area 4 (Fuel Storage Area) in the vicinity of the fuel unloading equipment. Significant black staining was observed on the ground surfaces in this

area. Additionally, stained soil was observed in the direct vicinity of the former deck and slasher control buildings. Based on the remaining equipment in the slasher control building, the staining observed on the wood chip covered ground surface is suspected to be hydraulic oil. A sheen from suspected transformer oil was observed within the containment area of the former transformer bank in Study Area 3 (Maintenance Area).

5.4.3 Stressed Vegetation

Ransom did not observe stressed vegetation, indicative of an HSP release, at the Site, during our reconnaissance.

5.4.4 Solid Waste

Paper waste, trash, and building demolition debris were observed throughout the Site buildings. Information regarding prior waste disposal practices was not available.

5.4.5 Wastewater

The Site building is reportedly connected to the municipal sewer system. No strong, pungent, or noxious odors, indicative of a release of HSP, was noted in connection with drains or sinks inside the building during our reconnaissance.

5.4.6 Wells

As previously discussed, municipal water is currently available to the Site. Ransom observed groundwater monitoring wells at the Site related to the ongoing monitoring for PCBs.

5.4.7 Septic Systems

Neither septic systems nor cesspools were observed on the Site during the site reconnaissance.

5.4.8 Drains

Ransom observed several surface water drains (i.e., catch basins) at the Site. Catch basins at the Site reportedly drain to the adjoining river.

6.0 INTERVIEWS

Ransom interviewed the following entities/individuals in an effort to obtain information indicating potential *RECs* in connection with the Site.

6.1 Past and Present Site Owners

Representatives of Katahdin KI 50 LLC provided existing environmental reports and contact information for the Site manager interviewed.

6.2 Site Manager

Mr. John Chaisson, current Site Manager, was interviewed during this Phase I ESA and accompanied Ransom during Site reconnaissance. Information provided by Mr. Chaisson has been included in applicable sections of this report.

6.3 Site Occupants

The Site is currently vacant. Therefore, no Site occupants were interviewed during this Phase I ESA.

6.4 Local Government Officials

Ransom conducted informal interviews with various municipal officials in the Town of East Millinocket, regarding their knowledge of the Site. Municipal officials interviewed included Mrs. Peggy Daigle (Chairman of the Selectmen) and Mr. Michael Michaud (Selectman). Ransom also interviewed Ms. Danielle Obery and Mr. Christopher Redmond of the MEDEP regarding Site use and status at the time of the previous environmental investigations. Information provided by the interviewees is included throughout the pertinent sections of this report.

7.0 EVALUATION

7.1 Findings

The approximately 250-acre Site, identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, was developed with over 60 buildings constructed in several phases between 1906 and 1991. The Site buildings included several industrial buildings housing paper mill operations, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Paper mill operations ceased in February 2014 and the Site is currently vacant. However, several buildings have been demolished by the current owners for equipment and building materials reclamation (e.g., scrap steel, wood, and brick). Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping. To facilitate the overall site reconnaissance and review of the large paper mill site, the property was divided into seven smaller study areas, Study Areas 1 through 7 identified as the Western Mill Area, Eastern Mill Area, Maintenance Area, Fuel Storage Area, Wood Lot Area, Recycling Area, and Western Property respectively.

As part of this assessment of the Site, EDR and Ransom conducted an environmental database search. Ransom also reviewed the MEDEP online databases. The Site was identified on the MEDEP Sites List, Registered Underground Oil Storage Tanks database, and the Hazardous and Oil Spill database. Spills noted at the Site ranged from less than a gallon to several hundred gallons of petroleum products, hydraulic oil, transformer oil, and/or lubricating oil. According to the MEDEP spill reports, the spills were immediately cleaned up to the satisfaction of the MEDEP. Other properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon the locations of these properties, which are considered to be downgradient from the Site with respect to the inferred groundwater flow direction(s) or are located at distances that make it unlikely for these properties to have impacted environmental conditions at the Site.

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2018. According to the available information, the Site also came to the attention of the MEDEP and U.S. EPA, due to three reported historic PCB spills or releases. The first release was documented in 1970 when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released in the years since the initial failure in 1970. A second release occurred in January 1978 when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented in May of 1981 near the Number 5 Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The drum storage facility was closed (including excavation of

approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and backfilled with clean fill material, as further described in a 1991 Report of PCB Cleanup Activities and Groundwater Monitoring, prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA in September 1991.

Previous investigations conducted across the Site between 1991 and 2002 also identified metals, including arsenic, barium, cadmium, chromium, and lead in soil samples collected near the former maintenance garage. VOCs were detected in a soil sample collected near the former paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area and in a groundwater, sample collected near the paint shop.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified several RECs associated with the former industrial operations at the Site including petroleum impacted soil, a stormwater catch basin which discharges to the nearby river, former petroleum storage tanks, a leachate transfer pipe running beneath the Site, and ongoing groundwater monitoring related to PCBs.

On behalf of MEDEP, TRC completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed #6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. HRECs identified by TRC included historical groundwater monitoring for PCBS, historical #6 oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential COCs present at the Site during historic operations.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met all of its obligations, as specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property.

During Ransom's Site reconnaissance, the Site buildings were observed to be either demolished or in varying states of disrepair; specifically, the fiber recycling building was currently in the process of being demolished. Key observations made in each of the 7 study areas during the site reconnaissance are described below:

1. Study Area 1 – Western Mill Area: Various containers and buckets of HSP were observed within the Site buildings; drums with unknown quantities of liquid inside were observed in the southwest corner of the oil boiler house; several transformers and one petroleum AST were observed within the boiler buildings and around the exterior areas of these buildings; and floor drains with significant staining were observed in the Site buildings.

2. Study Area 2 – Eastern Mill Area: The former paper machine buildings have been demolished, but the materials remain on Site; signs were posted prohibiting excavation of soil in the known PCB remediation area; unidentified black staining, appearing to originate on the second floor of the former Number 5 and 6 finishing building, was observed on the exterior of this building and extended to the ground surface; and a drainage pad that drains to the adjoining wastewater treatment plant was observed, which is reportedly used for delivery of leachate from the nearby Dolby Landfill.

3. Study Area 3 – Maintenance Area: Evidence of a gasoline UST, including vent and fill pipes, as well as a dispenser was observed to the east of the paint shop; the maintenance garage has been demolished and building materials appear to have been removed from the Site; the training building was described as a temporary storage location for HSP being consolidated at the Site (unknown for what length of time); and an oil sheen was observed within the containment structure surrounding a former transformer bank.

4. Study Area 4 – Fuel Storage Area: One bulk fuel oil AST was observed, as well as the location of a second previous tank; significant petroleum staining was observed in the vicinity of the fuel unloading area near the existing AST; significant oil staining was also observed in the oil pump house; a former transformer, which appeared to have been burnt and a sign labelling the building as "Foam House" were observed attached to the hydrant house; and several totes were observed with a black liquid inside, suspected to be oil.

5. Study Area 5 – Recycling Area: The fiber recycling plant is currently in the process of active demolition; several ASTs were observed in the chemical storage plant, including storage of sulfuric acid and polymers; and a temporary asphalt plant was observed to the west of the recycle fiber warehouse.

6. Study Area 6 – Wood Lot Area: Significant staining, suspected to be hydraulic oil, was observed in the vicinity of the slasher control building; a limited sheen, suspected to be hydraulic oil, was observed on water surface in the floor drains in the basement of the wood room building; and limited fill debris was observed in the wood lots.

7. Study Area 7 – Western Property: Significant solid waste debris was observed along the banks of Spencer Brook, and fill debris and signs of previous burning were observed in the far western clearing of the Site.

Based on the age of the buildings and Ransom's observations during our Site reconnaissance, there is the potential for the presence of hazardous building materials within the remaining Site buildings, including asbestos-containing material, lead-based paint, PCB-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and other universal wastes (fluorescent bulbs and ballasts, etc.). These materials will require proper characterization, abatement, and disposal, if disturbed during future building renovations and/or demolition activities.

7.2 Conclusions

Ransom has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 and U.S. EPA AAI (40 CFR Part 312) for the Site identified by the Town of East Millinocket Assessor's Office as Lot 10 on Block 1 on Tax Map 2, which corresponds to 50 Main Street, in the Town of East Millinocket, Penobscot County, Maine. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. Based on the information obtained during this Phase I ESA, this assessment has revealed no evidence of *RECs* in connection with the Site, except for the following:

1. Historic paper mill operations occurred at the Site for over a century including the use, handling, and storage of many types of hazardous materials and petroleum products. Several spills have been recorded at the property, but other unknown and/or undocumented releases may also have occurred at the Site, potentially impacting subsurface conditions including soil, soil vapor, and/or groundwater.

2. Staining suspected to be hydraulic oil was observed on the ground surface near the slasher control building and oil sheens were observed in the basement of the wood room building and containment area of the former transformer bank. Significant black staining was observed on and around the remaining portions of the former Number 5 and 6 paper machine building, fuel unloading equipment, and inside the oil pump house near the bulk fuel storage tanks. Each of these releases have the potential to impact soil and/or groundwater in the vicinity.

3. A 2,000-gallon gasoline UST, piping, and dispenser exist to the east of the paint shop. Previous investigations have shown impacts to soil and groundwater related to gasoline storage in this area.

4. Containers of various sizes and in various states of disrepair were observed in many of the Site buildings. Additionally, several large ASTs containing process polymers, acids, and chemicals were observed at the Site. The exact volume of chemical product remaining inside the containers could not be determined, but if significant product remains, these containers and ASTs represent a material threat of release, given the current condition of the Site buildings.

In accordance with the 1991 Consent Agreement and Final Order, the historic PCB spills and resulting PCB-contaminated soil and groundwater remaining at depth beneath clean surficial soil cover materials at the Site, constitutes a *CREC*. The remediation was completed under the oversight of MEDEP and U.S. EPA with the understanding the Site would continue to be used for industrial purposes. Should the proposed use change and/or the PCB-impacted areas are to be disturbed during future site redevelopment activities, additional assessment may be required. Currently, excavation of soil is prohibited within the PCB spill areas.

7.3 Opinions

The Phase I ESA completed by Ransom has identified conditions indicative of potential releases or threatened releases of hazardous substances, pollutants, contaminants, petroleum and petroleum products or controlled substances (as defined in 21 U.S.C. 802) on, at, in, or to the Site. Future redevelopment plans for the Site are unknown but have been proposed to include industrial operations.

Based on the findings of this assessment, it is Ransom's opinion that soil, groundwater, and soil vapor conditions have potentially been impacted by historic paper mill operations at the Site and that additional investigations and response action are warranted and recommended to address the above-stated RECs, further document Site conditions in relation to current regulatory clean up guidelines, and evaluate the suitability of the Site property for potential future redevelopment. It is also Ransom's opinion that additional investigation and/or remediation actions related to the historic PCB spills are not necessary at this time. However, if the Site is to be redeveloped in the future, the redevelopment plans should be evaluated, and additional investigation may be necessary with respect to potential changes in PCB exposure risks and receptors and/or if the covered and contained PCB-impacted areas are to be disturbed in the future.

8.0 RECOMMENDATIONS

Based on the information obtained during this assessment, it is apparent that soil, groundwater, and potentially soil vapor conditions have been adversely impacted by historic paper mill operations at the Site. Ransom recommends the following actions to address the remaining environmental concerns associated with the Site, and to protect human health and the environment:

1. Conduct a Phase II ESA, which would include targeted explorations to evaluate soil, groundwater, and/or soil vapor conditions at the Site in the areas of observed releases mentioned above and within areas of historic paper mill operations. The results of a Phase II ESA will assist in evaluating and documenting current Site conditions and to what extent, if any, the identified *RECs* and environmental concern have adversely impacted environmental conditions at the Site. Additionally, the recommended Phase II investigation will assist in evaluating potential risks to construction workers and potential costs related to managing contaminated soil and/or groundwater or implementing vapor mitigation measures for future building(s) at the Site. Please note that if U.S. EPA Brownfields funding is proposed to be utilized for conducting the recommended Phase II ESA, a Site-Specific Quality Assurance Project Plan (SSQAPP) will also need to be prepared and approved by the U.S. EPA and MEDEP, prior to conducting the Phase II ESA.

2. The 2,000-gallon gasoline UST and any accessible associated buried piping currently in-place at the Site should be removed by a MEDEP-approved contractor with oversight provided by a qualified environmental professional in accordance with the requirements of CMR Chapter 691.

3. Chemical containers and ASTs observed within the Site buildings should be properly consolidated and disposed and/or removed by a MEDEP-approved contractor.

4. In the event that the Site property is redeveloped in the future, an environmental media management plan should be developed to outline the necessary health and safety procedures, and appropriate soil and groundwater management strategies that will be required to protect human health and the environment.

Furthermore, certain ASTM non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk, including known and suspect ACM, lead based paint (LBP), PCB-containing fluorescent light ballasts, mercury-containing fluorescent lamps, and/or other potential universal wastes. ACM investigatory activities conducted by others in 2015 identified ACM at various locations throughout the Site buildings, and the ACM within the Site buildings reportedly has not been fully abated. Depending on potential future Site development or renovation plans, these hazardous building materials, if confirmed, may require abatement, special handling, and/or proper management and disposal, prior to and/or during future renovation and/or demolition activities. Therefore, Ransom further recommends a Hazardous Building Materials Inventory (HBMI) be performed to identify potential remaining hazardous building materials and to identify mitigation measures, if necessary, in order to support the current and future utilization of the Site.

9.0 ADDITIONAL SERVICES AND NON-SCOPE CONSIDERATIONS

9.1 Additional Services

No additional services beyond the standard scope of services prescribed by ASTM E 1527-13 were requested by MEDEP or the Town East of Millinocket.

9.2 Non-Scope Considerations

The following environmental issues are outside the scope (non-scope considerations) of the standard practice defined by ASTM E 1527-13. This Phase I ESA does not identify or evaluate these non-scope considerations:

1. Asbestos-containing building materials;
2. PCBs in building materials
3. Radon;
4. Lead-based paint;
5. Lead in drinking water;
6. Wetlands;
7. Regulatory compliance;
8. Cultural and historical resources;
9. Industrial hygiene;
10. Health and safety;
11. Ecological resources;
12. Endangered species;
13. Indoor air quality;
14. High-voltage power lines;
15. Biological agents; and
16. Mold.

10.0 REFERENCES

1. ASTM E 1527-13

2. Town of East Millinocket Municipal Offices
   Ransom Research: April 23, 2018.

3. Environmental Data Resources (EDR) Radius Map Report, Aerial Photograph Report, Historical Topographic Map Report, City Directory Abstract, and Sanborn® Fire Insurance Map Report, April 29, 2019.

4. Surficial Geology of the Millinocket, 1º by 2º Quadrangle, Maine; Maine Geological Survey, Department of Conservation, 1987.

5. Reconnaissance Bedrock Geology of the Millinocket Quadrangle, Maine; Maine Geological Survey, Department of Conservation, 1981.

11.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Primary Assessor and Report Author

This Phase I ESA was conducted in accordance with the requirements of ASTM International E 1527-13 by the undersigned. Any work completed on this Phase I ESA by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional(s) listed below.

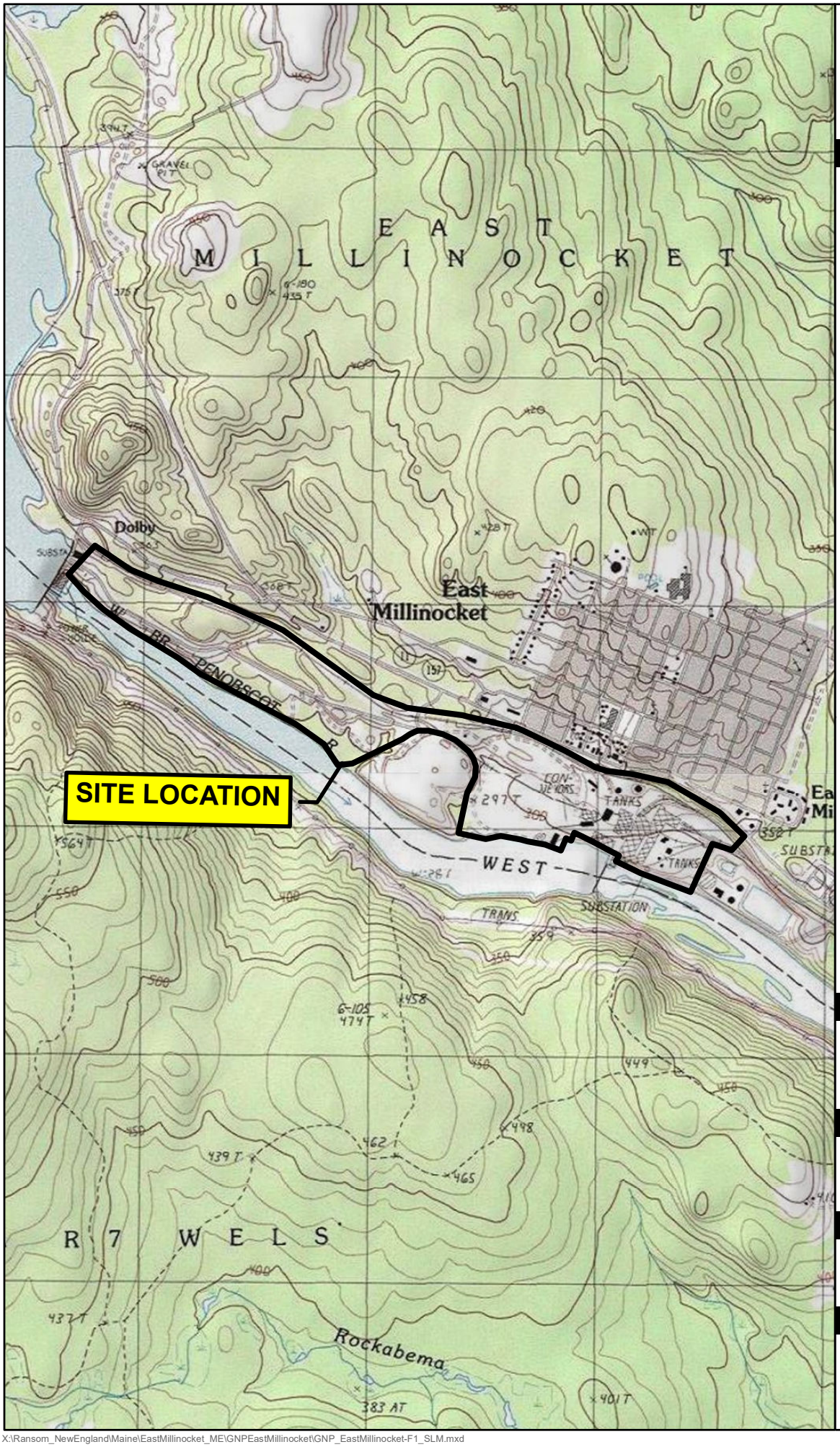
Sara L. Roy
Project Geologist / Primary Author

Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

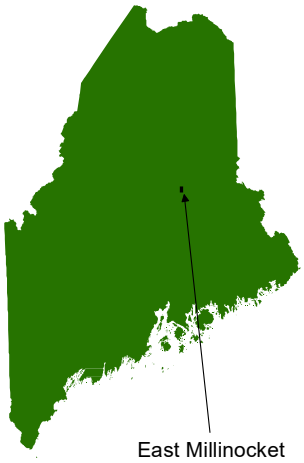
Eriksen Phenix, C.G.
Project Manager

Peter J. Sherr, P.E.
Principal / Senior Project Manager



RANSOM
Consulting Engineers and Scientists

Regional Locator Map



Notes

1. Data Source: USGS National Map Seamless Server, 24K DRG, 1/3" NED
2. USGS Quad Name(s): Medunkeunk Lake and East Millinocket, Maine
3. Latitude: 45°62'33.2"N Longitude: 68°57'17.9"W

Scale and Orientation

0 1,000 2,000

1 inch = 2,000 feet

Prepared For

Maine Department of Environmental Protection
17 State House Station
Augusta, Maine

Site Address

GNP East Millinocket
East Millinocket, Main

171.06116.004 | Jun 2019

Figure 1

Site Location Map

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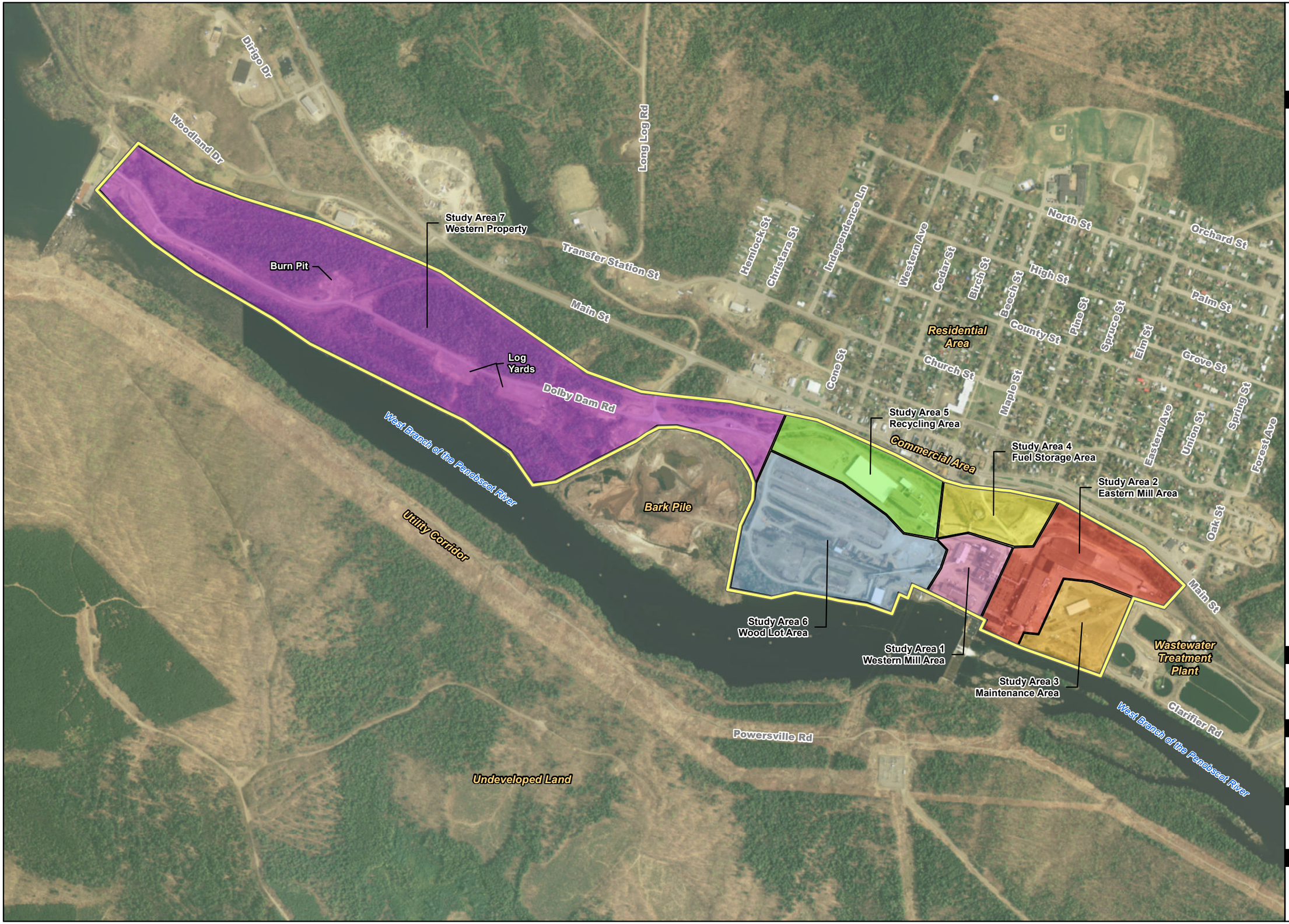

RANSOM
Consulting Engineers and Scientists

Legend & Notes

- Site Boundary

Study Area

- 1 Western Mill Area
- 2 Eastern Mill Area
- 3 Maintenance Area
- 4 Fuel Storage Area
- 5 Recycling Area
- 6 Wood Lot Area
- 7 Western Property

Notes

1. Site Plan based on ESRI and Digital Globe Orthophotography
2. Some features are approximate in location and scale
3. This plan has been prepared for Maine Department of Environmental Protection. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

Scale & Orientation

0 400 800

1 inch = 800 feet

Prepared For

Maine Department of Environmental Protection
17 State House Station
Augusta, Maine

Site Address

GNP East Millinocket
East Millinocket, Maine

171.06116.004 | Jun 2019

Figure 2
Full Site Layout

X:\Ransom_NewEngland\Maine\EastMillinocket_ME\GNPEastMillinocket\GNP_EastMillinocket-F2_FullSL.mxd

Structure Identification

1 - Recycle Fiber Warehouse	16 - Slasher Control Building	31 - No. 5 & 6 Finishing Room	46 - Wood Room Building
2 - Recycle Fiber Plant	17 - Slasher Maintenance Building	32 - No. 2 Train Shed	47 - No. 7 Screen Room Building
3 - Chemical Storage Plant	18 - Former Chemi-Groundwood Building	33 - Paper Warehouse	48 - Sulphite Plant
4 - Flotation Cell Building Extension	19 - Truck Dumper	34 - Former Drum Storage Area	49 - Groundwood
5 - Switch House	20 - Truck Dump Hopper	35 - Hopper Building	50 - Broke
6 - Fuel Unloading Building	21 - Bark Prep Building	36 - Bark Classifier Building	51 - Sulphite
7 - 750,000 Gallon Fuel Oil AST	22 - Bark Storage Building	37 - Sorter Building	52 - Groundwood
8 - Heater House	23 - Plant Protection Building	38 - Grinder Room	53 - Garage
9 - Hydrant House	24 - Precipitator Building	39 - Old Boiler House	54 - Maintenance Garage (Sold and Removed)
10 - Oil Pump House	25 - Bark Boiler Building	40 - Old Water Treatment Building	55 - Training Center
11 - Heater House	26 - Steam Plant	41 - No. 1-4 Paper Machine Building	56 - Warehouse W
12 - 1,700,000 Gallon Fuel Oil	27 - No. 2 Train Shed	42 - No. 5 & 6 Paper Machine Building	57 - Train Shed
13 - Guard House	28 - Mill Offices	43 - Warehouse J/Old Paint Shop	58 - Hydropulper Building
14 - Slasher House	29 - No. 1-4 Finishing Building	44 - Bark Dump Building	59 - Weldon Building
15 - Slasher Deck	30 - Grinder Roll and Machine Shop Building	45 - Transfer House	60 - Former Transformer Bank

RANSOM
Consulting Engineers and Scientists

Legend & Notes

- Site Boundary
- 1 — Structure Identification Number
- Equipment Removed
- Demolished
- Underground Storage Tank (UST)

Study Area

- 1 Western Mill Area
- 2 Eastern Mill Area
- 3 Maintenance Area
- 4 Fuel Storage Area
- 5 Recycling Area
- 6 Wood Lot Area
- 7 Western Property

Notes

1. Site Plan based on ESRI and Digital Globe Orthophotography
2. Some features are approximate in location and scale
3. This plan has been prepared for Maine Department of Environmental Protection. All other uses are not authorized unless written permission is obtained from Ransom Consulting, Inc.

Scale & Orientation

0 150 300

1 inch = 300 feet

Prepared For

Maine Department of Environmental Protection
17 State House Station
Augusta, Maine

Site Address

GNP East Millinocket
East Millinocket, Maine

171.06116.004 | Jun 2019

Figure 3
Focused Site Layout

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APPENDIX A

Photograph Log

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

Photograph Log

Study Area 1: Remaining portions of the grinder (L) and off-Site substation (R)

Study Area 1: A-frame biomass storage building and bark prep building in front of boiler buildings

Study Area 1: Remaining portions of the grinder including the cable tray linking the hydro plant to the substation

Study Area 1: Interior of the remaining portion of the grinder

Study Area 1: Interior of the A-frame biomass storage building which feeds the biomass boiler

Study Area 1: Hydraulic equipment and storage for the mechanical portion of the A-frame

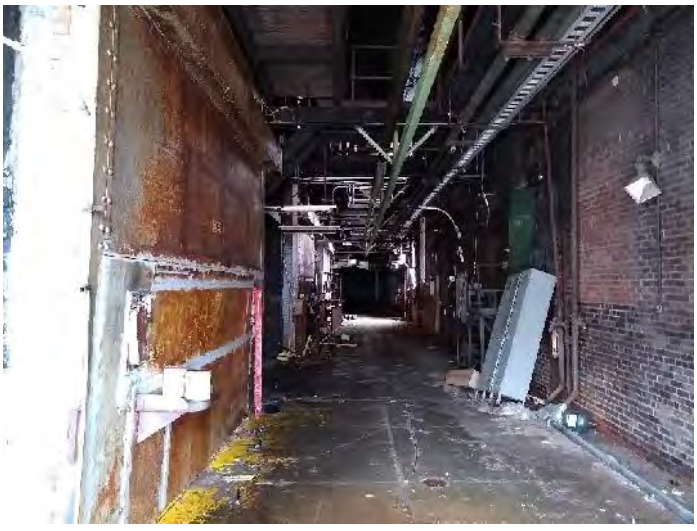
Study Area 1: Mechanical components and storage in the A-frame biomass storage building

Study Area 1: Exterior of the plant protection building

Study Area 1: Small quantity containers of petroleum products in the palnt protection buildng

Study Area 1: Interior of the plant protection building

Study Area 1: Interior of the plant protection building

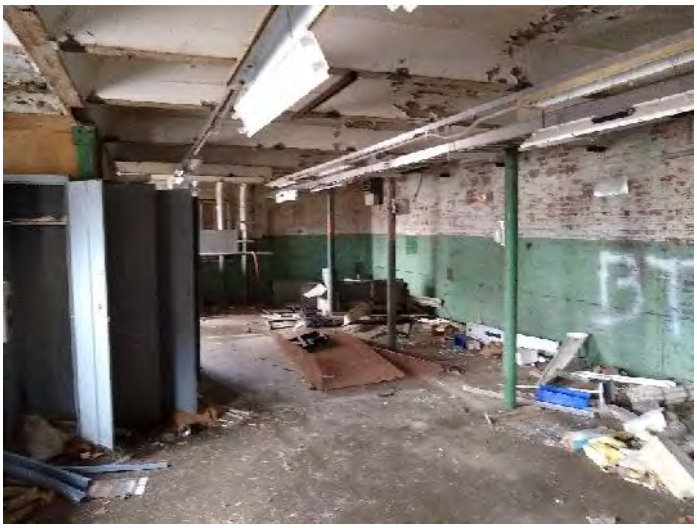


Study Area 1: Connector between old water treatment plant and the old boiler house

Study Area 1: Lower floor of the old boiler house building

Study Area 1: Buckets containing suspected

Study Area 1: Former electrical room in the old boiler house building



Study Area 1: Interior of the former electrical room in the old boiler house building

Study Area 1: Diesel tank remaining in a small containment structure outside the grinder

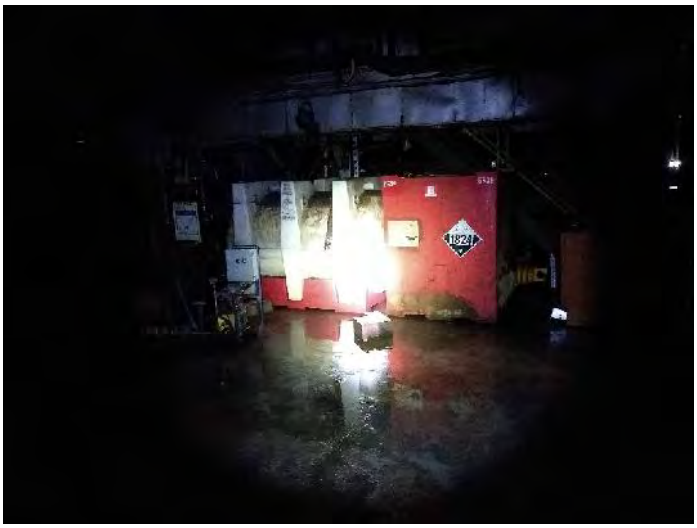
Study Area 1: Interior of the steam plant building near the existing biomass boiler

Photograph Log

Study Area 1: Example of HSP storage within the steam plant building

Study Area 1: Battery bank observed within the steam plant building along the eastern wall

Study Area 1: Ice covering floor of steam plant building surrounding HSP storage totes and drip buckets



Study Area 1: Sodium hydroxide tank observed on ground floor of the steam plant building

Study Area 1: petroleum AST observed on the ground floor of the steam plant building

Study Area 1: Mechanical equipment with evidence of repeated small releases of hydraulic oil

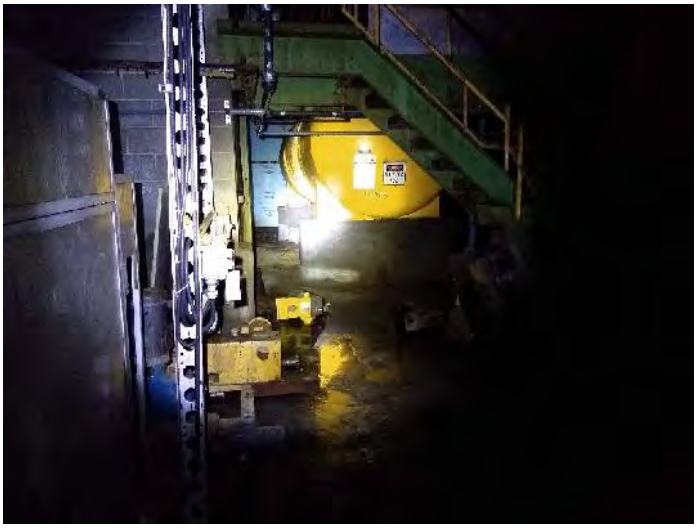
Study Area 1: Transformer observed on second floor of the steam plant building

Study Area 1: Transformer obeserved on the second floor of the steam plant building

Study Area 1: Parts cleaner observed in the steam plant building

Study Area 1: Interior of the parts cleaner observed in the steam plant building

Study Area 1: Improperly maintained HSP storage observed within the steam plant building



Study Area 1: Sulfuric acid tank observed within the steam plant building

Study Area 1: Improper material storage and suspected universal waste within the old water treatment building

Study Area 1: Exterior view of the A-frame, precipitator, and steam plant buildings

Study Area 1: Transformer observed on the exterior of the steam plant building

Study Area 1: Transformer observed on the exterior of the steam plant building

Study Area 1: Transformer observed on the exterior of the steam plant building

Study Area 1: Drums observed (contents unknown) within the old boiler house building

Study Area 1: Large tank observed between the hydro plant and grinder buildings

Study Area 2: Interior of the paper warehouse

Study Area 2: Used oil storage container observed at the rear of the paper warehouse

Study Area 2: Stockpiled equipment and e-waste at the rear of the paper warehouse

Study Area 2: Exterior of the No. 5&6 paper machine building (demolished) and finishing building

Study Area 2: Debris remaining from demolition of the No. 5&6 paper machine building and remaining stock silos

Study Area 2: Interior view of demoliton debris remaining from No. 5&6 paper machine building

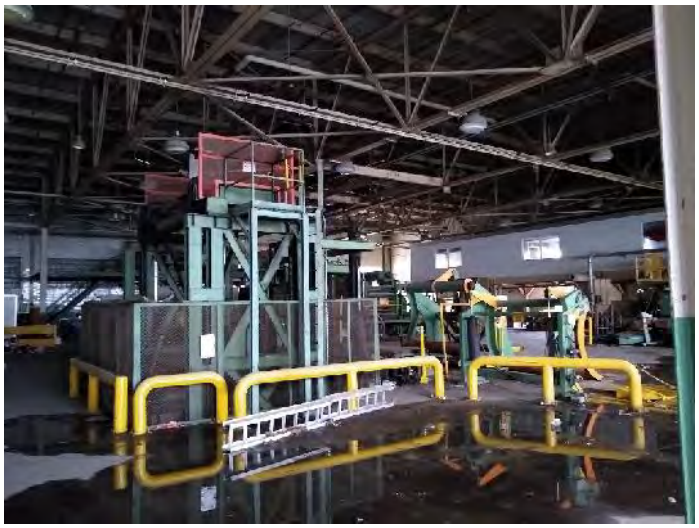
Study Area 2: Interior view of demoliton debris remaining from No. 5&6 paper machine building

Study Area 2: Interior of the No. 1-4 finishing building

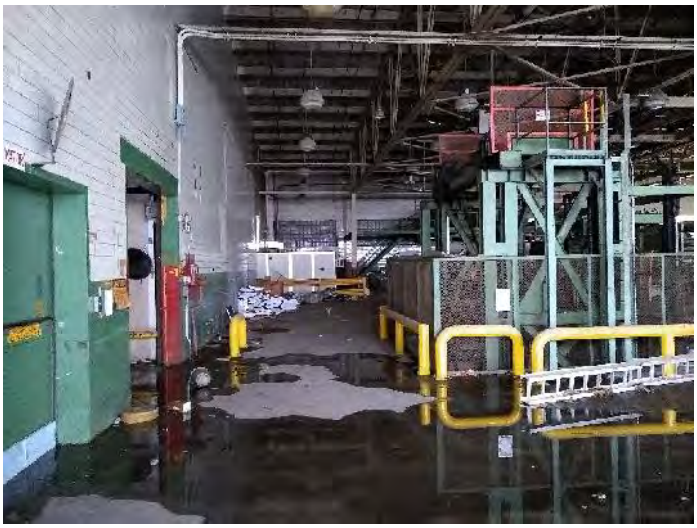
Study Area 2: Interior of the No. 1-4 finishing building

Study Area 2: Interior view of demoliton debris remaining from No. 1-4 paper machine building

Study Area 2: Interior of the No. 2 train shed



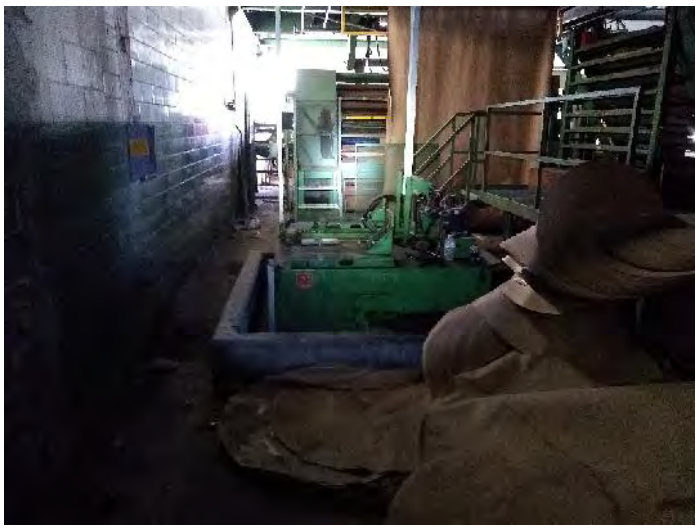
Study Area 2: Interior of the No. 5&6 finishing room



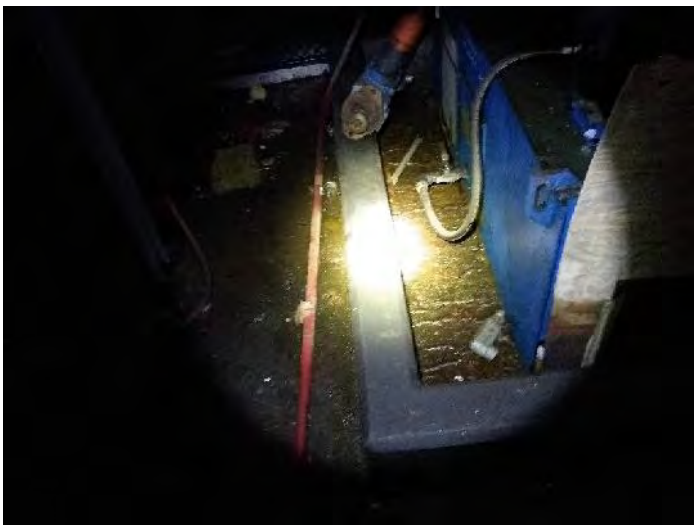
Study Area 2: Interior of the No. 5&6 finishing room

Study Area 2: Interior of the No. 5&6 finishing room (upper floor)

Study Area 2: Oil and staining observed within the interior of the No. 5&6 finishing room (upper floor)



Study Area 2: Oil and staining observed within the interior of the No. 5&6 finishing room (lower floor)



Study Area 2: Oil and staining observed within the interior of the No. 5&6 finishing room (lower floor)

Study Area 2: View into the hydropulper building

Study Area 2: Interior of the hydropulper building

Study Area 2: Bentonite and starch storage tanks inside the hydropulper building

Study Area 2: Storage for radiologic testing equipment on the northern portion of Study Area 2

Study Area 2: Storage for radiologic testing equipment on the northern portion of Study Area 2

Study Area 2: Several scrapped storage tanks observed on the northern portion of Study Area 2

Photograph Log

Study Area 2: Former transformer location outside of No. 5&6 paper machine building

Study Area 2: Staining observed on the exterior of the No. 5&6 paper machine building from the second floor interior

Study Area 2: Staining observed on the exterior of the No. 5&6 paper machine building and soil excavation limit sign

Study Area 2: Wells observed to the north of the former No. 5&6 paper machind building

Study Area 2: Disposal pad to WWTP for leachate trucked to the Site from the nearby landfill

Study Area 3: Exterior of the training center and warehouse

Study Area 3: View across Study Area 3

Study Area 3: Storage of petroleum containers inside the training center building

Study Area 3: Front portion of the training center building reportedly used for hazardous waste staging in the past

Study Area 3: Interior of the training center building

Study Area 3: Interior of the central warehouse attached to the training center

Study Area 3: Interior of the central warehouse attached to the training center

Study Area 3: Interior of the far warehouse attached to the training center

Study Area 3: Former paint shop building and exterior (UST located to the right of the building)

Study Area 3: Interior of the former paint shop building

Study Area 3: Evidence of UST presence to the east of the former paint shop

Study Area 3: Dispenser associated with UST located to the east of the former paint shop

Study Area 3: Front exterior portion of the former paint shop

Study Area 3: Interior of the former paint shop

Study Area 3: View to the southwest across former exterior salvage area

Study Area 3: Material stockpiled in former salvage area behind training center and warehouse building

Study Area 3: Former substation located at the southern portion of Study Area 3

Study Area 3: Trailer located within former salvage area

Study Area 3: Remaining disconnected substation equipment

Photograph Log

Study Area 3: Open drain connected to secondary containment of former substation (discharges to ground)

Study Area 3: Interior of former substation control room (weldon building)

Study Area 3: Pit within weldon building which connects to soil beneath building

Study Area 3: Oil sheen observed in vicinity of former substation equipment (drains to ground surface)

Study Area 3: View of former substation and containment drain which discharges to ground surface

Study Area 3: Rear view of remaining maintenance garage

Study Area 3: Interior of remaining maintenance garage

Study Area 3: Cracks in foundation surrounding floor drain observed in remaining maintenance garage

Study Area 3: View of training center building and remaining maintenance garage building

Study Area 4: Gravel parking area and earthen berm surrounding former bulk fuel storage AST

Study Area 4: View within containment berm of former bulk fuel storage AST

Study Area 4: Staining and/or free product observed within containment berm of former bulk fuel storage AST

Study Area 4: Exterior of the oil pump house building and staining observed on nearby ground surface

Study Area 4: Interior of the oil pump house building with significant staining observed on walls, floor, and windows

Study Area 4: Drum outside oil pump house building and oil staining observed reaching the ground surface

Study Area 4: Exterior view of the hydrant house

Study Area 4: Door signs on hydrant house identifying it as the foam house

Study Area 4: equipment stored inside the hydrant house

Study Area 4: Water connection valves to municipal water system

Study Area 4: View of containment berm surrounding existing bulk fuel storage AST

Study Area 4: Transformer on side of the hydrant house which appears to have been previously burnt

Study Area 4: Pole mounted electrical transformers observed on Site

Study Area 4: Connection to municipal water supply

Study Area 4: HSP storage totes observed on Site with no secondary containment

Study Area 4: HSP storage totes observed on Site with no secondary containment

Study Area 4: HSP storage totes observed on Site with no secondary containment

Study Area 4: HSP storage totes observed on Site with no secondary containment and staining on ground surface

Study Area 4: Oil staining observed on unloading structures

Study Area 4: Oil staining and debris observed on unloading structures and piping

Study Area 4: Oil staining observed on unloading structures, piping, and ground surface

Study Area 4: Oil staining observed on unloading structures, piping, and ground surface

Study Area 4: Oil staining observed on unloading structures, piping, and ground surface

Study Area 5: Interior of the recycle fiber warehouse

Study Area 5: Debris observed within the interior of the recycle fiber warehouse

Study Area 5: Debris observed within the interior of the recycle fiber warehouse

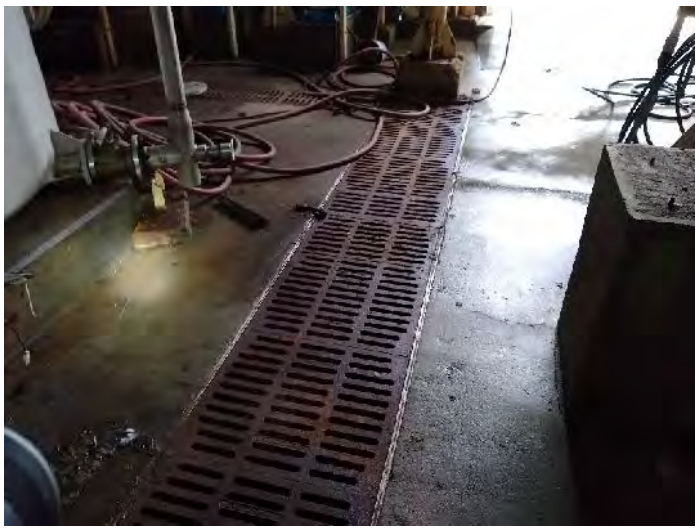
Study Area 5: Empty drums observed within the interior of the recycle fiber warehouse

Study Area 5: Debris observed within the interior of the recycle fiber warehouse

Study Area 5: Universal waste observed within the interior of the recycle fiber warehouse

Study Area 5: Interior of the chemical storage plant building with several large ASTs

Study Area 5: Interior of the chemical storage plant building showing floor drain system



Study Area 5: Interior of the chemical storage plant building showing floor drain system (staining/corrosion observed)

Study Area 5: Interior of the chemical storage plant building with staining observed on equipment

Photograph Log

Study Area 5: Interior of the chemical storage plant building with several large ASTs

Study Area 5: Interior of the chemical storage plant building with several large ASTs

Study Area 5: Sulfuric acid tank observed within the chemical storage plant

Study Area 5: Interior of the chemical storage plant building with several large ASTs

Study Area 5: Portable asphalt plant observed on Site to the west of the recycle fiber warehouse

Study Area 5: Portable asphalt plant observed on Site to the west of the recycle fiber warehouse

Study Area 5: Portable asphalt plant observed on Site to the west of the recycle fiber warehouse

Study Area 5: Portable asphalt plant observed on Site to the west of the recycle fiber warehouse

Study Area 6: Exterior of the wood room buildng located near the river

Study Area 6: Exterior of the bark prep building

Study Area 6: Exterior of the slasher maintenance building

Study Area 6: Exterior of the slasher maintenance building

Study Area 6: Interior of the slasher control building

Study Area 6: Exterior of the slasher control building showing significant hydraulic oil staining on ground surface

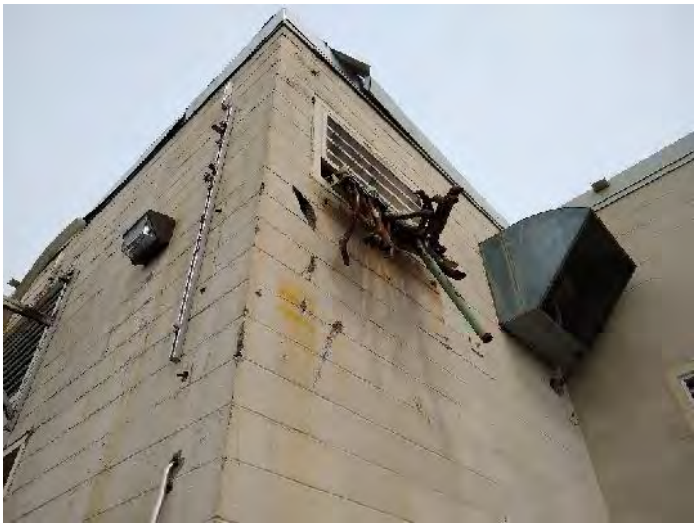
Study Area 6: Exterior of the slasher control building showing significant hydraulic oil staining on ground surface

Study Area 6: Former slasher location

Study Area 6: Interior of the slasher control building showing hydraulic equipment and oil staining

Study Area 6: Interior of the slasher control building showing hydraulic equipment and oil staining

Study Area 6: Interior of the slasher control building showing hydraulic equipment and oil staining



Study Area 6: Connection pipes from the slasher control building suspected to be source of hydraulic oil release

Study Area 6: Interior of the slasher control building

Study Area 6: Interior of the slasher control building showing miscellaneous HSP items

Study Area 6: Interior of the slasher control building showing subfloor equipment location

Study Area 6: Exterior of the wood room building

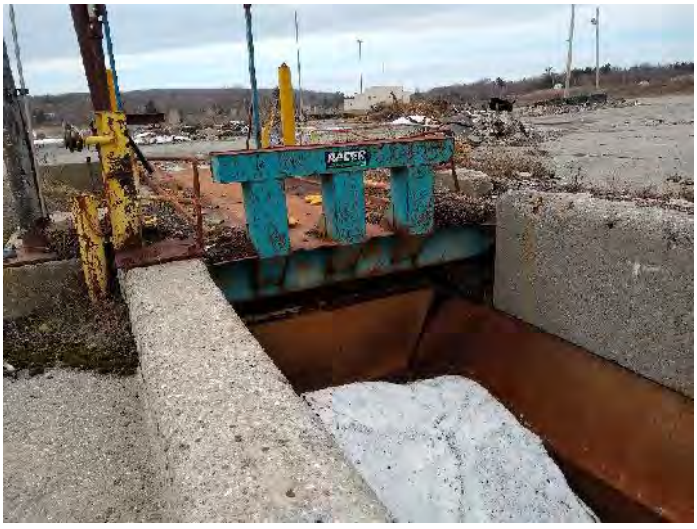
Study Area 6: Interior of the bark dump building

Study Area 6: Interior of the wood room building

Study Area 6: Interior of the wood room building

Study Area 6: Interior of the wood room building

Study Area 6: Electrical controls for the wood room building



Study Area 6: Grinding equipment outside the bark prep building

Study Area 6: Electrical controls for the bark prep building

Study Area 6: Interior of the bark prep building

Study Area 6: Oil cans observed on the interior of the bark prep building

Study Area 6: Interior of the bark prep building, no sheen observed on standing water present

Study Area 6: Discolored water observed in the log yard

Study Area 6: Debris observed in the log yard

Study Area 6: Debris observed in the log yard

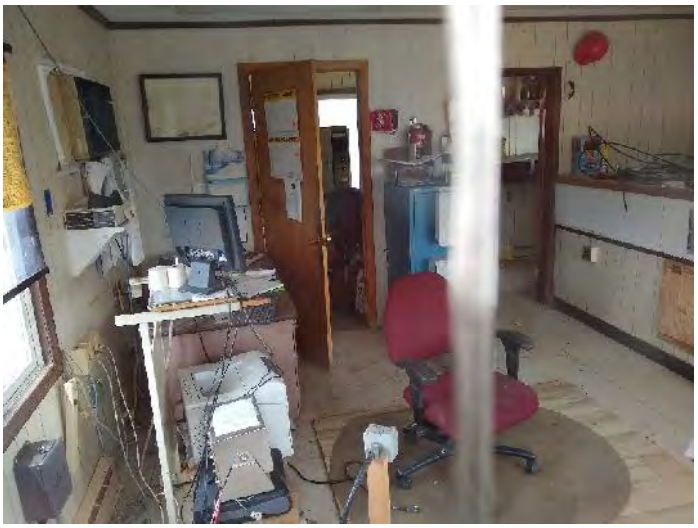
Study Area 6: Discolored water observed in the log yard

Study Area 6: View across the log yard looking west

Study Area 6: View across the log yard looking east

Study Area 6: View across the log yard looking north

Study Area 7: Scale building exterior



Study Area 7: Scale building interior

Study Area 7: Dam located at the western extent of the property

Study Area 7: Material stockpiles at western end of property

Study Area 7: Wood debris at western end of property

Study Area 7: Wood debris at western end of property

Study Area 7: Log slide below upper dam

Study Area 7: Material stockpiles within former burn pit

Study Area 7: Material stockpiles within former burn pit

Study Area 7: Material stockpiles within former burn pit

Study Area 7: Charred debris within former burn pit

Study Area 7: Material stockpiles within former burn pit

Study Area 7: Charred debris within former burn pit

Study Area 7: Former log yard

Study Area 7: Debris observed on former log yard

Study Area 7: Debris observed on former log yard

Study Area 7: Spencer Brook near former log yard with no observed impacts

Study Area 7: Spencer Brook on eastern end of Study Area 7 with visible sheen and debris observed

Study Area 7: Spencer Brook on eastern end of Study Area 7 with visible sheen and debris observed

APPENDIX B

Supplemental Documentation

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

SIGNED 8/27/88 ORIGINAL

BOARD ORDER

IN THE MATTER OF

GREAT NORTHERN PAPER COMPANY a division of GREAT NORTHERN NEKOOSA CORPORATION Millinocket, Penobscot County, Maine HAZARDOUS WASTE ACTIVITIES	)))))	ADMINISTRATIVE CONSENT AGREEMENT AND ENFORCEMENT ORDER

This Agreement by and among Great Northern Paper Company ("Great Northern"), the Maine Board of Environmental Protection (the "Board") and the State of Maine Attorney General is entered into pursuant to 38 M.R.S.A. Section 347(1) and in accordance with the Department of Environmental Protection ("Department") Consent Agreement Policy, as amended.

For the purposes of this Agreement only, the parties agree as follows:

1. Great Northern is a division of Great Northern Nekoosa Corporation. Great Northern is organized and exists under the laws of the State of Maine and operates a paper mill in Millinocket, Maine and a paper mill in East Millinocket, Maine.

2. Great Northern was issued an interim hazardous waste storage facility license #I-023 for the Millinocket mill (Brown dump facility) and an interim hazardous waste storage facility license #I-022 for the East Millinocket mill (Dolby storage facility). The interim licenses were issued on August 27, 1980 and in August 1983 for polychlorinated biphenyls. Great Northern is subject to the requirements of 38 M.R.S.A. Section 1304(8)(C) and the Department's Hazardous Waste Management Rules (the "Rules") including but not limited to Chapter 855, Interim Licenses for Waste Facilities for Hazardous Waste, including closure, and if applicable, post-closure requirements. Great Northern asserts that it rescinded its interim licenses in February 1982 and no longer operates as a hazardous waste storage facility under licenses I-022 and I-023. As such, Great Northern does not admit that the findings and activities described below with respect to those facilities are violations of Chapter 854 or 855 of the Rules or 40 CFR 264 or 265. Notwithstanding this disagreement, the parties agree to resolve the matter in the manner set forth below.

3. On May 20 and 21, 1987, an inspection was conducted by the Department and the United States Environmental Protection Agency (U.S. EPA) to determine compliance with the Maine Hazardous Waste Management Rules as well as the Code of Federal Regulations. During this inspection the following violations were found at the Millinocket and East Millinocket facilities:

   A. The so-called Brown dump facility at the Millinocket mill (interim license #I-023) was altered in 1986 in that it had been moved from the location known as the Brown dump to the Core storage area without obtaining prior approval from the Board and without closing the Brown dump in accordance with a closure plan approved by the Board, which is a violation of the Rules, Chapter 855.6, 855.9A and Title 40 of the Code of Federal Regulations Part 265.111 ("40 CFR 265.111). The Core storage facility remains unlicensed by the Board. Consequently, it does not have interim hazardous waste facility status and is subject to the handling and licensing requirements of Chapter 854 of the Rules;

   B. Great Northern uses the Core facility to store hazardous waste for a period longer than 90 days; Because Great Northern did not apply for or receive a license to store hazardous waste for greater than ninety (90) days at the Core storage facility, Chapter 851.8C of the Rules and 40 CFR 262.34(b) have been violated;

   C. There was an open drum of waste thinner in the paint shop generator storage area at the Millinocket Mill. This open drum constitutes a violation of Chapter 851.8B(2) of the Rules and 40 CFR 262.34/265.173(a);

   D. Four drums of waste paint thinner, an ignitable hazardous waste located at generator stations, were not labeled as hazardous waste and were not marked with accumulation dates, which is a violation of Chapter 851.8(B)(3) of the Rules and 40 CFR 262.34(a)(2) and (3). Two drums of waste paint thinner were located at the Millinocket mill paint shop and two drums of waste paint thinner were located adjacent to the East Millinocket paint shop;

   E. The Core storage facility and the Drum storage area, a generator storage area at the East Millinocket Mill, do not have impervious surfaces such as concrete or asphalt to prevent any unplanned release of hazardous waste to the soil. The failure to store hazardous waste on an impervious surface at the Core storage area is a violation of Chapter 854.12B(1) of the Rules and 40 CFR 264.175(b)(1). The failure to store hazardous waste on an impervious surface at the generator storage area known as the Drum storage area is a violation of Chapter 851.13B(1) of the Rules.

F. The Core storage facility and the Drum storage area do not have a containment and collection system with a capacity which exceeds 20% of the total capacity of all containers and tanks used to store liquid wastes or 110% of the capacity of the largest container or tank, whichever is greater. The lack of a containment and collection system with adequate capacity at the Core storage facility is a violation of Chapter 854.12B(3) of the Rules and 40 CFR 264.175(3). The lack of a containment and collection system with adequate capacity at the Drum storage area is a violation of Chapter 851.13B(2) of the Rules.

G. Daily inspections were not being conducted or recorded at the Dolby storage facility, the Core storage facility or the Drum storage area. Failure to conduct daily inspections at the Drum storage area is a violation of Chapter 851.13D of the Rules. Failure to conduct daily inspections at the Core storage facility is a violation of Chapter 854.12D(1) of the Rules. Additionally, failure to conduct weekly inspections at the Core storage area is a violation of 40 CFR 264.174. Failure to conduct and record daily inspections at the Dolby storage facility is a violation of Chapter 855.5E of the Rules and 40 CFR 265.15.

H. No "Danger - Unauthorized Personnel Keep Out" signs were posted at the Dolby storage facility, the Core storage facility or the Drum storage area. The failure to post the required signs at the Dolby storage facility is a violation of Chapter 855.5E of the Rules and 40 CFR 265.14C. The failure to post the required signs at the Core storage facility is a violation of Chapter 854.6C(2) of the Rules and 40 CFR 264.14(C). The failure to post the required signs at the Drum storage area is a violation of Chapter 851.13C(7)(c) of the Rules.

I. No portable fire control equipment was available for use at the Dolby storage facility, the Core storage facility, or the Drum storage area. The Dolby facility is, however, equipped with a sprinkler system. The failure to provide portable fire control equipment for use at the Dolby storage facility is a violation of Chapter 855.53 of the Rules and 40 CFR 265.32(C). The failure to provide portable fire control equipment for use at the Core storage facility is a violation of Chapter 854.6C(5) of the Rules and 40 CFR 264.32(C). The failure to provide portable fire control equipment for use at the Drum storage area is a violation of 851.13C(7)(c) of the Rules and 40 CFR 262.34(4).

J. The Contingency Plan for the facilities and generator storage areas is incomplete. The failure to have a contingency plan available for the Core storage facility is a violation of Chapter 854.6C(16) of the Rules and 40 CFR

264.53. The failure to have a contingency plan available for the two paint shop "generator" storage areas and the Drum storage area is a violation of Chapter 851.8B(5) of the Rules and 40 CFR 262.34(4). The emergency plan which does exist does not adequately address hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste to air, soil, or surface waters which might occur in the Millinocket mill or the East Millinocket mill;

K. The personnel training records are incomplete. There are no descriptions of training given and no job title descriptions provided which coincide with the names of the employees. Failure to maintain complete training records for personnel with responsibilities at the areas operating under the requirements for generators is a violation of Chapter 851.8B(5) of the Rules and 40 CFR 262.34(4). Failure to maintain complete training records for those personnel with responsibilities at the Brown Dump and Dolby storage facilities is a violation of Chapter 855.5E of the Rules and 40 CFR 265.16(d). Failure to maintain complete training records for those personnel with responsibilities at the Core storage area is a violation of Chapter 854.6C(4) of the Rules and 40 CFR 264.16;

L. Great Northern failed to provide and maintain a closure plan on site for the Brown Dump Facility, the Core Storage Facility or the Dolby Storage Facility. The failure to provide and maintain a closure plan on site at the Core storage facility is a violation of Chapter 854.6C(13) of the Rules and 40 CFR 264.112. Failure to provide and maintain a Closure Plan on site for the Brown Dump facility and Dolby storage facility is a violation of Chapter 855.5E of the Rules and 40 CFR 265.112.

M. Great Northern failed to provide and maintain closure cost estimates or financial assurance documents for the Brown Dump Facility, the Core Storage Facility, or the Dolby Storage Facility. The failure to provide and maintain closure cost estimates or financial assurance documents for the Brown Dump and Dolby storage facilities is a violation of Chapter 855.5E of the Rules and 40 CFR 265.142 and 265.143. The failure to provide and maintain these documents for the Core storage facility is a violation of Chapter 854.6C(14) of the Rules and 40 CFR 264.142 and 264.143.

N. Great Northern has not completed hazardous waste manifests as required by the instructions which are specified on the manifest. Great Northern has used incorrect site information on its manifests and incorrect EPA ID numbers. Great Northern's failure to properly complete the manifests constitutes a violation of Chapter 857.5D of the Rules;

O. Great Northern's manifests do not have a designated destination facility on them, which constitutes a violation of Chapter 857.6A(1)(a) of the Rules and 40 CFR 262.20(b); and

P. Great Northern failed to pay fees into the Maine Hazardous Waste Fund for hazardous waste generated in 1984 and 1985, a violation of 38 M.R.S.A. Section 1319-I. 38 M.R.S.A., Section 1319-I(6) states that any person who has not paid the appropriate fee to the Maine Hazardous Waste Fund within six (6) months after the fee becomes due, shall pay a penalty for late payment in addition to the fees otherwise owed. 38 M.R.S.A. Section 1319-I (1985) also states that no person may be required to pay, for any calendar year, more than $15,000 in fees. A review of the annual reports submitted by Great Northern revealed that Great Northern owed $15,000.00 (the maximum) for waste generated in 1985 to the Hazardous Waste Fund for the year 1985 and $4,000.00 for waste generated in 1984, not including a penalty for late payment and any other liability or penalty imposed by law.

4. In addition to the violations identified in paragraph 3(A) through (P) above, on the basis of inspections conducted by the Department and reports and sample analyses received by the Department, the Department has determined that Polychlorinated Biphenyls (PCBs) exist in soils, including soils which are below the groundwater surface, at concentrations in excess of 50 ppm at three locations known as the Chemi-Groundwood site and the No. 5 and No. 6 Paper Machine Building, which are located at the East Millinocket Mill. The discharge of PCB's occurred at the Chemi-Groundwood site on or before August 17, 1980. The discharge of PCBs occurred at the No. 5 Paper Machine room on or before May 14, 1981. The discharge of PCBs at the Chemi-Groundwood Site and the No. 5 Paper Machine room occurred when energized transformers failed, releasing the askeral (PCBs) oil. The discharge of PCBs at the No. 6 Paper Machine room occurred on January 3, 1978 when a spare transformer was punctured by a snow plow causing the release of askeral (PCB) oil. PCBs have been identified by the Department as hazardous waste and hazardous substances which pose a potential threat to the public health and safety as well as groundwaters, surface waters and the ambient air. Remedial action is necessary to abate, cleanup or mitigate the threats posed by the PCB contaminated sites.

5. The Board has regulatory authority over the activities described herein.

6. Great Northern expressly waives:

A. notice of and opportunity for hearing;

B. any and all further procedural steps before the Board;

C. the making of any Findings of Fact by the Board; and

D. its right to appeal any portion of this Administrative Consent Agreement and Enforcement Order.

7. This Agreement shall not become part of the official record unless and until it is accepted by the Board.

8. To resolve the violations referred to in paragraph three above, Great Northern agrees to:

A. Within forty-five (45) days of the effective date of this Agreement, submit to the Department for its review and approval a closure plan developed in accordance with Chapter 855, Section 9 of the Rules and 40 CFR 265 for the Brown dump storage facility. Great Northern shall commence closure of the facility in accordance with the closure plan and time schedule as modified and approved by the Board.

B. Within sixty (60) days from the effective date of this Agreement, submit to the Department for its review and approval one of the following documents for the Core storage facility in Millinocket and for the Dolby storage facility in East Millinocket:

(1) If Great Northern decides to use the Core storage facility for the storage of hazardous waste for greater than ninety (90) days, Great Northern shall submit a properly completed application for the Core storage facility in accordance with Chapter 856 of the Rules and 40 CFR 264; or

(2) If Great Northern decides not to use the Core storage facility, for the storage of hazardous waste for greater than ninety (90) days, Great Northern shall submit a properly completed closure plan in accordance with Chapter 855 and 40 CFR 265 for the Department's review and the Board's approval. Great Northern shall commence closure of the Core facility in accordance with the closure plan(s) and time schedules as modified and approved by the Board.

(3) If Great Northern decides to use the Dolby facility for the storage of hazardous waste for greater than ninety (90) days or for the handling of hazardous waste generated off the site, Great Northern shall submit properly completed application for the Dolby storage facility in accordance with Chapter 856 of the Rules and 40 CFR 264; or

(4) If Great Northern decides not to use the Dolby storage facility for the storage of hazardous waste for greater than ninety (90) days or for the handling of hazardous waste generated off the site, Great Northern shall submit a properly completed closure plan for the Dolby facility in accordance with Chapter 855, Section 9 of the Rules, and 40 CFR 265. Great Northern shall commence closure of the Dolby storage facility in accordance with the closure plan(s) and time schedules as modified and approved by the Board.

C. In the event that the Board denies either of Great Northern's applications for a final hazardous waste facility license, Great Northern shall cease operating as a hazardous waste facility at that location and shall commence closure pursuant to Chapter 855 of the Rules and 40 CFR 265 for the Core Storage facility and for the Dolby storage facility, and in accordance with the closure plan as modified and approved by the Board within sixty (60) days of receipt of the Board Order denying such application.

D. Immediately operate in accordance with the requirements of the Hazardous Waste Management Rules, Chapter 855 for hazardous waste storage facilities for the Core storage facility in Millinocket, including but not limited to, personnel training, contingency planning, operational records, site security, preparedness and prevention activities, container management, and financial assurance and liability insurance requirements.

E. Immediately operate in accordance with the requirements of the Hazardous Waste Management Rules, Chapter 855 for the Dolby facility in Millinocket, including but not limited to, personnel training, contingency planning, operational records, site security, preparedness and prevention activities, container management, and financial assurance and liability insurance requirements.

F. Refrain from altering or modifying any of the components of the Core and Dolby storage facilities unless and until Great Northern applies for and has received approval from the Board for such alterations and/or modifications.

G. Immediately comply with all of the Hazardous Waste Management Rules pertaining to generators of hazardous waste including but not limited to those sections identified in paragraph 3 above. These requirements include the storage of hazardous waste at the Drum storage area in East Millinocket for periods not exceeding ninety (90) days from the date of generation, obtaining EPA ID numbers for each Great Northern facility and generator storage area and complying with all of the Rules pertaining to manifesting and transportation of hazardous waste, Chapters 853 and 857.

II. By September 1, 1988 submit a remedial action plan for the remediation or removal of PCB contaminated soils and groundwaters at the No. 5 and No. 6 Paper Machine Building and the Chemi-Groundwood site as described in paragraph 4 above for the Department's review and approval. Such plan shall be coordinated and at a minimum comply with the U.S. Environmental Protection Agency (EPA) and its requirements under the Toxic Substances Control Act (TSCA). Great Northern shall implement the remedial plan ~~as~~ approved by the Department and EPA and in accordance with the time schedule approved by the Department and EPA. If, by October 1, 1989, approval of the plan has not been granted by EPA and implementation of the plan is not underway, the Department may utilize any appropriate authority to order Great Northern to take remedial measures as determined by the Department to be necessary to protect public health and safety and the environment within a time schedule determined by the Department. Great Northern reserves its right to appeal any such order issued by the Department and to assert that issuance of such order by the Department is prohibited as a matter of ~~federal~~ law.

I. Pay to the Hazardous Waste Fund, c/o the Department of Environmental Protection, the sum of fifty-two thousand dollars ($52,000) in penalties for the violations and for hazardous waste fees for the years 1984 and 1985 within thirty (30) days from the Board's acceptance of this Agreement.

9. The Board and the State of Maine Attorney General grant Great Northern Paper Company a release of their causes of action against Great Northern Paper Company for the specific violations listed in paragraph 3 above on the express condition that all actions called for in paragraph 8 above are completed in accordance with the express terms and conditions of this Agreement. The release shall not become effective unless and until this condition is satisfied.

ORDER

Pursuant to 38 M.R.S.A. Section 347(1) and the Department's Consent Agreement Policy, as amended, and based on the Agreement set forth above, the Board ORDERS Great Northern Paper Company to:

1. Within forty-five (45) days of the effective date of this Agreement, submit to the Department for its review and approval a closure plan developed in accordance with Chapter 855, Section 9 of the Rules and 40 CFR 265 for the Brown dump storage facility. Great Northern shall commence closure of the facility in accordance with the closure plan and time schedule as modified and approved by the Board.

2. Within sixty (60) days from the effective date of this Agreement, submit to the Department for its review and approval one of the following documents for the Core storage facility in Millinocket and for the Dolby storage facility in East Millinocket:

   A. If Great Northern decides to use the Core storage facility for the storage of hazardous waste for greater than ninety (90) days, Great Northern shall submit a properly completed application for the Core storage facility in accordance with Chapter 856 of the Rules and 40 CFR 264; or

   B. If Great Northern decides not to use the Core storage facility, for the storage of hazardous waste for greater than ninety (90) days, Great Northern shall submit a properly completed closure plan in accordance with Chapter 855 and 40 CFR 265 for the Department's review and the Board's approval. Great Northern shall commence closure of the Core facility in accordance with the closure plan(s) and time schedules as modified and approved by the Board.

   C. If Great Northern decides to use the Dolby facility for the storage of hazardous waste for greater than ninety (90) days or for the handling of hazardous waste generated off the site, Great Northern shall submit properly completed application for the Dolby storage facility in accordance with Chapter 856 of the Rules and 40 CFR 264; or

   D. If Great Northern decides not to use the Dolby storage facility for the storage of hazardous waste for greater than ninety (90) days or for the handling of hazardous waste generated off the site, Great Northern shall submit a properly completed closure plan for the Dolby facility in accordance with Chapter 855, Section 9 of the Rules, and 40 CFR 265. Great Northern shall commence closure of the Dolby storage facility in accordance with the closure plan(s) and time schedules as modified and approved by the Board.

3. In the event that the Board denies either of Great Northern's applications for a final hazardous waste facility license, Great Northern shall cease operating as a hazardous waste facility at that location and shall commence closure pursuant to Chapter 855 of the Rules and 40 CFR 265 for the Core Storage facility and for the Dolby storage facility, and in accordance with the closure plan as modified and approved by the Board within sixty (60) days of receipt of the Board Order denying such application.

4. Immediately operate in accordance with the requirements of the Hazardous Waste Management Rules, Chapter 855 for hazardous waste storage facilities for the Core storage facility in Millinocket, including but not limited to, personnel training, contingency planning, operational records, site security, preparedness and prevention activities, container management, and financial assurance and liability insurance requirements.

5. Immediately operate in accordance with the requirements of the Hazardous Waste Management Rules, Chapter 855 for the Dolby facility in Millinocket, including but not limited to, personnel training, contingency planning, operational records, site security, preparedness and prevention activities, container management, and financial assurance and liability insurance requirements.

6. Refrain from altering or modifying any of the components of the Core and Dolby storage facilities unless and until Great Northern applies for and has received approval from the Board for such alterations and/or modifications.

7. Immediately comply with all of the Hazardous Waste Management Rules pertaining to generators of hazardous waste including but not limited to those sections identified in paragraph 3 above. These requirements include the storage of hazardous waste at the Drum storage area in East Millinocket for periods not exceeding ninety (90) days from the date of generation, obtaining EPA ID numbers for each Great Northern facility and generator storage area and complying with all of the Rules pertaining to manifesting and transportation of hazardous waste, Chapters 853 and 857.

8. By September 1, 1988 submit a remedial action plan for the remediation or removal of PCB contaminated soils and groundwaters at the No. 5 and No. 6 Paper Machine Building and the Chemi-Groundwood site as described in paragraph 4 above for the Department's review and approval. Such plan shall be coordinated and at a minimum comply with the U.S. Environmental Protection Agency (EPA) and its requirements under the Toxic Substances Control Act (TSCA). Great Northern shall implement the remedial plan ~~as~~ approved by the Department and EPA and in accordance with the time schedule approved by the Department and EPA. If, by October 1, 1989, approval of the plan has not been granted by EPA and implementation of the plan is not underway, the Department may utilize any appropriate authority to order Great Northern to take remedial measures as determined by the Department to be necessary to protect public health and safety and the environment within a time schedule determined by the Department. Great Northern reserves its right to appeal any such order issued by the Department and to assert that issuance of such order by the Department is prohibited as a matter of ~~federal~~ law.

9. Pay to the Hazardous Waste Fund, c/o the Department of Environmental Protection, the sum of fifty-two thousand dollars ($52,000) within thirty (30) days from the Board's acceptance of this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement consisting of eleven (11) pages.

GREAT NORTHERN PAPER COMPANY

By: _____ Date: 6/13/88
James M. Giffune, Vice President - Operations

BOARD OF ENVIRONMENTAL PROTECTION

By: _____ Date: 8/8/88
E. Christopher Livesay, Chairman

SEEN AND AGREED TO:

STATE OF MAINE

By: Phyllis Gardiner Date: 8/22/88
Assistant Attorney General

DBGNPBO

12/29/89-SAL
received DEP

Great Northern Paper

MILLINOCKET, MAINE

CLOSURE REPORT
FOR
THE DRUM STORAGE FACILITY AT EAST MILLINOCKET MILL

PREPARED BY

SEVEE & MAHER ENGINEERS, INC.

CUMBERLAND CENTER, MAINE

DECEMBER 1989

LETTER OF TRANSMITTAL

SEVEE & MAHER ENGINEERS, INC.
4 Blanchard Road • P.O. Box 85A
Cumberland Center, ME 04021

(207) 829-5016

JOB NO.

DATE 12/28/89

ATTENTION Ms. STACEY LADNER

RE: GREAT NORTHERN PAPER

TO ME DEP
BUREAU OF OIL & HAZ. MATERIALS CONTROL
AUGUSTA, ME

WE ARE SENDING YOU the following:

- [x] Attached
- [ ] Under separate cover via _____
- [ ] Shop Drawings
- [ ] Specifications
- [ ] Copy of letter
- [ ] Change order
- [ ] Prints
- [ ] Plans
- [ ] Samples
- [x] REPORTS

COPIES	DATE	NUMBER	DESCRIPTION
4	12/89		CLOSURE REPORT for DRUM STORAGE FACILITY AT E. MILLINOCKET MILL

THESE TRANSMISSIONS ARE:

- [ ] For your approval
- [x] For your use
- [ ] As per your request
- [ ] For your review and comment(s)
- [ ] FOR BIDS DUE _____ 19 _____
- [ ] Approved as submitted
- [ ] Approved as noted
- [ ] Corrections noted
- [ ] _____
- [ ] Resubmit with _____ copies for approval
- [ ] Submit _____ copies for distribution
- [ ] Return _____ corrected prints
- [ ] PRINTS RETURNED AFTER LOAN TO US

REMARKS:

COPY TO: B. STETSON (GNP)

SIGNATURE: Pat M. Maher

FORM 705-2

McBEE - 1055 EAST STATE ST. - ATHENS, OHIO 45701
To Reorder Call Toll-Free 1-800-526-1272

IF ENCLOSURES ARE NOT AS DESCRIBED, PLEASE NOTIFY US IMMEDIATELY

Great Northern Paper
a company of
Great Northern Nekoosa Carporation

File No. 915.30

December 28, 1989

Ms. Stacy Ladner
Division of Licensing & Enforcement
Bureau of Oil & Hazardous Materials Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Stacy:

Subject: Final Report, Drum Storage Facility Closure

Attached is the final report for the closure of Drum Storage Facility at the East Millinocket Mill. This facilty has been closed in accordance with the specifications in the Maine Department of Environmental Protection approved closure plan.

The Drum Storage Facility Survey Plat, Figure 4, will be filed with the Town of East Millinocket.

Sincerely,

Brian R Stetson

Brian R. Stetson, Staff Engineer
Environmental Affairs Department

BRS/brs

GREAT NORTHERN PAPER COMPANY

MILLINOCKET, MAINE

CLOSURE REPORT

FOR

THE DRUM STORAGE FACILITY

AT EAST MILLINOCKET MILL

Prepared by

Sevee & Maher Engineers, Inc.

Cumberland Center, Maine

December 1989

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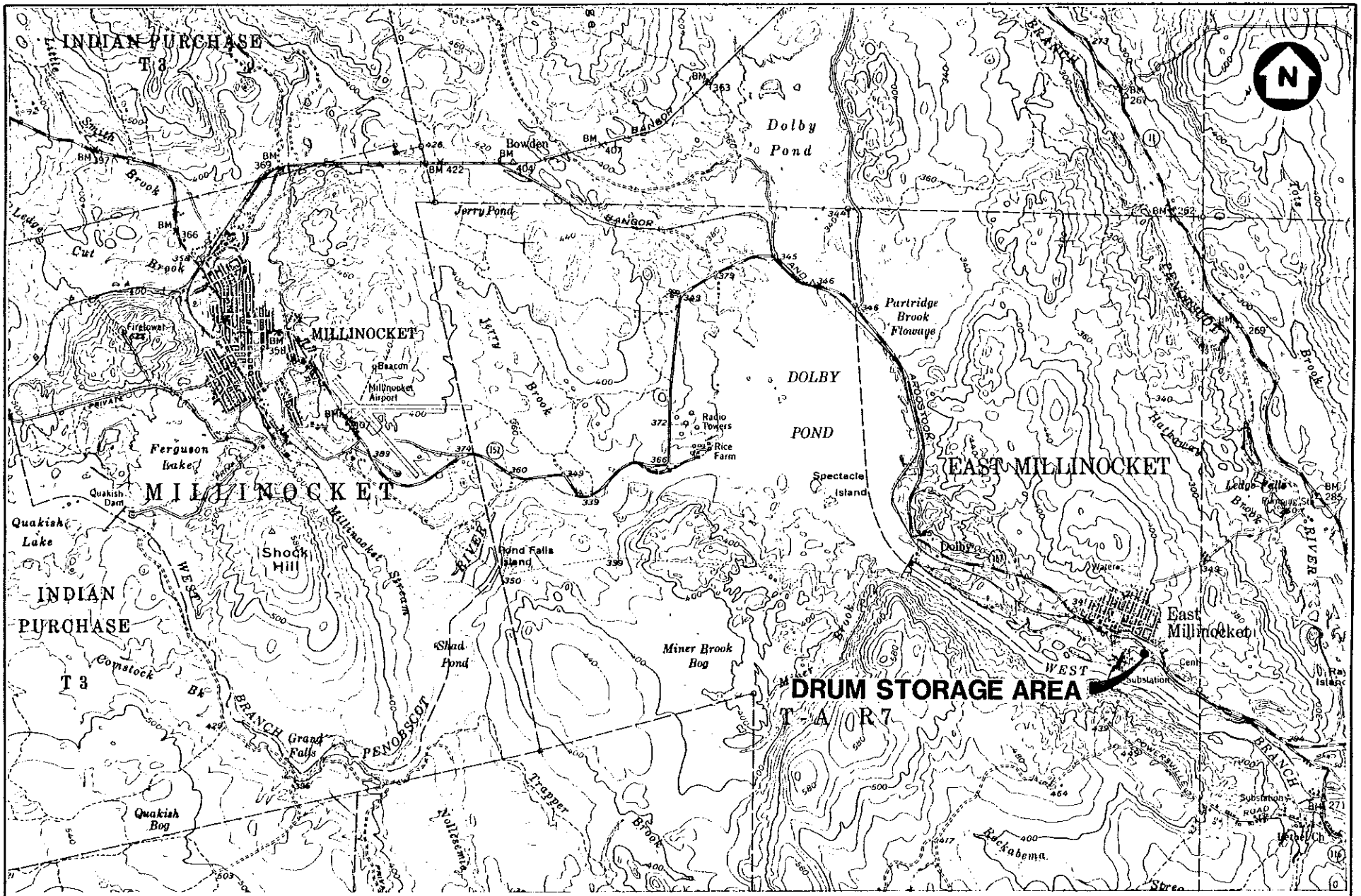
GREAT NORTHERN PAPER COMPANY
THE DRUM STORAGE FACILITY
AT EAST MILLINOCKET MILL

CLOSURE REPORT

1.0 PURPOSE AND OBJECTIVES

Great Northern operated an area known as the Drum Storage Facility at it's East Millinocket mill (see Figure 1). This area was utilized for the storage of drummed waste oil. Some of the waste oil stored at this location, when tested prior to burning, was found to contain hazardous constituents and was subsequently transported to licensed hazardous waste facilities for disposal. Under the terms of an Administrative Consent Agreement and Enforcement Order between Great Northern Paper Company (GNP) and the Maine Department of Environmental Protection (DEP), GNP agreed to prepare a closure plan for the Drum Storage Facility. The closure plan was prepared by Sevee & Maher Engineers, Inc. (SME) and submitted in July 1989 to the DEP. The Board of Environmental Protection issued a Board Order dated August 23, 1989 which approved the closure plan and ordered that the Drum Storage Facility be closed in accordance with the Board Order. This report describes the closure activities which occurred during the months of August and September 1989.

The objectives of the Drum Storage Facility closure activities were to:



BASE MAP ADAPTED FROM 15 MIN.
USGS TOPOGRAPHIC QUADRANGLE
MILLINOCKET, ME - 1951

0 1 2 MILES

FIGURE 1
SITE LOCATION
GREAT NORTHERN PAPER
DRUM STORAGE AREA
SEVEE & MAHER ENGINEERS

- Remove residual waste oil or hazardous constituents which may have been present;

- Eliminate the need for further site maintenance;

- Provide an effective cap over the area which will minimize infiltration which might otherwise enter the site; and

- Install monitoring wells to obtain groundwater samples for subsequent analysis.

2.0 CLOSURE ACTIVITIES

2.1 Summary of Activities

The Drum Storage Facility closure requirements are described in detail in the Sevee & Maher (SME) July 1989 Closure Plan and the Board of Environmental Protection Order dated August 23, 1989. The Drum Storage Facility closure occurred between August 24, 1989 and September 29, 1989. The closure activities are summarized below.

August 24, 1989 - Consolidated Environmental Services (CES) removed all visibly stained soils (approximately 50 cubic yards) to a stockpile. A composite soil sample was obtained by SME which was comprised of six discrete grab samples selected through the use of a random number generator.

August 25, 1989 - SME personnel established a 20 foot by 20 foot grid over the Drum Storage Facility. Samples were obtained from each grid point for on-site total petroleum hydrocarbon analyses by Northeast Laboratories (NEL). The soil at each grid point was also screened for volatile organic compounds using an organic vapor meter (OVM).

August 28, 1989 - NEL completed the total petroleum hydrocarbon analyses for the first set of surface soil samples.

August 29, 1989 - SME personnel obtained additional soil samples at 0.5 and 1.5 foot depths for on-site OVM and total petroleum hydrocarbon analyses. SME personnel also collected discrete soil samples for volatile organic compound and polychlorinated biphenol analysis to be conducted by Resource Analysts, Inc. (RAI).

August 30, 1989 - NEL reported results of the 0.5 and 1.5 foot depth samples. Sheridan Smith Construction excavated approximately 350 cubic yards of soil which was determined to be contaminated by waste oil based on the NEL analyses. The excavated soil was composite sampled for subsequent analysis by RAI. SME conducted total petroleum hydrocarbon and OVM sampling and analysis at the 1.5 and 2.5 foot soil depths.

September 5, 1989 - NEL reported the results of the 1.5 and 2.5 foot soil depth samples. Based on the results of the OVM and NEL analyses, it was determined that the site was "clean".

September 18, 1989 - The composite and discrete soil sample results were received from RAI.

September 19, 1989 - Consolidated Waste Services (CWS) was contacted to schedule removal of the excavated soil to their Norridgewock Special Waste Landfill.

September 20, 1989 - Telephone discussions between SME, CWS and DEP were conducted to finalize disposal plans.

Week of September 25, 1989 - CWS transported and disposed of the excavated soil at the Norridgewock landfill facility.

2.2 Oil Stained Soil Removal

The approved Drum Storage Facility closure plan required that the first closure effort would involve the excavation of all visibly stained soil to stockpiles no greater than 100 cubic yards. On August 24, 1989, Consolidated Environmental Services (CES) excavated approximately 50 cubic yards of visibly stained soil to a stockpile nearby the Drum Storage Facility. SME personnel collected 6 discrete grab samples during the excavation of the 50 cubic yards of soil. The timing of the grab sampling was based on the use of a random number generator. Table 1 provides a summary of the results of all composite sample analyses. The stockpile was secured by placing polyethylene sheeting beneath and on top of the pile.

Due to the gravelly nature of the on-site soils, it was very difficult to detect visual oil staining. It was determined that the best available method to determine if oils were present would be to utilize the services of Northeast Laboratories of Waterville, Maine, which had mobilized a field laboratory to the East Millinocket mill. In accordance with the approved closure

TABLE 1

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DRUM STORAGE FACILITY CLOSURE
COMPOSITE SOIL SAMPLE ANALYSES

Parameter	Composite #1	Composite #2	Composite #3	Composite #4	Composite #5
EP-toxicity (mg/l)					
- Arsenic	<0.01	<0.01	<0.01	<0.01	<0.01
- Barium	0.2	<0.1	<0.1	0.1	0.2
- Cadmium	<0.005	<0.005	<0.005	<0.005	<0.005
- Chromium	<0.01	<0.01	<0.01	<0.01	<0.01
- Lead	<0.05	<0.05	<0.05	<0.05	<0.05
- Mercury	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
- Selenium	<0.01	<0.01	<0.01	<0.01	<0.01
- Silver	<0.02	<0.02	<0.02	<0.02	<0.02
Flash Point	>150°F	>150°F	>150°F	>150°F	>150°F
PCBs (ug/g)	BDL	BDL	BDL	BDL	BDL
VOCs (ug/k)	BDL	BDL	BDL	BDL	BDL
Corrosivity (pH)	6.63	8.37	7.55	7.52	7.50
Reactivity (ug/g)					
- Sulfide	<25	<25	<25	<25	<25
- Cyanide	<0.2	<0.2	<0.2	<0.2	<0.2
Petroleum Hydrocarbons (ug/g)	2600	72	430	220	790

BDL = All compounds below detection limits. PCB detection limits were 1 ug/g.
VOC detection limits ranged from 0.5 to 2.7 ug/g.

plan, a 20 foot by 20 foot grid was established at the site for verification sampling and analyses (see Figure 2). Surface samples were collected at each grid point for analyses by NEL. NEL was requested to analyze the first round of verification samples and report the results as either greater than or less than the detection limit which was established at 36 µg/g. A soil sample at each grid point was also screened for volatile organic compounds using an organic vapor meter (OVM). Appendix A includes the OVM field screening data. The DEP agreed upon criteria for removal of the soil were:

- If the total petroleum hydrocarbons exceed 36 µg/g, the soil will be excavated and removed to a licensed off-site facility.

- If the OVM measurement is greater than or equal to 2.5 times background, the soil will be removed to a licensed off-site disposal facility.

2.3 Verification Sampling and Analyses

Verification sampling and analysis was continued throughout the soil profile at each grid point to determine the depth of waste oil contamination at the site. A total of 89 samples were screened for volatile organic compounds using the OVM. The 89 samples included duplicates and background soil samples. Only one sample showed a measurable response above background. This

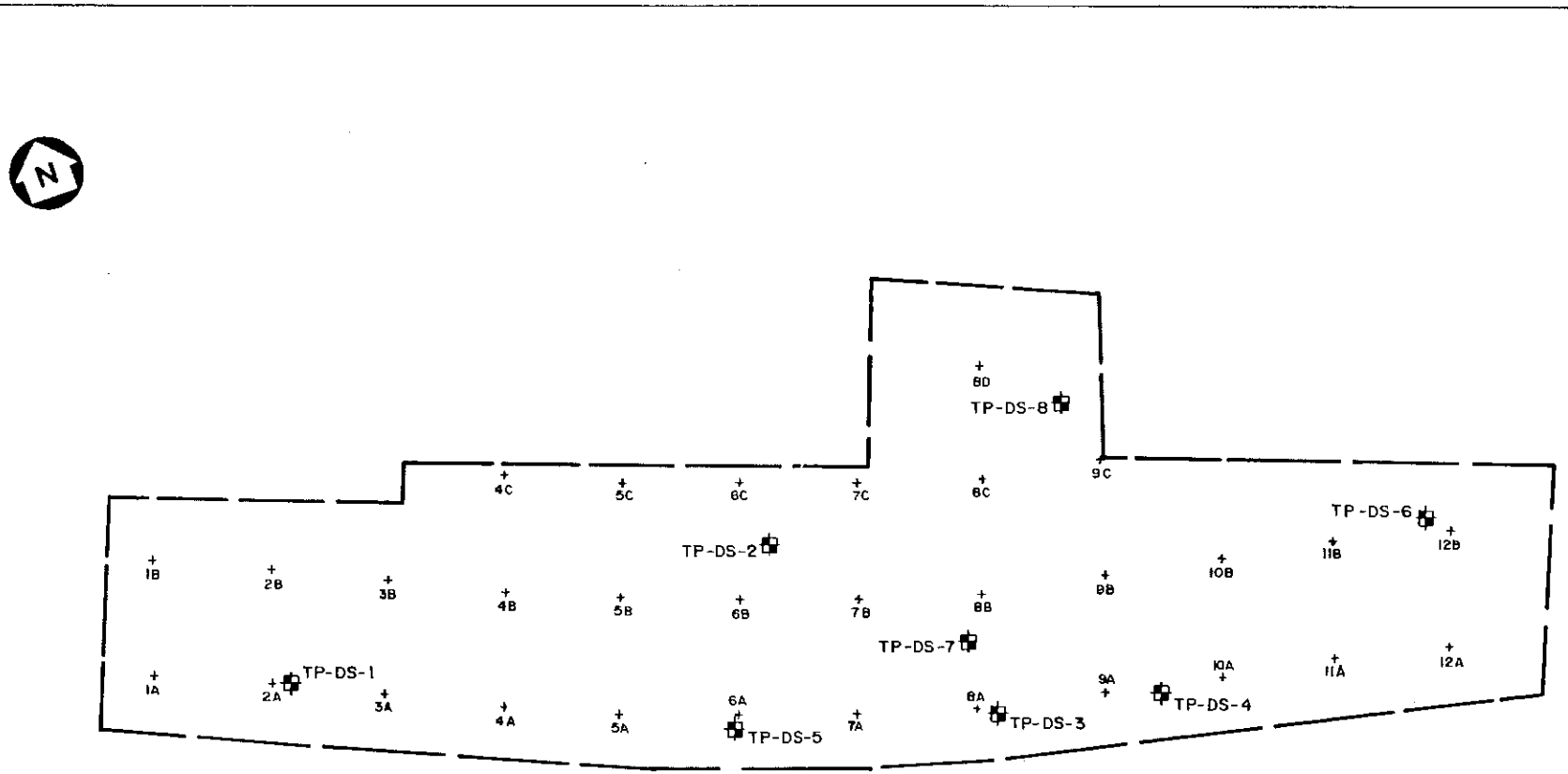


FIGURE 2
GREAT NORTHERN PAPER
DRUM STORAGE FACILITY CLOSURE
VERIFICATION SAMPLING LOCATIONS

SEVEE & MAHER ENGINEERS

was the sample obtained at grid location 9A. Subsequent analysis of sample 9A by RAI determined that the volatile organic compounds measured by EPA Method 8240 were below detection for this sample.

The verification sampling and analysis program also required that the soil at each grid location be tested for total petroleum hydrocarbons. If the concentration of total petroleum hydrocarbons exceeded 36 $\mu g/g$, then the soil would be excavated and removed to an off-site facility. The objective of the first round of total petroleum hydrocarbon analysis was to verify if oil was present even though no visible oil staining was observed. This testing determined that there was some oil present at the site after the removal of visibly stained soils. Subsequent verification sampling and analysis for total petroleum hydrocarbons was conducted at the 0.5, 1.5 and 2.5 foot depths and the concentration of total petroleum hydrocarbons was quantified.

The verification sampling and analyses was continued at each grid location until "clean" soil was found at all locations. Utilizing this information, the depth of excavation for off-site disposal was determined. Sheridan-Smith Construction conducted the excavation and removal to stockpile under the direction of SME. SME composite sampled an additional 350 cubic yards of soil excavated by Sheridan-Smith. Four composites (Composites 2 to 5) were sampled by obtaining 8 discrete grab samples using a random

number generator. The results of the analyses of these samples is found on Table 1. All laboratory data is included in Appendix B.

The DEP approved closure plan also required that if total petroleum hydrocarbons or volatile organic compounds (using OVM) were detected, then discrete samples would be obtained for polychlorinated biphenol and volatile organic compound (EPA Method 8240 plus tentatively identified compounds) analyses. Twenty samples were obtained for subsequent analyses by Resource Analysts, Inc. (RAI) of Hampton, New Hampshire. The results of the discrete soil sampling analyses are included in Table 2. The laboratory data is included in Appendix C for discrete soil samples.

2.4 Soils Disposal

Based on the results of the composite and discrete soil samples analyses, it was determined that the excavated soils were not a hazardous waste and met the disposal acceptance criteria established by the Maine Department of Environmental Protection (DEP) for Consolidated Waste Services (CWS). The composite soil sample analyses showed that the stockpiles did not contain hazardous wastes as defined by the United States Environmental Protection Agency and the Maine Department of Environmental Protection. The discrete soil samples analyzed by RAI during the verification sampling showed trace quantities of PCB-1260.

TABLE 2

GREAT NORTHERN PAPER
DRUM STORAGE FACILITY CLOSURE
DISCRETE SOIL SAMPLE ANALYSES

Sample Designation	Volatile Organic Compounds[1]	Polychlorinated Biphenols[2]
3A.5	BDL	Trace PCB 1260
4C.5	0.6 ug/g 1,1,1-trichlorethane	BDL
5B.5	BDL	Trace PCB 1260
5C.5	BDL	Trace PCB 1260
5C.5D	BDL	Trace PCB 1260
6A1.6	BDL	Trace PCB 1260
6C1.5	BDL	BDL
7B1.5	BDL	BDL
8A1.5	BDL	BDL
8D1.5	BDL	BDL
9A1	BDL	NA
9A1.5	BDL	BDL
9B1.5	BDL	BDL
9B1.5D	BDL	BDL
10A1.5	0.6 ug/g 1,1,1-trichlorethane	BDL
10B1.5	BDL	BDL
12A1.5	BDL	Trace PCB 1260
8A2.5	BDL	Trace PCB 1260

Notes: 1. EPA Method 8240
2. EPA Method 8080
BDL = Below method detection limit. Detection limits for PCBs were 1 ug/g. Detection limits for VOCs ranged from 0.5 to 2.6 ug/g.
NA = Not analyzed

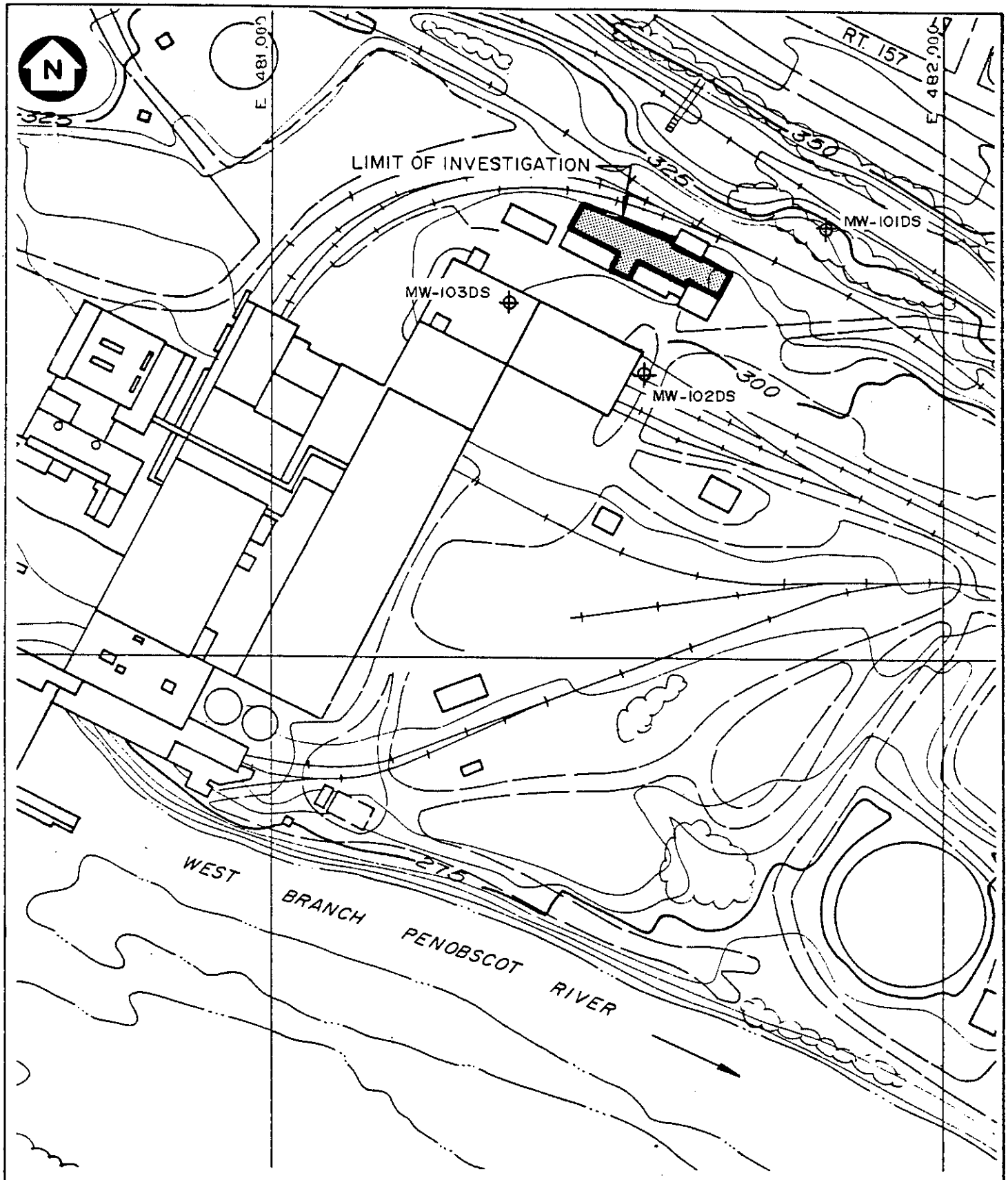
Additionally, two samples analyzed for volatile organic compounds by EPA Method 8240 showed 0.6 µg/g of 1,1,1-trichloroethane. This is slightly above the 0.5 µg/g detection limit for this compound. Based on these results, it was determined that the soils excavated were waste oil contaminated and not hazardous waste. Therefore, it was agreed by GNP, SME, DEP and CWS that the excavated soils could be deposited at the CWS landfill in Norridgewock. CWS personnel transported and disposed of these soils during the week of September 25, 1989.

3.0 MONITORING WELLS

The closure plan also required that one upgradient and two downgradient monitoring wells be installed at the site. These monitoring wells were installed under the direction of Mr. John Sevee, Certified Geologist. The wells were installed between August 24 and August 30 at the locations shown on Figure 3. Boring logs, bedrock core logs and monitoring well installation details are found in Appendix D.

Split-spoon samples were continuously obtained from each of the downgradient monitoring wells (MW-102DS and MW-103DS). Soil from each spoon sample was screened with the OVM and is presented on the monitoring well installation details. Volatile organic compounds were not detected above background in the split-spoon samples.

Groundwater samples were obtained from each monitoring well on October 27, 1989. Samples were submitted to RAI for analyses of total petroleum hydrocarbons, volatile organic compounds and acid/base/neutral extractable organic compounds. Results of these analyses are presented on Table 3. Laboratory and field data sheets are presented in Appendix E. There were no total petroleum hydrocarbons, volatile organic compounds or acid/base/neutral extractable organic compounds detected in any of the downgradient groundwater samples. The upgradient well (MW-101DS) contained 260 µg/l of bis(2-ethylhexyl)phthalate. We



TOPOGRAPHY BASED ON AERIAL PHOTOGRAMETRIC SURVEY BY JAMES SEWALL CO. PHOTOS DATED NOVEMBER 1974

FIGURE 3
GROUNDWATER MONITORING LOCATIONS
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DRUM STORAGE FACILITY

SEVEE & MAHER ENGINEERS

TABLE 3

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DRUM STORAGE FACILITY CLOSURE
WATER QUALITY RESULTS (EPISODE NO. 1)

	MW-101DS	MW-102DS	MW-103DS
pH (standard units)	6.69	7.61	6.42
Specific Conductance (umhos/cm)	530	1140	590
Temperature (^{o}C)	11.0	14.5	13.5
Groundwater Elevation (ft)	307.54	294.00	297.37
Petroleum Hydrocarbons (mg/l)[1]	<1.0	<1.0	<1.0
Volatile Organic Compounds (ug/l)[2]	BDL	BDL	BDL
Acid/Base/Neutral Organic Compounds (ug/l)[3]		BDL	BDL
- Bis(2-ethylhexyl)Phthalate	260		

Notes: Samples obtained 10/27/89 by Sevee & Maher Engineers, Inc.
Samples analyzed by Resource Analysts, Inc.

1. EPA Method 418.1. Detection limit = 1 mg/l
2. EPA Method 601. Detection limits ranged from 5 to 10 ug/l
3. EPA Method 625. Detection limits ranged from 10 to 100 ug/l

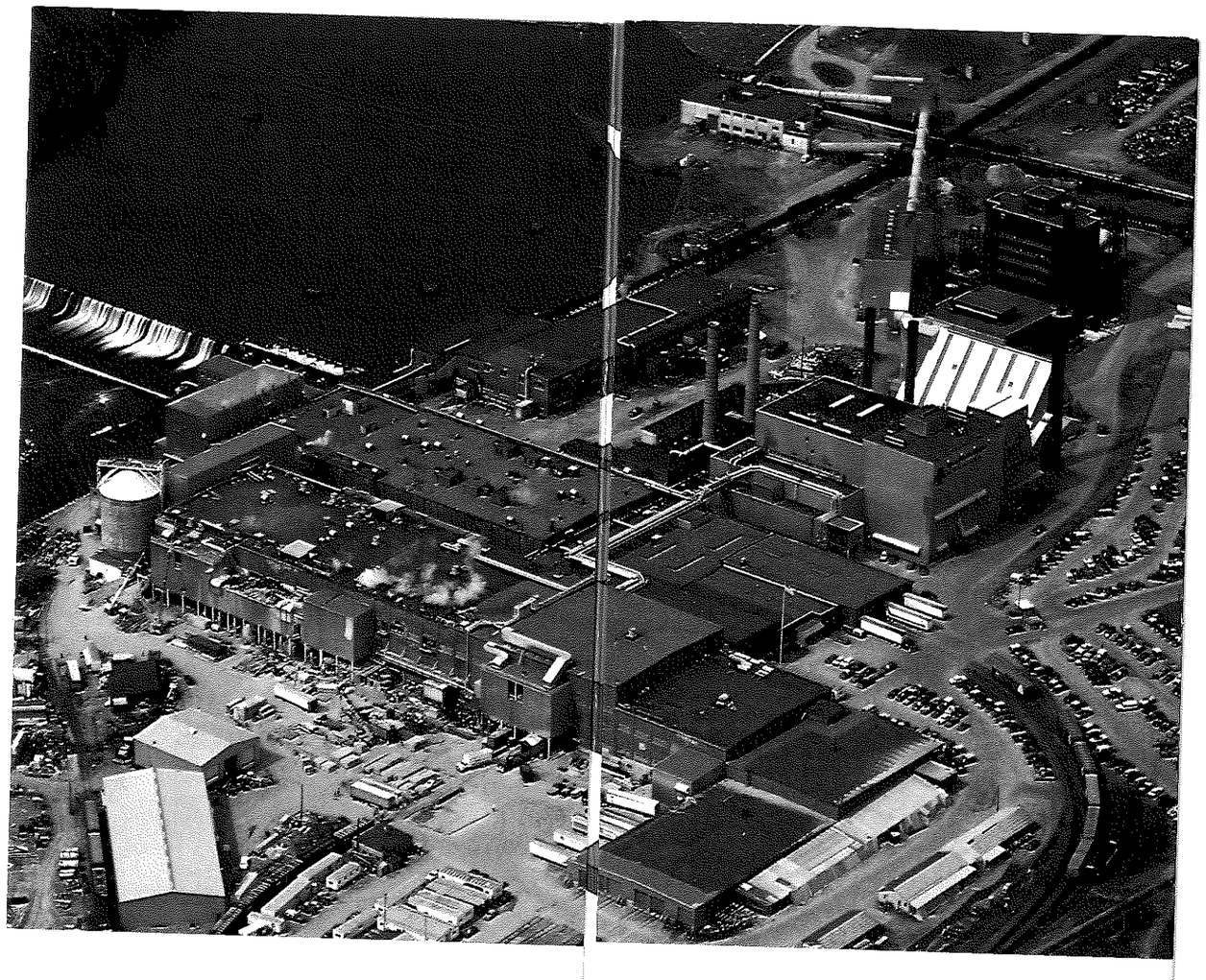
believe that the phthalate, which is generally considered to be an ubiquitous compound, if present, is either from an off-site source or is a result of sampling/analytical contamination.

Quarterly sampling will continue at the Drum Storage Facility for a period of two years. The results of these analyses will be submitted to the DEP staff.

4.0 SURVEY PLAT AND CLOSURE CERTIFICATION

A survey plat of the Drum Storage Facility was prepared and includes four permanent benchmarks as shown on Figure 4. Also shown on this plat are the 3 monitoring wells installed at the site and other physical site features found in the vicinity of the Drum Storage Facility.

Closure of the Drum Storage Facility was observed by Mr. Peter M. Maher, Professional Engineer. Mr. Maher observed all site activities and has certified on Figure 4 that the site has been closed in accordance with the DEP approved closure plan and the Board of Environmental Protection Order. This survey plat will be filed with the local zoning authority in East Millinocket.



Great Northern Paper welcomes you.

You are about to enter the East Millinocket mill, home of one of the world's most advanced newsprint manufacturing systems. Extensively modernized in 1987, this mill supplies paper to newspapers from Maine to Maryland, including some of the nation's most distinguished and widely read publications.

Here you will see "The Katahdin" and "The Penobscot," twin wire paper machines capable of producing over 40 miles of paper per hour. They are controlled entirely by computer, which allows them to perform with unprecedented accuracy.

In the Screen Room, some of the most modern equipment in the industry refines the pulp used for Great Northern newsprint. And the Finishing Room, where paper is prepared for shipment to customers, is a model of automation and robotics.

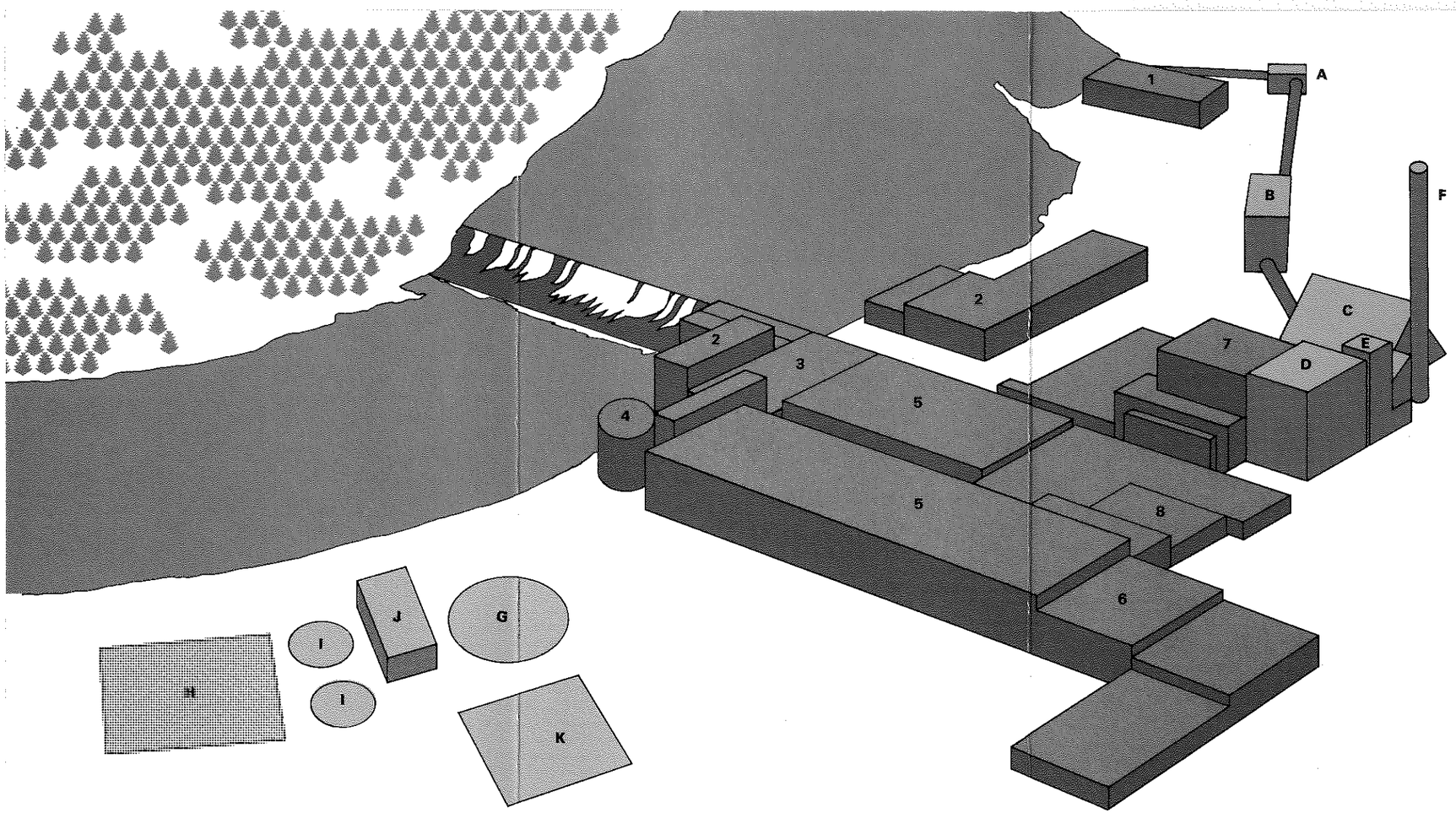
These are just a few of the highlights of your tour. We hope that you enjoy your visit and that you will come and see us again soon.

Statistics

Annual Capacity:
335,000 tons of paper

Paper Machines:
Two twin wire formers
(one 263" trim, one 275" trim)

Pulp Production:
725 air dry tons per day stone groundwood



Your Itinerary

1 Wood Room
Here, long logs that have been transported by truck or rail are slashed into four-foot lengths to fit the wood handling process. The four-foot logs are sent through revolving drums where the bark is removed. After the debarking process, the logs are conveyed to the Grinder Room where they are reduced to the pulp that is used to make paper.

2 Grinder Room
In this room, logs are put into huge grinders and forced against a large revolving grindstone. The tremendous pressure soon reduces the wood to fibers.

3 Screen Room
Here, the "groundwood" or "mechanical pulp" produced in the Grinder Room is screened, centri-cleaned, thickened and stored for future use. Bits of unground wood and coarse fibers that are removed from the pulp are further refined, then returned to the mill system for reprocessing. Water added to the pulp before and during the screening operation is returned to the Grinder Room.

4 Sulfite Storage Tower
Sulfite pulp for the East Millinocket mill is manufactured in Millinocket and pumped via a pipeline to the Screen Room. Here the pulp is thickened and stored in the 400-ton storage tower for use in papermaking.

5 Paper Room
At East Millinocket, the Paper Room — where paper is actually made — contains two paper machines. "The Penobscot" and "The Katahdin" are twin wire formers producing newspaper publishing grades for four-color offset printing, are approximately 340 feet long and run at speeds up to 3600 feet per minute. In making paper, the pulp, now called "stock," is forced out of the headbox onto an endless mesh belt called the bottom fabric. As the stock flows onto the moving bottom fabric, water begins to drain through the mesh. The bottom fabric then carries the wet sheet under the top fabric, where water is removed upwards, and over suction boxes which draw out more water as the paper is formed. The sheet then transfers to endless felts which carry it through a series of presses and onto the dryer section. The dried paper passes to the calender stack (which smoothes the sheet), is wound into a large roll and is transferred to the winder. There it is trimmed, slit and rewound into rolls the size the customer requires.

6 Finishing Room
Fully automated and computer-controlled, the Finishing Room receives the rolls of paper after quality inspection. They are weighed, wrapped and transported by clamp trucks to the trainshed for shipment to customers.

7 Steam Plant
All the steam generating facilities of the East Millinocket mill are directed and controlled from this building.

8 Administrative Offices
All support facilities are located here, including the Mill Manager's office, training facilities, East Millinocket personnel office, first aid rooms, physical therapy room and laboratories where Great Northern products are continually tested to assure their quality and pressroom performance.

Bark Burning System

A Classification Building
Here bark is received and screened to reject stones, sand and oversized material.

B Bark Preparation Building
Bark is further prepared for burning in this building. Low moisture bark is shredded and dispatched directly to the storage building, while bark containing high moisture is pressed prior to being shredded and sent to storage.

C Bark Storage Building
This building has the capacity to store approximately 2,000 tons of prepared bark at 60 percent moisture. Fuel from this building is fed continuously to the boiler.

D Biomass Boiler
Here 1,400 tons of bark per day are burned in a boiler containing a large furnace, a fixed water-cooled inclined pinhole grate, over-fire air fans and a radiant refractory faced arch within the furnace. The boiler produces 300,000 pounds of high pressure steam per hour.

E Electrostatic Precipitator
Fine char and ash are collected here and removed continuously through rotary dust valves and screw conveyors.

F Boiler Stack
As the final stage of the biomass boiler's environmental control system, this stack carries the previously cleansed emissions into the air.

Pollution Abatement Facilities

G Primary Clarifier
This is a 220-foot diameter, concrete vessel in which the suspended solids that are heavier than water settle out by gravity from the effluent. A slowly rotating rake moves these solids to a center well where they are pumped away.

H Aeration Lagoon
This lagoon is a rectangular basin which aids the removal of soluble solids (biochemical oxygen demand) through the action of microorganisms which feed on the organic waste material, converting it to harmless carbon dioxide and water. As tremendous quantities of oxygen are consumed in this process, the basin is equipped with subsurface aerators which keep the system from going septic and prevent the microorganisms from settling.

I Secondary Clarifiers
The overflow from the lagoon flows by gravity to the two secondary clarifiers. These are concrete basins in which the biological solids, now in visible form, settle out of the water and are raked to a center well for removal. The water, which now meets federal and state standards, is returned to the river at the rate of 25 million gallons a day.

J Operations Building
Support facilities for the pollution abatement system are located here, as are the offices of the operating staff. Also in this building, the sludge from the primary clarifier is thickened and sent to the biomass boiler to be burned as fuel. The secondary sludge is thickened and hauled to a company landfill site located three miles away at Dolby.

K Emergency Lagoon
This is a 9-million gallon pond which serves as a backup to the primary clarifier, as it too is capable of settling out suspended solids through gravity. This lagoon is periodically drained to remove the settled sludge which collects on the bottom.

STATE OF MAINE
Department of Environmental Protection

MAIN OFFICE: RAY BUILDING, HOSPITAL STREET, AUGUSTA
MAIL ADDRESS: State House Station 17, Augusta, 04333
207-289-7688

JOHN R. McKERNAN, JR.
GOVERNOR

DEAN C. MARRIOTT
COMMISSIONER

June 14, 1989

Mr. Dale Phenecie
Great Northern Paper
Millinocket, Maine 04462

Dear Mr. Phenecie:

Enclosed are the Department's review comments and conditions of approval for the PCB remediation project at the East Millinocket Mill. The comments are made as a result of the Departments review of the "East Millinocket Mill PCB Remediation Project Technical Specification" dated March 1989 and revised April 21 and May 12, 1989, and the "Quality Assurance Project Plan", dated March 1989 and revised June 1989.

On August 22, 1988 Great Northern (GNP) and the State of Maine entered into an Administrative Consent Agreement and Enforcement Order which included a requirement that Great Northern submit a remedial action plan for the remediation or removal of PCB contaminated soils and groundwaters at the No. 5 and No. 6 Paper Machine Building and the Chemi-Groundwood Site for the Department's review and approval. The order further stated that the "plan shall be coordinated and at a minimum comply with the U.S. Environmental Protection Agency and its requirements under the Toxic Substances Control Act (TSCA)".

Clean Fill

Great Northern proposes to use soils contaminated with PCBs in a concentration of less than 50 ppm as "clean fill" and place those soils back in the excavation. Additionally, the Maine Department of Human Services' Division of Public Health is proposing an interim exposure guideline of 1 ppm for PCB's contaminated soils. It is the Department's understanding that GNP is seeking approval of the less than 50 ppm criteria through the risk assessment prepared by Envirologic Data and the States identification of PCBs greater than 50 ppm as hazardous

waste. However, given the apparent discrepencies between the field screening and laboratory analytical results (method 8080), and the maximum exposure guideline proposed by DHS, the Department will require GNP to use uncontaminated fill in a three foot diameter around all sewer pipes, fire mains or feeders, conduits or other pipelines which are to remain in place or be installed at the three sites. This is being required in an attempt to limit the exposure of contractors or mill employees who may need to perform repair or other maintenance on these pipelines in the future. In addition, the following precautionary measures must also be agreed upon prior to implementation of the remediation plan:

- Great Northern must place a notation on the deed to its East Millinocket Mill site clearly indicating the presence of PCB contaminated soils and groundwater and restricting the removal of groundwaters as well as any future discharges to groundwater without prior DEP approval. Note: Discharges to groundwater is not intended to mean precipitation from or the run off of precipitation from mill buildings. Furthermore, the deed restriction must limit future excavations in those areas identified in the final remediation report as continuing to contain PCB's in concentrations of less than 50ppm, unless prior approval is granted by the Maine DEP.

- Additionally only backfill which contains no detectable PCB's may be utilized for the top 2 feet of fill to prevent contact with PCB contaminated soils.

- The surface areas above the sites will be paved with bituminous concrete.

2. It is the Departments understanding that observations regarding potentially contaminated foundations and pads will be recorded and will be tested as indicated in the QAPP. It is also the Department understanding that concrete pads and foundations will be disposed of in accordance with the analytical results and the plans are approved based on those understandings.

Dewatering

The addition of those waters from any of the dewatering efforts must not violate any existing state or federal treatment or discharge permits.

Wall Decontamination

It is the Departments understanding that the application of solvent wash will be preformed such that aqueous solvents will not be discharged to the ground surface. Any aqueous solvents must be contained for proper disposal. Great Northern shall supply the Department with material safety data sheets for all chemical solvents and detergents prior to the decontamination of walls. The procedure proposed for decontaminating walls must be submitted for the DEP's review and approval prior to implementation. In addition to the wall decontamination the Maine DEP is requiring GNP to submit an air monitoring plan for the inside wall of the buildings to be decontaminated to demonstrate that further decontamination is not necessary to protect worker safety.

Equipment Decontamination

The method of collection of all wash liquid, dirt, and debris used in equipment decontamination must be capable of preventing discharges of those materials to the ground surface. Great Northern must provide copies of material safety data sheets of any solvents or detergents to the Department prior to their use for equipment decontamination. The discharge of aqueous solutions to the waste water treatment plant must not violate any existing state or federal treatment or discharge permits.

Excavation and Disposal

The Disposal of excavated materials at the Dolby landfill must be in compliance with existing permits issued by the Departments Bureau of Solid Waste for use of the landfill. Additionally, cables, ducts and concrete proposed for disposal at Dolby III shall be field screened and/or analyzed in the laboratory and can only be disposed at the landfill if such disposal does not violate the terms and conditions of existing permits. If such disposal is not allowed under existing permits, GNP may apply for such approval through the Bureau of Solid Waste.

Notes and Survey Data

All field notes, especially with respect to the compositing of soil samples and the field screening analysis shall be available to the Department upon request.

Frequency of Sampling

Prior to Approval, GNP must clairfy the frequency and density of sampling to be preformed for 1) questionable soils, 2) concrete foundations, bases and rubble, 3) wipe testing for decontaminating walls and 4) wipe testing for decontamination of equipment.

Composite Samples

Prior to Approval, GNP must describe the procedure to be used by field personnel to determine the number of individual samples to be composited - when will 2 samples be composited and when will 10 samples be composited? The QAPP (June 1989) mentions 10 and 12 as the maximum number of samples to be composited. No more than 10 samples should be composited at any time.

Confirmation Sampling

GNP must clarify if the confirmation sampling includes the excavation walls and floors. Additionally, please clarify why the composite core procedure was not utilized for the confirmation sampling.

Sample Blanks

GNP must clarify the number of wipe sample blanks to the Departments satisfaction. The QAPP (revised June 1989) states only that "a" sample blank will be analyzed.

Equipment Blanks

The frequency of equipment blanks to be analyzed does not appear in Table 9.1. GNP must clarify the number of equipment blanks to be analyzed to the Department's satisfaction.

Field Screening

Field screening must follow protocal established by Dr. Spittlor of E.P.A. which includes methanol as well as hexane for the solvent extraction of PCB's from moist or wet soils. The description contained in the revised QAPP fails to mention the use of methanol in the extraction procedure.

Composite Sample Results

The calculation which is proposed to be performed to determine if soils are contaminated requires GNP to be 99.5% confident the soil is contaminated before it will be shipped for disposal as hazardous waste. While the proposal addresses the concept of false positives, it does not address false negatives which would allow contaminated soils to be improperly identified and handled. GNP must utilize a statistical equation such as the method located in SW-846 to determine the upper bound of the confidence interval (false negative) for the Department's approval.

Disposal of Aqueous Solvents

The disposal of of Aqueous solvents must be preformed in accordance with all federal, state and local regulations.

Treatment System

Prior to final approval, GNP must clarify what level of treatment is required for trichlorobenzene and tetrachlorobenzene. The influent into the last carbon unit must be sampled and analyzed for trichlorobenzene and tetrachlorobenzene daily in addition to PCB's. Additionally, the influent to the WWTP must be sampled daily for benzenes and PCB's. If the activated carbon is replaced, the carbon shall be tested and must be managed and disposed of in accordance with state and federal regulations. Also, GNP must clarify what will happen if the influent to the final carbon unit exceeds the level of treatment for chlorobenzene compounds or PCB's.

Transportation of Materials

All materials transported off-site which contain PCB's in concentrations greater than 50 ppm or other hazardous wastes shall be transported by a licensed hazardous waste transporter to a facility licensed to treat or dispose of such material. GNP must assure that sufficient laboratory analysis are performed to appropriately characterize all materials prior to shipment to the treatment and/or disposal facilities.

Sample Containers

In the revised QAPP (June 1989) sample containers are not always referred to as being air tight containers with teflon caps. Air tight containers with teflon caps should be used for all soil samples and wipe samples.

Worker Protection Plan
Air Monitoring Plan

This correspondence does not constitute approval of the worker protection plan or the air monitoring plan in as much as the actual plans are to be submitted by the successful contractor. These plans must be submitted for the Departments review and approval. The Department approves of the concepts of the plans as outlined except that the air monitoring plan must also list the location, type, sensitivity, number and frequency of analysis for the proposed air monitoring devices. Additionally, the person responsible for determining the appropriate level of personnel protection equipment and the process utilized to make that determination must be clearly stated. Lastly, specific measures for controlling PCB's transported by dust should be included in the health and safety plan.

Monthly Reporting

Great Northern Paper shall submit monthly written status reports which include a discussion of the progress made and problems encountered in the following areas:

1. Health and safety; this includes air monitoring, mill workers safety, and decontamination.

2. Disposal

3. Temporary contaminated material storage

4. Sampling/testing

5. Climate and other environmental concerns

6. Decontamination of structures

7. Additional contaminated materials encountered

8. EPA comments

9. Addition hydrogeological findings

10. Other information and GNP deems appropriate

11. Describe the actions which have been taken to implement the remedial action plan during the previous month.

12. Include all plans and procedures completed under the Technical Specification during the previous month.

13. Include copies of all manifests for the removal of contaminated soils and materials.

14. Describe the amounts of materials and soils removed from each of the Sites, categorized by type of material or soil and date of removal.

15. Describe all actions, data and plans which are scheduled for the next month and provide other information relating to the progress of construction as is customary in the industry.

16. Include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect Great Northern's ability to complete the Cleanup in accordance with the time schedule for implementing the remedial action plan, and a description of efforts made to mitigate those delays or anticipated delays.

Post Remediation Groundwater Monitoring

This letter does not constitute approval of the post remediation monitoring program in as much as the final design, installation and implementation of the plan is dependent upon the degree of success of the remediation plans and its design may be enhanced by the data gathered during remediation. Because the remediation plan will not successfully remove PCB's in concentration of greater than 50 ppm from the soils and groundwaters, Great Northern must provide financial assurance documentation to demonstrate that long term groundwater monitoring can be implemented.

In addition, if post remediation sampling and analysis demonstrates groundwater contamination by chlorobenzenes or PCB's a groundwater remediation plan will be required. Additionally, the DEP anticipates requiring the installation of groundwater monitoring wells at all contaminated sites.

Post Remediation Soil Sampling

The remediation plan fails to clearly provide for post remedial sampling to determine the effectiveness of the soil removal efforts. During our meeting of May 18, 1989, GNP indicated that soil sampling would occur on all excavation faces. GNP must verify the frequency and density of such sampling.

Soil Remediation - No. 6 Paper Machine and Chemi Groundwood

At both locations, high concentrations of PCB's are located near the bottom of the excavation (B604 at 9800 ppb is 6 feet below the bottom of the scheduled bottom of excavation and B8 contains a pocket of PCB's below the scheduled extent of the excavation). Whenever the scheduled bottom of excavation is achieved and the soils are verified by field screening to be contaminated and accessible by the equipment, those contaminated soils must be removed.

Additional Comments

The extent of soil contamination north of the white liquor building (between the liquor building and the site) has not been adequately defined. GNP must obtain additional soil samples from this area during the soil removal process.

Final Reporting

A final report which contains all soils and groundwater analytical data, results of wipe testing, air quality monitoring data, certification by GNP and an independent Maine registered professional engineer and independent Maine certified geologist that all remedial actions were implemented in accordance with the approved plan must be submitted within ninety (90) days of completion of the remedial action plan. The report must also detail all precision, accurracy and completeness results. Additionally the final report must contain a summary of all deviations or additions from the approved plan and any conditions encountered which were not anticipated by the plan.

This approval with the conditions noted above is for this project only and should not be construed as acceptable criteria for the approval of any other PCB remediation project.

Please contact me at 289-2651 if you would like to discuss the comments presented above.

Sincerely,

Scott Whittier

SCOTT WHITTIER, Acting Director
Division of Licensing & Enforcement
Bureau of Oil & Hazardous Materials Control

SW:dp
swpheneci

cc: Tony Palermo, USEPA
Dan Boxer, Pierce, Atwood, Scribner

APPENDIX A

PCB SPILL CHARACTERISTICS AND TRANSPORT MECHANISMS

APPENDIX A - SPILL CHARACTERISTICS AND TRANSPORT MECHANISMS

Based on discussions with GNP plant personnel, the coolant fluid used in the transformers at sites No. 5 and 6 consisted of an uncut (undiluted) PCB fluid, Askarel. Considering chemical analysis of the PCB in soil and discussions with the sole domestic manufacturer (Monsanto, 1985) the fluid is believed to consist of approximately 60% PCB 1260.

Askarel is a liquid with a unique odor; the specific gravity of the Askarel ranges from 1.5 to 1.6. Characteristics of the assumed constituents include:

Chemical	Sp G[1]	Density (pounds/gallon)	Solubility (mg/ℓ)	Vapor Pressure (mmHg)	K_{ow}[2]	K_{oc}[3]
PCB-1260 (a soft resin)	1.555	13.5 @25°C	0.0027 @25°C	4.05×10^{-5}	4.5×10^{6}	2.5×10^{6}

1 Sp G = Specific Gravity

2 K_{ow} = Octanol/Water Partition Coefficient

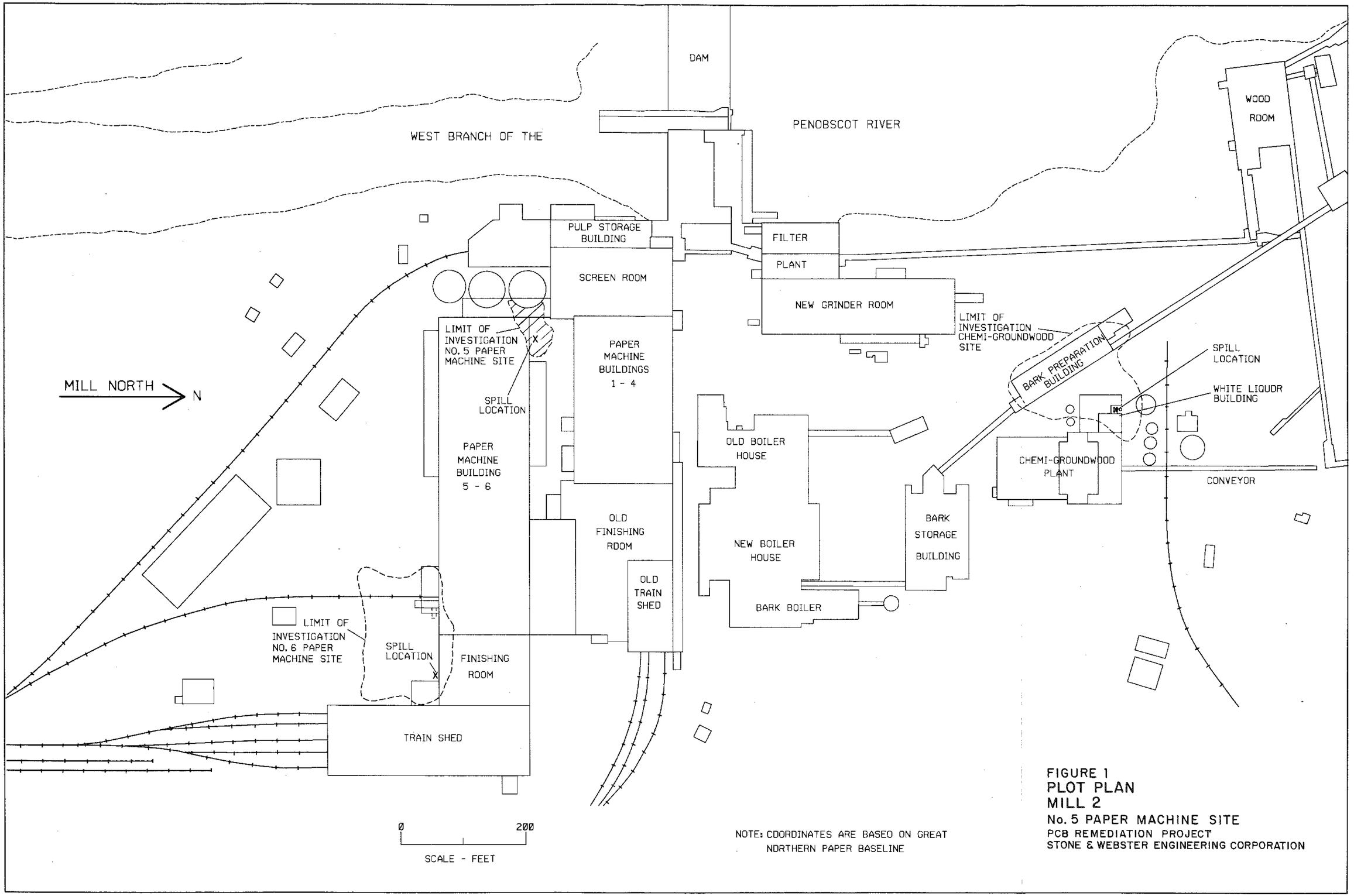
3 K_{oc} = Adsorption Coefficient for Chemical Partioning between Soil and Water

PCB and Askarel are denser than water, do not tend to volatilize, but do tend to strongly adsorb to soil/sediment and be hydrophobic. Volatilization is not expected to be a significant transport pathway. Based on the subsurface location of most of the PCB, transport by adsorption to sediment carried in surface runoff is not expected to be significant. Percolation of Askarel

through the soil and dissolution into water are considered the only probable transport modes.

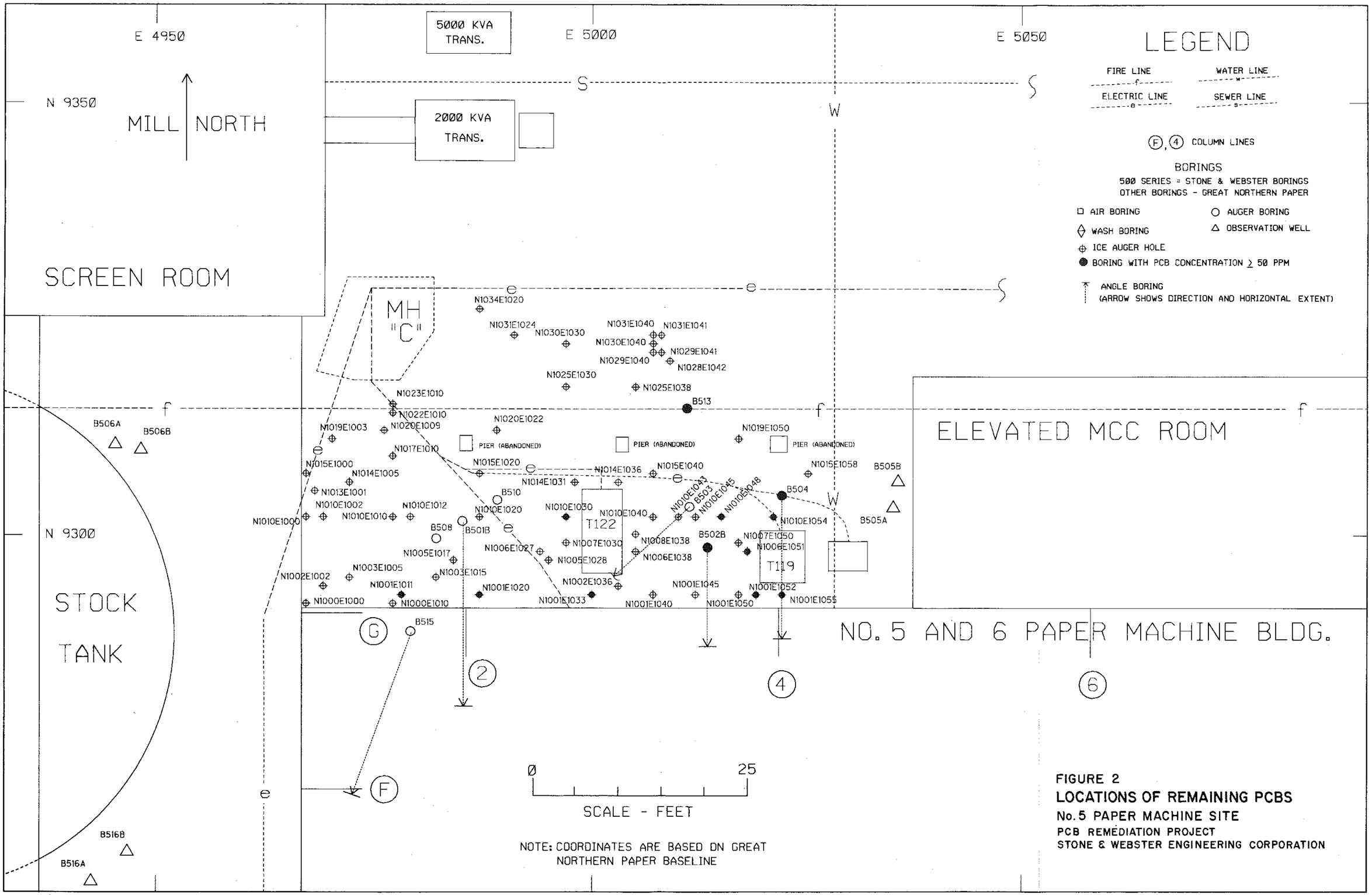
Dissolution or PCB into infiltrating water and subsequent transport in on-site groundwater is not expected to be a particularly effective transport mechanism for PCB due to its low (0.0027 mg/ℓ) solubility in water, high affinity to adsorb to solids (K_{oc}) and hydrophobic tendencies. Aqueous transport of PCB, to the extent it does occur, is expected to preferentially be in high permeability zones such as the porous fill and utility trenches as compared to the till.

Transport of PCB in Askarel or water is expected to be limited to the upper few feet of the till due to the volume of porous material in preferential pathways above the till, apparent low and upward hydraulic gradient and low hydraulic conductivity ($<10^{-7}$ cm/sec) of the till deposit, and the relatively short (7 years) time for migration to occur.



NOTE: COORDINATES ARE BASED ON GREAT NORTHERN PAPER BASELINE

FIGURE 1
PLOT PLAN
MILL 2
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION



LEGEND

FIRE LINE — f

WATER LINE — w

ELECTRIC LINE — e

SEWER LINE — s

Ⓕ, ④ COLUMN LINES

BORINGS

500 SERIES = STONE & WEBSTER BORINGS
OTHER BORINGS - GREAT NORTHERN PAPER

- □ AIR BORING
- ○ AUGER BORING
- ◇ WASH BORING
- △ OBSERVATION WELL
- ⊕ ICE AUGER HOLE
- ● BORING WITH PCB CONCENTRATION ≥ 50 PPM
- ANGLE BORING (ARROW SHOWS DIRECTION AND HORIZONTAL EXTENT)

NOTE: COORDINATES ARE BASED ON GREAT NORTHERN PAPER BASELINE

FIGURE 2
LOCATIONS OF REMAINING PCBS
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION

E 4950

E 5000

E 5050

N 9350

N 9300

MILL NORTH

5000 KVA TRANS.

2000 KVA TRANS.

SCREEN ROOM

STOCK TANK

ELEVATED MCC ROOM

NO. 5 AND 6 PAPER MACHINE BLDG.

MH "C"

LIMIT OF EXCAVATION

INTERMEDIATE LINE OF EXCAVATION AT EL. 291 ±

PIER (ABANDONED)

T122

T119

B505A B505B B506A B506B B502B B503 B504 B508 B510 B513 B515 B516A B516B B5018

N1034E1020 N1031E1024 N1030E1030 N1031E1040 N1031E1041 N1030E1040 N1029E1040 N1029E1041 N1028E1042 N1025E1030 N1025E1038 N1023E1010 N1022E1010 N1020E1022 N1019E1003 N1020E1009 N1017E1010 N1015E1000 N1014E1005 N1013E1001 N1010E1002 N1010E1012 N1010E1000 N1010E1010 N1010E1020 N1010E1030 N1010E1040 N1010E1043 N1010E1045 N1010E1048 N1010E1054 N1008E1038 N1007E1030 N1007E1050 N1006E1051 N1006E1038 N1005E1017 N1005E1028 N1003E1005 N1003E1015 N1002E1002 N1001E1011 N1001E1020 N1002E1036 N1001E1033 N1000E1000 N1000E1010 N1019E1050 N1015E1020 N1014E1036 N1015E1040 N1015E1058 N1014E1031 N1001E1040 N1001E1045 N1001E1050 N1001E1052 N1001E1055

A B C D F G 2 4 6

0 25

SCALE - FEET

NOTE: COORDINATES ARE BASED ON GREAT NORTHERN PAPER BASELINE

LEGEND

FIRE LINE — f —

WATER LINE — w —

ELECTRIC LINE — e —

SEWER LINE — s —

Ⓕ, ④ COLUMN LINES

BORINGS

500 SERIES = STONE & WEBSTER BORINGS
OTHER BORINGS - GREAT NORTHERN PAPER

□ AIR BORING

○ AUGER BORING

◇ WASH BORING

△ OBSERVATION WELL

⊕ ICE AUGER HOLE

● BORING WITH PCB CONCENTRATION ≥ 50 PPM

ANGLE BORING
(ARROW SHOWS DIRECTION AND HORIZONTAL EXTENT)

NOTE

AN EXCAVATION PROFILE IS NOT INCLUDED FOR **SECTION A-A.** SEE DATA PACKAGE (STONE & WEBSTER, 1988) FOR SUBSURFACE CONDITIONS ALONG THIS PROFILE.

FIGURE 3
EXCAVATION PLAN
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION

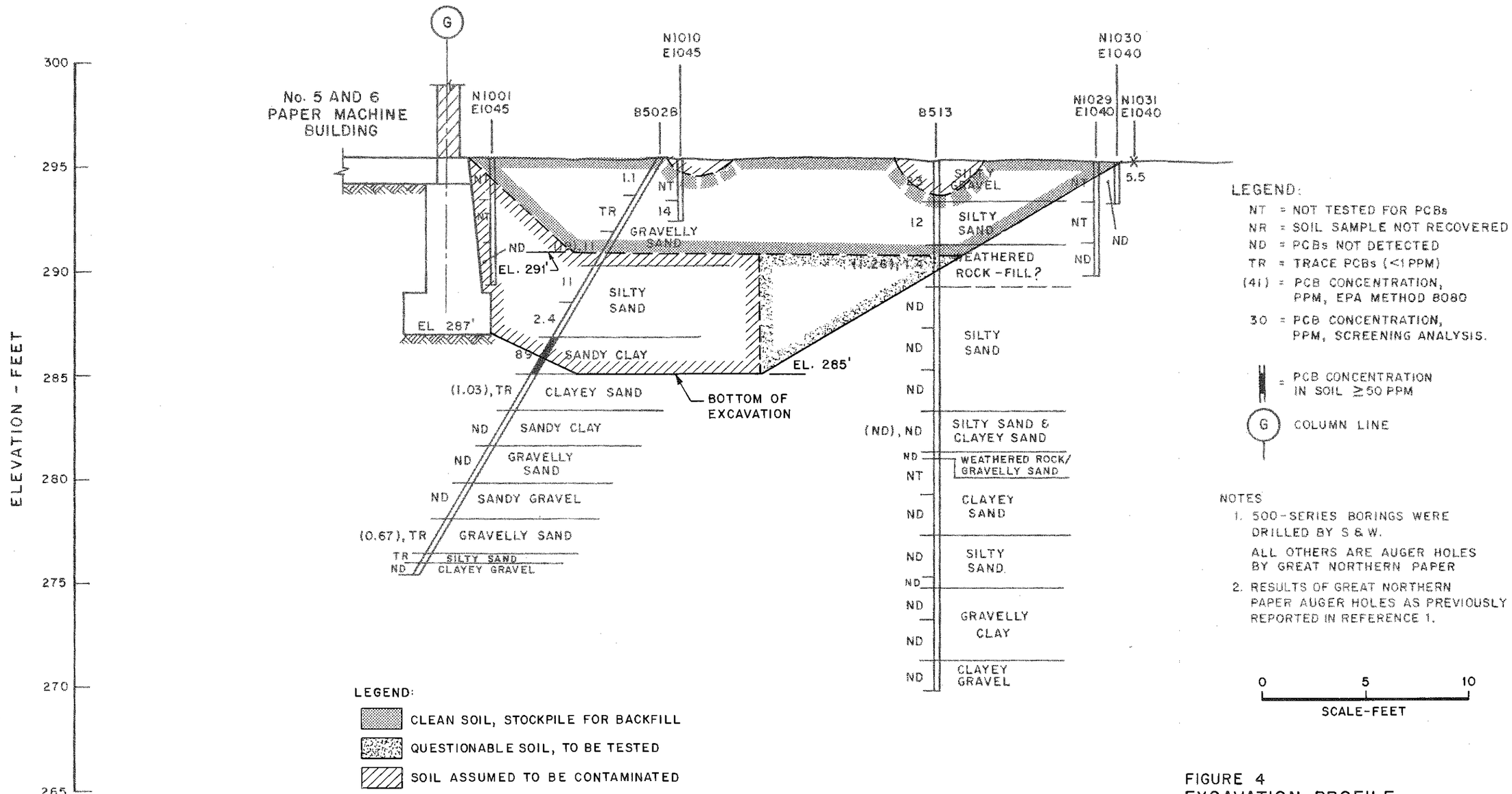
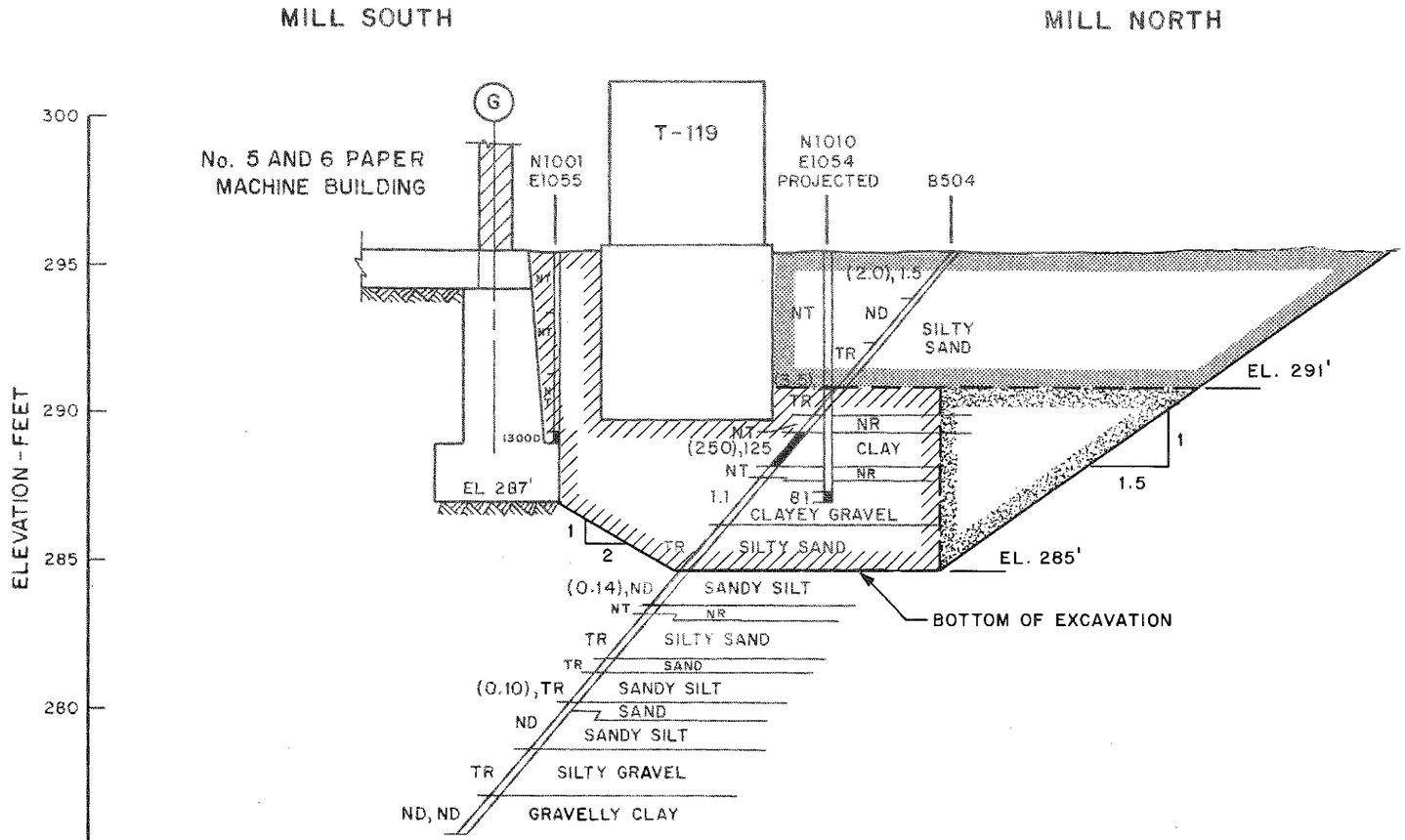


FIGURE 4
EXCAVATION PROFILE
SECTION B-B
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION



LEGEND

NT = NOT TESTED FOR PCBs
NR = SOIL SAMPLE NOT RECOVERED
ND = PCBs NOT DETECTED
TR = TRACE PCBs (<1PPM)
(41) = PCB CONCENTRATION, PPM, EPA METHOD 8080
30 = PCB CONCENTRATION, PPM, SCREENING ANALYSIS
= PCB CONCENTRATION IN SOIL ≥ 50 PPM
(A) COLUMN LINE

NOTES

1. 500-SERIES BORINGS WERE DRILLED BY S & W.
   ALL OTHERS ARE AUGER HOLES BY GREAT NORTHERN PAPER.
2. RESULTS OF GREAT NORTHERN PAPER AUGER HOLES AS PREVIOUSLY REPORTED IN REFERENCE 1.

0 5 10
SCALE-FEET

LEGEND:

CLEAN SOIL, STOCKPILE FOR BACKFILL
QUESTIONABLE SOIL, TO BE TESTED
SOIL ASSUMED TO BE CONTAMINATED

FIGURE 5
EXCAVATION PROFILE
SECTION C-C
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION

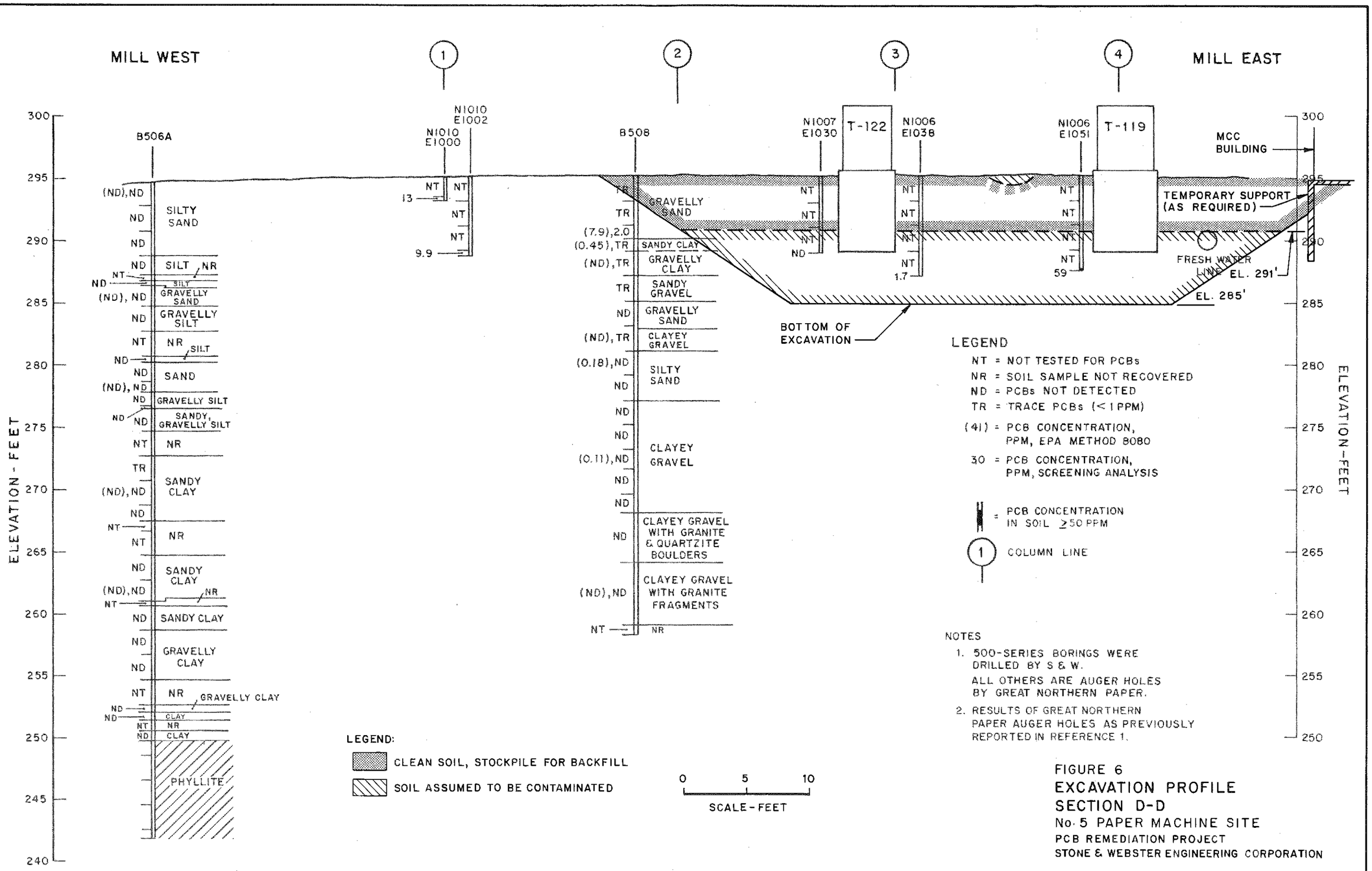


FIGURE 6
EXCAVATION PROFILE
SECTION D-D
No. 5 PAPER MACHINE SITE
PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION

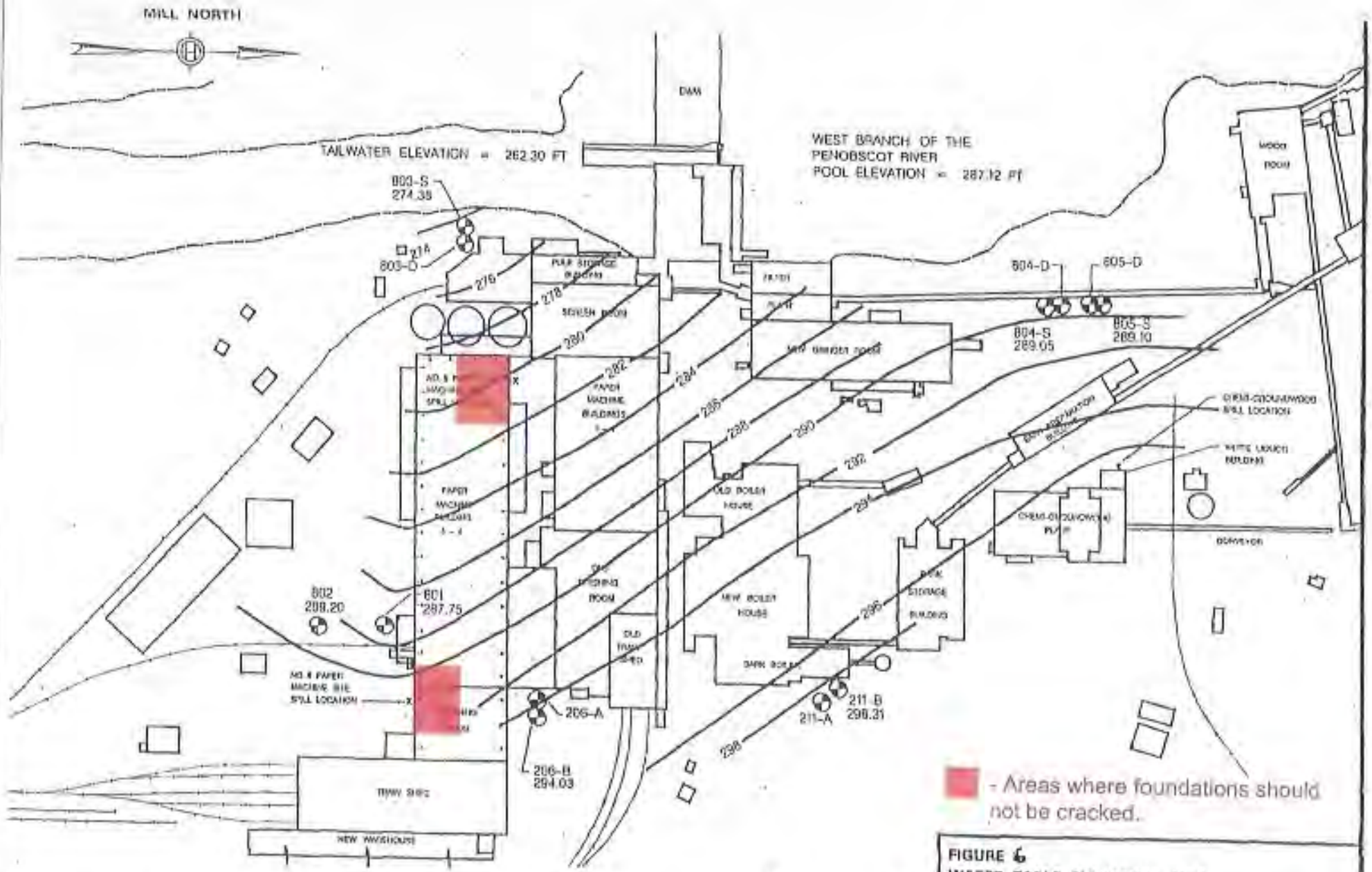
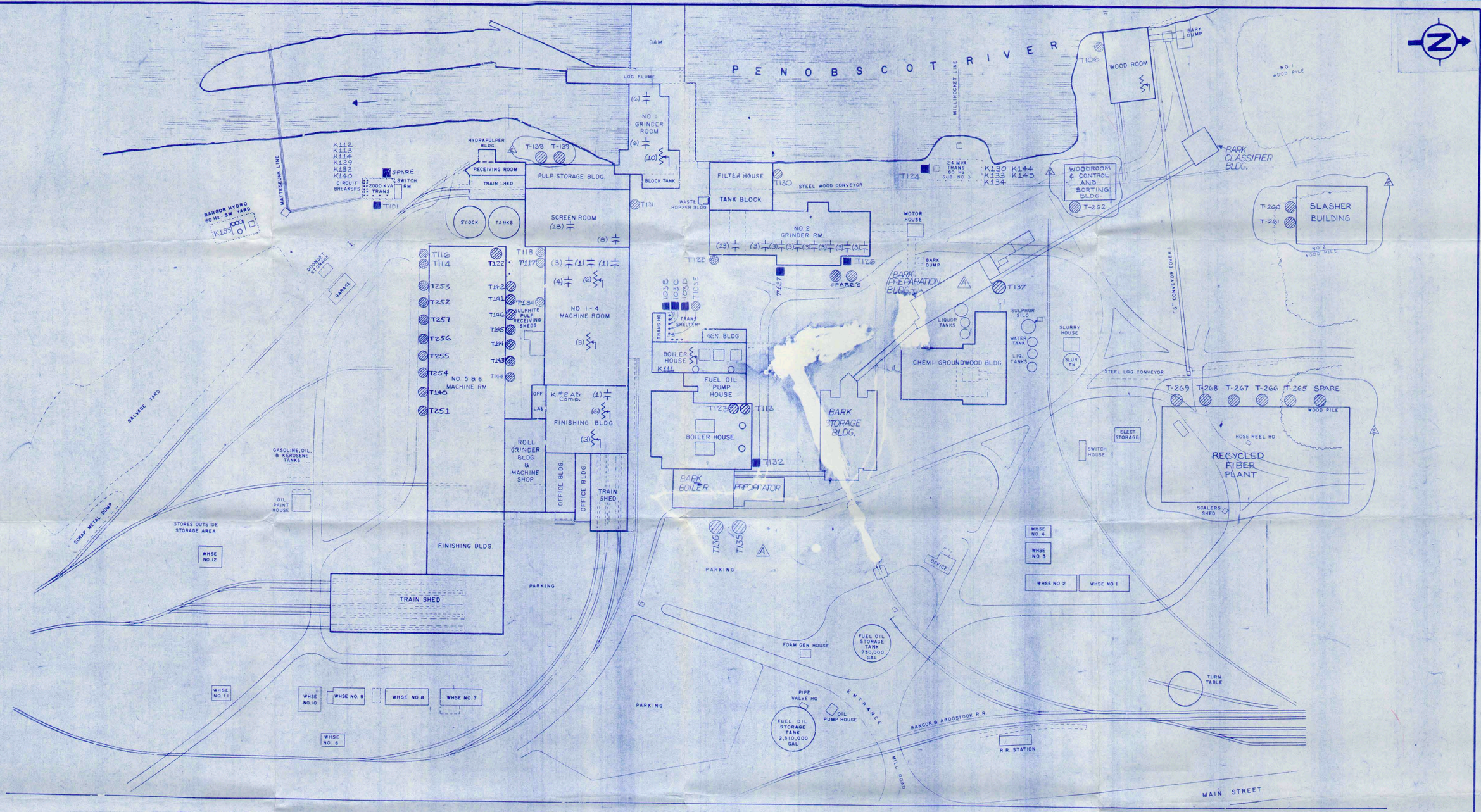


FIGURE 6
WATER TABLE ELEVATION MAP
EAST MILLINOCKET MILL
STONE & WEBSTER ENGINEERING CORPORATION



TRANSFORMERS

T. NO.	DWG. NO.	T. NO.	DWG. NO.	T. NO.	DWG. NO.	T. NO.	DWG. NO.	T. NO.	DWG. NO.
T101	B-12552	T110A	YB-12517	T115	YB-12519	T125	YB-12518	# 7	YB-12518
T103A	YB-12521	T110B	YB-12517	T116	YB-12519	T126	YB 12518	# 8	YB-12518
T103B	YB-12521	T110C	YB-12517	T117	YB-12520	T127	YB-12518	# 9	YB-12518
T103C	YB-12521	T111	B-12552	T118	YB-12520	T128	YB 12518	# 30	B-12552
T103D	YB-12521	T111A	B-12552	T119	YB-12519	T129	YB 12520	# 31	B-12552
T103E	YB-12521	T111B	B-12552	T120	YB-12519	T130	YB 12518	# 32	B-12552
T106	YB-18580	T112	B-12552	T121	YB-12520	T131	YB 12521	T135	
T107	YB-18517	T113	YB-12521	T122	YB-12520	T132	YB 12521	T136	
		T114	YB-12519	T123	YB-12521	T133	YB 12520	T137	
				T124	YB-12522	T134	YB 12520		

WELDON POWER STATION

T. NO.	DWG. NO.
T155A	YB-12514
T155B	
T155C	
T156A	
T156B	
T156C	
T157A	
T157B	
T157C	
POWER HOUSE	YB-12515

LEGEND

(10) Fluid Filled Capacitor. (quantity of 10 units)

K140 Oil Circuit Breaker. (breaker No 140 shown)

Oil Filled Compensator

MINERAL OIL TRANSFORMER

PCB TRANSFORMER

SILICONE TRANSFORMER

FIGURE 3-2

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CKD	APPVD	JOB No.
			E	6/14/94	GENERAL REVISION PER TVW MARKUP	LM		TVW	MILL
			D	8/23/90	GENERAL REVISION	MC		TVW	MILL
			C	11/16/88	UPDATING OF PRINT	TVW		FJC	MILL
			B	8/29/83	Add O.C.B.'S & Capacitors & Compensators per Contingency plan	RPK		RHL	M511
			A	7-14-80	ADDED BARK BOILER & TRANSFORMERS	DPF	SAS	RHL	2590
		C	0	7/27/77	FOR CONST	WPR	Lee	CKB	6537
		P		6-27-77	COMMENTS AND/OR APPROVAL	A Libbey	Lee	CKB	6537

EDWARD C. JORDAN CO., INC.
ENGINEERING - PLANNING - ARCHITECTURE
PORTLAND - BANGOR - PRESQUE ISLE, MAINE

JOB NO. 7701861 | DWG. NO.

DRN	A. Libbey	6-24-77
CKD	Lee	6-27-77
CKD	RPK	6-27-77
CORR.	D. Brown	6-27-77
APPVD	OTL	8-24-77

ISSUE CODE: P - PRELIM | B - BIDS | M - MTL T.O. | C - CONST

SCALE

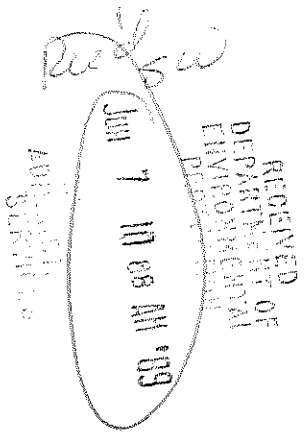
Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT
EAST MILLINOCKET MILL
TRANSFORMER OIL CONTAINMENT LOCATION PLAN

JOB NO. 6537
ENG. REQ. NO. 07016
FILE NO. 2-900-4790

YB-12516-E

GREAT NORTHERN PAPER



EAST MILLINOCKET MILL
PCB REMEDIATION PROJECT

QUALITY ASSURANCE PROJECT PLAN

Original Issue
MARCH 1989

Revised
JUNE 1989

Prepared by

STONE & WEBSTER ENGINEERING CORPORATION

1_00k6_6c

QUALITY ASSURANCE PROJECT PLAN APPROVAL FORM

QA ID No.:
Submittal Date: June 1989
Revision No.: 1

Task Start Date: July 5, 1989
(for beginning of site remediation project activities)

Task Title: Great Northern Paper
East Millinocket Mill
PCB Remediation Project

Great Northern Paper (GNP) Project Manager: Brad Kites Brian Stetson

Contractor: Manager: Stone & Webster Engineering Corporation (SWEC)

APPROVALS:

Richard S. Skryness SWEC Project Manager	Signature	Date
Robert Hawes SWEC QA Engineer	Signature	Date
~~Brian Stetson~~ GNP Project Manager	Signature	Date

Contractor: Northeast Laboratory, Inc. (NEL)

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William Colby, NEL	1	
Earl Moore, NEL	~~2~~ 3	X
Bradford Kites		
Michael Stafford (SWEC)	1	

20480-18795-B4

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SECTION 1

PROJECT DESCRIPTION

This Quality Assurance Project Plan (QAPP) applies to remedial action for three PCB spill sites at the Great Northern Paper's East Millinocket mill. The remedial action is a removal operation involving excavation of PCB contaminated soils with construction dewatering, decontamination and disposal of PCB contaminated porous and impervious surfaces, and site restoration. Audits of the laboratory operation will be conducted to assess performance on the requirements of operation and quality assurance for sampling and analysis.

The relevant target level for the remediation of PCB contaminated soil is 50 ppm as measured by EPA Method 8080. During the course of the remedial investigation effort, field screening for PCBs was shown to produce results which have a direct correlation to Method 8080 results. The corresponding relevant target level for removal of PCB contaminated soils and construction debris is 18 ppm as determined by the field screening procedure.

Extensive data were collected from soil borings to distinguish zones of clean and contaminated soils and retesting will not be needed. Zones that were previously inaccessible for sampling and soils that comprise transition material between "clean" and "contaminated" will be sampled and tested to confirm the concentrations of PCBs, and to determine whether the soils must be disposed of or can be used as backfill. Testing will be performed at the final lines and grade of the excavation to demonstrate conformance with the site action level of 18 ppm by field screening. Methods for sampling decontaminated materials prior to disposal also are included. Groundwater monitoring will be performed during and following the remediation construction to confirm the post-remediation risk assessment assumptions.

Analytical methods and quality control measures for testing samples for PCBs have been developed with the emphasis of generating valid data. Limits for accuracy and precision have been established on the basis of operating experience in prior field investigations. Procedures for corrective measures have been clearly established to account for quality control samples which are out of range.

This document defines the specific quality control activities and quality assurance mechanisms which will be incorporated into the project to support the precision, accuracy, and representativenesses of the collected data. A full description of the tasks and responsibilities associated with each individual contractor is detailed in the main body of the detailed work plan.

SECTION 2

PROJECT ORGANIZATION AND RESPONSIBILITIES

In addition to Great Northern Paper (GNP) it is envisaged that the main participants of the remediation work will include an onsite representative of GNP, a Remediation Contractor, and an Analytical Laboratory.

GNP, through its onsite representative, will manage all site remediation contracts, monitor and audit all site remediation activities, coordinate all sampling operations, and prepare the final remediation documentation for each site.

The Remediation Contractor will be responsible for all site remediation work including site health and safety. The Remediation Contractor's activities will be coordinated by GNP's representative to allow access for the collection of samples at such times and locations as required in the detailed work plan.

The Analytical Services Contractor will provide a field laboratory and analytical services for soil, water, and wipe analyses.

A detailed statement of the project organization and responsibilities of all participants will be part of the detailed work plan which will be prepared prior to the start of remediation work. However, the current project organization is shown on Figure 2-1.

PROJECT ORGANIZATION

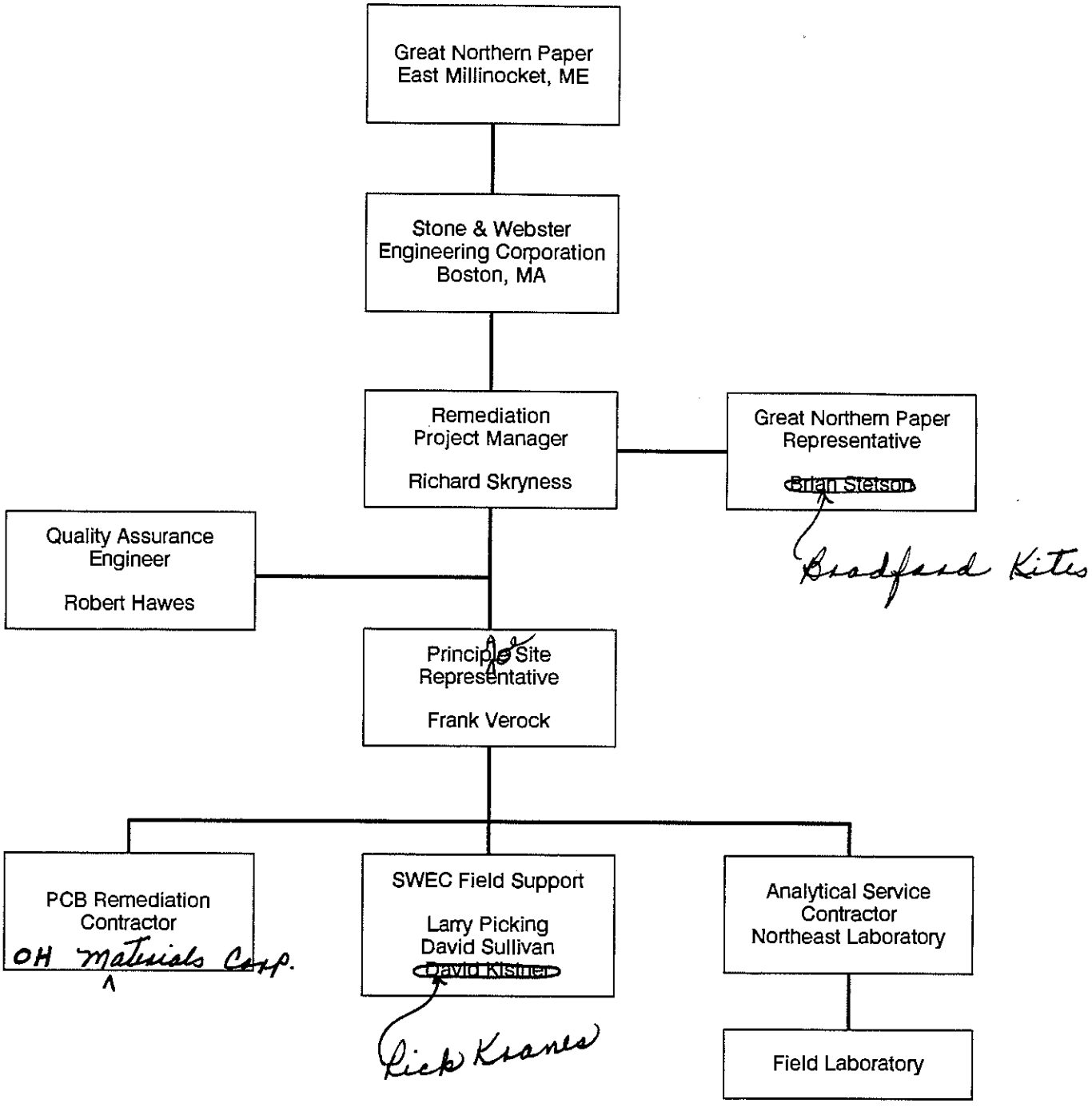

FIGURE 2-1

SECTION 3

QUALITY ASSURANCE OBJECTIVES FOR DATA

3.1 PRECISION, ACCURACY, AND COMPLETENESS

The collection of data to characterize the concentration of PCBs in various media involved in the site remediation requires that sampling and analysis procedures be conducted by trained personnel using properly operated and calibrated equipment.

Precision is defined as the degree of mutual agreement around individual measurements made under prescribed conditions. Accuracy is the degree of agreement of a measurement with an accepted reference or true value. Precision and accuracy goals for this program ~~are~~ are presented in Table 3-1.

3.2 REPRESENTATIVENESS AND COMPARABILITY

Standardized sampling and analytical procedures have been set forth in this plan to allow for representativeness and comparability of analytical results. The QA objective is that all analytical measurements be made on samples that are truly representative of the media being evaluated. Consistent methods and analytical procedures, QA sample analysis, and accurate reporting of data with consistent units will allow for comparability of the data.

Table 3-1

QA OBJECTIVES FOR ACCURACY AND PRECISION FOR PCB ANALYSIS OF SOIL AND WATER

	Precision (a)	Accuracy (b)	Completeness
Field Analysis	≤50%	40-120%	90%
Laboratory Analysis	≤30%	55-120%	90%

(a) measured as the average percent difference for replicate samples

(b) measured as the average percent recovery for laboratory control samples run with sample sets during the program.

Completeness is defined as the percent of samples judged to be valid compared to the total number of samples collected. All reasonable attempts will be made to have all data generated be valid. The completeness objective for the program is 90 percent.

SECTION 4

SAMPLING PROTOCOLS

4.1 GENERAL

Sampling protocols to be used during the remedial action work are described in Sections 4.2 to 4.7.

The protocols include soil core sampling for questionable soils; surface soil sampling for confirmation of site cleanup at specified extent of excavation; sampling of treated water effluent from the construction dewatering treatment system; wipe sampling of impervious surfaces; surface sampling of concrete; and groundwater sampling from monitoring wells.

4.2 SOIL CORE SAMPLING

Soil core sampling will be used to determine, prior to excavation, whether or not "questionable" soils exceed the action level criterion for PCBs.

Soil core sampling will be performed with manual or mechanically driven bucket auger equipment to a depth of 2.5 feet at each core location. Grab samples over the profile will be combined for a representative core composite. In the areas to be investigated, one core sample will be collected from each regular 10 foot x 10 foot grid. Core composites will be split into two portions. One portion will be used for preparation of an area composite, prepared by combining between 2 and 10 core composites. The second portion will be saved for later analysis if field screening of an area composite indicates the presence of contamination. Lower numbers of core samples will be combined into area composites in areas closer to known contamination. All data on sample core locations and identification of core samples composited into area samples will be carefully logged in field records and maintained by GNP's site representative.

Soil samples will be placed into 8-ounce wide-mouth glass jars and will be sealed with a chain-of-custody seal by GNP's site representative.

Containers used to collect soil samples will be washed with soap and water followed by a methanol or isopropanol rinse. Once samples are collected, they will be cooled to 4°C as a sample preservation measure. Samples for field screening will be submitted immediately. Sample to be analyzed by the fixed-based laboratory will be shipped via overnight courier or equivalent method. Note that the holding time for samples of this nature is 14 days.

Soil core sampling equipment will be decontaminated between core locations. Equipment will be washed with a solution of Alcanox detergent made up with potable water, rinsed with potable water, and rinsed with hexane to remove any residual of PCBs.

Spent decontamination fluids will be disposed of by the Analytical Laboratory Contractor, who will dispose of the spent decontamination fluids by an approved waste disposal contractor.

4.3 SURFACE SOIL SAMPLING

The following method of surface soil sampling will be used to confirm that soils remaining after excavation to specified grades for removal of contaminated soils meet the agreed upon target objective.

A 5-inch x 5-inch square template will be used to define the area for sampling. The top 0.50-0.75 inch of soil will be scraped off the surface with a stainless steel spatula or tool and collected in a pre-cleaned glass sample jar. Sample jars will be 8-ounce wide-mouth glass jars with teflon-lined caps.

Containers used to collect soil samples will be washed with soap and water followed by a methanol or isopropanol rinse. Once samples are collected, they will be cooled to 4°C as a sample preservation measure. Samples for field screening will be submitted immediately. Samples to be analyzed by the fixed-based laboratory will be shipped via overnight courier or equivalent method. Note that the holding time for samples of this nature is 14 days.

Surface soil samples will be collected from those open excavation surfaces where further excavation is possible if contamination is encountered. (Sampling will not be performed along the open face of the excavation near buildings where further excavation will compromise the integrity of the building foundation.) Samples will be collected on a 10-foot x 10-foot grid. Each sample will be split into two portions. Portions will be used to prepare composites of 10 samples that will cover larger areas with a practical number of samples. Analysis of retained individual samples will be performed if contamination is detected in the composite.

Surface soil sampling equipment will be decontaminated between sample locations. Equipment will be washed with a solution of Alcanox detergent made up with potable water, rinsed with potable water, and rinsed with hexane to remove any PCB residue. Spent decontamination fluids will be disposed of by the Analytical Laboratory Contractor, who will dispose of the spent decontamination fluids by an approved waste disposal contractor.

4.4 WIPE SAMPLES

Wipe samples will be used to determine the level of PCB contamination on high and low contact surfaces as defined in 40CFR761.125(c)(3)(iv).

Wipe samples will be collected using 3-inch square, 4-ply sterile gauze pads moistened with reagent grade hexane. Each gauze pad is first placed in a precleaned 250 ml sample jar and the tare weight of the jar and gauze pad are recorded. The jar is partially filled with reagent grade hexane and sealed prior to sampling.

The individual performing the wipe sampling will wear a new, impervious disposable glove for each sample. A square area of 400 cm^2 will be wiped for each sample. The surface will be marked with a rule (20 cm x 20 cm), or a measured template will be used that can be decontaminated or is disposable. The surface will be wiped immediately after the gauze is removed from the storage container. The gauze should be wet with solvent but not

dripping. The entire area will be wiped first with up and down strokes across the area and then with side to side strokes from top to bottom. The gauze pad will not be allowed to come in contact with any other surfaces and will be promptly replaced into the sample jar and sealed. Sample location and identification will be recorded in the field log book and the sample marked according to labelling requirements and a chain of custody followed.

A wipe sample blank will be prepared in the field by following the above procedure, but placing it directly into a sample jar without contact with any surfaces and submitting it along with other samples.

4.5 CONCRETE SAMPLING

This method will be used to evaluate surface contamination of porous concrete foundations or structures in contact with PCB contaminated soils.

The top 1/4 to 3/8 inch of concrete in a 3-inch x 3-inch square area will be chipped off the surface using chisels or other tools and collected in a steel tray held below the area. Samples will be collected in precleaned 8-ounce glass sample jars with teflon-lined caps and submitted to the laboratory. Samples will be pulverized to pass through a 1/4-inch screen prior to extraction for PCB analysis.

Containers used to collect concrete samples will be washed with soap and water followed by a methanol or isopropanol rinse. Once samples are collected they will be cooled to 4°C. Samples for field screening will be submitted immediately. Samples to be analyzed by the fixed-based laboratory will be shipped via overnight courier or equivalent method. Note that the holding time for samples of this nature is 14 days.

Sampling equipment will be decontaminated between sample locations. Equipment will be washed with a solution of Alcanox detergent made up with potable water, rinsed with potable water, and rinsed with hexane to remove any PCBs residue. Spent decontamination fluids will be disposed of by the Analytical Laboratory Contractor, who will dispose of the spent decontamination fluids by an approved waste disposal contractor.

Sample location and identification will be recorded in the field log book and the sample marked according to labelling requirements and a chain of custody followed.

4.6 WASTEWATER DISCHARGE SAMPLING

Samples of water will be collected from sample taps installed on the wastewater treatment system and analyzed for PCB contamination. Sample taps will be opened and allowed to flush for at least 15-20 seconds to purge the tee connection before a sample is collected. Flush water will be collected in a pail and dumped back into the equalization basin. The samples will be collected directly into precleaned quart glass containers with Teflon lined caps. Sample date and location will be logged in a field book and on a monitoring chart at the treatment system. Records of all sampling will be maintained by GNP's representative.

Grab samples will be taken once daily at the inlet to the last carbon treatment unit of each parallel treatment train to measure for breakthrough. The combined final effluent upstream of the discharge to the plant sewer will be sampled weekly and analyzed to monitor the discharge for PCB contamination.

Sample containers for wastewater sampling will be washed with soap and water followed by a methanol or isopropanol rinse. Once samples are collected, they will be cooled to 4°C as a sample preservation measure. Samples for field screening will be submitted immediately. Samples to be analyzed by the fixed-based laboratory will be shipped via overnight courier or equivalent method. Note that samples of this kind must be extracted within 7 days, and the extracts must be analyzed within 40 days.

4.7 GROUND WATER SAMPLING

Sampling will be performed in accordance with the U.S. EPA Protocol for Ground Water Evaluations OSWER DIR 9080.0-1, September 1986. As specified in this document, all bailers and bailer lines will be precleaned prior to each sampling event. Each bailer will be individually wrapped in aluminum foil and plastic to reduce the potential for contamination during transport. Dedicated Teflon or stainless steel bailers will be used to purge and collect all samples. Dedicated bailers will be stored separately from other dedicated bailers. In addition, their use and the well will be clearly labeled on the storage container. The bailer line is constructed of Teflon-coated type 304 braided stainless steel wire.

Well sampling equipment will be decontaminated between core locations. Equipment will be washed with a solution of Alcanox detergent made up with potable water, rinsed with potable water, and rinsed with hexane to remove any PCB residue.

Spent decontamination fluids will be disposed of by the Analytical Laboratory Contractor, who will dispose of the spent decontamination fluids by an approved waste disposal contractor.

Upon arrival at each well head, the ambient air in the vicinity of the well will be monitored prior to opening the well casing cap. This monitoring will be conducted with an HNU Systems photoionization unit. This unit is capable of detecting many volatile organics, but will not detect methane. An ambient air background reading will be taken at a location upwind of the well head. Once a background value is established, the well casing cap will be opened to determine if measurable amounts of volatile organics exist in the breathing zone. If measurable amounts exceed those identified in the the health and safety plan, protection will be ~~provided by~~ limited to full face air purifying respirators.

Once the casing cap and well cap have been removed, the static water level and the total depth of the well will be measured. The measuring device will be decontaminated between wells using a solvent (i.e., hexane) wipe and a deionized water wipe rinse.

During the well purging, in situ field measurements consisting of pH, temperature, and specific conductance will be collected. These data, as well as all pertinent field observations, will be entered into a bound field log book.

Purging will be considered complete when any of the following three conditions are met: three well volumes have been purged; the well is purged to dryness; or the in situ measurements stabilize. After the completion of purging, the water level will be measured and recorded. Providing ample recharge has occurred, the sample will then be collected. In the event recharge is slow, the sampling team will move to another well location and commence purging to allow the first well sufficient time to recharge. This will maximize the efficiency of the sampling time in the field. If recharge is poor and sufficient amounts of ground water are not available, the sampling team will collect whatever is available within 24 hours.

Ground water samples will be placed into precleaned 1-liter glass containers supplied by the laboratory. Samples will be shipped to the laboratory using laboratory chain-of-custody procedures. Samples will be analyzed for PCB's. All sampling information will be placed onto the sample container label and into the sampling team's field log book.

Sample containers for groundwater sampling will be washed with soap and water followed by a methanol or isopropanol rinse. Samples will be cooled to 4°C as a sample preservation measure. Samples for field screening will be submitted immediately. Samples destined for the fixed-base laboratory will be shipped via overnight courier or equivalent method. Note that samples of this kind must be extracted with 7 days, and the extracts must be analyzed within 40 days.

SECTION 5

SAMPLE CUSTODY

The purpose of chain-of-custody procedures is to document the identity of the sample and its handling from its first existence as a sample until analysis and data reduction are completed. Custody records trace a sample from its collection through all transfers of custody until it is transferred to the analytical laboratory. Internal laboratory records then document the custody of the sample through its final disposition.

5.1 FIELD SAMPLING OPERATIONS

The importance of uncontaminated reagents, collection media, and sample containers in collecting valid samples is well recognized by the project team. The collection medium actually becomes part of the sample itself.

Upon collection, each sample will be tagged with sample identification tags containing pertinent information about the sample.

Preprinted sample identification tags will be used to ensure that the required information is entered in the field. Each collected sample shall have a completely filled-in sample tag securely attached. In addition, the sample identification number is marked on the container with a permanent marker so that the sample can be properly identified even if the tag is separated from the sample.

Sample custody forms also will be completed prior to shipment or delivery to the analytical laboratory.

Figure 5-1 shows a typical sample label and a chain-of-custody seal that will be used to identify and seal samples in the field. Figure 5-2 shows a general use chain-of-custody record. This can be a two-part, carbonless copy form based on NEIC format and will be used to document sample transfer in the field and from sampling personnel to the mobile laboratory.

The receipt of samples by the fixed-base laboratory will initiate internal laboratory chain-of-custody procedures. The following provides a description of the fixed-base laboratory's custody procedures.

All samples submitted to the fixed-base laboratory will be brought to the Sample Bank Manager, who will continue the chain-of-custody by assigning a Laboratory Control Number to each sample; this number identifies the sample through all further handling. The sample will be recorded in the bound Master Sample Log under its Laboratory Control Number. Each page of the Master Log has the following format:

- Laboratory Control Number;
- sample description;
- sample condition;

- Signature of person completing sample record; and
- date of sample receipt.

The fixed-base laboratory maintains large, locked, refrigerated and nonrefrigerated storage areas with provision for hazardous material storage. The Sample Bank Manager will store each sample in the appropriate area under its Laboratory Control Number.

The Sample Bank Manager will initiate a page for each sample in the Custody Book and ensure that each handling of the sample is appropriately documented. Each analyst working with the sample will first go to the Sample Bank Manager and record in the Custody Book actions taken on the sample, thereby maintaining the chain-of-custody of the original sample.

When sample preparation and analysis procedures necessitate the transfer of samples between two analysts within the laboratory, a Sample Custody Transfer form is required. This document serves as a supplement to the Custody Notebook record of sample handling and becomes part of the permanent project file.

All materials such as field and laboratory notebooks and logbooks, field and laboratory data records, correspondence, reports, sample tags, chain-of-custody records, and instrument printouts will be clearly labeled with the project number and become a permanent part of the project file.

Project samples will be disposed of in an appropriate manner 60 days after submission of a final report, unless requested otherwise by the Client or regulatory agency.

SAMPLE LABEL AND CHAIN-OF-CUSTODY SEAL

Site Name _____

Boring Number _____

Sample Number _____ Sample Interval _____

Pen./Rec. _____/_____ Blows/6 inches ____/____/____/____

Date _____ Time _____

Inspector _____

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
OFFICIAL SAMPLE SEAL

SAMPLE NO. | DATE

SIGNATURE

PRINT NAME AND TITLE *(Inspector, Analyst or Technician)*

SEAL BROKEN BY | DATE

EPA FORM 7600-(R7-73)

FIGURE 5-1

CHAIN-OF-CUSTODY RECORD

CONTRACT NO:

SAMPLERS (Signatures)

Sample Code	Seq. No.	Date	Source Description	Container Size	Container G/P	Volatile Organics	Extractable Org.	Pesticides/PCBs	Trace Elements	Cyanide	Phenols	ANALYSES	COMMENTS

Relinquished by:	Date/Time	Received by:	Relinquished by:	Date/Time	Received by:
Relinquished by:	Date/Time	Received by:	Relinquished by:	Date/Time	Received by:
Relinquished by:	Date/Time	Received by:	REMARKS:		

FIGURE 5-2

SECTION 6

CALIBRATION AND FREQUENCY

6.1 CALIBRATION STANDARDS

Prepare stock solution of Aroclor 1260 from materials available from EPA/RTP Reference Standards Repository or equivalent source.

The stock standard solution will be prepared at a concentration of 1.00 µg/µl by dissolving 0.0100 g of assayed reference material in isooctane and diluting to volume in a 10-mc volumetric flask. Larger volumes may be utilized at the convenience of the analyst. Where compound purity is assayed to be 96% or greater, the weight can be used without correction to calculate the concentration of the stock standard. Note that commercially prepared stock solutions are acceptable if they are certified by the manufacturer or by an independent source.

Prepare working standards by dilution of the stock solution. Working standards will be prepared every other week or as needed.

A field matrix confirmation sample will be prepared from samples retained from the remedial investigation phase of work. Samples with field screening method concentrations in the range of 100 ppm +/-10 ppm, will be composited for the purpose of confirming the screening procedure.

6.2 CALIBRATION PROCEDURES

Calibration standards at a minimum of 3 but no more than 5 concentration levels are prepared through dilution of the stock standards with isooctane. One of the concentrations will be at a concentration near, but above, the method detection limit. The remaining concentration levels should correspond to the expected range of concentration found in actual samples from the site or should define the working range of the gas chromatograph.

Peak heights or area responses will be tabulated against the mass injected. These results will be used to prepare a calibration curve. Acceptance criteria for the initial calibration will be based on a correlation coefficient of 0.9900 or greater.

Analyze the field matrix confirmation standard. If the reported value is within the data quality objective accuracy limits established for the program, analysis may proceed.

All instrument operating conditions and quality control results are recorded in an instrument book. The analyst's notebook, signed and dated by the Senior Analyst, must contain all information regarding standard preparation and reference standards used.

A summary of calibration and confirmation data will be provided with the analytical results and will demonstrate the range and degree of linearity for PCB quantification.

SECTION 7

ANALYTICAL METHODS

7.1 Onsite Screening for PCBs

Onsite screening will be performed in a mobile laboratory set up temporarily at the project site for analysis of soils, water concrete, equipment decontamination blanks, and wipe samples. The purpose of an onsite laboratory will be to provide the remediation contractor with rapid return of results on analysis of samples.

The mobile laboratory will be equipped with instrumentation, glassware, reagents, chemicals, and other equipment to perform the required analysis. The mobile laboratory also will be equipped with ventilation and air conditioning for the safety of the workers.

7.1.1 Sample Preparation

Wipe Samples

Wipe samples will be analyzed using a hexane extraction procedure. The sample jar will be filled with hexane and weighed to determine the amount of hexane by difference from the tare weight. Each sample jar will be shaken for 10 minutes before 4 ml of hexane are transferred to another vial. An equal amount of concentrated sulfuric acid will be added and the vial shaken for 1 minute. The vial should stand for a few minutes to allow the hexane and acid to form separate liquid layers. For analysis, 1 ml of the hexane will be pipetted from the sample vial into an instrument sample vial.

Concrete Samples

Concrete samples will be pulverized with a mortar and pestle or other means to less than approximately 1/4-inch nominal size. A representative portion of the sample will then be treated in accordance with the procedure for soil below.

Soil Samples

For analysis, approximately 5 grams of the ground material will be weighed into a tared 12-ml glass vial. The remainder of the sample will be retained for further analysis, if required. Ten milliliters of hexane will be pipetted into the vial, the vial capped, and the mixture shaken for approximately 1 hour. Four milliliters of the hexane will be transferred to a clean vial. An equal amount of concentrated sulfuric acid will be added and the vial shaken for 1 minute. The vial should stand for a few minutes to allow the hexane and acid to form separate liquid layers. For analysis, 2 ml of the hexane will be pipetted from the sample vial into an instrument sample vial.

Water Samples

Approximately 500 ml of sample will be subjected to an extraction procedure using 100 ml of hexane in a 1-liter separatory funnel. The mixture will be shaken and then allowed to stand for a few minutes to allow the hexane and water to form separate liquid layers. The water will be drained off, leaving the hexane phase. The solvent will be dewatered through a column of approximately 1 inch of anhydrous sodium sulfate. The extract will be collected in a 250-ml beaker. The volume of hexane will be reduced by evaporation to approximately 10 ml by gentle sparging with nitrogen gas. The concentrated extract will be transferred to a 15-ml graduated vial. The volume of extract will then be transferred to a sample vial for analysis.

7.1.2 Sample Analysis

The sample extracts will be analyzed with a GC/ECD instrument in accordance with protocols described in EPA Method 8080, Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, 3rd Edition, SW846, US EPA, Washington, D.C. November, 1986 (SW-846). Operating conditions for the field screening instrument are listed in Table 7-1. (Reproduced from Table-1 in Remedial Investigation Work Plan Amendment #1 October 5, 1987, SWEC.)

7.2 LABORATORY PROCEDURES

Water analyses will be performed using Method 3510 (SW-846). One liter of water is serially extracted with methylene chloride in a separatory funnel. A solvent-solvent extraction with hexane is made before sample cleanup. GC/ECD analyses of the sample extracts will follow EPA Method 8080 (SW-846). Operating conditions for the laboratory analyses are presented in Table 7-2.

TABLE 7-1

MODIFIED GC/ECD CONDITIONS FOR FIELD SCREENING ANALYSIS OF AROCLOR 1260

Instrument	Hewlett-Packard 5840A with Ni^{63} electron capture detector and HP 7671 automatic sampler, or Hewlett-Packard 5890A with HP7672 automatic sampler.
Column	1.5% SP2250/1.95% SP2401 Supelcoport, 6 ft x 4 mm
Temperatures	
Column	225°C
Injector	250°C
Detector	350°C
Injector Volume	2.0 µL
Run Time	30 min
Carrier Flow	UHP argon/methane, 60 ml/min

TABLE 7-2

GC/ECD CONDITIONS FOR LABORATORY ANALYSIS OF AROCLOR 1260

Instrument	Hewlett-Packard 5840A with Ni^{63} electron capture detector and HP7671A aotomatic sampler
Column	1.5% SP2250/1.95% SP2401 Supecoport, 6 ft x 2 mm
Temperatures:	
Column	185°C
Injector	225°C
Detector	350°C
Injector volume	5.0 µL
Run time	50 min
Carrier flow	UHP argon/methane, 35 ml/min

SECTION 8

DATA REDUCTION, VALIDATION, AND REPORTING

8.1 FIELD SCREENING AND LABORATORY ANALYSIS RESULTS

8.1.1 Sample Analysis Data Reduction

Analytical results will be reduced to concentration units specified in EPA's instructions for the analytical procedure, using the equations given in the published method. Results will be expressed in the following units:

solid	milligrams per kilogram (mg/kg or ppm)
wipe sample	micrograms per square meter (µg/100 cm^2)
water	micrograms per liter (µg/L or ppb)

The concentration of PCBs identified in a sample will be calculated using the external standard method. The calculated sample concentration is based upon the chromatographic peak areas and response factors obtained from the calibration standards according to the following equation:

$$C = (Ax/RF)(DF)$$

where

C = concentration of analyte X in µg-C/L

Ax = peak area for analyte X
(sum of all Aroclor 1260 peaks areas)

RF = response factor for the appropriate
quantitative standard in area counts per µg-C/L.

DF = dilution factor.

For solid samples the equation to calculate the resulting concentration will be:

$$Xw = (Xv)(V)(df)(cf)/ w$$

where

Xw = reported value, mg/kg
Xv = sample extract concentration, µg/ml
V = sample extract volume, ml
df = dilution factor
w = sample weight, kg
cf = conversion factor, ms/1000 µg

For water samples the equation to calculate the resulting concentration will be:

$$Xww = (Xv)(V)(df)/ Vw$$

where

Xww = reported value, µg/L
Xv = sample extract concentration, µg/ml
V = sample extract volume, ml
Vw = sample volume, L
df = dilution factor

For wipe samples the equation to calculate the resulting concentration will be:

$$Xwp = (Xv)(V)(df)/ Awp$$

where

Xwp = reported value, $\mu g/m^2$
Xv = sample extract concentration, µg/ml
V = sample extract volume, ml
df = dilution factor
Awp = wipe sample area, m^2

8.1.2 Composite Sample Results

The criterion for the remediation project is removal of all accessible contaminated materials with greater than 18 ppm of PCBs as determined by the field screening test method. Data collected during the remedial investigation phase confirmed the correlation of the field screening (FS) concentration value of 18 ppm-FS to a concentration of 50 ppm as determined by the standard extraction method with EPA Method 8080 analysis.

Criteria for composite sample evaluation have been developed based upon guidance from work by the Midwest Research Institute (MRI), Verification of PCB Spill Cleanup by Sampling & Analysis. The intent of preparing composites is to avoid the unnecessary burden of attempting to analyzing impractical numbers of samples during the course of the remediation construction. The objective of developing a criterion for evaluating a composite sample result is to be certain that there is not a false-positive claim that material is contaminated.

The following method will be used to determine that lower cutoff concentration criterion that indicates the presence of some contamination in at least one sample in the composite above the action level criterion of 18 ppm-FS. Based on typical accuracy of 80 percent and precision of 30 percent, the following value represents the 99.5 percent confidence value that a sample truly exceeds the 18 ppm-FS criterion:

$$\text{Upper cutoff} = [(0.8)+(2.576)(0.3)(0.8)]\ 18 = 25.6 \text{ ppm-FS}$$

where the value of 2.576 was determined from statistical tables. For a composite sample, the value of the lower cutoff ss determined by dividing the above number by the number of samples combined in the composite:

$$\text{Lower cutoff} = \frac{25.6 \text{ ppm-FS}}{\text{(number of samples in composite)}}$$

(e.g., the cutoff value for a composite made up of five samples would be 25.6/5 = 5.1 ppm-FS.)

Based upon a detection limit of 1 ppm for the the field screening technique, the number of samples combined into a single composite should never exceed 25 in that the detection limit would interfere in evaluation of whether the composite exceeded the lower cutoff criterion. In the site remediation work, a maximum of 12 samples will be combined in any one composite to avoid complications with the detection limit.

If the composite sample result exceeds the lower cutoff value, then there are two possible courses of action:

Treat all soils represented by the composite as exceeding the site criterion for PCBs and take appropriate remedial steps; or

Analyze the component samples individually or in smaller composite groups to make a more detailed evaluation.

8.2 DATA VALIDATION

Data validation is the process of filtering data and accepting or rejecting it on the basis of sound criteria. Supervisory and Quality Control (QC) personnel will use validation methods and criteria appropriate to the type of data and the purpose of the measurement. Records of all data will be maintained, even that judged to be of "outlying" or spurious value. The persons validating the data will have sufficient knowledge of the technical work to identify questionable values.

Field sampling data will be validated by the Field Team Leader and/or the Field QC Coordinator based upon their judgment of the representativeness of the sample, maintenance and cleanliness of sampling equipment, and the adherence to an approved, written sample collection procedure.

Data from the onsite and laboratory analyses will be validated by the Laboratory QC Coordinator.

The following criteria will be used to evaluate the field sampling data:

- use of approved sampling procedures;
- use of reagents that have conformed to QC specified criteria; and
- proper chain-of-custody maintained.

The criteria listed below will be used to evaluate the analytical data:

- use of approved sampling procedures;
- use of properly operating and calibrated instrumentation;

- acceptable results from analysis of laboratory control samples (i.e., the reported values should fall within the 95 percent confidence interval for these samples); and

- precision and accuracy achieved should be comparable to that achieved in previous analytical programs and consistent with objectives stated in Section 3 of this QAPP.

8.3 DATA REPORTING

The analytical data validation and reporting scheme to be used by the Laboratory Contractor is presented in Figure 8-1.

All data will be reported in standard units depending upon the measurement and the ultimate use of the data.

ANALYTICAL DATA REPORTING SCHEME

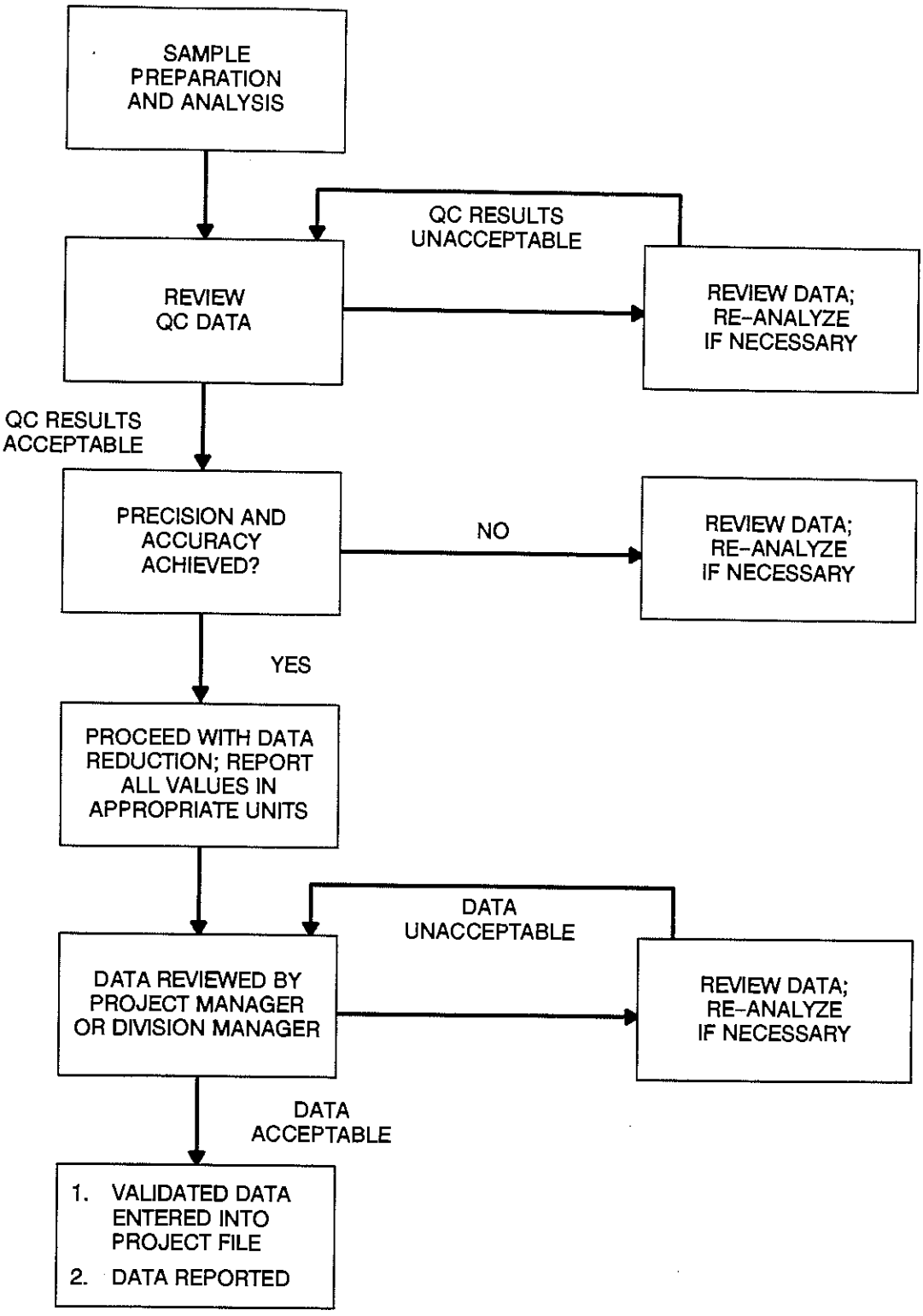

FIGURE 8-1

SECTION 9

INTERNAL QUALITY CONTROL CHECKS AND FREQUENCY

Quality Control checks will be performed to ensure the collection of representative samples and the generation of valid analytical results on these samples. These checks will be performed by project participants throughout the program under the guidance of the Project QA Engineer and the Field Laboratory QC Coordinator.

9.1 DATA COLLECTION AND SAMPLING QC PROCEDURES

QC checks for the sampling aspects of this program will include, but not be limited to, the following.

1. Use of field notebooks to ensure completeness, traceability, and comparability of the samples collected.

2. Field checking of field notebooks and sample labels by a second person to ensure accuracy and completeness.

3. Strict adherence to the sample chain-of-custody procedures outlined in Section 5 of the QAPP.

4. Submission of field-biased blanks and equipment blanks.

5. Analysis of field duplicates at a frequency of 1 duplicate with every 5th sample.

9.2 ANALYTICAL QC PROCEDURES FOR SAMPLES TO BE ANALYZED ONSITE AND IN THE LABORATORY

The following types of QC samples will be used to document the validity of the generated data in this project.

Method Blanks - Method blanks contain all the reagents used in the preparation and analysis of samples and are processed through the entire analytical scheme to assess spurious contamination arising from reagents, glassware, and other materials used in the analysis.

Equipment Blanks - Equipment blanks are used to detect spurious contamination arising from incomplete decontamination of the sample collection devices. Pesticide-grade solvent is used to rinse the equipment; the solvent is then analyzed as a normal sample extract.

Calibration Check Samples - One of the working calibration standards which is periodically used to check that the original calibration is still valid.

Replicate Samples and Spiked Samples - Analysis of replicate samples is used to enable estimation of the precision of the analytical procedure. Replicate aliquots of project samples are spiked with components of

interest and carried through the entire preparative and analytical scheme.

Laboratory Control Samples (LCS) - These samples are prepared from EPA EMSL concentrates or NBS standard reference materials. The LCSs are used to establish that an instrument or procedure is in control. An LCS is normally carried through the entire sample preparation and analysis procedure.

Confirmatory Analysis - Analysis of samples by a confirmatory technique such as gas chromatography with a dissimilar column, specific element detector, or mass spectrometer may be used when doubt exists over the identification of a peak on the chromatogram. The need for confirmatory analysis will be left to the discretion of the Analytical Services Contractor.

All values which fall outside the QC limits described in the Analytical Method will be noted. It is anticipated that some of these recovery values will be outside the QC limit owing to matrix interferences. The following guidelines will be used.

1. All recovery data are evaluated to determine if the QC limits are appropriate and if a problem may exist even though the limits are being achieved (e.g., one compound that is consistently barely within the lower limit).

2. All recovery data which are outside the established limits are evaluated. This evaluation will include an independent check of the calculation.

3. Corrective action will be performed if any of the following are observed:

   - all recovery values in any one analysis are outside the established limits;
   - over 50 percent of the values for a given sample set are outside the limits; or
   - one compound is outside the limits in over 50 percent of the samples.

The type and frequency of use of each of these QC measures is listed in Table 9-1. An analysis batch is defined as a group of 20 or fewer samples carried through the entire preparation and analysis procedure in one batch.

Reagents used in the laboratory are normally of analytical reagent grade or higher purity; each lot of solvent used is checked for acceptability prior to laboratory use. All reagents are labeled with the date received and date opened. The quality of the laboratory deionized water is routinely checked. All glassware used in the sampling and analysis procedures will be pre-cleaned according to the method requirements. Standard laboratory practices

for laboratory cleanliness, personnel training, and other general procedures are used.

TABLE 9-1

ANALYTICAL QC MEASURES

QA Measure	Minimum Frequency
Field Laboratory	
Method blank	Daily
Matrix spike/matrix spike duplicate	Daily
Laboratory control sample	Daily
Calibration check sample	Daily
Field Confirmation sample	Daily
Field Duplicate Sample	1 sample for every 5 samples
Confirmatory Analysis	As Needed
Laboratory	
Method blank	Each sample set or every 20 samples
Duplicate sample	Each sample set or every 20 samples/matrix
Laboratory control sample	Each sample set or every 20 samples
Calibration check sample	Daily
Confirmatory Analysis	As Needed

SECTION 10

QUALITY ASSURANCE AUDITS

The project Quality Assurance Program includes both performance and system audits as independent checks on the quality of data obtained from sampling, analysis, and data gathering activities. Either type of audit may show the need for corrective action.

10.1 PERFORMANCE AUDITS

The sampling, analysis, and data handling segments of a project are checked in performance audits. EPA Quality Control Concentrates and NBS Standard Reference Materials will be used to assess the analytical work.

10.2 SYSTEM AUDITS

A system audit is a qualitative review to ensure that the quality measures outlined in the QAPP are in place. The Laboratory Contractor shall perform a system audit at least once monthly.

10.3 EXTERNAL AUDITS

The Laboratory Contractor may be subjected to external audits by the Owner or his designee at any point in the project. The QC Coordinator will cooperate fully in any performance or system audit and be available to aid in scheduling such audits.

SECTION 11

PREVENTIVE MAINTENANCE PROCEDURES AND SCHEDULES

An orderly program of positive actions to prevent the failure of equipment or instruments during use will be instituted on the project. This preventive maintenance and careful calibration helps to ensure accurate measurements from field laboratory instruments.

All equipment that is scheduled for field use is cleaned and checked prior to use. An adequate supply of spare parts is taken to the field to minimize downtime from equipment failure.

The laboratory contractor shall submit a manual covering standard maintenance procedures.

SECTION 12

SPECIFIC ROUTINE PROCEDURES USED TO ASSESS DATA

12.1 PRECISION

12.1.1 Reference Method Testing and Analytical Measurements

Precision will be determined by the analysis of duplicate samples and will be expressed as the relative percent difference, which is determined according to the following equation:

$$\text{Relative \% difference} = \frac{\text{Value 1 - Value 2}}{\text{Arithmetic Mean of Value 1 and 2}} \times 100$$

12.2 ACCURACY

12.2.1 Reference Method Testing and Analytical Measurements

Accuracy will be estimated from the analysis of laboratory control samples whose true values are known to the analyst. Accuracy will be expressed as percent recovery or as relative error. The formulas to calculate these values are:

$$\text{Percent Recovery} = 100 \times \frac{\text{Measured Value}}{\text{True Valve}}$$

$$\text{Relative Error} = 100 \times \frac{\text{Measured Value - True Value}}{\text{True Value}}$$

12.3 COMPLETENESS

Completeness will be reported as the percentage of all measurements made whose results are judged to be valid. The procedures to be used for validating data and determination of outliers are contained in Section 8.0 of this QAPP. The following formula will be used to estimate completeness:

$$C = 100 \frac{V}{T}$$

where: C = percent completeness

V = number of sample measurements judged valid

T = total number of measurements

SECTION 13

CORRECTIVE ACTION

The acceptance limits for the sampling and analyses to be conducted in this program will be those stated in the method or defined. The corrective actions are likely to be immediate in nature and most often will be implemented by the analyst or Project Manager; the corrective action will usually involve recalculation, reanalysis, or repeating a sample run.

13.1 IMMEDIATE CORRECTIVE ACTION

Specific QC procedures and checklists are designed to help analysts detect the need for corrective action. Often the person's experience will be more valuable in alerting the operator to suspicious data or malfunctioning equipment.

If a corrective action can be taken at this point, as part of normal operating procedures, the collection of poor quality data can be avoided. Instrument and equipment malfunctions are amenable to this type of action and the Laboratory Contractor's QC procedures shall include troubleshooting guides and corrective action suggestions. The actions taken should be noted in field or laboratory notebooks and a memorandum issued to the Project Quality Assurance Manager within 1 day of the corrective action. No other formal documentation is required, unless further corrective action is necessary. These on-the-spot corrective actions are an everyday part of the QA/QC system.

Corrective action during the field sampling portion of a program is most often a result of equipment failure or an operator oversight, and may require repeating a run. Operator oversight is best avoided by having field crew members audit each other's work before and after a test. Every effort is made by the field team leader to ensure that all QC procedures are followed.

Corrective action for analytical work would include recalibration of instruments, reanalysis of known QC samples and, if necessary, of actual field samples.

If the problem is not solved in this way, more formalized long-term corrective action may be necessary.

Corrective actions implemented by the Analytical Services Contractor will be documented and submitted to the Quality Assurance Engineer and summarized in the final report.

13.2 LONG-TERM CORRECTIVE ACTION

The need for this action may be identified by standard QC procedures, control charts, performance, or system audits. Any quality problem which cannot be solved by immediate corrective action falls into the long-term category. The Laboratory Contractor shall use a system to ensure that the

condition is reported to a person responsible for correcting it who is part of a closed-loop action and follow-up plan.

The essential steps in the closed-loop corrective action system may include:

- Identify and define the problem.
- Assign responsibility for investigating the problem.
- Investigate and determine the cause of the problem.
- Determine a corrective action to eliminate the problem.
- Assign and accept responsibility for implementing the corrective action.
- Establish effectiveness of the corrective action and implement it.
- Verify that the corrective action has eliminated the problem.

Documentation of the problem is important to the system. A Corrective Action Request Form (shown on Figure 13-1) is completed by the person finding the quality problem. This form identifies the problem, possible causes and the person responsible for action on the problem. The responsible person may be an analyst, field team leader, or the QC Coordinator. If no person is identified as responsible for action, the QC Coordinator shall investigate the situation and determine who is responsible in each case.

The Corrective Action Request Form includes a description of the corrective action planned, the date it was taken, and space for follow-up. The QC Coordinator checks to be sure that initial action has been taken and appears effective and, at an appropriate later date, checks again to see if the problem has been fully solved. The QC Coordinator receives a copy of all Corrective Action Forms and then enters them in the Corrective Action Log. This permanent record aids the QC Coordinator in follow-up and makes any quality problems visible to management; the log also may prove valuable in listing a similar problem and its solution.

CORRECTIVE ACTION REQUEST FORM

Corrective Action Request Form No. _____

Originator _____ Date _____

Person Responsible for Replying _____ Contract Involved _____

Description of problem and when identified: _____

State cause of problem, if known or suspected: _____

Sequence of Corrective Action: (If no responsible person is identified, notify QA Manager immediately. Submit all CA forms to QA Manager for initial approval of CA.)

State Date, Person, and Action Planned:

CA Initially Approved By: _____ Date: _____

Follow-up Dates _____

Final CA Approval By: _____ Date: _____

Information copies to:

RESPONSIBLE PERSON/DEPARTMENT QC COORDINATOR: _____

QA MANAGER: _____

DEPARTMENT MANAGER: _____

FIGURE 13.1

SECTION 14

QUALITY ASSURANCE REPORTS TO MANAGMENT

Quality assurance activities undertaken during the remediation project will be summarized in a final report to the Project. The following information will be included in the summary.

- Assessment of analytical data accuracy, precision, and completeness.
- Results of performance audits of the analytical program.
- Results of system audits and external audits.
- Identified QA problems and problem resolution.

Georgia-Pacific Corporation
Northern Paper Division
One Katahdin Avenue
Millinocket, Maine 04462-1398
Telephone (207) 723-5131

File No. 507.10

March 29, 1991

Mr. Anthony Palermo
Office of Pesticides and Toxic Substances
U. S. EPA, Region I
JFK Federal Building
Boston, MA 02203

Dear Tony:

Subject: PCB Remediation Project, East Millinocket

Attached is the report on the PCB Remediaton Project at the East Millinocket mill. This report is submitted in compliance with the draft consent order.

If you have any questions concerning this submittal, please give me a call.

Sincerely,

Brian R. Stetson

Brian R. Stetson
Manager, Environmental Affairs

BRS/bv

Attachment

cc: w/attachment
Barbara Taylor - DEP

REPORT OF PCB CLEANUP ACTIVITIES AND GROUNDWATER MONITORING

EAST MILLINOCKET MILL

Great Northern Nekoosa

A Wholly-Owned Subsidiary of

Georgia-Pacific Corporation

MARCH 1991

Prepared by

STONE & WEBSTER ENGINEERING CORPORATIC

GREAT NORTHERN NEKOOSA

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GEORGIA-PACIFIC CORPORATION

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AND

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PREPARED BY

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MARCH 1991

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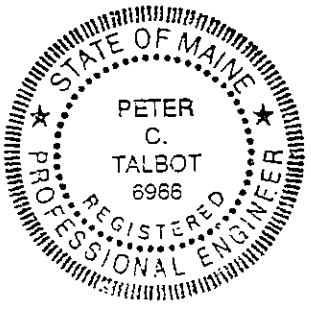

Larry W. Picking
Larry W. Picking
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SECTION 1

INTRODUCTION

1.1 GENERAL

This Report of PCB Cleanup documents the activities involved with removing and disposing of PCB-contaminated soils and materials, from three spill sites within the East Millinocket operation of Great Northern Nekoosa Corporation (GNN) at East Millinocket, Maine. The three sites are referred to as (1) the Chemi-Groundwood site, (2) the No. 6 Paper Machine site, and (3) the No. 5 Paper Machine site (refer to Figure 1). Great Northern Nekoosa Corporation is a wholly owned subsidiary of Georgia Pacific Corporation.

The remediation activities beginning with contractor mobilization was performed during the period July 17, 1989 through January 1991. Soils and groundwater investigations plus engineering and cleanup supervision was provided by Stone & Webster Engineering Corporation (SWEC). The cleanup of contaminated soils was performed by OH Materials Corporation (OHM) and the cleanup of the contaminated brick wall at the No. 5 Paper Machine site was performed by ENSR Corporation (ENSR). Onsite and offsite laboratory testing was conducted by Northeast Laboratory (NEL). Agency oversite was provided by a full-time representative of the United States Environmental Protection Agency (EPA), Region I during the cleanup of contaminated soils. A site inspection was made by the Maine DEP during the cleanup of a contaminated brick wall at the No. 5 Paper Machine site.

This report is provided pursuant to the requirements for a written report as outlined in Section XIV (Certification of Completion) of the Draft Consent

Agreement and Final Order between the EPA and GNN and is certification that all such activities have been completed in full satisfaction of the requirements of this Draft Consent Agreement and Final Order. It also provides the documentation required by the State of Maine Department of Environmental Protection (Maine DEP) stated in the Maine DEP Letter of Approval to GNN, dated June 14, 1989.

1.2 REPORT ORGANIZATION

The purpose of this report is to a) document the activities involved in the cleanup of the three spill sites and to b) present the technical and analytical results from the sampling, testing and groundwater monitoring programs that were in place to guide the cleanup work and confirm that the cleanup goals were attained.

Prior to actual cleanup, comprehensive investigations were conducted at each site, formal risk assessments were performed and considerable engineering was involved in defining the cleanup approach and preparing a Technical Specification for the cleanup effort. This phase of the work was carried out by SWEC and is documented in Data Packages and Remediation Plans for each site, which were submitted to the EPA, Region I and Maine DEP (refer to Figure 6). This work is briefly summarized in Section 2 of this report, Pre Cleanup Activities. The Technical Specification was then reviewed and approved by EPA, Region I and Maine DEP and formed the basis for contracts between GNN and OHM and GNN and ENSR to perform the cleanup work (refer to Figure 6).

After awarding the initial contract to OHM, a number of preliminary activities were necessary in order to prepare for actual removal and replacement of contaminated soil and brick wall material. These activities are described in Section 3, Initial Cleanup Activities. Summaries of actual site cleanups are presented in Sections 4, 5, and 6 for the Chemi-Groundwood, No. 6 Paper Machine, and No. 5 Paper Machine sites, respectively. A Groundwater Monitoring Program was operational before, during, and after the cleanup activities. A description of the Program and the results are presented in Section 7, Groundwater Monitoring. All data upon which the cleanup was based were collected in accordance with the approved Quality Assurance Project Plan. Quality Assurance audits results and analysis of data quality are presented in Section 8, Quality Assurance.

1.3 SPILL HISTORIES

1.3.1 Chemi-Groundwood Site

On August 17, 1970, a transformer located in an exterior alcove on the north side of the white liquor building failed due to a corrosion-related coolant loss of approximately 100 gallons. At the time of the failure, the transformer was energized and carried a light electrical load; it serviced areas of the mill outside the Chemi-Groundwood plant.

The transformer was removed and disposed of in accordance with applicable EPA and Maine DEP requirements in December 1981. From a total capacity of 920 gallons, only about 30 gallons of fluid remained in the unit at the time

it was removed. The fluid was identified from GNN records as Askarel, a mixture of PCB cogeners and chlorobenzene solvents.

1.3.2 No. 6 Paper Machine Site

The spill at the No. 6 Paper Machine site occurred on January 3, 1978, when a spare Allis-Chalmers 500 kVa transformer, stored outside the southeast corner of the No. 6 Paper Machine room, was accidentally damaged by heavy equipment plowing snow. The impact broke off a drain valve at the bottom of the transformer, releasing some of the cooling fluid. Based upon a review of records, the fluid was identified to be Askarel, consisting of a mixture of PCB cogeners and chlorobenzene solvents. GNN's best estimate of the spill volume was 600 gallons.

The spilled fluid was contained by construction of an earth dike, and sand was spread over the spill area to absorb free Askarel. Within 24 hours, the spread sand was collected and stored in barrels. The dike was left in place until the following spring to contain snowmelt. Additional cleanup efforts were completed in the springtime.

In mid-June 1985, excavation in this portion of the mill yard was started in connection with modernization of No. 5 and 6 Paper Machines. On August 16, 1985, an odor characteristic of Askarel was noticed in an excavation for the removal of old fire-line piping. Testing of soils within the excavation showed the presence of PCBs. Follow-up investigations to identify the extent of the contamination were begun immediately.

1.3.3 No. 5 Paper Machine Site

The spill at the No. 5 Paper Machine site occurred on May 14, 1981. As a result of an electrical failure, the lid of a transformer located in the courtyard at the northwest corner of the No. 5 Paper Machine room lifted on one side, splashing transformer fluid against the building and onto the ground. Based upon a review of records, the fluid was identified to be Askarel, consisting of a mixture of PCB cogeners and chlorobenzene solvents. GNN's estimate of the spill volume based upon discussion with workers who removed the transformer was 150 gallons.

SECTION 2

PRE CLEAN-UP ACTIVITIES

2.1 SITE INVESTIGATIONS

2.1.1 Chemi-Groundwood Site

During the period April 1986 through December 1987, a subsurface investigation that included 48 rotary soil borings and eight monitoring wells was conducted at the Chemi-Groundwood site to determine the extent of PCB contamination. These activities and data are summarized in a document entitled, Data Package for Chemi-Groundwood Site, dated April 6, 1988, which was submitted to the Maine DEP and the EPA Region I (refer to Figure 6).

2.1.2 No. 6 Paper Machine Site

During the period September 1985 to November 1987, a subsurface investigation that included 75 rotary soil borings and eight monitoring wells was conducted at the site to determine the extent of PCB contamination. These activities and data are summarized in a document prepared by SWEC entitled, Data Package for No. 6 Paper Machine Site, dated April 6, 1988, which was submitted to the Maine DEP and the EPA Region I (refer to Figure 6).

2.1.3 No. 5 Paper Machine Site

Two periods of activity preceded final cleanup at this site.

During the period August 28, 1985 through December 1985, a soil sampling program was initiated and a considerable amount of contaminated soil was removed.

During the period June 1987 through January 1988, 14 additional borings were drilled and six monitoring wells were installed to gather more data needed to devise additional cleanup plans. In August 1987, surface wipe samples were taken on the north side of the No. 5 Paper Machine building to determine the extent of PCB surface contamination. Both of these activities and data are summarized in a document prepared by SWEC entitled, Data Package for No. 5 Paper Machine Site, dated April 6, 1988, and submitted to the Maine DEP and the EPA Region I (refer to Figure 6).

2.1.4 Groundwater

As a part of the site investigations, 22 monitoring wells were installed near the three spill sites during the summer and fall of 1988. These wells were supplemented by 22 additional wells installed throughout the mill site in early summer 1989. The initial 22 wells were sampled on a quarterly basis, from winter 1988 through December, 1989. Water levels were monitored in all wells from installation through August 1990. Samples were analyzed for PCB and chlorobenzene. Details and results of the groundwater monitoring program are presented in Section 7 of this report.

2.2 CONCEPTUAL ENGINEERING AND RISK ASSESSMENT

The site investigations, as summarized in the Data Packages, defined the extent of contamination and the magnitude of the required cleanup efforts. After reviewing the Data Packages, EPA had additional concerns and comments which were transmitted to GNN. These were addressed in a report titled "Responses to EPA Comments on Data Packages" prepared by SWEC and dated

October 28, 1988 and submitted to EPA, Region I on that date. On February 2, 1988, SWEC began the planning and engineering necessary to formulate a conceptual approach to cleanup that would meet the requirements of the EPA and the Maine DEP. This work was completed on July 22, 1988. Details of the conceptual cleanup plan for each site are contained in three documents entitled: Remediation Plan for Chemi-Groundwood Site, Remediation Plan for No. 6 Paper Machine Site, and Remediation Plan for No. 5 Paper Machine Site. The documents are dated July 22, 1988, and were submitted to the Maine DEP and the EPA Region I for review and approval on July 26, 1988 (refer to Figure 6).

Each remediation plan includes a post-remediation risk assessment for both PCB and chlorobenzenes. These assessments were performed by Envirologic Data, Incorporated, of Portland, Maine. The risk assessments confirm that when completed, the defined remediations will be protective of health and the environment.

2.3 FINAL PLANS AND SPECIFICATIONS

Following review and approval of the conceptual plans by the EPA, SWEC began developing final plans and specifications on January 18, 1989. This effort resulted in a document entitled, East Millinocket Mill, PCB Remediation Project, Technical Specification, issued and submitted to the Maine DEP and EPA Region I in March 1989. The Technical Specification (including the drawings) became an integral part of the Draft Consent Agreement and Final Order between the EPA and GNN (refer to Section 1.1 of this report). It also served as the technical requirements document for a cleanup contract.

A separate specification was prepared and issued to ENSR Corp for removal/ replacement of the contaminated brick wall at the No. 5 Paper Machine site (refer to Section 6.2 of this report). In order to carry out the cleanup work at the Chemi-Groundwood site the demolition and removal of several structures was required to provide access. A specification was prepared by SWEC and a contract was let to ENSR Corp. for this activity (refer to Section 3.1 of this report).

2.3.1 Soil Classification and Utilization/Disposal Scheme

The soil cleanup was based on a three-part classification and utilization system for soil removed from the spill sites as follows:

1) Clean Soil: Soils with less than 50 ppm PCB content overlying or adjacent to more highly contaminated soil, as determined from test boring samples. The clean soil was removed in order to expose and excavate the contaminated soil. The clean soil was excavated to the limits shown on the drawings, stockpiled, and later used as backfill in the bottoms of excavations.

2) Questionable Soil: Soils whose disposition would be determined during the cleanup work by sampling and testing after these soils were exposed by excavating the overlying clean soil. These soils were treated as clean if test results indicated PCB content less than 50 ppm. If test results of these soils showed PCB content in excess of 50 ppm, they were treated as contaminated soil.

3) Contaminated Soil: Soils containing in excess of 50 ppm PCB as indicated from the soil boring sample tests. Contaminated soils were excavated to the limits shown on the drawings and transported by U.S. Pollution Control Inc. (USPCI), Dart Trucking Co., Inc. or Buffalo Fuel Corp. to a TASCA/RACA licensed hazardous waste disposal facility at CWM Chemical Services, Inc. (CWM) in Model City, New York or at USPCI's Grassy Mountain Facility in Utah.

Soil cleanup was specified as follows:

1) Clean soils were to be excavated, stockpiled, bermed and protected from runoff at a designated area on each site.

2) Contaminated soils were to be excavated, containerized and shipped to a licensed hazardous waste disposal facility.

3) Questionable soils were to be either tested in-place or at the staging/loadout area and dispositioned in accordance with the project's Quality Assurance Project Plan.

4) The sides and bottoms of the excavations were to be sampled and tested to confirm that soils remaining after excavation to specific grades were within the PCB target cleanup levels.

5) Follow-up excavation was to be performed as required as a result of the testing performed in Item 4.

6) The excavations were to be backfilled with clean fill. At the Chemi-Groundwood and No. 5 Paper Machine sites, the first material to be placed in the excavations was to be the clean stockpiled soil, followed by backfill obtained from an off-site source. At the No. 6 Paper Machine site, concrete was to be placed at the base of the excavation, followed by clean stockpiled soil and final backfill from an off-site source.

At a minimum on all three sites, the fill material from grade to 2 feet below grade was to be obtained from an off-site source.

2.3.2 Cleanup Control and Confirmation

A formal sampling and testing plan was devised in order to direct the remediation work and to document that the cleanup was carried out to the extent agreed upon by EPA and Maine DEP. The plan was based on fast turn-around of analytical results using a mobile laboratory and screening methods for analysis. The screening methods were developed prior to cleanup and were correlated to the fixed laboratory analysis and standard procedures described in the Project's QAPP. The screening method was developed by Stone & Webster in consultation with EPA, Region I and Maine DEP (refer to Section 3.2 of this report).

2.4 QUALITY ASSURANCE PROJECT PLAN

Along with the preparation of the final plans and specifications, a sampling and testing program was developed by SWEC and is described in the document

entitled Quality Assurance Project Plan (QAPP), which was submitted to the EPA Region I and Maine DEP in March 1989 (refer to Figure 6). This document defines the sampling protocols, analytical methods, quality assurance objectives and quality control checks that were used to support the precision, accuracy, and representativeness of the collected data at the three sites. Quality Assurance audit results and analyses of data quality are presented in Section 8, Quality Assurance.

SECTION 3

INITIAL CLEANUP ACTIVITIES

3.1 DEMOLITION OF ABOVEGROUND STRUCTURES

During the early development of the remediation plans, it became apparent that the excavation required to cleanup the Chemi-Groundwood site would jeopardize the structural integrity of the White Liquor Building and the large Sulfur Silo (refer to Plot Plan of Mill Figure 1). Since these structures were no longer used by the mill, the aboveground portions of these structures were demolished and removed by ENSR Corporation during the late spring and early summer of 1989, prior to the cleanup work. The foundations and floor slabs of these structures, which had a high probability of being contaminated, were left in place and removed as part of the PCB cleanup.

3.2 ONSITE LABORATORY AND ANALYTICAL SCREENING

In order to complete the cleanup activities in a timely manner, rapid return of analytical results was required. Rapid analysis was provided by developing in consultation with EPA screening criteria based on abbreviated analytical procedures and by a mobile laboratory set up temporarily at the project site for analysis of soils, water, concrete, equipment decontamination blanks, and wipe samples.

The abbreviated analytical (screening) procedures were based on a 1-hour extraction process that permitted laboratory turnaround of 12 hours or less. The initial screening procedure was calibrated against Method 8080 extractions performed on sample splits from the three sites during the course of

the initial field investigations. Methods and correlations of the initial procedure are documented in the Data Packages for each site (refer to Section 2.1 of this report). At the request of EPA Region I and Maine DEP, the screening procedure was modified to include methanol/water in the extraction procedure. This more rigorous procedure was adopted without a corresponding change to the 18 ppm screening Action Level, resulting an additional level of conservatism. This conservatism was confirmed by EPA, Region I in their audit results of October 5 and 6, 1989, where they compared the test results from both methods (screening vs. EPA Method 8080) on 21 sample splits (refer to Section 8.1 of this report and Appendix L of the Data Package for Report of PCB cleanup). Final sampling, screening, and testing procedures are further documented in the Quality Assurance Project Plan, issued in March 1989, revised in July 1989, including all Addenda through October 6, 1989.

The sampling and testing associated with the cleanup of the PCB contaminated brick wall at the No. 5 Paper Machine Site was also conducted in accordance with this Quality Assurance Project Plan.

3.3 WATER TREATMENT FACILITY

3.3.1 General

A temporary water treatment system was designed and constructed by OHM in conformance with the Technical Specification to remove residual PCB and chlorobenzene from construction dewatering during the excavation work. The

water treatment system was designed to discharge less than 0.5 parts per billion (ppb) of PCB as Aroclor 1260 and less than 10 ppb of chlorobenzene into the mill's sewer system.

The water treatment system was placed within the working limits of the Chemi-Groundwood site and processed water from the following sources:

- groundwater from dewatering the Chemi-Groundwood site
- groundwater from dewatering the No. 5 Paper Machine site
- groundwater from dewatering the No. 6 paper Machine site
- runoff collection from the staging/loadout area
- drainage and rinsate from equipment and personnel decontamination where no detergent or chemical solvents were used.

The water from the No. 5 Paper Machine site, the No. 6 Paper Machine site and runoff water from the staging/loadout area was transferred to the water treatment system in a self-contained vacuum trailer. Additional water storage systems were provided at these sites by OHM to accommodate this task.

3.3.2 Water Treatment System

Initially, the water treatment system consisted of an equalization/sedimentation tank, transfer pumps, high capacity duplex strainer/bag filter arrangement and a twin carbon filter unit connected in series. Additional instrumentation was provided to monitor/record the following:

- continuous monitoring of level in sedimentation tank-freeboard set at 1 foot

- quick power disconnect for transfer pump

- continuous monitoring of differential pressure on filters

- water treatment system flow rate

- daily cumulative flow volume

- continuous monitoring of differential pressure indicators on the filter units

Sampling and testing of the effluent water during the startup operation of the water treatment system indicated the presence of PCB's after the first carbon unit. This indicated that recirculation of the treated water was necessary to meet the discharge requirement. The following modifications/ additions were made to the water treatment system to meet the discharge requirements without recirculation.

- A 50,000 gallon sedimentation pool. Additional surface storage pools were also provided.

- A third holding tank for increased detention time before treatment.

- A mixed media filter (6-ft by 6-ft with a 4.8 ton capacity). The column media consisted of an 8 to 12 inch thickness of Klensorb 100, a granular absorbent media which removed insoluble oil, followed by 1 1/2 feet of 0.55-0.65 millimeters effective grain size, underlain by 2 feet of 3/8 inch coarse aggregate.

- A clean water holding tank for mixed media backflushing

- A bag filter setup in series. The filter membranes reduced particles in a downstream direction from 25 microns to 1 micron.

- A 4000-pound carbon unit downflow from the dual carbon unit

- A clean water tank used during backwash operations.

At the completion of the water treatment tasks, the system was decontaminated and all solid waste from the system was bulked with the contaminated soils and solids for manifesting, transportation, and disposal at a licensed hazardous waste facility.

3.3.3 Sampling and Testing

Wastewater samples were collected from sample ports installed on the wastewater treatment system and analyzed for both PCB and chlorobenzenes. The final effluent upstream of the discharge to the plant sewer system was sampled on a weekly basis while the influent to the last carbon treatment unit was sampled on a daily basis to monitor for PCB breakthrough. Sampling

and analysis of wastewater was done in accordance with the procedures detailed in the Quality Assurance Project Plan.

Of 53 samples of effluent water tested, only 5 samples indicated traces of PCB up to 2.7 ppb, and only 4 samples indicted traces of chlorobenzene, up to 5.6 ppb. Compared to results of the influent testing, the data indicate the facility operated satisfactorily.

The results of the sampling associated with the water treatment facility plus a summary of the quantity of wastewater processed are presented in Appendix H of the Data Package for Report of PCB Cleanup.

3.4 LOADOUT AREA

A staging/loadout area was constructed in the vicinity of the Chemi-Ground-wood site where contaminated and questionable soils and debris from the three sites were stockpiled for testing of questionable material and final shipment of contaminated material by the following licensed hazardous waste transportation firms USPCI, Dart Trucking Co., Inc. or Buffalo Fuel Corp.

The operation of the staging/loadout area included the following:

- Soil and debris was placed on a protected impermeable liner which was bermed to prevent run-on/runoff.

- Stockpiles were covered to prevent fugitive dust, erosion or infiltration from precipitation.

- Liquids collected inside the loadout area were periodically collected and transported in a self-contained vacuum trailer to the water treatment facility for processing

- Questionable soils which tested less than 50 ppm PCB concentration were removed and stockpiled with clean soil (reference quantity of questionable soils shown in table G-1 included in Appendix G of the Data Package for Report of PCB Cleanup).

At the completion of the job, all materials associated with the staging/ loadout area including stockpile covers, the protective sand buffer, impermeable poly liner, geo fabric and straw bail berms were removed and disposed of as contaminated waste. In addition, the soil surface underlying the stockpile area was repeatedly sampled and tested. Contaminated soils were removed and disposed of as contaminated waste until surface sampling and testing of the staging/load out area showed levels of PCB contamintion below cleanup standards. The locations and results of the samples taken are shown in Table F-6 and Figure F-7 included in Appendix F of the Data Package for Report of PCB Cleanup.

The contaminated waste associated with the staging/loadout area was tranported by USPCI, Dart Trucking Co., Inc., or Buffalo Fuel Corp. to a licensed hazardous waste disposal facility at CWM's disposal facility in Model City, New York or USPCI's Grassy Mountain Facility in Utah.

Manifests, transport, and disposal of contaminated soil and debris are summarized in Appendix G of the Data Package for Report of PCB cleanup.

3.5 HEALTH AND SAFETY

3.5.1 Cleanup of Contaminated Soils

The Health and Safety Plan for the cleanup of contaminated soils was developed and implemented by OHM in conformance with the Technical Specification. OHM also provided for health and safety personnel. As an independent check, SWEC contracted with Hygienics, Inc. to provide health and safety oversite.

All work was performed in accordance with the applicable federal, state and local regulations as well as the EPA and Maine DEP approved remediaton plans and consent order.

3.5.2 Cleanup of Contaminated Brick Wall

The Health and Safety Plan for the cleanup of the contaminated brick wall at the No. 5 paper machine site was developed and implemented by ENSR as part of its contract. As an independent check, Health and Safety oversight was provided by Industrial Hygiene New England, Inc., which was contracted directly by GNN.

All work was performed in accordance with the applicable federal, state and local regulations as well as, EPA and Maine DEP approved remediation plans.

SECTION 4

CLEANUP OF CHEMI-GROUNDWOOD SITE

4.1 GENERAL

OH Materials Corporation (OHM) began cleanup activities at the Chemi-Groundwood Site on August 14, 1989 and finished the soil remediation in December 1990. the site was paved by others in August 1990. Since additional space was available, the following facilities common to all three sites were located within the permissible battery limits of the Chemi site:

- the water treatment facility
- the personnel decontamination trailer
- OHM equipment and field office trailers

Initial activities to establish and maintain site control included the following:

1. Survey control points were located and maintained in the clean area allowing OHM to control the entire Chem-Groundwood site excavation, both horizontally and vertically for the duration of the project.

2. A 10-foot by 10-foot grid was established in the work area for the purpose of sampling and testing the soil in accordance with the projects Quality Assurance Project Plan (QAPP).

3. The excavation was staked and all utilities within the excavation limits were located.

4. Site structures and foundations were surveyed and located.

5. A survey program to monitor movement of buildings adjacent to the excavation was established and maintained for the duration of the project. No movement of any structures was detected.

4.2 REFERENCES

Documents and drawings prepared and issued by SWEC that apply to the Chemi-Groundwood site include the following:

DOCUMENTS

Description
Data Package for Chemi-Groundwood Site
Remediation Plan for Chemi-Groundwood Site
Quality Assurance Project Plan (QAPP) including Addenda through October 6, 1989
Technical Specification, PCB Remediation Project, East Millinocket Mill

DRAWINGS

Drawing No.	Title
YB-19038	Chemi-Groundwood Site, As-Built Excavation (PLAN)
YB-19039	Chemi-Groundwood Site, As-Built Sections Sheets 1 to 7

These drawings are included in Appendix K of the Data Package for Report of PCB Cleanup.

4.3 DEMOLITION AND DISPOSAL OF SUBSTRUCTURES

The cleanup at the Chemi-Groundwood site required demolition and removal of the following reinforced concrete foundations and substructures.

- White liquor building - foundations, concrete slabs on grade, and equipment foundations
- Liquid sulfur tank foundation
- Transformer and disconnect switch foundation
- Sulfur silo substructure and conveyor tunnel
- Track hopper substructure
- Pipe rack foundations
- Instrument shed foundation
- Miscellaneous pipe support foundations
- Sulfite tank (TK-2A) foundations

The demolition and removal of contaminated concrete proceeded in a manner which did not disturb adjacent structures and utilities. Concrete dust was minimized by applying a water spray on the concrete during demolition. Reinforcing steel, when encountered, was first separated from the concrete, then cut into smaller lengths and disposed of as contaminated material.

Concrete rubble from areas within the limits of contamination were disposed of as contaminated material by USPCI, Dart Trucking Co. Inc, or Buffalo Fuel Corp. to a TASCA/RACA licensed hazardous waste facility at USPCI's Grassy Mountain Facility in Utah or CWM Chemical Services, Inc. (CWM) Model City, New York.

4.4 EXCAVATION DEWATERING

The planned depth of the excavation at the Chemi-Groundwood Site extended 10 feet below the water table. The actual excavation extended even deeper, to as much as 13 feet below the water table in some areas. This, plus the relatively higher permeability of soils at the site required the installation of a well point dewatering system to protect soils supporting adjacent foundations. Additional dewatering via trenching and sumping at the excavation bottom was required to keep the excavation reasonably dry.

The well-point dewatering system remained operational through the removal of contaminated and questionable soil and during backfilling.

On more than one occasion OHM had difficulty in keeping the excavation reasonably dry. During the first occurrence, the excavation work was stopped and a recovery plan was developed and implemented for the remainder of the earthwork. The water removed from the excavation and the water collected in the well-point headers were processed through the water treatment facility prior to discharging into the mill sewer system (refer to Section 3.3 of this report).

4.5 EXCAVATION AND DISPOSAL OF SOIL

The excavation was conducted in a manner which minimized the generation of dust. When necessary, dry soil was moistened prior to excavation. Air monitoring was conducted periodically by contractor to determine appropriate level of worker protection in the exclusion zone and also at the perimeter

of the work area to assess off-site impact. All readings taken at the perimeter of the work area were within acceptable limits. A soil berm was built around the excavation to prevent surface runoff from entering the excavation.

Excavated material within the clean areas of the excavation were separately stockpiled, within site limits covered and bermed to prevent runoff, and later used as backfill at at the bottom of the excavation. Questionable and contaminated soils were separately staged on protective poly, covered and protected from precipitation and runoff. The soils were then transported via a lined, covered 10-cubic yard truck to the staging/loadout area (refer to Section 3.4)

As a result of the sampling and testing program performed during the excavation, additional contaminated soils were removed beyond the original excavation limits at the bottom of the excavation and on the northern slope. In addition, testing of soils along the east slope of the completed excavation indicated the presence of a thin zone of soil, approximately 25 ft. long, having PCB concentrations in excess of 50 ppm (refer to Appendix F, Figure F-1 included in the Data Package for Report of PCB Cleanup). This soil was left in place as further excavation in this area would compromise the structural integrity of the Chemi-Groundwood Building. A polyliner was placed along this slope prior to backfilling.

Also, during the excavation and stockpiling of the clean soils, approximately 1000 yards of soil containing an oily substance with a petroleum odor was encountered. This material was stockpiled separately from the remainder of

the clean soils. While sampling and testing of the stockpiled material indicated no PCB contamination, some amounts of tannin-like substances and petroleum hydrocarbons were present (refer to Appendix F, Table F-11 included in the Data Package for Report of PCB Cleanup). The material was disposed of by Clean Harbors of Braintree, Massachusetts under a separate contract at a licensed waste disposal facility in Hampden, Maine.

The final limits of the excavation performed at the Chemi-Groundwood Site are shown on Drawings YB-19038 and YB-19039, Sheets 1 to 7 included in Appendix K of the Data Package for Report of PCB Cleanup. The disposition of contaminated materials from the site are included in Table G-2, Appendix G of the Data Package for Report of PCB Cleanup.

Stockpiled clean material was initially placed at the bottom of the excavation and borrow material obtained from an off-site location followed. The fill material from finished grade to at least two feet below grade consisted of bank run gravel from an off-site location. This same material was placed a minimum of 3-feet or to the excavated surface, whichever was less, around the bark press discharge pipe (pressate pipe) which remained within the excavation.

The surface area above the site was paved in August and the limits are shown on Drawing YB-16313, included in Appendix K of the Data Package for Report of PCB Cleanup.

4.6 UNDERGROUND UTILITIES

All underground utilities within the excavation were removed and then disposed of similar to the concrete rubble in Section 4.3 with the exception of the pressate pipe extending from the bark preparation building to catch basin No. 6 located at the southern end of the excavation. The pressate pipe between the outside of the bark preparation building and catch basin No. 6 was cleaned, disassembled, placed in storage and replaced during backfilling. Similarly, the existing catch basin located along the discharge line between the sump and catch basin No. 6 was removed and reinstalled. Backfill around the pipe was from an off-site source.

4.7 SAMPLING AND TESTING OF QUESTIONABLE SOILS

4.7.1 General

The Quality Assurance Project Plan (QAPP) initially required in-situ testing of questionable soils, screening of samples at the onsite mobile laboratory, and 24-hour determination of questionable soil disposition (i.e., as either clean or contaminated). Sampling was to be done manually using hand augers. Disposition of the soils (i.e., as clean or contaminated) would be determined prior to their excavation.

Due to the sandy nature of much of the questionable soils at this site, auger holes tended to cave rapidly, resulting in contamination of the lower soils zones from the upper zones.

After the first two sampling sequences in-situ sampling was abandoned and an alternate method was devised. The alternate method consisted of sampling stockpiled "questionable" material in the staging/loadout area to determine whether or not "questionable" soil exceeded the action level criterion for PCB's.

Approval from the onsite EPA representative was obtained for this change in procedure, and an addendum to the Quality Assurance Project Plan was submitted to the EPA and the Maine DEP (refer to Figure 6).

4.7.2 Sampling Method

Questionable soils were excavated and transported to the staging/loadout area in a lined dump truck, then stockpiled in an area isolated from other materials in the loadout area. A stockpile was considered the amount of soil unloaded from a single dump truck and contained no more than 15 cubic yards.

The sampling and disposition of each stockpile was conducted in accordance with the Amendment to Section 4.2, Soil Core Sampling, of the QAPP dated October 6, 1989.

4.7.3 Testing Method

Analysis of all soil samples was performed in accordance with the projects Quality Assurance Project Plan (QAPP) including all Amendments through

§October 6, 1989. The test results are shown in Appendix F of the Data Package for Report of PCB Cleanup.

4.8 SAMPLING AND TESTING OF FINISHED EXCAVATED SURFACES

During excavation and prior to placing backfill, 152 surface soil samples were taken. Sampling and testing was done in accordance with the QAPP. The sample locations are shown on Figure F-1, included in Appendix F of the Data Package for Report of PCB Cleanup. The results of the testing are shown in Appendix F.

4.9 DEVIATIONS AND DIFFERING CONDITIONS

Refer to Section 4.7, Sampling and Testing of Questionable Soils.

4.10 CHRONOLOGY OF EVENTS

The major events which occured during the cleanup of the Chemi-Groundwood site are shown in Figure 4.

SECTION 5

CLEANUP OF NO. 6 PAPER MACHINE SITE

5.1 GENERAL

OH Materials Corporation (OHM) began cleanup activities at the No. 6 Paper Machine site on October 3, 1989 and finished the soil remediaion in November 1989. The site was paved by others in July 1990. Initial activities to establish and maintain site control during the cleanup included the following:

1. Survey control points were located and maintained in a clean area of the site allowing OHM to control the entire No. 6 Paper Machine site, horizontally and vertically for the duration of the project.

2. A 10-foot by 10-foot grid was established in the work area for the purpose of sampling and testing the soil in accordance with the project's Quality Assurance Project Plan (QAPP).

3. Site structures and foundations were surveyed.

4. The excavation was surveyed and utilities located within the excavation limits were marked.

5. A survey program to monitor movement of buildings adjacent to the excavation was established and maintained for the duration of the project. No movement of any structures was detected.

5.2 REFERENCES

Documents and drawings prepared and issued by SWEC that apply to the No. 6 Paper Machine site include the following:

DOCUMENTS

Description
Data Package for No. 6 Paper Machine Site
Remediation Plan for No. 6 Paper Machine Site
Quality Assurance Project Plan (QAPP) including Addenda through October 6, 1989
Technical Specification, PCB Remediation Project, East Millinocket Mill

DRAWINGS

Drawing No.	Title
YB-19042	No. 6 Paper Machine Site, As-Built Excavation (Plan)
YB-19043	As-Built Relocation of Underground Utiltiies
YB-19044	No. 6 Paper Machine Site, As-Built Sections

These drawings are included in Appendix K of the Data Package for Report of PCB Cleanup.

5.3 EXCAVATION DEWATERING

The excavation at this site extended approximately 3 feet below the static groundwater table. Excavation dewatering was performed using a mobile vacuum recovery unit.

The dewatering effluent was collected and transported to the water treatment facility located at the Chemi-Groundwood site via the mobile vacuum recovery unit. The effluent was processed through the water treatment system reducing PCB and chlorobenzene concentrations to approved levels and then discharged into the mill's sewer system. The results of the sampling and testing plus a summary of the volume of wastewater processed from the No. 6 Paper Machine site are included in Appendix D of the Data Package for Report of PCB cleanup.

5.4 EXCAVATION AND DISPOSAL

Cleanup at the No. 6 Paper Machine site required excavation of contaminated soils adjacent to the foundation of the No. 6 Paper Machine Building. Since this building houses machinery critical to the operation of the mill and cannot tolerate misalignment caused by foundation settlement, the excavation depth was limited to a maximum of 14 feet. A concrete panel scheme was developed to protect the building foundation from settlement during excavation. Also cement grout was utilized to provide additional stabilization to the soils supporting the foundation. Some contaminated soil was left in place at the bottom of the excavation. As a protective barrier against future excavation of these contaminated soils a concrete mat (1 1/2 ft thick minimum) was placed at the bottom of the excavation.

Throughout the excavating and backfilling phases, berms were installed and maintained to prevent surface runoff from entering the excavation. To prevent rain water from inadvertent contact with contaminated and/or questionable soils, permalon (Plyex-150) liners were provided and maintained.

In addition, polyethylene sheeting was also provided along the slopes of the excavation to guard against surface erosion.

Contaminated soils were removed and loaded directly into modular containers and transport by USPCI to their licensed hazardous waste disposal facility at Grassy Mountain, Utah.

Due to the small volume of questionable soils at the No. 6 site, these soils were treated and disposed of as contaminated material.

The disposition of contaminated materials from the No. 6 Paper Machine Site are included in Appendix G of the Data Package for Report of PCB Cleanup.

Confirmatory sampling and testing of the soils along the slopes of the finished excavation indicated that no additional excavation was necessary. The results of the confirmatory surface soil sampling are shown on Figure F-2 included in Appendix F of the Data Package for Report of PCB Cleanup.

The final limits of the excavation performed at the No. 6 Paper Machine Site are shown on Drawings YB-19042, YB-19043 and YB-19044, sheets 1 to 5 included in Appendix K of the Data Package for Report of PCB Cleanup.

As a result of site specific soil conditions which permitted steeper excavation slopes than originally planned, some clean soil was left in place on the south side of the excavation.

The excavation was backfilled after the contaminated materials had been removed and the concrete mat had been placed. Stockpiled clean material was placed as initial backfill on the top of the concrete mat and clean borrow material obtained from an off-site source was placed on top. The fill material from finished grade to at least two feet below grade consisted of clean bank run gravel from an off-site source. One soil sample was taken from the clean bank run gravel and analyzed for PCB content. The result of the soil sample is shown on Table F-5 included in Appendix F of the data Package for Report of PCB Cleanup and shows a PCB contamination level less than the method detection limit of 1 mg/kg.

The surface area above the site was paved in late July 1990, and the limits are shown on Drawing YB-16313 included in Appendix K of the Data Package for Report of PCB Cleanup.

5.5 UNDERGROUND UTILITIES

All underground utilities within the excavation were removed and then disposed of as contaminated material. Prior to cleanup activities, a yard storm sewer system was bypassed and constructed outside of the contaminated area. A section of the yard fire protection piping was also lowered to avoid interference with the relocated storm sewer system. The as-built locations of these utilities are shown on Drawing YB-19043 included in Appendix K of the Data Package for Report of PCB Cleanup.

Also, the computer electrical grounding system west of the MCC room at column line 33 did not require relocation as originally planned. This system had been relocated by GP in the past.

5.6 SAMPLING AND TESTING OF FINISHED EXCAVATED SURFACES

Prior to placing backfill, 14 surface soil samples were taken along the slopes of the finished excavation. Sampling and testing was done in accordance with the QAPP. The sample locations are shown in Figure F-2. The results of the testing and Figure F-2 are included in Appendix F of the Data Package for Report of PCB Cleanup. Test results were all less than the action limit, indicating effective removal of required contaminated soil prior to backfilling.

5.7 DEVIATIONS AND DIFFERING CONDITIONS

Minor field changes had to be made to the design of the storm sewer line bypass (refer to Drawing YB-19043 included in Appendix K of the Data Package for Report of PCB Cleanup). This work was well outside the contamination zone and did not affect the cleanup work.

Due to the small volume of questionable soil at the No. 6 site, these soils were not sampled and tested as specified, but were treated as contaminated, manifested and disposed of offsite to a licensed hazardous waste disposal facility.

5.8 CHRONOLOGY OF EVENTS

The major events which occurred during the cleanup of the No. 6 Paper Machine site are shown in Figure 4.

SECTION 6

CLEANUP OF NO. 5 PAPER MACHINE SITE

6.1 SOIL REMEDIATION

6.1.1 General

OH Materials Corporation (OHM) began soil cleanup activities at the No. 5 Paper Machine Site on September 11, 1989 and finished the soil remediaiton in November 1990. The site was paved by others in July 1990. Initial activities to establish and maintain site control during the cleanup included the following:

1. Exploratory excavations were performed around the 20 inch diameter fresh water line to determine location of existing pipe connections. This was performed by OHM on August 10 and 11, 1989.

2. Survey control points were located and maintained in a clean area of the site allowing OHM to control the entire No. 5 Paper Machine site horizontally and vertically for the duration of the project.

3. A 10-foot by 10-foot grid was established in the work area for the purpose of sampling and testing the soil in accordance with the project's Quality Assurance Project Plan (QAPP).

4. Site structures and foundations were surveyed and located.

5. The excavation was staked and utilities located within the excavation limits were located.

6. A survey program to monitor movement of buildings adjacent to the excavation was established and maintained for the duration of the project. No movement of any structures was detected.

6.1.2 References

Documents and drawings prepared and issued by SWEC that apply to the soil remediation of the No. 5 Paper Machine site include the following:

DOCUMENTS

Description
Data Package for No. 5 Paper Machine Site
Remediation Plan for No. 5 Paper Machine Site
Quality Assurance Project Plan (QAPP) including Addenda through October 6, 1989.
Technical Specification, PCB Remediation Project, East Millinocket Mill

DRAWINGS

Drawing No.	Title
YB-19040	No. 5 Paper Machine Site, As-Built Excavation (Plan)
YB-19041	No. 5 Paper Machine Site, As-Built Sections

These drawings are included in Appendix K of the Data Package for Report of PCB Cleanup.

6.1.3 Schedule Restrictions

Work at the No. 5 Paper Machine site required coordination with time restrictions imposed by ongoing mill activities. The work area could not be barricaded until after September 1, 1989. Work which was specified in the Technical Specification and which would impact the mill's service water system had to be performed during a scheduled 2-day mill shutdown, September 12 and 13, 1989.

6.1.4 Underground Utilities

The 20-inch transite pipe (supply line for mill's service water system) located within the excavation limits was initially designated to be replaced with ductile iron pipe. Work associated with this pipe which would have an impact on the mill's service water system was to be performed during a 2-day mill shutdown scheduled for September 12 and 13, 1989.

Exploratory excavations performed in August 1989 in the immediate area of the 20-inch transite pipe indicated that the flange couplings as shown on design drawings did not exist along this length of pipe as expected. It became apparent that the removal and replacement of this section of pipe could not be accomplished within the 2-day mill shutdown. Instead, the contaminated soil surrounding the top of the pipe was excavated and removed to elevation 290.3 as shown on Drawings YB-19041 sheets 1 to 4 included in Attachment K of the Data Package for Report of PCB Cleanup.

Approximately 2.5 c.y. of contaminated soil, having a maximum PCB concentration of 70 PPM, was left in place adjacent to the west side and under the transite pipe as further excavation in these areas would jeopardize the integrity of the transite pipe. Backfill placed along the transite pipe was from an off-site source. In addition, to prevent inadvertent contact with the remaining contaminated soils and 20-inch transite pipe during future excavations, concrete was placed along the west side as well as along the top of the pipe as shown in Drawings YB-19041 sheets 1 to 4 included in Attachment K of the Data Package for Report of PCB Cleanup.

All other existing utilities within the limits of the excavation were located and marked on the ground. During the excavation, these utilities were protected or removed as required.

6.1.5 Excavation Dewatering

Similar to the No. 6 Paper Machine site excavation, dewatering effluent was collected and transported to the water treatment facility located at the Chemi-Groundwood site using a mobile vacuum recovery unit (refer to Section 3.3 of this report).

The collected effluent was then processed through the water treatment facility reducing PCB and chlorobenzene concentrations to approved standards and finally discharged into the mills sewer system. The results of the sampling and testing done in accordance with the QAPP plus a summary of the volume of wastewater processed from the No. 5 Paper Machine site is included in Appendix H of the Data Package for Report of PCB Cleanup.

Timely completion of the excavation work eliminated the necessity of special measures to prevent surface runoff from entering the excavation.

6.1.6 Excavation And Disposal

The excavation was conducted in a manner which minimized the generation of dust. When necessary dry soil was moistened prior to excavation. Air monitoring was conducted periodically by the contractor to determine appropriate level of worker protection in the exclusion zone and also at the perimeter of the work area to assess off-site impact. All readings taken at the perimeter of the work area were within acceptable limits. Care was also exercised to prevent cross contamination of soils. Excavated clean soils were separately stockpiled, covered with 6 mil polyethylene, and protected from runon/runoff in a designated clean area on the site. These clean soils were later used at the bottom of the excavation.

Contaminated materials were temporarily staged on protective poly, covered, and protected from precipitation and runoff. The contaminated materials were then transported to the staging/loadout area in a lined dump truck where they awaited disposition to a licensed hazardous waste facility (refer to Section 3.4 of this report).

Concrete foundations encountered during the excavation were removed in segments and transported to the Chemi-Groundwood site for further demolition. The concrete rubble/debris was then transported to the staging/loadout area for disposition to a licensed hazardous waste facility (refer to Section 3.4 of this report).

Surface soil sampling and testing performed on the finished surfaces of the excavation confirmed that contaminated soils with PCB concentrations in excess of 50 ppm had been removed and no additional excavation was necessary. The results of the surface soil samples taken are shown on Figure F-3 included in Appendix F of the Data Package for Report of PCB Cleanup.

The excavation was backfilled after all contaminated materials had been removed except for the small amount of contaminated soils left in place adjacent to and underneath the 20 inch transite pipe (refer to Section 6.1.4). Stockpiled clean material was placed at the bottom of the excavation first and borrow material from off-site followed. The fill material from finished grade to at least two feet below grade consisted of clean bank run gravel from an off-site source. This similar material and/or concrete was placed in a 3 ft diameter or to the excavated surface, whichever was less, around all utilities which remained within the excavation.

The surface area above the site was paved in July 1990 and the limits are shown on Drawing YB-16313 included in Appendix K of the Data Package for Report of PCB Cleanup.

6.1.7 Sampling And Testing Of Finished Excavated Surfaces

During excavation and prior to placing the backfill, 13 soil samples were taken in accordance with the QAPP. Three samples were taken specifically from the soil left in place around the transite pipe. Results of the sampling and testing program are summarized in Appendix F of the Data Package for Report of PCB Cleanup.

6.1.8 Deviations and Differing Conditions

Encapsulation, rather than replacement of the transite pipe (refer to Section 6.1.4 of this report), was a modification to the Technical Specification, which was approved by the EPA and Maine DEP.

6.1.9 Chronology Of Events

The major events which occurred during the cleanup of the No. 5 Paper Machine site are shown in Figure 4.

6.2 REMEDIATION OF BRICK WALL

6.2.1 General

As documented in the Data Package for the No. 5 Paper Machine site (issued April 6, 1988), failure of the transformer resulted in contamination of an adjacent exterior brick wall of the paper machine building.

The original plan as discussed in the Remediation Plan for site No. 5 called for decontamination of the wall by surface washing, reducing PCB concentration below clean up standards of 100 µg/100 cm^2, and covering the wall with metal siding to prevent inadvertent contact of the remaining contaminated surface by mill workers. The original plan also called for preliminary washing and testing of the wall, which if proved successful, would be the technique used to reduce the surface contamination to approved standards.

Several tests of the wall were performed and the results showed that the existing PCB contamination could not effectively be reduced by wall washing. A summary of the testing performed on the wall is shown in Table F-13 included in Appendix F of the Data Package for Report of PCB Cleanup.

Further bulk sampling and testing of the brick and mortar from a highly contaminated area of the wall showed that PCB had penetrated into both the brick and mortar. The test results revealed high concentrations of PCB toward the exterior (exposed) side of the first wythe of brick. However, PCB concentrations quickly reduced to less than 10 ppm towards the middle and interior side of the first wythe of brick. A summary of the tests performed on both the brick and mortar is shown in Table F-12 and Figure F-4 included in Appendix F.

Based on the above results, the document 'Guidelines for Removing Brick', was submitted on November 7, 1989, to the U.S. EPA, Region I office and Maine DEP. This document discussed an alternate proposal to remove the exterior wythe of contaminated brick and replace with new clean brick.

Additional wipe tests were taken on the brick wall to better define the upper limits of PCB contamination. These tests were performed by SWEC on April 4, 1990, and are shown on Drawing AB-19077 included in Appendix J of the Data Package for Report of PCB Cleanup. These test results along with the sample results shown in Figure 13 found in the Data Package for No. 5 Paper Machine site were used to define the limits of brick removal.

The remediation of the brick wall was performed by ENSR Corporation (ENSR), under SWEC and GNN supervision, during the period September 10, 1990 to December 14, 1990. A Work Plan/Transportation Plan for brick wall removal and replacement was developed by ENSR, approved by SWEC and GNN, and submitted to the EPA and Maine DEP on September 21, 1990.

The plans were prepared in accordance with the Technical Specifications for PCB Contaminated Brick Wall Removal/Replacement issued September, 1990, by SWEC and submitted to the EPA and Maine DEP on September 18, 1990.

All work associated with the remediation of the brick wall was performed in accordance with the approved Work Plan/Transportation Plan.

6.2.2 References

The following documents and drawings were prepared and issued by SWEC for the No. 5 Paper Machine Brick Wall removal/replacement.

DOCUMENTS

Description
Data Package for No. 5 Paper Machine site
Remediation Plan for No. 5 Paper Machine Site
Quality Assurance Project Plan (QAPP) including Addenda through October 6, 1989.
Technical Specifications for PCB Contaminated Brick Wall Removal/Replacement No. 5 & 6 Paper Machine Building.
Work Plan for Brick Wall Removal and Replacement at No. 5 & 6 PM Building

DRAWINGS

AB-19077	No. 5 Paper Machine Site-Wipe Sample Locations
SB-19078	No. 5 Paper Machine Site-Brick Wall Repair-Evaluation
SB-19079	No. 5 Paper Machine Site-Brick Wall Repair-Details
SB-19122	No. 5 Paper Machine Site-Brick Wall Repair-Details.

These drawings are included in Appendix K of the Data Package for Report of PCB Cleanup.

6.2.3 Temporary Containment Enclosure

A temporary containment enclosure encompassing the contaminated portion of the brick wall was constructed and maintained through the duration of brick removal and replacement of new brick. The enclosure served as a barrier for fugitive dust emission and containment of hazardous materials. The enclosure also provided working surfaces from which wall demolition and repair activities were performed.

The enclosure was constructed on a protective floor liner consisting of two layers of 60 mil high density polyethylene (HDPE) which lay on the top surface of the finished pavement.

The enclosure consisted of an extensive self-supporting scaffolding system anchored to the brick wall at several locations for horizontal stability. The roof consisted of plywood decking on top of lightweight aluminum joists which was then secured to the scaffolding system. A nylon reinforced

plastic fabric (3-layer, linear low density polyethylene copolymer with reinforced heavy duty nylon cord) was then secured to exterior sides and roof of the enclosure. The nylon reinforced plastic fabric was also affixed to the brick wall and the poly liner at the base of the enclosure creating a sealed environment in which work activities were performed.

The interior of the enclosure consisted of three zones; a clean zone, a contamination reduction zone and a hot zone, which like the exterior of the enclosure were separately sealed using nylon reinforced plastic fabric.

A portable HEPA filtration system sufficient to maintain the enclosure under negative pressure relative to the interior of the mill and exterior of the enclosure was provided inside the enclosure. The HEPA filtration system served to reduce and control dispersion of contaminants to those areas. A static negative air pressure (minimum of 0.04 inches of water column pressure differential) was continuously maintained inside the enclosure relative to the pressure inside No. 5 and 6 Paper Machine Building and the outside of the enclosure from the onset of brick removal until analysis results of tested surfaces by ENSR confirmed the enclosure had been completely decontaminated.

6.2.4 Utilities

Initial activities involved the removal of a makeup air duct located along the eastern end of the contaminated area and the cleaning and decontamination of conduits, cable trays and cables within the contaminated area.

The cleaning was accomplished by removing loose debris and foreign material from the electrical systems by repeated wiping of the conduits, trays and cables with absorbent pads and a PCB solvent (Bulk LPS Instant Super Cleaner/Degreaser). Absorbent pads were also placed on the ground to collect and contain any droppage from the cleaning process. All used absorbent pads were containerized and disposed of as contaminated waste. Appropriate personnel protection was utilized during these activities.

The sections of the trays which showed PCB levels above 10 µg/100 cm^2 following solvent cleaning were removed and disposed of as contaminated waste. These tray sections were replaced with new sections of trays upon completion of wall restoration. Several wipe samples were taken on the exterior surfaces of the newly installed trays at the completion of the wall remediation project. The locations and results of these wipe samples are also shwon in Table F-15 and Figure F-5 included in Appendix F of the Data Package for Report of PCB Cleanup. The results show levels of contamination within allowable standards of 10 µg/100 cm^2.

Following the successful decontamination of electrical systems and the installation of the scaffolding system adjacent to the brick wall the conduits and cable trays were removed from their supports, wrapped and protected against damage and contamination, and then temporarily secured to the scaffolding of the enclosure. Similarly, the insulated steam pipe located at the eastern end of the enclosure was wrapped and protected.

The conduit and cable tray supports within the contaminated area of the brick wall were removed during the wall removal activities, disposed of as

contaminated waste and replaced following the completion of the wall repair activities.

6.2.5 Wall Removal/Restoration

6.2.5.1 Wall Removal

All work was performed in accordance with the applicable requirements which include, but are not necessarily limited to, the following:

- 29 CFR 1910.120, Occupational Safety and Health Administration (OSHA) standards for Hazardous Waste Operations and Emergency Response.
- 29 CFR 1926, OSHA standards for the Construction Industry.
- 29 CFR 1910.20, OSHA standard for Access to Employee Exposure and Medical Records.
- 20 CFR 1910.134, OSHA standard for Respiratory Protection.
- 29 CFR 1910.1200, OSHA standard for Hazard Communication.
- 40 CFR 761, U.S. Environmental Protection Agency (EPA) PCB Spill Cleanup Policy.

- 49 CFR 171 and 172, Department of Transportation (DOT) Hazardous Materials Regulations.

All personnel who entered the enclosure during the brick removal activities were protected by a full-face air purifying respirator (APR) equipped with combination organic vapor/dust cartridges, in addition to, full body, hooded Tyvek coveralls, disposable overbooties, proper gloves, ear protection and head protection. Upon leaving the enclosure, all protective clothing was removed in the decontamination room and disposed of as PCB containing waste except for the respirators (APR) which remained on until the person entered the first stage of the clean room and removed the respirator for cleaning.

Following the startup operation of the HEPA filtration system, the exterior wythe of brick including the mortar between the outer and middle brick wythe was removed utilizing pneumatic chipping hammers with various bits. The limit of the brick removed and replaced with new brick is shown on Drawing SB-19078 included in Appendix K of the Data Package for Report of PCB Cleanup.

The generation of dust is inevitable from an operation of this type. Routine air monitoring of the work area inside the enclosure during brick removal indicated that the dust generated during the brick wall demolition activities did not exceed the dust action level of 10 mg/m^3, therefore, extraordinary dust suppression methods were not required. The continuous and proper operation of the enclosure including HEPA filtration system provided an effective means for controlling the airborne dust following work stoppage through relatively rapid air changes .

Air monitoring outside of the enclosure during brick removal was performed by Industrial Hygiene of New England (IH/NE). IH/NE performed both real-time and integrated sampling to monitor dust levels. A criterion of 150 $\mu g/m^3$ above baseline dust concentrations was used as a warning level of which action was to be taken to curtail dust generating activities within the enclosure. This dust action level was exceeded on only one occasion and was caused by a rupturing exhaust hose from the HEPA air handling units (the portion of the hose outside the enclosure) blowing up dust from around the transformers. Once the problem was remedied, particulate levels returned to normal. All other air measurements were within acceptable limits. The full IH/NE report and results of air quality monitoring and observations during the brick removal phase are included in Appendix J of the Data Package for Report of PCB Cleanup.

All contaminated wall debris was placed in double 6 mil polyethylene bags, labelled and staged in the work area decontamination zone where additional outside bags were placed over the inner bags. The material was then removed through the personnel access way of the enclosure, transported to the disposal container staging area, loaded into secured disposal containers and finally transported by Dart Trucking Co., Inc. to a TASCA/RACA licensed hazardous waste disposal facility in Model City, New York.

After the removal of all contaminated wall debris from the enclosure, the exposed interior wyth of brick was cleaned. Cleaning consisted of vacuuming and wiping the wall with a PCB solvent to remove any residual contamination left as a result of the demolition activities. Six wipe samples were taken on the second brick wythe along the section of the wall that originally

showed the highest PCB concentrations to document the maximum remaining levels of contamination. The results of these wipe samples are shown in Table F-17 and Figure F-6 included in Appendix F of the Data Package for Report of PCB Cleanup. The results show that the remaining level of PCB concentrations on the second-wythe of brick are within cleanup standards of 10 $\mu g/100cm^2$.

Following the completion of wall demolition activities and the removal of all contaminated material generated as a result of these activities, the entire enclosure was decontaminated. This consisted of vacuuming (wet and dry) and wiping down the inner portion of the enclosure and equipment to be reused. Restoration of the exterior wythe of the brick wall did not begin until sampling and testing of the enclosure by ENSR confirmed that the enclosure was clean. The results of the sampling and testing are shown in Table F-18 included in Appendix F of the Data Package for report of PCB cleanup.

Other contaminated materials generated as a result of decontamination activities, tools, protective clothing, materials associated with the interior of the enclosure including scaffolding and planking associated components were bagged, labelled and disposed of separately as PCB containing waste. The dispositions of contaminated materials from the site are included in Appendix G of the Data Package for Report of PCB Cleanup.

6.2.5.2 Wall Restoration

After successful decontamination of the enclosure, the brick wall was repaired by replacing the removed contaminated brick wythe with a clean solid "water struck" face brick as shown on Drawings SB-19078, SB-19079 and SB-19122 included in Appendix J of the Data Package for Report of PCB Cleanup.

6.2.6 Chronology of Events

The major events which occurred during the cleanup of the contaminated brick wall of the No. 5 paper machine site are shown in Figure 5.

SECTION 7

GROUNDWATER MONITORING

7.1 GENERAL

The following sections summarize the groundwater investigations and document the results of the hydrogeologic monitoring program associated with the PCB contamination investigations and cleanup activities.

The groundwater investigations documented in this section were performed pursuant to the February 9, 1989 Groundwater Monitoring Plan in accordance with the proposed Consent Agreement and Final Order, between the U.S. Environmental Protection Agency and Great Northern Paper.

Results of the groundwater investigations that preceded the cleanup activities are presented in other documents. These documents are:

- Data Package for Chemi-Groundwood Site
- Data Package for No. 5 Paper Machine Site
- Data Package for No. 6 Paper Machine Site

The Data Packages were issued April 6, 1988 and summarize the results of the drilling, sampling and testing conducted at each site prior to cleanup (refer to Sections 1.2 and 2 of this report). Included in the above data packages are more extensive descriptions of the geology and hydrogeology of the three sites in particular and the mill in general. Some of the pre-cleanup groundwater data are repeated in this section for continuity and clarity.

7.2 SUMMARY OF GEOLOGY

The East Millinocket Operation is located on the east bank of the West Branch of the Penobscot River at the town of East Millinocket, Maine. Ground surface within the mill is mostly level, sloping gently westward toward the river. Elevations range between 295 feet and 300 feet (mill datum). Within 50 feet of the river, there is an escarpment where the topography abruptly drops 15 to 20 feet.

There is a dam at the mill, owned and operated by Great Northern Nekoosa. Pool elevation above the dam is normally maintained at el. 288.8 feet and tailwater elevation is normally at el. 262.8 feet.

The geology at the mill can be categorized into five general subdivisions. From oldest to youngest, these include: 1) bedrock, 2) a dense, gray glacial till, 3) a brown glacial till, 4) channel sands, and 5) backfill. Descriptions of the soils and rocks are based on visual inspection of split-spoon soil and cored rock samples taken from 81 borings drilled during the remediation investigations between September 1987 and January 1988. Logs of these borings are included in the Data Packages for the three sites previously issued to the EPA.

7.3 HYDROGEOLOGY

Within the geologic profile described above, three water bearing units can be identified that consistently yield groundwater to monitoring wells. Two of these units, the brown till and the channel sands, combine to form a

shallow water bearing zone, bounded below by the relatively impervious gray till. The upper limit of this zone is the unconfined water table, which is encountered at an average depth of about 8 feet throughout the mill.

A deeper consistent water-bearing zone occurs in the uppermost 5 to 10 feet of bedrock which is jointed and weathered. This zone is confined above by the base of the relatively impervious gray till. Some hydraulic communication must occur across the gray till, as the piezometric surface of the bedrock zone is almost everywhere within a few inches of the piezometric surface of the shallow zone (i.e., the water table). However, purging monitoring wells screened in the bedrock zone does not measurably depress water levels in wells screened in the upper zone, and vice-versa. A generalized hydrogeologic profile of the mill area is shown in Figure 2.

7.4 MONITORING WELL NETWORK

Forty-four monitoring wells have been installed throughout the area of the mill. The wells are grouped into 22 nests of two wells per nest; one screened at the base of the upper water-bearing zone (i.e., top of the gray till) and the other in the deeper, weathered bedrock zone. A typical monitoring well nest is shown on Figure 7-2. Locations of the well nests are shown on Figure 3.

The wells are constructed of 2 inch ID, Type 304 stainless steel casing with 5 foot long, 2 inch ID, continuous slot (wire-wound), Type 304 stainless steel screens.

Twenty-two of the 44 wells were installed as part of the pre-cleanup investigations conducted at the three spill sites during the summer and fall of 1987. These wells were continuously sampled for laboratory analysis of PCB and chlorobenzenes, on a quarterly basis through December, 1989.

During June and July 1989, 22 additional monitoring wells were installed for the purpose of tying the earlier site-specific wells together into a piezometric monitoring network for the entire mill. The additional wells, together with the original wells, were monitored for groundwater level elevations from mid-summer 1989 to September 1990 providing for a four-season collection of data. This includes the period of cleanup during which excavation dewatering was performed plus a significant post-cleanup period to establish post-cleanup water table elevations.

Construction details of the wells are included in Appendix A and B of the Data Package for Report of PCB cleanup.

7.5 SAMPLING AND TESTING

7.5.1 Slug Testing

7.5.1.1 Testing Methods

Slug tests were performed in: a) the deep borings of all the well nests at incremental depths during drilling, and b) in every monitoring well upon completion of construction. The purpose of the slug testing was to measure

hydraulic conductivities of the soils (and rock) and to assure hydraulic communication between each well and formation.

The tests were performed by rapidly adding water to the boring or well and measuring the time rate of water-level change inside the casing, using a watch and a tape with an electronic water sensor (M-Scope).

7.5.1.2 Analytical Method

The slug tests were analyzed using the method of Bower and Rice (1989, the Bower and Rice Slug Test - An Update, Groundwater, Vol. 27, No. 3). This method is based on determining the slope of the straight line portion of a plot of the logarithm of the recovery data vs arithmetic time and calculating the permeability from this plot. During some tests, water levels recovered too rapidly to be measured and, during other tests, water levels recovered so slowly that rates could not be determined in a reasonable amount of testing time. Hydraulic conductivities were not determined for these tests, but the fact of too rapid or too slow of a recovery was noted.

7.5.1.3 Results

Results of the slug testing are summarized in Appendix C of the Data Package for Report of PCB Cleanup.

7.5.2 Piezometric Levels

7.5.2.1 Measuring Method

Water levels were measured in all the wells at least on a quarterly basis and more frequently in wells near active excavation dewatering during the cleanup activities. Since January 1990, water levels have been measured monthly. All water level measurements were made on the same day to reduce temporal error.

Measurements were made using a graduated tape with an electronic water sensor (M-scope). Reference was the top of the 2 inch ID stainless steel casing, inside the guardpipe or road box. Depth readings were then converted to elevations.

7.5.2.2 Results

The results of the water levels measured in each well are summarized in Appendix D of the Data Package for Report of PCB Cleanup.

Contours plotted from the piezometric surface data indicate a general east to west horizontal gradient of the piezometric surfaces, with very little vertical gradient. These contours are also included in Appendix D of the Data Package for PCB Cleanup. The water level data indicate little change to the mill area groundwater flow regimen as a result of the subsurface remediation work. The data will be used to design a post-cleanup, groundwater monitoring plan.

7.5.3 PCB and Chlorobenzene Analysis

7.5.3.1 General

The original 22 wells that were installed in 1987 have been sampled nine times, on a quarterly basis, from December 1987 through December 1989. Samples were analyzed for PCB (Aroclor 1260), 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3,5-trichlorobenzene, 1,2,3,4 tetrachlorobenzene, 1,2,3-tetrachlorobenzene, and pentachlorobenzene.

7.5.3.2 Sampling Method

The monitoring wells were sampled in accordance with the U.S. EPA Protocol for Groundwater Evaluations, OSWER DIR 9080.0-1, September 1986. Dedicated, one liter Teflon bailers equipped with Teflon-coated, Type 304 stainless braided wire were used. Prior to sampling, the wells were purged to one of the following: a) three well volumes of water had been removed, b) the well was purged to dryness, or c) until field measurements of pH, temperature and resistivity stabilized.

Samples were placed into precleaned 2-liter amber glass jars and cooled to 4°C for shipment to the laboratory.

Field sampling equipment was decontaminated by rinsing with hexane followed by rinsing with deionized water. The exterior surface of the sample containers were washed with soap and water and rinsed with methanol or isopropanol prior to delivery to the laboratory.

7.5.3.3 Testing Method

Analysis was performed using EPA Method 3510. One liter of unfiltered water was serially extracted with methylene chloride in a separatory funnel. A solvent-solvent extraction with hexane was made before sample cleanup. GC/ECD analyses of the sample extracts followed EPA Method 8080.

7.5.3.4 Results

Test results are tabulated in Appendix E of the Data Package Report of PCB Cleanup. In summary, PCB but no chlorobenzene was detected in well 516B, chlorobenzene but no PCB was detected in wells 112A, 112B, 119A and 119B, and both PCB and chlorobenzene were detected in wells 101A, 101B, 616A and 616B. These results indicate some groundwater transport of PCB and chlorobenzene down gradient from the spill sites, with chlorobenzene being more mobile than PCB.

Test results of samples taken in December 1988 indicated 3.1 µg/l Aroclor 1260 from well 101A, 16.4 µg/l from well 101B and 6.7 µg/l from well 616A. The solubility limit for Aroclor 1260 in water is generally accepted to be 2.7 µg/l. Since the PCB content from these samples appeared to be unrealistically high, these three wells were resampled on February 2, 1989. Results from the February samples were; well 101A, 7.87 µg/l; well 101B, 68.0 µg/l, and well 616A, 1.07 µg/l. A duplicate sample of well 101A, taken as soon as the well recovered sufficiently from the original sampling, had 14.3 µg/l Aroclor 1260. Results of the resampling and retesting validated the earlier, higher than expected PCB content in the water from these wells.

During the regular March 1989 quarterly sampling effort, wells 101A and 616A were sampled in quadruplicate, with each bottle designated a,b,c, or d (well 101B was frozen and could not be sampled). Bottles were analyzed according to the following scheme:

Bottle a — A one liter aliquot was analyzed unfiltered for chlorobenzenes

A second one liter aliquot was analyzed unfiltered for PCBs.

Bottle b — A one liter aliquot was analyzed unfiltered for PCBs.

A second one liter aliquot was filtered through a .22 micron filter and analyzed for PCBs.

Bottle c — A one liter aliquot was analyzed unfiltered for PCBs. as a duplicate.

A second one liter aliquot was filtered through a .22 micron filter and analyzed for PCBs.

For the sample from well 101A, bottle d, a one liter aliquot was analyzed unfiltered for chlorobenzenes as a duplicate.

Filter residue from above filtration were Sohxlet-extracted for 16 hours using a 1:1 hexane:acetone solvent system and analyzed for Aroclors. For quality control, a one liter sample of organic free water (designated LCS-1) was spiked to 25 µg/l with Aroclor 1260, filtered through a 0.22 micron filter, extracted and concentrated for analysis of PCBs. A second one liter sample of organic free water (designated LCS-2) was spiked to 25 µg/l with Aroclor 1260 and extracted without filtration and analyzed for PCBs. The filter from LCS-1 was also analyzed for PCBs.

QC for the chlorobenzene analysis consisted of the analysis of one aliquot of organic free water spiked to 100 µg/l with each of the chlorobenzenes of interest, extracted and analyzed for chlorobenzenes. Results of these analyses are listed in Table E-2, included in Appendix E of the Data Package for Report of PCB Cleanup.

For every sample tested, there was a good to excellent correlation between, a) the PCB recovery for the unfiltered specimen, and, b) the sum of recoveries for the residue (above filter) and filtrate, for the corresponding filtered specimen from the sample (refer to Table E-2). Also in every sample, a significant portion (up to 1/2) of the total PCB was recovered from the residue. These results, a) validated the earlier, higher than expected PCB laboratory results, and, b) indicated the extra PCB occured as an adsorbate on colloids.

During the quarterly sampling events after March 1989, care was taken to purge wells Nos. 101A, 101B, and 616A at a very slow rate. PCB concentrations higher than 2.7 mg/l were never again detected. This, plus the

results tabulated in Table E-20, suggest that very fine soil particles (colloids) carrying PCB may be mobilized by high gradients induced at the well by rapid purging. These colloids remain suspended in the sample and result in PCB concentrations considerably higher than the solubility limit.

SECTION 8

QUALITY ASSURANCE

8.1 LABORATORY AUDIT FINDINGS

During the course of the PCB Cleanup work, two audits of the Northeast Laboratory onsite facility were conducted by SWEC Engineering Assurance. The audits were performed to assess Northeast Laboratory's compliance with the Quality Assurance Project Plan (QAPP) dated July 1989 and their Laboratory QA program (LQAP).

Results of the audits indicated that in general Northeast Laboratory was in compliance with the requirements of the QAPP and their LQAP. An audit of personnel qualifications, instrumentation and equipment, analytical methods, QA/QC, and results of field screening methods, was performed by EPA, Region I on October 5 and 6, 1989. Audit results were very satisfactory and demonstrated the validity and conservatism of the screening procedure.

An internal audit of the mobile laboratory was conducted by Northeast Laboratories during the period September 18 through October 20, 1989. Results of the audit indicated that the mobile laboratory was in compliance with the QAPP with respect to accuracy and precision.

The results of the above four audits are presented in Appendix L of the Data Package for Report of PCB Cleanup.

8.2 DATA QUALITY OBJECTIVES

The data quality objectives for PCB analysis of soils and water at the field based laboratory and the fixed based laboratory as specifically called for in the QAPP are summarized in Table 8-1.

Table 8-1

QA OBJECTIVES FOR ACCURACY AND PRECISION
FOR PCB ANALYSIS OF SOIL AND WATER

	Precision (a)	Accuracy (b)	Completeness (c)
Field Laboratory	≦ 50%	40-120%	90%
Fixed Base Laboratory	≦ 30%	55-120%	90%

(a) measured as the average percent difference for duplicate samples.

(b) measured as the average percent recovery for laboratory control samples run with sample sets during the program.

(c) the percent of samples judged to be valid compared to the total number of samples collected.

Precision was determined by the analysis of duplicate samples, expressed as the relative percent difference, expressed by the following equation:

$$\text{Relative \% Difference} = \frac{\text{Value 1 - Value 2}}{\text{Arithmetic Mean of Value 1 and 2}} \times 100$$

Accuracy was determined from the analysis of laboratory control samples whose true values are known to the analyst. Accuracy is expressed as percent recovery calculated using the following equation.

$$\text{Percent Recovery} = \frac{\text{Measured Value}}{\text{True Value}} \times 100$$

Completeness is reported as the percentage of all measurements made whose results are judged to be valid. The following formula has been used to estimate completeness.

$$\text{Percent Completeness} = \frac{\text{Number of Samples Judged Valid}}{\text{Total Number of Measurements}} \times 100$$

In addition to the specific quality assurance criteria presented in the QAPP, other routine assessments of data adequacy and quality were employed. Specifically, matrix spike/matrix spike duplicate data were used, where necessary, to further qualify and quantify the precision and accuracy of data judged to be suspect under the criteria provided in the QAPP.

A matrix spike is an aliquot of a sample fortified (spiked) with known quantities of specific compounds and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for the matrix by measuring recovery. A matrix spike duplicate is a second aliquot of the same matrix spike that is used to determine the precision of the method. Precision in this case is also measured by relative percent difference. Percent recovery and relative percent difference (RPD) for MS/MSD results were reviewed in light of the criteria in the QAPP.

All data were evaluated on a batch-by-batch basis. That is, samples collected on the same day and analyzed together in the laboratory were considered a batch. The analytical results of a batch of samples were considered valid if the average Laboratory Control Samples (LCS) percent recovery and the average relative percent difference for duplicate/replicate analysis met the respective criteria for accuracy and precision.

8.2.1 Soil Data Quality

Table I-1 included in Appendix I of the Data Package for Report of PCB Cleanup summarizes the results of all Laboratory Control Samples (LCS) analyzed in conjunction with PCB analysis of soils from the Chemi-Groundwood, No. 6 Paper Machine and No. 5 Paper Machine Sites and the Soil Stockpile Area. The Percent Recovery for all LCS were within the criteria for acceptable accuracy required by the QAPP for field laboratory operations. These are outlined in Table 8-1.

Table I-2 included in Appendix I of the Data Package for Report of PCB Cleanup summarizes the calculation of relative percent difference for duplicate soil sample analysis for No. 6 Paper Machine Site, No. 5 Paper Machine Site, and the Soil Stockpile Area. All duplicate analysis associated with soils from these sites met the criteria for precision required by the QAPP and defined in Table 8-1.

Table I-3 included in Appendix I of the Data Package for Report of PCB Cleanup summarizes the calculation of relative percent difference for duplicate samples taken from the Chemi Groundwood Site. A total of 181 measurements for PCB were performed on soil samples from Chemi Groundwood 138 measurements were represented by duplicate analysis and fell within the criteria for precision for the field based laboratory analysis. A total of 43 measurements were represented by duplicate analysis which exceeded specified criteria for precision requiring an assessment of possible consequences of decisions based on these analytical results. This assessment is presented in Section 8.3 of this report.

8.2.2 Groundwater Data Quality

Table I-4 included in Appendix I of the Data Package for Report of PCB cleanup summarizes LCS percent recovery data and duplicate sample PCB analysis for all groundwater samples collected from the monitoring wells while Northeast Laboratories served as the analytical laboratory contractor. All sample analysis was performed at the fixed base laboratory. All quality assurance objectives were met. Based on the criteria stated in Table 8-1, the groundwater analysis may be considered valid and 100% complete.

8.2.3 Water Treatment Facility Data Quality

Table I-5 included in Appendix I of the Data Package for Report of PCB cleanup summarizes LCS percent recovery data for water samples taken from various points in the Water Treatment Facility as well as the final discharge. No duplicate samples were taken, thus an estimate of the precision

of the PCB analysis, as explicitly defined in the QAPP, is unavailable for the wastewater analysis. However, as part of the laboratory's internal quality control procedures, matrix spike (MS) and matrix spike duplicate (MSD) analyses were performed. Analysis of MS/MSD results serve as estimates of both analytical accuracy and precision since the laboratory analysis is performed in duplicate (precision) and includes the measurement of recovery (accuracy).

The results of matrix spike/matrix spike duplicate analysis are summarized in Table I-6 included in Appendix I of the Data Package for Report of PCB cleanup. Based on the relative percent difference of the MS/MSD analysis, the analysis of the wastewater samples for PCBs were all in compliance with the data quality objectives stated in Table 8-1. In addition, Laboratory Control Sample analysis met the objectives for accuracy. All PCB analytical results for wastewater analysis are considered valid and 100% complete based on the quality assurance objectives stated in the QAPP and presented in Table 8-1.

8.3 ASSESSMENT

All quality assurance objectives were met with the exception of the precision objectives for 43 soil samples from the Chemi Groundwood Site. The lower precision probably resulted from the fact that soils at this site are more granular and heterogeneous than at the other sites. Also, since the excavation at this site extended more than 10 feet below the water table, samples tended to be much wetter. These factors made it more difficult to split samples for representative duplicates.

As a result of the inability to meet the Data Quality Objectives (DQOs) at the Chemi-Groundwood site for some samples, an assessment of possible consequences was made based on the following assumptions:

- Only samples testing below the action limit of 18 mg/Kg are of concern, since any soil represented by samples testing higher than 18 mg/Kg would have been treated as contaminated and removed.

- A better indication of precision for samples taken from a given media at a given site can be obtained by pooling the precision data.

A Relative Standard Deviation (S_R) value of 0.51 was calculated using all of the duplicate soil pairs from the Chemi-Groundwood site, except those where both sample and duplicate tested below 1 mg/Kg Aroclor-1260. The following equation was used:

$$S_R = \frac{2}{K}\sqrt{\left(\frac{S_1 - R_1}{S_1 + R_1}\right)^2 + \left(\frac{S_2 - R_2}{S_2 + R_2}\right)^2 + \ldots\left(\frac{S_N - R_N}{S_N + R_N}\right)^2}$$

where:

S_n = value for sample n

R_n = value for duplicate n

K = total number of pairs (sample & duplicate)

Each soil test value below 18 mg/Kg Aroclor-1260 for the site was then addressed for the percent confidence that the soil represented by the test value did not exceed 18 mg/Kg Aroclor-1260. For this calculation, all test values of less than 1 (including ND) were assigned a value of 1. The following method was used:

$$Z = \frac{(R \times L/X) - 1}{S_R} \qquad (2)$$

where:

R = recovery (accuracy)

L = action limit (18 mg/Kg)

X = sample test value (mg/Kg)

S_R = relative standard deviation (from Eq. 1)

The confidence level that the sample did not equal or exceed the action limit (18 mg/Kg) was determined from a statistical table using the Z value from Eq.2 (Skoog, D.A., and West, D.M., 1969). Confidence levels are shown on Table 8-1. Only 5 test results have confidence levels of less than 80 percent. These samples are C-56, C-71, C-94, C-95 and C-123. Decisions based on the results of these tests were as follows:

Sample C-56

Used to confirm clean-up.

Sample C-71

Non-confirmatory sample. Excavation carried deeper and confirmed by other samples in this area. Soil represented by this sample was treated as contaminated.

Sample C-94

Used to confirm clean-up.

Sample C-95

Used to confirm clean-up.

Sample C-123

Used to confirm clean-up

Therefore it can be concluded that the only consequence of not meeting all the DQOs at the Chemi-Groundwood site is that four test values used to confirm satisfactory clean-up had less than 80 percent levels of confidence that soils represented by these samples did not exceed the action limit, and only three had levels of confidence of less than 50 percent (see Table I-7 included in Appendix I of the Data Package for Report of PCB cleanup).

Considering the additional conservatism of the screening procedures (refer to Section 3.2 of this report) the consequence of not meeting all the DQOs can be considered to be insignificant.

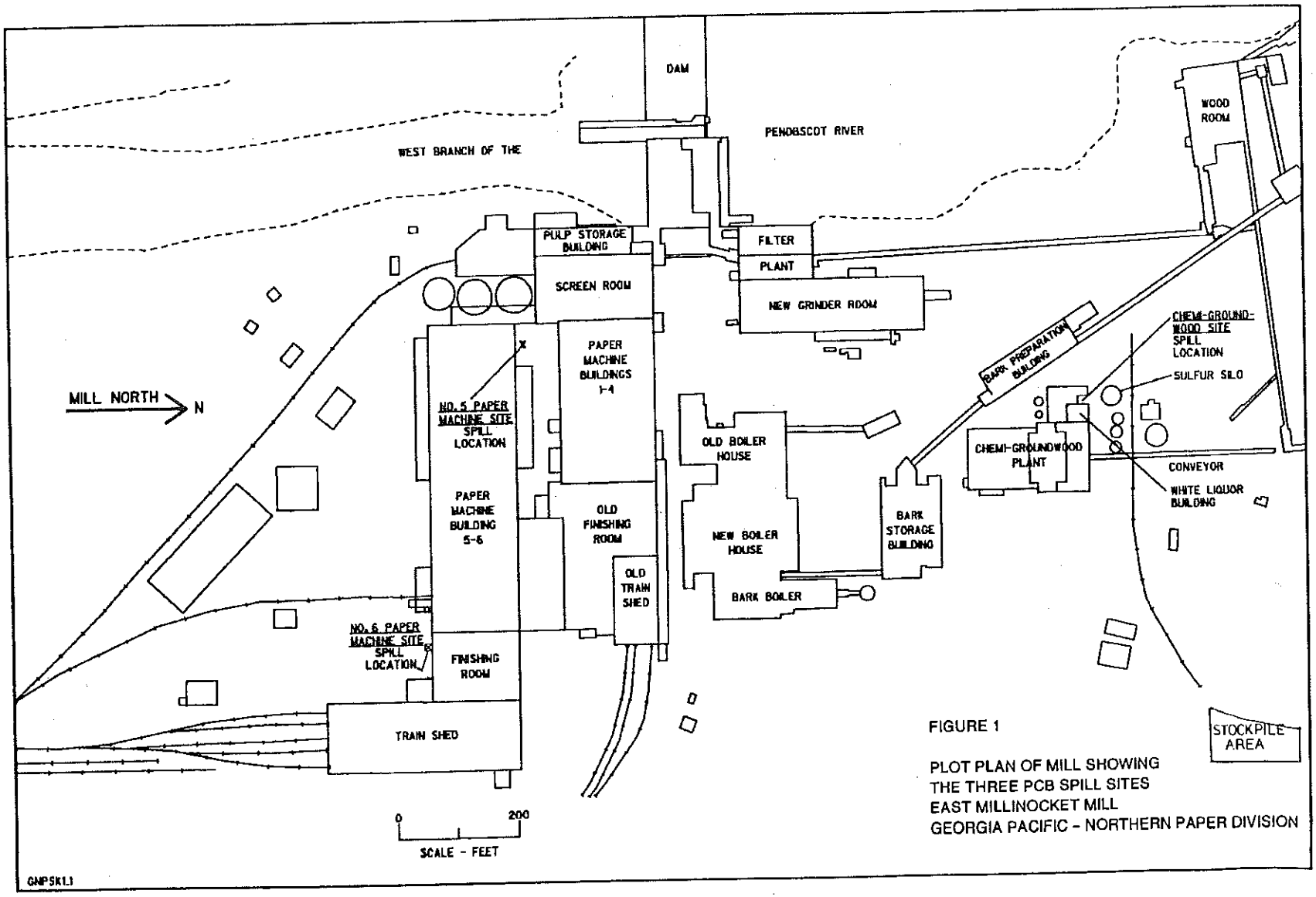


FIGURE 1

PLOT PLAN OF MILL SHOWING
THE THREE PCB SPILL SITES
EAST MILLINOCKET MILL
GEORGIA PACIFIC - NORTHERN PAPER DIVISION

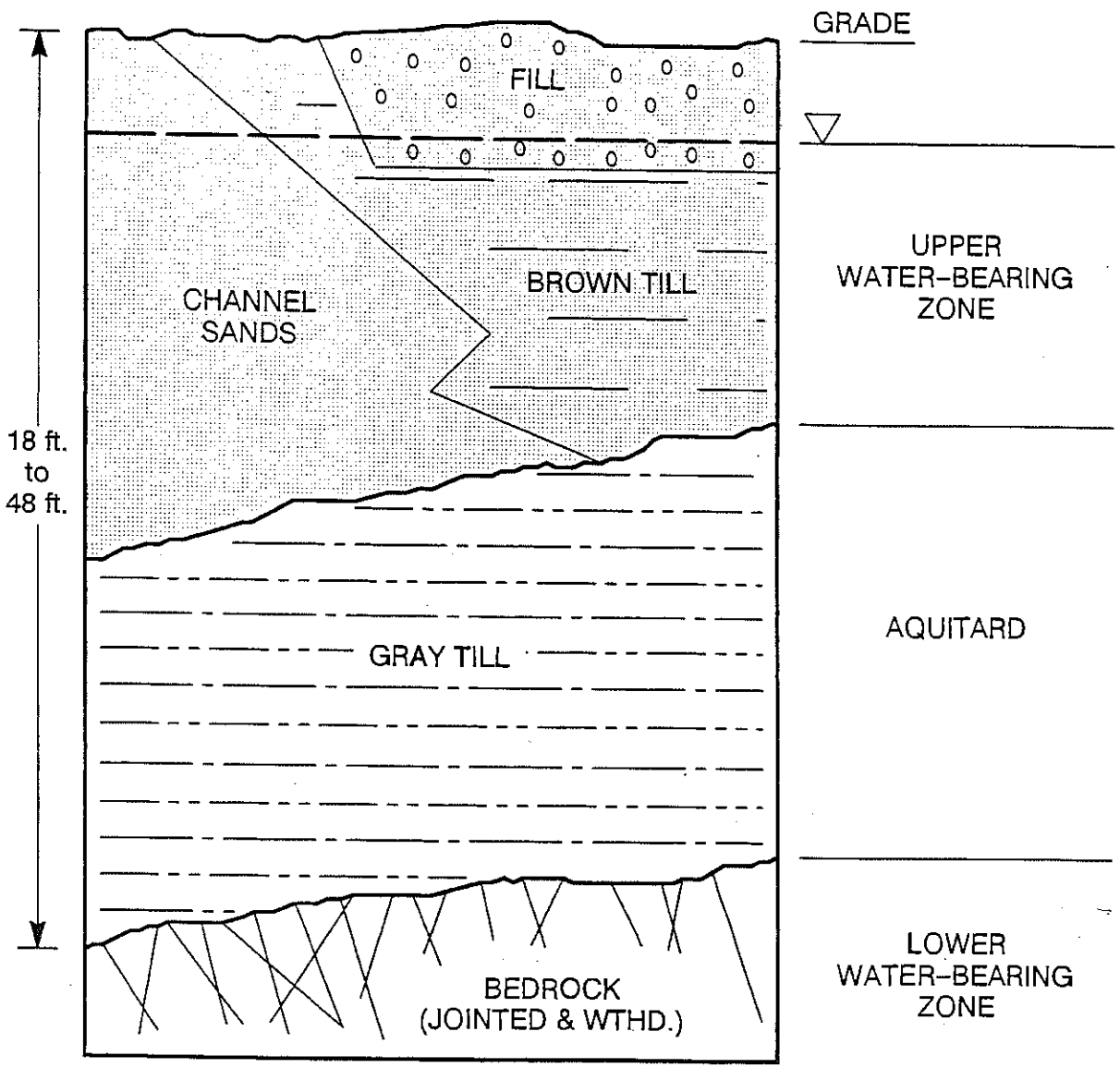


FIGURE 2

TYPICAL HYDROGEOLOGIC SECTION
EAST MILLINOCKET MILL

1519_00K2_2

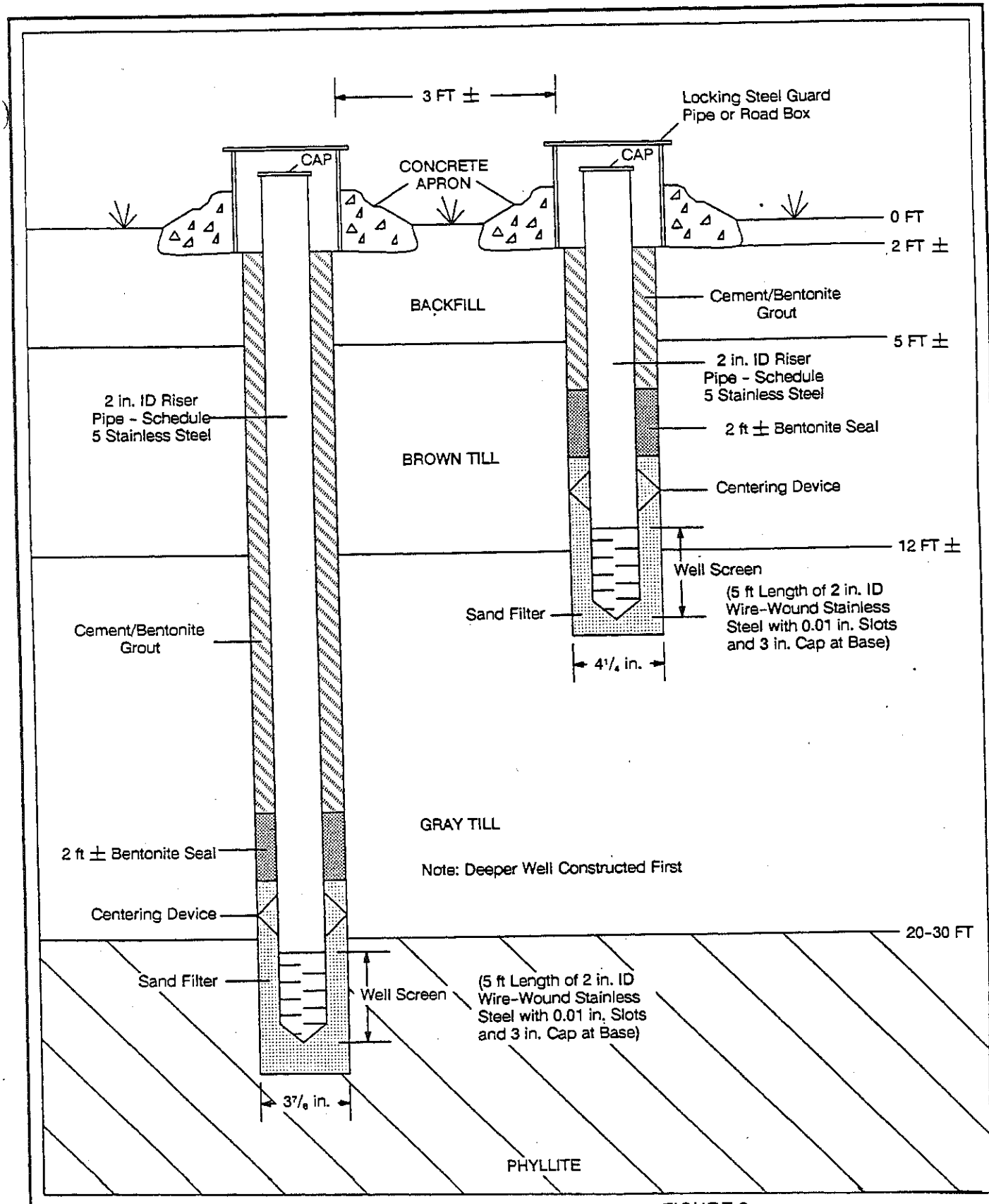
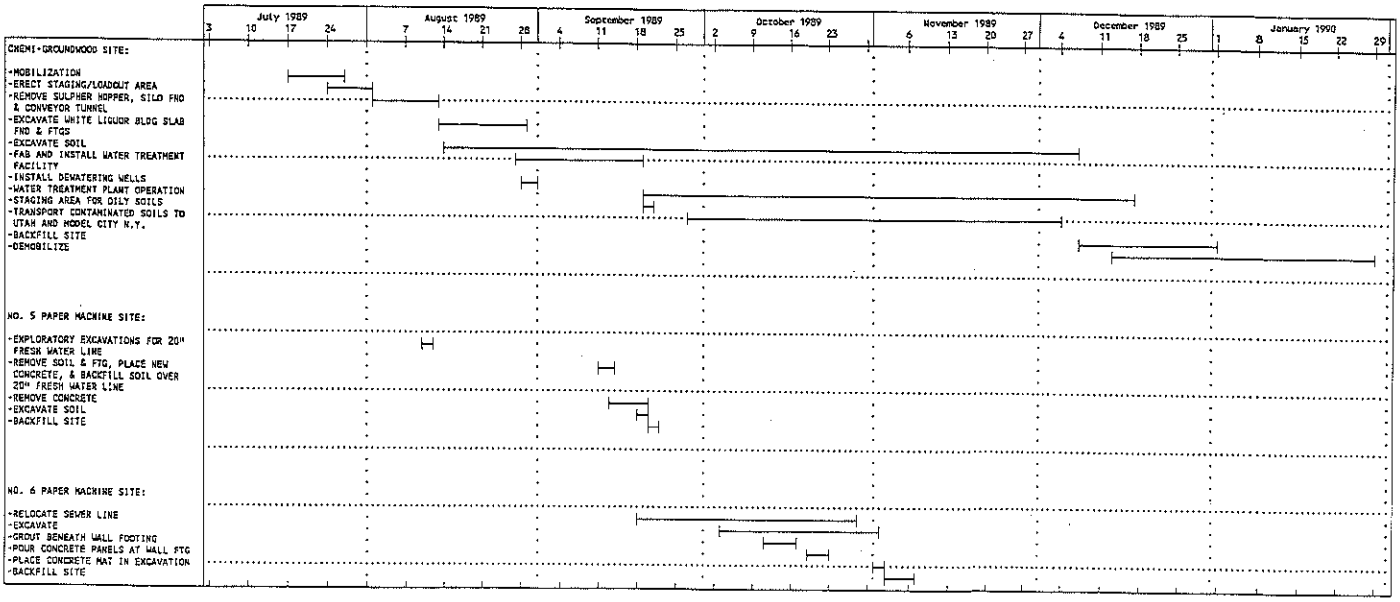


FIGURE 3

TYPICAL MONITORING WELL NEST
PCB REMEDIATION PROJECT



FIGRUE 4
PCB REMEDIATION PROJECT
GREAT NORTHERN NEKOOSA - EAST MILLINOCKET MILL
AS-BUILT REMEDIATION SCHEDULE FOR CLEANUP OF CHEMI-GROUNDWOOD SITE, NO. 5 PAPER MACHINE SITE AND THE NO. 6 PAPER MACHINE SITE

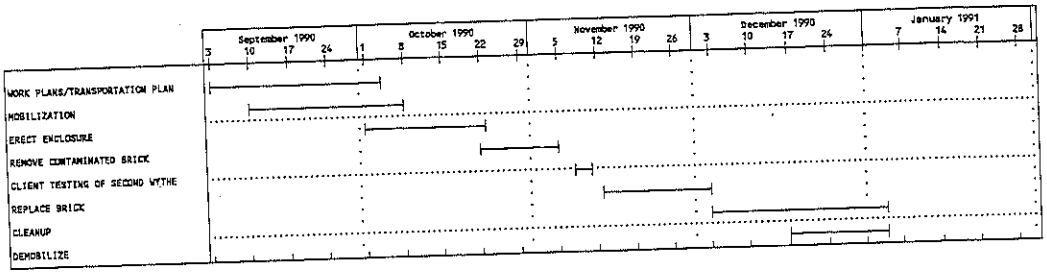


FIGURE 5
PCB REMEDIATION PROJECT
GREAT NORTHERN NEKOOSA - EAST MILLINOCKET MILL
AS-BUILT REMEDIATION SCHEDULE FOR CLEANUP OF CONTAMINATED
BRICK WALL AT THE NO. 5 PAPER MACHINE SITE

FIGURE 6

LIST OF SUBMITTALS

Document Description	EPA/Maine DEP Submittal Date
Remediation Plan for Chemi-Groundwood Site	July 22, 1988
Remediation Plan for No. 6 Paper Machine Site	July 22, 1988
Remediation Plan for No. 5 Paper Machine Site	July 22, 1988
Data Package for Chemi-Groundwood Site	April 6, 1988
Data Package for No. 6 Paper Machine Site	April 6, 1988
Data Package for No. 5 Paper Machine Site	April 6, 1988
Technical Specification, PCB Remediation Project, East Millinocket Mill, Soil Remediation	October 6, 1988
Technical Specification, Demolition of White Liquor Building	April 1989
Technical Specification, PCB Contaminated Brick Wall Removal/Repair, No. 5 Paper Machine Site	September 18, 1990
Industrial Hygiene New England (IH/NE) Air Monitoring Report for Brick Wall Remediation at the No. 5 Paper Machine Site	January 11, 1991
Quality Assurance Project Plan (QAPP)	September 21, 1989

RECEIVED 03 7/31/2016

List of East Millinocket, Maine Historical Documents

√ Great Northern Paper Mill 2 PCB Remediation Project. Remediation Plan for No. 5 Paper Machine Site. July 22, 1988.

√ Great Northern Paper Mill 2 PCB Remediation Project. Data Package for No. 5 Paper Machine Site. April 6, 1988.

√ Great Northern Paper Mill 2 PCB Remediation Project. Remediation Plan for No. 6 Paper Machine Site. July 22, 1988.

√ Great Northern Paper Mill 2 PCB Remediation Project. Data Package for No. 6 Paper Machine Site. April 6, 1988.

√ Great Northern Paper Mill 2 PCB Remediation Project. Remediation Plan for Chemi-Groundwood Site. July 22, 1988.

√ Great Northern Paper Mill 2 PCB Remediation Project. Data Package for Chemi-Groundwood Site. April 6, 1988.

√ Report of PCB Cleanup and Groundwater Monitoring. East Millinocket Mill. March 1991.

√ Appendix K of the Report of PCB Cleanup and Groundwater Monitoring. East Millinocket Mill. March 1991. DRAWINGS

√ Appendix F of the Report of PCB Cleanup and Groundwater Monitoring. East Millinocket Mill. March 1991. SOIL & WALL TEST RESULTS

√ Consent Agreement and Final Order. September 27, 1991.

√ HISTORIC & CURRENT WELL LOCATION MAP

√ POST REMEDIATION GW MONITORING PLAN 4/1992

Copy on file
Tony, P

Georgia-Pacific Corporation
Northern Paper Division
One Katahdin Avenue
Millinocket, Maine 04462-1398
Telephone (207) 723-5131

File No. 507.20

January 8, 1991

Mr. Anthony Palermo
U. S. Environmental Protection Agency
Region I
JFK Federal Building
Boston, MA 02203-2211

Dear Tony:

The attached letter from ENSR responds to your questions concerning the July 5, 1990 report covering remediation of the February 19, 1989 spill from the T-160 transformer at our Millinocket operation. This additional material supports the conclusion that all necessary and feasible steps were taken to remediate the site and that, for the small amount of PCB remaining, all three criteria for allowing less stringent cleanup requirements per 40 CFR 761.120 were met.

If you have any questions concerning this material, please call me at (207)723-5131, extension 1278.

Sincerely,

Carlton E. Akeley
Chemical Management Group Leader

ENSR Consulting
and Engineering
35 Nagog Park
Acton, Massachusetts 01720
(508) 635-9500
(508) 635-9180 (FAX)

January 3, 1991

Mr. Carl Akeley
Environmental Affairs Department
Northern Paper Division
Georgia-Pacific Corporation
One Katahdin Avenue
Millinocket, ME 04462-1398

RE: Northern Paper Response to EPA - Region I Informational Request

Dear Mr. Akeley:

You have asked us to supply you with additional data regarding the PCB cleanup resulting from the failure of the T-160 PCB transformer at the Riverbank Substation in Millinocket on February 19, 1989. Specifically, you requested:

1. Documentation of the conclusion that "there is a lack of an exposure pathway" for the PCBs that remain in the spill site;

2. Details of the estimated costs of cleanup to the policy cleanup standards; and

3. Details of the steps necessary to complete cleanup in conformance with the policy cleanup standards (identifying) specific steps toward cleanup that are considered to be impractical, and the basis for that conclusion).

In accordance with your request, we submit the following data.

Lack of an Exposure Pathway

As estimated in ENSR's April, 1990 T-160 PCB Cleanup Remedial Activities Report, greater than 99.5% of the spill was removed. Given the fact that PCB is not a volatile compound (so that the limited amount of PCB remaining will not migrate in the vapor phase of the unsaturated soil zone) the only migration pathway is by the dissolved phase which is virtually eliminated by the cap placed over the spill site following ENSR's remedial activities. The cap will almost eliminate downward migration of precipitation preventing any dissolved form of the PCB migration from entering the groundwater. If PCBs exist in the groundwater zone, then the migration of PCB in the dissolved phase in the groundwater will

be limited by the reduced groundwater flow velocity and flow volume in the spill area.

By observation the pathway for groundwater flow from the Site is toward the Millinocket Stream. The groundwater flow velocity from the Site area and flow volume over any existing PCBs is reduced by the concrete containment wall and the metal sheet piling wall below the concrete containment wall shown on Figure 2 in the April, 1990 T-160 PCB Cleanup Remedial Activities Report.

These containment walls significantly affect groundwater flow by causing the majority of the groundwater to travel under the walls to the river. In addition, PCB is known to be very insoluble in water with solubilities less than 50 micrograms per liter (Roberts et al, 1982).

The enclosed attachment provides more details concerning PCB solubility and transport, and the reasoning behind the conclusion that the majority of the remaining PCB is located in the vadose or unsaturated zone at the spill site.

Estimated Cost of Cleanup

It is impossible to accurately predict a clean-up cost to a specific concentration given the unknown complexities and hazards of further soil removal around the substation foundations. Approximately the same amount of work and precautions employed during the original remedial activities would have to be duplicated, in addition to complex engineering designs for foundation support during additional soil removal. It is estimated that further soil removal would cost a minimum of one to two times the estimated cleanup contractor cost of $1.34 million in the April, 1990 report.

The enclosed attachment points out a few of the reasons why it is virtually impossible to accurately predict clean-up cost to specific concentrations given the nature of PCB migration. Experience within ENSR from other sites with these types of spills has provided the investigation and estimated remediation cost described at the end of section II of the attachment.

Policy Cleanup Steps

In the April 1990, T-160 PCB Cleanup Remedial Activities Report, it concludes that the majority of the PCB spill was removed due

to the immediate response and volume of contaminated soil removed. The report also stated that any further soil removal would threaten the stability of the substation foundation wall and present unnecessary risk to the health and safety of remediation workers. In short, all attempts were made to remove the maximum amount of soil possible.

The descriptions provided in the attachment is our basis for the impracticality of proceeding with any further clean-up of the Site. To our knowledge, no site with this type of spill has ever been "cleaned up" to concentrations any lower than the solubility limit of the specific DNAPL (described in the attachment as dense non-aqueous phase liquid of which PCB is a member), nor does the technology exist to accomplish this goal. The soil concentrations of PCBs may always be greater than the dissolved concentrations due to the properties of PCB causing a high degree of absorption to soil material.

I hope this information and the enclosed attachment is helpful. If you have any questions, please call me.

Very Truly Yours,

Michael B. Moore

Michael B. Moore
Hydrogeologist

Reference No. 53-MBM-141

Attachment

cc: Brian R. Stetson, Great Northern Paper

EST

ATTACHMENT

I. Fundamental Principals and Conceptual Models of DNAPL Transport

Fundamental Principals

In the term dense non-aqueous phase liquids (DNAPL), non-aqueous phase refers to the fact that such liquids are immiscible in water from a fluid-mechanical viewpoint, such as petroleum hydrocarbons. Dense refers to the fact that, unlike petroleum hydrocarbons, they are more dense than water. Many organic compounds such as chlorinated solvents, halogenated benzenes, some pesticides, coal tar/creosote and polychlorinated biphenyls (PCB) are DNAPL compounds.

The high density of DNAPL enables a release into the subsurface to penetrate downward through the vadose (unsaturated) zone and the groundwater (saturated) zone as a separate non-aqueous phase. Although considered immiscible from a fluid-mechanical viewpoint, DNAPL compounds have finite solubilities in both air and water (Table 1). Below the water table, small quantities of compounds can be dissolved by groundwater in contact with the DNAPL. Above the water table, volatile DNAPL compounds will partition into the air phase leading to the development of vapor plumes. Table 1 shows that PCB's have one of the lowest water solubilities of any type of DNAPL compound making them one of the most immobile or environmentally persistent of DNAPL compounds.

TABLE 1 Physical/chemical properties for selected organic solvents and PCB which are DNAPL compounds at typical subsurface temperatures.

	Density (g/cm^3)	Viscosity (cP)	Vapor Pressure (mm)	Solubility (mg/L)
1,1,1-Trichloroethane	1.35	0.84	100	720
Carbon tetrachloride	1.59	0.97	90	785
Methylene chloride	1.33	0.44	349	20,000
Chloroform	1.49	0.56	151	8,200
Tetrachloroethene	1.63	0.90	14	200
Trichloroethene	1.46	0.57	58	1,100
PCB (Inerteen 70-30®)	1.49		0	< 0.05

Notes: organic solvent data from Schwille (1988)
PCB data from Roberts et al, 1982; NIOSH 1985
Properties at 20°C
PCB density at 15.5°C
1,1,1-Trichloroethane properties at 25°C

The presence of DNAPL in the subsurface has critical implications with regard to remedial measures to control or clean-up of groundwater contamination at spill sites. DNAPL can potentially penetrate downward into the subsurface to beyond the depth of feasible removal by excavation given the limited depth excavation equipment can achieve. Similarly, DNAPL can also migrate into areas which are otherwise inaccessible such as beneath buildings. Complete removal, however, is not possible with existing remedial technologies. Simply purging and treating contaminated groundwater from dissolved plumes will not be effective in removing the contaminant source because of the low solubility of the compounds. The consideration of investigation and remediation is not possible without an adequate understanding of the conceptual models for the occurrence of DNAPL in the subsurface and the fundamental processes which control DNAPL behavior in the subsurface. Consequently, these models are described in the following paragraphs restricting the discussion to porous media.

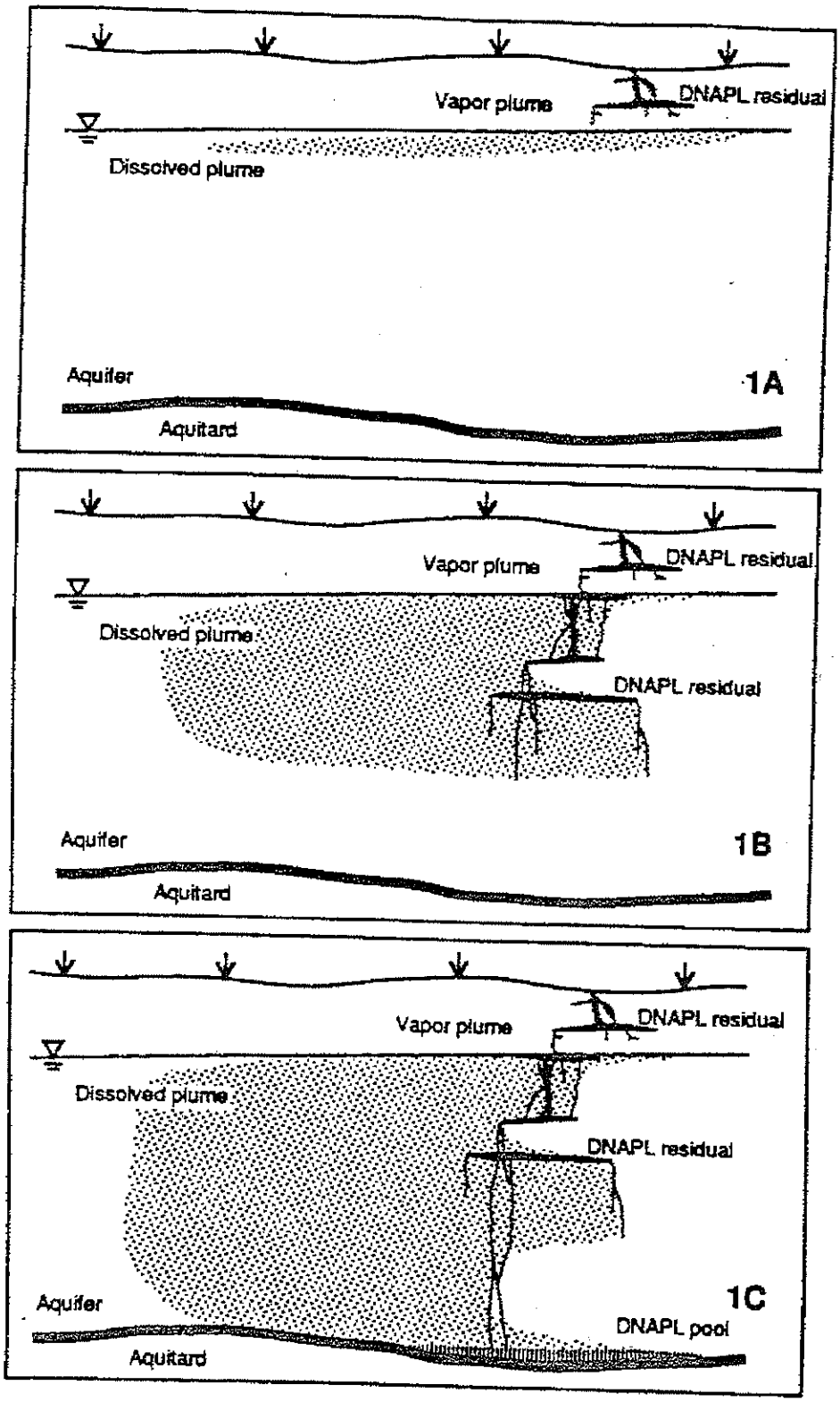
Conceptual Models

Based on recent laboratory studies, modeling studies and field experiments together with observations at many spill sites and waste disposal facilities in North America, several conceptual models for the development of groundwater contamination from DNAPL can be described. In these conceptual models, a quantity of DNAPL is introduced into the subsurface such as might occur due to a spill. In such situations, DNAPL may penetrate downward through the vadose (unsaturated) zone and the groundwater (saturated) zone.

The flow of DNAPL through geologic media will depend on the properties of a specific DNAPL such as density and viscosity; the pressure driving the DNAPL migration; the intrinsic permeability of the geologic medium; and the degree of DNAPL saturation of the pore space in the geologic medium. Higher rates of DNAPL flow will occur in more permeable media for higher DNAPL saturations and for DNAPL having higher density and lower viscosity. All PCBs have densities significantly higher than water and viscosities lower than water so that in a given geologic medium with conditions of high DNAPL saturation, DNAPL migration may occur at rates significantly greater than those for groundwater.

Conceptual models of DNAPL migration and the development of groundwater contamination from DNAPL sources in granular media are illustrated in Figures 1A, 1B and 1C. Figure 1A represents the case of a relatively small spill in which all of the DNAPL has penetrated into the vadose zone and forms a zone of residual DNAPL contamination because the volume released did not exceed the retention capacity of the vadose zone. For a given volume of DNAPL released in a given geologic medium, the depth of

Figure 1. Conceptual models for DNAPL in porous media.



penetration will be influenced by the area over which the release occurs and the rate of release. Most dense organic solvents have high vapor pressures causing a plume of solvent vapors to develop in soil air surrounding the DNAPL source in the vadose zone. This is not the case when the DNAPL source is PCB given its relatively low vapor pressure (Table 1).

In Figure 1B, the volume of DNAPL released is sufficiently large for DNAPL to move into the groundwater zone, but not large enough for DNAPL to reach the bottom of the aquifer. Groundwater flow patterns will have no significant effect on the movement of DNAPL through the groundwater zone. In laboratory experiments by Schwille (1988), the downward penetration of trichloroethene and tetrachloroethene in coarse and medium sand was not noticeably affected by horizontal groundwater flow velocities as high as 14 meters/day (46 feet/day). As in the vadose zone, the migration of DNAPL in the groundwater zone will be strongly influenced by heterogeneity (differences or variations) in the geologic media. Finer-grained layers will restrict downward migration of DNAPL and may result in the formation of DNAPL pools or deflect DNAPL laterally. Lateral migration of DNAPL may occur independent of the direction and magnitude of groundwater flow. This potential for lateral migration introduces substantial complexities for investigation of a suspected spill area.

If the volume of spilled DNAPL is larger than the retention capacity of the vadose and groundwater zones, a portion of the DNAPL will settle out as a pool of free liquid on the bottom of the aquifer as shown in Figure 1C, or it will settle out on low permeability beds in the aquifer. DNAPL may form puddles or pools in depressions on such low permeability beds. In situations where the beds are sloped, DNAPL can continue to move downslope and its movement need not be controlled by the direction of groundwater flow. Depending on the volume of the spill and the configuration of the low permeability beds, DNAPL may move relatively substantial distances laterally away from the area in which it was released. The rate of this migration through the subsurface may be rapid. Laboratory experiments performed by Schwille (1988) illustrated migration rates of centimeters per minute for tetrachloroethene moving downward through coarse to medium sand under only small DNAPL driving pressures.

Fundamental Principals and Conceptual Models Relative to PCB and the T-160 PCB Site

The unique physical and chemical properties of PCB have a substantial impact on their potential to migrate in the subsurface environment. As shown in Table 1, PCB's have lower solubilities in water than more common DNAPL compounds, very low potential to migrate in the vapor phase and are strongly absorbed

by soil material (Griffin et al, 1978; Roberts et al, 1982). These properties make PCB compounds much more immobile and difficult to remove from the subsurface than other more common DNAPL compounds.

In the April 1990, T-160 PCB Cleanup Remedial Activities Report, it was estimated that the majority of the PCB spill was removed due to the immediate response and volume of contaminated soil removed. Given these estimates, it appears that the scenario discussed in Figure 1A is the most likely possibility with the Figure 1B and 1C scenarios much less likely. The main difference between the Figure 1A scenario and a DNAPL spill consisting of PCB is the lack of a vapor phase that would exist from PCB. The more common DNAPL compounds listed in Table 1 have vapor pressures two and three orders of magnitude greater than PCBs, which permits these compounds greater mobility in the vapor phase.

II. Evaluation of DNAPL Investigations and Remediation

The presence of DNAPL in the subsurface has significant implications regarding methods of approach for an investigation, the interpretation of groundwater contamination from that investigation and the design of remedial measures at spill sites.

Investigations in areas of DNAPL spills are exceedingly more difficult than dissolved contamination sites with greater risk of compounding an already difficult problem. One very important consideration in DNAPL investigations is the possible contamination of the groundwater in deeper strata as a result of drilling through zones of potentially mobile DNAPL. If a boring intersects a lens or pool of DNAPL in a granular media, DNAPL can enter the boring during drilling or prior to the installation of monitoring wells. This DNAPL would sink to the bottom of the boring and exit the boring resulting in interconnection through the borehole and worsening of the extent of subsurface contamination. Even if geologic conditions are such that DNAPL cannot exit the bottom of the borings, only small amounts of accumulated DNAPL at the bottom of such borings could result in the detection of significant, but erroneous, concentrations of dissolved contaminants in the groundwater sampled from these deeper levels. Special drilling techniques must be used in these circumstances which do not offer guarantees against causing further DNAPL migration.

The cost implications of investigations at DNAPL spill sites are compounded by the numerous complications due to DNAPL flow characteristics of which the above example is one of many. Based on ENSR's experience, a typical subsurface investigation with the objective of defining the extent of contamination at a DNAPL site can cost between one and five million dollars.

In terms of remedial potential, most DNAPL compounds will not be rapidly dissolved by flowing groundwater because of their low solubility. Based on the results of a laboratory experiment (Schwille, 1988), at least 100 years would be required to dissolve a pool of trichloroethene 1.5 meters (4.9 feet) in length, 0.5 meters (1.6 feet) in width and 0.2 meters (0.66 feet) in thickness containing approximately 50 liters (13 gallons) of solvent in a sandy aquifer in which the linear groundwater velocity was 275 meters/year (902 feet/year). Calculations such as this are consistent with the observation that groundwater contamination from DNAPL sources is continuing at sites which DNAPL releases or disposal occurred tens of years ago. The estimate for complete dissolution of the same volume of PCB as the above example would be considerably longer given the solubility differences of approximately five orders of magnitude listed in Table 1.

This discussion will not enter into the various technologies available and under research for remedial alternatives. Through ENSR's experience and literature review it is known that there are significant limitations on the applicability of all of the potential technologies available. To our knowledge, none have been demonstrated to be effective in the elimination of DNAPL. Data for actual costs of remediation of DNAPL sites does not exist since a DNAPL site which has been remediated does not exist. Cost estimates for capital investment, operation and maintenance for 100 years of operation (following the above example) of a groundwater pump and treat scenario are well over two times the investigation cost described above.

REFERENCES

Griffin, R., R. Clark, M. Lee, and E. Chain, Disposal and Removal of Polychlorinated Biphenyls In Soil, Land Disposal of Hazardous Waste in Fourth Annual Research Symposium, Solid and Hazardous Waste Division Municipal Environmental Research Lab, U. S. Environmental Protection Agency, Cincinnati, Ohio, March, 1978.

NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, February, 1987.

Roberts, J. R., J. A. Cherry, and F. W. Schwartz, A Case Study of a Chemical Spill: Polychlorinated Biphenyls (PCBs) 1. History, Distribution, and Surface Translocation, Water Res.,3, 525-534, 1982.

Schwille, F. 1988. Dense Chlorinated Solvents in Porous and Fractured Media - Model Experiments. Translated by J.F.Pankow, Lewis Publishers Inc. Chelsea, Michigan.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In re:	)	
GREAT NORTHERN NEKOOSA CORPORATION,	)	EPA Docket No. TSCA-I-87-1041
Respondent.	)	

CONSENT AGREEMENT AND FINAL ORDER

I.

BACKGROUND

The United States Environmental Protection Agency ("EPA") filed on February 10, 1987 an Administrative Complaint in this matter pursuant to Section 16(a) of the Toxic Substances Control Act ("TSCA"), 15 U.S.C. § 2615(a), for violations of Section 15 of TSCA, 15 U.S.C. § 2614;

Section 15(c) of TSCA, 15 U.S.C. § 2614, states that it shall be unlawful for any person to fail to comply with any rule promulgated under Section 5 or 6 of TSCA, 15 U.S.C. §§ 2604 and 2605;

The regulations entitled "Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions," 40 C.F.R. Part 761, were promulgated pursuant to Section 6 of TSCA;

EPA's Administrative Complaint alleges that Respondent Great Northern Nekoosa Corporation ("Great Northern") violated the regulations concerning the marking, recordkeeping and storage for

disposal of polychlorinated biphenyls ("PCBs"), 40 C.F.R. Part 761, Subparts C, D, and J, at its facility in East Millinocket, Maine;

Several of the counts in the Complaint concerned the discovery of PCB spills which resulted in contamination of the ground at the No. 5 Paper Machine Site and the No. 6 Paper Machine Site at the East Millinocket, Maine facility;

After discovery of the spills at the No. 5 and No. 6 Paper Machine sites, Great Northern identified another contaminated site known as the Chemi-Groundwood Site;

On July 22, 1988, Great Northern completed Remediation Plans for the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site, and completed a Technical Specification for the remediation of the three sites in July 1989;

On November 13, 1990, Great Northern revised a Workplan for Wall Decontamination, originally drafted in September of 1990, for the PCB-contaminated brick wall of the building located next to the No. 5 Paper Machine Site;

On September 18, 1990, Great Northern completed Technical Specifications for Wall Decontamination for the PCB-contaminated brick wall of the building located next to the No. 5 Paper Machine Site;

Each of the Plans and Specifications described in the preceding three paragraphs has been reviewed and approved by EPA, and Great Northern has submitted to EPA documentation representing that Great Northern has performed the work described therein;

EPA alleges that the PCB spills at the Sites constitute

hazardous substances, pollutants, and/or contaminants as defined by Sections 101(14) and 101(33) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601(14) and 9601(33), and that PCBs have been released into the environment from the Great Northern facility in East Millinocket, Maine;

EPA alleges that the PCB spills at the Sites required response actions to be undertaken pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604;

EPA alleges that, in performing these response actions, it has incurred and accounted for response costs (within the meaning of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §§101(25) and 107(a)) at or in connection with the Sites as of the effective date of this Agreement;

EPA alleges that the response actions it has performed to date and the response costs it has incurred in connection with the Sites are not inconsistent with the National Contingency Plan ("NCP"), 40 C.F.R. Part 300;

EPA alleges that Great Northern is a responsible party pursuant to Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is liable for response costs incurred and to be incurred at or in connection with the Sites;

EPA and Great Northern ("the Parties") agree that implementation of the Remediation Plans, the Technical Specification, the Workplan for Wall Decontamination, and the Technical Specifications for Wall Decontamination, in addition to

the requirements for future monitoring, reporting and other actions contained in this Consent Agreement and Final Order, has attained a degree of cleanup of PCBs released into the environment and control of further releases which at a minimum is consistent with the requirements of TSCA and the federal regulations promulgated thereunder, and that this Consent Agreement and Final Order does not provide a release to Great Northern with regard to the standard of cleanup under any other federal statute or regulation;

The Parties recognize that implementation of this Consent Agreement and Final Order has expedited the remediation of the three PCB contaminated sites, will avoid prolonged and complicated litigation between the Parties involving civil penalties and reimbursement of government costs incurred in the oversight of the cleanup, and that entry of this Consent Agreement and Final Order is therefore in the public interest.

NOW, THEREFORE, it is hereby Ordered, Adjudged, and Decreed:

II.

JURISDICTION

(i) EPA has jurisdiction over this matter pursuant to Section 16(a) of TSCA, 15 U.S.C. § 2515(a). Great Northern stipulates to the jurisdiction over the subject matter alleged in the Complaint, and that the Complaint states a claim upon which relief can be granted against Great Northern. Great Northern waives any defenses it might have as to jurisdiction and venue; and, without admitting or denying the factual allegations contained in the Complaint, consents to the terms of this Consent Agreement and Final Order.

(ii) Section XVI of this Consent Agreement and Final Order, Reimbursement for Response Costs, concerns the recovery of costs incurred by EPA at the Great Northern Site in East Millinocket, Maine as of the effective date of this Agreement. The authority to enter into Section XVI of this Agreement is vested in the President by Section 122(h)(1) of CERCLA, 42 U.S.C. § 9622(h)(1). This authority was delegated to the Administrator of the United States Environmental Protection Agency on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (January 29, 1987), and further delegated to the Regional Administrator, Region I, of EPA, by EPA Delegation No. 14-14-D (September 13, 1987).

III.

PARTIES BOUND

The benefits and burdens of this Consent Agreement and Final Order apply to and are binding upon the undersigned parties and their successors, assigns and contractors. The undersigned representative of each party to this Consent Agreement and Final Order certifies that he or she is fully authorized by the party whom she or he represents to enter into the terms and conditions of the Consent Agreement and Final Order and to execute and legally bind that party to it. Great Northern shall provide a copy of this Consent Agreement and Final Order to any contractor and require a copy be provided to each subcontractor hired to perform any remaining work required by this Consent Agreement and Final Order and shall condition all contracts, and require all subcontracts (to the extent they relate to such work) to be conditioned, upon

performance of the work in conformity with the terms of this Consent Agreement and Final Order.

IV.

DEFINITIONS

Unless noted to the contrary, the terms of this Consent Agreement and Final Order shall have the meaning assigned to those terms by the Toxic Substances Control Act, 15 U.S.C. § 2501 et seq., or the regulations promulgated thereunder at 40 C.F.R. Part 761. Whenever the terms listed below are used in this Consent Agreement and Final Order, the following definitions shall apply:

A. "Cleanup" shall mean the implementation, in accordance with Section VI, hereof, of the tasks described in the Remediation Plans, the Workplan for Wall Decontamination, the Technical Specification, and the Technical Specifications for Wall Decontamination. "Cleanup" shall not include implementation of the groundwater monitoring plan by Great Northern in accordance with Section VII, hereof.

B. "Day" shall mean a calendar day unless expressly stated to be a working day. "Working day" shall mean a day other than a Saturday, Sunday, or legal holiday. In computing any period of time under this Consent Agreement and Final Order, where the last day would fall on a Saturday, Sunday, or legal holiday, the period shall run until the end of the next working day.

C. "EPA" shall mean the United States Environmental Protection Agency.

D. "Great Northern" shall mean Great Northern Nekoosa

Corporation.

E. "Parties" shall mean EPA and Great Northern.

F. "PCB" shall mean polychlorinated biphenyl.

G. "Quality Assurance Project Plan" shall mean the plan which specifies the quality assurance measures applied to the implementation of the remediation plans at the Sites, as set forth in Great Northern's Quality Assurance Project Plan, revised in July 1989 and as amended, attached hereto as Appendix E.

H. "Remediation Plans" shall mean the three Remediation Plans for the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site, completed by Great Northern on July 22, 1988, and attached hereto as Appendices B, C, and D.

I. "Response Costs" as used in Section XVI of this Agreement shall include any and all civil liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), relating to costs incurred and accounted for by EPA during its oversight of the cleanup conducted at or in connection with the Sites as of the effective date of this Agreement and not inconsistent with the National Contingency Plan.

J. "Sites" shall mean the three specific PCB contaminated sites identified by Great Northern as the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site. These three sites are located at Great Northern's East Millinocket, Maine facility. The limits of these three sites are set forth in the July 22, 1988 Remediation Plans and the Technical Specification.

K. "Technical Specification" shall mean the technical engineering specifications for implementation of the remediation

plans at the Sites, as set forth in Great Northern's July 14, 1989 Technical Specification, as amended on September 11, 1989. The Technical Specification is attached hereto as Appendix A.

L. "Technical Specifications for Wall Decontamination" shall mean the technical engineering specifications for implementation of the Workplan for Wall Decontamination, as set forth in Great Northern's September 18, 1990 Technical Specifications for Wall Decontamination, attached hereto as Appendix G.

M. "TSCA" shall mean the Toxic Substances Control Act, 15 U.S.C. § 2501 et seq.

N. "Work" shall mean activities required by the Consent Agreement and Final Order, including the implementation, in accordance with Section VI, hereof, of the tasks described in the Remediation Plans, the Workplan for Wall Decontamination, the Technical Specification, the Technical Specifications for Wall Decontamination, and the implementation of the groundwater monitoring plan required to be submitted in accordance with Section VII, hereof. "Work" shall not include reimbursement of response costs under Section XVI of this Consent Agreement and Final Order.

O. "Workplan for Wall Decontamination" shall mean the workplan developed for the PCB-contaminated brick wall of the building located next to the No. 5 Paper Machine Site, as set forth in Great Northern's Workplan for Wall Decontamination, originally drafted in September of 1990, and revised on November 13, 1990, attached hereto as Appendix F.

V.

GENERAL PROVISIONS

1. Objectives of the Parties

The objectives of the Parties in entering into this Consent Agreement and Final Order are to protect public health, welfare and the environment from releases or threatened releases of PCBs from the Sites by the investigation, development, design and implementation of remedial and monitoring programs by Great Northern, and to reimburse EPA for response costs incurred during its oversight of the cleanup conducted at or in connection with the Sites as of the effective date of this Agreement.

2. Effect of Settlement

The execution of this Consent Agreement and Final Order is not an admission of liability with respect to any issue dealt with in this Consent Agreement and Final Order nor is it an admission or denial of the factual allegations set out in the complaint.

3. Commitment of Great Northern

a. Great Northern certifies that it has financed and performed all remedial activities at the Sites, including the remedial work set forth in Section VI, and agrees to finance and perform the groundwater monitoring required under Section VII, and to finance and perform any other activities required as a result of the groundwater monitoring data.

b. Great Northern represents that the Work set forth in Section VI has been completed in accordance with the standards, specifications and within the time periods as prescribed in Section

VI and in the Technical Specification and Technical Specification for Wall Decontamination, which are incorporated herein by reference, subject to the Force Majeure provisions of Section XVIII.

c. Great Northern shall assume any and all liability arising from or relating to their acts or omissions in the performance of the Work or their failure to perform fully or complete the requirements of this Consent Agreement and Final Order.

d. Great Northern shall reimburse EPA, to the extent set forth in section XVI of this Consent Agreement and Final Order, for costs incurred and accounted for as of the effective date of this Agreement during oversight of the cleanup at or in connection with the Sites.

4. Permits and Approvals

a. Great Northern certifies that, to the best of its knowledge, it obtained all permits or approvals necessary for the Work. However, to the extent that any permit or approval necessary for the Work was not obtained, nothing in this Consent Agreement and Final Order shall be interpreted as relieving Great Northern of liability for failure to obtain such permit or approval.

b. This Consent Agreement and Final Order is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

5. Conveyance of the Site

a. Within sixty days of approval of this Consent Agreement and Order, Great Northern as owner of the East Millinocket facility

shall record a memorandum of this Consent Agreement and Final Order in the Registry of Deeds of Penobscot County, State of Maine, in accordance with that locality's recording and conveyance standards.

b. In any deed transferring property subject to this Agreement, Great Northern shall include notice, and provide that a deed to any subsequent grantee shall include notice, that the property is subject to this Agreement, and that the grantee shall provide notice to EPA and to the Commissioner of the Maine Department of Environmental Protection at least ten (10) days prior to any future excavations in those areas identified in the Remedial Plans as containing PCBs, except in the event of an emergency, in which case the deed shall require notice to EPA and the Maine Department of Environmental Protection within twenty-four (24) hours after the commencement of such excavations.

c. Title to the Sites as described herein may be freely conveyed, provided that within twenty (20) days of such conveyance, Great Northern notifies EPA of such conveyance, the name of the grantee, and a description of Great Northern's obligations under this Consent Agreement and Final Order, if any, to be performed by such grantee. In the event of such conveyance, all of Great Northern's obligations pursuant to this Consent Agreement and Final Order shall continue to be met by Great Northern and, subject to approval by the United States, the grantee.

6. Future Disruption of the Sites

a. Once Great Northern has completed the Remedial Action, Great Northern must notify EPA and the Commissioner of the Maine

DEP in writing ten (10) business days prior to beginning any activities at any of the Sites involving the excavation or any other movement of soils or other debris below the layer of uncontaminated soil overlaying PCB contaminated soil, and of excavation of PCB contaminated soil under buildings at any of the Sites. If an emergency situation exists, Great Northern must notify EPA and Maine DEP by telephone or telefax within 24 hours after the commencement of activities otherwise requiring written notification.

b. Prior to undertaking any of the excavation activities described in this Section (except in emergency situations), Great Northern will determine PCB levels of excavated soil using scientifically accepted testing methods and will provide the results of such testing at EPA's request. In the event of an emergency, Great Northern will determine PCB levels of excavated soil as soon as is practicable.

c. When excavating soils from any of the Sites below the uncontaminated layer of soil, care must be taken to control dust, runoff or other means of off-site deposition of contaminated soil and protect workers within the Sites from exposure to the contaminated soil.

d. All such excavated soil or debris containing greater than 1 ppm PCBs that is not placed back within the Sites under at least a two-foot layer of uncontaminated soil must be disposed of off-site as PCB Waste, except that such material found to contain 50 ppm PCBs or greater must not be placed back within the Sites, but

must immediately be marked, stored for disposal, and disposed of as PCB Waste. Upon EPA's request, Great Northern shall provide evidence of such disposal in the form of a manifest or certification of destruction.

e. Great Northern will institute procedures or take other actions, including but not limited to providing notice to all relevant persons at relevant times, to reasonably ensure that PCB contaminated soil is not inadvertently excavated and to further ensure that Great Northern's employees, contractors, and agents comply with the above procedures.

VI.

PERFORMANCE OF THE CLEANUP BY GREAT NORTHERN

7. Great Northern certifies that it has performed the Cleanup of the Sites in accordance with the Technical Specification, Appendix A, the Remediation Plans, Appendices B, C, and D, the Workplan for Wall Decontamination, Appendix F, and the Technical Specifications for Wall Decontamination, Appendix G. The Technical Specification, Remediation Plans, the Workplan for Wall Decontamination, and the Technical Specifications for Wall Decontamination, are incorporated into and made an enforceable part of this Consent Agreement and Final Order.

8. Great Northern certifies that it completed the Cleanup on January 4, 1991.

9. Great Northern certifies that the Cleanup performed by Great Northern pursuant to this Consent Agreement and Final Order

has, at a minimum, achieved the following performance standards and requirements: (a) the sampling and analysis performed pursuant to Great Northern's Quality Assurance Project Plan, attached hereto as Appendix E, has demonstrated cleanup of the soil to the levels provided for in the Remediation Plans and Technical Specification; and (b) on the brick wall of the building adjacent to the No. 5 Paper Machine Site, statistical sampling conducted in accordance with the Quality Assurance Project Plan and Workplan for Wall Decontamination reveals less than 100 micrograms of PCBs per 100 square centimeters.

VII.

GROUND WATER MONITORING

10. Great Northern certifies that it has submitted the results of the sampling done pursuant to its January 23, 1989 Ground Water Monitoring Plan.

11. Great Northern has submitted to EPA and the Maine Department of Environmental Protection for approval in accordance with Section XII, hereof, a plan for long-term groundwater monitoring at the Sites. Great Northern shall implement the Plan, as approved by EPA and the Maine Department of Environmental Protection. EPA reserves the right to require Great Northern to take such action as is necessary to address any PCB contamination revealed by the groundwater monitoring at the Sites.

VIII.

ADDITIONAL WORK

12. In the event that EPA or Great Northern determines that

additional remediation work is necessary to meet the Performance or Clean-up Standards described in Section VI, notification of such additional work will be provided to the Project Coordinator for the other party.

13. Any additional work determined to be necessary by Great Northern is subject to approval by EPA.

14. Any additional work determined to be necessary by Great Northern and approved by EPA, or determined to be necessary by EPA to meet the Performance or Clean-up Standards, shall be completed by Great Northern in accordance with the standards, specifications, and schedules approved by EPA.

15. Unless otherwise stated by EPA, within 30 days of receipt of notice by EPA that additional work is necessary, Great Northern shall submit for approval by EPA a work plan for the additional work. Upon approval pursuant to the procedures set forth in Section XII, Great Northern shall implement the plan for additional work in accordance with the schedule contained therein.

IX.

QUALITY ASSURANCE, SAMPLING

16. Great Northern certifies that it used quality assurance, quality control, and chain of custody procedures in accordance with its Quality Assurance Project Plan, attached hereto as Appendix E. Sampling data generated consistent with the Quality Assurance Project Plan shall be admissible as evidence, without objection (except as to weight), in any proceeding under Section XIX of this Consent Agreement and Final Order. Great Northern will continue to

assure that EPA personnel or authorized representatives are allowed access to any laboratory utilized by Great Northern in implementing this Consent Agreement and Final Order. In addition, Great Northern shall have a designated laboratory analyze samples submitted by EPA for quality assurance monitoring.

17. Great Northern has made available to EPA the results of all sampling and/or tests generated by Great Northern with respect to its obligations under this Consent Agreement and Final Order, and has submitted these results in monthly progress reports as described in Section XI of this Consent Agreement and Final Order.

18. Great Northern has allowed and will continue to allow split or duplicate samples to be taken by EPA and/or its authorized representatives, of any samples collected by Great Northern pursuant to the implementation of this Consent Agreement and Final Order. In addition, EPA shall have the right to take any additional samples that EPA deems necessary.

X.

ACCESS

19. From the date of entry of this Consent Agreement and Final Order until EPA certifies completion of the Cleanup pursuant to Section XV, the United States and its representatives, including EPA and its contractors, shall have access at all times to the Sites and any property to which access is required for the implementation of this Consent Agreement and Final Order, to the extent access to the property is controlled by or available to Great Northern, for the purposes of conducting any activity

authorized by or related to this Consent Agreement and Final Order, including, but not limited to:

a. Monitoring the Work or any other activities taking place on the property;

b. Verifying any data or information submitted to the United States;

c. Conducting investigations relating to contamination at or near the Sites;

d. Obtaining samples;

e. Assessing the need for or planning and implementing additional response actions at or near the Sites; and

f. Inspecting and copying records, operating logs, contracts, or other documents required to assess Great Northern's compliance with this Consent Agreement and Final Order.

Upon exercising its right of access to the Sites and any property to which access is required for the implementation of this Consent Agreement and Final Order, EPA will make every attempt to conform to Great Northern's safety requirements, as set forth in its Safety and Health Plan developed pursuant to the Technical Specification.

20. Notwithstanding any provision of this Consent Agreement and Final Order, EPA retains all of its access authorities and rights under TSCA, CERCLA, RCRA and any other applicable statute or regulations.

XI.

REPORTING REQUIREMENTS

21. Great Northern has submitted to EPA written monthly progress reports which: (1) describe the actions which have been taken toward achieving compliance with this Consent Agreement and Final Order during the previous month; (2) include all results of sampling and tests received by Great Northern during the course of the work; (3) include all plans and procedures completed under the Technical Specification during the previous month; (4) include copies of all manifests for the removal of contaminated soils and materials; (5) describe the amounts of materials and soils removed from each of the Sites, categorized by type of material or soil and date of removal; (6) describe all actions, data and plans which had been scheduled for the next month and provide other information relating to the progress of construction as is customary in the industry; (7) include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect Great Northern's ability to complete the Cleanup in accordance with the time set forth in this Consent Agreement and Final Order, and a description of efforts made to mitigate those delays or anticipated delays.

22. Upon the occurrence of any event during performance of the work which, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9603, requires reporting to the National Response Center, Great Northern shall promptly orally notify the Region I

PCB Coordinator and the EPA On-Scene Coordinator ("OSC"), Arthur Wing, EPA Environmental Services Division, 60 Westview Street, Lexington, Massachusetts 02173, or in the event of the unavailability of the EPA OSC, the Emergency Response Section, Region I, United States Environmental Protection Agency (twenty-four hour emergency response line: 617-223-7265), in addition to the reporting required by Section 103. Within 20 days of the onset of such an event, Great Northern shall furnish to the EPA OSC or Emergency Response Section, as appropriate, a written report setting forth the events which occurred and the measures taken, and to be taken, in response thereto. Within 30 days of the conclusion of such an event, Great Northern shall submit a report setting forth all actions taken to respond thereto.

XII.

SUBMISSIONS REQUIRING AGENCY APPROVAL

23. Upon receipt of any plan, report or other item which is required to be submitted for approval pursuant to this Consent Agreement and Final Order, EPA shall within sixty (60) days, unless EPA provides an explanation for the delay, either: (1) approve the submission; (2) disapprove the submission, notifying Great Northern of deficiencies; or (3) modify the submission to cure the deficiencies.

24. In the event of approval or modification, Great Northern shall proceed to take any action required by the plan, report, or other item, as approved or modified, or exercise its rights pursuant to the dispute resolution provisions of this agreement.

25. Upon receipt of a notice of disapproval, Great Northern shall correct the deficiencies and resubmit the plan, report, or other item for approval within thirty (30) days (or such other time as the parties agree upon). Notwithstanding the notice of disapproval, Great Northern shall proceed to take any action required by any non-deficient portion of the submission, unless such implementation is inconsistent with the disapproved portion of the submission.

26. If, upon resubmission, the plan, report, or item is not approved, Great Northern shall be deemed to be in violation of this Consent Agreement and Final Order, subject to the dispute resolution provisions of this Agreement.

XIII.

PROJECT COORDINATORS

27. Within twenty (20) calendar days of the effective date of this Consent Agreement and Final Order, Great Northern shall provide to EPA, in writing, the name, address and telephone number of the former's designated Project Coordinator. EPA's project coordinator is Anthony Palermo, EPA Region I PCB Coordinator, and the On-Scene Coordinator for purposes of CERCLA oversight and cost recovery is Arthur Wing, EPA - Environmental Services Division, 60 Westview Street, Lexington, Massachusetts 02173. If a Project Coordinator, or OSC initially designated is changed, the identity of the successor shall be given to the other party within 10 working days before the changes.

28. EPA may designate other representatives, including EPA

and State employees, and federal and state contractors and consultants, to observe and monitor the progress of any activity undertaken pursuant to this Consent Agreement and Final Order. The OSC shall have authority consistent with the National Contingency Plan, 40 C.F.R. Part 300, promulgated pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 et seq., to halt, conduct, or direct any work required by this Consent Agreement and Final Order and, to take any necessary response action when he or she determines that conditions at the Sites may present an imminent and substantial endangerment to public health or welfare or the environment.

XIV.

CONFIRMATION OF COMPLETION

29. If EPA concludes, based upon representations made by Great Northern, that the Cleanup has been fully performed consistently with this Consent Agreement and Final Order, and EPA further concludes that the necessary action has been taken to mitigate the public health hazards and threats and the other threats posed by the Sites, as set forth in the Action Memorandum dated August 7, 1989, EPA will provide Great Northern with written confirmation of that determination. This confirmation shall constitute the "Confirmation of Completion of the Cleanup" for purposes of this Consent Agreement and Final Order. Such confirmation does not constitute a release from liability, a covenant not to sue, or a waiver of any present or future claims which EPA may have against Respondent, other than such liability as

is otherwise released in this Agreement.

XV.

ENDANGERMENT AND FUTURE RESPONSE

30. In the event of any action or occurrence during the performance of the Work which causes or threatens a release of a hazardous substance, or which may present an imminent and substantial endangerment to public health or welfare or the environment, Great Northern shall immediately take all appropriate action to prevent, abate, or minimize such release or endangerment, and shall immediately notify the OSC; or, if the OSC is unavailable, the EPA Emergency Response Unit, Region I. Great Northern shall take such action in accordance with all applicable provisions of the Health and Safety Plan developed pursuant to the Technical Specification. In the event that Great Northern fails to take appropriate response action as required by this Section, and EPA takes such action instead, Great Northern shall reimburse all costs of the response action defined by CERCLA. Payment of such response costs shall be made in the manner described in Section XVI, as applicable, within thirty (30) days of Great Northern's receipt of demand for payment and an appropriate accounting of the costs incurred. The bill for these costs will consist of a line-item summary of costs incurred during the preceding year; the summary will include a breakdown of costs by category, including without limitation payroll, travel, indirect costs, and contracts, and a brief narrative of work related to such costs (generally one to two paragraphs in length).

31. Nothing in the preceding paragraph shall be deemed to limit the power and authority of the United States, the State of Maine, or any Court to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the Sites.

XVI.

REIMBURSEMENT OF RESPONSE COSTS

i) jurisdiction

32. Section II (ii), on pages 4 and 5 of this Consent Agreement and Final Order, is hereby incorporated by reference.

33. Great Northern consents to and will not contest EPA's authority to enter into Section XVI of this Agreement, and agrees and submits to the jurisdiction asserted in Section XVI of this Agreement for the purpose of any subsequent proceedings for the enforcement of Section XVI of this Agreement.

ii) response costs

34. In entering into Section XVI of this Agreement, the mutual objective of EPA and Great Northern is to settle EPA's claims against Great Northern for response costs incurred and accounted for at or in connection with the Sites as of the effective date of this Agreement.

35. Great Northern shall make payment to EPA for the response costs incurred and accounted for at or in connection with the Sites as of the effective date of this Agreement in the amount of two hundred and ten thousand dollars ($ 210,000) (the "Cost

Reimbursement Settlement Payment") within thirty (30) days after the effective date of Section XVI of this agreement.

iii) stipulated penalties

36. If Great Northern fails to tender the entire Cost Reimbursement Settlement Payment for Section XVI of this Agreement within thirty (30) days after the effective date of Section XVI of this Agreement, Great Northern shall be liable to pay the sums set forth below as stipulated penalties:

Period of Failure to Comply	Penalty Per Day
1st - 5th day	$1,000.00
6th - 10th day	$2,000.00
each day thereafter	$5,000.00

37. Any such penalty shall be due and payable within ten (10) days of the receipt of a written demand from EPA. Payment for stipulated penalties shall be made as set forth in Paragraph 39 below. Penalties shall accrue regardless of whether EPA has notified Great Northern of its failure to make a timely payment.

38. In the event that Great Northern fails to pay stipulated penalties as provided in Paragraphs 36 and 37, EPA may institute proceedings in the United States District Court to recover such stipulated penalties and for any other appropriate relief. In any such action the terms of Section XVI of this Agreement shall not be subject to judicial review. The stipulated penalties set forth in this section do not preclude EPA from electing to pursue any other remedies or sanctions which may be available to EPA by reason of a refusal or failure to comply with the terms or conditions of Section XVI of this Agreement, including, but not limited to, an

enforcement action pursuant to Section 122(h)(3) of CERCLA, 42 U.S.C. § 9622(h)(3).

iv) method of payment

39. The Settling Parties shall make all payments to EPA required under Sections XVI(ii) and (iii) above by certified or cashier's check, payable to the "Environmental Protection Agency, Hazardous Substance Superfund". The check shall reference the name of the Sites and the EPA docket number for this Agreement. The transmittal letter accompanying each such payment shall reference that the payment is for response costs incurred at the Great Northern Sites, and shall be mailed to the following address:

Region I
U.S. Environmental Protection Agency
Attn: Hazardous Substance Superfund Accounting
P.O Box 360197M
Pittsburgh, Pennsylvania 15251

Great Northern shall simultaneously send a copy of the transmittal letter and check to:

Anthony Palermo
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency
John F. Kennedy Federal Building, APT
Boston, Massachusetts 02203

and

Mary Dever
U.S. Environmental Protection Agency
Environmental Services Division
60 Westview Street
Lexington, Massachusetts 02173

v) release for covered matters

40. In consideration, and upon payment, of the amounts specified in Paragraph 35 of Section XVI of this Agreement, EPA

agrees that such payment shall represent full satisfaction of the United States's claim against Great Northern for "Covered Matters." "Covered Matters" shall include any and all civil liability under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), for reimbursement of response costs incurred and accounted for by EPA at or in connection with the Sites as of the effective date of this Agreement. Nothing in Section XVI of this Agreement shall be construed to require EPA to enter into any later agreement with respect to the Great Northern Sites with Great Northern, or to prevent EPA from performing any response actions at the Site, and shall not prevent EPA from recovering response costs incurred and accounted for after the effective date of this agreement or from requiring Great Northern to perform any response actions at the Sites, nor shall it prevent Great Northern from disputing any such actions by EPA under the dispute resolution provisions of this Agreement.

vi) reservation of rights

41. Nothing in Section XVI of this Agreement is intended to be nor shall it be construed as a release or covenant not to sue for any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which EPA may have against Great Northern for:

a. Any liability as a result of failure to make timely payments as required by Section XVI of this Agreement; or

b. Any matters not expressly included in Covered Matters, including, without limitation, any liability for (i)

injunctive relief at the Sites, (ii) response costs incurred and accounted for at the Sites after the effective date of this Agreement, or (iii) damages to natural resources.

42. Nothing in Section XVI of this Agreement is intended to be nor shall it be construed as a release, covenant not to sue, or compromise of any claim or cause of action, administrative or judicial, civil or criminal, past or future, in law or in equity, which EPA may have against any person, firm, corporation or other entity not a signatory to this Agreement. Except as specifically set forth herein as Covered Matters in Section XVI of this Agreement, Section XVI of this Agreement shall not estop or limit any legal or equitable claims of the United States against Great Northern, their agents, contractors, successors, or assigns, including but not limited to, claims related to releases of hazardous substances or other pollutants or contaminants.

viii) public comment period

43. Final acceptance by EPA of Section XVI of this Agreement shall be subject to Section 122(i) of CERCLA, 42 U.S.C. § 9622(i), which requires EPA to publish notice of the proposed settlement in the Federal Register, to provide persons who are not parties to the proposed settlement an opportunity to comment on the proposed settlement, and to consider comments filed in determining whether to consent to the proposed settlement. After consideration of any comments submitted during the thirty (30) day public comment period held pursuant to Section 122(i) of CERCLA, EPA may withhold consent to all or part of Section XVI of this Agreement if comments

received disclose facts or considerations which indicate that Section XVI of this Agreement is inappropriate, improper or inadequate. Otherwise, Section XVI shall become effective when EPA issues notice to Great Northern that the former is not withdrawing from this section of the Agreement.

ix) effective date

44. The effective date of Section XVI of this Agreement shall be the date upon which EPA issues written notice to Great Northern that the public comment period pursuant to Paragraph 43 has closed and that comments received, if any, do not require modification of or EPA withdrawal from this Agreement.

XVII.

INDEMNIFICATION AND INSURANCE

45. Great Northern shall indemnify and save and hold harmless the United States, its officials, agents, employees, contractors, or representatives from any and all claims or causes of action arising from or on account of acts or omissions of Great Northern, their officers, employees, agents, contractors, subcontractors, and any persons acting on their behalf or under their control, in carrying out activities pursuant to this Consent Agreement and Final Order. The United States shall not be held out as a party to any contract entered into by or on behalf of Great Northern in carrying out activities pursuant to this Consent Agreement and Final Order. Neither Great Northern nor any such contractor shall be considered an agent of the United States.

46. Great Northern waives, and shall indemnify and hold

harmless the United States with respect to, any claims for damages or reimbursement from the United States, or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Great Northern and any person for performance of work on or relating to the Sites, including claims on account of construction delays.

47. Great Northern certifies, and has submitted documentation to prove, that it has the ability to be financially responsible for the indemnification referenced in Paragraphs 45 and 46, above, in accordance with the standards set forth in 40 C.F.R. 264.147(f). Great Northern shall submit its corporate annual report to EPA, annually, within thirty (30) days of the anniversary of the effective date of this Agreement, for a period of three years beginning one year following the effective date of this Agreement.

XVIII.

FORCE MAJEURE

48. "Force Majeure" is defined for the purposes of this Consent Agreement and Final Order as an event arising from circumstances beyond the control of Great Northern and of any entity controlled by Great Northern, including their contractors and subcontractors, which delays or prevents the performance of any obligation (with the exception of Great Northern's obligations under Section XVI of this Consent Agreement and Final Order) under this Consent Agreement and Final Order. "Force Majeure" does not include unanticipated or increased costs, changed financial circumstances, or non-attainment of the goals and standards set

forth in Section VI, hereof, and does not apply to Reimbursement of Response Costs under Section XVI of this Consent Agreement and Final Order.

49. When circumstances occur which may delay or prevent the completion of any phase of the Work, whether or not caused by a Force Majeure event, Great Northern shall notify the EPA Region I PCB Coordinator and the EPA OSC orally of the circumstances within five working days after it first became aware of them. Within ten (10) working days after Great Northern first became aware of such circumstances, Great Northern shall supply to EPA in writing an explanation of the cause(s) of any actual or expected delay or noncompliance, the anticipated duration of any delay, the measures taken and to be taken by Great Northern to prevent or minimize the delay or correct the noncompliance, and the timetable for implementation of such measures. Failure to give timely oral and written notice to EPA in accordance with this Paragraph shall constitute a waiver of any claim of Force Majeure with respect to the circumstances in question.

50. If EPA agrees that a delay is or was caused by a Force Majeure event, and that the delay prevents the possibility of completion of the Cleanup by the date specified in Paragraph 8, hereof, the Parties shall agree on extension of the date of completion of the Cleanup. In proceedings on any dispute regarding a delay in performance or other noncompliance, Great Northern shall have the burden of proving (1) that the delay or noncompliance is or was caused by a Force Majeure event, and (2) that the amount of

additional time requested is necessary to compensate for that event.

XIX.

DISPUTE RESOLUTION

51. If Great Northern objects to any EPA notice of disapproval or decision made pursuant to this Consent Agreement and Final Order, including any decision which has resulted in the assessment of stipulated penalties, Great Northern shall notify EPA in writing of its objection within ten (10) business days of receipt of the notice. An EPA Region I official employed at a management level higher than Programmatic Section Chief shall be assigned by EPA to mediate and resolve the dispute. The designated EPA official, the EPA employee whose decision is being disputed, and Great Northern shall have fourteen (14) days from the receipt by EPA of the notification of objection to meet and reach an agreement. If agreement cannot be reached on any issue within this fourteen (14) day period, the designated EPA official shall provide a written decision to Great Northern and Great Northern shall implement the activities required by the EPA decision beginning no later than five (5) days after receipt of the EPA decision. If EPA determines, in its sole discretion, that Great Northern acted in good faith in invoking dispute resolution regarding any EPA notice of disapproval or decision other than an EPA bill for response costs, the time period to implement or complete the disputed EPA decision will be suspended during the pendency of the dispute pursuant to the procedures and deadlines of this Paragraph;

provided however, that the accrual of stipulated penalties shall not be suspended by this provision. Engagement of a dispute resolution between EPA and Great Northern shall not be cause for the delay of any undisputed work or any other undisputed obligations under this Consent Agreement and Final Order. If the decision of the designated official resolving the dispute grants any relief to Great Northern, then no stipulated penalties shall be due for the matter as to which such relief was granted.

In the event that Great Northern does not implement the activities required by the EPA decision, the EPA Regional Administrator may take such civil enforcement actions against Great Northern as may be provided by statutory or equitable authorities, including, but not limited to, the assessment of such civil penalties or damages as are authorized by Sections 122 and 109 of CERCLA.

XX.

STIPULATED PENALTIES

52. With the exception of a failure to comply with the requirements of Section XVI of this Consent Agreement and Final Order (Reimbursement of Response Costs), if Great Northern fails to comply with any requirement of this Consent Agreement and Final Order, including but not limited to the groundwater monitoring described in Section VII of this Agreement, or to perform all required work properly by the deadline set forth in Paragraph 8, Great Northern shall pay to EPA stipulated penalties of $1,000 per day for each day of each and every violation of said requirements.

53. Stipulated penalties shall begin to accrue on the day that performance is due or noncompliance occurs, and shall continue to accrue through the final day of correction of the noncompliance. Separate penalties shall accrue for each separate violation of this Consent Agreement and Final Order.

54. All penalties due to EPA under this Section shall be payable within thirty (30) days of receipt by Great Northern of notification of noncompliance, and shall be subject to the conditions and method of payment described in Paragraph 58, below.

55. Stipulated penalties due to EPA under this section shall be paid by certified check made payable to the order of the "Treasurer, United States of America," and shall be mailed to EPA--Region I, P.O. Box 360197M, Pittsburgh, PA 15251.

56. The stipulated penalties set forth above shall be in addition to any other remedies, sanctions, or penalties which may be available to the United States or its Agencies or Departments by reason of Great Northern's failure to comply with requirements of this Consent Agreement and Final Order.

XXI.

PENALTY

57. In light of the estimated seven million, two hundred and fifty thousand dollar ($7,250,000) cost of the Cleanup, EPA has determined that it is fair and proper to reduce the civil penalty from the amount proposed in the Complaint to twenty-two thousand and eight hundred dollars ($ 22,800).

58. Within thirty (30) days of receiving a copy of this

Consent Agreement and Final Order signed by the Regional Administrator, Region I, Respondent shall submit a cashier's or certified check, to the order of the "Treasurer, United States of America," in the amount of twenty-two thousand and eight hundred dollars ($22,800), to:

EPA -- Region I
P.O. Box 360197M
Pittsburgh, PA 15251

and shall provide copies of the check to:

Regional Hearing Clerk (RRC)
U.S. Environmental Protection Agency
Region I
John F. Kennedy Federal Building
Boston, MA 02203

and

Anthony Palermo (APT)
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency
Region I
John F. Kennedy Federal Building
Boston, MA 02203

Pursuant to 31 U.S.C. § 3717, an executive agency like EPA is entitled to assess interest and penalties on debts owed to the United States and a charge to cover the cost of processing and handling a delinquent claim. Interest will therefore begin to accrue on the civil penalty if it is not paid within thirty (30) calendar days of Respondent's receipt of the Consent Agreement and Order. Interest will be assessed at the rate of the United States Treasury tax and loan rate in accordance with 4 C.F.R. § 102.13(c). In addition, a penalty charge of six percent per year will be assessed on any portion of the debt which remains

delinquent more than ninety (90) days after payment is due. However, should assessment of the penalty charge on the debt be required, it will be assessed as of the first day payment is due under 4 C.F.R. § 102.13(e).

59. The penalty specified in Paragraph 57, hereof, shall represent civil penalties assessed by EPA and shall not be deductible for purposes of Federal taxes.

XXII.

COVENANTS NOT TO SUE BY EPA

60. This Consent Agreement and Final Order constitutes a full and final settlement by EPA of all claims for civil penalties pursuant to Section 16(a) of TSCA for the violations of TSCA alleged in the Complaint. Compliance with this Consent Agreement and Final Order shall not be a defense to any actions subsequently commenced pursuant to Federal laws and regulations administered by EPA relating to violations other than those alleged in the Complaint and it is the responsibility of Respondent to comply with said laws and regulations.

XXIII.

COVENANTS BY GREAT NORTHERN

61. Great Northern hereby covenants not to sue the United States for any claims related to or arising from the Work or this Consent Agreement and Final Order, including any direct or indirect claim for reimbursement from the Hazardous Substances Superfund established pursuant to Section 221 of CERCLA, 42 U.S.C. § 9631. Nothing in this Consent Agreement and Final Order shall be deemed

to constitute preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.25(d).

XXIV.

ACCESS TO INFORMATION

62. Great Northern shall provide to EPA upon request, all documents and information within their possession and/or control or that of their contractors or agents relating to activities at the Sites or to the implementation of this Consent Agreement and Final Order, including sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to remedial activities. Great Northern shall also make available to EPA, for purposes of investigation, information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

63. Great Northern may assert privilege or business confidentiality claims covering part or all of the documents or information submitted to EPA under this Consent Agreement and Final Order to the extent permitted by and in accordance with 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies specific documents or information when they are submitted to EPA, the public may be given access to such documents or information without further notice to Great Northern.

64. No claim of confidentiality shall be made with respect to

any sampling or analytical data or any other documents or information evidencing conditions at or around the Sites.

XXV.

RETENTION OF RECORDS

65. Until six (6) years after EPA confirmation of completion of the Work, Great Northern shall preserve and retain all records and documents now in its possession or control which are necessary to evaluate compliance hereunder. After this document retention period, Great Northern shall notify EPA at least ninety (90) calendar days prior to the destruction of any such records or documents, and, upon request by EPA, Great Northern shall relinquish custody of the records or documents to EPA.

XXVI.

NOTICES AND SUBMISSIONS

66. Whenever, under the terms of this Consent Agreement and Final Order, written notice is required to be given or a report or other document is required to be sent by one party to another, it shall be directed to the individuals and the addresses specified below, unless those individuals or their successors give notice of a change to the other parties in writing. Written notice as specified herein shall constitute complete satisfaction of any written notice requirement of the Consent Agreement and Final Order with respect to EPA and Great Northern, respectively.

As to EPA:

The EPA Region I PCB Coordinator: U.S. EPA, JFK Federal Building, Boston, Massachusetts 02203.

The EPA On-Scene Coordinator: Art Wing, EPA Environmental Services Division, 60 Westview Street, Lexington, Massachusetts 02173.

As to Great Northern:

The Project Coordinator

XXVII.

EFFECTIVE AND TERMINATION DATES

67. With the exception of Section XVI of this Consent Agreement and Final Order, which contains conditions for its own effective date, the effective date of this Consent Agreement and Final Order shall be the date upon which this Consent Agreement and Final Order is ordered by EPA.

68. Upon confirmation of Cleanup by EPA, this Consent Agreement and Final Order shall terminate. Termination of this Consent Agreement and Final Order shall not affect the Covenants Not to Sue (Sections XXII and XXIII above), including all reservations pertaining to those covenants, shall not affect Great Northern's obligations for Reimbursement of Response Costs under Section XVI of this Agreement, and shall not affect any continuing obligations of Great Northern, including, but not limited to, those described in Sections V, VI, VII, VIII, XVII, XX, XXI, and XXV.

XXVIII.

U.S. DISTRICT COURT JURISDICTION

69. The Parties hereby agree to submit to, and waive any objections to, the jurisdiction of the U.S. District Court in Maine for enforcement of this Consent Agreement and Final Order.

XXIX.

MODIFICATION OF THIS AGREEMENT

70. This Consent Agreement and Final Order may be amended or modified by mutual agreement of the Parties. Any such agreement shall be in writing and signed by both Parties. EPA may, in its discretion, extend any deadlines or time periods under this agreement whenever it deems such extensions to be appropriate.

For EPA:

Linda M. Murphy
LINDA M. MURPHY, Director
Air Management Division
U.S. Environmental Protection Agency, Region I

Date: Sept. 27, 1991

Gregory Dain
GREGORY DAIN, Esq.
Assistant Regional Counsel

Date: September 27, 1991

For Great Northern:

Raymond V. Taylor X
Vice President
Great Northern Nekoosa Corporation

Date: Sept. 24, 1991

Daniel E Boxer
DANIEL E. BOXER, Esq.
Counsel for Great Northern

Date: September 26, 1991

FINAL ORDER

The foregoing Consent Agreement is hereby approved and incorporated by reference into this Final Order. Except as provided in Paragraph 44, above, relating to the effective date of Section XVI (Reimbursement of Response Costs), Great Northern is hereby ordered to comply with the terms of the above Consent Agreement, effective immediately.

Date: Sept 27, 1991

Julie Belaga
Regional Administrator
U.S. Environmental Protection Agency - Region I

Docket No. TSCA-I-87-1041

CERTIFICATE OF SERVICE

I certify that I filed the original and one copy of the foregoing Consent Agreement and Final Order with the Regional Hearing Clerk, and that I mailed a true copy hereof by certified mail to the Respondent, all this 30th day of September, 1991.

Gregory Dain

Gregory Dain
EPA Region I
Office of Regional Counsel
JFK Federal Building
Mail Code (RCA)
Boston, MA. 02203-2211

ENVIRONMENTAL AUDIT
OF THE

GEORGIA-PACIFIC PROPERTY

MILLINOCKET, MAINE

PREPARED FOR:

BOWATER INCORPORATED
GREENVILLE, SOUTH CAROLINA

PREPARED BY:

SIRRINE ENVIRONMENTAL CONSULTANTS
GREENVILLE, SOUTH CAROLINA

DECEMBER 1991

The SPCC plan appears to sufficiently encompass the necessary spill prevention and containment procedures. The plan has recently been reviewed and revised as is required.

Until recently, the SPCC plan existed, but has lacked implementation. This is evidenced by the spills discussed in the "Permit Compliance" section. With the improvements underway in spill containment (containment wall and Lift Station redundancy), the number of spills to Millinocket Stream should reduce significantly.

- Environmental Files - The environmental files were reviewed during the inspection. The files were well organized, orderly, and up-to-date. Permits, regulations, and correspondence was easily available and accessible.

- Environmental Personnel - The environmental personnel assisted in the inspection and subsequent interviews. All appeared to be familiar with and interested in their areas of responsibility.

- Stormwater Regulations - At the time of the mill inspection, stormwater sampling and reporting was underway with plans to submit information prior to the upcoming reporting deadline of November 18, 1991. It should be noted that the EPA has since postponed this deadline to October 12, 1992. Therefore, no problems are foreseen in complying with the reporting requirements.

3.2.3.2 East Millinocket Mill

System Description

The wastewater treatment system is located on the south side of the mill and surrounded mainly by the mill, a municipal primary wastewater treatment facility, a wooded area, and the river.

The wastewater treatment system consists mainly of primary clarification, aeration, secondary clarifications, and sludge dewatering (see Figure 3-4). Wastewater from the interceptor sewer is pH adjusted with hydrated lime as it gravity flows into the primary clarifier. Here solids settle and are removed for dewatering. The overflow from the primary clarifier enters a header, where anhydrous ammonia is added, and gravity flows to the aeration lagoon. Municipal wastewater which has undergone primary clarification and chlorination also flows into the head of the aeration lagoon. This lagoon has a natural clay liner and underdrain system. Normal operating depth is 21 feet. The lagoon is "U" shaped with the two longitudinal sections being divided by a "mid-feather". The mid-feather is comprised of wooden pilings which extend from above the water surface to the lagoon bottom. Wooden boards extend from piling to piling and from the water surface to the lagoon bottom. The mid-feather serves two important purposes. First, the pilings serve as support for the diffused air header. Second, the mid-feather channels water along the entire lengths of the longitudinal sections. This optimizes the effective lagoon area.

The majority of the aeration lagoon has a coarse bubble diffused air system in operation. Eight 250 Hp blowers are housed in the wastewater treatment system building. A compressed air header extends from the building to the mid-feather (as previously discussed). Lateral feeders extend from the header and supply several subsurface aerators. A total of 1,483 subsurface aerators are located along the bottom of the aeration lagoon.

Wastewater exits the aeration lagoon and split flows into either of two secondary clarifiers. Underflow from one secondary clarifier is used for maintaining mixed liquor suspended solids in the aeration lagoon. Underflow from the other secondary clarifier is wasted to the sludge dewatering system.

Secondary sludge is pumped to an Empire Belt Press for dewatering. This press is operated as necessary to remove any excess secondary sludge from the system. Dewatered sludge from the press is conveyed outside of the wastewater treatment building and discharged onto the ground. This sludge, as well as the primary sludge, is hauled to the company owned landfill. Average secondary sludge production is about 11-12 TPD.

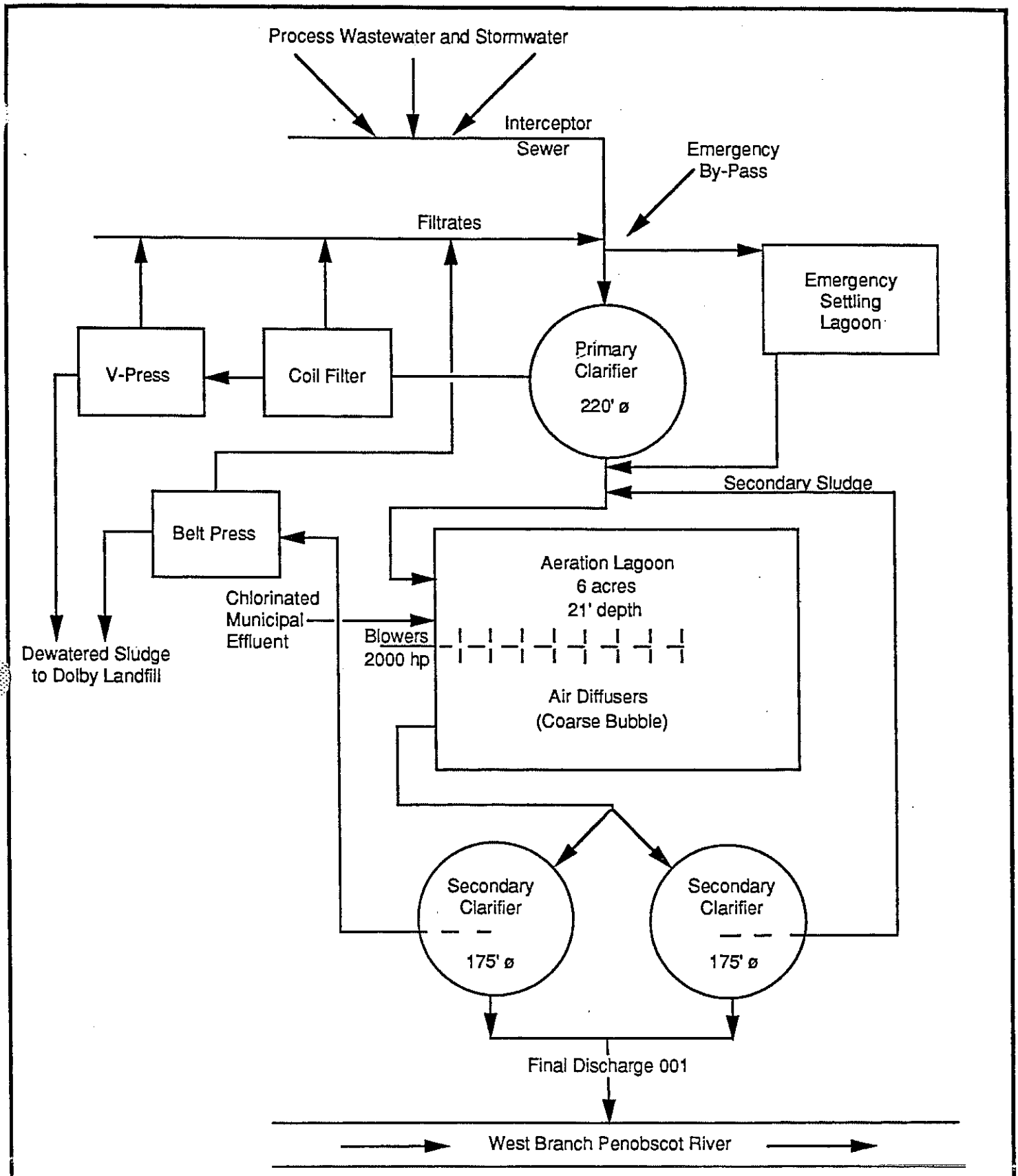


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Figure 3-4

East Millinocket Wastewater Treatment System

Primary sludge, removed from the primary clarifier underflow, is also dewatered at the wastewater treatment building. Initially, the sludge is dewatered to 18-20% solids via a coil filter. A V-press which follows the coil filter increases the sludge to about 30% solids. The dewatered sludge, consisting mainly of fiber and lime sludge, is discharged onto the ground. It is later hauled with the secondary sludge to the mill operated landfill (Dolby III) for use as a ground cover. About 30 TPD of primary sludge is generated from the East Millinocket Mill operations.

The wastewater treatment system is operated from the wastewater treatment system building. An operator and laborer work out of this building.

Also associated with the wastewater treatment system is an emergency settling lagoon. This lagoon is designed for diverting spills or accommodating primary clarifier outages. The contents in the lagoon can be metered back into the system at a more opportune time.

Existing Permits

Wastewater from the East Millinocket Mill is regulated by EPA NPDES Permit #ME0000175 and MDEP Permit #W002228-44-A-R. The NPDES permit expires September 28, 1995 and the MDEP permit expires March 28, 1995. Both permits are virtually the same with minimal differences. Table 3-9 is a list of outfalls, including the outfall number and name, and a brief description of each.

TABLE 3-9

PERMITTED DISCHARGES - EAST MILLINOCKET MILL
NPDES PERMIT #ME0000175
MDEP PERMIT #W002228-44-A-R

OUTFALL #	OUTFALL NAME (DESCRIPTION)	MONITORING REQUIREMENTS
001A	TREATED PROCESS WASTEWATER (EFFLUENT SYSTEM DISCHARGE)	FLOW, pH, TSS, BOD, E. COLI
002A	UNCONTAMINATED COOLING WATER (#2 CONDENSING TURBINE NON-CONTACT)	FLOW, TEMPERATURE, pH
005A	FILTER BACKWASH (NORTH FILTER SHOWER WATER)	FLOW, TSS, pH
005B	NORTH FILTER FLOOR DRAIN (SELF EXPLANATORY)	FLOW, TSS, pH
007A	TRASH SCREEN SHOWER (INTAKE WATER DEBRIS)	FLOW, pH

Figure 3-5 also provides a schematic layout of the discharges. Of the five permitted discharge points, only the Treated Process Wastewater, Discharge 001A should routinely be influenced by process contributions of solids and BOD. The remaining discharges should contain mainly the solids and BOD which naturally exist in the local river and lake waters.

No stipulations regarding treated wastewater color exist in the permits. Based on discussions with mill personnel, none are presently anticipated. This is due to a recent investigation by the MDEP of the East Millinocket Mill discharge. An aerial study was conducted on this discharge. Results indicated no noticeable color change at the outfall. Therefore, it was concluded that no color regulations were necessary at either the East Millinocket or Millinocket Mills.

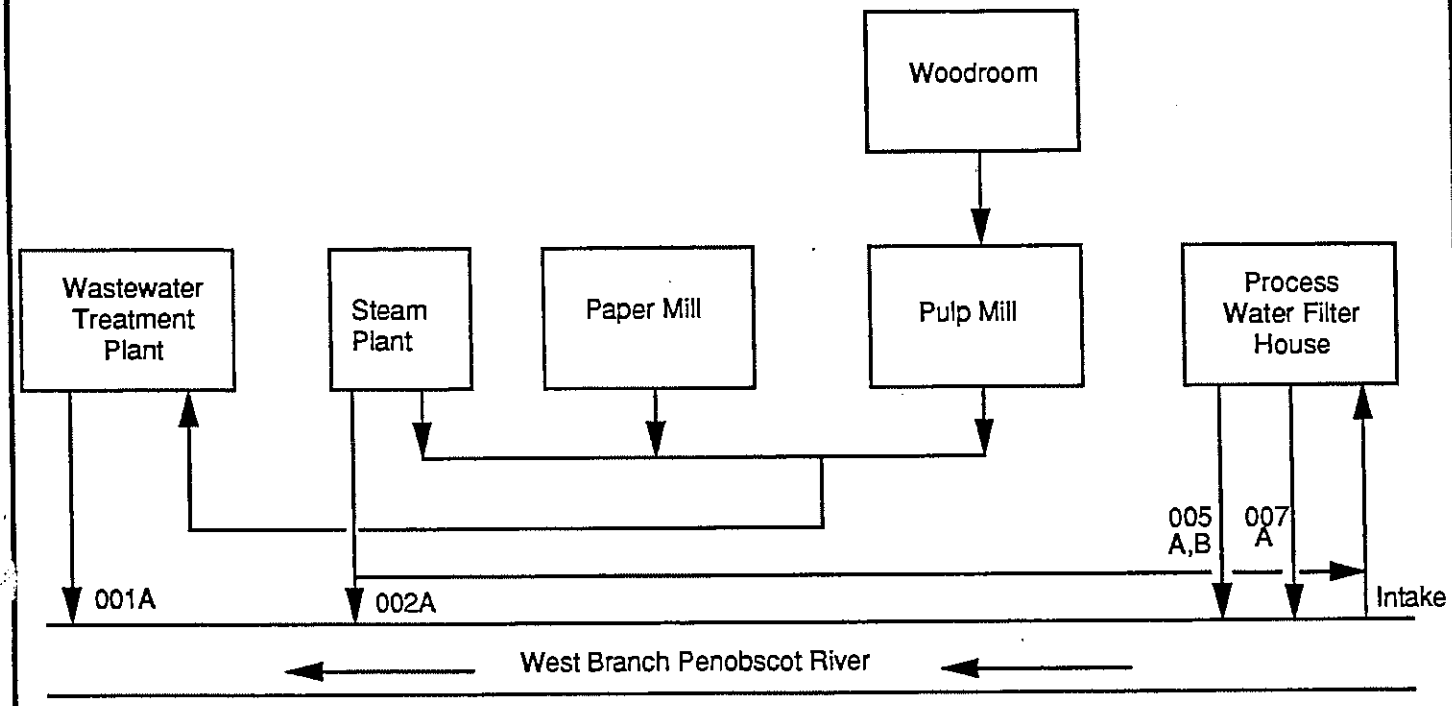

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Figure 3-5

East Millinocket Wastewater Discharges

The permits do contain provisions for handling by-passes and upsets. These incidences, whether intentional or unintentional, result in a discharge of untreated wastewater into the West Branch of the Penobscot River. Under the permit, these incidents must be reported to the appropriate regulatory agencies.

Permit Compliance

Treated Process Wastewater

Monthly Operating Reports, DMRs, and correspondence with the regulatory agencies have been reviewed to determine permit compliance. Twelve months of Monthly Operating Reports were reviewed for compliance specifically at Discharge 001A. Miscellaneous DMR's and an explanatory report by mill personnel to the regulatory agencies were reviewed for permit exceedances at other discharge points.

A review of the Monthly Operating Reports from August 1990 - July 1991 is in Table 3-10.

Both daily and monthly operating data were reviewed for permit exceedances of Discharge 001A. Two daily BOD exceedances occurred in November 1990. Otherwise, daily and monthly BOD discharge values were within permit limitations. Monthly average BOD values averaged 32% of permit limits. This is considered to be well within an acceptable operating range.

Current wastewater treatment plant and collection system are adequate to meet existing permit limitations.

A review of TSS discharges indicates four daily exceedances. No monthly TSS exceedances occurred during the period reviewed. The monthly TSS values averaged 24% of permit limits. Again, this is considered to be well within an acceptable operating range.

TABLE 3-10

PERMIT EXCEEDANCES - EAST MILLINOCKET MILL

WASTE TREATMENT DISCHARGE

BOD Summary, #/Day						pH Summary
Month	Year	Permit Daily	Daily Exceedances	Permit Monthly	Monthly Average	Exceedances 5.0-9.0
August	1990	4,380		3,020	1,600	
September	1990	4,380		3,020	1,600	
October	1990	4,380		3,020	1,200	
November	1990	12,200	13,400 28,100	6,000	3,600	
December	1990	12,200		6,000	2,000	
January	1991	12,200		6,000	1,400	
February	1991	12,200		6,000	1,000	
March	1991	12,200		6,000	1,100	
April	1991	12,200		6,000	1,100	
May	1991	12,200		6,000	1,300	
June	1991	4,380		3,020	1,000	
July	1991	4,380		3,020	1,100	
Average		8,942	20,750	4,758	1,500	N/A
% of Permit			170		34	N/A

TSS Summary, #/Day					
Month	Year	Permit Daily	Daily Exceedances	Permit Monthly	Monthly Average
August	1990	5,020		4,310	2000
September	1990	5,020		4,310	2200
October	1990	5,020		4,310	1700
November	1990	22,350	32,500 73,000 33,700	12,000	7200
December	1990	22,350	27,800	12,000	2900
January	1991	22,350		12,000	1300
February	1991	22,350		12,000	1200
March	1991	22,350		12,000	1300
April	1991	22,350		12,000	1200
May	1991	22,350		12,000	1300
June	1991	5,020		4,310	1400
July	1991	5,020		4,310	1400
Average		15,129	41,750	8,796	2,092
% of Permit			187		28

Other Permitted Discharges

Various reports from December, 1988 to June, 1991 were reviewed regarding permit exceedances for permitted discharges other than treated process wastewater. All of these exceedances are for excessive flowrates. Table 3-11 summarizes the exceedances:

TABLE 3-11

PERMIT EXCEEDANCES - EAST MILLINOCKET MILL

PERMIT EXCEEDANCE SUMMARY

Month	Year	Outfall	Parameter	License Limit	Reported Value	# of Daily Exceedances
December	1988	Trash Screen Showers	Flow	0.02	0.23	1
September	1990	N. Filter Floor Drain	Flow	0.5	1.9	1
June	1991	N. Filter Floor Drain	Flow	0.5	0.79	1
		Flow Avg.		0.3	1.0	

All three of the exceedances occurred for only one day per item. One involved the trash screen showers and two involved the north filter floor drain. These excessive flows are related to excessive river water being circulated through the mill. No measurable increases in solids or BOD should have resulted from the excessive flows.

Spill Occurrences

Several spill events have occurred at the East Millinocket Mill during recent years. Due to these spills, the MDEP has issued a consent order. This order imposes both fines and remedial action. The events pertaining to the East Millinocket Mill, occurred from September 1984 through January, 1990 and are indicated in Table 3-12.

These spill events usually occurred in areas near the West Branch of the Penobscot River allowing untreated water to be discharged at other than permitted locations. The mill personnel included these spillages into the Treated Process Wastewater quantities in an effort to determine if a violation, in fact, had occurred. In doing so, daily maximum BOD

TABLE 3-12

SPILL OCCURRENCES - EAST MILLINOCKET MILL

Beginning Spill Date	Max Spill Gal/Day	Maximum BOD #/D	Maximum TSS #/D	pH	Total BOD #/D	Total TSS #/D	Permit BOD #/D	Permit TSS #/D	Exceedances		
									BOD	TSS	pH
11/10/84	7,000	50	20	4.5	1,250	1,120	12,200	43,000			X
7/3/85	2,400,000	180	300	7.5	280	600	12,200	43,000			
7/4/85	2,400,000	180	300	7.5	Bad Test	Bad Test	12,200	43,000			
7/5/85	400	2	0	9.0	7,002	1,500	12,200	43,000			
9/2/85	102,000	10	10	7.7	40	40	12,200	43,000			
7/10/86	2,725,000	658	200	8.5	758	450	12,200	43,000			
5/17/88	22,000	600	30	5.0	700	230	12,200	26,125			
10/14/88	6,000	200	40	5.3	1,600	1,040	12,200	26,125			
12/25/88	500,000	100	50	6.5	500	550	12,200	26,125			
3/9/89	9,600	160	80	6.0	1,050	900	12,200	26,125			
6/19/89	1,700	0	20	7.5	1,940	2,480	12,200	26,125			
Averages	743,064	195	95	7	1,375	810	12,200	35,330			

* NOTE: The 6/19/89 spill occurred at the Dolby III Landfill which is under the East Millinocket NPDES jurisdiction.

values were not exceeded. Exceedance in pH occurred in one of the spills. This reported pH value was for the spills only, not the pH for the total waste.

During negotiation of the consent order, the MDEP contended that no relationship exists between license limits for BOD, TSS and pH and the amount lost in spills. Therefore, a fine was assessed and one order was stipulated for the East Millinocket Mill. The consent order required a containment wall be constructed along the river to contain spills.

If the terms of the Consent Order are executed by G-P, no additional actions shall be taken by the MDEP for water quality matters prior to and including the date of execution of the Consent Order.

Consent Order Status

The Consent Order issued by the MDEP was agreed to by G-P on September 25, 1991. Fines levied against G-P amounted to $140,000 for violating water quality laws at both mills. (The Consent Order amounted to $601,847 for air, water, and legal enforcement assessment.) Of the $140,000 wastewater fine, about 14% is attributable to East Millinocket Mill, 82% to Millinocket Mill and 4% to other items (Dolby III Landfill and the sulfite line). No remedial action, other than fines, was specified in the Consent Order for East Millinocket Mill.

In an effort to minimize spill leakage directly into the West Branch of the Penobscot River, a containment wall, approximately four feet in height, has been constructed along the stream bank. It extends from the stone ground wood mill to the paper machine area. This wall should contain any spills which may occur at these production areas. This containment was specified in the consent order.

General Observations

During the mill site inspection, which occurred during the week of September 13, 1991, several general observations were made which are relevant to the environmental aspects of the wastewater treatment facility and its associated components. Following is a list of items and observances:

Mill General

- The mill areas were generally clean and orderly. No noticeable chemical spills were observed which could have caused detrimental effects to the Wastewater Treatment System or the West Branch of the Penobscot River.

- The containment wall along the West Branch of the Penobscot River was installed and appeared to be functional for its intended purpose. Continuation of the wall further towards the woodyard is also recommended. A spill recently occurred at the Sorter Building which resulted in a discharge into the West Branch of the Penobscot River.

- Although not a water quality issue, the basement of the bark building had a significant accumulation of wood dust. This dust poses a fire and health hazard.

- Logs are presently transported into the mill either by the West Branch of the Penobscot River or by ground transportation. Mill personnel indicated that river transportation will soon cease due to upgrades in the woodyard area (which will better accommodate ground transportation) and expiration of the Maine Log Storage Permit (#W006206-50-C-R). Discontinuation of river transportation should minimize environmental liability and enhance public perception of the mill operations. The mill presently dredges the log storage area to remove sediment created by water transportation and storage. The elimination of log transportation by water will reduce sedimentation and the need for dredging.

- Dioxin does not appear to be an issue at this facility since chlorine containing chemicals have not been used for bleaching. Sodium hydrosulfite is presently used for pulp bleaching. A small quantity of chlorine is used for raw water treatment.

- It is recommended that all permitted discharge points within the mill be equipped with monitoring devices capable of supplying the necessary data to assure full time compliance. In many instances, this may be only flow monitoring. By having more continuous monitoring, multi-day exceedances can be avoided.

Wastewater Treatment System

- The Wastewater Treatment System appeared to be orderly and properly staffed. The staff has operators which have achieved high rating levels with the state operated training program. Also, the staff appeared to have a genuine interest in their jobs.

- pH neutralization of wastewater might be accomplished by using a chemical which will not increase the total mill sludge volume. This may result in increased chemical cost, but it would reduce sludge disposal cost.

- Discussions with mill personnel and correspondence from a diving inspection company have indicated that the mid-feather has deteriorated. (The mid-feather is both a support for the diffused air header and a diversion wall.) Many of the pilings have deteriorated at the water/air interface. Also, some lateral boards which make up the diversion wall are missing. Repair to the mid-feather could require the wastewater treatment system to be out of service. Additional or new pilings may also be required.

- An underdrain collection system and collection pond is located at the Wastewater Treatment System to collect any drainage/leakage from the Settling and Aeration Lagoons. Discussions with mill personnel and a review of limited test data have indicated that the collection pond contents do not pose any significant environmental risks.

- Problems with foam and odor are possible, although neither was detected during the inspection. Both should be at a minimum due to the type of pulping process utilized. It is feasible that complaints can occur due to the close proximity of the system to residential areas. It is also possible that odors emanating from the city primary treatment system could inadvertently be attributed to the mill wastewater treatment system.

- The mill receives a small flow (approximately 300,000 gallons per day) of primary treated sanitary sewage from the city. This waste stream could potentially cause problems in the mill wastewater treatment system, but the likelihood is remote. The ratios of mill to sanitary waste flow, BOD, and TSS are very high, thereby minimizing the effects of the sanitary waste. It should be noted that the sanitary waste is chlorinated prior to discharge into the mill wastewater treatment system.

- The wastewater transfer line extending from the general mill to the wastewater treatment system is a potential leak source. Assuredness of the transfer line integrity should be maintained by routine inspections and pressure testing.

Sludge Dewatering System

- The sludge dewatering equipment appeared to be properly maintained and functional for producing a 30% discharge sludge. This sludge presently serves a useful purpose as a cover material at the landfill. With the ever growing concern with waste minimization, increased discharge solids could be used as waste fuel. The present 30-35% solids sludge creates combustion efficiency problems in the bark boiler. If the solids can be increased to above 40% solids, this problem will be eliminated. To increase the sludge solids, additional mechanical or thermal dewatering/drying equipment could be installed at either the Millinocket Mill or East Millinocket Mill. The sludge could either be burned at the bark boiler at the East Millinocket Mill or incinerated using its own Btu value for drying.

- Problems have resulted from insufficient dewatering of primary sludge prior to incineration at the on-site power boiler. Primary sludge has "matted" on the boiler grates, plugging the grate openings. This in turn has caused the grates to overheat. Due to this problem, sludge has not been burned since October 1990.

- Primary sludge is presently dewatered on a coil filter and V-press; secondary sludge is dewatered on a belt press. If the two sludges could be blended and dewatered on the belt press, it is feasible that percent solids could be increased to a level acceptable for incineration. The sludges are presently kept separate since the primary sludge may contain materials large enough to damage the belt press wire. By installing a macerator on the primary sludge line, any large particles could be reduced to an acceptable size. This should then allow blending of the sludges. A resultant decrease in polymer cost and increase in landfill life expectancy should occur.

Compliance Assuredness

Several items exist within the mill which are designed to assure wastewater environmental compliance. Observations were made of the following:

- "Quality Assurance Plan for NPDES Effluent Monitoring at the Great Northern Paper Company East Millinocket Mill" - This document was prepared by Acheron Engineering Services in April, 1990. This document provides a description of the mill and permitted discharges. Included in the discharge descriptions are locations, testing requirements, limits, responsibilities, and procedures. This document appears to encompass the basic information needed to understand the discharges from a permit standpoint. Review and update of this plan by a professional engineer was specified by May 1991. Mill personnel have stated that this is only an internal document and review dates are at the discretion of mill personnel.

- SPCC Plan. This plan was initially implemented in 1976 and last revised September 21, 1990. It addresses spill prevention, containment, and procedures for chemical spills. Storage locations, descriptions, and containment are given for chemicals within the mill. These include PCBs, fuels, oils, and pulp. Spill containment is addressed in an effort to minimize ground water and surface water contamination as well as minimize health risks.

  The SPCC plan appears to sufficiently encompass the necessary spill prevention and containment procedures. The plan has recently been reviewed and revised as is required.

  Until recently, the SPCC plan existed, but has lacked implementation. This is evidenced by the spills discussed in the "Permit Compliance" section. With the improvements underway in spill containment (containment wall), proactive containment instead of reactive containment should occur. The number of spills to the West Branch of the Penobscot River should be reduced.

- Environmental Files - The environmental files were reviewed during the inspection. The files were well organized, orderly, and up-to-date. Permits, regulations, and correspondence were easily available and accessible.

- Environmental Personnel - The environmental personnel assisted in the inspection and subsequent interviews. Each appeared to be familiar and interested with their areas of responsibility.

- Stormwater Regulations - At the time of the mill inspection, stormwater sampling and reporting was underway with plans to submit information prior to the upcoming November 18, 1991 reporting deadline. It should be noted that the EPA has since postponed this deadline to October 12, 1992. Therefore, no problems are foreseen in complying with the reporting requirements.

Ground water monitoring of the Brown Dump and Core Storage areas are on-going. G-P has requested, but has not received approval for a reduction in the ground water monitoring requirements.

Review of hazardous waste manifests indicate hazardous wastes are properly manifested off-site to approved treatment, storage, and disposal (TSD) facilities. TSD facilities used by the Millinocket mill include:

- Safety Kleen Corporation, Leeds, ME;
- Chemical Waste Management, Model City, NY and Emelle, AL;
- American Industrial Waste, White Bluff, TN;
- Jet-line of Lowell, Lowell, MA and Dover, NH;
- Mercury Refining Company, Inc., Albany, NY;
- CECOS Treatment Inc. Bristol, CT;
- U.S. Pollution Control, Glive, Utah;
- Clean Harbors, Braintree, MA;
- Frontier Chemical Waste Process, Inc. Niagara Falls, NY; and
- Trade Waste Incineration, Sauget, IL.

In 1982, International Minerals and Chemical Corporation (IMC) was named as a PRP for a CERCLA cleanup action at the Ottati and Goss and Kingston Sites located in New Hampshire. IMC notified Great Northern Nekoosa (GNN), now G-P, of its intention to name GNN as a PRP since GNN reportedly sent hazardous waste to the site. In 1989, GNN settled with IMC to avoid litigation for an amount of $15,144. Under this agreement GNN would not retain additional liability for cleanup of the Kingston Site. The agreement eliminated liability for the Kingston site. To date, GNN has not been named as a PRP for the Ottati and Goss site; however, it is possible, but unlikely that it could be named as a PRP and be liable for a portion of cleanup cost. No information of GNN waste disposed at Ottati and Goss site was available during the audit.

The Millinocket Mill is not currently listed on the MDEP list of hazardous waste sites or the EPA CERCLIS. No evidence of improper hazardous waste disposal was noted during the site inspection.

In the past four years, the EAD has aggressively replaced or retrofitted PCB transformers, capacitors, and bushings. PCBs are considered hazardous wastes under MDEP regulations. The mill contractor, ENSR Corporation, has retrofilled and replaced PCB items for storage and eventual off-site disposal. Review of hazardous waste manifests indicated that PCB wastes have been properly transported and disposed of off-site at approved facilities. The ENSR laydown area was inspected during the site visit. Minor deficiencies in labeling practices were noted, as were general housekeeping practices. According to the EAD, one PCB transformer is still in service at the Millinocket Mill. This transformer is scheduled for removal prior to January 1992. Several bushings containing PCB fluids are in the process of being removed and replaced by ENSR.

In February 1989, a PCB transformer (T-160) located at the Riverbank Substation, failed and released approximately 350 gallons of PCB fluid. The location of the spill is shown in Figure 3-6. The spill was immediately remediated by soil removal. An estimated 99.5% of the spilled PCB fluid has been recovered. G-P maintains additional soil removal would be impractical and may result in the failure of the substation foundation. Consequently, G-P has requested EPA approval to leave up to 1800 parts per million (PCBs) in the soil. No approval from EPA for this request has been received to date.

3.2.5.2 East Millinocket Mill

The East Millinocket Mill operates as a large quantity generator (EPA I.D. No. MED001098011) under MDEP regulations. Hazardous waste routinely generated by the East Millinocket Mill includes Safety Kleen solvent (petroleum naphtha), PCBs, corrosive liquids, paint waste, paint solvents, and hexane. Non-routine waste generated in the past two years includes waste gasoline from UST removal and PCB contaminated soil. A summary of the hazardous wastes generated in 1990 is contained in Appendix A. Routinely generated waste, such as waste paints, are accumulated in satellite storage areas. Safety Kleen Corporation replaces the solvents from parts cleaning units in maintenance areas and transports the waste off-site for recycle.

N

West Branch Penobscot River

West Branch Penobscot River

Dam

Bark Pile

Wood Room

Sedimentation Basin

Skimming Pond

Old Grinder Room

Filter Plant

New Grinder Room

Screen Room

1-4 Machine Room

5-6 Machine Room

PCB Spill Areas

Garage

Oil House (Warehouse "J")

Warehouse "K"

New Train Shed

Old Boiler House

Bark Preparation

PCB Spill

Chemi-Ground Wood Bldg.

Bark Storage

New Boiler House

Bark Boiler

Old Finishing Room

Slasher Deck

Wood Storage

Portal Crane

Aeration Basin

Clarifier

Clarifier

Primary Clarifier

Settling Basin

Town of East Millinocket Waste Treatment Facility

Old Train Shed

Oil Tank

Drum Storage Area (Closed)

New Finishing Room

Burn Pit Area

Note:

The Burn Pit Area is actually located further west on the road to Dolby Dam.

Railroad

Oil Stained Soil

PCB Spill Areas

Not to Scale

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Figure 3-7
Site Contamination Areas
East Millinocket Mill
East Millinocket, Maine

Review of hazardous waste manifests indicated hazardous waste generated at the East Millinocket Mill are properly disposed of off-site at the TSD facilities listed previously for Millinocket. In 1989, a MDEP inspection identified only one violation (inadequate training records). This violation has been corrected.

The East Millinocket Mill is currently listed on the MDEP list of hazardous waste sites for three separate releases of PCB fluids. The location of these spills are shown in Figure 3-7. The first spill occurred in the Chemi-Groundwood Building in 1970 and was a result of a transformer failure due to corrosion. Approximately 100 gallons of PCB fluid (Askarel) was reportedly released. The transformer was removed and disposed in accordance with EPA and MDEP regulations in 1981. During removal of the transformer, only 30 gallons of a total of 930 gallons was recovered. In January 1978, a spare transformer was damaged by a snow plow at the southeast corner of the No. 6 paper machine room. The spill volume was estimated at 600 gallons of Askarel. The spill fluid was absorbed with sand and the PCB contaminated sand was placed in fifty-five gallon drums. In June 1985, excavation of the area for a modernization of the No. 5 and No. 6 paper machine encountered PCB contaminated soil. The third spill occurred in May 1981 as a result of a transformer explosion which released PCBs at the northeast corner of the No. 5 paper machine building. An estimated 150 gallons of Askerel was released. From April 1986 to 1988, site investigations were completed at the three spill sites. The investigation included the installation of 22 ground water monitoring wells. An additional 22 wells were installed in 1989.

Remediation plans were developed and submitted for EPA approval in July 1988. The remediation and ground water monitoring reports are contained in Appendix C. Several draft consent agreements between G-P and EPA Region I have been proposed. As of December 1991, G-P has not signed a consent agreement with EPA.

Over the past four years, G-P has aggressively worked toward elimination of all PCB transformers, capacitors, and bushings from the East Millinocket mill. All PCB transformers and capacitors have been removed. Several bushings remain and are scheduled for replacement with non-PCB bushings. Review of hazardous waste manifests indicated the

assessment by Sirrine of liability resulting from former USTs was difficult. However, removal and abandonment procedures used by G-P are consistent and in compliance with MDEP regulations.

3.2.6.1 Millinocket

The maintenance garage is the site of the only UST remaining on-site at the Millinocket mill. The tank capacity is 8,000 gallons and is used to store gasoline. The tank was installed in 1988 and is double walled with cathodic protection. This tank replaced a 12,000 gallon UST which was removed in 1989. No significant release was discovered by the certified remover during removal of the tank. At least three other USTs were removed since 1988 from the Millinocket Mill. This includes a 8,000 gallon No. 2 fuel oil tank removed from the wastewater treatment plant, a 25,000 gallon waste oil tank removed from the steam plant, and a 10,000 gallon kerosene tank removed from outside of the No. 11 paper machine building. No significant release of petroleum was noted during removal of these tanks.

3.2.6.2 East Millinocket

A total of three USTs were in service at East Millinocket during the site inspection. These included two 1,000 gallon USTs at the wastewater treatment plant used to store No. 2 fuel oil and diesel. According to mill personnel, the No. 2 fuel oil tank was removed in October 1991. The third active UST is a 2,000 gallon gasoline tank installed in 1989 and is located at the Oil House building. This tank replaced a 15,000 gallon gasoline tank which was removed from the Oil House. The new Oil House tank is double walled with cathodic protection. The remaining UST at the wastewater treatment plant is scheduled for removal prior to the end of December 1991.

Two 20,000 gallon No. 2 fuel oil USTs located in the steam plant building have been abandoned in place. Removal of these would be extremely difficult due to their location. A monitoring well installed outside of the steam plant has not exhibited any petroleum odor. In 1985 a waste oil tank was removed from the maintenance garage area. Contamination from the UST with chlorinated solvents resulted in the contents being

- Hazardous Substance Contingency Plan,
- Pre-Emergency Planning Manual, and
- SPCC Plan.

These plans include procedures for responding to hazardous materials incidents including notification requirements, training, and evacuation procedures. MDEP required revision of the Hazardous Substance Contingency as part of a September 1987 consent order. The revision included site specific hazardous waste contingency planning.

The plans currently meet the requirements of Section 311 of the Clean Water Act, Chapter 854 of Maine Hazardous Waste Rules, and evacuation plan requirements of Title 37B, M.R.S.A., Chapter 13.

The Millinocket Mill has prepared and implemented a written Hazardous Communication Plan as required by OSHA 29 CFR 1910.1200. This plan is available to all employees and is located throughout the mill. The plan incorporates the Hazardous Chemical Book which contains Material Safety Data Sheets for all chemicals, and proper handling instructions. Training occurs annually and during new employee orientation.

The Millinocket Mill uses several chemicals which require reporting under SARA Title III. Form R release reports have been submitted for seven chemicals. The mill has also submitted hazardous chemical inventory reports under the requirements of Section 311/312 of SARA.

Above Ground Petroleum Storage

The Millinocket Mill currently has two bulk storage tanks located within a diked area. The tanks are used to store bunker C (No. 6) oil. Each tank has a capacity of 2.3 million gallons. The tanks are filled from a rail off-loading area located adjacent to the tanks. The tanks are constructed of carbon steel on a concrete block base and show evidence of external corrosion and pitting after 39 years of use.

During the site inspection, several fuel oil spill areas were noted inside the diked containment areas. Fuel oil stains were also noted seeping out of the dike. The off-loading rail spur was also heavily contaminated from bunker C fuel oil spills (Figure 3-6). The discharge of oil onto lands adjacent to, on, or over waters of the state is prohibited under 38 M.R.S.A. Section 543. Other petroleum products are stored in seven above ground tanks. Table 3-16 lists the above ground petroleum storage tanks. Secondary contaminant is provided by concrete dikes or drains which discharge to the wastewater treatment system. The Millinocket Mill has an approved SPCC which outlines petroleum spill potential, responsible personnel, and cleanup procedures.

Waste Oil

Waste oil is generated at the mill during normal operations. This includes machine oil, hydraulic oil, motor oil, and greases. The waste oil is collected at points of generation in portable 250 gallon containers (textainers). After testing for chlorinated solvents and the flashpoint, the waste oil is burned in the No. 3 Power Boiler. The EAD has written procedures for proper handling and disposal of waste oil and is distributed to maintenance personnel. Waste oil and diesel fuel have been used to initiate fires at the Millinocket Burn Pit. However, this practice has reportedly been discontinued.

Several areas of petroleum stained soil resulting from incidental petroleum releases were noted throughout the mill area. The areas are shown in Figure 3-6. The discharge of oil onto lands adjacent to, on, or over waters of the state is prohibited under 38 M.R.S.A. Section 543.

3.2.7.2 East Millinocket Mill

The East Millinocket Mill uses several types of hazardous chemicals during normal operations. The majority of the chemicals are used in small quantities and received in drums. A complete list of hazardous materials used are contained in Appendix E. Chemicals received in bulk and stored in above ground storage are shown in Table 3-17. The chemicals are received by truck and rail. Drummed chemicals are off loaded at the

TABLE 3-16

ABOVE GROUND PETROLEUM STORAGE - MILLINOCKET MILL

Product	Size (gallons)	Material of Construction	Secondary Containment	Age (Years)
Bunker C	2,310,000	Carbon steel	Earthen dike	39
Bunker C	2,310,000	Carbon steel	Earthen dike	39
Diesel	25,000	Carbon steel	Concrete dike	8
Bunker C	1,700	Carbon steel	Process sewer	18
Bunker C	10,000	Carbon steel	Process sewer	34
Bunker C	10,000	Carbon steel	Process sewer	34
Lube Oil	3,000	Carbon steel	Process sewer	28
Lube Oil	3,000	Carbon steel	Process sewer	28
Dryer Oil	10,000	Carbon steel	Concrete dike	17

TABLE 3-17
ABOVE GROUND HAZARDOUS MATERIALS STORAGE - EAST MILLINOCKET MILL

Product	Size (gallons)	Materials of Construction	Secondary Containment	Age
Anhydrous Ammonia	18,000	Carbon steel	None	15
Phosphoric Acid	6,000	Fiberglass	Concrete dike	15
Sulfuric Acid	12,000	Carbon steel	Process sewer	38
Caustic	12,000	Carbon steel	Process sewer	38

receiving area located at the No. 5 and 6 paper machine building. Chlorine gas is delivered to the wastewater treatment system where it is used in treatment of sanitary wastewater. The mill has a hazardous materials (Hazmat) response team to respond to hazardous materials releases.

All above ground bulk chemical storage tanks have secondary containment by dikes or process sewer containment. The tanks were clearly labeled during the site inspection. No off-loading of bulk chemicals was observed and no US DOT inspections have been recently conducted. Written procedures and employee training have been provided for the transfer of specific hazardous chemicals. All training is on-the-job.

With the exception of the PCB releases discussed in Section 3.2.5.2, the East Millinocket Mill has not had any major chemical spills which could result in ground water or surface water contamination. Review of MDEP spill files indicate minor releases are properly reported and remediated by EAD.

Responses to emergencies involving hazardous substances are covered by the following three plans:

- Hazardous Substance Contingency Plan,
- Pre-Emergency Planning Manual, and
- SPCC Plan.

The plans include:

- Response and evacuation procedures for hazardous material incidents,
- Notification requirements,
- Training requirements, and
- Chemical inventory location.

The plans currently meet all applicable MDEP, EPA, and OSHA regulations.

The East Millinocket Mill uses several chemicals which require reporting under SARA Title III. Form R release reports have been submitted for four chemicals. The mill has also submitted hazardous chemical inventory reports under the requirements of Section 311/312 of SARA.

The East Millinocket Mill has prepared and implemented a written Hazardous Communication Plan in accordance with 29 CFR 1910.1200. The plan incorporates the Hazardous Chemicals Book which contains a list of all chemicals used at the mill, information for safe handling of these chemicals, and Material Safety Data Sheets for each chemical. Training is conducted annually and during new employee orientation.

Above Ground Petroleum Storage

Bunker C oil is stored in two above ground storage tanks (2.3 and 0.75 million gallon capacity). An earthen dike provides secondary containment for the tanks. Concrete dikes provide secondary containment for two smaller bunker C tanks (5,000 and 25,000 gallon capacity). Bunker C oil is received via rail and stored in bulk tanks and transported by pipe to the smaller tanks. Table 3-18 lists above ground petroleum tanks in use at the mill. Both large bulk tanks are over 35 years old and, although coated, showed signs of external corrosion and pitting. Minor releases of bunker C oil were noted within the earthen dike. The off-loading area was heavily stained with bunker C oil (Figure 3.7). The discharge of oil onto lands adjacent to, on, or over waters of the state are prohibited under 38 M.R.S.A. Section 543.

In August 1991, a pipeline used to transport bunker C oil to the bulk tanks was discovered to be leaking. MDEP was notified and the mill began remediation by free product removal. An assessment was conducted by an outside consultant which included test pitting. No ground water monitoring wells were installed by G-P. The assessment identified two areas where bunker C was breaking out of the soil. The estimated volume of contaminated soil was 6,500 cubic yards. The free product is currently being collected in a runoff ditch and disposed at the bark boiler. To date, no additional requirements for additional remediation or ground water monitoring have been required by the MDEP.

TABLE 3-18

ABOVE GROUND PETROLEUM STORAGE - EAST MILLINOCKET

Product	Size (gallons)	Materials of Construction	Secondary Containment	Age (years)
Bunker C	2,300,000	Carbon steel	Earthen dike	41
Bunker C	750,000	Carbon steel	Earthen dike	35
Bunker C	5,000	Carbon steel	Concrete dike	20
Bunker C	25,000	Carbon steel	Concrete dike	38

Waste Oil

Waste oil is routinely generated at the mill during normal operations. All waste oil is collected at points of generation in 250 gallon containers (textainers) or 55-gallon drums. After testing for chlorinated organics and the flashpoint, the waste oil is burned in the No. 3 Power Boiler at Millinocket Mill. The mill has written procedures for the generation, accumulation, and disposal of waste oil.

During the site inspection, a steam cleaning operation at the maintenance garage was observed discharging oil contaminated wastewater to a surface runoff ditch. The ditch reportedly discharges to the wastewater treatment plant; however, Sirrine was unable to confirm this. The discharge resulted in visibly contaminated soil.

Several other areas of petroleum contaminated soil were noted throughout the mill. These areas included the bulk fuel oil off-loading rail spur, maintenance garage area, and mill rail spurs. The stained areas are shown in Figure 3-7. The discharge of oil onto lands adjacent to, on, or over waters of the state is prohibited by 38 M.R.S.A. Section 543.

3.2.7.3 Woodlands

Pinkham Lumber

The removal of underground petroleum tanks has resulted in the storage of diesel fuel in one 20,000 gallon aboveground tank. The tank was installed in 1991 and is contained by concrete pad and dikes. The tank supplies fuel to the boilers. Various lubricating oils, hydraulic fluid, and grease are stored in drums inside the garage area. Some are also stored at both sawmills and at the planer mill.

Waste oil generated at the mill during normal operations includes motor oil, machine oil, hydraulic oil, and greases. Waste oil is accumulated at the garage in a portable tank and transferred to a 4,000 gallon aboveground tank. Waste oils are transported to the boilers by flexible piping which is manually connected. Waste oils are mixed with bark and wood

implemented. Site health and safety personnel should increase their visibility during abatement operations. In addition to increased involvement with abatement contractors and IH oversight technicians, recordkeeping and review of abatement documents needs improvement.

3.2.8.2 East Millinocket Mill

The overall condition of suspect ACMs at the East Millinocket Mill is good. This may be attributed to the presence of an in-house abatement team. Based on the site inspection and personnel interviews, the only building presenting a major asbestos problem is the Chemi-Groundwood facility. At the time of the survey, this structure was off-limits to site and outside personnel. Since the building is not currently occupied, the risk of asbestos exposure is not of concern. If any mill employee or contractor enters this building, proper protective equipment and work practices must be utilized. Prior to any renovation and/or demolition activity, affected areas must be assessed for the presence of ACMs.

Respiratory protection, training, IH oversight and medical surveillance programs are in-place and functioning properly. Based on the asbestos program/recordkeeping review and the integrity of suspect ACMs, the East Millinocket Mill has a strong base to support its asbestos maintenance operations.

3.2.8.3 Woodlands

Based on telephone conversation with Glenn Saucers (Pinkham Lumber Area Manager of Industrial Relations and Safety) and review of bulk sampling data, the majority of all insulating and building materials at Pinkham Lumber does not contain asbestos. Excluding the roofing systems and the babbitt pot insulation stored in the filing room tool crib, the only other ACMs identified during Pinkham asbestos bulk surveys were the shut-off valve and pipe insulation located in the Maintenance Shop Furnace Room.

In conjunction with closure activities, downgradient monitoring wells MW-602 and MW-603 were installed. Screened lengths extended 69 feet and 30 feet, respectively. These excessive screen lengths allow significant mixing and dilution of potential contamination. Therefore, the use of these wells as monitoring locations is unacceptable. In addition, based on the northeast ground water flow direction, MW-602 and MW-603 may be too widely spaced to intercept the ground water plume. Therefore, monitoring well TWM-4 was installed and ground water samples were analyzed for VOCs, total and dissolved metals.

Millinocket Piping Systems

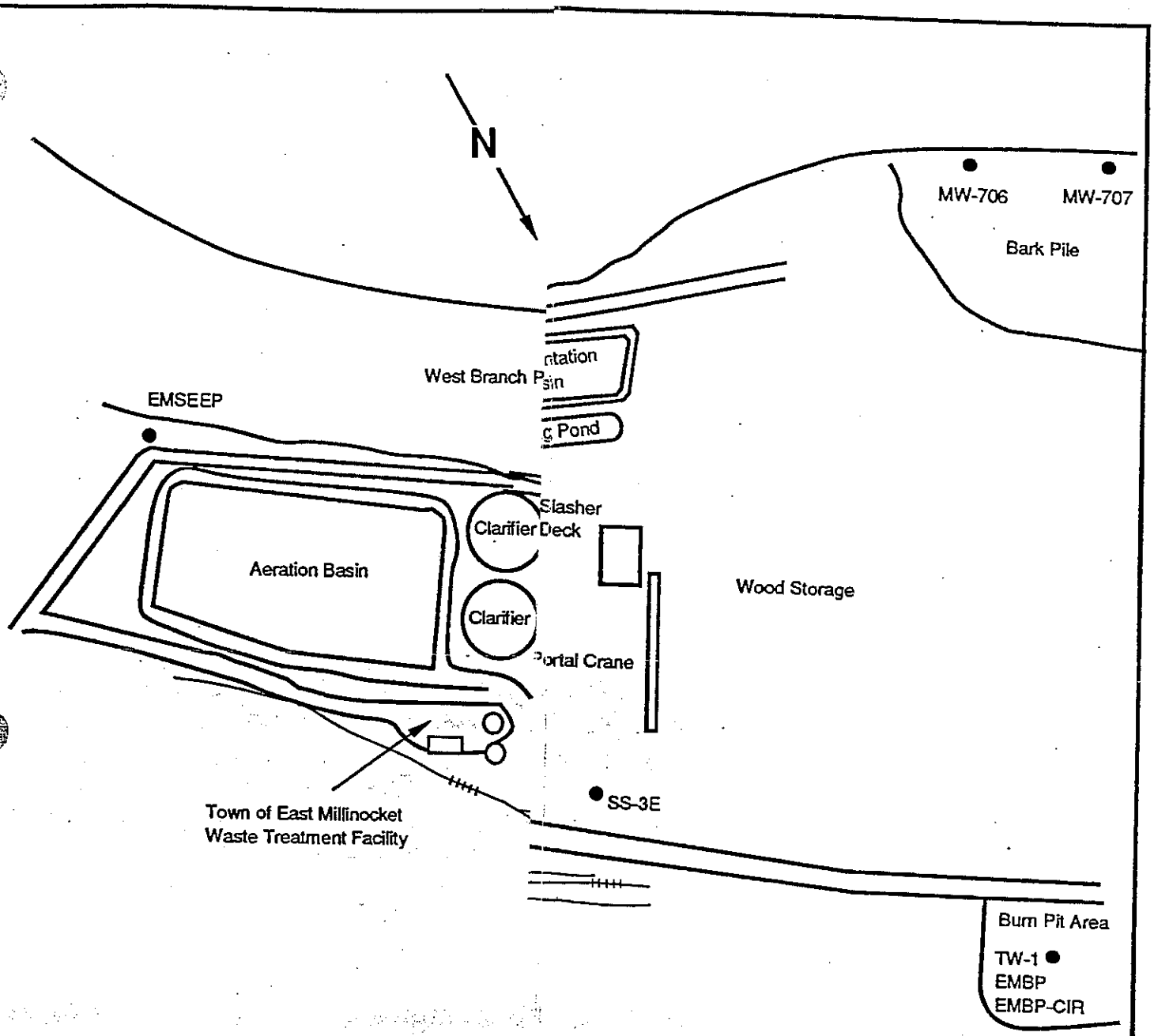
The deteriorated condition of the pipe insulation in several areas of the mill prompted Sirrine to conduct ambient air monitoring at five areas. These included the MgO Plant, steam plant, No. 1 paper machine, sulfite mill, and the grinder room. These five areas were tested for asbestos using Transmission Election Microscopy (TEM).

3.4.1.2 East Millinocket Mill

The following discussions on the East Millinocket Mill sampling activities refer to locations depicted in Figure 3-9.

Burn Pit

During the site inspection, Sirrine noted a small amount of waste solvent present in the burn pit. Additionally, it is known that diesel fuel was previously used to initiate the fires. To confirm the absence of VOC or TPH contamination, soil sample EMBP was taken from a soil boring at a depth of 0 to 5 feet. Because oil was noted during drilling activities, a sample of the circulation water was taken and also analyzed for VOCs and TPH. Temporary monitoring well TW-1 was installed at this location to monitor the effects of the pit on local ground water. A ground water sample from well TW-1 was analyzed for VOCs and TPHs.



Note:

The Burn Pit Area is actually located further west on the road to Dolby Dam.

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Figure 3-9
Sampling Activities Location Map
East Millinocket Mill
East Millinocket, Maine

Paint Shed

Paint solvents are used in the paint shed. Waste solvents are generated and stored in this building. To confirm the absence of VOCs in the soil in this area, soil sample EMPS was taken from a soil boring located on the south side of the paint shed and analyzed for VOCs. To monitor the potential effects of these solvents on ground water, temporary well TW-2 was installed, sampled, and analyzed for VOCs and TPHs.

Garage UST

A UST formerly used to store waste oil that had been contaminated with solvents was located near the garage at the East Millinocket facility. This UST was removed in 1985. Soil sample EMUST was taken from a soil boring in the vicinity of the former UST location and analyzed for VOCs. A temporary monitoring well, TW-3, was installed to assess ground water quality in this area. A ground water sample from this well was analyzed for VOCs and TPH. An additional soil sample, SS-1E, was collected from a drainage ditch south of the garage and analyzed for PCBs.

Old Train Shed

An old train shed is located near the entrance to the East Millinocket Mill. Oil staining of rail spur lines was typical of both mills. Because PCBs have been associated with electric components in trains, a composite surface soil sample SS-2E was collected and analyzed for PCBs to determine if soils in this area had been impacted.

Bulk Fuel Oil Off-loading Area

Due to the failure of a 12-inch diameter transport pipe leading to the oil-water separator in the rail car unloading area, Bunker C fuel oil was released. Oil was observed seeping out at the ground surface in several areas. In August 1991, 20 test pits were excavated by Sevee and Maher Engineers, Inc. to assess the extent of contamination. No. 6 fuel oil contamination was discovered in soils in the vicinity of the failed transport pipe. Maximum

thickness of the oil was approximately one foot. At the southern end of the rail car unloading area, maximum oil thickness was approximately one foot, the lower six inches being very dense oil. The density of the oil implies historical spills in this area.

Three temporary monitoring wells were installed downgradient of the bulk fuel tank, the rail car unloading area, and the oil-water separator. TW-4, TW-5, and TW-6 were analyzed for BTEX, semivolatiles, and TPH. An existing well, B-211B, was also sampled; the ground water was analyzed for BTEX, semivolatiles, and TPH. One soil sample, SS-4E, was also taken inside the diked area of the bulk fuel tank beneath obvious oil staining. This sample was analyzed for SVOCs and TPH.

Drum Storage

The Drum Storage Area was formerly used to store hazardous waste. During a MDEP approved closure, approximately 400 cubic yards of soil was removed. Two existing monitoring wells (MW-102 and MW-103) were sampled at the former hazardous waste drum storage area to determine if ground water has been impacted by these wastes.

Recycle Plant Area

No indication of soil or ground water contamination in the area of the proposed recycle plant was identified during Phase I activities. However, because the construction of the proposed plant will begin shortly after the acquisition surface soil sample SS-3E was collected and analyzed for VOCs, SVOCs, total and dissolved metals. This confirmation sample was necessary to ensure that no construction delays occur from environmental contamination.

Construction Fill Area

An old dump site previously used for construction fill and mill wastes is located east of the waste water treatment plant. A seep was observed at this location. Therefore, seepage sample EMSEEP was collected and analyzed for VOCs, SVOCs, and TPH.

Bark Pile

The Bark Pile covers approximately 3 acres and was used for storage of woodwastes and construction and demolition debris. Other waste materials may have also been disposed of in the Bark pile. Disposal of bark and other debris began in 1910 and ceased in 1980.

Several downgradient monitoring wells exist, each spaced approximately 800 feet apart. Historically, the highest indicator parameters, total organic carbons and specific conductance, were consistently found in wells MW-706 and MW-707. Therefore, ground water samples were collected from these wells and analyzed for VOCs, total and dissolved metals.

3.4.1.3 Woodlands

The following discussion on the Woodlands sampling activities refer to locations depicted in Figures 3-10, 3-11, and 3-12.

Pinkham Lumber Septic System (Figure 3-10)

In the Pinkham Lumber sawmill, north of Ashland, Maine, floordrains in the maintenance garage discharge industrial wastewater to a septic system. Stains from petroleum products were noticed around these drains. Because solvents are also routinely used in the garage area, soil samples "Pinkham" and "Pinkham Below" were collected from an excavation pit beneath the septic drain lines. Both samples were analyzed for VOCs, SVOCs, and total metals.

Pinkham Lumber I&E Lagoon (Figure 3-11)

The Pinkham Lumber sawmill was operated as a lumber dipping operation for about five months during 1980. Lumber was dipped into a tank containing PQ-10 to control fungus growth. PQ-10 contains 16 percent tetrachlorophenol, alcohols, and water as a diluting

4.0 PHASE II ACTIVITIES

This section presents the Phase II methodology and results of all sampling and analysis including asbestos air sampling.

4.1 SITE HYDROGEOLOGY

4.1.1 MILLINOCKET MILL

Three geologic units were identified in a previous study characterizing groundwater and soil conditions surrounding the Liquor Lagoon and Ash Pond, located west of the bulk fuel storage area, at the Millinocket Site (E.C. Jordan Co., July 1988). These units, from surface down, include:

- An ablation till consisting of relatively loose, gravelly sand;
- A glacial till consisting of dense, silty, gravelly sand and hard, sandy silt with boulders occurring throughout the formation; and
- A black sandstone bedrock.

The sandy ablation till and fill material have been encountered to depths between 5.5 and 14 feet. This surficial layer is believed to have been a glacial deposit or to have been reworked during construction activities. Underlying this material, the dense silty glacial till has been encountered at thicknesses ranging from approximately 8 to 38 feet. Bedrock was generally encountered at depths of 24 to 46 feet below land surface. The thicknesses of the overlying unconsolidated layers appears to increase towards the Millinocket River to the east.

Ground water beneath the site generally flows from west to east, apparently discharging to the Millinocket Stream, with water table conditions occurring at depths less than 10 feet in the upper sandy fill. Horizontal groundwater flow velocities were estimated to be 50 to

170 feet/year in the upper sandy till and approximately 20 to 50 feet/year in the lower, dense more silty till. These estimates were based on slug test data and a hydraulic gradient of 0.10 calculated from water level elevations collected at the site (E.C. Jordan, July, 1988). The average hydraulic conductivities for upper sandy till and lower, more dense till were 0.42 feet/day and 0.12 feet/day, respectively. Available data indicate the hydraulic conductivity of the bedrock is very low (0.008 ft/day); therefore, it appears the quantity and rate of ground water moving through this unit is considerably less than the overlying, unconsolidated sediments.

4.1.2 EAST MILLINOCKET MILL

Previous studies at the East Millinocket Mill indicate the site is underlain by five distinct geologic units (Stone & Webster, April 1988). These units from youngest to oldest include:

- Backfill consisting of light brown or brown-gray silty sand and gravel with minor silt and clay layers as well as scattered wood and bark fragments;
- Channel sands consisting of well to poorly graded lands and silty sands;
- Brown glacial till composed of yellow-brown silty sand and sandy silt, sandy clay, and clay with varying amounts of gravel;
- Dense gray glacial till composed predominantly of greenish-gray to brown-gray gravelly clay or clayey gravel with varying amounts of sand; and
- Bedrock composed of dark gray phyllite with closely spaced joints and some extreme weathering in the topmost portion.

Backfill, channel sands, and brown glacial till occur as discontinuous units across the site. Backfill is generally encountered to depths between 4 and 22 feet. In places, the backfill sands and gravels may be coated with a black, tar-like substance. The channel sands have been observed at depths between 10 and 30 feet and at thicknesses ranging from

2 to 12 feet. The brown glacial till is also generally encountered, but may be absent where it has been eroded and replaced by channel sands.

The gray glacial till overlies bedrock and is generally encountered at depths ranging from 9 to 18 feet, except where it was apparently eroded and encountered at depths up to 30 feet. Thicknesses of this unit vary from 8 to 22 feet with thicker sequences observed to the northwest.

Bedrock has been encountered across the site at depths ranging from 24 to 38 feet. The bedrock apparently dips to the northwest.

Ground water elevations obtained from shallow wells (screening the brown till/gray till interface) and deep wells (screening the top of bedrock) indicate ground water generally flows to the west and apparently discharges into the Penobscot River. The water table is encountered in the fill, channel sands, and brown till at an average depth of 8 feet. The average horizontal hydraulic gradient at the brown till gray till interface aquifer is approximately 0.04. The geometric mean of hydraulic conductivities measured at the site is approximately 7.7×10^{-4} ft/min (1.1 ft/day) with the average ground-water flow velocity calculated to be 3.08×10^{-5} ft/min (0.04 ft/day). Areas composed of channel sands may create local zones of greater hydraulic conductivities.

Between the water table aquifer and bedrock aquifer is the dense, gray till. This unit has a relatively low permeability and comprises a confining unit for the bedrock aquifer.

The jointed and weathered upper 5 to 10 feet of bedrock comprises the deeper water bearing zone. The average horizontal hydraulic gradient at the top of bedrock is approximately 0.02. The piezometric surface elevation of the bedrock aquifer is within a few inches of the elevation of the water table; therefore, it appears a hydraulic connection exists across the gray till. An upward hydraulic gradient of 0.04 is generally encountered across the site.

4.2 PHASE II METHODOLOGY

4.2.1 SURFACE SOIL SAMPLE COLLECTION

Surface soil samples were collected at various locations for analysis by selected analytical procedures. All samples were collected utilizing stainless steel bowls and spoons. A steel shovel was used to clear the surface in places covered with gravel. Exposed soil was then removed with a stainless steel trowel and the underlying soil sampled with a clean stainless steel spoon. All sample tools were decontaminated according to the procedures described in Section 4.2.6.

Samples were collected as composite samples from 3 to 6 places in the vicinity of each designated sample location. Soil samples for VOC analyses were placed in containers prior to compositing. Sample mixing was performed immediately after sample collection. Samples were composited in a decontaminated stainless steel bowl and mixing was conducted with a stainless steel spoon. Soil was scraped from the sides and bottom of the bowl and rolled to the center. When the sample was thoroughly mixed and made as homogenous as possible, it was placed into appropriate sample containers. All sample containers were collected in laboratory cleaned glass jars, labelled and immediately placed on ice in a cooler. Sampling personnel wore clean disposable gloves throughout sampling activities.

4.2.2 DRILLING

Drilling was conducted at various locations around East Millinocket Mill, Millinocket Mill, and West Branch Garage using a Mobile B-53 drill rig. Drilling was conducted to obtain soil samples for chemical analyses and to install temporary monitoring wells for the collection of groundwater samples. The casing drive-and-wash method was used at each location. Initially, a borehole was advanced to 5 feet using a 4-inch inner diameter (ID) solid stem auger. A 4-inch ID casing was then driven with a 300-pound hammer falling 16 inches until appropriate sampling depths or the bottom of exploration was reached. A 3-3/8 inch roller cone bit with clean, potable circulation water was used to drill and flush

cuttings from inside the casing. Circulation water at each borehole was contained in a tub and recirculated. A split-spoon sampler was driven at five foot intervals to obtain representative subsurface soil samples. A portion of each sample was placed in a plastic bag and organic vapors in the head space were measured and recorded after the completion of drilling each borehole. Headspace analyses conducted with plastic bags were used as a field screening tool only. Results were used to observe relative amounts of organic vapors in the sample and select sample intervals to be analyzed by an analytical laboratory. All soil samples were described in general accordance with ASTM procedures. Selected samples were sent to an analytical laboratory for analyses. The number of blows from a 140-pound hammer falling 30 inches required to drive the sampler 1.5 feet were counted and recorded. Appendix F contains all test boring reports.

In areas where boulders or bedrock was encountered, coring procedures were employed utilizing a 3-inch outer diameter NQ core barrel. Clean, potable water was used during coring.

All downhole drilling tools and the drill rig were steam cleaned prior to mobilizing to each borehole location. Approximate amounts of circulation water lost while drilling was recorded.

All drilling at the East Millinocket Mill was terminated in the backfill, channel sands, and brown glacial till. All drilling at the Millinocket Mill was terminated in the sandy ablation till or denser glacial till. The single boring at West Branch encountered fill material/ablation till, dense glacial till, and was terminated in bedrock.

4.2.3 MONITORING WELL INSTALLATION AND DEVELOPMENT

After drilling to desired depths, a temporary well was installed in each borehole. Each well was constructed with 2-inch ID Schedule 40 PVC riser and screen which was steam cleaned prior to installation. The screen was constructed with 0.010-inch factory slots with lengths varying between 4 and 10 feet. Measurements to the nearest 0.01 feet were made of the screen and riser and recorded. The screen and riser were assembled and lowered

into the borehole with the casing remaining in place. Sussex silica sand was then poured around the screen with the casing pulled back incrementally until the sand reached the desired depth, approximately one to two feet above the screen. Frequent measurements were taken with a tape and tag bar to assure no bridging was occurring. The remaining annulus was filled with bentonite pellets or volclay grout, depending on the depth of the borehole. Bentonite pellets were then hydrated after completion of each well. A locking cap and lock were placed on each well. Appendix G contains well installation logs.

Well development was conducted after each well had been constructed. Well development was accomplished by bailing with a PVC bailer or developing with a positive displacement pump. As the wells were developed, ground water temperature, pH, and specific conductance were monitored as indicator parameters. This information was recorded on the Monitoring Well Development Log Shown in Appendix H. The turbidity of the developed water was noted visually and recorded in the field log book. Well development was continued until indicator parameters stabilized.

4.2.4 GROUNDWATER SAMPLING

Groundwater samples were collected from each new temporary monitor well and from selected existing wells. The depth to water was initially measured and used to obtain the volume of water in the well casing. Measurements of pH, specific conductivity, and temperature were made after removing the first bailer volume. These measurements were then made after each well volume was removed. Well evacuation was continued until pH, specific conductivity, and temperature varied by less than 15% over two consecutive readings and a minimum of 3 well volumes had been evacuated. All sampling information was recorded on the Field Data Information Sheet for Ground Water Sampling, which is included in Appendix I.

Samples were then collected in prelabelled precleaned laboratory jars with appropriate preservative as required by the analytical method. Sample containers submitted for VOC analysis were completely filled so that no headspace remained. Each sample was stored

on ice in a cooler after sample collection. Sampling personnel wore clean disposable laboratory gloves throughout sampling activities.

4.2.5 SURFACE WATER SAMPLING

Surface water sampling was conducted by directly filling each prelabelled precleaned sample container. Appropriate preservatives were used as required by certain analytical methods. Upon collection, each sample was placed on ice in a cooler. Sampling personnel wore new disposable laboratory grade gloves throughout sampling activities.

4.2.6 FIELD CLEANING PROCEDURES

Field equipment and instrumentation, which was used on multiple wells, were cleaned according to the following field cleaning procedures:

1) Flush item thoroughly with phosphate free laboratory detergent solution;
2) Rinse item at least two times with potable water;
3) Rinse item at least one time with de-ionized water;
4) Rinse item at least one time with pesticide grade isopropanol, allow to air dry; and
5) Wrap in aluminum foil until use.

4.2.7 ASBESTOS AIR SAMPLING

Asbestos air sampling was conducted in accordance with provisions of 40 CFR Part 763 and NIOSH 7402. Sample collection cassettes contained mixed cellulose ester filters (MCEF) with a pore size of less than or equal to 0.45 microns. Each cassette was sealed with a shrink gel-band to prevent leakage around filter edges and cassette part joints.

SKC portable low-volume air sampling pumps (Model 224) were calibrated at flow rates equal to or greater than one liter per minute but not exceeding 10 liters per minute. Each

sample location was selected randomly near damaged suspect ACMs. The sampling cassette was placed in a downward direction at approximately 45 degrees from horizontal.

Sampling continued until at least a minimum volume of 560 liters was collected. In addition to working air samples, quality control blank samples were submitted to an American Industrial Hygiene Association (AIHA) accredited laboratory for analysis. All samples were analyzed by transmission electron microscopy (TEM).

The detection limit of TEM is 0.0045 fibers (structures) per cubic centimeter (f/cc). The area clearance standard for airborne asbestos is 0.01 f/cc. Sample results meeting this requirements indicate the sample area tested is suitable for occupancy.

4.3 PHASE II RESULTS

This section describes the analytical results of samples collected at the Millinocket mill, the East Millinocket mill, Woodlands, and the Dolby Landfills during the Phase II assessment. Data tables presenting these results can be found in Table 4-2 at the end of this section. Complete analytical reports are contained in Appendix J. All sample locations can be found on the site maps in Section 3.4 of this document.

The G-P/Bowater contract defines the criteria for what is considered soil and groundwater contamination.

Results of the chemical analyses of samples collected during the Phase II assessment represent current conditions of soil, ground water, and surface water at the respective sample locations. As stated earlier, sample locations were selected to be representative of conditions at specific areas within the study area. The selected sample locations provide a limited assessment of potential impact at a given area. Contaminant distribution within a plume of ground water contamination is generally variable due to changes in aquifer and contaminant characteristics. Also, certain contaminants may undergo transformations over time and distance from their point of origin which may result in a compound with greater environmental risk. Therefore, the results presented in this study must be considered an indication of existing conditions, not an absolute

characterization of all areas within the study area. It may be necessary to conduct supplemental investigations at certain locations to confirm and/or characterize the extent of contamination.

4.3.1 MILLINOCKET

4.3.1.1 Soil

Bulk Fuel Oil Area

Three soil samples (MBF-1, MBF-2, and MBF-3) were collected from soil borings in the vicinity of the bulk fuel oil tanks at the Millinocket mill and analyzed for SVOCs and TPH. Each sample was collected as a composite from approximately 0-1.5, 5-6.5, and 10-11.5 feet below the land surface. No SVOCs were detected. TPH of 55000 ppm was detected in the soil at MBF-3 between the railroad spur and the bulk fuel oil storage tanks. No SVOCs were detected in MBF-3. One surface soil sample, SS-2M, was collected at the end of the railroad spur by the bulk fuel unloading area and was analyzed for TPHs and PCBs. This sample contained 3,500 ppm TPHs. Soil sample, MBF-1, collected downgradient of the two storage tanks had 48 ppm TPHs. This soil sample was not analyzed for total metals. Table 4-2, page 161, summarizes the results from samples taken in this area.

PCB Contractor Laydown Area

Aroclor 1260 was detected at surface soil sample location SS-1M (580 ppb) in the PCB contractor laydown northeast of the bulk fuel tanks. Concentration of PCB in this composite sample exceeded the RCRA Action Levels and Media Protection Standards. Table 4-2, page 162, summarizes the results from the sample taken in this area.

Pesticide Off-Loading Area

A single soil sample was collected at the northwest corner of the mill at the pesticide unloading area near the railroad ties. The sample SSMPU was analyzed for pesticides; none were detected. Table 4-2, page 165, summarizes the results of this sample.

Brown Dump

Approximately 300 yards east of the bulk fuel storage tanks, two surface soil samples were taken in the Brown Dump. BD-1 was collected along the treeline at the dump. No VOCs were detected and no metals above RCRA Action Levels were detected. A second sample, BD-2, was taken in the vicinity of the new temporary well TWM-4 and the old monitoring well where dark stained soils were apparent. Analysis of this sample indicated mercury levels of 34200 ppb which exceeds RCRA Action Levels. Lead levels in Sample BD-2 are 476,000 ppb. Although there is no RCRA Action Level for this compound, it is considered to be very high. Other metals were present in the soil sample but were below RCRA Action Levels. Table 4-2, Page 164, summarizes the results of these samples.

4.3.1.2 Ground Water

Bulk Fuel Oil Area and Red Liquor Lagoon

Three temporary monitoring wells, TWM-1 through TWM-3, were installed in the vicinity of the bulk fuel tanks as shown on Figure 3-8. Each well was sampled and analyzed for Benzene, Toluene, Ethylbenzene, and Xylene (BTEX), SVOCs, and TPH; none of these constituents were detected in the ground water in TWM-1 or TWM-2. TWM-3-2 had a concentration of 0.18 mg/l of TPH. No BTEX or SVOCs were detected in TWM-2. TWM-4, located in the Brown Dump Area, had no detectable levels of BTEX. Table 4-2, page 161, summarizes the results of these samples.

Ash Pond

Existing monitoring well MW-202B located at the closed ash pond was sampled and analyzed for total and dissolved metals. Total metals analysis indicated aluminum (4.3 ppm) and lead (0.020 ppm) concentrations above the MEGs, but below RCRA Action Levels for these constituents. All dissolved metals were below MEGs and RCRA Action Levels. Table 4-2, page 166, summarizes the results of this sample.

4.3.1.3 Asbestos Air Sampling Results

During the Phase II site investigation, Sirrine collected five asbestos air samples at the Millinocket Mill on October 2, 1991. All sampling results were reported below the clearance criteria of 0.01 f/cc. Table 4-1 summarizes sample locations and airborne asbestos concentrations.

Because airborne asbestos concentrations can be misleading, air monitoring should supplement physical inspections. Levels may vary from day to day and from room to room. For this reason, the Environmental Protection Agency (EPA) does not recommend air monitoring as an assessment tool for identifying asbestos exposure potentials.

However, if the asbestos-containing material is currently in good condition, increases in airborne asbestos levels may provide an early warning of deterioration and/or disturbance of asbestos building systems. If any risk of asbestos fiber release is due to physical or water damage, corrective actions should be conducted immediately.

In addition to the Operations and Maintenance Program recommendation, site health and safety personnel should improve asbestos program recordkeeping and oversight of abatement operations. During a site walk-through at the Millinocket Mill, an abatement containment and disposal container was inspected. The abatement oversight contractor (IHNE) was not following proper EPA recommended air monitoring procedures.

IHNE site representative used only one sampling pump to characterize potential asbestos emissions from the containment barrier. Based on EPA recommendations, it is standard practice to collect air samples at the personnel decontamination corridor, equipment/debris load out chamber, negative pressure exhaust and several sampling points along the containment perimeter. During the review of air monitoring data from previous abatement projects, it was also noticed that elevated clean room and clearance fiber counts were reported.

TABLE 4-1

ASBESTOS AIR SAMPLING RESULTS
MILLINOCKET MILL
OCTOBER 2, 1991

Sample Number	Sample Description	Concentration (f/cc)
G-1359-1A	MGO - 3rd Floor At Ash Washer Near Elevator	<0.0045
G-1359-1B	Paper Room - Catwalk Under #1 Machine Near Spiral Stairs	<0.0045
G-1359-1C	Steam Plant - 3rd Floor At Control Room	<0.0046
G-1359-1D	Sulfite Mill - Old High Yield Control Room	<0.0045
G-1359-1E	Grinder Room - Ground Floor At West Wall Near Green Tool Box	<0.0046

The inspected disposal container was not properly labeled or secured. There is no evidence that these practices occur routinely, but these examples reinforce the need of site health and safety to increase involvement with asbestos-related projects. During the site investigation, these other non-asbestos health and safety concerns were noted:

- Confined Space Entry
- Fall Protection
- Welding Screen Protection
- Respirator/Cartridge Selection
- Hearing Conservation
- Overhead/Low Clearance Hazards

4.3.2 EAST MILLINOCKET

4.3.2.1 Soil

Maintenance Garage Area

Soil samples were taken at East Millinocket in the vicinity of the maintenance garage and the underground storage tank (UST) removal site. Sample SS-1E, taken from a ditch which receives steam cleaning wastewater, was analyzed for VOCs, total metals, and TPH. No VOCs were detected in the soil. Although arsenic (10900 ppb), barium (31100 ppb), cadmium (580 ppb), chromium (24600 ppb), and lead (22600 ppb) were detected, concentrations of these constituents were below RCRA Action Levels. TPH were detected at 6100 ppm. One soil sample, EMUST, was collected from a soil boring in the maintenance garage area. Sample EMUST, taken from a soil boring at 0.5-2.0 feet, was analyzed for VOCs. VOCs were not detected above RCRA Action Levels. Table 4-2, pages 167 and 168, summarizes the results of these samples.

Recycle Mill Area

Soil sample SS-3E was collected from a surface drainage ditch near the location of the proposed recycle mill, and analyzed for VOCs, SVOCs, total metals, and TPH. None of these constituents were at concentrations above RCRA Action Levels. The surface water in the ditch had a sheen during sampling, apparently from an off-site source, and

laboratory analysis indicated a TPH level of 67000 ppb. Table 4-2, page 169, summarizes the results of this sample.

Paint Shed

One soil sample, EMPS, was taken from the soil boring at a depth of 0-1.5 feet at the south end of the paint shed and analyzed for VOCs. VOCs were detected at 7.1 ug/l. Table 4-2, page 170, summarizes the results of this sample.

Burn Pit

Sample EMBP was taken from a boring at 5-6.5 feet below land surface at the Burn Pit. No VOCs were detected at this location. TPH analysis indicated 62 ppm TPH in soil at the Burn Pit. Table 4-2, page 172, summarizes the results of this sample.

Bulk Fuel Oil Off-Loading Area

Surface soil sample SS-4E was taken inside the dike of the bulk fuel tank approximately 1 to 2 feet below obvious oil staining and analyzed for SVOCs and TPH. The following SVOCs were detected: phenanthrene (1700 ppb), fluoranthene (1600 ppb), pyrene (1700 ppb), benzo(a)anthracene (750 ppb), chrysene (1200 ppb), and benzo(b)fluoranthene and benzo(k)fluoranthene (1400 ppb). No RCRA Action Levels exist for these SVOCs organics. The TPH level for this soil sample is 89 ppm. Table 4-2, page 176, summarizes the results of this sample.

Old Train Shed

Surface soil sample SS-2E was taken in front of the old train shed along the oil-stained railroad spur. This sample was analyzed for PCBs; none were detected. Table 4-2, page 171, summarizes the results of this sample.

4.3.2.2 Ground Water

Maintenance Garage Area

Temporary well TW-3 was installed at the UST removal site near the maintenance garage. Ground water samples did not indicate any VOCs or TPHs in this area. However, a noticeable sheen and petroleum odor was observed during development and sampling of this well. Purge water from this monitoring well was containerized for disposal at the waste water treatment plant. This well was resampled prior to abandonment and no TPHs or VOCs were detected. Table 4-2, page 168, summarizes the results of this sample.

Paint Shed

Monitoring well TW-2 was installed in the vicinity of the paint shed. During drilling and development, a diesel odor was detected. A noticeable sheen was apparent on the surface of the purged water. TPH analysis was performed on a ground water sample from this well. EPA Method 418.1 results did not indicate any TPH. However, reexamination under ASTM D 3328, which has a lower detection limit than 418.1, indicated TPH of 1200 ppb. Characteristics of these components were similar to a product in the kerosene/fuel oil range and contained resolved two- to four-ring polynuclear aromatic hydrocarbons. The only VOC detected was 1,2-Dichloroethene (7.1 ppb). This well was resampled and analyzed for VOCs and TPH. No detectable concentrations were found. Table 4-2, page 170, summarizes the results of this sample.

Burn Pit

A temporary well TW-1 was installed at the Burn Pit area. Oil was observed in the circulation water and a sample of the water was taken and analyzed for VOCs and TPH. Although VOCs and TPH was detected in the circulation water sample (EMPS-CIR), neither were detected in the ground water sample. Table 4-2, page 172, summarizes the results of this sample.

Bulk Fuel Oil Area

Four wells (TW-4, TW-5, TW-6 and existing well 211-B) were sampled in the vicinity of the East Millinocket bulk fuel tank and analyzed for BTEX, SVOCs, and TPH. None of the above constituents were detected. Because oil-stained soils were encountered during drilling activities, TW-4 was resampled (TW-4-2) and analyzed for TPH by EPA SW-846, Method 3510 and 5030. A concentration of 0.25 mg/l was detected in this sample. Table 4-2, page 176, summarizes the results of these samples.

Drum Storage Area

Two existing monitoring wells were sampled in the Drum Storage area. No VOCs or TPHs were reported in the analytical data. Total metals analyses indicated elevated levels of aluminum in MW-102 (12600 ppb) and MW-103 (23300 ppb) which exceed MEGs and proposed MCLs. Total lead (27 ppb) exceeds the MEGs in well MW-103. Lead was not detected in dissolved metals analysis. Table 4-2, page 173, summarizes the results of these samples.

Bark Pile

Wells MW-706 and MW-707 located in the bark piles were sampled for VOCs, total and dissolved metals. Aluminum concentrations in ground water sampled at MW-706 exceeded proposed secondary MCLs based on taste and odor. Aluminum (9300 ppb), arsenic (52 ppb), and dissolved arsenic (55 ppb) all exceed MCLs, MEGs, and RCRA Action Levels. Although detected in the ground water samples, VOCs did not exceed any standard levels. Low pH and high ground water temperatures in the Bark Pile samples can be attributed to the high tannic acid and composting associated with decaying bark. Table 4-2, page 174, summarizes the results of these samples.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
GREAT NORTHERN PAPER, INC. MILL PROPERTIES
MILLINOCKET AND EAST MILLINOCKET, MAINE

00-1153 E January 22, 2001

S.W.COLE ENGINEERING, INC.

• Geotechnical Engineering • Field & Laboratory Testing • Scientific & Environmental Consulting

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00-1153 E

January 22, 2001

Great Northern Paper, Inc.
Attention: Mr. Brian Stetson
One Katahdin Avenue
Millinocket, ME 04462-1298

Subject: Phase I Environmental Site Assessment
Great Northern Paper, Inc. Mill Properties
Penobscot County, Maine

1.0 INTRODUCTION

In accordance with our Agreement dated December 14, 2000, we have completed a Phase I Environmental Site Assessment (ESA) of the Great Northern Paper, Inc. (GNP) Mill Properties located in Millinocket and East Millinocket, Maine. Our assessment includes the GNP Millinocket and East Millinocket paper mills. Other GNP Mill Properties included the Dolby Landfills property, the GNP Woodlands Office and the GNP hangar parcel at the Millinocket Airport. We did not include the properties associated with the GNP hydroelectric dams in our assessment.

1.1 Purpose

This assessment was conducted in order to provide an indication of the potential for environmental contamination by petroleum and hazardous substances from previous and current uses of the site and of adjoining properties.

1.2 Approach

We conducted our Environmental Site Assessment (ESA) in general accordance with the ASTM E 1527-00 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. We modified the ASTM Method for this assessment, using a two-step approach to conduct the Phase I Environmental Site Assessment due to the size of the properties, the variety of physical and chemical

processes involved in the papermaking process, and the time constraints of the project. Our approach is outlined below:

Step 1

- Research of historical site uses through standard record research.
- Research of standard environmental records and databases.
- Interviews of individuals with knowledge of the site.
- Review of GNP historic aerial photographs, maps, and other internal documents with details about the sites. Research was conducted at the GNP offices in Millinocket, Maine.
- Identification of particular environmental issues requiring further research and/or site visits.
- Review of environmental documents and previous environmental reports.

Step 2

- Limited site reconnaissance of areas identified in Step 1 as requiring further research.

1.3 Scope of Services

Our Scope of Services included four components: records review, interviews, site reconnaissance, and report preparation. These components are described in the outline below:

Records Review – We reviewed records from the following sources:

Standard Environmental Records – We conducted environmental records searches of current government databases and subcontracted environmental database searches from EcoSearch Environmental Resources, Inc. of Indianapolis, Indiana (www.ecosearch.net).

Environmental Protection Agency Records (Boston, MA)

- NPL (1.0 Mile Approximate Minimum Search Distance (AMSD) - 08/18/00

- CERCLIS List (1.0 Mile AMSD) - 08/18/00
- RCRIS (0.25 Mile AMSD) - 04/15/00
- CORRACTS (1.0 Mile AMSD)
- ERNS List (0.25 Mile AMSD) - 01/01/00
- PADS (1.0 Mile AMSD) - 11/20/99
- TRI (0.5 Mile AMSD) - 10/96

Maine Department of Environmental Protection Bureau of Remediation and Waste Management (BRWM) Records

- Maine Underground Storage Tank List (UST - 0.25 Mile AMSD) – 10/02/00
- Maine Leaking Underground Storage Tank List (LUST - 0.5 Mile AMSD) - 10/02/00
- HWS State Equivalent CERCLIS/NPL (Division of Remediation Uncontrolled Hazardous Substances Sites Program List) - (SL - 1.0 Mile AMSD) – 04/05/00
- Maine Solid Waste Facility List (SWF - 1.0 Mile AMSD) - 08/18/99

Maine Department of Environmental Protection Bureau of Remediation and Waste Management (Augusta and Bangor, Maine)

- Spill Reports Master List – (Site - 11/07/00)
- Selected Spill Report Records
- MDEP UST database - (Site - 12/8/99)

Previous Environmental Reports – We reviewed the following environmental reports that GNP provided to us:

- Sirrine Environmental Consultants of Greenville, South Carolina - Environmental Audit of the Georgia-Pacific Property in Maine for Bowater Incorporated, reported December 1991.

- RUST Environment & Infrastructure of Charleston, South Carolina - Environmental Compliance Review of GNP's Mills and Associated Woodland Facilities, September 1996.
- The Roy F. Weston, Inc. Alternative Remedial Contracts Strategy (ARCS) team, Preliminary Assessment Plus (PA+) reports of the GNP paper mills in Millinocket and East Millinocket, for the U.S. Environmental Protection Agency (EPA) Waste Management Division, August 12, 1992.
- MDEP Final Site Inspection Report for the Millinocket Mill, conducted for EPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program as a follow-up of the 1992 ARCS PA+, November 3, 1999.

Physical Setting – We reviewed the following published maps for the site and surrounding area:

- Delorme 3-D TopoQuads Maine Software (topographic mapping)
- Maine Geological Survey, Significant Sand and Gravel Aquifer Maps, East Millinocket and Millinocket Quadrangles
- Maine Atlas and Gazetteer (DeLorme Publishing, Inc., 1999), Map 43

Historical Use Information – We attempted to identify obvious uses of the property from the present, back to the obvious first developed use, or 1940, whichever was earlier, using the following resources:

Aerial Photographs – We reviewed sets of historic aerial photographs from the following sources:

- GNP in Millinocket, Maine. Aerial photographs reviewed include black and white, infrared, and color photographs from the 1950's to 2000.

Current and Historical Maps – We reviewed current and historic maps and plans from the following sources:

- GNP Offices, Millinocket, Maine
- Penobscot County Registry of Deeds in Bangor, Maine

Municipal Offices – We visited and interviewed, by telephone, persons with knowledge about the site at the Millinocket and East Millinocket municipal offices.

GNP – We reviewed aerial photographs, historical photographs, reports, maps, and environmental records available in the GNP archives and the GNP Environmental and Government Affairs Department files in Millinocket, Maine.

Interviews – We conducted interviews of persons who might have knowledge about the site (i.e., GNP employees, MDEP personnel), in regards to:

- Current and Historic uses of the site
- Possible underground storage tanks, hazardous substances, or petroleum used or released on the site or nearby
- Waste disposal at the site
- Site conditions

Site Reconnaissance – We conducted a limited reconnaissance of the GNP Millinocket and East Millinocket paper mills, the Dolby Landfills, the Woodlands Office and the GNP airport parcel at the Millinocket Airport. We focused our visits on areas identified, through our research, as potential environmental issues. Our reconnaissance was conducted on January 04 and 05, 2001. Our reconnaissance included driving and walking about the properties, where accessible, in order to document possible environmental conditions on the site. We reviewed site features, described environmental conditions, and took photographs to support our observations. It should be noted that areas of the sites were covered by up to 1 foot of snow. The snow cover limited our observation of the ground surface in these areas. The photographs taken during our site reconnaissance will be provided in a photo album separately.
Our scope of services did not include a lead-based paint survey, radon testing, asbestos survey, or wetlands evaluation.

Report – We compiled a written report that follows. It includes our findings, conclusions, and supporting documents.

1.4 Appendices

This report is subject to the limitations included in Appendix A. Site maps that specify locations of identified issues, or sites identified as having a potential for environmental contamination are in Appendix B. Appendix C contains copies of Containment Location Plans of the Millinocket and East Millinocket Mills. Appendix D includes copies of the EcoSearch environmental database reports. Appendix E contains copies of the MDEP UST list. Appendix F contains copies of the MDEP Spill Reports Master List.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The site includes the Millinocket and East Millinocket GNP paper mills, the Dolby Landfills, the GNP Woodlands Office, and the GNP airport parcel at the Millinocket Airport. The properties are located in Millinocket and East Millinocket, Maine. Our assessment does not include the properties associated with the GNP hydroelectric dams.

According to our research, Inexcon, Maine, Inc. purchased the GNP timberlands from Bowater, Inc. in 1999. The land was acquired by Bowater Inc. from Georgia-Pacific (GP) in 1992, by GP from Great Northern Nekoosa (GNN) in 1990, and by GNN from Great Northern Paper Company (GNP Co.) in 1987. According to Brian Stetson, GNP Manager of Environmental and Government Affairs, there are no environmental liens on the GNP timberlands tracts.

2.1.1 Millinocket Mill

The Millinocket Mill includes approximately 550 acres and is identified by the Town of Millinocket as Lot 1 on Map R6 (Brunette, 2001).

2.1.2 Woodlands Office

The Woodlands Office is identified by the Town of Millinocket as Lot 9 on Map U11.

2.1.3 GNP Airport Parcel

The GNP hangar parcel is identified by the Town of Millinocket as Lot 4 (Subdivision 1) on Map R4.

2.1.4 East Millinocket Mill

The East Millinocket Mill consists of about 410 acres and is identified by the Town of East Millinocket as Lot 10 on Tax Map 2, Block 10.

2.1.5 Dolby Landfills

The Dolby Landfills are surrounded by GNP timberland property and encompass about 800 acres of land. The Town of East Millinocket describes the landfills as part of Lot 12 on Map 5.

2.2 Current Uses of the Site

2.2.1 Paper Mills

The Millinocket Mill is an active sulfite pulp and groundwood paper mill that began operations in 1900 (GNP, 2000). The East Millinocket Mill is a groundwood paper mill and uses sulfite pulp from the Millinocket Mill. A Recycling Plant also exists at the East Millinocket Mill to produce recycled fiber for paper production. The East Millinocket Mill was built in 1906 (GNP, 2000). Numerous facility changes have taken place at the facilities over the years including mill modernizations in the 1950's and 1980's that included additions of new paper machines and wastewater treatment plants (WWTP). The mills use a combination of hydroelectric power, fuel oil, pulping liquors, woodwaste and sawdust to generate energy for the mill power systems. GNP has continually improved their operations and facilities to improve efficiency in relation to their papermaking processes and use, storage, generation and disposal of petroleum products and hazardous substances (GNP, 2000). Since 1987, GNP has reduced their hazardous waste generation by approximately 99% (Akeley, 2001). The reduction was accomplished by improved spill prevention and control measures, enhanced chemical ordering and chemical use procedures, and discontinuing the use of products that ultimately become hazardous waste.

2.2.2 Woodlands Office

The Woodlands Office is utilized as office space and parking for GNP's Woodlands Division.

2.2.3 GNP Airport Parcel

The GNP airport parcel includes two hangars and an above ground aircraft fueling system. The facility is no longer used to store and fuel aircraft. The facilities are currently used for storage of equipment used by the Environmental and Government Affairs Department such as sampling equipment, boats, etc. Apparently, personal vehicles are also stored within the structures.

2.2.4 Dolby Landfills

The Dolby Landfills include three landfills, Dolby I, Dolby II, and Dolby III. Dolby II and I are inactive, closed landfills. Dolby III is an active landfill operating under an MDEP-approved solid waste license. The landfills were/are used to dispose of non-hazardous solid waste generated at the GNP mills. Currently, solid waste disposed of in Dolby III includes:

- primary and secondary wastewater treatment sludge from the two mills
- woodwaste
- bark ash
- general mill waste such as lunchroom waste, waste paper, etc.
- waste generated from GNP woodlands operations and recreational use in the West Branch Penobscot River region of the Penobscot including Baxter State Park
- production-related non-hazardous wastes such as sulfur, magnesium oxide/hydroxide and oil-fired boiler ash (only with permission from the Environmental and Government Affairs Department)
- wood ash from the Signal/Sherman facility in Sherman Station, Maine
- waste from the Recycled Fiber Plant at the East Millinocket Mill (SME Operations Manual, 1999).

The Dolby Landfills also accepted municipal waste from the Town of Millinocket, East Millinocket and Medway until the 1993 (SME, 1999).

2.3 Description of Structures and Utilities

2.3.1 Millinocket Mill

The Millinocket Mill includes, but is not limited to: a stone groundwood mill; a sulfite mill; a wood room; 11 paper machines (several inactive or removed); a steam plant and boiler water filter house; a vehicle maintenance building; a bulk bunker C oil farm and unloading area (railroad rack); two small hazardous waste storage buildings; a bark pile; Engineering and Research building and an Administration Building; and a wastewater treatment plant (WWTP) that is southeast of the mill across Millinocket Stream. Drainage systems within these structures are connected to the process sewers and treated at the GNP WWTP. Other structures include pulp and chemical storage facilities. The Town of Millinocket municipal water system provides drinking water to the mill. Wastewater and sewage generated at the mill is treated at the GNP WWTP.

See Appendix C for plans depicting bulk storage locations of products including petroleum and hazardous substances at the Millinocket and East Millinocket Mills. The plans identify approximate locations, products, and quantities for the mill bulk storage facilities.

2.3.2 Woodlands Office

The Woodlands Office consists of a rectangular two-story building and a paved parking lot. Municipal water and sewer serve the property. The building is heated with #2 fuel oil that is stored in a 1,000-gallon UST.

2.3.3 GNP Airport Parcel

The GNP airport parcel consists of two hangars and an aboveground aircraft fuel system that includes a pump station and an AST. The fuel system has been abandoned because the facilities are no longer utilized to store and fuel aircraft.

2.3.4 East Millinocket Mill

The East Millinocket Mill includes, but is not limited to: a groundwood mill; a wood room; 6 paper machines (several inactive or removed); structures associated with a bark boiler; a Recycling Plant; a vehicle maintenance building; a bulk bunker C oil farm and unloading area (railroad rack); a wood storage yard; two small hazardous waste storage buildings; a bark pile; and a WWTP (southeast of mill across Millinocket Stream). Drainage systems within these structures are connected to the process sewers and treated at the GNP WWTP. Other structures include pulp and chemical storage facilities. The East Millinocket Mill Dam and Dolby Dams and their hydroelectric stations are located adjacent to the East Millinocket Mill property. The Town of East Millinocket municipal water system provides drinking water to the mill.

2.3.5 Dolby Landfills

The Dolby Landfills include: Dolby I, II, and III landfills; an operators building; a leachate collection system at Dolby II and III that includes leachate collection piping, a 250± gallon ferric chloride tote for leachate odor control, a leachate collection pond, a pump station, and a leachate pipeline that transports leachate to the East Millinocket WWTP; a 1,000± gallon diesel above ground storage tank (AST) for fueling landfill equipment; the landfill operators building; a small leachate collection pond near Dolby I; and active and inactive borrow pits.

2.4 Site and Vicinity Characteristics

2.4.1 Millinocket Mill

The Millinocket Mill site is located south of a generally residential neighborhood in Millinocket, Maine. The majority of the mill property is located south and west of Millinocket Stream with Ferguson Lake to the west. A portion of the site including the Little Italy substation and the GNP WWTP are located east of Millinocket Stream. The area east of Millinocket Stream includes some residential properties, the Town of Millinocket WWTP, The Town of Millinocket Transfer Station, and Millinocket Airport property.

2.4.2 Woodlands Office

The Woodlands Office is located in a commercial area on Central Street. Adjacent properties include a self-storage facility, a bank, and a motor sports sales and service business. Areas south and east of the site appear to be undeveloped.

2.4.3 GNP Airport Parcel

The airport parcel is located west of the southern runway and is accessed by a short gravel road that extends from the Rice Farm Road. Adjacent properties include residences to the south and west, and additional hangar parcels.

2.4.4 East Millinocket Mill

The East Millinocket Mill site is located south of Route 157 in East Millinocket, Maine and extends about 2.5 miles along the north shore of the West Branch Penobscot River of the Penobscot River (West Branch Penobscot River) from the Medway Town line. The Town of East Millinocket is across Route 157 from the mill.

2.4.5 Dolby Landfills

The Dolby Landfills are located off Route 157 in East Millinocket, east of Partridge Brook Flowage. The area surrounding the landfills property is undeveloped GNP timberlands. Partridge Brook flowage borders the site to the west.

2.5 Past Uses of the Site

2.5.1 Millinocket Mill

The Millinocket Mill site was formerly a farm and undeveloped land. Construction of the Millinocket Mill began in 1899 (McLeod).

2.5.2 Woodlands Office

The Woodlands Office was built in the 1960's and was originally an apartment building (Fessenden, 1998). The Woodlands Office was purchased from Ken Barnet in 1966 (Fessenden, 1998). The building was formerly an apartment building. However, other historic use of the facility may include gasoline service. An underground storage tank (UST) was discovered at the site in 1998 during construction of a paved parking lot

(1998). The tank appeared to be a former gasoline UST, however, GNP and the former owner were not aware of the origin of the tank or its usage.

2.5.3 GNP Airport Parcel

The GNP hangars were constructed in 1955 on previously undeveloped land (Walsh, 2001). GNP used the hangars to store aircraft and conduct minor maintenance activities. Several UST's and dispensing facilities formerly existed on the parcel for fueling the aircraft. GNP discontinued their air service department in 1994 (Burleigh, 2001).

2.5.4 East Millinocket Mill

The East Millinocket Mill appears to have been built on undeveloped land. Construction of the East Millinocket Mill began in 1906 (McLeod).

2.5.5 Dolby Landfills

The Dolby Landfills site was first developed in 1975 (SME, 1999). It appears that the land was formerly undeveloped and managed for timber harvesting by GNP.

2.6 Past and Current Uses of Adjoining Properties

The properties adjoining the Millinocket and East Millinocket Mills include timberland, commercial, and residential uses.

2.6.1 Millinocket Mill

The Millinocket Mill is bounded by GNP timberlands to the south and by mainly residential properties to the north and east. Ferguson Lake borders the property to the west and Millinocket Stream passes through the east portion of the site. The Town of Millinocket wastewater treatment facility is located adjacent to the GNP WWTP.

2.6.2 Woodlands Office

Past uses of properties adjacent to the Woodlands Office include undeveloped land and commercial uses including an automobile sales and service, and gasoline service.

2.6.3 GNP Airport Parcel

The Town of Millinocket Airport has been in service since at least World War I (MDEP, 1985). We did not find information that indicated other past uses of properties adjacent to the GNP airport parcel.

2.6.4 East Millinocket Mill

The East Millinocket Mill is bounded mainly by commercial properties to the north. These properties include a bank, a gas station and automotive repair shop, and an industrial park with commercial facilities. The mill is adjacent and north of the West Branch Penobscot River. GNP timberlands are adjacent to the east boundary of the site in the Town of Medway.

2.6.5 Dolby Landfills

The Dolby Landfills property was GNP timberlands prior to their development as landfills.

3.0 RECORDS REVIEW

3.1 Standard Federal and State of Maine Environmental Record Sources

We obtained and reviewed records and databases from the U.S. Environmental Protection Agency and the State of Maine Department of Environmental Protection (DEP) Bureau of Remediation and Waste Management (BRWM) and from EcoSearch Environmental Resources, Inc.

We searched the EPA and MDEP environmental records sources for the Dolby Landfills site using the radii noted in Section 1.1. We subcontracted an environmental databases search for the GNP Millinocket Mill Properties using an expanded search radii to include the Woodlands Office and the GNP airport parcel. We subcontracted an environmental database search for the East Millinocket Mill that extended the radii searches along the property boundaries of the site, due to the size and irregular shape of the property.

Copies of the EcoSearch database reports are included in Appendix D.

3.1.1 EPA Lists

We reviewed the EcoSearch reports for EPA database listings including: National Priorities List (NPL); Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS); Resource Conservation and Recovery Information System (RCRIS) Treatment, Storage, and Disposal; RCRIS Generators; Resource Conservation and Recovery Information System Corrective Action Sites (CORRACTS); the Emergency Response Notification System (ERNS); PCB Activity Database System (PADS); and Toxic Release Inventory (TRI) for facilities listed within the radii noted in Section 1.1. EcoSearch searched other federal databases, but found no listings for the additional databases.

3.1.1.1 Millinocket Mill

NPL

Great Northern Paper, Bowater, and/or Georgia-Pacific, in Millinocket are not listed in the NPL database.

CERCLIS

Great Northern Paper Mill #1 in Millinocket is listed in the CERCLA Archive Data database. It appears that the listing was active in 1991 and 1992. The site was delisted from CERCLIS with a "No Further Remedial Action Planned" status.

RCRIS

Great Northern Paper Corp. in Millinocket is listed in the RCRA TSD and Generators database as a Transporter and Small Quantity Generator with evaluations conducted in 1987 and 1988. It is also listed in the RCRA Corrective Action (CORRACTS) database with corrective action "events" taking place in 1992.

ERNS

Great Northern Paper Co. in Millinocket is listed in the ERNS database for 38 spill events. Twenty (20) of these events involved a spill of less than or equal to 1 gallon of oil (lubricating, hydraulic, or unknown oil) into Millinocket Stream. Ten (10) of the

events involved either the sighting of a "sheen" in Millinocket Stream or a known release of oil (lubricating, waste, or unknown/other oil) down a drain into the Stream with "unknown" spill amounts. One (1) spill involved less than or equal to 1 gallon of asphalt spilled into Millinocket Stream, one (1) spill involved a release of less than or equal to 1 gallon of sulfuric acid into Millinocket Stream, one (1) spill involved the release of a "few gallons" of anhydrous ammonia into the air, and one (1) spill involved the release of acid (vapor) into the air. The remaining four (4) spill events are significant and are therefore mentioned separately below.

On June 12, 1992, approximately 4000 gallons of sodium hypochlorite was released and routed into the mills process sewer where it was treated. The substance apparently leaked due to a structural failure on a storage tank.

On July 11, 1992, approximately 400 gallons of sulfuric acid was spilled and released to a floor drain at the Steam Plant. It was suspected that some acid may have entered the ground because of loose tiles in the floor drain. The acid apparently leaked due to corrosion of a ¾" outlet pipe on a storage tank.

On March 28, 1994, approximately 5000 gallons of sodium hypochlorite (15% or less) was released and routed into the mills process sewer where it was treated by the wastewater treatment plant. The substance apparently leaked from a storage tank transfer line due to unknown causes.

On March 21, 1997, approximately 500 gallons of "oil, misc: transformer (non PCB)" was released onto the ground. The oil apparently leaked when a switchgear failed at the electrical substation. According to the database, the release was secured and the contaminated soil was removed.

3.1.1.2 East Millinocket Mill

NPL

Great Northern Paper, Bowater, and/or Georgia-Pacific, in East Millinocket are not listed in the NPL database.

CERCLIS

Great Northern Paper Mill #2 in East Millinocket is listed in the CERCLA Archive Data database. It appears that the listing was active in 1990, 1991 and 1992. The site was de-listed from CERCLIS with a "No Further Remedial Action Planned" status.

RCRIS

Great Northern Paper Inc. in East Millinocket is listed in the RCRA TSD and Generators database as a Small Quantity Generator with evaluations conducted from 1987 to 1991. It is also listed in the RCRA Corrective Action (CORRACTS) database with corrective action "events" taking place in 1992.

ERNS

Great Northern Paper Co. in East Millinocket is listed in the ERNS database for ten (10) spill events. Five (5) of these spill events involved a spill of less than or equal to 1 gallon of oil (lubricating, hydraulic, or waste oil) into the Penobscot River. One (1) of the events involved the sighting of a "sheen" of unknown oil in the Penobscot River with "unknown" spill amounts. One (1) spill involved the release of 10 pounds of calcium hydroxide into the Penobscot River. According to the listing, the substance was treated at the Mill's wastewater treatment plant. One (1) spill involved 20 gallons of hydraulic oil spilled into the Penobscot River. According to the listing, booms were deployed and absorbents used to clean up the spill. The remaining two (2) spill events are more significant and are therefore mentioned separately below.

On September 6, 1989, water from a broken fire main was discovered to be running through a PCB remedial site. According to the listing, the fire main was shut down and the runoff water was to be analyzed. The water apparently was routed to the Mill's sewer system to eventual discharge into the Penobscot River.

On June 27, 1993, approximately 1500 gallons of sulfuric acid was released onto the ground due to a failed fitting at the recycling plant. The "material was released into concrete containment inside building" and "will be treated in waste water treatment plant".

3.1.1.3 Other GNP Mill Properties

We did not find EPA database listings for the Woodlands Office, the GNP airport parcel, or the Dolby Landfills.

3.1.2 State of Maine Records Sources

We reviewed the EcoSearch reports for database listings from the Maine Department of Environmental Protection (MDEP) Uncontrolled Hazardous Substance Sites Program List of Investigations (SL, State equivalent HWS); the MDEP Solid Waste Facility (SWF) List; the MDEP Underground Storage Tank Database (UST), and the MDEP Leaking Underground Storage Tank Database (LUST).

We found UST and LUST listings in the database that we were unable to locate. We consider these listings as "orphan" listings. Orphan listings may or may not be adjacent to the site. Appendix E contains copies of the MDEP UST list that includes each of the towns/townships included in the GNP properties.

3.1.2.1 Millinocket Mill

HWS

The MDEP Uncontrolled Hazardous Sites Program database lists Great Northern Paper Mill #1 in Millinocket as "resolved".

SWF

The MDEP Solid Waste Facility List contains listings for GNP in Millinocket; however, these listings appear to be related to activities that do not take place on the Millinocket Mill's property. Several of the listings refer to "sludge utilization" and "landspread woodash". The listing also mentions the Dolby Landfill. Refer to the section labeled "Other Properties Included in the Site" below for more information.

UST

According to the DEP BRWM Master List of Registered UST's, the following registered UST's appear to be located on the Millinocket Mill property.

- Great Northern Paper Guest House - registration number 20225
  1) 100-gallon #2 fuel oil, installed 10/1/69, removed
- Paper Machine #11 – registration number 9802
  1) 10,000-gallon #1 fuel oil, installed 1/1/74, removed
  2) 2500-gallon waste oil, installed 10/1/69, removed
- Steam Plant Millinocket Mill – registration number 9803
  1) 2500-gallon waste oil, installed 10/1/69, removed
- Millinocket Mill Garage – registration number 9804
  1) 12,000-gallon regular gasoline, installed10/1/69, removed
  2) 8000-gallon unleaded gasoline, installed 2/1/88, removed 9/27/98
- Millinocket Mill WWTP – registration number 9805
  1) 8000-gallon #2 fuel oil, installed 1/1/72, removed

According to the DEP BRWM Master List of Registered UST's, there are no UST's adjacent to the Mill property. The following registered UST's appear to be located within 0.5 mile and upgradient of the mill. Facilities denoted with an asterisk (*) have a corresponding LUST listing which is detailed in the LUST section below.

- Hillside Manor, Central Street, 0 active, 1 removed
- Eugene Levasseur, Aroostook Ave., 0 active, 1 removed
- Millinocket Exxon, Pine Street, 0 active, 6 removed
- Millinocket Airport, Medway Road, 1 active, 3 removed *
- Ronald Mullen, Wassau Street, 0 active 4 removed
- Bilodeau Apartments, Aroostook Ave., 0 active, 1 removed
- Steego Auto, Aroostook Ave., 0 active, 1 removed
- Norstar Bank of Maine, Aroostook Ave., 0 active, 2 removed
- Elks Club 1521, Aroostook Ave., 0 active, 1 removed
- Merrill Norstar Bank, Penobscot Ave., 0 active, 1 removed
- St. Andrews Episcopal Church, Highland Ave., 0 active, 2 removed
- St. Andrews Episcopal Rectory, Highland Ave., 0 active, 1 removed
- Millinocket Regional Hospital, Somerset Street, 2 active, 2 removed

- Millinocket Baptist Church, Penobscot Ave., 0 active, 1 removed
- Millinocket Fire Department, Spruce Street, 0 active, 1 removed
- K&M Motors, Central Street, 0 active, 1 removed *
- Northern Maine Bowling Center, Penobscot Ave., 0 active, 1 removed
- Millinocket Armory, Spring Street, 0 active, 2 removed
- JJ Newberry, Penobscot Ave., 0 active, 1 removed
- Granite Street School, Granite Street, 1 active, 1 removed
- Aroostook Ave School, Aroostook Ave., 1 active, 1 removed
- US Post Office, Penobscot Ave., 0 active, 1 removed
- Municipal Building, Penobscot Ave., 0 active, 1 removed
- P&H Auto, Aroostook Ave., 3 active, 2 removed
- FHA, South Street, 0 active, 1 removed
- Bell Atlantic, Penobscot Ave., 1 active, 2 removed

LUST

According to the DEP BRWM Leaking Underground Storage Tank database, the following were LUST reports on the Millinocket Mill property. We reviewed some of the LUST listings

- Unreported amount of waste oil during removal of 1000-gallon capacity UST, 9/14/89, material temporarily stockpiled
- 5 gallons of diesel fuel onto ground due to vessel overfill, 4/19/90, incinerated and landspread
- Unreported amount of gasoline detected during standard inventory, 12/9/97, no cleanup method reported
- 10.99 gallons of unreported substance during removal of three UST's with 1000-gallon, 2000-gallon, and 3000-gallon capacities, 6/2/88, material landspread according to guidelines
- Unreported amount of unreported substance during unspecified tank removal, 6/10/92, no cleanup method reported

- 0.99 gallon of gasoline during removal of 8000-gallon capacity UST, 9/24/98, no cleanup method reported
- Unreported amount of unreported substance during removal of 1000-gallon capacity UST, 10/21/92, cleanup method not reported
- 0.99 gallon of #1 fuel oil onto ground due to vessel overfill, 11/20/92, landspread
- 3.99 gallon of JP3 onto ground due to loose fitting on AST, 8/21/98, cleanup method not reported
- 1200 gallons of sulfuric acid due to valve failure, 11/5/98, routed to Mill's waste water treatment plant
- Unreported amount of unreported substance during removal of a 15000-gallon capacity UST, 6/6/86, cleanup method not reported
- 40 gallons of waste oil onto ground due to vessel overfill, 5/11/89, disposal by Millinocket Fire Department
- 0.99 gallons of #2 fuel oil during removal of two UST's with 2000-gallon and 1000-gallon capacities, 8/21/87, minor soil contamination remained on site

According to the DEP BRWM Leaking Underground Storage Tank database, there were no LUST's adjacent to the Millinocket Mill property. There were 7 LUST listings for properties within 0.5 mile and upgradient of the Mill property, described below.

There are three listings for 115 Central Street, 1 for K&M Motors and 2 for O.S. Gonya. We believe these three listings refer to the same property. Two of the listings are for tank removals on 7/27/87 (no spills) and 10/7/93 (20.99 gallons #2 fuel oil, material taken for recycling). One of the listings reports no spill from a citizen complaint.

G.R. Adams, Jr., Inc., reported a 0.5-gallon spill at the Millinocket School Department on Spring Street due to human error on 8/19/98. Contaminated sorbents were to be incinerated.

Approximately 625.99 gallons of #2 fuel oil was spilled at Preble Oil Company on Penobscot Avenue from an above ground tank (AST) for "unknown" reasons on

11/14/96. According to the report, 500.99 gallons were recovered and the contaminated soil was landspread for aeration.

Charles Theriault on Pine Street reported a 200.99-gallon spill of #1 fuel oil due to a physical breakage on an above ground storage tank (AST) on 2/28/98. According to the listing, 175.99 gallons were recovered by Sawyer Environmental.

Millinocket MDEP Spill Reports

We reviewed the MDEP's Spill Reports Master List and selected spill reports at MDEP BRWM offices in Bangor and Augusta, Maine. We reviewed spills that were generally greater than 100 gallons of a product or appeared to indicate potential contamination issues. We found numerous spill reports on file for Great Northern Paper in Millinocket. A copy of the Spill Reports Master List is included in Appendix F.

We found numerous spill reports that appear to have occurred within 0.5 mile of the Millinocket Mill. We also found numerous spill reports that may have occurred within 0.5 mile of the Millinocket Mill, many of which we could not locate using information in the spill reports. We consider these listing as "orphan" files, because the locations may or may not be within 0.5 mile of the properties. Due to the number of spill reports, we have summarized the incidents that occurred on the property and that, in our opinion, appear to be of potential environmental concern.

We found numerous spill reports documenting incidents that occurred at the Millinocket Mill and involved less than or equal to 100 gallons (most less than 20 gallons) of petroleum-based substances such as gasoline, diesel, and various oils (lube, hydraulic, #1 fuel oil, #2 fuel oil, #6 fuel oil, waste oil). These spills were reported to the MDEP and cleaned up, if possible, according to MDEP recommendations. We also found numerous spills of 100 gallons or less (most less than 20 gallons) of other substances such as unspecified hazardous chemicals, unspecified non-hazardous chemicals, caustic soda, gaseous chlorine, sodium silicate, ammonia, magnesium biosulfate, phosphoric acid, sulfuric acid, wood liquors, transformer oil (non-PCB), and unknown substances. We found one report for a spill of 0 to 1 gallon of PCB containing transformer oil.

We reviewed several spill reports that detailed larger spills (>100 gallons) at the site, which are briefly described below.

- 2,100 pound spill of anhydrous ammonia into air (MDEP spill report B-208-83)
- 200 gallon spill of 50% caustic liquid into Penobscot River (MDEP spill report B-252-83)
- 60,000-gallon spill of #6 fuel oil at the Oil Farm; approximately 59,700 gallons recovered in secondary containment area, remaining 300 gallons in drainage ditch was boomed and collected with sorbents placed by Jet-Line Pollution Control. Estimated that 30 gallons made it into Millinocket Stream (MDEP spill report B-142-84)
- 10,000 gallon spill of #6 fuel oil, most into the Oil Farm containment area, approximately 300 cubic yards of contaminated soil to Sawyers. (MDEP spill report B-22-87)
- 200 gallon spill of magnesium hydroxide, most neutralized on site and taken to landfill, rest into storm sewer to WWTF (MDEP spill report B-150-87)
- 150 pound spill of anhydrous ammonia into air (MDEP spill report B-411-87)
- 360 gallon spill of PCB containing transformer oil at the T-160 site; approximately 350 gallons recovered and disposed, approximately 342 cubic yards of soil removed from site for disposal. (MDEP spill report B-84-89)
- 100 gallon spill of lube oil; most went down through a crack in concrete, entire concrete pad torn up and contaminated soil disposed of (MDEP spill report B-101-89)
- 250 gallon spill of Boral (mild bleach) onto ground; some into process sewer to WWTF, soda ash spread on ground, excavation hazardous due to proximity to bulk tanks, material left in ground (MDEP spill report B-105-89)
- 130 gallon spill of magnesium hydroxide; material shoveled into drums for disposal (MDEP spill report B421-89)
- 2050 gallon spill of caustic water mixture; approximately 2000 gallons recovered, 50 gallons into sewer into stream (B-524-89)
- 1600 gallon spill of magnesium hydroxide; approximately 750 gallons into process sewer to WWTF, approx. 750 gallons taken to Dolby Landfill, approx. 100 gallons into stream (B-653-89)

- 100 pound spill of ammonia into air and onto ground, liquid portion mixed with water and settled into drainage ditch, where it was left to naturally remediate (MDEP spill report B-215-90)
- 175 gallon spill of roof adhesive; disposed of as hazardous waste, some evaporated (MDEP spill report B-394-90)
- 36,000 pound (3000-4000 gallons) spill of sodium hypochlorite; into process sewer to WWTF (MDEP spill report B-304-92)
- 400 gallon spill of sulfuric acid, no details on spill or cleanup given in report (MDEP spill report B-361-92)
- 1600 gallon spill of diesel fuel; approx. 1300 gallons recovered, sorbents and sand applied to recover remainder, product incinerated and landfarmed (MDEP spill report B-026-93)
- 270.90 gallon spill of diesel fuel; approx. 17 yards of contaminated gravel taken off-site and disposed of (MDEP spill report B-528-93)
- 5000 gallon spill of 12% sodium hypochlorite; neutralized in WWTF (MDEP spill report B-146-94)
- 580 gallons of non-PCB transformer oil; most onto ground under transformer, uncertain impact to stream, 3 truckloads of contaminated soil to Dolby Landfill (MDEP spill report B-0174-97)
- 200 gallon spill of PCB containing sludge (180 ppm or approx. 0.3 pounds of PCB); contained and cleaned up, some flowed to process sewer to WWTF (MDEP spill report B-0199-97)
- 2000 gallon spill of lube oil; most to WWTF where recovered using sorbents and aeration, rest cleaned up using sorbents, taken to Dolby Landfill for disposal (MDEP spill report B-0716-97)
- 200 gallon spill of gasoline; absorbed with bark which was burned in biomass boiler (MDEP spill report B-0653-98)

We reviewed two spill reports that pertained to a property adjacent to the Millinocket Mill, briefly described below.

- 175 gallon spill of lube oil at the Dolby Dam; was boomed immediately and cleaned up (MDEP spill report B-449-86)

- 110 gallon spill of lube oil at Weldon Dam; into river (MDEP spill report B-40-87)

We reviewed several MDEP Spill Reports for LUST listed facilities that did not occur on GNP Mill Properties in Millinocket including: 2,452 gallon #1 fuel oil spill (MDEP Spill Report B-2-86); waste oil release during 1,000-gallon UST removal (MDEP Spill Report B-543-89); 10.99 gallon release during removal of three UST's (MDEP Spill Report I-73-88); release of unreported amount of unreported substance during 15,000-gallon UST (MDEP Spill Report B-185-86).

Copies of the MDEP Spill Reports we reviewed are on file at the Bangor, Maine office of S.W. Cole Engineering, Inc.

3.1.2.2 East Millinocket Mill

HWS

The MDEP Uncontrolled Hazardous Sites Program database lists Great Northern Paper Mill #2 in East Millinocket as "NFA" (no further action).

SWF

The MDEP Solid Waste Facility List contains a listing for the East Millinocket Wastewater Treatment Facility, and two listings for the Town of East Millinocket Transfer Station, which are located on the GNP Mill property. The MDEP Solid Waste Facility List also contains listings for GNP that mention the Dolby Landfill. Refer to the Section 3.1.2.3 *Other GNP Mill Properties* below for more information.

UST

According to the DEP BRWM Master List of Registered UST's, the following registered UST's appear to be located on the East Millinocket Mill property.

- East Millinocket WWTP – registration number 12859
  1) 1000-gallon #2 fuel oil, installed 1/1/74, removed
  2) 1000-gallon diesel, installed 1/1/74, removed

- East Millinocket Municipal Wastewater Treatment Facility – registration number 13057
  1) 2000-gallon #2 fuel oil, installed 8/1/85, active
- East Millinocket Mill Steam Plant – registration number 13518
  1) 20,000-gallon #2 fuel oil, installed 1/1/55, abandoned in place
  2) 20,000-gallon #2 fuel oil, installed 1/1/55, abandoned in place
- East Millinocket Mill Maintenance Garage – registration number 9473
  1) 6000-gallon waste oil, installed 1/1/79, removed
- Oil and Paint Shop (Warehouse J)– registration number 16697
  1) 2000-gallon unleaded gasoline, installed 12/1/89, active
- Warehouse J (incorrectly listed for Millinocket, also called Oil House) – registration number 9806)
  1) 15,000-gallon gasoline, installed 1/1/54, removed
  2) 12,000-gallon kerosene, installed 1/1/54, removed
  3) 12,000-gallon diesel, installed 1/1/54, removed
  4) 12,000-gallon diesel, installed 1/1/54, removed

According to the DEP BRWM Master List of Registered UST's, there are no UST's located adjacent to the Mill property. The following facilities have registered UST's that appear to be located within 0.5 mile and upgradient of the East Millinocket Mill property. Facilities denoted with an asterisk (*) have a corresponding LUST listing which is detailed in the LUST section below.

- Oak Park Manor, Main Street, 5 active, 6 removed
- Town of East Millinocket Municipal Building, Main Street, 2 active, 2 removed *
- Dave's Auto Repair, Main Street, 0 active, 3 removed
- Town Garage, Church Street, 3 active, 4 removed
- Dead River Oil Co., Main Street, 3 active, 0 removed *
- East Millinocket Municipality, Beech & Birch Streets, 0 active, 3 removed
- First Congregational Church of Christ, Maple Street, 0 active, 1 removed
- Opal Myrick School, Beech Street, 1 active, 1 removed
- US Post Office, Main Street, 0 active 1 removed

- Bell Atlantic, Birch Street, 1 active, 1 removed

LUST

According to the DEP BRWM Leaking Underground Storage Tank database, there are no LUST's on the East Millinocket Mill property.

According to the DEP BRWM Leaking Underground Storage Tank database, there are no LUST's adjacent to the East Millinocket Mill property. There were 5 LUST listings for properties within 0.5 mile and upgradient of the Mill property, described below.

The Town of East Millinocket Municipal Building (Police Department section) on Main Street reported a 10-gallon spill of gasoline due to a hose failure during filling on 9/17/89. Sorbents were used to recover approximately 9 gallons. The sorbents were then incinerated. A second listing for the Municipal Building for 7/18/89 reports no contamination and no spill.

Dead River Oil Company on Main Street reported that a loose fitting on a tank top voided a precision test on 6/30/98. No spill was reported.

There are two listings for spills associated with above ground storage tanks (AST) in the LUST database. Jack Hamm on Main Street reported a 50.99-gallon spill of #2 fuel oil due to physical breakage on 3/9/98. According to the listing, 0.99 gallon was recovered by Roy Bros Oil. Dead River Co. reported a 125.99 gallon #1 fuel oil spill at the residence of Herschel Hafford on Spruce Street due to physical breakage on 2/18/98. According to the listing, 2.99 gallons was recovered using sorbent pads, which were transferred to the DEP for later incineration.

East Millinocket MDEP Spill Reports

We reviewed the MDEP's Spill Reports Master List and selected spill reports at MDEP BRWM offices in Bangor and Augusta, Maine. We reviewed spills that were generally greater than 100 gallons of a product or appeared to indicate potential contamination

issues. We found numerous spill reports on file for Great Northern Paper in East Millinocket. A copy of the Spill Reports Master List is included in Appendix F.

We found numerous spill reports that appear to have occurred within 0.5 mile of the East Millinocket Mill. We also found numerous spill reports that may have occurred within 0.5 mile of the East Millinocket Mill; many of which we could not locate using information in the spill reports. We consider these listing as "orphan" files, because the locations may or may not be within 0.5 mile of the properties. Due to the large number of spill reports, we summarized only the reports that occurred on the property and that, in our opinion, appear to be of potential environmental concern.

We found numerous spill reports documenting incidents involving spills at the East Millinocket Mill of 100 gallons or less (most less than 20 gallons) of petroleum-based substances such as gasoline, diesel, and various oils (lube, hydraulic, transmission, #1 fuel oil, #6 fuel oil, unspecified). These spills were reported to the MDEP and cleaned up, if possible, according to MDEP recommendations. We also found several spills of 100 gallons or less (most less than 20 gallons) of other substances such as unspecified hazardous chemicals, unspecified non-hazardous chemicals, gaseous chlorine, sulfuric acid, and transformer oil (non-PCB). We found two spills relating to PCB containing transformer oil, one of 2 gallons and one of 0.25 gallons.

We reviewed spill reports that detailed larger spills (>100 gallons) at the site, described below. Those denoted with an asterisk (*) are explained in more detail below (see letters a through d).

- 800 gallon spill of PCB oil (over 50 ppm); contaminated soil removed, cleaned up to MDEP satisfaction (MDEP spill report B-189-85) *a
- 200 gallon spill of #6 fuel oil at the Oil Farm and Off-Loading area; recovered with bark, wood chips, and sorbents, burned in mill's biomass burner (MDEP spill report B-553-90)
- 9000 gallon spill of #6 fuel oil at the Oil Farm and Off-Loading area; approx. 8000 gallons recovered and burned in mill's boilers, wood chips used to sorb rest of free oil (MDEP spill report B-213-91) *b

- 1900 gallon spill of sulfuric acid; approx. 1800 gallons to process sewer to be neutralized in WWTF, rest soda ash used to neutralize on-site, monitoring well placed downgradient has shown no impact (MDEP spill report B-338-91) *c
- 1000 gallon spill of a mixture of 6% sulfuric acid solution and 4% caustic solution; liquid contained and pumped into a holding pit (MDEP spill report B-759-91)
- 400 gallon spill of sulfuric acid; most leaked through hole in tile under building, caustic soda added to neutralize acid (MDEP spill report B-361-92) *d
- 1500 gallon spill of sulfuric acid; pumped to process sewer, neutralized at WWTF (MDEP spill report B-340-93)
- 1250 gallon spill of #6 fuel oil at the Oil Farm and Off-Loading area; leaked into secondary containment, pumped out and disposed of (MDEP spill report B-77-94)
- 550 gallon spill of #6 fuel oil at the Oil Farm and Off-Loading area; leaked into earthen dike, scraped out, remainder mixed with wood chips and burned in mill's boiler (MDEP spill report B-79-94)
- 100 gallon spill of hydraulic oil; spill occurred on wood chips which were collected and burned in mill's boiler (MDEP spill report B276-94)
- 1200 gallon spill of sulfuric acid; went to process sewer to WWTF (MDEP spill report B-305-94)
- 100 gallon spill of #6 fuel oil; contained, bark used as sorbent which was burned in mill's boiler (MDEP spill report B-468-94)
- 1200 gallon spill of sulfuric acid; most contained in secondary containment, released to process sewer to be neutralized at WWTF (MDEP spill report B-718-98)
- 200 gallon spill of #6 fuel oil; into process sewer to WWTF where oil was vacuumed and sorbed from primary clarifier, collected oil was bulked with bark and burned in mill's boiler (MDEP spill report B-568-99)

The following paragraphs provide additional information regarding four of the spills summarized above.

A. On August 29, 1985, trench excavation related to construction activities at the mill revealed PCB contaminated soil near the No. 5 and No. 6 Paper Machine Building. The source of contamination was found to be from a spill that occurred on January 3, 1978, when a front-end loader struck a transformer

and 700 gallons of PCB oil spilled onto the ground. Remediation activities at the time of the spill included removal of "5 or 6 hundred" drums of contaminated soil, which were removed from the site and disposed of in New York. It was thought that the remediation efforts were successful, however, the 1985 trench excavation revealed that they were not. E.C. Jordan Co., an environmental consultant, oversaw the installation of 30 borings with piezometers to determine the extent of contamination, reviewed by E.C. Jordan Co. During this time, it was discovered that a 100-gallon PCB oil spill on May 14, 1981 had contributed to the contamination as well. About 200 yards of contaminated soil were removed from this area. The contaminated soil from both clean-up efforts was taken to New York for disposal. Clean-up efforts were mostly completed by December (1985), but apparently resumed in summer. According to the spill report, "the company seems to have done a credible job in this clean-up".

B. On April 15, 1991, a significant #6 fuel oil spill at the Oil Farm Off-Loading area was noticed where rail cars off-load fuel into above ground fuel storage tanks. Free product was seen seeping out of an embankment below the off-loading area. The spill, caused by a leak in an underground fuel line, had apparently been occurring for some time prior to its discovery. Clean Harbors, Inc. recovered over 8000 gallons of product from an oil/water separator and a water basin, which was taken to the mill's boiler to be burned. The remaining product lined the water basin and was in nearby drainage ditches. At the time of the writing of the spill report, wood chips were to be used as sorbents in these areas, and then burned in the mill's boiler. Tom Varney, the DEP investigator on site, recommended that a recovery well be placed at the point of the leak (when determined) and one or two more along the railroad right-of-way. The report did not indicate whether additional recovery wells were installed. A September 13, 1991 report from Sevee & Mahar Engineers, Inc. of Cumberland Center, Maine, details the clean-up efforts further. Sevee & Mahar was apparently contracted to determine the horizontal and vertical boundaries of the contaminated soil. They excavated 20 test pits in two specific areas of "northerly" and "southerly" oil breakouts. A third possible area of contamination was not investigated due to live steam

lines, transport pipes, and the possibility of embankment instability. According to the report, the contamination was more significant in the southerly area. In the southerly area, they observed a dense, six-inch layer of oil beneath the ground surface, leading them to believe that other leaks and spill events had occurred. They did not believe the contamination in the southerly area was migrating. The report details that the northerly breakout area was very mobile, in that it appeared that oil was moving through the ground along bedding of pipes and along channels within fill. The report concluded "the estimated volume of soil containing No. 6 fuel oil ranges between 2000 and 6500 cy". The range was provided due to the uncertainty surrounding the area they could not investigate, and due to remedial efforts on fixing the pipes had not been completed.

C. On June 4, 1991, an above ground storage tank leaked approximately 1900 gallons of sulfuric acid at the Steam Plant. According to the spill report, approximately 1800 gallons was diverted to the process sewer, where it flowed to the mill's wastewater treatment facility to be recycled or disposed of off-site. Apparently, some of the acid entered the ground at the site of an abandoned and filled UST, underneath a building floor. Soda ash was added to the ground area to neutralize the acid. A monitoring well was placed downgradient of the spill and has not shown any impact.

D. On July 11, 1992, 400 gallons of sulfuric acid leaked into a floor trench drain system due to a failed water treatment line at the Steam Plant. Some of the acid went into a neutralization pit and then entered the WWTF. An undetermined amount of acid leaked through a hole in the tile and went under the building. Caustic soda was put into the hole to minimize pollution. According to the report, "it appears that most of the 400 gallons of sulfuric acid is probably under the building, which is located about 900 to 1,500 feet from the river".

Copies of the MDEP Spill Reports we reviewed are on file at the Bangor, Maine office of S. W. COLE ENGINEERING, INC.

3.1.2.3 Other GNP Mill Properties

The other GNP Mill Properties were not listed in all the MDEP records sources that we reviewed or were provided by EcoSearch. The database listings we found are discussed below.

SWF

The MDEP Solid Waste Facility database includes several listings pertaining to the Dolby Landfill. These listings also appear in the EcoSearch Reports for Millinocket and East Millinocket included in Appendix C. The Dolby landfill license was issued in 1984 to GNP. The landfill has a licensed volume of 5,100,000 cubic yards of special waste, with an estimated life of 17 years.

UST

According to the DEP BRWM Master List of Registered UST's, the following UST's are owned by GNP, but are not on either of the Mill properties.

- Woodlands Office – registration number 9799
  1) 2000-gallon unspecified gasoline, installed 10/1/69, removed (also registered # 19981, EcoSearch)
  2) 1,500-gallon #2 fuel oil, 1/1/71, removed
  3) 1,000-gallon #2 fuel oil, 7/1/91,active
- Great Northern Airport – registration number 9932
  1) 10,000-gallon JP1, installed 1/1/79, removed
  2) 10,000-gallon JP1, installed 1/1/68, removed
  3) 2000-gallon unleaded gasoline, installed 1/1/65, removed
  4) 1000-gallon #1 fuel oil, installed 1/1/65, removed
  5) 1000-gallon #2 fuel oil, installed 1/1/70, removed
  6) 1000-gallon #2 fuel oil, installed 10/1/87, removed
  7) 500-gallon #2 fuel oil, installed 10/1/69, removed
  8) 1,000-gallon aviation fuel, 10/1/69, removed (registration # 14510)

LUST

According to the DEP BRWM Leaking Underground Storage Tank database, the Town of Millinocket on Penobscot Street reported 0 gallons spilled during the removal of three Municipal Airport UST's on 5/20/87.

MDEP Spill Reports

We reviewed an MDEP spill report (B-585-92) that detailed the removal of the 1,000-gallon capacity #2 fuel oil UST (tank #6) at the Great Northern Airport on 10/21/92. No soil contamination was noted during the removal.

A copy of this MDEP Spill Report is on file at the Bangor, Maine office of S.W. Cole Engineering, Inc.

3.2 Physical Setting

We obtained and reviewed published maps from the US Geological Survey and Delorme 3-D TopoQuads ™ Software (topographic mapping), which describe various aspects of the site and adjacent areas. We reviewed the Maine Atlas & Gazetteer produced by DeLorme Publishing, Inc. We also reviewed information related to the physical setting of the GNP Mill Properties in environmental reports prepared by Sirrine (1991), the MDEP (1999), and the ARCS team (1992).

3.2.1 Delorme 3-D TopoQuads Software

The parcels are depicted on the Delorme 3-D TopoQuads ™ Maine Software that uses USGS topographic data. We reviewed the map software for information related to the parcels.

The Millinocket Mill is depicted on the west side of Millinocket Stream south of the Town of Millinocket. We noted a large mill complex including several tanks, railroad tracks, a water channel from Ferguson Lake to the mill, and electric transmission lines. We noted what appears to be the locations of the former Ash Pond and Liquor Lagoon south and topographically upgradient of the mill complex. Part of the Millinocket Mill property is located east of Millinocket Stream including the Little Italy substation and the GNP WWTP. We noted the Millinocket Mill bark pile as a cleared area near the west

boundary of the site. Shack Hill is located near the center of the property and is approximately 250 to 300 feet higher in elevation than the mill complex. We noted the Quakish Dam between Quakish Lake and the back channel of the West Branch Penobscot River.

We noted the Woodlands Office building and the GNP hangar parcel on the topographic maps. The Woodlands Office is depicted as a long rectangular building on the outskirts of the developed properties in Millinocket near the former Millinocket Town line. We noted several structures north and west of the Woodlands Office. The structures in this area currently include a bank (west) and a motor sports dealer (north). The GNP hangars are depicted at the end of a short road extending from the Rice Farm Road. They are located west of the Millinocket Airports southern runway.

The East Millinocket Mill property is depicted south of Route 157 along the West Branch Penobscot River from the Medway town line to the Dolby Dam. The mill complex consists of several structures, tanks, conveyors, railroad sidings and a WWTP. The complex is southerly and topographically downgradient of the developed portion of the Town of East Millinocket. The area west of the mill complex consists of the bark pile (cleared area along the river), a set of railroad tracks, partially forested land, and the Dolby Dam substation and Dolby Storage facility.

The Dolby Landfills are located east and adjacent to Partridge Brook Flowage. We noted cleared areas in the locations of Dolby I, Dolby II, the former Borrow Pit, and a small area where Dolby III originated. The area surrounding the landfill property appears to be forested except for the Partridge Brook Flowage and Route 157. Dolby I is located greater than 1 mile northwest of residential structures of the Town of East Millinocket. We noted structures east of Partridge Brook Flowage from the landfill property. Partridge Brook Flowage and Dolby Pond separate this area from the landfill. Route 157 crosses the outlet from Partridge Brook Flowage to Dolby Pond.

3.2.2 Significant Sand & Gravel Aquifer Maps

We reviewed Maine Geological Survey (MGS) Significant Sand & Gravel Aquifer Maps of the Millinocket and East Millinocket quadrangles for information related to the GNP Mill Properties.

We noted that most of the Millinocket Mill complex and WWTP are located within the boundaries of a sand and gravel aquifer associated with Millinocket Stream. The map depicted a landfill on the property near the bark pile. Based on our historical research, GNP deposited some solid waste such as scrap metal, empty drums, etc., in the bark pile but it was mainly used to store bark. A landfill was also depicted about 2,000 feet northeast of the GNP WWTP. This area is currently the Town of Millinocket Transfer Station. According to Mr. Lynell Bouchard, the transfer station was constructed in 1974-5 and the property has not been utilized as a landfill.

No sand and gravel aquifers are mapped near the Woodlands Office. The Town of Millinocket Sand-Salt Storage Area is located 1,000 feet southwesterly of the site.

The GNP airport parcel is located on or near the Millinocket Stream sand and gravel aquifer noted above. The Millinocket Transfer Station is located southeasterly of the site.

No sand and gravel aquifers are mapped near the East Millinocket Mill property. The East Millinocket Landfill is depicted about 2,000 feet northerly and upgradient of the site. A sludge dump is depicted 1,500 feet north of the Dolby Dam on what appears to be GNP timberland property.

No sand and gravel aquifers are depicted near the Dolby Landfills.

3.2.3 Environmental Reports

We reviewed hydrogeologic information in reports prepared by Sirrine (1991), the ARCS team (1992), and the MDEP (1999). Please note that the Millinocket and East Millinocket Mills cover large geographic areas (400+ acres each) and their physical settings may vary widely.

The Millinocket Mill site overburden is mapped by the Maine Geological Survey (MGS) as till in the vicinities of the mill complex and bark pile, however, other deposits may be present (MDEP, 1999). The area around the WWTP is mapped as sand and gravel

deposits (MDEP, 1999). Sand and gravel aquifer maps indicate that various sand deposits exist within the boundaries of the Millinocket Stream aquifer that encompasses the mill complex and the GNP WWTP. Explorations near the Ash Pond and Liquor Lagoon made by the E.C. Jordan Co. (1988) identified three geologic units in the area south of the mill complex. The units include till beginning at the ground surface consisting of loose, gravelly sand over a dense, silty, gravelly sand and hard, sandy silt with boulders that overlies black sandstone bedrock (Sirrine, 1991). According to the E.C. Jordan Co., groundwater at the mill generally flows west to east and discharges to Millinocket Stream (Sirrine, 1991). Groundwater flow velocities range from 0.42 feet/day in the surficial till to 0.008 feet/day in the bedrock. Monitoring wells installed by Sevee & Mahar (SME) west (former Core Storage Area) and south (former Brown Dump) of the main mill complex indicate that the area is underlain by gray sand and gravel and brown silty fine sand with varying depths of fill with bedrock ranging from between 4 feet and 75 feet below the ground surface (MDEP 1999). The MDEP (1999) indicated that the nearest off-site drinking water wells are located east of Millinocket Stream on Prospect Street. It appears that both wells are located upgradient of the Millinocket Mill property line. On-site drinking water wells are located at the Guard Shack near the northwest corner of the property and the WWTP.

The East Millinocket Mill is underlain by five geologic units including fill, channel sands, brown glacial till, dense gray glacial till, and dark gray phyllite bedrock, according to explorations conducted by Stone & Webster in 1988 (Sirrine, 1991). The fill consists of silty sand and gravel with silt, clay, wood and bark fragments varying in depths from 4 to 22 feet over native soils. Stone & Webster noted a black, tar-like substance coating some of the fill and channel sands in some areas. The gray till overlies bedrock. The depth of the bedrock varies from 24 to 38 feet below the ground surface (Sirrine, 1991). Groundwater apparently flows westerly and discharges to the East Branch of the Penobscot River. Groundwater depths were found to be 8 feet below the ground surface on the average. Average groundwater flow was calculated at about 0.04 feet/day. Surficial geology of the site is described as till by MGS. Sand and gravel aquifer maps do not depict overburden aquifers on the mill property. The Town of East Millinocket water supply source is located about 3.0 miles north-northeast of the mill

along the East Branch of the Penobscot River. The nearest private drinking water well is located about 1.0 mile east of the eastern border of the mill property (ARCS, 1992).

3.3 Historical Use Information

We reviewed reasonably ascertainable sources of historical information that cover the site and surrounding area including: historic aerial photographs, historical maps, environmental records and reports at the GNP Environmental and Government Affairs Department (Research and Engineering Building) and the GNP Woodlands Office, in Millinocket, Maine; selected plans and records at the Penobscot County Registry of Deeds in Bangor, Maine; and municipal assessment records at the Millinocket and East Millinocket municipal offices. We identified potential environmental issues requiring further research.

3.3.1 GNP Historical Information

We reviewed historical information pertaining to past uses and environmental conditions of the GNP Mill Properties at the GNP Environmental and Government Affairs Department (Research and Engineering Building) and the GNP Woodlands Office, in Millinocket, Maine. We reviewed Environmental and Government Affairs Department files in the Research and Engineering Building at the Millinocket Mill. The files included reports prepared by environmental consultants, correspondence with federal and state regulatory agencies, GNP in-house correspondence, environmental compliance documents (Annual Hazardous Waste Reports, etc.), and reports associated with the Dolby Landfills. We reviewed current and historic aerial photographs, plans, and other information at the Woodlands Office at 1024 Central Street in Millinocket.

The purpose of the 1991 Sirrine Environmental Audit of GP property was to identify regulatory compliance problems that could impact the operations of the paper mills and to identify site contamination, which may result in liability to Bowater Inc. upon acquisition of the Georgia-Pacific Corp. properties. Sirrine reported that the Millinocket and East Millinocket Mills were in general compliance with applicable environmental regulations. Sirrine conducted soil and groundwater sampling at potentially contaminated areas. Sirrine reported several groundwater and soil samples that exceeded existing drinking water standards and proposed RCRA guidelines.

We reviewed two letters from Carl Akeley of GNP to Mr. Scott Whittier and Mr. Tom Varney of the MDEP, dated June 25 and 30, 1992, respectively. The letters stated that an outside consultant conducted an audit of the mills and observed several areas visibly stained with oil and reported soil and water tests that exceed MEG's, MCL's and proposed RCRA guidelines. To our knowledge, no actions were taken by the MDEP in response to these letters.

The 1992 ARCS team PA+ reports were conducted as a joint effort between CERCLA and RCRA programs to assess former and current hazardous waste treatment, storage and disposal facilities to determine whether the sites require corrective action under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Both PA+ reports concluded that the mills do not require further action under CERCLA.

In 1996, RUST Environment & Infrastructure (RUST) performed a review of GNP's compliance with environmental regulations and to evaluate the effectiveness of GNP's environmental management systems. RUST evaluated GNP's compliance with solid and hazardous waste, air emissions, hazardous materials, water and wastewater, and stormwater. The Millinocket Mill holds several licenses relating to their operations including:

- MDEP Air Emissions License A-406-71-A-R/A
- Federal NDPES Permit No. ME0000167
- MDEP Waste Discharge License #W002227-44-B-R

The East Millinocket Mill holds several licenses relating to their operations including:

- MDEP Air Emissions License A-405-71-A-R/A
- Federal NDPES Permit No. ME0000175
- MDEP Waste Discharge License #W002228-44-B-M

The Dolby Landfill includes several licenses. The original license for Dolby III is MDEP Solid Waste License #L-000796-07-A-N. RUST found that GNP was in substantial compliance with existing environmental regulations and licenses and that the

compliance issues they identified in their report were readily correctable. The issues they identified appeared to be mainly associated with air emissions at both mills including some emissions not noted in the Air Emissions Licenses, reporting issues, opacity excesses, data recovery rates, and that the Millinocket area is not designated as an attainment area as required in the East Millinocket Mills Air Emissions License. RUST also noted some unlabeled drums at both mills that appeared to contain waste. RUST found no other compliance issues for the facilities.

The 1999 MDEP SI was conducted under authority of CERCLA to assess the potential threat to human health and the environment. The SI was conducted because of a review of delisted CERCLIS sites. The Inspector General concluded that the Millinocket Mill had been inappropriately deferred to RCRA because of the 1992 PA+ report. The MDEP's SI included site visits, records review, and soil, groundwater, and surface water sampling. The MDEP requested that the EPA archive the site from the CERCLIS list. The EPA archived or removed the site from CERCLIS and indicated that no further work will be performed at the property and no further steps will be taken to list site on the NPL list.

Copies of the Sirrine, RUST, ARCS team, and MDEP records noted above are on file in the GNP Environmental and Government Affairs Department and at the Caribou and Bangor offices of S. W. COLE ENGINEERING, INC.

Through our research of these and other documents, we identified numerous potential environmental issues at and adjacent to the GNP Mill Properties. The issues we identified are discussed below.

3.3.1.1 Millinocket Mill

Reported Petroleum and Hazardous Substance Spills – According to the MDEP (1999), approximately 125 spills were reported to the MDEP from 1977 to 1998. Most of the spills involved petroleum product releases of less than 50 gallons that impacted Millinocket Stream. The most notable spill occurred in 1984 when 60,000 gallons of #6 fuel oil overflowed during off-loading at the oil farm. The oil overflowed the containment

area and discharged to a drainage ditch. A small amount of oil entered Millinocket Stream. The spill was cleaned up by vacuuming the product and soil excavation. Other spills at the mill have included hazardous substances including sulfuric acid, ammonia hydroxide, battery acid, chlorine gas, propane, and PCB's.

A PCB spill occurred in 1989 when the T-160 transformer at the Riverbank substation exploded releasing 350 gallons of PCB fluid. GNP immediately began remediation of the site that included free product recovery, soil excavation, removal of contaminated construction materials such as concrete, and removal and replacement of PCB-containing equipment. The PCB remediation was managed by ENSR Constructors (1991) and reported to the EPA. According to ENSR's remediation report, PCB contamination with soil concentrations as high as 1,800 ppm was left in-place because it lacked a pathway to endanger public health, may result in substation foundation failure and was not economically feasible in relation to the benefits of further removal. Based on our file review, it appears that the EPA required no further action.

The MDEP issued a Consent Order in 1991 that imposed fines and required remedial actions associated with violations of water and air quality laws at both mills. Water quality violations involved numerous spills and discharges of untreated wastewater. Remedial actions included construction of concrete containment walls along the banks of Millinocket Stream and the West Branch Penobscot River, back-up power for the Millinocket lift station, and diversion of some stormwater run-off to Millinocket Stream rather than the process sewers to reduce the likelihood of lift station overflows.

We reviewed plans prepared by GNP that discuss the spill potential for the GNP properties and the petroleum and hazardous substance storage at those facilities. The plans include a Spill Prevention Control and Countermeasures Plan (revised 2000), an Oil Pollution Prevention Facility Response Plan (revised 2000), and a Hazardous Substance Contingency Plan (dated 1998). These plans were reviewed by a professional engineer. Appendix C contains plans depicting GNP's petroleum and hazardous substance storage locations.

See Section 3.1 for a description of MDEP spill reports and ERNS incidents.

Former Liquor Lagoon – The former Liquor Lagoon was built south of the mill on the lower slopes of Shack Hill in the early 1970's to store sulfite liquor for recycling in the MgO Boiler. It was constructed entirely of native till soils with a capacity of approximately 14.8 million gallons (MDEP, 1999). The MDEP required that the lagoon be closed as a condition of a Site Location Permit for the mill. E.C. Jordan (1988) conducted investigations of the soils and groundwater near the lagoon. E.C. Jordan reported liquor impact of the soils and groundwater downgradient of the lagoon. GNP replaced the lagoon with a 2 million gallon storage tank. The MDEP approved a closure plan for the lagoon prepared by E.C. Jordan that included draining the liquor from the lagoon to a storage tank, removal of the earthen dike on the downgradient end of the lagoon, removal of sludge and visually contaminated soils, and regrading of the lagoon area. The closure plan included installation of four passive collection underdrains downgradient of the lagoon to remove liquor-impacted groundwater for treatment at the GNP WWTP, and implementation of a groundwater-monitoring program. Closure of the lagoon was completed in 1990 in accordance with the MDEP-approved plan.

The GNP groundwater sampling program and additional sampling by Sirrine (1991) and the MDEP (1999) indicate that the groundwater downgradient of the former lagoon contains elevated concentrations of metals, VOC's, and SVOC's, chemical oxygen demand (COD), and specific conductance. The MDEP defined elevated as a concentration three times greater than the background level or any level if no background concentration was discovered. GNP continues to sample the Liquor Lagoon monitoring wells three times per year. The results indicate that most, if not all, of the parameters are decreasing over time.

The MDEP conducted soil sampling near the former lagoon along with groundwater sampling in 1999. They analyzed the soil samples for parameters including VOC's, SVOC's, priority pollutant metals, PCB's, and pesticides. The MDEP reported elevated concentrations for di (2-ethylhexyl) phthalate in one of the soil samples. The other results were not elevated above background levels.

GNP in-house correspondence relating to the Liquor Lagoon indicates intermittent surficial discharges of liquor-impacted groundwater near the former lagoon and in a drainage ditch that discharges to the lagoon groundwater collection system. The drainage ditch segregates the liquor-impacted groundwater discharges from normal surface water drainage.

GNP has prepared a site specific Best Management Practices Plan for Spent Pulping Liquor-Papergrade Sulfite. The plan describes GNP's sulfite liquor processes, storage locations, and spill prevention and control. The plan was prepared to comply with federal regulations associated with sulfite papermaking.

Former Ash Pond – The former Ash Pond was constructed in the early 1970's to store boiler ash. The boiler ash was pumped to the pond as a water slurry. The pond was constructed so that the water infiltrated the native soils and left the boiler ash for subsequent dredging and disposal. The pond was ordered closed as a condition to a Site Location Permit for the mill. A closure plan similar to the Liquor Lagoon plan was prepared for the pond and approved by the MDEP. Groundwater monitoring for the pond indicates that the groundwater quality has since improved nearly to background levels. Additional sampling by Sirrine (1991) and the MDEP (1999) indicate elevated aluminum concentrations in the groundwater. Sirrine also noted elevated lead concentrations in 1991. GNP continues to sample the monitoring wells associated with the former pond biannually.

The MDEP conducted soil sampling near the site in 1999 for parameters including VOC's, SVOC's, priority pollutant metals, PCB's, and pesticides. They reported elevated concentrations for vanadium only. No other parameters were elevated above background levels.

Former Hazardous Waste Storage Areas – GNP operated two temporary hazardous waste storage facilities beginning in 1980 under interim license I-23 at the Brown Dump and Core Storage Area. A MDEP and EPA inspection of the facilities in 1987 identified several violations that resulted in a MDEP Consent Agreement and Enforcement Order

in 1988. As a result, GNP was ordered to close the facilities in compliance with Maine Hazardous Waste Management Rules. The two facilities were closed in 1990 in accordance with MDEP-approved closure plans prepared by SME (1990). The closures included soil sampling investigations, soil removal, and proper disposal of contaminated soils. Remediation of the site included removing visually impacted soils, field monitoring of soil samples with organic vapor monitors (OVM) based on a grid system covering the former hazardous waste storage areas, and additional soil removal based on the OVM results. Groundwater monitoring wells were also installed and sampled according to the closure plan. One year of sampling indicated non-detect results for VOC's, SVOC's, and total petroleum hydrocarbons (TPH). The MDEP approved termination of the groundwater sampling programs for both areas after one year of sampling based on the analytical results.

Sirrine performed additional soil and groundwater sampling in 1991 at the former Brown Dump. Sirrine collected soil samples in a stained area at the site and reported elevated metal concentrations including mercury and lead. Groundwater sample analyses indicated no VOC's and metals concentrations less than applicable state and federal regulations. In 1995, GNP removed the mercury and lead impacted soils. Clean-up confirmation sampling of the excavated area indicated mercury and lead concentrations at background levels. Toxicity Characteristic Leachate Procedure (TCLP) testing of the excavated soils indicated the contaminated soils were non-hazardous. The contaminated soils were disposed of in the Dolby Landfill.

The MDEP did not conduct sampling at this area during their SI of the site in 1999 because they did not observe stained areas or storage containers at either location.

Wastewater Treatment Plant – The GNP Millinocket Mill WWTP is located about 0.5 miles southeast of the mill across Millinocket Stream. The plant consists of the treatment building, a primary clarifier, a settling pond, and an aeration lagoon. The plant treats water generated during paper production and effluents from the mill process sewers including the MgO sewer, liquor-impacted groundwater from the former liquor lagoon, and other drain effluent from the mill. GNP discharges approximately 20 million

gallons of treated wastewater from a state and federally licensed outfall into Millinocket Stream daily. Waste sludge generated at the plant is disposed of at the Dolby Landfills. GNP has also periodically implemented a landspreading of the sludge generated at the WWTP for agricultural beneficial re-use in compliance with MDEP regulations.

Petroleum products and chemicals are stored at the treatment plant also. These include diesel, fuel oil, urea, and phosphoric acid (see Appendix C for locations and descriptions). The containers for these substances are within secondary containment units or the floor drains and process sewer act as secondary containment.

Unpermitted discharges have occurred at the facility over the years including exceedances of pH, flow, biological oxygen demand (BOD), and total suspended solids (TSS). The MDEP issued a Consent Order relating to these violations in 1991 that imposed fines and remedial actions. GNP complied with the MDEP Consent Order.

An ammonia spill occurred at the plant in 1990. About 150 gallons of ammonia was released due to an underground pipe leak (Sirrine, 1991). GNP stopped the leak and replaced the pipe with an above ground pipe. No further action was required by the MDEP.

RUST conducted a review of GNP's compliance with wastewater regulations in 1996. RUST reported no compliance issues. However, they did report several notable issues relating to wastewater: an ammonia spill in 1996; potential for MDEP penalties for reportable spills (including mill site); secondary containment drain valves left open at some locations (including mill site); and inadequate SPCC inspection documentation (including mill site).

The MDEP conducted surface water sediment sampling for VOC's, SVOC's, priority pollutant metals, PCB's, pesticides, and dioxins near the treatment plants outfall and further downstream of the plant. No elevated VOC's, SVOC's, PCB's, or metals were detected. Dioxins were reported in two of the samples, however, the results were approximate and below the method detection limit. One of the parameters was

detected in the method blank. GNP does not use chlorine in their papermaking processes.

Bark Pile – The bark pile is located southwest of the mill complex between Ferguson Lake and the back channel of the West Branch Penobscot River. Bark disposal began in the early 1900's and included solid waste from the mill until the early 1970's. Bark was placed at the site until the early 1980's. The bark pile covers about 53 acres and contains about 4 million cubic yards of material. The bark is periodically mined by Earth-Gro of Medway and processed for sale as bark mulch in accordance with a MDEP permit. The MDEP noted in the permit that the bark pile does not appear to be adversely impacting water quality of the area. The bark is annually sampled and laboratory tested by GNP to meet MDEP permit conditions. Upon termination of the bark reclamation, GNP must close the bark pile in accordance with MDEP solid waste regulations.

The MDEP conducted groundwater and surface water sediment sampling near the bark pile during their SI of the Millinocket Mill in 1999. The MDEP reported elevated concentrations of acetone, arsenic, thallium, nickel, copper, and chromium. The sediment sampling results were not above background levels for VOC's, SVOC's, or priority pollutant metals.

Oil Farm and #6 Oil Off-Loading Area – The oil farm and off-loading area is located south of the main mill complex. It consists of two 2.31 million gallon #6 fuel oil AST's within an earthen containment dike, a railroad off-loading rack, and a steam pump station. The railroad tracks and the dike include a drainage system that discharges to an oil/water separator. The oil/water separator is connected to the mill process sewers. Oil from the oil/water separator is tested for hazardous waste characteristics and burned as necessary at the Steam Plant if non-hazardous. Numerous spill incidents have occurred in this area as noted in Section 3.1 and under *Reported Petroleum and Hazardous Substance Spills* in this section.

In 1991, Sirrine noted free product within and outside the containment dike of the AST's. Sirrine collected soil and groundwater sampling near the Oil Farm and Off-Loading area and at downgradient locations. Soil sample analytical results ranged from non-detect (ND) for SVOC's to 3,500 ppm TPH (surficial sample). Groundwater results were ND for benzene-toluene-ethylbenzene-xylene (BTEX) compounds and SVOC's. One of the groundwater samples contained 0.18 milligrams/liter (mg/l) of TPH. The remaining samples were reported as ND.

Hazardous Waste Storage Sheds – Two hazardous waste storage sheds (one for flammables) are located south of the main mill complex and north of the oil farm. The sheds are used for temporary storage of hazardous waste generated at the mill. They are located within locked chain-linked fences. RUST (1996) reviewed GNP's hazardous waste operations and found them to be in general compliance with state and federal regulations.

Steam Plant and Chemical Storage Area – The oil-fired steam plant and chemical storage area is located southwesterly of the main mill complex. The steam plant burns oil to produce steam for the mill. The steam plant also includes petroleum and chemical storage facilities inside and outside the building. Interior bulk storage includes caustic soda, sulfuric acid, DTPA, # 6 oil, lube oil, and used oil. Bulk chemical storage outside the plant includes molten sulfur, cooking acid, weak liquor, magnesium hydroxide, concentrated liquor/acid condensate, sodium hydrosulfite, borol, washing regents, hydrogen peroxide, and spent red liquor (see Appendix C for locations and descriptions).

MDEP surface water sediment sampling of Millinocket Stream appeared to indicate minimal environmental impact as a result of the mill. No elevated VOC's, SVOC's, PCB's, or metals, except for copper, were detected. P' P' DDT (1,1,1-Trichloro-2, 2-bis (4'-chlorophenyl) ethane) was the only pesticide detected in sediments at a downstream location. The pesticides P' P' DDD (1,1-Dichloro-2, 2-bis (4'-chlorophenyl) ethane) and P' P' Dde (1,1-Dichloro-2, 2-bis (4'-chlorophenyl) ethylene) were discovered in the upstream background sample. These pesticides are breakdown products of P' P' DDT.

PCB Contractor Laydown Area – ENSR Constructors created a Laydown Area south of the main mill complex where they stored drums, equipment etc. ENSR utilized this area while conducting PCB remedial actions at the mill. Sirrine collected a surficial soil sample in the area in 1991. Sirrine reported a concentration of 580 ppb PCB's in the sample.

Main Mill Complex – The main mill complex includes the stone groundwood mill, the sulfite mill, the paper machine rooms, the chemical storage area, the stock preparation and coating area, machine shops, and other areas located within the main cluster of mill structures. This area is where the bulk of the papermaking process takes place. Numerous petroleum products and hazardous substances are located within the main mill complex including 250-gallon waste oil totes, paper dyes, resins, bases, acids, etc. (see Appendix C for locations and descriptions). The main mill complex contains numerous floor drains that are connected to the process sewers. The paved areas outside the mill complex are also connected to the process sewers. The process sewers act as secondary containment for the facility. The effluent from the process sewers is treated at the WWTP.

GNP has written plans and policies relating to the handling, use, storage, and spill prevention and control of petroleum and hazardous substances.

MDEP surface water sediment sampling of Millinocket Stream appeared to indicate minimal environmental impact as a result of the mill. See narrative for the Steam Plant and Chemical Storage Area.

Little Italy Substation – The Little Italy electrical substation is located across Millinocket Stream from the main mill complex. The substation formerly included PCB-containing equipment, which was replaced by non-PCB-containing equipment in the late 1980's. Sirrine collected a composite sample of surficial soils around the substation in 1992. Sirrine reported a concentration of 560 ppb PCB's.

Burn Pit – A burn pit is located northwest and adjacent to the former Ash Pond. GNP burns wood waste in this area including wooden pallets, lumber, etc. Fires were started with small amounts of diesel fuel and waste oil. According to the Sirrine (1991) report, GNP discontinued the use of waste oil to initiate fires.

Stream AST Area – Numerous bulk storage tanks are located along the western streambank of Millinocket Stream. These tanks vary in capacity from 6,000 gallons to 400,000 gallons and contain pulp, broke (pulped waste paper), clay, sodium hydroxide, lime and sulfite (see Appendix C for locations and descriptions). The sodium hydroxide tank includes a secondary containment unit. The area is paved and drainage enters the process sewers. Also, an approximately four foot concrete wall acts as secondary containment for the area. The wall was constructed in the early 90's to reduce and/or eliminate unpermitted discharges to Millinocket Stream.

The Riverbank substation is located in this area. It contains several transformers and is the site of the T-160 PCB spill that occurred in 1989. It no longer includes PCB-containing equipment.

The process sewer lift station is also located along the streambank. The process sewers drain to the station where the effluent is screened and pumped to the WWTP. The lift station was renovated in the early 1990's to reduce shutdowns due to power failure and overflows due to the screen becoming plugged.

MDEP surface water sediment sampling of Millinocket Stream appeared to indicate minimal environmental impact as a result of the mill. See narrative for the Steam Plant and Chemical Storage Area.

Pesticide Off-Loading Area – A former pesticide off-loading area was located along Bangor & Aroostook Railroad (BARR) tracks westerly of the Research and Engineering building (Sirrine, 1991). Sirrine collected a surficial soil sample in this area and had it analyzed for pesticides and herbicides. The sample was ND for pesticides and herbicides.

UST's – All former UST's have been removed from the Millinocket Mill. The former UST's include: an 8,000-gallon and a 12,000-gallon gasoline tank (registration # 9804) at the Maintenance garage; an 8,000-gallon #2 fuel oil tank (registration # 9805) at the WWTP; a 2,500-gallon waste oil tank (registration # 9803) at the steam plant; and a 10,000-gallon kerosene tank (registration # 9802) and a 2,500-gallon waste oil tank outside the No. 11 paper machine building. According to the Sirrine report, no significant release of petroleum was noted during the tank removals.

We reviewed a UST Site Assessment prepared by Fessenden GeoEnvironmental for the former 8,000-gallon gasoline UST (registration # 9804) at the Maintenance garage. Fessenden reported photoionization detector (PID) readings of >2,500 ppm for samples below the fill pipe and pump island and ND readings for the remainder of the samples collected. Fessenden did not observe holes in the tank. The contamination appeared to be the result of historic overfills. MDEP personnel established a Baseline 1 (BL-1) clean-up goal for the site that consists of removal of free product and saturated soils. The contamination was left in-place because no free product or saturated soils were observed in the excavation.

3.3.1.2 Woodlands Office

The Woodlands Office site includes an existing #2 fuel oil UST. Two UST's were removed from the site including a 1,500-gallon #2 fuel oil UST, and a 2,000-gallon gasoline UST. According to Environmental Affairs staff, no problems were encountered during the removal of the 1,500-gallon #2 fuel oil UST. The 2,000-gallon UST was discovered while paving the Woodlands Office parking lot in 1998. Fessenden GeoEnvironmental conducted a UST Site Assessment (1998) on the gasoline tank removal. Fessenden reported no soil gas concentrations above the 100 parts per million (ppm) MDEP notification level. They reported that no holes were visible in the tank and that minor contamination discovered during the excavation was likely due to historic overfills. GNP officials and the former owner of the property had no previous knowledge of the tank or its past usage.

3.3.1.3 GNP Airport Parcel

Seven UST's were formerly located on the airport parcel under registration # 9932. The UST's included two 10,000-gallon jet fuel tanks (removed 1989 and 1992), a 2,000-gallon gasoline tank (removed 1987), a 1,000-gallon kerosene tank (removed 1987), two 1,000-gallon #2 fuel oil tanks (removed 1989 and 1992), and a 500-gallon fuel oil tank (removed in 1987 or 1989). An eighth UST at the airport parcel consisted of a 1,000-gallon aviation fuel tank under registration # 14510. According to Environmental Affairs staff, no problems were encountered during the removal of the GNP UST's at the airport. We reviewed a UST Site Assessment conducted by SME for the removal of a 10,000-gallon jet fuel tank from the property. According to SME's assessment, approximately 12 cubic yards of contaminated soil was removed from the tank excavation and disposed of in the Dolby Landfill. SME indicated that the contamination was likely the result of historic overfills because no holes were noted in the tank. MDEP personnel determined no further investigation or remediation was required at the site.

Sirrine reported that pesticide contamination from spruce budworm operations at the Millinocket Airport was remediated to the MDEP's satisfaction. The Maine Forest Service and other timberland owners including GNP participated in the remediation project. The spruce budworm program included aerial spraying of forestland to control spruce budworm infestation in the 1970's and 1980's. Sirrine collected a soil sample in the remediated area and reported low levels of heptachlor epoxide, 4,4-DDE and 4,4-DDT ranging from 1.7 parts per billion (ppb) heptachlor epoxide (estimated) to 7.1 ppb 4,4-DDT. We found no environmental database information relating to the pesticide contamination at the Millinocket Airport.

3.3.1.4 East Millinocket Mill

Reported Petroleum and Hazardous Substance Spills – Numerous spills have occurred at the site over the years that are similar in nature to those reported at the Millinocket Mill. Sirrine (1991) indicated that other than the PCB spills at the No. 5, No. 6, and the former Chemi-Groundwood building, the mill has not had major chemical spills that could have resulted in significant groundwater or surface water contamination.

See Section 3.1 for a description of MDEP and ERNS spill reports for the East Millinocket Mill.

Main Mill Complex – The main mill complex generally consists of the paper machines, the screen room, and the finishing/shipping center. Petroleum products and hazardous substances similar to those used in the Millinocket Mill are stored and used in the East Millinocket Mill (see Appendix C for locations and descriptions). Floor drains within these structures enter the process sewer for treatment at the East Millinocket WWTP.

Steam Plant and Bark Boiler Buildings – Steam Plant and bark boiler buildings are located westerly of the main mill complex. The steam plant generates power for the mill by burning bark and #6 fuel oil. Bulk petroleum and chemical storage at the plant includes caustic soda, sulfuric acid, #6 fuel oil, #2 fuel oil, and lube oil. Waste oil is placed in 250-gallon totes in the steam plant. Floor drains in the building discharge to the process sewer.

Maintenance Garage and Paint Shed/Oil Room – The Maintenance garage and paint shed/oil room are located easterly of the main mill complex. The garage is used for vehicle maintenance. Typical substances used in vehicle operations are stored and used in the garage including waste oil. The facility formerly utilized Safety-Kleen parts washing stations. GNP currently uses self-contained water-based parts washers. A waste oil UST was located near the maintenance garage. The tank was removed in 1985 and no significant soil or groundwater contamination resulted from the UST (Sirrine, 1991). Sirrine noted evidence of oily discharges to a nearby ditch from a steam-cleaning operation in the Maintenance garage.

The Paint Shed/Oil Room are located northerly of the maintenance garage. The shed and oil room are actually the west and east halves of one structure. Apparently, this structure has also been known as the "Oil House" and "Warehouse J". According to the Sirrine report, an active 2,000-gallon gasoline UST was located at the Oil House in 1991 that replaced a 15,000-gallon gasoline tank in 1989. In 1991, Sirrine noted paint-related products and waste in the paint shed during a site visit.

Sirrine conducted groundwater and soil (surficial and subsurface) sampling in the vicinity of the Maintenance garage and Paint Shed/Oil Room in 1991. They reported that a surficial soil sample taken in the ditch near the maintenance garage was ND for VOC's, had metals concentrations ranging from 109 ppm arsenic to 0.56 ppm cadmium, and a TPH concentration of 6,100. Soil boring and groundwater samples indicated low VOC's concentrations (6.6 ppb toluene) in the soil and ND for TPH and VOC's in the groundwater.

In 1992, the ARCS team (1992) observed similar products in the paint shed and noted petroleum products in the east half of the structure (Oil Room) including 55-gallon waste oil drums, paper machine oil, and transformer oil. The ARCS team also noted a petroleum stain on the floor of the oil room that appeared to enter a floor drain in the center of the room. They reported that the floor drain leads to the WWTP.

Wastewater Treatment Plant – The East Millinocket Mill WWTP is located east of the mill complex and includes the treatment building, a primary clarifier, two secondary clarifiers, an emergency settling lagoon, and an aeration lagoon. About 20 million gallons of treated wastewater is discharged daily from a state and federally licensed outfall to the West Branch Penobscot River. Waste sludge generated at the plant is disposed of at the Dolby Landfills. GNP has also periodically implemented a landspreading of the sludge generated at the WWTP for agricultural beneficial re-use in compliance with MDEP regulations. The Town of East Millinocket owns a wastewater treatment plant on GNP property adjacent and northerly of the GNP aeration lagoon. The municipal plant consists of two primary clarifiers. Effluent from the municipal clarifiers is piped to the GNP secondary clarifiers for treatment.

The East Millinocket Mill WWTP operates in a similar fashion as the Millinocket Mill WWTP. The East Millinocket Mill WWTP has exceeded sampling parameters in the past and was included in a 1991 MDEP Consent Order relating to water violations (see Millinocket WWTP narrative).

RUST conducted a review of GNP's compliance with wastewater regulations in 1996. RUST reported no compliance issues. However, they did report several notable issues relating to wastewater: potential for MDEP penalties for reportable spills (including mill site); secondary containment drain valves left open at some locations (including mill site); and inadequate SPCC inspection documentation (including mill site).

Hazardous Waste Storage Buildings – Two hazardous waste storage sheds (one for flammables) are located east of the main mill complex and northwest of the WWTP. The sheds are used for temporary storage of hazardous waste generated at the mill. They are located within locked chain-linked fences. RUST (1996) reviewed GNP's hazardous waste operations and found them to be in general compliance with state and federal regulations.

Bark Pile – The East Millinocket Mill bark pile is located west of the mill complex and wood yard. The pile contains waste bark that has accumulated from the early 1900's to the 1970's. Solid waste including construction debris and general mill waste was likely dumped in the bark pile prior to the 1970's. According to the ARCS team (1992), the bark pile covers approximately 7 acres.

SME conducted a site investigation including groundwater sampling near the bark pile on behalf of GNP. The investigation and subsequent groundwater sampling program was a condition of a post-development Site Location Permit for the East Millinocket Mill. SME found no significant environmental impact or threat to public health from the bark pile. In 1991, Sirrine conducted groundwater sampling of existing wells within the boundaries of the bark pile. They reported aluminum and arsenic concentrations above applicable state and federal regulatory levels. In 1992, the ARCS team noted what appeared to be leachate from the bark pile in a drainage swale along the northern border of the pile boundary.

The MDEP approved a permit for GNP to reclaim the bark pile in 1992. The MDEP stated in the permit that based on groundwater quality monitoring that the bark pile has not had an adverse impact on the groundwater near the bark pile. Since 1992, the

MDEP visited the site and found no indication that reclamation of the bark pile has had an adverse environmental impact near the bark pile. In a letter to GNP dated January 3, 2001, Cynthia Darling of the MDEP stated that there is no basis for additional hydrogeologic work relating to the East Millinocket bark pile.

PCB Spill Sites – Three historic PCB spill sites were identified at the East Millinocket Mill in the early 1980's that required EPA notification and response. The sites included an 800+ gallon PCB fluid leak from an inactive transformer at the former Chemi-Groundwood building, a 600 gallon PCB spill outside the No. 6 paper machine building in 1978, and a transformer explosion that released 150 gallons of PCB fluid outside the No. 5 paper machine building in 1981. Site investigations including groundwater and soil sampling were conducted at the sites between 1986 and 1989 by SME and Stone & Webster Engineering (S&W) to evaluate the extent of the contamination and assess remedial options. GNP certified final remediation of the three sites in compliance with EPA-approved remedial plans in 1991 according to an EPA Consent Agreement and Final Order (EPA Docket No. TSCA-I-87-1041, 1991). As part of the EPA Consent Agreement, GNP must continue to implement an approved groundwater sampling program. S&W conducts quarterly groundwater sampling of twelve nested monitoring wells at the site. Groundwater results for September 2000 reported by S&W indicate ND results for PCB's and chlorobenzenes at all the wells except well 804-S. Well 804-S had a concentration of 1.2 micrograms per liter (ug/l) 1,2,4-trichlorobenzene, which is slightly greater than the method detection limit of 1.0 ug/l.

Former Hazardous Waste Storage Areas – GNP operated two temporary hazardous waste storage facilities beginning in 1980 under interim license I-23 at the Drum Storage Area and the Dolby Storage Facility. A MDEP and EPA inspection of the facilities in 1987 identified several violations that resulted in a MDEP Consent Agreement and Enforcement Order. As a result, GNP was ordered to close the facilities in accordance with Maine Hazardous Waste Management Rules. The Drum Storage Area was located northeast of the mill complex. It was closed in 1989 in accordance with a MDEP-approved closure plan prepared by SME (1989). The closure included soil sampling investigations, soil removal, and proper disposal of contaminated soils.

Remediation of the site included: removing visually impacted soils; soil sample field testing with organic vapor monitors (OVM) at multiple points based on a grid system covering the former hazardous waste storage areas; and additional soil removal based on the OVM results. Approximately 400 cubic yards of contaminated soil was removed and transported to an approved off-site landfill. Groundwater monitoring wells were also installed and sampled according to the closure plan. One year of groundwater sampling for VOC's, SVOC's, and total petroleum hydrocarbons (TPH) indicated no significant contamination. The MDEP approved termination of the groundwater sampling program after one year of sampling based on the analytical results.

The Dolby Storage Facility was closed in 1990 in accordance with a MDEP-approved closure plan prepared by SME (1990). The facility consisted of a PCB storage area located on a concrete slab with a concrete berm in a building near the Dolby Dam. Remediation of the facility included wet and dry clean-up activities, removal and proper disposal of PCB-contaminated concrete, and clean-up confirmation sampling.

Sirrine conducted groundwater sampling of two existing monitoring wells at the former Drum Storage Area in 1991. Sirrine reported ND results for VOC's and TPH. Aluminum (126 to 233 ppb) and lead concentrations (27 ppb) exceeded their respective MCL's and MEG's . Lead was not detected in a dissolved metals analysis.

Oil Farm and #6 Oil Off-loading Area – The oil farm and off-loading area is located north of the mill complex adjacent to the main access road to the site. It consists of one 2.31 million gallon #6 fuel oil AST and one 750,000 gallon #6 fuel oil AST within earthen containment dikes, a railroad off-loading rack, and a steam pump station. The railroad tracks and the dike include drainage systems that discharge to an oil/water separator. The oil/water separator is connected to the mill process sewers. Oil from the oil/water separator is tested for hazardous waste characteristics and burned as necessary at the Steam Plant if non-hazardous. Numerous spill incidents have occurred at the facility as noted in Section 3.1 and under *Reported Petroleum and Hazardous Substance Spills* in this section.

In 1991, a transport pipe from the off-loading area failed releasing #6 oil to the soil. GNP notified the MDEP. Remedial actions included passive free product recovery adjacent to the off-loading area. The MDEP did not require soil removal or installation of monitoring wells. However, the MDEP indicated that contaminated soils must be removed if encountered during future excavation of the area. In 1991, SME conducted a test-pit investigation of the spill area to evaluate the extent of the release. SME reported that up to 6,500 cubic yards of soil may have been impacted by #6 oil contamination near the off-loading area.

Sirrine conducted soil and groundwater sampling near the Oil Farm and off-loading area. They collected a surficial soil sample below a stained area within the 2.31 million gallon containment for SVOC and TPH analysis. Sirrine collected groundwater samples from three temporary monitoring wells and an existing monitoring well downgradient of the off-loading area. The surficial soil sample contained various SVOC's ranging in concentrations from 1.2 ppm to 1.7 ppm. The TPH concentration was 89 ppm. Groundwater samples collected near the off-loading area were ND for BTEX, SVOC's and TPH. However, Sirrine indicated that they re-sampled one of the wells because oil-stained soils were encountered during well installation. A concentration of 0.25 mg/l was found in the second sample.

Burn Pit – A burn pit is located north of the access road to Dolby Dam. GNP burns wood waste in this area including wooden pallets, lumber, etc. Fires were started with small amounts of diesel fuel and waste oil. According to the Sirrine (1991) report, GNP discontinued the use of waste oil to initiate fires. Sirrine observed some waste solvent within the burn pit in 1991.

Sirrine conducted soil and groundwater sampling at the burn pit in 1991. They reported ND results for VOC's and 62 ppm TPH in soil samples taken during temporary monitoring well installation. Groundwater samples were ND for VOC's and TPH. A sample of the circulation water was collected during well installation because Sirrine personnel observed what appeared to be oil on the water. The circulation water

contained 190 ppm TPH. Acetone was also detected in the sample; however, it was detected in the laboratory method blank as well.

Construction Fill Area – Prior to1975, construction debris, empty drums, metal, and general waste was disposed of at the Construction Fill Area located east of the WWTP. The fill area was closed prior to MDEP solid waste regulations. During their reconnaissance of the area in 1991, Sirrine personnel observed what appeared to be a leachate seep with an oil sheen from the downgradient side of the fill area. Sirrine collected a sample of the seep for laboratory analysis for VOC's, SVOC's, and total metals. The sample contained 10 ppb benzene, no detectable SVOC's, and metal concentrations that exceed drinking water MCL's and MEG's for aluminum (1.1 ppm), barium (1.5 ppm), and lead (.02 ppm).

UST's – One active UST is located at the East Millinocket Mill. The UST is located at the Oil House (also known as the Paint Shed/Oil Room or Warehouse J) and consists of a 2,000-gallon gasoline UST (registration # 16697). The tank was installed in 1989. It is a double-walled cathodically protected tank with continuous interstitial monitoring.

Former UST's that have been removed from the site include; two 1,000-gallon UST's (registration # 12859) for diesel and #2 fuel oil at the WWTP; a 6,000-gallon waste oil tank (registration #9473) near the Maintenance garage; and three 12,000-gallon kerosene (1) and diesel (2) UST's and a 15,000-gallon gasoline UST (registration # 9806) near Warehouse J (also called the Oil House and Paint Shed/Oil Room). Two 20,000-gallon #2 fuel oil UST's (registration # 13518) were abandoned in-place at the Steam Plant.

According to the Sirrine report (1991), the 6,000-gallon waste oil tank removed from the Maintenance garage contained hazardous waste oil. Mill personnel indicated that no significant soil or groundwater contamination resulted from the UST (1991). Sirrine conducted soil and groundwater sampling near this former UST in 1991 (see Maintenance garage and Paint Shed/Oil Room narrative).

Adjacent Sites – We reviewed a letter from Mr. Tom Varney of the MDEP to Mr. Ralph Bragdon, former owner of a bulk fuel storage facility upgradient of the East Millinocket Mill. The facility is located on Route 157,north and adjacent to BARR tracks. The letter stated that sampling at the site detected soil concentrations ranging from 5,100 to 7,800 ppm fuel oil and groundwater concentrations ranging from 4.3 to 7.3 ppm. Mr. Varney indicates in the letter that the site qualifies for a Baseline 1 (BL-1) clean-up that consists of free product and saturated soil removal. We did not find further documentation relating to the former Bragdon bulk fuel storage facility in GNP files.

The Dolby Dam substation is located on GNP hydropower property near the western boundary of the East Millinocket Mill property. The substation is located within a chain-linked fence and formerly contained PCB equipment. According to GNP personnel and a RUST 1996 Compliance Review, all known PCB equipment has been replaced with non-PCB equipment. In 1992, Sirrine collected a composite surficial soil sample at the substation for PCB analysis. Sirrine reported that the sample contained 260 ppb PCB's.

3.3.1.5 Dolby Landfills

In 1991, Sirrine reviewed sampling results from the Dolby Landfills. They noted several exceedances of secondary MCL's for iron and manganese and MCL's and/or MEG's for sodium, chromium, and lead at Dolby I and Dolby II. They also found elevated indicator parameter concentrations such as chloride, conductivity, and sulfate intermittently at some of the wells. Sirrine indicated that elevated concentrations for these parameters may indicate that the landfill is affecting groundwater quality of the area.

Sirrine conducted groundwater and leachate sampling at two Dolby I wells, six wells and a leachate sampling location at Dolby II, and two wells and a leachate sampling location at Dolby III. Generally, the samples were analyzed for VOC's, SVOC's, and total and dissolved metals. Sirrine reported that the Dolby I background well samples were ND for VOC's and SVOC's. The aluminum concentration at the Dolby I background well exceeded the MEG. The Dolby I downgradient well samples exceeded the MCL and MEG for dissolved arsenic. 1,2-dichloroethene (8.4 ppb) was also detected. No VOC's were above the MCL's, MEG's.

The Dolby II northerly wells exceeded the MCL's and MEG's for total aluminum, chromium, lead and mercury. The easterly wells exceed MEG's for aluminum, arsenic, chromium and lead. Chromium and lead exceeded their MCL's. The westerly wells exceeded the MEG's for total aluminum. Arsenic concentrations exceeded the MCL and MEG for both total and dissolved arsenic. The leachate sample exceeded the MEG and MCL for total arsenic.

The Dolby III wells that Sirrine sampled did not exceed MEG's or MCL's. The leachate sample exceeded the MEG for acetone and total arsenic.

SME provides services to GNP relating to the Dolby Landfills including preparing the Annual Reports, Operations Manual updates, site inspections, consultation, and construction testing. According to SME (Annual Report, 1999), the Dolby Landfills accepted municipal solid waste from Millinocket, East Millinocket, and Medway until 1993. SME reported that the landfills are being operated in compliance with the Dolby Landfill Operations Manual. According to SME, review of water quality data indicates little influence from the landfills. Iron historically exceeds its Secondary MCL at some of the wells and the leachate pond underdrain. Some of the wells show slowly increasing levels for parameters such as conductivity, chloride, sodium, and hardness. SME believes these increases are due to groundwater bypass from the Dolby III landfill and road salt and calcium chloride used on the access roads. Surface water quality in Partridge Brook Flowage does not appear to be impacted by landfill operations. SME stated that the impact of the landfill on the surrounding water quality does not pose a threat to public health.

3.3.2 Municipal Assessment Records

We reviewed municipal assessment records at the Millinocket and East Millinocket Town Offices for information relating to the GNP Mill Properties. The Towns of Millinocket and East Millinocket do not have assessment information for the Millinocket Mill, the East Millinocket Mill, or the Dolby Landfills. Table 1 below, contains a list of current landowners that bound GNP properties in Millinocket, Maine. Table 2 below,

contains a list of current landowners that bound Great Northern Paper properties in East Millinocket, Maine.

Table 1
Adjacent Landowners - Millinocket

Owner	Map #/Lot #	Property Adjacent To
Cote, Walter	U12/7	Millinocket Mill
Jamieson, Joseph	U12/6	Millinocket Mill
Caruso, Katherine	U12/5	Millinocket Mill
Colombo, Elaine	U12/4	Millinocket Mill
Colombo, Elaine	U12/3	Millinocket Mill
Cote, Alice	U12/2	Millinocket Mill
Wiley-Ayotte, Lisa	U12/1	Millinocket Mill
Moscone, Ilene	U5/190	Millinocket Mill
Great Northern Paper	U5/191	Millinocket Mill
Breznayak, Frank	U5/192	Millinocket Mill
Brunette, Vincent	U5/119	Millinocket Mill
Macdonald, Woodrow	U5/118	Millinocket Mill
Shaw, Steven	U4/1	Millinocket Mill
Booker, David	U4/66	Millinocket Mill
Deshaine, Sandra	U4/136	Millinocket Mill
Plourde, Harold	U4/137	Millinocket Mill
Daigle, Marry-Ellen	U4/138	Millinocket Mill
O'Kane, Gerone	U4/213	Millinocket Mill
Avery, Rayanne	U4/214	Millinocket Mill
Davis, John	U4/215	Millinocket Mill
Rideout, Gary Readon	U4/216	Millinocket Mill
Rideout, Gary	U4/283A	Millinocket Mill
Disselkamp, John	U4/284	Millinocket Mill
Wheeler, Shirley	U18/8	Millinocket Airport
Morrow, Herman Jr.	U18/9	Millinocket Airport
Johnson, Robert	U18/10	Millinocket Airport
Harding, Angeline	U18/11	Millinocket Airport
GNP	R5/4	Millinocket Airport
Day, Shelly	R4/4 Subdivision on 1	Millinocket Airport
Mott, Robert	R4/4 Subdivision on 1	Millinocket Airport
Cesare, Anthony	R4/4 Subdivision on 1	Millinocket Airport

Table 2 Adjacent Landowners – East Millinocket		
Owner	**Map #/Lot #**	**Property Adjacent To**
Katahdin Federal Credit Union	U11/8	East Millinocket Mill
Lapiere, Wayne	U11/9A	East Millinocket Mill
Brown, Floyd	U11/5	East Millinocket Mill
Katahdin Motors	U11/4	East Millinocket Mill
Great Northern Paper	R5/3	East Millinocket Mill
Niles, Richard	5/3	Dolby Landfill
Great Northern Paper	5/12	Dolby Landfill

We attempted to review code enforcement records relating to the GNP Mill Properties at the Millinocket and East Millinocket municipal offices. We did not find information pertaining to the GNP Mill Properties.

3.3.3 Penobscot Registry of Deeds

We reviewed deed information relating to the GNP Mill Properties at the Penobscot Registry of Deeds in Bangor, Maine. We found no environmental liens on GNP Mill Properties. We found three state and federal Consent Order/Agreements on file at the Registry of Deeds. These documents include:

- MDEP Consent Order relating to air and water quality violations at the GNP mills dated September 25, 1991.
- MDEP Consent Agreement and Enforcement Order, dated August 8, 1988, for hazardous waste violations in part related to interim hazardous waste licenses I-22 (Millinocket Mill, Brown Dump) and I-23 (East Millinocket Mill, Dolby Storage Facility), and PCB spills at the East Millinocket Mill.
- EPA Consent Agreement and Final Order relating to the remediation of PCB spills at the former Chemi-Groundwood, and the No. 5 and No. 6 paper machines at the East Millinocket Mill.

GNP has paid the fines relating to these Consent Order/Agreements and appears to have conducted the necessary remedial actions as stipulated by the regulatory agencies. GNP currently operates in general compliance with state and hazardous

waste regulations (RUST, 1996). GNP closed the Brown Dump, Core Storage Area, Dolby Storage Facility, and Drum Storage area as required by the MDEP. GNP remediated the East Millinocket PCB sites as stipulated by the EPA and noted in the EPA Consent Agreement and Final Order. GNP conducts the required groundwater sampling program relating to the three PCB sites.

According to a compliance review by RUST in 1996, several compliance issues exist in relation to GNP's air licenses. RUST did not identify compliance issues relating to water/wastewater. RUST explained that past spills have been reported and remediated properly by GNP but that the MDEP may issue a collective penalty relating to these past spills (since 1991 Consent Order)

4.0 SITE RECONNAISSANCE AND INTERVIEWS

4.1 Site Reconnaissance

We conducted reconnaissance of selected sites (see Section 3.3.1) including tours through the main structures of both mill complexes on January 04 and 05, 2001 as part of Step 2 of our research. We toured the Millinocket Mill property on January 4, 2001. We visited the Woodlands Office, the GNP Airport parcel, the East Millinocket Mill, and the Dolby Landfills on December 5, 2001. Mr. John Civiello of GNP's Environmental and Government Affairs Department accompanied us on our site visits. Mr. Civiello has worked for GNP for 20+ years varying in occupation from mill operations, wastewater treatment to environmental staff.

4.2 Interviews

We interviewed several people with knowledge about the GNP timberlands. Some of their comments are recorded below. Please see the preceding text for additional comments. Interview documentation in included in the bibliography. The following is a list of people we interviewed:

Brian Stetson	Manager of Environmental and Government Affairs, GNP
Carl Akeley	Chemical Management Group Leader, GNP
Beth DeHaas	MDEP, Oil Enforcement Unit, Augusta
Tom Varney	MDEP Oil and Hazardous Materials Spills Specialist, Bangor

Tom Maleck	MDEP Oil and Hazardous Materials Spills Specialist, Bangor
Jean Firth	MDEP Environmental Specialist, Division of Remediation
Jim Sohns	MDEP, Bureau Land and Water Quality
Nadia Peters	Environmental and Government Affairs, GNP
John Civiello	Environmental and Government Affairs, GNP
Bruce Albert	Environmental and Government Affairs, GNP
Judith Moore	Environmental and Government Affairs, GNP
Vincent Brunette	Town of Millinocket Tax Assessor
Sue Walsh	Town of Millinocket Clerk
David Beaumont	Licensed Tank Installer
Cal Weeks	Millinocket Airport Superintendent
Cheri Deveau	East Millinocket Assessor's Office
Steve Campbell	Town of East Millinocket Public Works Department
Lynell Bouchard	Town of Millinocket Public Works Department
Howard Weymouth	GNP Land Use Forester and Lease Manager

4.3 Potentially Hazardous Substances in Connection with Identified Uses

Numerous petroleum products and hazardous substances are utilized in the operations associated with the GNP Mill Properties. Some of these substances include caustics, acids, dyes, pulping liquors, fuels, etc. GNP has written procedures and plans that identify the substances, their properties, locations and their relative quantities. These plans also explain GNP's policies for regulatory notification and response to hazardous materials incidents. These plans include, but are not limited to, a Hazardous Substance Contingency Plan, an SPCC plan, an Oil Pollution Prevention Plan, and a Hazardous Communication Plan.

GNP has reduced their hazardous waste generation by approximately 99% since the late 1980's (Akeley, 2001). Steps taken to reduce hazardous waste generation include enhanced chemical ordering and use procedures, improved spill prevention and control, and discontinued use of products that ultimately become hazardous waste.

GNP no longer utilizes Safety Kleen parts washing stations at either mill. They replaced these units with self-contained water-based parts washers (Moore, 2001). The oil

generated in these units is tested for hazardous waste characteristics before it is re-used or recycled.

We observed storage locations and evidence of spills of some of the previously mentioned substances within the mill structures. Generally, these spills are reported and cleaned up in compliance with GNP spill clean-up procedures. Floor drains in the mill structures are connected to the process sewers. The effluent from the process sewers is treated at the WWTP's of each mill. According to GNP personnel, most areas with a significant spill potential have been designed with features such as pavement, secondary containment, and process sewer drainage to reduce the potential for environmental impact.

We noted evidence of #6 oil spillage within the 2.31 million gallon #6 oil containment area at the East Millinocket Mill. Mr. Tom Varney (2001) of the MDEP indicated that he had been involved with spills in the area of the East Millinocket Oil Farm and Off-Loading area. He thought that most of the Off-Loading Area along the BARR tracks was impacted by #6 oil. He thought that GNP installed a recovery well at the site. GNP removed #6 oil-contaminated soils from the site approximately 2 years ago while replacing pipelines associated with off-loading operations (Stetson, 2001). No free product has been recovered at the Off-Loading Area for the last 2 years (Stetson, 2001). The contaminated soils were disposed of at Dolby III Landfill in compliance with GNP's solid waste licenses.

Mr. Varney (2001) also recalled #6 oil contamination discovered at the Millinocket Oil Farm and Off-Loading Area in 1998-9 during reconstruction of the Off-Loading Area. He explained that no free product or saturated soils were discovered. He indicated that the contaminated soil was "landfarmed" on-site with MDEP approval. He did not require further action at the Oil Farm and Off-Loading Area at the Millinocket Mill.

We also noted powdered sulfur on the ground near the molten sulfur tank at the Steam Plant (outside chemical storage area) of the Millinocket Mill. It appears that some of the stormwater drainage in this area may go to a drainage ditch that is ultimately discharged

to Millinocket Stream. Mr. Civiello explained that GNP plans to re-design this area to improve spill containment features and reduce the potential for spills of petroleum and hazardous substances and their residues to flow to Millinocket Stream untreated.

We visited GNP's former hazardous waste storage areas (Brown Dump, Core Storage Area, Dolby Storage Facility, and Drum Storage Area), the former Liquor Lagoon, the former Ash Pond, and the vicinity of the three PCB sites at the East Millinocket Mill. We did not gain access to the interior of the Dolby Storage Facility. We did not observe stains or evidence of spills at these areas. We noted discolored water in a drainage ditch for the Liquor Lagoon collection system. This water appears to be liquor-impacted water and drains to the process sewers.

4.4 Hazardous Substance Containers and Unidentified Substance Containers

We noted numerous petroleum and hazardous substance containers at the GNP mill properties during our site visits. GNP appears to have all tanks, containers, and piping labeled throughout their mills. Generally, the petroleum and hazardous substance containers are either located in an area with floor drains connected to the process sewers or they are located within secondary containment.

We looked in one of the two hazardous waste storage sheds at each mill during our site visits. The flammable hazardous waste buildings were not accessible the day of our site visits. The storage sheds are small metal buildings with metal secondary containment. These metal buildings are also located within a concrete dike. We did not observe hazardous waste stored in the Millinocket Mill shed the day of our visit. We noted one properly 55-gallon drum labeled as containing lead paint waste in the East Millinocket shed the day of our site visit. We also noted a daily inspection form in the shed.

See Appendix C for plans depicting petroleum and chemical storage containment locations at the Millinocket and East Millinocket Mills.

4.5 Storage Tanks

We observed numerous storage tanks on the GNP properties. According to Mr. Carl Akeley (2001) of GNP Environmental Affairs, GNP hires a subcontractor to conduct tank integrity testing of bulk petroleum and hazardous substance storage tanks that do not include secondary containment (for the individual tank). According to GNP personnel, secondary containment structures including the Oil Farm earthen dikes at both mills have the capacity to contain at least 110% of the volume of the largest tank within the containment structure. As part of their SPCC plan, GNP conducts annual inspections of all petroleum and hazardous substance storage facilities. Appendix C contains plans that depict the tank locations, products stored, and approximate storage capacities.

We visited the GNP Airport parcel in Millinocket and observed the aircraft fuel system buildings outside GNP's main hangar. According to GNP personnel, the fuel system includes an aboveground aviation fuel tank (1,000± gallon capacity) within secondary containment and a reel and pump station. The tank and the pump station are located within their own wooden structures. We did not gain access to the structures. We did not observe evidence of spills or leaks outside the buildings.

We also visited the Woodlands Office to observe the #2 fuel oil UST system. The UST is located south of the building in a grassy area. We noted a vent pipe, and a fill pipe road box. We did not observe evidence of overfills on or adjacent to the fill area.

We observed a skid tank-mounted 1,000± gallon capacity diesel AST with a pump at the Dolby Landfill. The tank is reportedly used to fuel landfill equipment. It appeared that the tank is double-walled. We did not observe evidence of leaks or spills associated with the AST.

See Sections 3.1 and 3.3.1 for descriptions of active and former UST's associated with the GNP Mill Properties. Mr. Carl Akeley and Ms. Judith Moore have been involved with GNP's UST removal program. They did not recall a UST removal on the GNP Mill Properties that exhibited significant soil or groundwater contamination.

4.6 Indications of PCB's

We observed numerous transformers and capacitors on the GNP properties. According to GNP personnel and a 1996 Compliance Review by RUST, all known PCB-containing equipment has been removed from the GNP Mill Properties.

In 1991 and 1992, Sirrine conducted soil sampling for PCB analysis at the PCB Contractor Laydown area, the Little Italy substation and the Dolby substation. Sirrine reported concentrations of 580 ppb, 560 ppb and 260 ppb, respectively. According to Mr. Brian Stetson of GNP Environmental Affairs, Little Italy and Dolby substation areas and the PCB Contractor Laydown Area were remediated by soil removal in 1993. The PCB-contaminated soils were disposed of at Dolby III Landfill with MDEP approval (MDEP Solid Waste Order #S-00796-WS-X-N, 1993).

PCB remediation projects were completed at the T-160 Riverbank substation at the Millinocket Mill in 1990 under EPA review. Remediation of the Chemi-Groundwood, No. 5 and No. 6 paper machine PCB sites at the East Millinocket Mill were completed in 1991 according to EPA-approved remedial plans. We noted signs on the east side of the No. 5 and No. 6 paper machine building in the area of the No. 6 paper machine PCB spill. The sign stated, "Do Not Penetrate the Ground in This Area without first notifying the Environmental Affairs Department".

See Section 3.3.1 for a brief description of the remediation projects.

4.7 Indications of Solid Waste Disposal

We observed areas along the top and south-southwest portions of the Bark Pile at the Millinocket Mill. The Bark Pile is located southwest of the mill complex between Ferguson Lake and the back channel of the West Branch Penobscot River. We observed the reclamation area of the Bark Pile where Earth-Gro periodically mines bark for re-use as mulch. We did not observe leachate seeps in the areas we observed. We noted an area of ponded water near the southwest boundary of the bark pile. The water was a dark hue and appears to indicate impact from the bark pile.

We observed two areas of historic solid waste disposal at the East Millinocket Mill including the Construction Fill Area and the Bark Pile. We attempted to observe areas noted previously as potential leachate seeps at each of the areas in the 1991 Sirrine report and the 1992 East Mill ARCS PA+ report. We did not observe leachate seeps during our site visits due to approximately 1 foot of snow on the ground.

We visited the Dolby Landfills site. We did not gain access to Dolby I or the access road that travels around the northeast perimeter of Dolby II due to snow cover. We observed active solid waste disposal activities at Dolby III. We observed the leachate pond, leachate pump station, and several monitoring wells. We did not observe evidence of improper leachate management during our site visit.

4.8 Wells, Wastewater, and Septic Systems

We observed monitoring wells at the Millinocket Mill, the East Millinocket Mill, and the Dolby Landfills. These wells are associated with current or historic groundwater monitoring programs at these facilities. Mr. John Civiello of GNP Environmental Affairs opened one of the downgradient monitoring wells of the former Liquor Lagoon. We noted a significant odor (sulfur-like) in the well.

Wastewater generated at the mills is treated at GNP WWTP's. Stormwater from most mill operation areas drains to the process sewers for treatment at the WWTP's to reduce environmental impacts in high potential spill areas. Treated wastewaters from the mills are discharged into Millinocket Stream and the West Branch Penobscot River through state and federally permitted outfalls. Other permitted outfalls at the mills discharge uncontaminated waters including turbine condenser waters, non-contact cooling waters, air conditioner cooling waters, grinder stone pressure waters, etc. Some of the permitted outfalls are monitored for flow, temperature, pH, BOD, and TSS. According to the Sirrine report, the only discharge waters that should be affected by process solids and BOD are the treated wastewaters for the WWTP's.

We are not aware of subsurface septic systems on the GNP mill properties.

4.9 Physical Setting Analysis

4.9.1 Millinocket Mill

The Millinocket Mill has been in operation since about 1900. It is located on the west bank of Millinocket Stream. GNP property also exists on the east bank of Millinocket Stream from near the Little Italy substation to east of the GNP WWTP. The soils and groundwater at the site have been impacted from historic mill operations. Properties adjacent to the site are generally residential. We do not expect significant contamination of the site resulting from contaminant migration from off-site sources.

4.9.2 Woodlands Office

The Woodlands Office is located in a commercial area on Central Street in Millinocket. An active #2 fuel oil UST exists at the site. Two UST's have been removed from the site. No significant soil or groundwater contamination was observed during these UST removals. The site is west and north of mainly undeveloped land. Adjacent properties include a motor sports business, a bank and a self-storage facility. An automobile dealership that includes a gasoline service station is near the site at an equal or higher topographical elevation. It is possible that contamination from off-site sources such as the automobile dealership/gas station have impacted the soil and/or groundwater of the Woodlands Office. Public water and sewer serve the site. We did not observe evidence that off-site contaminant sources have impacted the site.

4.9.3 GNP Airport Parcel

The GNP Airport parcel is located in a mixed residential and commercial area at the Town of Millinocket Airport. Seven UST's have been removed from the site over the years. According to GNP personnel, no significant soil and/or groundwater contamination has been discovered because of UST removals. In 1992, approximately 12 cubic yards of aviation fuel-contaminated soil was removed from the site. Off-site sources of potential soil and groundwater contamination include pesticides from spruce budworm program activities (see Section 3.3.1) and reported LUST's near the airport main office. It is possible that contamination from off-site sources have impacted the

soil and/or groundwater of the GNP Airport parcel. However, we did not observe evidence of contamination at the parcel.

4.9.4 East Millinocket Mill

The East Millinocket Mill has been in operation since approximately 1906. The soils and groundwater at the site have been impacted from historic mill operations. The mill is located downgradient of the Town of East Millinocket and adjacent to the West Branch Penobscot River. Numerous spill reports and active and removed UST's have been documented for the Town of East Millinocket and adjacent properties. It is likely that contamination from off-site sources has migrated to the East Millinocket Mill.

4.9.5 Dolby Landfills

The Dolby Landfills are located adjacent to Partridge Brook Flowage in East Millinocket. According to reports by Sirrine (1991) and SME (1999), groundwater has been impacted by the landfill. SME stated that the landfill impacts on the local groundwater do not threaten public health. No drinking water wells are located within 1 mile of the landfill. Undeveloped GNP timberland surrounds the site. It does not appear that there are off-site sources that could impact the soil or groundwater at the Dolby Landfills.

5.0 CONCLUSIONS AND RECOMMENDATIONS

We identified several potential sources of contamination on the GNP Mill Properties and on adjacent properties. Our recommendations relative to the sites we identified are discussed below.

5.1 Adjacent Properties – No Further Action Required at This Time

We did not identify sites adjacent to the Millinocket Mill that would require further action.

The properties adjacent to the Woodlands Office include a bank, a motor sports business and a self-storage facility. An automobile sales and gasoline service station are near the Woodlands Office. It is likely that active and removed UST's exist within the vicinity of the site. We did not observe evidence that suggests that Woodlands

Office property has been impacted by off-site sources. We do not recommend further study of properties adjacent to the Woodlands Office.

The East Millinocket Mill is located adjacent to the West Branch Penobscot River and downgradient of the Town of Millinocket. The mill has been an industrial site since 1906. The soils and groundwater at the site have been impacted from historic mill operations. We noted numerous spill reports, active and removed UST's, etc. documenting potential off-site contaminant sources. The mill appears to be in the path of groundwater from potential upgradient contaminant sources. It is likely that contamination from upgradient sources has impacted groundwater and possibly soils at the site. The Town of East Millinocket provides drinking water to the mill. A drinking water well is located near Dolby Dam, which is not likely to be impacted from upgradient off-site sources due to the undeveloped nature of the area upgradient of the dam site. Based on this information, we do not recommend further study of properties adjacent to the East Millinocket Mill.

The Dolby Dam substation is located on GNP hydropower property adjacent to East Millinocket Mill property. Sirrine reported that a surficial soil sample taken at the substation contained 260 ppb PCB's. We reviewed 40 CFR Part 761 relating to PCB's and discussed PCB regulations with Mr. Ed Vigneault of the MDEP BRWM. Based on our review of federal guidelines and our discussion with Mr. Vigneault, it appears that the most conservative clean-up goal for the site would be to a PCB concentration of 1 ppm. The soil sample collected at the Dolby substation had a PCB concentration of 260 ppb or 0.26 ppm. It appears that the PCB concentrations at the Dolby Dam substation did not require remediation. GNP personnel indicated that this area was remediated in conjunction with other GNP PCB remedial activities in 1993. We do not recommend further study of the site at this time.

We found evidence that the soils and groundwater of the Millinocket Airport were impacted by LUST's owned by the Town of Millinocket. It appears that the former LUST's were located about 700± feet northeast and slightly upgradient of the GNP airport parcel. Based on interviews of airport employees and municipal employees, the

LUST's were discovered in the early 1980's. According to Mr. Cal Weeks (2001), the LUST's and contaminated soils were removed from the site and nearby residential properties were provided with municipal water because of the contamination. According to Mr. Tom Maleck of the MDEP, about 6,000 cubic yards of contaminated soil was removed from the site with excavations as deep as 22 feet below the ground surface. Mr. Maleck indicated that the area was remediated and is no longer monitored. We recommend further review of available information relating to the Millinocket Airport LUST's to assess potential impacts to the GNP Airport parcel.

5.2 Adjacent Properties – Additional Assessment Recommended

We did not identify adjacent properties that require additional assessment.

5.3 On-Site Potential Issues - No Further Action Required at This Time

Millinocket Mill

We reviewed numerous petroleum and hazardous substance spill-related documents relating to the Millinocket Mill. See Section 3.1 and 3.3.1 for descriptions of the Millinocket spills. Based on our review of spill-related documentation, it appears that GNP has reported and responded to the spills to MDEP's satisfaction. We do not recommend further assessment of the spills based on our records review.

We do not recommend further study of the former hazardous waste storage facilities, the Brown Dump and the Core Storage Area. These facilities were remediated and closed in 1990 in accordance with MDEP-approved closure plans. GNP conducted additional remediation including contaminated soil removal and clean-up confirmation sampling of the Brown Dump because of stained soils and elevated metals concentrations (mercury and lead) documented by Sirrine in 1991. The MDEP observed both areas as part of an SI in 1999 and found no evidence of petroleum or hazardous substance storage or spills.

The former Liquor Lagoon has impacted groundwater and soils at the Millinocket Mill. The lagoon was constructed of native till soils and stored sulfite liquor. It was closed in 1990 in accordance with an MDEP-approved closure plan. GNP conducts groundwater

sampling three times a year at the facility in accordance with the closure plan. A groundwater collection system consisting of several subsurface underdrain pipes receive liquor-impacted groundwater downgradient of the former Liquor Lagoon. This groundwater flows into the mill process sewers and is treated at the WWTP. GNP groundwater monitoring reports and groundwater sampling conducted by Sirrine in 1991 and the MDEP in 1999 indicate that the groundwater is contaminated by metals, VOC's, SVOC's, COD and conductivity. It appears that, based on GNP's monitoring reports, the concentrations of the liquor indicator parameters are decreasing over time. We do not recommend further study of the Liquor Lagoon at this time given that the area has been adequately characterized by soil and groundwater sampling, a collection system removes liquor-impacted groundwater downgradient of the former lagoon, GNP conducts groundwater monitoring three times per year, and the concentrations of the indicator parameters in groundwater downgradient of the former lagoon appear to be decreasing over time.

The former Ash Pond was closed in 1990 in accordance with an MDEP-approved closure plan. The pond was constructed in a similar manner as the Liquor Lagoon and contained a water-boiler ash slurry. Sirrine (1991) and the MDEP (1999) conducted additional soil and groundwater sampling near the pond. They found elevated aluminum concentrations in the groundwater. Sirrine also identified elevated lead concentrations, but the MDEP did not in 1999. The MDEP found elevated vanadium concentrations in the soil. GNP conducts biennial groundwater sampling at the site. Based on GNP groundwater monitoring reports, it appears that the concentrations of monitored parameters are decreasing to near background levels. We do not recommend further action associated with the Ash Pond at this time.

The WWTP is located southeast of the mill and across Millinocket Stream. The plant discharges about 20 million gallons of treated process waters generated at the Millinocket Mill daily. No compliance issues were identified in 1996 according to a RUST compliance review of the WWTP. We understand that the WWTP operates in general compliance with their state and federal licenses (RUST, 1996). Exceedances and spills have occurred at the facility but appear to have been responded to

appropriately by GNP, based on our review of MDEP spill reports. Sediment sampling conducted by the MDEP did not indicate a significant impact to Millinocket Stream because of WWTP discharges (MDEP, 1999). We do not recommend further study of the site at this time; however, it appears that the MDEP may issue a penalty in the future relating to spills and permit exceedances occurring at the WWTP and mill since the 1991 MDEP Consent Agreement and Final Order (RUST, 1996).

The Bark Pile at the Millinocket Mill was used to dispose of bark and solid waste generated at the mill from the early 1900's until the early 1970's or 1980's. The pile covers about 53 acres and contains about 4 million cubic yards of material. The bark pile is periodically reclaimed for mulch by Earth-Gro under a MDEP permit. The 1992 permit indicated that the bark pile does not appear to be adversely impacting groundwater quality of the area. No drinking water wells or surface water intakes are located near the bark pile. The MDEP conducted groundwater sampling in the bark pile in 1999 and reported elevated concentrations of acetone, arsenic, thallium, nickel, copper, and chromium. The MDEP also conducted sediment sampling in the back channel of the West Branch Penobscot River and reported no results above background levels for SVOC's, VOC's, and priority pollutant metals. It appears that the bark pile has impacted groundwater quality near the bark pile based on the MDEP's groundwater sampling results from 1999. However, we do not recommend further study of the site at this time because the groundwater impact does not appear to endanger public health.

The hazardous waste storage sheds are located south of the main mill complex. The sheds are constructed of metal and include metal secondary containment. These sheds are also located within concrete dikes for additional secondary containment. One shed is for flammable hazardous waste and the other shed is for other hazardous wastes. GNP appears to comply with state and federal hazardous waste management regulations (Rust, 1996). We do not recommend further assessment of the hazardous waste storage sheds at the Millinocket Mill.

The Steam Plant and Chemical Storage area are located southwesterly and upgradient of the main mill complex. Numerous petroleum and hazardous substances are stored

and utilized at the Steam Plant. A 2,500-gallon waste oil UST was removed from the Steam Plant. We did not find evidence of significant soil or groundwater contamination resulting from the UST. A MDEP spill report (B-234-89) indicated that about 40 gallons of waste oil was spilled while filling the tank. Thirty gallons were recovered and the remainder discharged to Millinocket Stream via stormwater drainage. MDEP surface water sediment sampling results appear to indicate minimal environmental impact from this area. We do not recommend further study of the Steam Plant and Chemical Storage area at this time. We recommend that the surface water drainage in the area of the plant be reviewed to assess the potential for spills outside the plant to reach Millinocket Stream.

The main mill complex includes the stone groundwood mill, the sulfite mill, the paper machine rooms, a chemical storage area, the stock preparation and coating area, machine shops, and other areas located within the main cluster of mill structures. Numerous petroleum and hazardous substances are located within the mill complex including waste oil, paper dyes, resins, bases, acids, etc. The mill complex includes floor drains connected to the process sewers. All process sewer effluents are piped to the WWTP for treatment. The floor drains and process sewers act as secondary containment for the numerous petroleum and hazardous substances throughout the mill complex. As noted previously, GNP has written policies and procedures relating to the use, transport, spill prevention and control, and disposal of petroleum and hazardous substances. MDEP surface water sediment sampling results appear to indicate minimal environmental impact from this area. We do not recommend further study of the main mill complex at this time.

The Little Italy substation is located on the east side of Millinocket Stream directly across from the main mill complex. The facility is located within a chain-link fence. The PCB Contractor Laydown area is located southerly of the main mill complex. Sirrine reported surficial soil samples taken at the substation and the PCB Contractor Laydown area contained 560 ppb and 580 ppb PCB's, respectively. We reviewed 40 CFR Part 761 relating to PCB's and discussed PCB regulations with Mr. Ed Vigneault of the MDEP BRWM. Based on our review of federal guidelines and our discussion with Mr.

Vigneault, it appears that the most conservative clean-up goal for the site would be to a PCB concentration of 1 ppm. The soil sample collected at the Little Italy substation and the PCB Contractor Laydown Area had PCB concentrations of 560 ppb (0.56 ppm) and 580 ppb (0.58 ppm), respectively. It appears that he PCB concentrations at the Little Italy substation and the PCB Contractor Laydown Area did not require remediation. GNP personnel indicated that these areas were remediated in conjunction with other GNP PCB remedial activities in 1993. We do not recommend further study of these sites at this time.

The Burn Pit for the Millinocket Mill is located northerly and adjacent to the former Ash Pond. GNP burns wood waste in the pit such as limbs, lumber and wooden pallets. GNP uses small amounts of diesel fuel to initiate the fires. The use of waste oil to initiate the fires was discontinued prior to 1991. Poor handling of the fire fuels may have caused small amounts of petroleum to be spilled at the site, however, the fires would likely have burned off most if not all of the mishandled petroleum. Sirrine conducted soil and groundwater sampling at the East Millinocket Mill burn pit in 1991. Sirrine reported low levels of TPH (62 ppm) in soils at the site but no VOC's or TPH in the groundwater. We do not recommend further study of the site at this time.

The Stream AST area consists of various bulk storage containers ranging in capacity form 6,000 gallons to 400,000 gallons. These tanks contain pulp, broke, clay, sodium hydroxide, lime and sulfite. The entire area is paved and drainage is connected to the process sewers. The area is also secondarily contained by a 4± foot concrete wall along the Millinocket Stream. We found that a PCB spill at the Riverbank substation was remediated by ENSR in 1989-90. PCB-contaminated soils were left in-place due to their proximity to the foundation of the structure, high cost and limited feasibility of additional removal, and the very limited potential migration of the contamination. The EPA did not request further remedial actions based on a remediation report prepared by ENSR (1990). MDEP surface water sediment sampling results appear to indicate minimal environmental impact from this area. We do not recommend further study of the site at this time.

The former Pesticide Off-Loading Area is located along BARR tracks westerly of the Administration and Research and Engineering buildings. Sirrine collected surficial soil samples at the site and reported ND results for pesticides and herbicides. We do not recommend further study of the site at this time.

Several UST's have been removed from the site. Our research indicates that contamination was discovered below the fill pipe and pump island of an 8,000-gallon gasoline UST during its removal in 1998. The tank was located near the Maintenance garage. The contaminated soils were left in-place because the site met the BL-1 clean-up goal established by MDEP personnel. A BL-1 requires free product and saturated soils removal. Neither free product nor saturated soils were observed during the UST removal. Mr. Carl Akeley and Judith Moore indicated that no significant soil or groundwater contamination was discovered during UST removals at the Millinocket Mill. We did not find evidence that the former on-site UST's have significantly impacted soils or groundwater at the site.

Woodlands Office

We found documentation that two UST's have been removed from the site including a 2,000-gallon gasoline tank, and a 1,500-gallon #2 fuel oil tank. A UST Site Assessment relating to the 2,000-gallon UST indicated minor contamination near the tank most likely due to historic tank overfills. Soil gas concentrations were below the MDEP notification level of 100 ppm. A 1,000-gallon #2 fuel oil UST is in operation at the site. The tank appears to comply with current MDEP UST regulations. We did not observe evidence of spillage near the tank fill area. We do not recommend further assessment of the site.

GNP Airport Parcel

The GNP Airport parcel consists of two hangars and an aviation fuel system at the Town of Millinocket Airport. Seven UST's have been removed from the GNP parcel. We reviewed MDEP spill reports and an UST Site Assessment for two 1,000-gallon #2 fuel oil tanks, a 2,000-gallon gasoline tank, and a 10,000-gallon aviation fuel tank removed from the GNP Airport parcel. MDEP personnel were on-site during each of these removals. According to the documents we reviewed, minor amounts of soil

contamination were discovered during the removal of these UST's. Some of the contamination was landspread near the site, some was mixed with clean fill and used as backfill, and some was disposed of at the Dolby Landfills. The MDEP approved and/or recommended these remedial actions.

Pesticide contamination was discovered and remediated at the Millinocket Airport on land on or adjacent to the GNP Airport parcel. It is likely the contamination was the result of spills during pesticide mixing and loading related to the Maine Forest Service and timberland owners spruce budworm program. According to the 1991 Sirrine report, the pesticide contamination was cleaned up to the MDEP's satisfaction. Sirrine collected a soil sample in the approximate location of the pesticide remediation site. Sirrine reported low levels of heptachlor epoxide (1.7 ppb, estimated), 4,4-DDE (2.6 ppb, estimated) and 4,4-DDT (7.1 ppb).

We do not recommend further study of the site at this time due to the minor amounts of contamination that have been observed at the site.

East Millinocket Mill

We interviewed Ms. Jean Firth of the MDEP BRWM relating to the CERCLIS status of the East Millinocket Mill. Ms. Firth indicated that the mill was listed on CERCLIS in the past because it had been a former hazardous waste storage site. She said that a 1992 PA+ report relating to the property recommended the mill be deferred to the RCRA program. The site was delisted from CERCLIS. Ms. Firth explained that the EPA is conducting additional review of delisted CERCLIS sites. She said that the MDEP will conduct a Final Site Inspection (SI) of the East Millinocket Mill at the request of the EPA. She indicated that the SI will be conducted in a similar manner to the SI completed at the Millinocket Mill in 1999. She expects that work will begin at the site in June of this year. Based on our review of the Millinocket Mill SI, we expect that the MDEP will conduct records research and soil, groundwater, and surface water sediment sampling at most or all of the areas we identified in Section 3.3.1.

We reviewed numerous petroleum and hazardous substance spill-related documents relating to the East Millinocket Mill. See Section 3.1 and 3.3.1 for descriptions of the East Millinocket spills. Based on our review of spill-related documentation, it appears that GNP has reported and responded to the spills to MDEP's satisfaction. We do not recommend further assessment of the spills based on our review of the spill documentation. However, we recommend further review of the Oil Farm and Off-Loading Area, which historically has been the location of numerous #6 oil spills. This area will be discussed in Section 5.4.

We do not recommend further study of the East Millinocket Mill main complex, the WWTP or the hazardous waste storage sheds. The sites are similar in nature to the Millinocket Mill. We did not find evidence that further assessment of these areas would be required.

The Steam Plant is located on the westerly side of the Main Mill complex. Bulk storage facilities are located at the Steam Plant that contain petroleum and hazardous substances including #6 fuel oil, #2 fuel oil, lube oil, sulfuric acid, and caustic soda. As noted, GNP has written policies and procedures relating to use, transport, spill prevention and control, and disposal of petroleum and hazardous substances. Two 20,000-gallon #2 fuel oil UST's were abandoned in-place at the Steam Plant. A monitoring well installed near the UST's apparently had not shown evidence of petroleum contamination (Sirrine, 1991). We do not recommend further study of this area at this time. However, the monitoring well near the UST's (if it still exists) should be checked for evidence of petroleum contamination.

The Bark Pile at the East Millinocket Mill is located adjacent to the West Branch Penobscot River and westerly of the mill complex. Bark and solid waste from the mill were disposed of at the site from the early 1900's to the 1970's. GNP conducted groundwater monitoring near the pile for several years and found minimal impact to the groundwater. GNP has a MDEP permit to reclaim the bark. The 1992 permit and a letter from Cynthia Darling of the MDEP indicate that the MDEP has reviewed groundwater monitoring information for the bark pile and have found that it has not had

an adverse impact to water quality in the area. Additional groundwater sampling conducted by Sirrine in 1991 found elevated aluminum and arsenic concentrations in groundwater near the bark pile. EPA ARCS team personnel also noted what appeared to be leachate in a drainage swale along the northern boundary of the pile. We do not recommend further review of the East Millinocket Bark Pile. It is the MDEP's opinion that the Bark Pile will have minimal impact on local groundwater, and noted the lack of drinking water wells near the pile. It does not appear that impacts on groundwater at the Bark Pile will endanger public health.

We reviewed documents pertaining to the remediation of the Chemi-Groundwood, No.5 and No. 6 paper machine PCB sites. The documents indicate that these areas were remediated to the satisfaction of the EPA. It appears that GNP remediated these sites in accordance with the EPA Consent Agreement and Final Order relating to these PCB sites. We do not recommend further review of these sites.

The former hazardous waste storage facilities at the East Millinocket Mill, the Drum Storage Area and the Dolby Storage Facility were remediated and closed in accordance with MDEP-approved closure plans in 1989 and 1990. One year of quarterly groundwater monitoring for VOC's, SVOC's, and TPH at the Drum Storage Area indicated no significant contamination at the site. No groundwater sampling was required for the closure of the Dolby Storage Facility. The MDEP approved termination of the Drum Storage Area groundwater monitoring program. Sirrine conducted additional groundwater sampling at the Drum Storage Area in 1991. They reported elevated aluminum and lead concentrations. No drinking water wells are located in the vicinity of the Drum Storage Area, so the elevated aluminum and lead concentrations do not appear to endanger public health. We do not recommend further study of the former Dolby Storage Facility or Drum Storage Area at this time.

The Burn Pit for the East Millinocket Mill is located north of the access road to Dolby Dam. GNP burns wood waste in the pit such as limbs, lumber and wooden pallets. GNP uses small amounts of diesel fuel to initiate the fires. The use of waste oil to initiate the fires was discontinued prior to 1991. Poor handling of the fire fuels may

have caused small amounts of petroleum to be spilled at the site, however, the fires would likely have burned off most if not all of the mishandled petroleum. Sirrine conducted soil and groundwater sampling at the East Millinocket Mill burn pit in 1991. Sirrine reported low levels of TPH (62 ppm) in soils at the site but no VOC's or TPH in the groundwater. We do not recommend further study of the site at this time.

The Construction Fill Area is located near the eastern property boundary of the East Millinocket Mill. GNP closed the Construction Fill Area prior to adoption of the MDEP's solid waste regulations. No groundwater data is available for the site. In 1991, Sirrine observed an apparent leachate seep near the toe of the fill embankment in this area. Analysis of a sample of the apparent leachate indicated a concentration of 10 ppb benzene, ND for SVOC's, and elevated metals concentrations including aluminum, barium, and lead. According to Mr. Carl Akeley, he and MDEP personnel attempted to observe the apparent leachate seep. He explained that they could not find a seep along the boundaries of the Construction Fill Area. It appears that the closed drinking water well is located 1 mile or greater east of the site. Also, it is likely that groundwater from the Construction Fill Area discharges to the West Branch Penobscot River where it becomes greatly diluted. Based on these statements, we do not recommend further study of the site at this time.

Several UST's have been removed from the East Millinocket Mill including former UST's at the WWTP and the Maintenance garage. Several UST's have been abandoned in-place at the Steam Plant (see East Millinocket Mill Steam Plant discussion) and the Oil House (Warehouse J or Paint Shed/Oil Room). Mr. Carl Akeley and Judith Moore indicated that no significant soil or groundwater contamination was discovered during UST removals at the Millinocket Mill. We did not find evidence that the former on-site UST's or abandoned UST's have significantly impacted soils or groundwater at the site.

Dolby Landfills

We visited the Dolby Landfills during our reconnaissance of sites we identified as potential environmental issues. We did not observe leachate outbreaks or other indications of potential contamination during our site visit. However, approximately 1-

foot of snow limited our observations. Ms. Cynthia Darling (2000) of the MDEP indicated that the Dolby Landfills are operated in compliance with GNP's solid waste licenses. RUST (1996) found no compliance issues relating to GNP's management of solid waste during their Compliance Review of GNP properties. We understand that the MDEP plans to review GNP's latest Environmental Monitoring Program (EMP) including monitoring results.

Sirrine conducted groundwater and leachate sampling of the Dolby Landfills in 1992. Sirrine reported results that exceeded MCL's and MEG's for arsenic, aluminum, chromium, mercury, lead, and acetone (leachate). SME reviews and prepares Annual Reports for the Dolby Landfills. As part of the Annual Report, SME provides statistical analysis of the GNP's groundwater and surface water sampling results to indicated trends in the data and provide comparisons to water quality standards. SME indicated in the 1999 Dolby Landfills Annual Report that iron historically exceeds its Secondary MCL at some of the wells and the leachate pond underdrain. Some of the wells show slowly increasing levels for parameters such as conductivity, chloride, sodium, and hardness. SME believes these increases are due to groundwater bypass from the Dolby III landfill and road salt and calcium chloride used on the access roads. SME stated that review of groundwater and surface water quality data indicates little influence from the landfills and that the impact of the landfill on the surrounding water quality does not pose a threat to public health.

It appears that the Dolby Landfills have impacted groundwater quality in the area based on our review of the available information. We found no evidence of drinking water wells that could reasonably be impacted by the landfills. GNP conducts groundwater and surface water sampling at the landfills to assess the impact of the landfill on water quality of the area. We do not recommend further study of the site at this time. However, we understand that the MDEP will review GNP's current EMP.

5.4 On-Site Potential Issues - Additional Assessment Needed

East Millinocket Mill

The Oil Farm and Off-Loading Area consists of #6 bulk oil storage and a railroad track off-loading station. Numerous spill incidents have occurred at these facilities over the years. In 1991, SME conducted a subsurface investigation of the area consisting of twenty test pits in two #6 oil outbreak areas. SME found extensive #6 oil impact of the area including dense, layers of oil and apparently mobile #6 oil in the vicinity of the underground steam pipes and within fill layers. SME indicated that up to 6,500 cubic yards of soil had potentially been impacted by #6 oil. According to GNP personnel, a culvert within the #6 oil-impacted embankment of the Off-Loading Area was utilized for free product recovery. GNP has not recovered free product from the culvert since #6 oil-contaminated soils were removed during replacement of underground pipelines at the Off-Loading Area (Stetson, 2001). No drinking water wells are located in the vicinity of the site. It does not appear that the existence of #6 oil-impacted soils or possibly free product at the site endangers public health.

It is likely that #6 oil-impacted soils and possibly free product exist at the site. Free product has not been discovered at the Off-Loading Area for approximately 2 years. We recommend further review of MDEP and GNP documentation of spills and investigations associated with the Oil Farm and Off-Loading Area. Based on this information, we recommend subsurface explorations of the area to further assess the extent of the contamination and potential existence of free product.

S.W.COLE
ENGINEERING, INC.

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January 22, 2001

6.0 CLOSING

Thank you for utilizing our services with this phase of your project. If you have any questions or if we may be of further assistance, please do not hesitate to contact us.

Very truly yours,

S. W. COLE ENGINEERING, INC.

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GLOSSARY OF ACRONYMS

ARCS	Alternative Remedial Contracts Strategy
BL-1	Baseline 1 Clean-up Goal
BOD	Biological Oxygen Demand
BRWM	Bureau of Remediation and Waste Management
BTEX	Benzene Toluene Ethylbenzene Xylene compounds
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
COD	Chemical Oxygen Demand
CORRACTS	RCRIS Corrective Action Sites
DDD	1,1-Dichloro-2,2-bis(4'-chlorophenyl)ethane
DDE	1,1-Dichloro-2,2-bis(4'-chlrophenyl)ethylene
DDT	1,1,1-Trichloro-2,2-bis(4'-chlorophenyl)ethane
DTPA	Diethylene Tetramine Pentacetic Acid
EPA	Environmental Protection Agency
ERNS	Environmental Response Notification System
ESA	Environmental Site Assessment
GNP	Great Northern Paper, Inc.
GNN	Great Northern Nekoosa
GP	Georgia-Pacific Corp.
HWS	Hazardous Waste Site
LUST	Leaking Underground Storage Tank
MCL	Maximum Contaminant Level
MDEP	Maine Department of Environmental Protection
MEG	Maine Exposure Guideline
MGO	Magnesium Oxide
ND	Non-Detect
NPL	National Priorities List
OVM	Organic Vapor Monitor
PA+	Preliminary Assessment Plus
PADS	PCB Activity Database
PCB	Polychlorinated Biphenyls
PPB	Parts Per Billion
PPM	Parts Per Million
RCRA	Resource Conservation Recovery Act
RCRIS	Resource Conservation Recovery Information System
RUST	RUST Environment and Infrastructure
S&W	Stone & Webster Engineering
SI	Final Site Inspection Report
SL	State List – Uncontrolled Hazardous Substance Site List
SME	Sevee & Maher Engineers, Inc.
SPCC	Spill Prevention, Control, and Countermeasures
SVOC	Semi-Volatile Organic Compound
SWF	Solid Waste Facility List
TCLP	Toxicity Leachate Procedure
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory

GLOSSARY OF ACRONYMS CONT'D.

TSCA	Toxic Substances Control Act
TSS	Total Suspended Solids
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WWTP	Wastewater Treatment Plant

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Aerial Photographs

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Photo 78-10, May 27, 1998, J.W. Sewall Co., (scale undetermined)
Photo 2, October 21, 1988, J.W. Sewall Co., 1":80,000'
Photos 127 & 128, August 29, 1978, Keystone Aerial Survey, 1":80,000

Indian Purchase 3

Photo 2, July 21, 2000, J.W. Sewall Co., 1":63,360'
Photo 2, May 29, 1985, J.W. Sewall Co., 1":80,000'
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APPENDIX A

APPENDIX A
Limitations

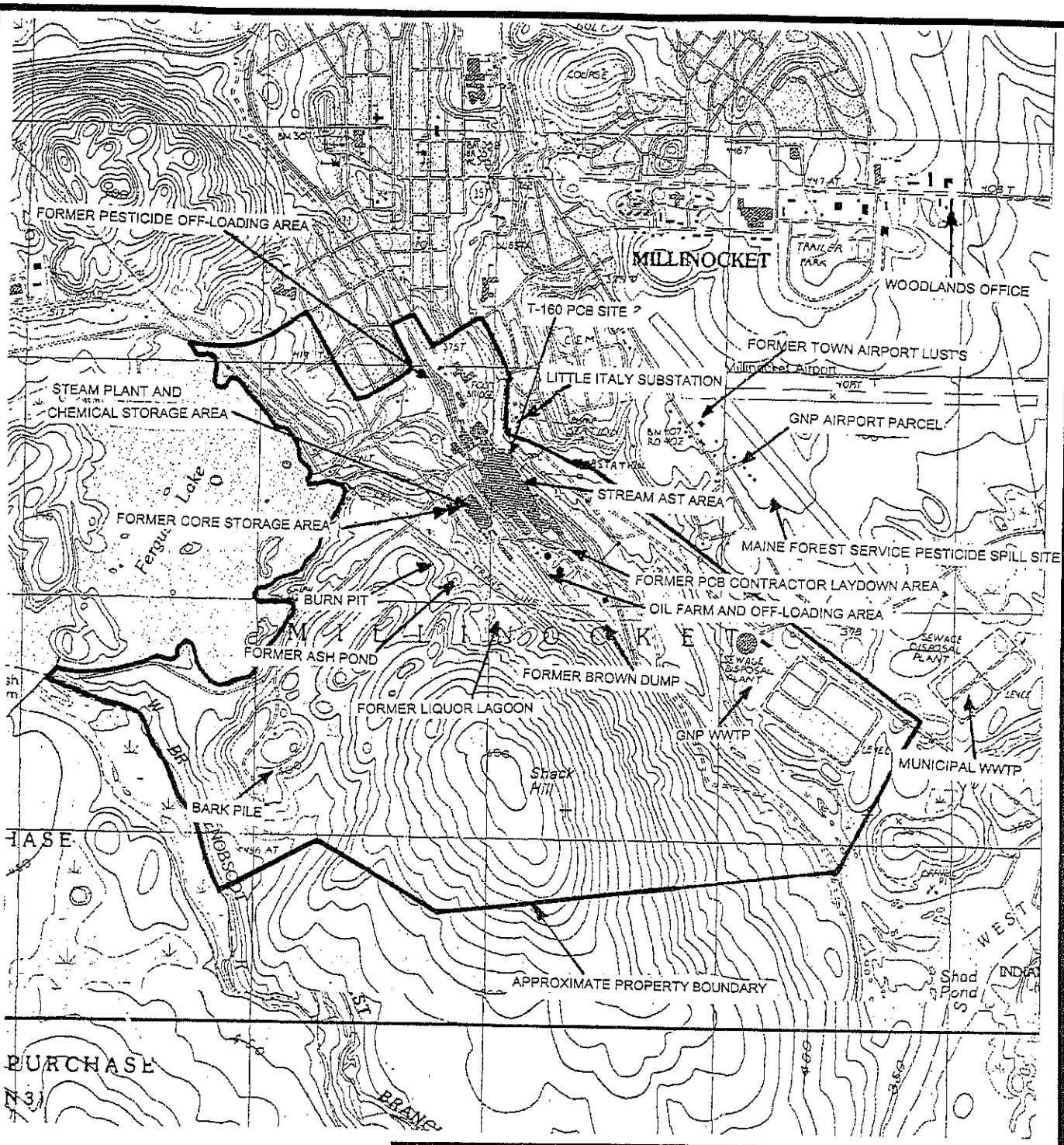
This environmental site assessment report has been prepared for the exclusive use of Boeing Financial, and Great Northern Paper, Inc. for specific application to the Phase I Environmental Site Assessment of the Great Northern Paper Mill Properties in Millinocket and East Millinocket, Maine. We have endeavored to prepare this report in accordance with generally accepted practices. No other warranty, expressed or implied, is made.

The scope of our assessment has been limited to the items specifically discussed in the text of this report. Recommendations contained in this report are based substantially upon information provided by others regarding the site and on our findings during the site visit. Should any additional data or information become available, it should be reviewed by S. W. COLE ENGINEERING, INC. and the conclusions and recommendations presented in this report should be modified as appropriate.

This report cannot reflect undetected variations, which may occur, nor can it reflect variations of subsurface conditions (groundwater quality or elevation) over time. S. W. COLE ENGINEERING, INC. has made no attempt to verify the compliance of the past or present owners and/or occupants of the property with local, state, or federal laws and regulations.

It must be noted that our findings do not represent scientific certainties and are based on professional judgment. S. W. COLE ENGINEERING, INC. does not represent that the subject site contains no hazardous substances or other latent conditions beyond that detected or observed by S. W. COLE ENGINEERING, INC. during this environmental site assessment.

APPENDIX B



S.W.COLE ENGINEERING, INC.

GREAT NORTHERN PAPER, INC.

SITE MAP

Phase I Environmental Site Assessment
Great Northern Paper Mill Properties
Millinocket , Maine

NOTE :

Base map taken from DeLorme 3D TopoQuads.

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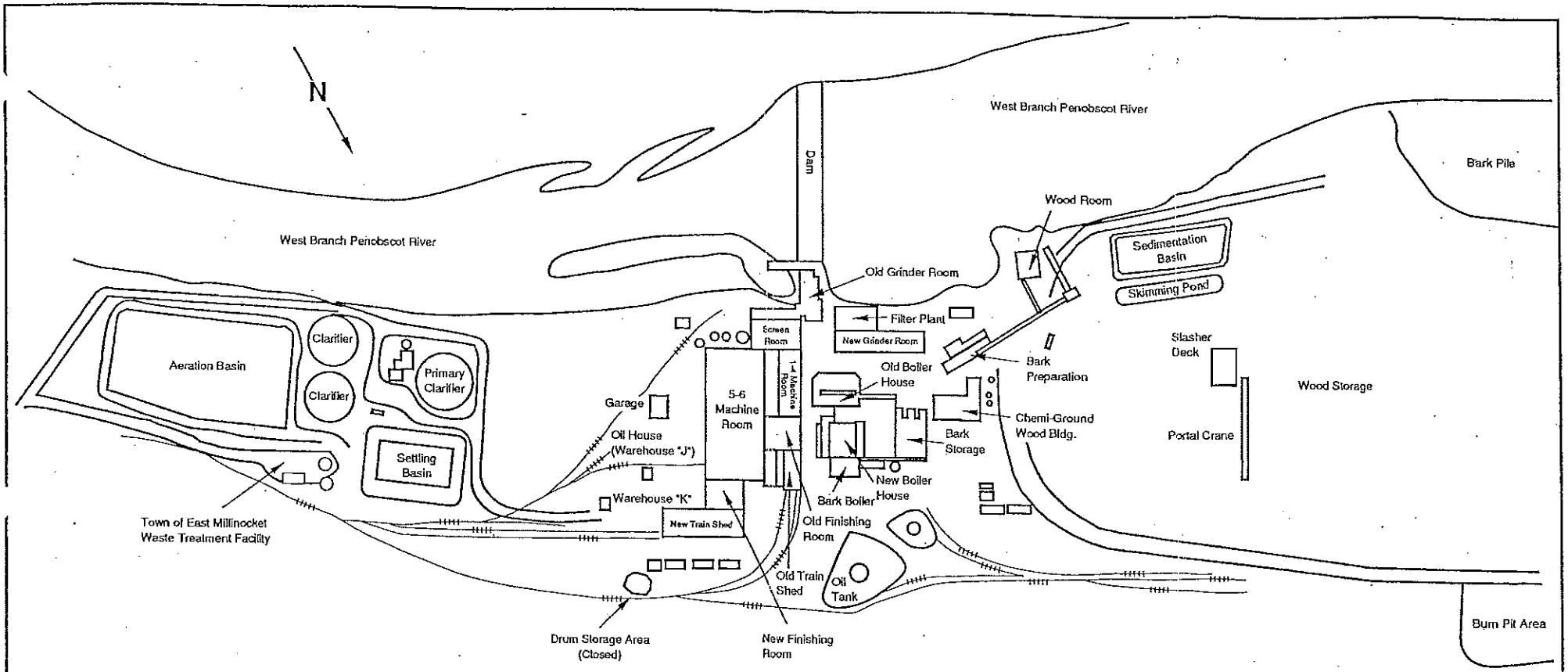
Job No.	00-1153 E	Scale	1 : 25,000
Date :	01/23/01	Sheet	B-1

00-1153 MAPS.dwg 1/23/01 3:05 PM D.A.R., S. W. Cole Engineering, Inc.



Railroad

Not to Scale

NOTE :

Base plan taken from 1991 Sirrine Environmental Consultants "Environmental Audit of the Georgia Pacific Property East Millinocket, Maine" provided by Great Northern Paper, Inc.

Note:

The Burn Pit Area is actually located further west on the road to Dolby Dam.

S.W.COLE ENGINEERING INC

GREAT NORTHERN PAPER, INC.

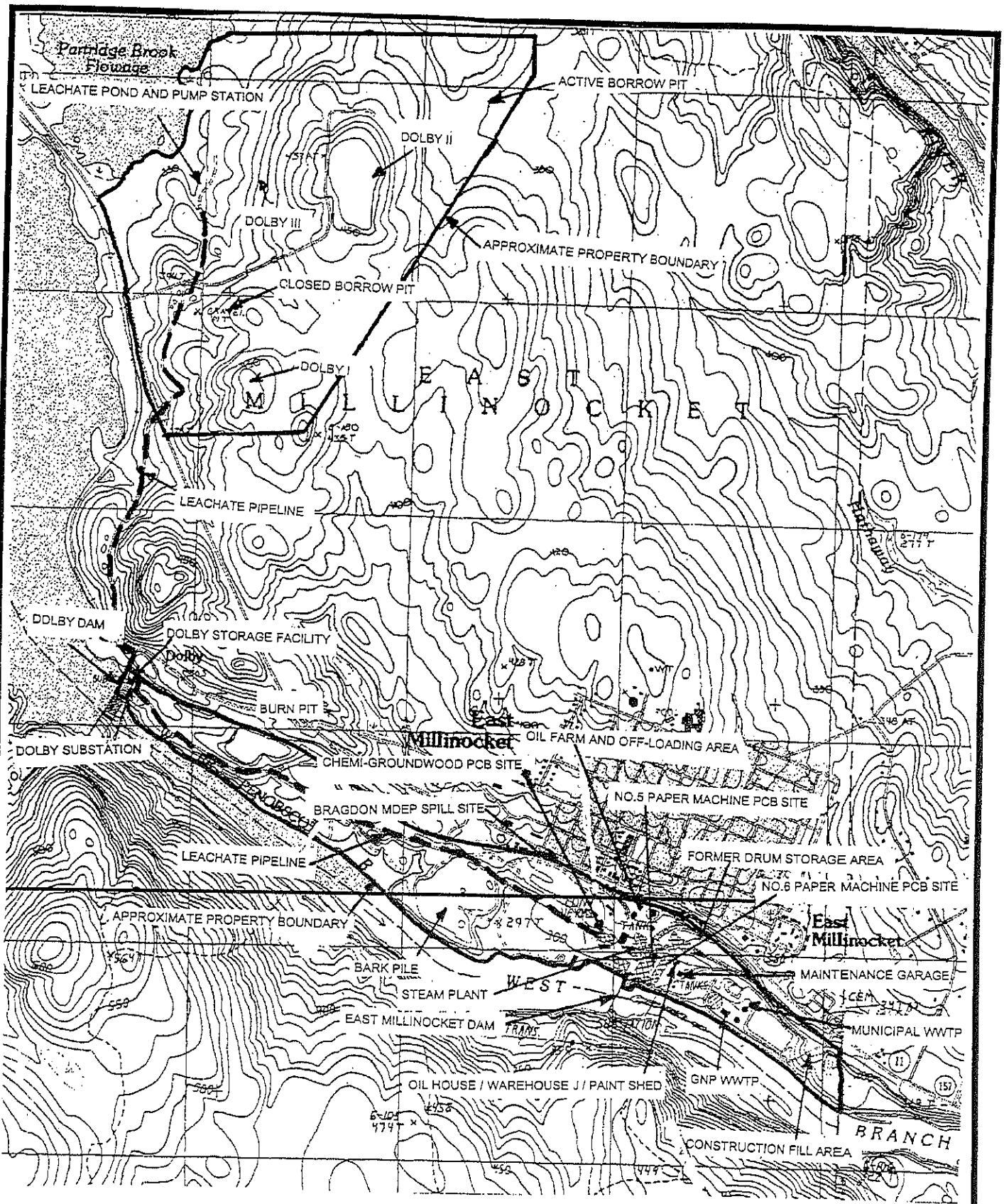
SITE MAP

Phase I Environmental Site Assessment
Great Northern Paper Mill Properties
East Millinocket, Maine

Job No. 00-1153 S Scale Not to Scale
Date: 9/12/01 Sheet B-4

SIRRINE
ENVIRONMENTAL CONSULTANTS

Figure 2-5
Site Map
East Millinocket Mill
East Millinocket, Maine



NOTE :

Base map taken from DeLorme 3D TopoQuads.

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S.W.COLE ENGINEERING,INC.

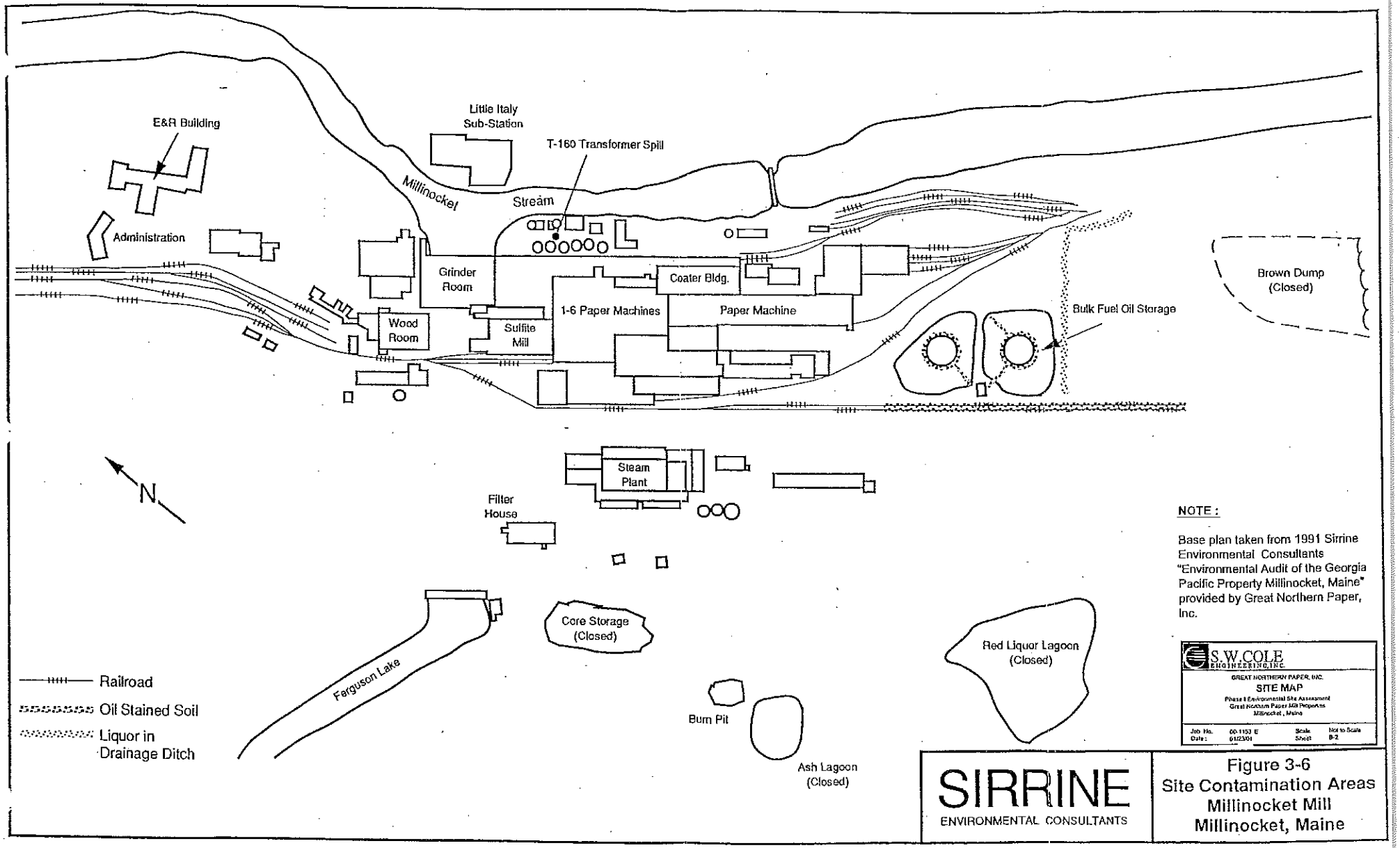
GREAT NORTHERN PAPER, INC.

SITE MAP

Phase I Environmental Site Assessment
Great Northern Paper Mill Properties
East Millinocket , Maine

Job No.	00-1153 E	Scale	1 : 25,000
Date :	01/23/01	Sheet	B-3

DAR, S. W. Cole Engineering, Inc. 1/23/01 3:05 PM 00-1153 MAPS.dwg



NOTE :

Base plan taken from 1991 Sirrine Environmental Consultants "Environmental Audit of the Georgia Pacific Property Millinocket, Maine" provided by Great Northern Paper, Inc.

S.W.COLE ENGINEERING, INC.
GREAT NORTHERN PAPER, INC.
SITE MAP
Phase I Environmental Site Assessment
Great Northern Paper MDI Properties
Millinocket, Maine
Job No. 00-1153 E Scale Not to Scale
Date: 6/23/00 Sheet B-2

SIRRINE
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Figure 3-6
Site Contamination Areas
Millinocket Mill
Millinocket, Maine

APPENDIX C

FILE

S T A T E O F M A I N E
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS MATERIALS AND SOLID WASTE CONTROL

M E M O R A N D U M

TO: Jean Firth, ESIII Division of Remediation, Pre-remedial Unit

FROM: Troy Smith, Geologist
Division of Technical Services

DATE: September 27, 2001

SUBJECT: Geology Report for the Mini Site Inspection of the Great Northern Paper, Mill # 2, East Millinocket, Maine

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The following is a summary of the geologic and hydrogeologic information obtained for the subject site. This information is not to be considered a complete characterization of the site. The information provides a basis of knowledge to support the Site Inspection (SI) and for future investigations at the site. If you have any questions or comments, please contact me.

1.0 Available Geologic Information

1.1 Bedrock

The subject site is located in an area that has received reconnaissance level bedrock mapping of the Sherman, Mattawamkeag, and Millinocket 15' Quadrangles. The map was published by the Maine Geological Survey in 1981 (MGS, 1981). According to this information, the site underlain by a slate member of the Silurian Age Allsbury Formation. The Allsbury Formation is described as a gray slate or phyllite with thin beds of graywacke. Thin limestone beds may also be present. Red and green slates are common in the eastern part of the slate member belt.

The original lithology of the bedrock has been changed by significant metamorphic alterations. The original porosity of the formation has been almost eliminated by the metamorphic alterations. Metamorphism has occurred as a result of several tectonic events that have folded, faulted, and intruded the formation since the Silurian age when the rocks were formed. Fractures, joints, and other openings in the crystalline rocks have occurred by processes related to the tectonic and metamorphic processes. The openings in the rock, collectively referred to as fractures, have generated a secondary porosity that facilitates groundwater flow in the bedrock. The flow of groundwater in the bedrock aquifer

is dependant on the site specific fracture patterns and head gradients. In Maine, the fractured crystalline bedrock aquifers have relatively low bulk storage capacities. In many cases the overburden material provides the bulk storage for the bedrock aquifer. This is particularly important to contaminant migration and contaminant source investigations.

1.2 Surficial Deposits

The surficial geologic map of the Millinocket 15' Quadrangle was published by The Maine Geologic Survey in 1986 (MGS, 1986). The native surficial materials covering the site are mapped as stream alluvium deposits and ribbed moraine deposits. Stream alluvium deposits are mapped near the central portion of the site, from the central dam south and east along the bank of the West Branch of the Penobscot River. The rest of the mill area and the area around East Millinocket is mapped as a ribbed moraine deposit primarily comprised of a heterogeneous mixture of sand, gravel, and silt.

2.0 Site Specific Data Collection

2.1 Subsurface Investigations

The Site Investigation (SI) included completing three borings in the overburden materials. MEDEP personnel utilized a trailer mounted direct push instrument (DPI) for light-duty probing. All soil borings were observed and logged by myself as the project geologist. Included with this memo are a soil-boring log and a summary table with the soil boring and micro-well construction details.

Temporary micro-wells were installed in the soil borings to facilitate groundwater collection. Once groundwater samples were collected, micro-wells were removed and the boring was backfilled with soil cuttings, filter sand, and bentonite clay. Investigations in the Chemi-groundwood area were not completed because of the existing pavement present in the area. Institutional controls concerning the integrity of the pavement are part of the long-term management plan of this area. Therefore, no soil borings were placed in this area and no groundwater samples were collected.

One soil boring, identified as SS-07, was completed in the Dolby drum storage area. A groundwater sample, GW-10, was collected from the temporary micro-well installed at this location.

Two soil borings were completed in the bark pile area. Due to the nature of the subsurface conditions (spongy bark) no subsurface samples were able to be retrieved. The first boring in the bark pile (SS-05) encountered refusal at 19.6 feet below the surface. A micro-well was installed, but no groundwater was present. Therefore, no groundwater samples were collected. A second boring was completed (GW-09) near the base of the bark pile. Refusal was encountered at 21.5 feet below the surface and groundwater was present at approximately 13 feet. A groundwater sample was collected from a temporary micro-well that was installed at this location.

2.2 Hydrogeologic Information

On August 1, 2001, Nick Hodgkins and Paul Higgins collected groundwater samples from the existing monitoring wells located at the mill. Laura Gay and I assisted with collecting groundwater samples on August 2. Well stabilization measurements were collected and recorded on the Low Flow Purge and Sample Data Sheets. Copies of the data sheets are included as part of this memorandum. Stone and Webster are sampling the existing wells as part of a separate ongoing monitoring program. The compiled purge and sampling data for the December 2000 sampling event were reviewed prior to sampling to better understand the site conditions. Additionally, a water table elevation map of the December 2000 data was provided prior to completing the investigation. A copy of this data is provided as part of this memo for reference. The December 2000 data and the stabilization data from this investigation are compiled on an attached table entitled GNP Mill #2, Well Stabilization Measurements.

3.0 Data Interpretation and Discussion

The data collected as part of the two day SI provides discrete information for areas targeted. The data should not be considered a complete characterization of the hydrogeology of the site.

Subsurface soil samples collected as part of the investigation encountered fill materials related to construction and operation of the facility. All of the materials encountered at SS-07 are interpreted as fill materials or reworked native materials related to the construction of the building and dam in the Dolby portion of the facility. Reportedly, the building has a deep basement. Borings completed in the bark pile encountered wood material from the surface to the depth of refusal. The refusal encountered was solid and advancement of the probe stopped upon striking the obstruction in each of the borings. The probe could have encountered the bedrock surface, a large cobble in the underlying till material, or an object such as a log present in the bark pile.

The two dams present at the facility not only impact surface water flow in the West Branch of the Penobscot, but they also appear to control groundwater flow near the facility. The magnitude of the control on the groundwater flow is not understood and the current monitoring well network is not adequate to characterize the impact. According to the water table elevation map provided by Stone and Webster (S&W) the pool elevation above the dam (on the north side) is 287.05. The tailwater elevation on the south side of the dam is 261.06 feet. The groundwater gradient is not expected to be as large as the gradient between the pool elevation and the tailwater elevation. However, there is likely a southern component of flow that is not being monitored at this time. Based on the water level data, there does appear to be a vertical and southern component of flow that is not depicted on the water table elevation map. It appears that these flow components could be greater in magnitude than the westerly component generally presented on the map.

The water level data collected from the existing monitoring wells is very similar to the levels measured in December 2000. It is likely that the consistent groundwater levels in the plant area are a result of the consistent surface water levels maintained by the dams. In addition to the hydraulic control that the dams have on the groundwater flow there may be some building drains that have some localized effects on the shallow groundwater elevations in MW-206B and MW-801. There is little data available to support this hypothesis. However, it may be important to look into this possibility if contaminant migration is important in this area.

The final stabilized field parameters are presented on an attachment to this document. For comparison purposes, the table includes the final measurements from the December 2000 sampling event. The flow rates from the August 2001 sampling event were significantly lower than those recorded by S&W. In general the magnitude of drawdown was less than recorded by S&W, except for wells MW-206A, MW-803D, and MW-803S. It appears that the December 2000 final drawdown recorded in MW-206A is in error. The final drawdown is higher than the static water level. Both the shallow and deep wells at MW-803 were purged and sampled at the same time. The screened interval of MW-803S is 22.5 to 32.5 feet and the interval for MW-803D is 32.5 to 42.5 feet. During the purging process it was noticed that the pumping from one well influenced the water level in the other well. The water levels never stabilized due to the apparent hydraulic connection during the purging process. The well performance did meet the criteria for low flow sampling as outlined in the MEDEP SOP. Therefore, samples were collected from each well once the other parameters stabilized. The intense sunlight and high ambient air temperature affected temperature measurements. Therefore, these measurements

should not be used to indicate the groundwater temperature. The conductivity measurements were very similar to those recorded previously. Except for pH measurements at MW-211B, MW-802, and MW-803S, the pH values were very similar to those recorded by S&W. A review of the data sheets shows that the same pH meter and probe were used at the three wells that had very dissimilar values on August 1. This meter was operated by Nick Hodgkins at all three locations. This meter recorded pH values between 3.18 and 3.94 at wells that previously recorded pH values between 6.7 and 7.6. A review of the calibration log shows that the pH meter and probe was calibrated at either 7:02 am or 7:09 am on August 1. Both meters were calibrated to pH standards of 4.00 and 7.00 with acceptable calibration readings and calculated slopes of 97.8 and 94.6. Additionally, the meters were calibrated on August 2 with slope factors of 95.6 and 99.6. On August 2 both Orion pH meters recorded values between 6.36 and 6.88. If the pH meter or probe were not functioning properly, the problem should have been diagnosed with the calibration procedures. Therefore, either the meter and probe required additional calibration on August 1 or the groundwater pH was between 3.18 and 3.94 on this date. Additional sampling would be required to make the final determination.

4.0 Recommendations

Based on my preliminary review of the data collected in August 2001 and the information from December 2000, I only have a general recommendation for better understanding the hydrogeology of the site. The purpose of the recommendation is for those conducting future investigations at the site to consider. The groundwater flow across the entire site appears to be complex. The mill is located near a groundwater discharge area with significant upland to the east of the mill. The surface water dams, buildings, bark piles, and other anthropogenic influences alter the natural direction of groundwater flow and contaminant migration. The anthropogenic influences in addition to the natural hydrogeologic setting provide many components of flow that need to be further characterized to determine the fate and transport of contaminants. Therefore, the flow of groundwater needs to be characterized in three dimensions, not just a two-dimensional water table map. The current monitoring well network does not appear to be adequate to characterize groundwater flow or contaminant migration in the mill area. The current data can be better used to provide a basis for planning future investigations. However, it must be evaluated in three dimensions.

5.0 References

MGS, 1981. Reconnaissance Bedrock Geology of the Sherman, Mattawamkeag, and Millinocket 15' Quadrangles, Maine, By David C. Roy. Maine Geological Survey Open File Report No. 81-46.

MGS, 1986. Surficial Geology of the Millinocket Quadrangle, Maine. Maine Geological Survey, Open File Report No. 86-60.

Project Name: GNP, Mill #2, East Millinocket

Method of Installation:
Trailer Mounted Direct Push

Date of Installation	Well ID	Total Depth BGS	Depth to Water	Depth to Refusal	Screen Interval BGS	Height of PVC stickup	Depth to water Below PVC 8/1/01
08/01/2001	GW-10	10	6'	Not Encountered	4.75-9.75'	0.25'	~6.5'
08/01/2001	SS-05	19.6'	Dry	19.6'	13-18'	2.0'	Dry
08/01/2001	GW-09	21.5'	~13'	21.5'	14.5-19.5'	0.5'	13.5'

State of Maine Department of Environmental Protection		**Boring No.: SS-07, GW-10**
Project Name: Great Northern Paper, Mill #2, E. Millinocket		Page 1 of 1
Weather: Sunny 80's	Date Started: 8/1/01	Date Completed: 8/1/01
Equipment: Trailer Direct Push	Casing Size: 2"	Total Depth: 10 feet
Ground Elevation:	Operator: BB, TS	Water Level: ~6'
Logged By: TS	OVM/TIP/HNU:	Field Analysis Method:

Sample #	Depth in Feet bgs	Lab Analysis	Field Analysis	PEN ----- REC	Headspace (ppm)	Soil Description	Notes/Observations	Micro-well Notes
	1							
	2							
2-4'		#01304		2/1.1'		0.4' Light brown SAND & GRAVEL with some SILT		
	3					0.7' Light gray SILT with some SAND & GRAVEL	moist	
	4							4.75
4-6'		VOC		2/0.9'		0.35' Black fibrous PEAT & SILT	wet	---
	5					0.55' Light gray SAND, GRAVEL, & SILT		---

	6							---
6-8'		metals		1/0.3'		0.3' Light gray SAND & GRAVEL	water saturated	---
	7					some SILT		---

	8							---
8-10'		metals		2/1'		1.0' Light brown SAND, GRAVEL, &	water saturated	---
	9					SILT		---

	10							9.75

Soil Classification System: ASTM D-2488-84

Name	Size Limit	Sieve Size Pass	Sieve Size Ret.	Example
Coarse Sand	2mm-4.75mm	#4	#10	Rocksalt
Medium Sand	0.42mm-2mm	#10	#40	Sugar/Salt
Fine Sand	0.075-0.42mm	#40	#200	Powder Sugar
(silts/clays)	<0.075	#200		

Name	Size Limit	Sieve Size Pass	Sieve Size Ret.	Example
Boulder	12" OR MORE	---	---	Basketball
Cobbles	3-12"		3"	Grapefruit
Coarse Gravel	3/4"-3"	3"	3/4"	Orange/Lemon
Fine Gravel	4.75mm-3/4"	3/4"	#4	Grape or Pea

Terms of minor components	
and	35-50%
some	20-35%
little	10-20%
trace	1-10%

GNP Mill # 2
Well Stabilization Measurements

Well ID	Date	Static Water Level	Stabilized Water Level	Drawdown	Flow Rate (mL/min)	Dissolved Oxygen (mg/L)	Temperature (C)	Conductivity (uS/cm)	pH	Eh (mV)	Turbidity (NTU)
MW-206A	12/13/2000	21.85	21.1	0.75	200		12.2	900	6.9		5.3
	08/02/2001	21.78	23.44	-1.66	68	0.8	17.7	951	6.67	304	6.2
MW-206B	12/13/2000	21.59	22.71	-1.12	180		12	1200	6.9		5.1
	08/02/2001	21.97	22.39	-0.42	62	0.3	20.5	1176	6.86	118.5	13.3
MW-211A	12/13/2000	8.99	9.52	-0.53	400		10	450	6.6		2.9
	08/01/2001	8.8	8.98	-0.18	140	7.9	16.8	620	6.52	250	18.4
MW-211B	12/13/2000	8.84	9.8	-0.96	500		9.2	410	6.7		3.5
	08/01/2001	8.66	8.81	-0.15	256	6	14.3	526	3.18	214.1	0.98
MW-801	12/13/2000	9.38	10.94	-1.56	400		11	410	7.6		1
	08/01/2001	9.41	10.22	-0.81	80	2.9	21	520	6.87	68	0.7
MW-802	12/13/2000	7.66	10.35	-2.69	500		9	440	7.4		1.5
	08/01/2001	7.6	10.01	-2.41	116	<1.0	17	461	3.94	222.4	1.98
MW-803D	12/14/2000	7.74	16.64	-8.9	500		13.6	400	6.6		24
	08/01/2001	6.86	18	-11.14	80	2.8	18.9	470	6.47	260	22.6
MW-803S	12/13/2000	10.73	14.8	-4.07	500		14.2	580	7.6		14
	08/01/2001	10.72	16.62	-5.9	116		19.3	625	3.47	235.9	9.55
MW-804D	12/14/2000	8.16	12.8	-4.64	500		10	1600	7.1		0.7
	08/02/2001	7.57	8.29	-0.72	77	0.5	16.9	1554	6.86	182.8	0.63
MW-804S	12/14/2000	8.45	9.4	-0.95			10.4	1000	6.9		4.3
	08/02/2001	7.82	8.23	-0.41	254	0.05	12.9	1185	6.88	142.4	4.9
MW-805D	12/14/2000	8.65	14.69	-6.04	500		9.2	280	7.7		0.9
	08/02/2001	7.86	11.71	-3.85	80	2.5	17.2	340	7.7	3	0.7
MW-805S	12/14/2000	9.15	13.25	-4.1	400		10.2	1000	6.4		3.2
	08/02/2001	8.43	9.08	-0.65	64	0.15	20.3	980	6.36	281.7	5.55

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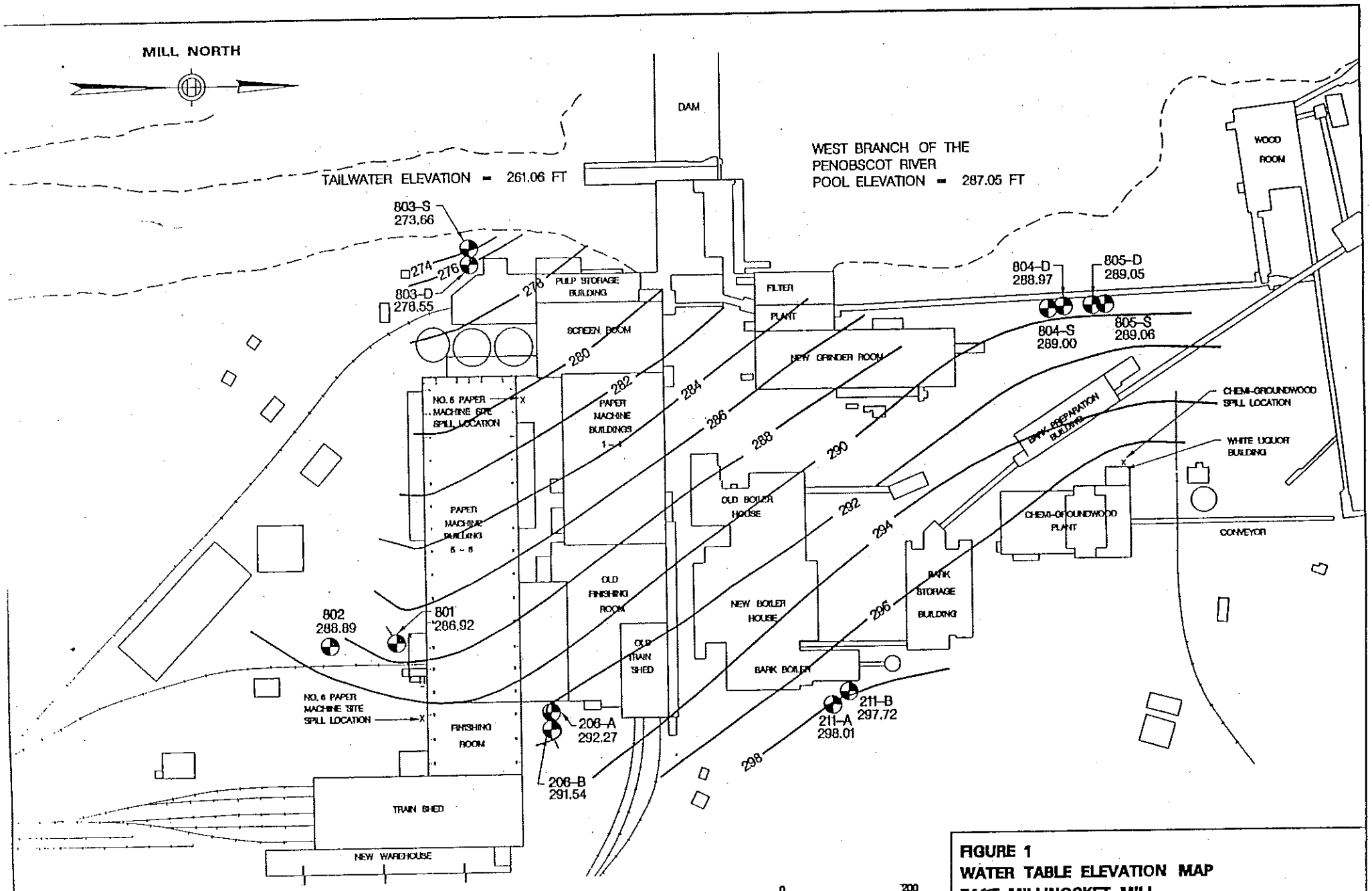

BASED ON DECEMBER 2000 WATER LEVEL MEASUREMENTS
ALL ELEVATIONS ARE REFERENCED TO USGS DATUM

FIGURE 1
WATER TABLE ELEVATION MAP
EAST MILLINOCKET MILL
STONE & WEBSTER ENGINEERING CORPORATION

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **206-B** TOP OF STANDPIPE ELEVATION: 314.13 ft

DATE(S) EVENT: December 13, 2000

* Was well able to be unlocked?: Yes, no odor.				
* Initial depth to water and date of reading:		21.59 ft 13:30, December 13, 2000		
* Total well depth:	28.4 ft	Depth to midpoint of screen:		25.9 ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)		0.15 ft^3	1.1 gal	4.2 L
* General Condition of Well: Good, guard pipe is lower than riser, difficult to close cover.				
* Final depth to groundwater and date of reading:		22.71 ft, 16:12, December 13, 2000		
* Calculated maximum not to exceed drawdown:		22.95 ft		

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): X Peristaltic pump, dedicated tubing
Purge water contained in Drum C
Date Sampled: December 13, 2000
Weather: Clear, Cold 16

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
					21.59	3.8	13:30-15:50	0.18
13:30	6.8	1200	8.2	12.2				
13:34	6.9	1200	11.5	12.2				
13:38	6.9	1200	6	12.2				
13:42	6.9	1200	5.2	12.2				
13:47	6.9	1200	4.8	12.2				
15:50	6.9	1200	4.7	12.2	22.89			
					Sample	1L	1553-1557	
					Sample	1L	1557-1605	
					Sample	1L	1605-1612	
16:12	6.9	1200	5.1	12.0	22.71			

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **211-B** TOP OF STANDPIPE ELEVATION: 306.56 ft
DATE(S) EVENT: December 13, 2000

* Was well able to be unlocked?: Yes, no odor.			
* Initial depth to water and date of reading:	8.84 ft 09:25, December 13, 2000		
* Total well depth: 22.1 ft	Depth to midpoint of screen:		19.6 ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)	0.29 ft^3	2.1 gal	8.1 L
* General Condition of Well: Good (leaning to the NE)			
* Final depth to groundwater and date of reading:	9.80 ft, 10:10, December 13, 2000		
* Calculated maximum not to exceed drawdown:	11.49 ft		

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): X Peristaltic pump, dedicated tubing
Purge water contained in Drum C
Date Sampled: December 13, 2000
Weather: Clear, Cold 20's

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
					8.49		0925-1010	0.5
09:49	6.6	420	9.0	9.0	9.13	3.09		
09:53	6.6	440	3.0	9.2		3.59		
09:57	6.6	440	3.2	9.2		4.09		
10:00	6.7	430	3.3	9.2		4.3		
					sample	1 L	1000-1002	
					sample	1 L	1002-1004	
					sample	1 L	1004-1006	
					sample	1 L	1006-1008	
10:10	6.7	410	3.5	9.2	9.80	4.5		

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **802** TOP OF STANDPIPE ELEVATION: 296.55 ft
DATE(S) EVENT: December 13, 2000

* Was well able to be unlocked?: Yes, no odor.			
* Initial depth to water and date of reading:	7.66 ft 07:27, December 13, 2000		
* Total well depth: 22.5 ft	Depth to midpoint of screen:		17.5 ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)	0.32 ft^3	2.4 gal	9.1 L
* General Condition of Well: Good			
* Final depth to groundwater and date of reading:	10.35 ft, 14:05, December 13, 2000		
* Calculated maximum not to exceed drawdown:	10.63 ft		

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): **X** Peristaltic pump, dedicated tubing
Purge water contained in Drum C
Date Sampled: December 13, 2000
Weather: Clear, Cold 20's

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
					7.66	0.8	0727-0733	0.5
					7.67	1.5	0901-0906	
					7.68	2.1	10.49-10.59	
10:51	7.3	440	1.4	8.8				
10:54	7.3	440	1.6	8.8				
12:44								
12:46	7.3	430	1.3	9.2	7.65			
12:48					9.90	0.5		
						1 L	1358-1402	
						1 L	1402-1405	
14:05	7.4	440	1.5	9.0	10.35			

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **803-S** TOP OF STANDPIPE ELEVATION: 284.39 ft
DATE(S) EVENT: December 13, 2000

* Was well able to be unlocked?: Yes, no odor.				
* Initial depth to water and date of reading:	10.73 ft 06:47, December 13, 2000			
* Total well depth:	32.5 ft	Depth to midpoint of screen:	27.5	ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)	0.47 ft^3	3.5 gal	13.4	L
* General Condition of Well: Good				
* Final depth to groundwater and date of reading:	14.80 ft, 16:47, December 13, 2000			
* Calculated maximum not to exceed drawdown:	15.08 ft			

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): X Peristaltic pump, dedicated tubing
Purge water contained in Drum C
Date Sampled: December 13, 2000
Weather: Clear, Cold 20's

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
					10.73	0.9	0647-0654	0.50
					11.44	1.7	0845-0852	
					11.32	2.4	1031-1036	
					11.53		1219-1222	
12:19	7.6	560	19	14.8	13.90			
12:22	7.6	580	20	14.8	15.20	3.1		
					11.75	0.5	1344-1349	
13:47	7.5	580	18.0	14.6				
					11.00	1 L	1642-1645	
						1 L	1645-1647	
16:47	7.6	580	14	14.2	14.80			

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **804-S** TOP OF STANDPIPE ELEVATION: 297.45 ft
DATE(S) EVENT: December 14, 2000

* Was well able to be unlocked?: Yes, no odor.				
* Initial depth to water and date of reading:		8.45 ft	08:45, December 14, 2000	
* Total well depth:	22.5 ft	Depth to midpoint of screen:		17.5 ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)		0.30 ft^3	2.3 gal	8.6 L
* General Condition of Well: Good				
* Final depth to groundwater and date of reading:		9.40 ft,	10:59, December 14, 2000	
* Calculated maximum not to exceed drawdown:		11.26 ft		

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): X Peristaltic pump, dedicated tubing
Purge water contained in Drum D
Date Sampled: December 14, 2000
Weather: Cold, Snow, teens

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
Equip. Blank, 10:11	6.9	1.2	0.3	12.0			1011-1012	
Equip. Blank, 10:12	6.9	1.2	0.3	12.0			1012-1013	
					8.45	3.5	1016-1043	
10:32	6.9	960	12	10.4				
10:39	6.9	950	11	10.4				
10:41	6.9	950	11	10.4				
					Sample	1 L	1043-1045	
					Sample	1 L	1045-1047	
					Sample	1 L	1047-1049	
Duplicate						1 L	1051-1053	
Duplicate						1 L	1053-1056	
Duplicate						1 L	1056-1058	
10:59	6.9	1000	4.3	10.4	9.40			

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

SAMPLING AT GREAT NORTHERN PAPER
EAST MILLINOCKET MILL

MONITORING WELL NUMBER: **805-D** TOP OF STANDPIPE ELEVATION: 297.70 ft

DATE(S) EVENT: December 13 and 14, 2000

* Was well able to be unlocked?: Yes, no odor.				
* Initial depth to water and date of reading:		8.65 ft 13:15, December 13, 2000		
* Total well depth:	44.5 ft	Depth to midpoint of screen:		39.5 ft
* Est. Standing Vol. of water inside well casing: (Assume: 2 inch I.D. casing)		0.78 ft^3	5.8 gal	22.0 L
* General Condition of Well: Good				
* Final depth to groundwater and date of reading:		14.69 ft, 10:28, December 14, 2000		
* Calculated maximum not to exceed drawdown:		15.82 ft		

PURGING AND SAMPLING INFORMATION:

Purging Method (peristaltic pump or bailer): X Peristaltic pump, dedicated tubing
Purge water contained in Drum: D
Date Sampled: December 13 and 14, 2000
Weather: Clear, Cold, teens

Time	pH	Conductivity (umho)	Turbidity (ntu)	Temperature (°C)	Depth to Water (ft)	Purge Volume	Purge Time	Purge Rate (L/min)
12/13, 13:15					8.65	1.9	1315-1330	0.5
12/14, 06:39					8.39	1.9	0639-0655	
					9.20	1.6	0804-0819	
08:11	7.8	280	1.3	9.6	14.50			
08:15	7.8	280	1.8	9.6				
08:19	7.8	280	1.3	9.2			08:42-08:44	
09:57		sample			8.65	1 L	11:18-11:19	
						1 L	1119-1121	
						1 L	1121-1123	
						1 L	1123-1125	
						1 L	1125-1127	
09:59		sample						
10:28	7.7	280	0.9	9.2	14.69			

Note: Purge rate was determined by filling a graduated cylinder during the first minute of pumping.

Low Flow Purge and Sample Data Sheet

Date 08/01/01 Site Name GNP Mill #2 — East Millinocket

Well# MW-802 Total Depth 22.5' Well Diameter 2"

Water Level 7.60 Screen Interval _____ Formation _____ Sample Device Peristaltic

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	Comments
Min.	Feet below MP	mL/Min	mg/L	Celcius			mV	NTU	Feet	
2:45	8.48									
3:00	9.49	116								Low flow hook up to cell
3:11	9.76			18.1	444	4.59	4.3	2.99		
3:15	9.82				443	4.46	19.5	2.12		
3:19	9.90				444	4.34	22.5	1.56		
3:23	9.92				446	4.26	(8.4)	3.92		readjusted ORP sensor
3:27	9.94				447	4.19	18.0	2.91		
3:31	9.96				450	4.13	21.9	2.47		
3:35	9.97				452	4.06	22.3	1.53		
3:39	9.99				458	3.98	23.4	1.52		
3.43	10.01			17.0	461	3.94	23.4	1.98		
4:13			<1.0							

Equilibrium Goals
3 consecutive readings 3-5 min. apart
Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers: Nick Hodgkins

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

Laboratory Sample Numbers

Analysis / Depth	Number
VOC	01E-DOR-03419
SVOC	01E-DOR-03503
Metals	01E-DIN-10196

Low Flow Purge and Sample Data Sheet

Date 8/01/01 Site Name GNP Mill #2 – East Millinocket

Well# MW-211A (GW-12) Total Depth 29.0' Well Diameter 2"

Water Level 8.80' Screen Interval _____ Formation _____ Sample Device _____

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	
Min.	Feet below MP	mL/Min	mg/L	Celcius			mV	NTU	Feet	Comments
1300	8.98	140 ml	7.7	17.2	64	6.36	42	23	26.5	Slow set-up - 1st Well
1305	8.98	140 ml	8.1	16.2	64	6.47	42	21	"	
1310	8.98	140 ml	8.0	16.1	64	6.50	47	19.7	"	
1315	8.98	140 ml	7.9	15.9	63	6.51	45	17.6	"	
1320	8.98	140 ml	8.0	15.5	63	6.53	46	19.2	"	
1325	8.98	140 ml	8.0	16.0	63	6.53	49	17.6	"	
1330	8.98	140 ml	7.9	16.8	62	6.52	51	18.4	"	*Cell now in sunlight

Equilibrium Goals
3 consecutive readings 3-5 min. apart
Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers:
P. Higgins
Nick
Malcom

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

Laboratory Sample Numbers

Analysis / Depth	Number
VOC	OIE - DOR - 03734
SVOC	OIE DOR 03500
PP Metals	OIE DIN 10208

Low Flow Purge and Sample Data Sheet

Date 08-01-01 Site Name GNP Mill #2 East Millinocket

Well# 803-D (GW-18) Total Depth _____ Well Diameter 2"

Water Level 6.86 @ 1645 Screen Interval _____ Formation _____ Sample Device _____

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	Comments
Min.	Feet below MP	mL/Min	mg/L	Celcius			mV	NTU	Feet	
17 25	12.46	80	3.1	18.8	47	6.49	44	24.8	37.5	Slow Recharge
17 30	13.16	80	3.0	19.1	49	6.50	45	24.6	"	
17 35	13.73	80	2.9	19.2	47	6.49	49	19.2	"	
17 40	14.31	80	2.9	19.2	47	6.45	51	18.7	"	
17 45	14.85	80	2.9	19.1	47	6.46	52	18.5	"	
17 50	15.45	80	2.9	19.0	47	6.45	53	19.3	"	
17 55	16.00	80	2.9	18.9	47	6.46	55	22.0	"	
1800	16.45	80	2.9	18.8	49	6.44	56	20.1	"	
1805	16.88	80	2.8	18.9	47	6.46	57	20.9	"	
1810	17.48	80	2.8	18.9	47	6.47	59	20.5	"	
1815	18.00	80	2.8	18.9	47	6.47	61	22.6	"	

Equilibrium Goals
3 consecutive readings 3-5 min. apart

Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers: P. Hussey

Laboratory Sample Numbers

Analysis / Depth	Number
VOC	01E-DOR-03502
SVOC	
P.P. Metal	

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

Low Flow Purge and Sample Data Sheet

Date 8/2/01 Site Name GNP Mill #2

Well# MW-804D Total Depth 34.8 Well Diameter 2" Steel

Water Level 7.57 Screen Interval 24.8-34.8 Formation _____ Sample Device PP

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	
Min.	Feet below MP	mL/Min	mg/L	Celcius	uS/cm		mV	NTU	Feet	Comments
954		~~77~~								Began Purge
959	8.07	77								
1002	8.10									
1009	8.21									
1010	8.22	74	—	17.1	1563	6.76	-24.8	—		
1015	8.25	77	—	17.1	1560	6.82	-21.6	7.96		
1020	8.28		—	17.0	1554	6.85	-18.1	1.13		
1023	8.29	77	—	16.9	1554	6.86	-16.2	0.63		Sampled
~~1026~~ 1028			0.5							

Equilibrium Goals
3 consecutive readings 3-5 min. apart

Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers: SMITH

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

Laboratory Sample Numbers

Analysis / Depth	Number
Amber	35011
Cubie	70193
VOA	37501

Low Flow Purge and Sample Data Sheet

Date 08-02-01 Site Name GNP Mill #2 East Millinocket

Well# 805 D (Gw 23) Total Depth _____ Well Diameter 2"

Water Level 7.86' @ 905 am Screen Interval _____ Formation _____ Sample Device _____

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	
Min.	Feet below MP	mL/Min	mg/L	Celcius			mV	NTU	Feet	Comments
0	7.86	80	-	-	-	-	-	-	39.6	Deep well
									"	
0945	10.40	80	2.9	18.3	34	7.49	-127	2.3	"	V. sunny spot
0950	10.64	80	2.8	18.5	34	7.71	-139	2.3	"	
0955	10.76	80	2.7	18.3	34	7.83	-150	2.7	"	
1000	10.87	80	2.7	18.2	33	7.93	-160	2.7	"	
1005	11.00	80	2.7	18.0	33	7.99	-160	2.6	"	
1010	11.11	80	2.6	18.1	33	8.03	-169	2.5	"	
1015	11.16	80	2.6	18.1	33	8.04	-169	2.5	"	
1020	11.26	80	2.5	18.2	33	8.15	-172	2.3	"	
1025	11.33	80	2.5	18.2	33	8.06	-174	2.2	"	
1030	11.40	80	2.5	18.3	33	8.08	-163	3.0	"	
1035	11.48	80	2.5	18.3	33	8.01	-195	2.5	"	
1040	11.54	80	2.5	18.2	33	7.97	-201	2.0	"	
1045	11.57	80	2.5	18.0	33	7.90	-201	2.2	"	
1050	11.62	80	2.5	17.5	33	7.79	-196	1.7	"	
1055	11.68	80	2.5	17.2	34	7.75	-196	1.0	"	
1100	11.71	80	2.5	17.2	34	7.70	-196	0.7	"	Sample 1

Equilibrium Goals
3 consecutive readings 3-5 min. apart
Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers: Paul Higgins

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

Laboratory Sample Numbers	
Analysis / Depth	Number
VOC	OIE - DOR - 03738
SVOC	OIE - DOR - 03499
P.P. Metals	OIE - DIN - 10192

Low Flow Purge and Sample Data Sheet

0852

Date 8/2/01 Site Name GNP Mill #2

Well# MW-206B

Water Level 21.97 Total Depth 28.4 Well Diameter 2"

Screen Interval 23.4-28.4 Formation _____ Sample Device PP

Time	Water Level	Flow	DO	Temp.	Cond.	pH	ORP	Turb.	Intake Depth	
Min.	Feet below MP	mL/Min	mg/L	Celcius			mV	NTU	Feet	Comments
1114									26	Began Purge Lowest
1119	22.26									Brown Muddy Water
1122	22.30	74								Clearing
1178	22.36	71								Reduced to lowest
1132	22.36	62								
1147	22.36									
1150	22.41	64	—	20.2	1168	6.89	-50.5	—		
1155	22.41		—	20.1	1145	6.89	-60.0	—		
1200	22.41		—	20.2	1160	6.88	-73.7	—		
1203	22.40	62	—	20.4	1159	6.87	-76.3	—		
1206	22.40	—	—	20.5	1176	6.86	-80.5	—		Disconnected cell
1207	—	—	—	—	—	—	—	56.8		
1210	—							38.6		
1215	22.39							21.7		
1218								17.5		
1221								14.1		
1224								13.1		
1227			0.3					13.3		

Equilibrium Gaals
3 consecutive readings 3-5 min. apart

Flow 1-2 mL/Min
Water Level +- 0.01
DO +- 10%
Turb +- 10%
Cond. +- 3%
pH +- 0.1
ORP +- 10 mV
Temp. +- 0.1 (may not equilibrate)

Samplers: SMITH

Laboratory Sample Numbers

Analysis / Depth	Number
VOA	03399
Amber	03496
Cubic	-10202

Eh Conversion for Ag/AgCl probe: Add 199 mV to ORP Reading

mL/Ft Information	pH Meter Calibration
3/4 in well = 347 mL/Ft	Time:
2 in well = 617mL/Ft	Reading
4 in well = 2470 mL/Ft	Date Revised 3/22/99

FINAL SITE INSPECTION REPORT

FOR

GREAT NORTHERN PAPER MILL #2
EAST MILLINOCKET, MAINE

July 18, 2002

prepared by:

Jean Firth, Environmental Specialist
Site Assessment and Support Services Unit
Division of Remediation
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection

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1.0 INTRODUCTION

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, the Maine Department of Environmental Protection (MEDEP) has prepared this Site Inspection Report (SI) on the Great Northern Paper Mill #2 site in East Millinocket, Maine, for the United States Environmental Protection Agency (USEPA). The purpose of this report was to collect information concerning conditions at the site, and to assess the potential threats to human health and the environment. SIs are limited in scope and are not intended to supersede more detailed investigations.

2.0 SITE DESCRIPTION

2.1 Site Location

The Great Northern Paper Mill #2 (GNP2) site is located on Main St (Route11/157), approximately two miles west of Route 95, in East Millinocket, Penobscot County, Maine (Figure 1). The center of the site is located at 45° 37' 21.08" W latitude, 68° 34'27.19" N longitude. The corresponding Town of East Millinocket tax map and lot number are Map 2, Block 1, Lot 10.

GNP2 occupies a 2.5 x 0.3 mile strip of land (500 + acres) located in a commercial, suburban and residential area of north central Maine. The site border on the south is defined by the West Branch of the Penobscot River (WB Penobscot River), on the east by undeveloped land, on the west by Dolby Dam and Dolby Pond. Maine Street and the Town of East Millinocket wastewater treatment plant border the site to the north (4; 5). A small commercial zone in East Millinocket exists along Main Street north of the site. The residential center of East Millinocket lies just north of the commercial zone on Main Street.

2.2 Site Description

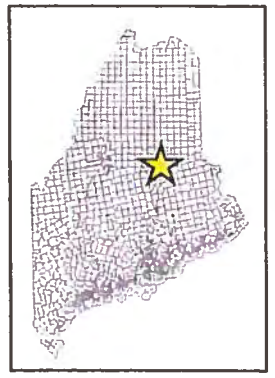
GNP #2 is an active paper and wood pulp processing plant that has been in operation since 1907 (Figure 2). There are 2 entrances to the site. The main entrance is located in the north central portion of the site off Main Street approximately 2 miles east of the Rt. 95 exit. The entrance is staffed by mill security who monitor all vehicles and people entering the site. The border between the site and Maine Street is fenced south of the main gate. Another entrance is located in the north west area of the site and is used for trucks delivering logs to the mill.

For this report the site is divided into three sections to facilitate discussion of the site: the wastewater treatment plant (WWTP) area, the Mill operations area and the waste storage areas (Figures 3-5). During the Preliminary Assessment Plus (PA+) investigation 12 areas of concern (AOCs) were identified these are shown on the area figures and presented in detail in Appendix A.

Figure 1: Site Location

(With Population Data)

Great Northern Paper Mill #2
East Millinocket, Maine



ZONE DISTANCE	BUFFER POPULATION
Zero to 1/4 Mile	577
1/4 Mile to 1/2 Mile	1228
1/2 Mile to 3/4 Mile	1626
3/4 Mile to 1 Mile	1758
1 Mile to 2 Miles	2204
2 Mies to 3 Miles	2735
3 Miles to 4 Miles	3912

- Quarter Mile Buffer
- Half Mile Buffer
- One Mile Buffer
- Two Mile Buffer
- Mill Structure
- Lagoon
- Waste Area

Data Sources: Background data is a USGS 7.5' Quad sheet. Accuracy +\- 40 ft.

Mill Structures and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas collected by Maine DEPusing Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

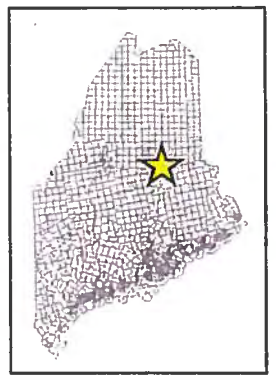
TO BE USED FOR REFERENCE PURPOSES ONLY

N W E S

0 0.25 0.5 1 Miles

Figure 2: Site Diagram

Great Northern Paper Mill #2
East Millinocket, Maine



Partridge Brook Flowage
DOLBY LAKE
Dolby II & III Landfills
EAST MILLINOCKET
Hathaway Brook
RTE 11
RTE 11 & 157
MEDWAY
East Branch Penobscot River
Dolby Storage Area
Salvage Area
Snow Dump Area
Miner Brook
West Branch Penobscot River
Wastewater Treatment Plants
Bark Pile
Chemi Groundwood Area
ART HILL

- Road
- Stream
- Contour
- Mill Structure
- Lagoon
- Waste Area
- Lakes & Rivers
- Landfill
- NWI Wetland

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine DEP using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

TO BE USED FOR REFERENCE PURPOSES ONLY

N W E S

0 1,000 2,000 4,000 Feet

2.2.1 Mill Operations Area

The mill operations area is comprised of the mill building, machine room building, sulfite storage tank, No. 5 paper machine, No. 6 paper machine, steam plant, chemi-groundwood area, paint shop building, automotive maintenance building, hazardous waste storage buildings and the drum storage area (Figure 3). A variety of fuel and chemical storage tanks and containment structures exist on the GNP2 site. Appendices B and C present a summary of the fuel and chemical storage structures, along with their location on the site and capacities.

2.2.1.1 Mill Building

The main mill building, a two-story, 240,000 + square foot, brick, metal, and wood framed building, houses the bulk of the paper and wood pulp processing equipment. The south end of the building, adjacent to the river, contains the grinder room, screen room, and sulfite storage tower (AOC NO. 11). Wood logs are ground into pulp, screened and stored for processing in this area of the building. Water used in the pulp production process is drawn directly from the West Branch Penobscot River. Chemicals used and stored in this area of the building include caustic soda (250- gallon, aboveground tank) and sodium hydrosulfite, used in the bleaching process, stored in twenty 250-gallon aboveground steel tanks (10).

2.2.1.2 Paper Machines No. 5 and 6

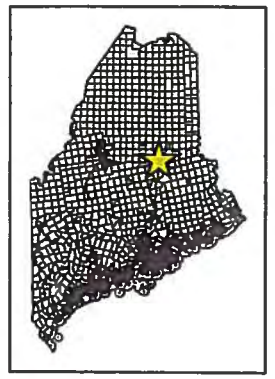
The central part of the main mill building contains the No. 5 and No. 6 paper machines (AOC No. 2 and 3). The Number 5 and 6 paper machines are responsible for the paper making at the main mill buildings and occupy approximately one-half of the building's total area. On January 4, 1978, a transformer that was stored outside the No. 6 paper machine room was struck by a front end loader plowing snow. A drain valve was broken off the bottom of the transformer releasing the cooling fluid (24:p2-1). The 600 gallon spill was contained by an earthen dike and sand was spread over the area at the time of the spill. The sand was picked up and stored in barrels within 24 hours of the spill; the dike was left in place until the spring to contain snowmelt. In the spring an area approximately 30'x30'x6' was excavated and stored in barrels. No post excavations samples were collected (24:p2-1).

In June 1985 GNP began excavation in this area as part of modernization of the mill and additional PCB contamination was detected. An investigation to determine the extent of contamination began immediately. Between September and December 1985, 47 borings were drilled at the site under the supervision of GNP and its contractor.

A spill from a transformer located in the courtyard outside the No. 5 paper machine site occurred on May 14, 1981 due to an electrical failure. The lid of the transformer was lifted and approximately 150 gallons of fluid was splashed against the building and onto the ground. Immediate clean-up activities consisted of wiping down the building and the transformer with a cleaner. No soil was cleaned up at that time. In August 1985 as a result of the discovery of PCB contamination at the No. 6 paper machine, soil samples were collected in this area. Samples to determine the extent of contamination were collected with a power ice auger. GNP conducted excavation of the soil in the area in November and December 1985. The excavation was deepest

Figure 3: Mill Operations

Great Northern Paper Mill #2
East Millinocket, Maine



Machine Room Building Storage Area (AOC 8)

Number 6 Paper Machine PCB Site (AOC 3)

Hazardous Waste Buildings (AOC 9)

Paint Shop Building (AOC 4)

Chemi-Groundwood Building (AOC 1)

MW-211-A (GW-12)

MW-211-B (GW-13)

MW-206-B (GW-15)

MW-206-A (GW-14)

MW-801 (GW-16)

MW-802 (GW-17)

MW-805-S (GW-22)

MW-804-S (GW-20/GW-21)

MW-805-D (GW-23)

MW-804-D

Number 5 Paper Machine PCB Site (AOC 2)

Kraft Hydra-Pulper Building (AOC 7)

MW-803-S (GW-19)

MW-803-D (GW-18)

Automotive Maintenance Building (AOC 5)

Sulfite Storage Tank (AOC 11)

- Monitoring Well
- Contour
- Road
- Rivers
- Mill Structure
- Lagoon
- Waste Area
- NWI Wetland

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized fro CAD file produced by Plisga & Day Land Surveyors Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

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adjacent to the building, approximately 10 feet. The excavation was backfilled with clean granular soil placed over a plastic liner. The soil was manifested to a licensed hazardous waste landfill in December 1985 (22:p2-2).

In the spring of 1987, additional sampling was conducted at both the No.5 and 6 paper machine areas in order to develop remedial plans (22:p2-2; 24:p2-2). Both areas were subsequently remediated.

Chemicals used in the paper machine rooms during the PA+ investigation include acetic acid/dye mixture and caustic soda. During the site reconnaissance for the PA+ report, 50 drums of acetic acid/dye in totes and on stands were observed in the south end of the paper machine area. Fifteen 250 gallon steel tanks (in totes) containing dyes and caustic soda were observed in a lower-floor storage area below paper machines Number 5 and 6. The northern portion of the main mill building contains the finishing room and an automated and computer controlled paper-packing and shipping center. No chemicals were observed in this area of the plant during the site reconnaissance (10).

2.2.1.3 Steam Plant

Adjacent and northwest of the main mill building are the steam plant (AOC No. 7) (40,000+square feet) and bark burning buildings (30,000 + square feet). All steam generating operations for the plant occur in and are controlled from the steam plant. Chemical used and stored in the steam plant include caustic soda and sulfuric acid, used primarily to regenerate resins in the water purification system, and small amounts of fuel oil additives. Ion exchange resins are also used in the steam plant. A 12,000 gallon plastic caustic soda tank and one sulfuric acid 8,600 gallon plastic tank, were observed on the concrete floor of the building. Areas of staining from minor caustic soda and sulfuric acid spills were observed on the concrete floor during the PA+ site reconnaissance. The total stained area was approximately 20 square feet. The ion exchange resins were contained in a 250-gallon, aboveground tank (10).

2.2.1.4 Chemi-groundwood Building

Northwest of the steam plant is the Chemi-groundwood building area (AOC No.1). The Chemi-groundwood building was a two-story, steel frame with galbestos siding built in the 1950's for a paper milling operation, which was terminated in 1969. The processes in these buildings involve the chemical softening of raw wood logs in preparation for pulping (10). A spill from a transformer located in this building occurred on August17, 1970. The transformer failed and released approximately 890 gallons of PCB laden fluid into the soil. Between April 1986 spring 1987 investigations into the extent of contamination was conducted by GNP2 contractors to delineate the extent of the PCB contamination. Remeditation was completed by 1991 and EPA approved the cleanup, including instituting a monitoring plan, through a Consent Agreement (52). The chemi-groundwood building was demolished in 1997 the area has subsequently been paved (56).

2.2.1.5 Automotive Maintenance Garage

Southeast of the main mill building are an automotive maintenance garage (AOC No.5) and paint shop building (AOC No.4) (Figure 2). The automotive maintenance garage (approximately 2,000 square feet) is a one-story, cement-floored, aluminum structure, used as a work area for company vehicles. Chemicals used in the maintenance garage include automotive additives, fuel oil, and solvents for parts-cleaning systems. According to GNP2 staff, the parts cleaning solvent is recycled in the system, and periodically picked up by a licensed waste hauler. Sporadic staining on the cement floor, likely from oil spills, was observed during the site reconnaissance (10). An additional garage, used only for storing plant vehicles, is located west of the maintenance garage.

2.2.1.6 Paint Shop Building

The paint shop building (1600-square feet) is a cement block-framed structure with a cement floor. At the time of the PA+ report it was used to store and transfer paint-related chemicals. Most of the paint-related materials were stored on shelves. In the west half of the building, one 55-gallon drum of thinner and one 55-gallon drum of paint waste were observed on the concrete floor. The paint waste had been accumulating since July 1990, according to the accumulation sticker on the drum. No floor drains were observed in the west half of the building. The floor in the west half of the building was clear and free of staining. The east half of the building is used primarily as a small maintenance and staging area. Five 5-gallon oil containers marked "Texaco Marfax Heavy Duty 2 Oil" were on shelving in the room. Four 55-gallon drums, approximately one-half full each of waste oil, were located near the floor drain in the center of the room. The drums were labeled: (1) paper machine oil, (1) transformer oil, (1) soluble oil, (1) waste oil MNC-2. An area of black staining, apparently from waste oils, approximately 8 feet long and 6 feet wide leads into a floor drain (10). The floor drain leads to the Wastewater Treatment Plant (WWTP). During the site reconnaissance by MEDEP staff in May 2001 this area was used primarily for storage of small items such as automotive parts on shelves. No containers of chemicals or floor drains were observed (56).

2.2.1.7 Hazardous Waste Storage Buildings

The GNP2 hazardous waste buildings (AOC No.9) are located northeast of the WWTP (Figure 2). The hazardous waste buildings consist of two metal 8 foot x 12-foot sheds on concrete pads surrounded by concrete berms. The sheds are used to store hazardous wastes from the GNP2 processes for up to 90 days. Wastes that are stored at the sheds include paint waste, PCB capacitors, and contaminated waste oils. The sheds replace the "Drum Storage" and "Dolby Storage" hazardous waste storage areas, and have been in use since 1988. Both sheds were locked, empty, clean, and free of staining during the site reconnaissance (10).

2.2.1.8 Drum Storage Area

The drum storage area was located northeast of the mill building and was used for storage of drums of hazardous waste and waste oil between 1980 and 1987. A 1989 Board of Environmental Protection Order identified storage of 100 drums of waste oil 55 gallons of

hexane, 365 gallons of flammable liquid, and 330 gallons of waste paint. This area went through closure under the supervision of the MEDEP. Samples of the area were collected in 1989 and results showed levels of fuel oil. Based on these results approximately 400 cubic yards of contaminated soil was removed. Three monitoring wells were installed at this site to determine if volatile organic compounds, petroleum hydrocarbons or semi-volatile organic compounds had entered the groundwater. No measurable levels of contamination were found. A new paper warehouse and adjacent paved areas were built over the drum storage area, which act as a cap (41:p1, 20).

2.2.2 Wastewater Treatment Plant

The WWTP (AOC No.10) is located approximately 1,000 feet southeast of the main mill and associated building (Figure 4). The WWTP consists of an operations building, a primary and secondary clarifiers, and aeration and emergency settling lagoons. The WWTP has been on line since 1974, and handles primarily waste from the pulp operations. Prior to 1974, wastewater was discharged directly into the West Branch Penobscot River (36). GNP is licensed to discharge 33-million-gallons per day (mgd) of wastewater; however the actual amount discharged is approximately 20 mgd. The facility has an National Pollution Discharge Elimination System (NPDES) permit. The effluent is periodically tested for: ph, BOD, hardness, conductivity, TOC, Cl, Cd, Cr, Al, Ca, Pb, Cu, Mn, Zn, Mg, Ag, Sb, Se, Be, Hg, Ni, alkalinity, conductivity, cyanide semi-volatile organic compounds and volatile organic compounds (36). According to GNP2 staff, the separated waste pulp could also contain trace quantities of chemicals which were accidentally mixed into the system through normal processes or the site's floor drain system, which lead to the WWTP. Waste solids from the WWTP is sent to the East Millinocket landfill, the material is not tested prior to shipment. The operations building of the WWTP contains two 500 gallon, steel, aboveground polymer (Percol 757) tanks. Evidence of minor polymer spills were observed on the concrete floor below the tanks (10; 35).

2.2.3 Waste Storage Areas

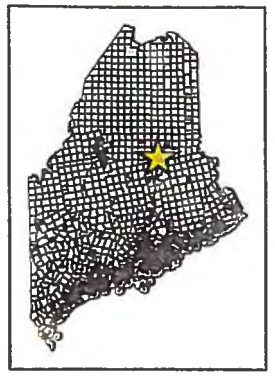
The waste storage areas include the Dolby storage area, the bark pile, the snow dump area and the salvage area (Figure 5).

2.2.3.1 Dolby Storage Area

The Dolby storage area is located at the northwestern edge of the GNP#2 site, east of the Dolby Dam. The area consists of a brick, concrete-floored building (approximately 2,000 square feet), which was used until the late 1980's as a storage area for PCB drums and PCB filled transformers. The building was mostly empty in 2001, some electrical equipment was stored on shelves, and the floor was clean and free of staining. The Dolby Storage area was closed under MEDEP guidance in 1990 (42). PCB contamination was detected inside the building which required clean-up. Remediation included washing all of the walls and the entire floor as well as scrabbling the floor of the 14'x15' bermed storage area down to a ½ inch. Additional samples from this area were collected and concrete was removed until samples showed the area was clean. An area approximately 8'x8' was entirely removed and 4 inches of soil beneath this area

Figure 4: Wastewater Treatment Plant

Great Northern Paper Mill #2
East Millinocket, Maine



Wastewater Treatment Plant Influent Pipe (AOC 12)

Town of East Millinocket Wastewater Treatment Plant (NPDES # ME0100196)

SD 31 / SD32

9

10

Town Discharge

SD33

Mill Discharge

11

11A

Great Northern Paper Wastewater Treatment Plant (AOC 10) (NPDES # ME0000175)

West Branch Penobscot River

12

- Sediment Sample
- Storm Water Outfall
- Treated Outfall
- Contour
- Road
- Rivers
- Mill Structure
- Lagoon
- NWI Wetland

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine DEP using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

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Figure 5: Waste Disposal Areas

Great Northern Paper Mill #2
East Millinocket, Maine

BKSS-01
BKSS-02
BKSS-03

GW-10

Dolby Storage Area

SD28

West Branch Penobscot River

Snow Dump Area

Salvage Area

SS 06

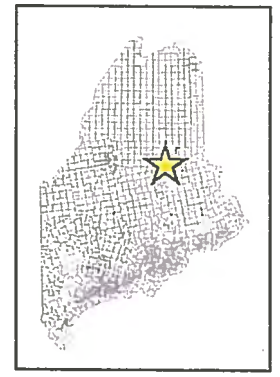
SS 08

SD29

Waste Bark Pile (AOC 6)

EAST MILLINOCKET

T4 R7 WELS



- Soil Sample
- Sediment Sample
- Road
- Stream
- Contour
- Mill Structure
- Lakes & Rivers
- Lagoon
- Waste Area
- NWI Wetland

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine DEP using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

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was also removed. Post removal samples showed PCB levels were below the clean-up standard of 25 ppm. After the removal was complete the concrete floor was reconstructed.

2.2.3.2 Waste Bark Pile

Waste bark from the bark processing operations was stockpiled on a waste bark pile (AOC No. 6), located approximately 6,000 feet northwest of the main mill complex (Figure 4). The bark pile covers an are of approximately 22 acres. Waste bark was sent there from the early 1900's to the 1970's. According to GNP2 staff, the area of the pile was also used in the past for mill trash. Mill trash is now disposed at an off-site landfill. Mr. Akeley also indicated that it was possible that hazardous materials were buried amongst the bark. During the site reconnaissance for the PA+ a few rusted drums and pieces of scrap metal existed along the northwest slope of the pile. A small area of orange leachate was observed in a drainage swale along the northern border of the pile. The orange leachate terminated in a small pool in the swale (10).

In 1992, GNP began mining the bark pile, which is then processed for use as mulch. Samples of the pile are collected and analyzed annually for PCBs, metals, and a variety of other inorganic parameters. Approximately 100,000 tons of bark has been processed to date. GNP plans to remove all of the bark from this area in 3-5 years (60).

2.2.3.3 Snow Dump Area

During the site reconnaissance for this report in May 2001, MEDEP personnel noted an area approximately 1.4 acres in size with miscellaneous debris and snow piles located west of the bark pile. This is the area where snow from snow removal around the mill is dumped. The area had bark, logs some solid waste strewn about. During the sampling event in August 2001, a closer inspection of the area revealed several drums located over an embankment. These drums appeared to be empty.

2.2.3.4 Salvage Area

The salvage area is approximately 1.35 acres located west of the bark pile. This area is used for storage of old equipment and materials such as wood, bricks and pipes. During the sampling event for this report 6 full drums of grease were found in this area (56).

2.3 Site Ownership History

The site is currently owned by Inexcon who purchased the mill from Bowater in 1999. Bowater Inc. purchased the property from Georgia Pacific, Inc. on January 1, 1992. Georgia Pacific had owned the property for two years, beginning in February 1990, when it purchased it from Great Northern Nekoosa Corporation. Great Northern Nekoosa Corporation was formed in 1970 from a merger involving the original owner, Great Northern Paper, Inc., and Nekoosa Edwards Paper Co. (10). Great Northern Paper had owned the property since 1904.

TABLE 1

Site Ownership History
Great Northern Paper Mill #2, East Millinocket

Owner	Date
Inexcon	August 1999
Bowater Inc.	January 1, 1992
Georgia Pacific Corp.	February 1990
Great Northern Nakoosa Corp.	1970
Great Northern Paper Co.	1904
Various owners	Various dates

2.4 Regulatory History

GNP2 has received licenses and orders from the MEDEP for: discharge of wastewater to the WB Penobscot River, air emissions, site location, land spreading sludge and ash, asbestos removal, and solid waste disposal. GNP2 has been regulated under RCRA for hazardous waste as a generator and treatment, storage and disposal facility (TSDF). GNP2 has also reported many spills of oils and hazardous materials to the MEDEP.

2.4.1 Wastewater Discharge License

GNP2 currently holds a wastewater discharge license for 33 million gallons a day from the treatment plant to the West Branch of the Penobscot River (38). The effluent is analyzed daily for pH, suspended solids, BOD, and annually for priority pollutant metals, cyanide, pesticides, PCBs, volatile organic compounds and semi volatile organic compounds (60)

2.4.2 Air Emissions License

In June 1977 the MEDEP issued an air emissions license to GNP2 that regulated SO_2 emissions. A new license was issued on January 13, 1988 to limit pollutant emissions from 3 sources on the facility including: particulate matter SO_2, NOx, Carbon monoxide, and volatile organic compounds. This license has been modified may times since then. Examples of the amendments include: approval for adding a bark boiler stack, approval for burning old telephone poles and railroad ties and limits for carbon monoxide emissions (17).

2.4.3 RCRA

In August 1980 MEDEP issued an interim hazardous waste facility storage license (15). GNP2 submitted a notification of hazardous waste activity in August 1980; EPA acknowledged receipt of a notification of hazardous waste activity in September 1980 (12; 13). The notification identified the Dolby Power Station as an existing storage facility that was established in October 1974 for drums containing PCB waste. In 1980 approximately 5,500 gallons of waste was stored

in this location. The MEDEP amended GNP2's interim hazardous facility license to allow storage of PCBs in August 1983. A 90-day hazardous waste storage permit was then issued (13; 15). An interim license was also issued by the EPA for the Dolby storage area and Drum storage facility, prior to remediation of those sites (10).

Four RCRA inspections of the site have been conducted, 1981, 1987, 1989 and 1991. In 1981 the inspection note deficiencies including no inspection schedule, no "danger keep out" signs and drums containing PCB were leaking. However, the facility was considered in compliance at the time of the inspection because asbestos and PCB were not regulated under RCRA (44:pp1-3). In 1987 EPA and MEDEP conducted another inspection, the following violations were noted: daily inspections were not being conducted at Dolby Dam or Drum Storage area, no "Danger-Unauthorized Personnel Keep Out" signs at the Dolby Dam or Drum Storage areas, no portable fire control equipment at Dolby Dam and Drum Storage facilities, the drum storage area did not have an impervious surface or containment for the containers, a drum of PCB oil at Dolby Dam was not labeled hazardous waste, the contingency plan was incomplete, 2 drums outside of the paint shop contained waste thinner but was not labeled hazardous waste, personnel training records were incomplete, no closure plan on site and manifests were not completed per instruction and were without a designated facility (16; 61). In July 1989, MEDEP and EPA conducted another inspection of the site (18; 19). Violations observed at the time were: failure to maintain a waste analysis plan, failure to maintain job descriptions for those attending annual hazardous waste training, failure to annually update written aid agreement with local authorities and failure to provide local authorities with contingency plan. The last inspection found in the file was conducted by MEDEP in September 1991 (45). A notice of violation was issued in November 1991, listing the following violations: failure to conduct daily inspections at hazardous waste satellite accumulation areas, three units of hazardous waste in the hazardous waste storage area did not have the proper information on the label and the home addresses of the emergency coordinators were not listed in the Contingency Plan (62).

On June 12, 1991, the Board of Environmental Protection terminated the Interim Hazardous Waste license for GNP2.

2.4.4 Asbestos

Great Northern Paper Co. submits an annual notification for asbestos removal to the MEDEP indicating their anticipated removals for the year. They then submit quarterly reports to the MEDEP stating the actual amounts removed and the areas were asbestos was removed. In 2000, GNP2 removed approximately 6,000 square feet and an additional 815 linear feet of asbestos containing material (49).

2.4.5 Ash and Sludge

Available MEDEP files show GNP2 has generated up to approximately 400,000 cubic yards of sludge and 45,000 cubic yards of ash a year from both of their facilities. This has been disposed of either through composting, land spreading at various locations over the years or landfilling at their Dolby Landfill (46). Several MEDEP and LURC orders have been issued since 1989 approving land spreading sludge and ash at GNP owned forest land and privately owned farm land (48).

2.4.6 Solid Waste

GNP owns a landfill facility located north of their East Millinocket mill called the Dolby Landfill. This landfill has been used over the years for disposal of sludge, ash and trash from both the East Millinocket and Millinocket mills. The landfill has been permitted since 1976 when they expanded the Dolby I landfill. Since then this section of the landfill has been closed and two other expansions have occurred. Currently the Dolby site has many monitoring wells installed around it and they are monitored for three times a year for a variety of water quality parameters.

2.4.8 Reported Spills

There have been 59 spills of oil or hazardous materials at the site that GNP2 has reported to the MEDEP Division of Response since 1981. Forty-two of these spills were petroleum products. Other substances released include: acids, chlorine and PCB oil. A list of the spills is located in Appendix D.

3.0 WASTE SOURCES

3.1 Waste Source Description

There are 7 potential sources areas onsite: the mill operations area, the Dolby storage area, the hazardous waste storage buildings, the bark pile, the wastewater treatment plant, the salvage area and the snow dump area.

Table 2 presents all identified structures or areas on the GNP2 property that are potential source areas. Table 2 also includes a brief description of the AOC, the date of startup and closure (if applicable) of the AOC, and their status with regard to the occurrence of a potential for release of hazardous substance from those areas.

There have been five major remediations at the GNP2 site. The Chemi-Groundwood building area was the location of a spill of PCBs. In 1970 approximately 890 gallons of PCB laden fluid was discharged into the soil. Samples collected in 1988 showed PCB levels ranging from non-detect to 5200 mg/kg as well as chlorobenzenes (23). Approximately 6,000 cubic yards of soil were removed from this area.

Two other major PCB spills have occurred in the mill operations area, paper machines No. 5 and 6. Approximately 150 and 600 gallons respectively of PCB laden oil was spilled (22; 24). PCBs and chlorobenzenes were detected in soil and groundwater in these areas. Approximately 5,250 cubic yards of soil were removed from these areas.

Oils and solvents were stored in the drum storage area in the 1980's. Petroleum and VOCs were detected in soils. This area was paved in 1990. The Dolby storage facility floor and soils beneath the floor were contaminated with PCB. The floor and soils were removed in 1990.

TABLE 2

Potential Sources at
Great Northern Paper Mill #2, East Millinocket

Waste Source Area	Area of Concern (AOC)	Potential Sources within the Area	Start- up Closure date	Release Status	Containment	Approximate Size	Potential Contaminants
Mill Operations Area	AOC No. 1	Chemi-groundwood area PCB release	1950 to 1969	Release	Various*	Various*	SVOCs, PCBs, metals, VOCs
	AOC No. 2	No. 5 paper machine PCB Release	1970s to 1990	release			
	AOC No. 3	No. 6 paper machine PCB release	1979 to 1990	Release			
	AOC No. 4	Paine shop building waste storage area	1950 to present	High potential			
	AOC No 5.	Automotive maintenance Bldg.	1970 to present	Low potential of release			
	AOC No 7	Kraft Hydra-Pulper bld. (1) 250 gallon caustic soda tank, (20) 250 gallons sodium hydrosulfite tanks	Early 1900 to present	Low potential			
	AOC No. 8	Machine room building storage for acetic-acid dyes and caustic soda	Early 1900 to present	Low potential			
	AOC No. 11	Sulfite storage tank (1) AST 1,000,000 gallon sulfite tank	1987 to present	Low potential			
Bark Pile	AOC No 6	Waste bark pile, approximately 21 acres	Early 1900 to 1970s	High potential	None	21 acres	SVOCs, PCBs, Metals, VOCs
Wastewater Treatment Plant	AOC No. 10	WWTP building area (2) 500 gallon polymer tanks; (1) 6000 gallon phosphoric acid tank	1974 to present	Low potential	Licensed discharge	33 MGD**	SVOCs, PCBs, Metals, VOCs
	AOC No. 12	WWTP influent pipe contaminated soil from ruptured pipe (fall, 1991)	1974 to present	Release			
Hazardous Waste Storage Buildings	AOC No. 9	Storage of hazardous waste.	1988 to present	Low potential	Lined and bermed	0.01 acres	SVOCs, PCBs, Metals, VOCs
Dolby Storage Area	NA	Storage of PCB wastes under MEDEP Interim License I-25	1974 to 1991	Release	None	0.17 acres	PCBs, VOCs
Salvage Area	NA	Storage of scrap materials	Unknown-present	Low Potential	None	1.35 acres	SVOCs, Metals, VOCs
Snow Dump Area	NA0	Area used to dump snow from around the facility	Unknown to present	Low Potential	None	1.4 acres	SVOCs, Metals, PCBs

*- there are various containments and sized for the AOCs in this area.
**- GNP2's license limit is 33 mgd, however they discharge an average of approximately 20 mgd.

3.2 Waste Source Sampling

Waste source samples have been collected from the site at various times and locations in the late 1980's. In preparation for removal of contaminated soil, GNP #2 conducted subsurface exploration and wipe sampling of the chemi-groundwood area, the No.5 and No.6 paper machine areas, the drum storage area and the Dolby storage areas. A summary of the findings are presented in Table 3 (20; 21; 22; 23; 24).

TABLE 3

Compounds Detected in Soil
Great Northern Paper Mill #2, East Millinocket

Sample Location	Method/Sample Type	Contamination/Range
Drum Storage Area	8 Test Pits 12 300g-Soil Samples	VOC:ND except for 4.9 ug/g 1,1,1 TCA in one sample PCB: ND TPH: Upper 1' - 110-51,000 ug/g Below 1' – ND
Dolby Storage Facility	Swipe Samples (8 total, 100cm2 each) collected July 27, 1988	PCB -1242: 1.3 -4- ug/Swipe PCB -1260: 9.2 - 2700 ug/Swipe
No. 5 Paper Machine Area	Swipe Samples (100cm^2 each, total unk.) collected August 1988 (14) Soil Boring (200) Soil Samples	PBC: 1.2 – 11.1 ug/100cm2 PCB: <5 -13,000 mg/kg
No. 6 Paper Machine Area	Soil Borings Soil Samples	PCB: <5-230,00 mg/kg
Chemi-groundwood area	Soil borings Soil samples	PCB: < 2-4400 ppm

ND = Non-detect mg/kg- milligram per kilogram ppm-parts per million

MEDEP personnel collected soil samples during the SI sampling event in August 2001 (Table 4; Figure 5). Three samples were collected from source areas and one background sample was collected. One sample was collected from the Dolby storage area with a direct push drilling system for volatile organic compounds (VOCs), priority pollutant metals, semi-volatile organic compounds (SVOCs) and PCBs; no contaminants were detected (3; 59). One sample was collected from the snow dump area for priority pollutant metals, SVOCs and PCBs. Only Aroclor 1260 was detected in the PCB analysis at 0.06 milligram per kilogram (mg/kg). The sample from the salvage yard had some low levels of SVOCs. The only compound that was elevated above the background level (i.e. 3 times the background concentration or detected if background was non-detect) was nitrobenzene (3).

TABLE 4

Soil Sample Results MEDEP Collected August 1-2, 2001
Great Northern Paper Mill #2, East Millinocket

Sample ID	**BKSS-01**	**SS-06**	**SS-07**	**SS-08**
Sample Location	Background	Snow Dump	Dolby Storage	Salvage Yard
Sample #	04260 (s) 04259 (p)	004258 (s) 04257 (p)	01304 (s) 05302 (p)	04242 (s) 04241 (p)
Contaminant	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Phenol	J 0.15			
4-Methyl Phenol	J 0.16			J 0.11
Phenanthrene	1.8			0.42
Anthracene	1.1			0.41
Fluoranthene	8.4			1.6
Chrysene	7.3			0.20
Di (2ethylhexylPhalate	0.38			0.36
Pyrene	6.7			0.60
Benzo (A) Anthracene	6.0			0.18
Naphthalene	0.46			
Benzoic Acid	1.7			
2- Methylnaphthalene	J 0.17			
Acenaphthylene	1.7			
Dibenzofuran	J 0.11			
Benzo (B) Fluoranthene	5.8			
Benzo (K) Fluoranthene	3.5			
Benzo (A) Pyrene	5.4			
Indeno (1,2,3-CD) Pyrene	4.7			
Dibenzo (A,H) Anthracene	2.4			
Benzo (G,H,I) Perylene	3.7			
Nitrobenzene				**J 0.11**
Aroclor 1260		**0.06**		

(S)= Semi Volatile sample number (P)= PCB/pesticide sample number
Blank cells indicate the contaminant was non-detect in that sample.
ND # -non-detect the number is the detection limit mg/L-milligrams per liter
Bold #- elevated level (i.e. 3 X the background concentration or detected if background was non-detect).

GNP2 has collected samples from the bark pile since they began reclaiming the material. Samples are analyzed for metals, PCBs and a variety of inorganic parameters such as nitrate, chloride and phosphorus. No PCBs have been detected in the bark pile samples. The results of these samples are presented in Appendix E.

4.0 GROUNDWATER PATHWAY

4.1 Hydrogeology

The native surficial materials covering the GNP2 site are mapped as stream alluvium deposits and ribbed moraine deposits. Stream alluvium deposits are mapped near the central portion of the site, from the central dam south and east along the bank of the West Branch of the Penobscot River. The rest of the mill area and the area around East Millinocket is mapped as a ribbed moraine deposit primarily comprised of a heterogeneous mixture of sand, gravel, and silt (59). No mapped overburden aquifers are present in area of the site (38). The Stone & Webster boring logs indicate fill thickness of two to twelve feet (20; 21; 37).

The GNP2 site is located in an area that has received reconnaissance level bedrock mapping of the Sherman, Mattawamkeag, and Millinocket 15' Quadrangles. According to this information, the site is underlain by a slate member of the Silurian Age Allsbury Formation. The Allsbury Formation is described as a gray slate or phyllite with thin beds of graywacke. Thin limestone beds may also be present. Red and green slates are common in the eastern part of the slate member belt.

The original lithology of the bedrock has been changed by significant metamorphic alterations. The original porosity of the formation has been almost eliminated by the metamorphic alterations. Metamorphism has occurred as a result of several tectonic events that have folded, faulted, and intruded the formation since the Silurian age when the rocks were formed. Fractures, joints, and other openings in the crystalline rocks have occurred by processes related to the tectonic and metamorphic processes. The openings in the rock, collectively referred to as fractures, have generated a secondary porosity that facilitates groundwater flow in the bedrock. The flow of groundwater in the bedrock aquifer is dependant on the site specific fracture patterns and head gradients. In Maine, the fractured crystalline bedrock aquifers have relatively low bulk storage capacities. In many cases the overburden material provides the bulk storage for the bedrock aquifer. This is particularly important to contaminant migration and contaminant source investigations (59).

The two dams present at the facility not only impact surface water flow in the West Branch of the Penobscot, but they also appear to control groundwater flow near the facility. The magnitude of the control on the groundwater flow is not understood and the current monitoring well network is not adequate to characterize the impact. According to the water table elevation map provided by Stone and Webster (S&W) the pool elevation above the dam (on the north side) is 287.05. The tailwater elevation on the south side of the dam is 261.06 feet. The groundwater gradient is not expected to be as large as the gradient between the pool elevation and the tailwater elevation.

There have been many monitoring wells located around the site as from the investigations that have been conducted at the site. Four monitoring wells and three piezometers were installed in the bark pile in 1991 (10). MEDEP staff could not find any of these during the SI sampling event. Several monitoring wells were installed in the drum storage area in the late 1980's. These were removed subsequent to the remediation of the area. Currently there are seven sets of

wells located around the Chemi-groundwood area and the No. 5 and 6 paper machine areas. These are sampled quarterly by contractors for Georgia Pacific as part of the Post Remediation Groundwater Monitoring Plan.

Based on the water level data, there does appear to be a vertical and southern component of flow that is not depicted on the water table elevation map. It appears that these flow components could be greater in magnitude than the westerly component generally presented on the groundwater flow map (Figure 6).

4.2 Groundwater Pathway Targets

The population residing within four miles of the site obtain drinking water from groundwater wells, both public and private sources. The towns of East Millinocket, Millinocket, Medway, TAR7 WELS and Grindstone are located within four miles of GNP2. The East Millinocket Water District supplies a portion of the population of East Millinocket and Medway with public water. The water supply for the Town of East Millinocket is from wells located within the one mile distance ring from the site; these wells serve approximately 1,753 people (27). There are no private drinking water wells within 0.5 miles of the site. The closest private domestic well to the GNP2 facility is within the ½ to one mile radius from the site (27). Approximately 2,156 people are served by private wells within four miles of the site (27). Table 5 shows the approximate population served by groundwater sources within four miles of the property as calculated into radial distance rings from the site (4-9; 27).

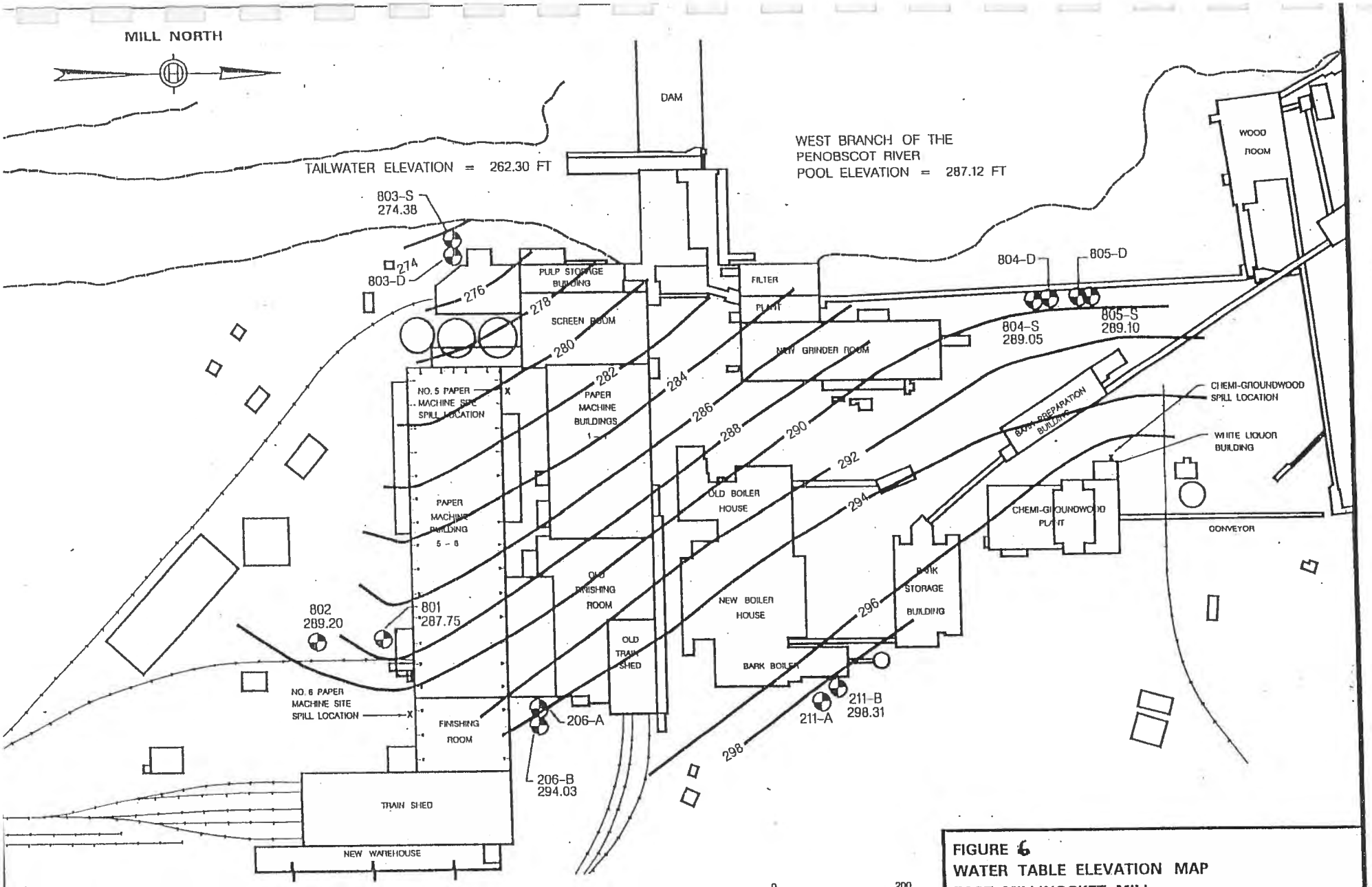
TABLE 5

Populations Served by Groundwater Sources Within 4 Miles of Great Northern Paper Mill #2, East Millinocket

Radius	Public Water Supplies	Private Water Supplies	Total
0-0.25	0	0	0
0.25-0.5	0	0	0
0.5-1	1753	13	1766
1-2	0	435	435
2-3	0	531	531
3-4	0	1177	1177
Totals	**1753**	**2156**	**3909**

4.3 Groundwater Pathway Sampling and Analysis

In 1989 as part of a Board of Environmental Protection Ordered investigation groundwater samples were collected in the drum storage area. Three monitoring wells were installed at this site to determine if volatile organic compounds, petroleum hydrocarbons or SVOCs had entered the groundwater. No measurable levels of contamination were found. MEDEP staff could not find these wells during the site reconnaissance in May 2001.



BASED ON MARCH 2000 WATER LEVEL MEASUREMENTS
ALL ELEVATIONS ARE REFERENCED TO USGS DATUM

FIGURE 6
WATER TABLE ELEVATION MAP
EAST MILLINOCKET MILL
STONE & WEBSTER ENGINEERING CORPORATION

Although there were monitoring wells and piezometers installed in the bark pile area MEDEP staff could not locate them during the onsite sampling event in 2001. Additionally, no information was found in the MEDEP files regarding sampling and analysis from these wells.

In 1991 as part of the Consent Agreement between Georgia Pacific (the owner of the site at the time) and EPA the "Post Remediation Groundwater Monitoring Plan" was implemented. This plan called for quarterly monitoring of 12 monitoring wells around the Chemi-groundwood, No. 5 and 6 paper machine areas for PCBs and chlorobenzenes. Results available in the MEDEP files begin in 1994. These results have not shown any levels of PCBs detected. The PA+ report indicates that a sample from a monitoring well in the No. 5 paper machine area had PCBs at 1.6 ug/l.

Low levels of chlorobenzenes have shown up off and on over the years in monitoring well MW-804-S. Table 6 shows the concentrations of chlorobenzenes reported by Georgia Pacific in MW-804-S over the past two years.

TABLE 6

Chlorobenzene Concentrations in MW-804-S
Great Northern Paper Mill #2, East Millinocket

Date	3/00	6/00	9/00	12/00	3/01	6/01	10/01
Contaminant	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,4-trichlorobenzene	ND	ND	1.2	3.6	3.4/3.5	ND	4.6/3.4
1,3,5-trichlorobenzene	3.4/3.7	1.3/1.4	ND	ND	1.1	ND	ND

Cells with two concentrations listed indicate the results of the sample and the replicate sample.

As part of this investigation MEDEP personnel collected groundwater samples from the existing monitoring wells onsite (Figure 3). These samples were analyzed at the State of Maine Health and Environmental Testing Lab (HETL) for SVOCs, VOCs and priority pollutant metals. Two additional groundwater samples were collected from microwells that were installed with a direct push drill rig at this same time. One microwell was installed in the bark pile (GW-9) and one near the Dolby storage building (GW-10). Monitoring wells 211-A and 211-B are considered upgradient background locations and are used for comparison for the groundwater samples. Positive results are presented in Table 7.

Elevated levels of contaminants were detected in monitoring wells. Cadmium, chromium, lead, nickel and silver were detected at elevated levels in the water from the bark pile. Arsenic, lead, MTBE and several polyaromatic hydrocarbons were detected at elevated levels in the groundwater sample from near the Dolby storage area. Arsenic and benzo(a)pyrene levels exceeded the MEGs; benzo(a)pyrene also exeeded the MCL.

Arsenic, cadmium, lead, silver and MTBE were detected at elevated levels (although not above a drinking water standard) in several monitoring wells around the site. Five chlorbenzenes were detected at an elevated level in MW-804-S. 1,3-dichlorobenzene, 1,4 dichlorbenzene,

TABLE 7

MEDEP Groundwater Sample Results
August 1 & 2, 2001
Great Northern Paper Mill #2, East Millinocket

Location	GW 9	GW 10	GW 12	GW 13	GW 14	GW 15	GW16	GW 17	GW 18	GW 19	GW 20	GW 21	GW 22	GW 23	GW 36	MEG's	MCL's
Monitoring Well #			MW- 211A	MW- 211B	MW- 206A	MW-206B	MW-801	MW-802	MW-803D	MW-803S	MW-804S	MW-804D	MW-805S	MW-805D	MW-804D		
Sample #	04984 (s) 10281 (m) 03047 (v)	04985 (s) 10291 (m) 03049 (v)	03734 (s) 10208 (m) 03500 (v)	03497 (s) 10206 (m) 03737 (v)	05304 (s) 10203 (m) 03402 (v)	03496(s) 10202 (m) 03496 (v)	03494 (s) 10205 (m) 03736 (v)	03503 (s) 10196 (ms) 03419 (v)	03502 (s) 10194 (m) 03739 (v)	03498 (s) 10195 (m) 03423 (v)	05303 (s) 10197 (m) 03744 (v)	03495 (s) 10201 (m) 03481 (v)	03504 (s) 10198 (m) 03747 (v)	03499 (s) 10192 (m) 03738 (v)	03501 (s) 101193 (m) 03750 (v)	State Standard	Federal Standard
Contaminant	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Arsenic		**0.016**					**0.003**				**0.004**	**0.004**	**0.015**	**0.008**	**0.004**	0.01	*0.05*
Beryllium																	
Cadmium	**0.0012**										**0.0005**		**0.0011**			0.0035	*0.01*
Chromium	**0.001**		0.21		0.083	0.001	0.003		0.11	0.17	0.004	0.002	0.014	0.003	0.003	0.1	*0.1*
Copper			0.004													1.3	*1.3*
Lead	**0.008**	**0.003**			**0.003**	**0.005**	**0.003**		**0.003**		**0.003**	**0.003**	**0.005**	**0.003**	**0.003**	0.01	*0.015*
Mercury						**0.0003**										0.002	*0.002*
Nickel	**0.020**		0.31		0.12		0.021		**1.4**	0.29	0.019	0.006	0.018	0.005	0.006	0.14	None
Antimony																0.003	*0.006*
Selenium																0.035	*0.05*
Silver	**0.0016**					**0.0005**					**0.0006**					0.035	None
Thallium																0.0005	*0.002*
Zinc	**J0.026**	**J0.005**				**J 0.006**			**J0.007**		**J0.008**		**J0.012**		**J0.005**	2.0	None
Vanadium																None	None
1,3-Dichlorobenezene (v/s)											**0.0038/ 0.015**					0.06	None
1,4-Dichlorobenezene (v/s)											**0.0049/ 0.019**					0.021	*0.075*
1,2-Dichlorobenezene (v/s)											**0.0016/ *0.0066***					0.004	*0.005*
124, Trichlorobenzene (v/s)											**0.0022/ 0.0067**					0.07	*0.07*
MTBE		**0.0030**									**0.0072**	**0.0023**	**0.0040**		**0.0030**	0.035	*0.035*
Monochlorobenzene											**0.019**					0.14	*0.1*
Chloroethane													**0.0017**			None	None
Naphthalene		**0.0026**														0.014	None
Phenanthrene		**0.0024**														None	None
Fluoranthene		**0.0015**														None	None
Fluorene		**0.0016**														None	None
2-Methylnaphthalene		**0.0023**														None	None
Benzo(a)Pyrene		*0.0010*														0.00005	*0.0002*

GW 13 was used as the background sample location Sample Locations GW 21 & GW 36 are duplicates Blank cells indicate the contaminant was non-detect in that sample. mg/L-milligrams per liter
(V)- Volatile sample # (S)- Semi Volatile sample results (P)- PCB/pesticide sample results (m)-metals sample results
Bold results indicate that the contaminant was greater than 3x the background level or detected if background was non-detect.
MEG- Maximum Exposure Guidelines, the State of Maine drinking water standard.
MCL- Maximum Contaminant Limit, the Federal drinking water standard.
Italic results indicate that the contaminant exceeded the MCL.
Underlined results indicate the result exceeded the MEG.

1,2-dichlorobenzene and 1,2,4-trichlorobenzene were detected in both the VOC and SVOC analysis; the SVOC results were higher than the VOC results. 1,2,4-trichlorbenzene level, in the SVOC analysis, was above the MEG and MCL.

4.4 Groundwater Pathway Conclusions

Approximately 1,753 people residing within four miles of the site obtain drinking water from groundwater sources. The closest drinking water well is located approximately 0.5 miles upgradient of the site. Onsite groundwater is contaminated with chlorobenzenes at one monitoring well with 66.3 ppb total chlorobenzenes detected in August 2001.

5.0 SURFACE WATER PATHWAY

5.1 Hydrology

The topography of the GNP2 site slopes irregularly due to numerous cut and fill events. During the early 1900s to 1950 coal ash was used as fill around the mill areas (10). This practice was discontinued when coal furnaces were no longer used. The general trend is a downward slope southwestward, toward the West Branch Penobscot River from Route 11/157, of 60-feet in approximately one-quarter mile (approximately 5 percent) (4; 5). Probable points of entry (PPEs) to the surface water pathway exist both from overland flow and direct discharges.

The 15 mile surface water target distance limit starts at the Dolby Dam (PPE #1). This is the most upstream PPE that receives stormwater runoff from the area. The small stream next to the bark pile also acts as a potential point of entry from the site (PPE #4) (4). The West Branch Penobscot River joins the East Branch Penobscot River 1½ mile southeast of outfall #13 (PPE #15) and becomes the Penobscot River. The Penobscot River flows southeast through the towns of Medway, Molunkas, Woodville and Mattawamkeag. The surface water pathway ends just over the town line in Winn (Table 8; Figure 7).

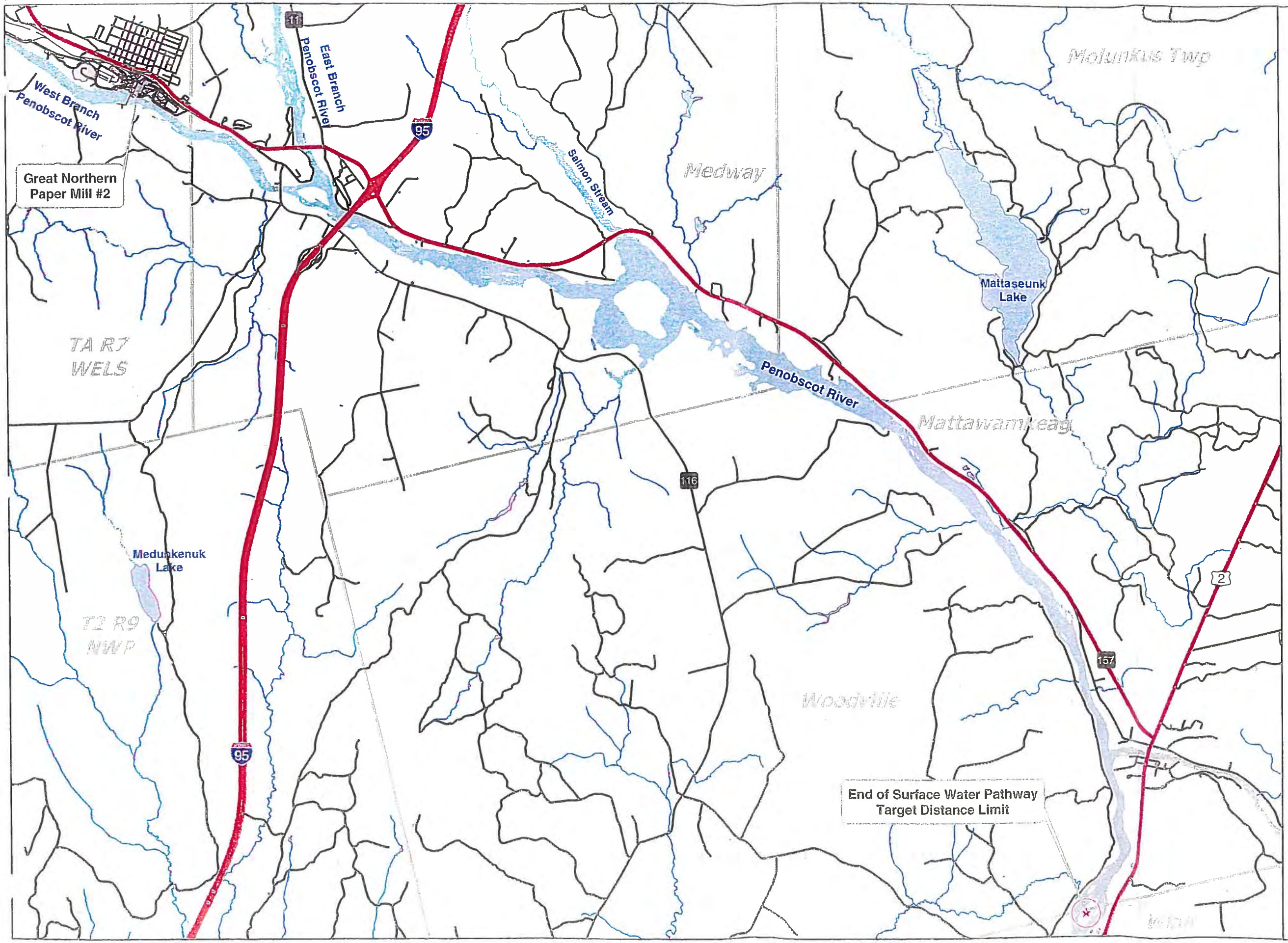
TABLE 8

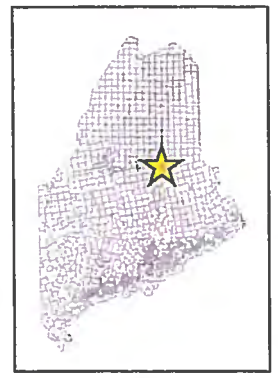
Surface Water Pathway
Great Northern Paper Mill #2, East Millinocket

Water Body	Distance
West Branch Penobscot River at overland flow at Dolby Dam (PPE #1 the most upstream PPE)	0
Outfall #13 (PPE #15, the most downstream PPE) enters the WB Penobscot River.	0
WB Penobscot River joins the East Branch of the Penobscot River	1.5
Salmon Stream enters the Penobscot River	6
Penobscot River in Winn	15

Figure 7: Surface Water Pathway

Great Northern Paper Mill #2
East Millinocket, Maine





- Road
- Stream
- Mill Structure
- Lakes & Rivers
- Lagoon
- Waste Area
- Town Boundary

Data Sources: Background data is a USGS 7.5' Quad sheet. Accuracy +\- 40 ft.

Mill Structures and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas collected by Maine DEPusing Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\-

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

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N W S

0 0.5 1 2 M

Stormwater runoff flows into the West Branch Penobscot River from 17 permitted outfalls and the WWTP which discharges approximately 20 mgd to the WB Penobscot River. Table 9 lists the outfalls and describes the locations on the site (Figure 7).

TABLE 9

Stormwater Outfalls from
Great Northern Paper Mill #2, East Millinocket

Storm Water and NPDES Outfalls
WB Penobscot River at **Outfall 4** (PPE #2), the drainage area includes an active construction wood waste and fire drill burn pit.
WB Penobscot River at **Outfall 5** (PPE #3), this includes a natural brook (PPE #4) that receives run-off from the bark pile as well as a paved access road.
WB Penobscot River at **Outfall 6** (PPE #5), this receives run-off from the woodyard and the bark pile
WB Penobscot River at **Outfall 7** (PPE #6, this receives run-of from the woodyard which flows to a sedimentation pond before discharge to the river.
WB Penobscot River at **Outfall 8** (PPE #7), this use to receive run-off from the mill area where wood is sorted by the conveyor. This is no longer an active outfall. A sedimentation pond has been installed an the stormwater is directed to the WWTP.
WB Penobscot River at **Outfall 8A** (PPE #8), this use to receives run-off from the conveyor area. The area has been redesigned and water flows to the WWTP.
WB Penobscot River at **Outfall 002A, 005A, 006A, 007A** (PPE #9), this receives discharges from non-contact cooling water at the steam plant's # 2 condenser, north filter shower in the filtration plant, north filter floor drain locate din the filter plant and the trash screen shower water located in the filter plant.
WB Penobscot River at **Outfall 9** (PPE #10), this receives stormwater from the Town of East Millinocket, a vegetated bank, paved company roadways, rail spurs, vegetative ditch, unvegetated construction set-up area, two maintenance garages, two warehouses, the former drum storage area and the PCB spill areas.
WB Penobscot River at WWTP **Outfall 001A** (PPE #11)
WB Penobscot River at **Outfall 10** (PPE #12), the drainage area includes the paved access road to the WWTP and the construction laydown and storage area.
WB Penobscot River at **Outfall 11** (PPE #13), a concrete pad where dewatered sludge is stored prior to transport to the Dolby landfill.
WB Penobscot River at **Outfall 11A** (PPE #14), a concrete pad where dewatered sludge is stored prior to transport to the Dolby landfill.
WB Penobscot River at **Outfall 12** (PPE #15) , near the WWTP.
WB Penobscot River at **Outfall 13** (PPE #16) (Most downstream PPE) No mill activities take place in the area of this stormwater outfall.

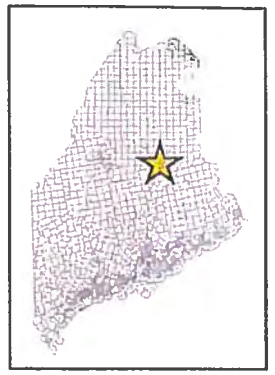
The flow rate in the WB Penobscot River in East Millinocket is 2,700 cubic feet per second (cfs) and 4,200 cfs in the Penobscot River at Mattawamkeag (54; 11).

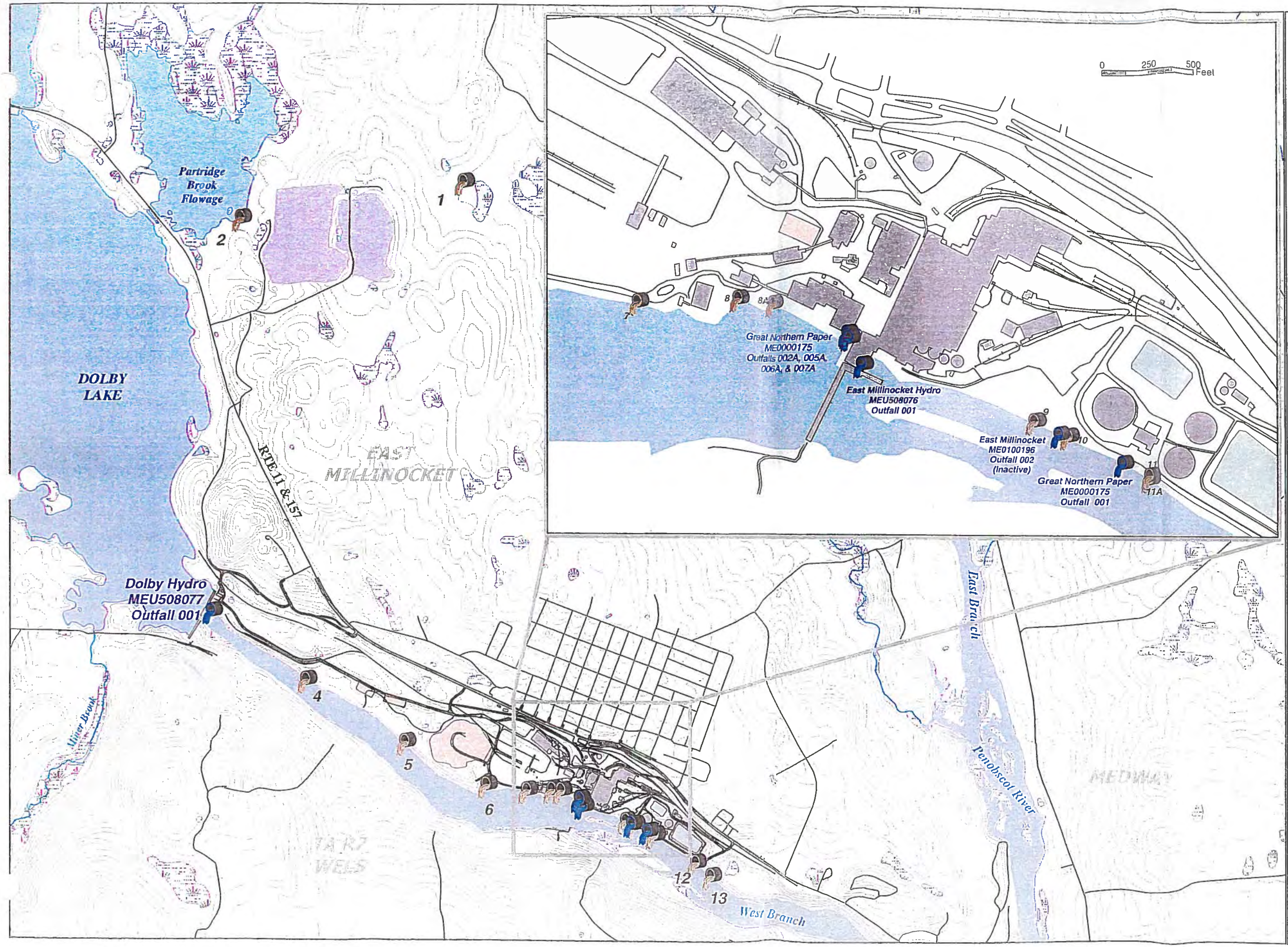
5.2 Surface Water Pathway Targets

The West Branch Penobscot River is identified as a local fishery resource, and is used for hydropower and recreational activities (28). The area in proximity to the site contains bald eagles a State listed endangered species (30). The Orono Sedge, a Federal candidate species, occurs along the banks of the West Branch and mainstream Penobscot River, within four miles of the site (29). There are approximately 8.8 miles of wetlands along the surface water pathway, 0.4 miles in the WB Penobscot River and 8.4 in the Penobscot River (50).

Figure 8: Storm Water Discharges & NPDES Outfalls

Great Northern Paper Mill #2
East Millinocket, Maine





- Storm Water Outfall
- NPDES Outfall
- Road
- Stream
- Contour
- Mill Structure
- Lakes & Rivers
- Lagoon
- Waste Area
- NWI Wetland
- Dolby Landfills

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine DEP using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

TO BE USED FOR REFERENCE PURPOSES ONLY

N W E S

0 1,000 2,000 4,000 Feet

The majority of the site is listed as outside of the 500-year flood zone (zone C). A 500 to 1000 foot wide area of the site along Spencer Brook in the northwestern part of the site is identified as within the 100-year flood zone (35).

5.3 Surface Water Pathway Sampling and Analysis

MEDEP personnel collected 8 sediment samples from the WB Penobscot River and 3 background sediment samples from Dolby Pond in August 2001 (Figure 8). Samples were analyzed for VOCs, SVOCs, PCBs. PCBs were detected in sample locations SD-29 and SD-30. Up to twenty SVOCs were detected in sediments downstream of the site. Table 10 shows the results of these analysis; Appendix G is complete laboratory analysis sheets.

Sample locations BKG-25, SD-22 and SD-34 were also sampled for dioxins; thirteen dioxin compounds were detected at an elevated level in these samples. See Table 11 for a complete list of these results. Samples BKG-25, SD-31 and SD-32 were sampled for PCB congeners; no compounds were detected above the background level (Appendix H).

5.4 Surface Water Pathway Conclusions

There are 14 probable points of entry from direct discharges and surface water outfalls at the Great Northern Paper Mill #2 site. Two are licensed NPDES outfalls, the largest from the wastewater treatment plant, which is licensed to discharge 33 million gallons a day, the remaining 12 outfalls are storm water discharges. There are many sensitive environments in the surface water pathway including: approximately 8.8 miles of wetlands, fisheries, and 2 State listed sensitive environments. Sediment samples collected by the MEDEP in August 2001 showed elevated levels of semivolatile organic compounds, PCBs and dioxins. There are no drinking water intakes along the surface water pathway within the target distance limit from the site.

6.0 SOIL and AIR PATHWAYS

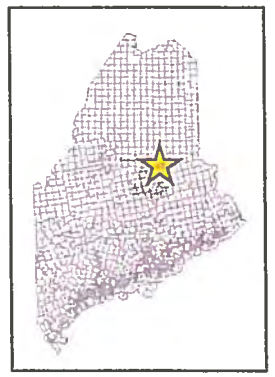
6.1 Physical Conditions

GNP2 is located geographically in north-central Maine in the Town of East Millinocket, Penobscot County, Maine. The site is situated in a mixed residential, commercial and industrial area. The commercial zone along Route 11/157 and approximately 90 percent of the population of East Millinocket are within one-half mile of the site (4; 5; 27).

GNP #2 is an active paper and wood pulp processing plant that has been in operation since 1907 (Figure 2). There are 2 entrances to the site. The main entrance is located in the north central portion of the site off Main Street approximately 2 miles east of the Rt. 95 exit. The entrance is staffed by mill security who monitor all vehicles and people entering the site. The border between the site and Maine Street is fenced south of the main gate. Another entrance is located in the north west area of the site and is used for trucks delivering logs to the mill.

Figure 9: Sediment Sample Locations

Great Northern Paper Mill #2
East Millinocket, Maine



BKSD-25
BKSD-26
BKSD-27
Partridge Brook Flowage
DOLBY LAKE
BKSS-01
BKSS-02
BKSS-03
SD28
GW-10
SS 06
SS 08
SD29
SD-30
SD 31
SD32
SD33
SD34
EAST MILLINOCKET
MEDWAY
Rathbway Brook
RTE 11
RTE 11 & 157
East Branch
Penobscot River
West Branch Penobscot R.
Ulmer Brook
I - 95

Soil Sample
Sediment Sample
Road
Stream
Contour
Mill Structure
Lakes & River
Lagoon
Waste Area
NWI Wetland
Dolby Landfills

Data Sources: Background data is from the Maine Office of GIS. Accuracy +\- 40 ft.

Mill Structures, mill roads, and lagoons digitized from CAD file produced by Plisga & Day Land Surveyors, Bangor, Maine, Project # 91354, Dec. 12, 1991.

Waste areas and well locations collected by Maine DE using Trmble Pro-XR GPS unit on August 1, 2001. Accuracy +\- 3 ft.

Map prepared by: John P. Lynam
Maine DEP GIS Unit, Nov. 2001.

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N
W E
S

0 0.25 0.5 1 Mile

TABLE 10

MEDEP Sediment Sample Results

August 1 & 2, 2001

Great Northern Paper Mill #2, East Millinocket

Location	BKSD-25	BKSD-26	BKSD-27	SD-28	SD-29	SD-30	SD-31	SD-32	SD-33	SD-34
Sample #	04239 (p) 04255 (s) 10222(m)	10224(m)		04235 (p) 04215 (s) 04213 (v) 10260(m)	04216 (p) 04217 (s) 04203 (v) 10258(m)	04238 (p) 1300 (s) 04199 (v) 10259(m)	04229 (p) 04228 (s) 04205 (v) 10226(m)	04222 (p) 04226 (s) 04206 (v) 01718(m)	04214 (v) 04225 (s)- 01719(m)	04237 (s) 04204 (v) 10257(m)
Contaminant	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Arsenic		30.7								
Chromium										
Copper										
Lead	38	24.9		22.7	25.3	45.1	24.8	27.2	20.1	25.2
Mercury	14.3									
Zinc			68.9		111.5	155		97.9	64.2	
Acetone		N/A	N/A		**0.048**					
Fluoranthene		N/A	N/A			**1.6**			**12**	**J0.15**
Chrysene		N/A	N/A			**0.77**			**6.7**	**J0.12**
Benzo (B) Fluoranthene		N/A	N/A			**0.79**			**5.0**	**J0.11**
Benzo (A) Anthracene		N/A	N/A			**0.47**			**5.6**	
Benzo (K) Fluroanthene		N/A	N/A			**0.50**			**3.5**	
Benzo (A) Pyrene		N/A	N/A			**0.61**			**5.0**	
Phenanthrene		N/A	N/A			**0.53**			**11**	
4-Methyl Phenol		N/A	N/A			**J0.22**			**0.56**	
Naphthalene		N/A	N/A						**0.88**	
2 Methylnaphthalene		N/A	N/A						**0.53**	
Acenaphthylene		N/A	N/A						**J0.14**	
Acenaphthene		N/A	N/A						**2.6**	
Dibenzofuran		N/A	N/A						**1.6**	
Fluorene		N/A	N/A						**2.6**	
Anthracene		N/A	N/A			**J0.14**			**3.8**	
Fluoranthene		N/A	N/A			**1.6**			**12.**	
Pyrene		N/A	N/A			**0.71**			**6.3**	
Indeno (1,2,3-CD) Pyrene		N/A	N/A						**3.4**	
Dibenzo (A,H) Anthracene		N/A	N/A						**1.7**	
Benzo (G,H,I) Perylene		N/A	N/A						**2.8**	
Aroclor 1260		N/A	N/A		**0.06**	**0.18**				

Blank cells indicate the contaminant was non-detect in that sample. ND # -non-detect the number is the detection limit mg/L-milligrams per liter

Bold numbers are elevated concentrations (i.e. greater than three times the background concentration or detected if the background was non-detect)

(V)- Volatile sample # (S)- Semi Volatile sample results (P)- PCB/pesticide sample results (m)-metals sample results

TABLE 11

MEDEP Dioxin and PCB Congener Results
August 1, 2001
Great Northern Paper Mill #2, East Millinocket

Location	BKSD-25	SD-31	SD-32	SD-33	SD-34
Sample #	01E-DOR-4243 01E-DOR-4247	01E-DOR-4219	01E-DOR-4220	01E-DOR-4230	01E-DOR-4218
Contaminant	ppt	ppt	ppt	ppt	ppt
Hexa PCB #156	4.0 J	ND	ND	ND	ND
Penta PCB #118	ND	10.6 J	8.1 J	ND	ND
Hepta PCB #180	ND	21.6	23.3	ND	ND
Hepta PCB #170	ND	ND	11.3	ND	ND
123678-HxCDD	ND	ND	ND	**3.2 J**	**4.4 J**
1234678-HpCDD	ND	ND	ND	**70.2**	**80.7**
OCDD	ND	ND	ND	**1100**	**667**
2378-TCDF	ND	ND	ND	**0.94 J**	ND
1234678-HpCDF	ND	ND	ND	**25.6**	**38.1**
1234789-HpCDF	ND	ND	ND	**2.9 J**	**2.1 J**
OCDF	ND	ND	ND	ND	**86.8**
Total TCDD	ND	ND	ND	**2.3**	ND
Total HxCDD	0.82	ND	ND	**14.7**	**28.3**
Total HpCDD	ND	ND	ND	**127**	**167**
Total TCDF	ND	ND	ND	**3.5**	ND
Total PeCDF	ND	ND	ND	**4.3**	**6.7**
Total HxCDF	3.2	ND	ND	**28.0**	**35.7**
Total HpCDF	4.1	ND	ND	**68.5**	**84.6**

ND- non-detect
J approximate
ppt- parts per trillion

For this report the site is divided into three areas to facilitate discussion: the wastewater treatment plant (WWTP) area, the Mill operations area and the waste storage areas (Figures 3-5). During the Preliminary Assessment Plus (PA+) investigation 12 areas of concern (AOCs) were identified these are shown on the area figures and presented in detail in Appendix A.

The mill operations area is comprised of the mill building, machine room building, sulfite storage tank, No. 5 paper machine, No. 6 paper machine, steam plant, chemi-groundwood area, paint shop building, automotive maintenance building, hazardous waste storage buildings and the drum storage area (Figure 3). A variety of fuel and chemical storage tanks and containment structures exist on the GNP2 site.

The WWTP (AOC No.10) is located approximately 1,000 feet southeast of the main mill and associated building (Figure 4). The WWTP consists of an operations building, a primary and secondary classifier, and aeration and emergency settling lagoons. The WWTP has been on line since 1974, and handles primarily waste from the pulp operations.

The waste storage areas include the Dolby storage area, the bark pile, the snow dump area and the salvage area. The Dolby storage area is located at the northwestern edge of the GNP#2 site, east of the Dolby Dam. The area consists of a brick, concrete-floored building (approximately 2,000 square feet), which was used until the late 1980's as a storage area for PCB drums and PCB filled transformers. Waste bark from the bark processing operations was stockpiled on a waste bark pile (AOC No. 6), located approximately 6,000 feet northwest of the main mill complex (Figure 4). The bark pile covers an area of approximately 22 acres. During the site reconnaissance for this report in May 2001, MEDEP personnel noted an area, approximately 1.4 acres in size, with miscellaneous debris and snow piles located west of the bark pile. This is the area were snow from snow removal around the mill is dumped. The area had bark, logs and some solid waste strewn about. The salvage area is approximately 1.35 acres located west of the bark pile. This area is used for storage of old equipment and materials such as wood, bricks and pipes.

6.2 Soil and Air Pathway Targets

Approximately 536 people were employed at the mill as of January 1, 2001. No schools or day-care facilities are located onsite (10). Table 12 lists the approximate population within four miles of the property as calculated into radial distance range from the property (26; 27).

There are no terrestrial sensitive environments located on the GNP2 property. One terrestrial sensitive environment with State significance, the Orono Sedge, is located within four mile of the site (29). There are also hundreds of acres of wetlands within four miles of the site (31-34).

TABLE 12

Population within 4 Miles of
Great Northern Paper Mill #2, East Millinocket

Radial Distance (miles)	Approximate Population
0.00 – 0.25	577
0.25 – 0.50	651
0.50 – 1.00	530
1.00 – 2.00	446
2.00 – 3.00	531
3.00 – 4.00	1177
TOTAL	**3912**

6.3 Soil and Air Pathway Sampling and Analysis

Soil sampling and analysis is discussed in section 3.2 above. PCBs, chlorobenzenes, 111 TCA, and petroleum compounds have been detected in soil samples onsite. Other than routine air monitoring required by GNP2's license no air samples have been collected from the site.

6.4 Soil and Air Pathway Conclusions

There were approximately 536 people working at the GNP2 site in 2001 and 3912 people living within 4 miles of the site. There are no sensitive terrestrial environments located on the GNP2 property. There is 1 State listed terrestrial sensitive environment within four miles of the site as well as hundreds of acres of wetlands. Soil samples collected from the site in August 2001, showed elevated levels of Aroclor 1260 (a PCB) in the snow dump area and nitrobenzene in the salvage area.

7.0 SUMMARY

The Great Northern Paper Mill #2 (GNP #2) site is located on Main Street (Route 11/157) in East Millinocket, Maine. The site is approximately 500 acres. There are three areas of the site with potential sources of hazardous substances: the mill operations area, the waste disposal areas and the wastewater treatment plant. The bark pile coves a 22 acre area. The other waste disposal areas include the Dolby storage area, the salvage area and the snow dump area.

GNP2 operated under interim license #1-022 as an interim hazardous waste treatment, storage and disposal facility since August 27, 1980. The interim license was closed in late 1990 after the closure of the Dolby and drum storage areas. GNP2 currently operates under RCRA as a small quantity generator. Three major PCB spills were cleaned-up at the site under the direction of EPA.

The Maine DEP and file information indicated notices of violation. Most of these involved inadequacies in the required documentation, such as the contingency plan, waste analysis plan, personnel training plan and closure plan. The files indicated that GNP #2 has been responsive to these notices.

Approximately 1,753 people residing within four miles of the site obtain drinking water from groundwater sources. The closest drinking water well is located approximately 0.5 miles upgradient of the site. There are 12 onsite monitoring wells that are monitored quarterly for PCBs and chlorobenzenes. Onsite groundwater is contaminated with chlorobenzenes at one monitoring well; 66.3 ppb total chlorobenzenes was detected in August 2001.

There are 14 surface water outfalls from the Great Northern Paper Mill #2 site. Two of these are licensed NPDES discharges, the largest outfall is from the wastewater treatment plant that is licensed to discharge 33 million gallons a day. The remaining 12 outfalls are storm water discharges. There are many sensitive environments in the surface water pathway including: approximately 8.8 miles of wetlands, fisheries, and 2 State listed sensitive environments. Sediment samples collected by the MEDEP in August 2001 showed elevated levels of semivolatile organic compounds, PCBs and dioxins. There are no drinking water intakes along the surface water pathway within the target distance limit from the site.

There were approximately 536 people working at the GNP2 site in 2001 and 3912 people living within 4 miles of the site. There are no sensitive terrestrial environments located on the GNP2 property. There is 1 State listed terrestrial sensitive environment within four miles of the site as well as hundreds of acres of wetlands. Soil samples collected from the site in August 2001, showed elevated levels of Aroclor 1260 (a PCB) in the snow dump area and nitrobenzene in the salvage area.

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APPENDIX A

AREA OF CONCERN INVENTORY

From the Preliminary Assessment Plus Report, August 1992

AOC DESCRIPTION OUTLINE

AOC No.:	1
AOC Name:	Chemi-groundwood Building PCB Spill
AOC Status:	Release (10; 23)
AOC Description:	A leaking transformer on the outside south wall of the Chemi-groundwood building caused areas of PCB-oil into soils (10).
AOC Start-Up Date:	Building was opened in early 1950s. Exact start time of PCB release is not known (10).
AOC Closure Date:	Usage of building discontinued in 1969. PCB remediation occurred I 1989 (10).
Waste Managed at AOC:	None
Release Controls:	Remediation, involving removal, of approximately 6,000 cubic yards, of contaminated soils, occurred in 1989. Surface has been paved (10).
Release History:	Analytical results of soil samples showed PCB concentrations ranging from < 2 – 6000 parts per million (23).

AOC DESCRIPTION OUTLINE

AOC No.:	2
AOC Name:	Number 5 Paper Machine PCB Site
AOC Status:	Release (10; 24)
AOC Description:	Two overpressured transformers, on the outside of the Number 5 Paper Machine Building, ruptured and spill transformer oil in a 60 feet x 30 feet area, approximately 3-5 ft deep (ARCS/Region I 1992).
AOC Start-Up Date:	Building was erected in early 1900s. PCB release occurred in the late 1970s (10).
AOC Closure Date:	Building is still in use. Remediation of contaminated soils completed in 1990 (10).
Release Controls:	Excavation of PCB contaminated soil began in 1989. Approximately 5,250 cubic yards of soil were removed from the Number 5 and Number 6 paper machine areas (combined). Surface has been paved (10).
Release History:	Analytical results from soil samples in 1988 ranged from <5- 30,000 mg/Kg of PCB. Maximum PCB concentration in groundwater was 1.6 ug/L (22).

AOC DESCRIPTION OUTLINE

AOC No:	3
AOC Name:	Number 6 Paper Machine PCB Site
AOC Status:	Release
AOC Description:	Construction equipment hit a transformer outside of the Number 6 Paper Machine Building, spill approximately 200 gallons of PCB oil into soil (10).
AOC Start-Up Date:	Building was erected in early 1900s. PCB release occurred in 1979 (10).
AOC Closure Date:	Building is still in use. PCB remediation completed in 1989 (10).
Release Controls:	Contaminated soils excavated and shipped off-site in 1989. Approximately 5,250 cubic yards of soil were removed form the Number 5 and Number 6 paper machine areas (combined). Site surface is now paved (10).
Release History:	Analytical results of soil samples in 1988 showed PCB concentrations ranging from ,5-230, 120mg/kg (24).

AOC DESCRIPTION OUTLINE

AOC No.:	4
AOC Name:	Paint Shop Building
AOC Status:	High Potential of Release
AOC Description:	The structure is a 30 x 30 foot concrete-floored building. The west half contains a variety of paint-related chemicals in small metal cans. One 55-gallon drum of thinner and one 55-gallon drum of paint waste was in the room. According to a label on the drum, the paint waste had been accumulating since July 1990. No evidence of a release was noted in the west half of the building. No floor drains existed in the west half of the building, the east half of the building is a maintenance area. Five 5-gallon waste oil containers marked Texaco MARFAX Heavy Duty 2 oil was on shelves. Four 55-gallons drums, approximately half full, were on the floor. The labels read: (1) Paper Machine Oil HD220 (2) Transformer Oil (3) Soluble Oil (4) Waste Oil MNC-2. A stained area, approximately 8feet x6 feet leads into floor drain. Floor drain leads to Wastewater Treatment Plant (10).
AOC Start-Up Date:	AOC Closure Date - Active (10)
Waste Managed at AOC:	Up to 55 gallons each of waste paint and oil (10).
Release Controls:	Floor drain in east half of building leads to wastewater treatment plant. Floor and wall of west half of building appear able to contain any minor spills (10).

AOC DESCRIPTION OUTLINE

AOC No.:	5
AOC Name:	Automotive Maintenance Building
AOC Status:	Low Potential for Release
AOC Description:	A 40 x 40 feet cement floored building, used to maintain automobiles (10).
AOC Start-Up Date:	AOC Closure Date – Active (10).
Waste Managed at AOC:	Relatively small quantities of spilled waste oil and other automotive related chemicals (10).
Release Controls:	No release controls observed. Floor appears capable of containing minor spills (10).
Release History:	Scattered small stains of automotive related chemicals were on floor. No record of spills associated with this maintenance building were observed in EPA or ME DEP files.

AOC DESCRIPTION OUTLINE

AOC No.:	6
AOC Name:	Waste Bark Pile
AOC Status:	High Potential for Release
AOC Description:	Located west of main mill buildngs. Waste bark pile is approximately 600 feet long, 500 feet wide, and 30 feet high. Used to dispose of waste bark. Also used as a disposal area for "mill trash" (10).
AOC Start-Up Date:	Early 1900s (10).
AOC Closure Date:	usage stopped in 1970s (10).
Waste Managed at AOC:	Waste bark and mill trash (not documented) (10).
Release Controls:	No release controls were observed.
Release History:	No documentation of a release observed in EPA or ME DEP files.

AOC DESCRIPTION OUTLINE

AOC No.:	7
AOC Name:	Kraft Hydra-Pulper Building
AOC Status:	Low potential of release (10).
AOC Description:	Part of main mill building. Chemicals stored/used include a 250-gallon caustic soda tank and transfer system. Also, approximately (20) 250-gallon steel tanks of sodium hydrosulfite (10).
AOC Start-Up Date:	Early 1900s (10).
AOC Closure:	Building still in use (10).
Waste Managed at AOC:	None
Release Controls:	Tanks stored above ground on concrete floor. Floor appears adequate to contain minor release (10).
Release History:	Small (2 to 3 square feet) area of staining observed below caustic Soda tank (10). No record of releases associated with the tanks were observed in the EPA or Maine DEP Files, the site representative had no knowledge of an associated release incident.

AOC DESCRIPTION OUTLINE

AOC No.:	8
AOC Name:	Machine Room Building Storage Area
AOC Status:	Low Potential of release (10)
AOC Description:	Storage area for fifteen 250-gallon steel tanks of acetic-acid dyes and caustic soda.
AOC Start-Up Date:	Early 1900s (10).
AOC Closure Date:	Building still in use (10).
Waste Managed at AOC:	None
Release Controls:	Tanks are above ground on concrete floor. Floor appears adequate to control minor releases (10).
Release History:	No evidence of a release was observed during site reconnaissance. No record of a release associated with the tanks was observed in the EPA or ME DEP files. The site representative had no knowledge of an associated release incident.

AOC DESCRIPTION OUTLINE

AOC No.:	9
AOC Name:	Hazardous Waste Buildings
AOC Status:	Low potential of release
AOC Description:	Two metal 8 feet x 12 feet sheds on concrete pads, used for temporary storage of hazardous wastes. No wastes were in sheds during site reconnaissance. Approximately 200 drums of wastes have been temporarily stored in the sheds over the past 5 years (10).
AOC Start-Up Date:	1988
AOC Closure Date:	Storage sheds are still in use (10).
Waste Managed at AOC:	None.
Release Controls:	Storage sheds are fitted with sealed doors, on a concrete pad with concrete berms (10).
Release History:	No record of a release associated with the storage sheds were observed in the ME DEP or EPA files. The site representative had no knowledge of associated releases incident.

AOC DESCRIPTION OUTLINE

AOC NO.:	10
AOC Name:	Wastewater Treatment Plant Building
AOC Status:	Low potential of release
AOC Description:	Two 500-gallon steel tanks containing percol 757 (polymer), and one 6,000-gallon tank containing phosphoric acid (10).
AOC Start-Up Date:	1974
AOC Closure Date:	Treatment plant is still in operation.
Waste Managed at AOC:	None
Release Controls:	Tank are located above ground on a concrete floor. Flooring appears adequate to contain minor release (10).
Release History:	Small areas of staining were observed below tanks, likely resulting from sporadic, small releases. No documentation of a release was observed in the ME DEP or EPA files. The site representative also had no knowledge of a release incident involving the above ground tanks (10).

AOC DESCRIPTION OUTLINE

AOC No.:	11
AOC Name:	Sulfite Storage Tank
AOC Status:	Low potential of release
AOC Description:	Above ground, 1,000,000- gallon sulfite tank (ARCS/Region I 1992); (39).
AOC Start-Up Date:	1987 (39).
AOC Closure Date:	Tank is still in use.
Waste Managed at AOC:	None
Release Controls:	No release controls were observed during the site inspection.
Release History:	No documentation of a release was observed in the ME DEP or EPA files.

AOC DESCRIPTION OUTLINE

AOC No.:	12
AOC Name:	Wastewater Treatment Plant Influent Pipe
AOC Status:	Release (10)
AOC Description:	The influent pipe for the wastewater treatment plant ruptured, releasing approximately 46,000-gallon of influent (mill sewage) into surrounding soils (10).
AOC Start-Up Date:	1974 (10).
AOC Closure Date:	Present
Waste Managed at AOC:	Sewerage/wastewater from paper mill operations (10).
Release Controls:	Flow re-routed while pipeline repaired.
Release History:	The release occurred in fall 1991 resulting in a loss of 10,000 gallons per minute for 4 minutes, and 300 gallons per minute for the following 20 minutes. The plant then shut down of 9days while the pipeline was repaired (10).

APPENDIX B

EAST MILLINOCKET MILL PETROLEUM STORAGE AND CONTAINMENT

Petroleum Storage and Containment
Great Northern Paper Mill #2, East Millinocket

Location	Gallons	Type of Product	Date Installed	Containment	Registration
Wastewater Treatment Plant	1,000	Heating Oil	1991		
Wastewater Treatment Plant	1,000	Diesel	1991		
Steam Plant	20,000	Heating Oil (Abandoned)	1955	Tank Policy	Abandoned and closed (filled with sand)
Steam Plant	20,000	Heating Oil (Abandoned)	1955	Tank Policy	Abandoned and closed (filled with sand)
Oil Farm	750,000	No. 6 Fuel Oil	1950	Earth Dike/Oil-Water Separator	*
Oil Farm	2,300,000	No. 6 Fuel Oil	1954	Earth Dike/Oil-Water Separator	*
Oil House	2,000	Gasoline (unleaded)	1989	Tank policy	16697
Steam Plant	25,000	No 6 Fuel Oil		Steel tank encased in reinforce concrete walls. Level indication and alarms.	*
North of 750,000 gallon, No 6 Fuel Oil Tank.	5,000	Oil/ Water Separator		Fence Concrete Dike	

*Aboveground Tank – Registration not needed.
Source: Great Northern Nekoosa Corporation 1992.

APPENDIX C

EAST MILLINOCKET MILL PULP AND CHEMICAL STORAGE AND CONTAINMENT

Appendix C

East Millinocket Mill Pulp and Chemical Storage and Containment

Location	# of Tanks	Type of Product	Date Installed	Capacity	Containment
South Side of Mill	1	Broke Pulp	1954	750,000 gallons	Permanent berm to process sewer at sulfite tank
South Side of Mill	1	Groundwood Pulp	1954	750,000	Permanent berm to process sewer at sulfite tank
Old Grinder Room	2	Slimicide	1982	400 gallons	Inside building
Chlorine Storage Bldg.	8	C12	1955	1 ton each	Impact barrier Response Plan
Wastewater Treatment Plant	1	Anhydrous Ammonia	1976	18,000 gallons	Excess flow valve Response Plan
Wastewater Treatment Plant	1	Phosphoric Acid	1976	6,000 gallons	Concrete Dike
Boiler House	1	Sulfuric Acid	1957	12,000 gallons	Concrete dike overflow to process sewer
Boiler House	1	50% Caustic	1957	12,000 gallons	Concrete dike overflow to process sewer
South Side of Mill	1	Sulfite Pulp	1987	1,000,000	Permanent berm to process sewer
Inside Train Dock	2	Pitch Dispersant	1987	400 gallons	Inside Bldg.
North of Wood Storage	4-6	Chlorine	1987	1 ton Cylinder	Structural barrier Response Plan
Wastewater Treatment Plant		Lime Silo	1987	61 tons	Response Plan
Southside of Mill		Groundwater Pulp Storage	1990	1,000,000	Permanent berm to process sewer

Source: Great Northern Nekoosa Corporation 1991.

East Operation

Pulp and Chemical Storage and Containment

Location	No. Of Tanks	Type of Product	Date Installed	Capacity	Containment	Reference Item No. on Location Maps
Boiler House	1	Sulfuric Acid	1992	8,600 gal.	Concrete Dike Overflow to process sewer	63
Boiler House	1	50% Caustic	1957	12,000 gal.	Concrete Dike Overflow to process sewer	64
Boiler House	1	Waste Pit	1992	30,000 gal.	Inside Building process sewer	107
Chlorine Storage Building	8	C12	1955	1 ton each	Impact Barrier Response Plan	65
Old Grinder Room	8-10 (Totes)	Slimicide	1882	400 gal.	Inside Building	66
Old Grinder Room	2	Slimicide	1982	400 gal.	Inside Building	67
Inside Train Dock	2	Pitch Dispersent	1987	400 gal.	Inside Building	68
Southside of Mill	2	Groundwood Pulp	1954	750,000 gal.	Permanent berm to process sewer at sulfite tank	69
Southside of Mill	1	Broke Pulp	1954	750,000 gal.	Permanent berm to process sewer at sulfite tank	70
Southside of Mill	1	Sulfite Pulp	1987	1,000,000 gal.	Permanent berm to process sewer	71
Wastewater Treatment Plant	1	Urea	1976	18,000 gal.	Excess flow valve Response Plan	72
Wastewater Treatment Plant	1	Phosphoric Acid	1976	6,000 gal.	Concrete Dike	73
Hydropulper	2	Cytec 3405	1997	14,000 gal.	Inside Building	84
Wastewater Treatment Plant	-	Lime Silo	1987	61 ton	Response Plan	85
No. 5 & 6 P.M. Basement	1	Retenition Aid	1990	400 gal. (tote)	Inside Building	86
Southside of Mill	-	Groundwood Pulp Storage	1990	1,000,000 gal.	Permanent berm to process sewer	92
Wastewater	-	Ferric Sulfate	1996	6,000 gal.	Containment	

East Operation

Pulp and Chemical Storage and Containment

Location	No. Of Tanks	Type of Product	Date Installed	Capacity	Containment	Reference Item No. on Location Maps
Court Yard	1	Sodium Bisulfite	1997	4,000 gal.	Impact barrier overflow to process sewer	98
No. 5 & 6 P.M. Basement	1	Polymer	1997	1,300 gal.	Overflow to process sewer	99
No. 5 & 6 P.M. Basement	1	Polymer	1997	3,100 gal.	Overflow to process sewer	100
No. 5 & 6 P.M. Basement	2	Polymer	1997	3,100 gal.	Overflow to process sewer	101
No. 5 & 6 P.M. Basement	1	Polymer	1997	2,400 gal.	Overflow to process sewer	102
No. 5 & 6 P.M. Basement	1	Polymer	1997	2,900 gal.	Overflow to process sewer	103
No. 5 & 6 P.M. Basement	2	Detergent (Dubois)	1997	300 gal.	Overflow to process sewer	104

Recycle Fiber Plant

Chemical Tanks

Chemical Name	Capacity	Date Installed	Containment	Location No.
Sodium Hydroxide	16,500 gal.	1993	Overflow to process sewer in building	101
Sodium Silicate	16,500 gal.	1993	Overflow to process sewer in building	99
(DTPA)	5,575 gal.	1993	Overflow to process sewer in building	100
Sulfuric Acid	8,200 gal.	1993	110% of tank volume, lock valve to process sewer, concrete dike	97
Hydrogen Peroxide	10,200 gal. (2)	1993	110% of tank volume, lock valve to process sewer, concrete dike	93
Lionsurf 798M (Displector)	8,225 gal.	1993	Overflow to process sewer in building	98
Sodium Hydrosulfite	21,000 gal.	1993	110% of tank volume, lock valve to process sewer, concrete dike	96
Sulfite Dioxide (SO_2)	Empty	1993	110% of tank volume, lock valve to process sewer, concrete dike	94
Borol	12,000 gal.	1993	110% of tank volume, lock valve to process sewer, concrete dike	95
Polymers (Nalco 7655)	7,614 gal.	1993	Overflow to process sewer in building concrete dike	102
Polymer (Nalco 7593)	6,662 gal.	1993	Overflow to process sewer in building concrete dike	106
Sludge Polymer Feed Tank (Nalco 7524)	6,662 gal.	1993	Overflow to process sewer in building concrete dike	103
Primary Polymer (Nalco 7593) to Acid Clarifier & Alkaline Clarifier	1,000 gal. (2)	1993	Overflow to process sewer in building concrete dike	107 108
Sodium Bisulfite	6,500 gal.	1993	Overflow to process sewer in building	105
Defoamer, Nalco 7507 Plus	1,000 gal.	1998	Overflow to process sewer in building	*
Talc Slurry	7,500 gal.	1998	Overflow to process sewer in building	110

* TANK IS IN PROCESS BUILDING

APPENDIX D

EAST MILLINOCKET MILL PULP SPILLS REPORTED TO THE MEDEP RESPONSE DIVISION

APPENDIX D

Spills Reported to MEDEP for Great Northern Paper Mill #2, East Millinocket, Maine

Spill #	Date	Amount	Material	Released to	Remediation
B-42-81	5-2-81	200-300 gals.	Bunker C	Holding pond	Sorbents, incineration
B-82-83	5-16-83	1 gal.	Lube oil	Penobscot River	Sorbent
B-96-84	5-24-84	1 gal or less	Lube oil	Overfilled drip pan at Dolby hydroelectric dam	None
B-259-84	11-30-84	2 gal	PCB oil	Ground	Sorbents
B-52-85	3-27-85	70 gal	Unspecified oil	Dolby Dam facility-10 gal to Penobscot	Sorbent boom
B-67-85	7-8-85	1 pint	Transformer oil	Ground	Bagged
B-89-85	8-29-85	800 gal	Askarel	Ground	Borings installed, pieso-meters set to establish flow of groundwater-excavated
B-91-85	5-17-85	Sheen	Oil	Penobscot	Boom
B-97-85	5-23-85	55 gal	Hydraulic oil	Penobscot	Boom/Sorbent
B-83-87	3-30-87	1 gal	Transmission oil	Penobscot	Sorbent boom & pads
B-345-87	9-10-87	15-50 gal	Black water leachate	WWTP	Neutralized
B-163-88	5-4-88	1 pint	Gear oil	Rocabe Dam	N/A
B-187-88	5-17-88	1 gal	Lube oil	Penobscot	Boom
B-145-89	4-5-89	5 gal	Lube oil	Penobscot River	Boom
B-222-89	none given	10 gal	Hydraulic oil	Wood yard	Excavate
B-260-89	5-20-89	5.99 gal	Diesel	Dolby Dam	Boom
B-332-89	6-21-89	0.25 gal	PCB oil	Mill yard	Excavate/drum/ manifest /dispose
B-497-89	8-24-89	12 gal	Hydraulic oil	Woodyard	Sorbent
B-614-89	10-13-89	5 gal	Hydraulic oil	Ground	Speedi-dri spread, hauled to Dolby landfill
B-218-90	4-27-90	1 gal	Hydraulic oil	Penobscot River	Sorbent
B-433-90	7-25-90	1 p	Chlorine	Air	Fans
B-553-90	9-13-90	200 gal	#6 fuel oil	Tar lot	Sorbents
B-574-90	9-20-90	1 gal	Hydraulic oil	Penobscot River	Sorbent
B-213-91	4-15-91	8,000 gal	#6 fuel oil	Ground	Burned/vac truck, excavation
B-338-91	6-4-91	1,900 gal	Sulfuric acid	Process sewer	Pumped out

Spill #	Date	Amount	Material	Released to	Remediation
B-644-91	10-4-91	0.5 gal	lube oil	Penobscot River	Sorbent
B-759-91	12-10-91	1000.99 g	Haz. chemical-unspecified	Ditch, mill's sewer system	Contractor's hired; pump & dispose
B-27-92	1-14-92	0.19 gal	Lube oil	Concrete floor	Sorbent
B-448-92	8-20-92	0.25 gal	Lube oil	Floor drain; Penobscot River	Boom; pads
B-595-92	10-13-92	0.1 gal	Lube oil	Penobscot River	Boom
B-70-93	2-13-93	20 gal	Hydraulic oil	Floor; Penobscot River	Boom
B-124-93	3-24-93	0.12 gal	hydraulic oil	Penobscot River	Boom
B-340-93	6-27-93	1,500 gal	Sulfuric acid	WWTP	Pumped
B-370-93	7-9-93	50 gal	Sulfuric acid	WWTP	Neutralized
B-58-94	1-3-94	10 gal	Sulfuric acid	Cement	Neutralized/washed
B-77-94	2-16-94	1,250 gal	#6 fuel oil	Railroad bed	Disposed
B-79-94	2-15-94	550.99 gal	#6 fuel oil	Snow pile	Burnt in facilities boiler
B-92-94	2-22-94	2.99 gal	Sulfuric acid	WWTP	Soda ash
B-102-94	3-8-94	20 gal	Sulfuric acid	WWTP	None
B-157-94	3-30-94	2.99 gal	Diesel	Concrete floor	Pads
B-179-94	4-8-94	2.99 gal	Sulfuric acid	Concrete floor	Soda ash
B-241-94	5-4-94	60 gal	Diesel	Concrete floor	Sawdust/burned in boiler
B-276-94	5-11-94	100 gal	Hydraulic oil	Floor	Sorbent
B-305-94	5-30-94	1,200 gal	Sulfamic acid solution	WWTP	N/A
B-322-94	6-8-94	60 gal	Hydraulic oil	Millinocket Stream	Sorbent
B-468-94	8-12-94	100 gal	#6 fuel oil	Floor	Sorbent
B-172-95	4-13-95	.1 gal	Lube oil	Penobscot River	Sorbent
B-230-95	5-16-95	4 gal	Diesel	Ground	Spread over 6 mil polyethylene tarp
B-524-95	9-27-95	0.99 gal	Unspecified oil	Unknown source	Monitor
B-534-95	10-5-95	1 pint	Lube oil	Penobscot River	None
B-28-96	1-18-96	5.99 gal	Transformer oil	Riverbank	Sorbent
B-309-96	6-13-96	0.2 gal	Hydraulic oil	West Branch	Boom
B-461-96	8-23-96	0.99 gal	Lube oil	Penobscot River	Sorbent
B-515-96	9-18-96	1.99 gal	Lube oil	West Branch	none
B-708-96	12-6-96	9 p	Non-haz chemical	West Branch/Air	None
B-742-97	7-2-97	1.99 gal	Lube oil	West Branch	None
B-718-98	11-5-98	1,200 gal	Sulfuric acid	unknown	unknown
B-568-99	9-14-00	200 gal	#6 fuel oil	unknown	unknown
B-349-00	6-26-00	20.99 gal	Hydraulic oil	unknown	unknown

Bk 8740 Pg72 #19548
05-21-2003 @ 09:15a

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

1 MAI 2003

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

April 24, 2003

Marie Dumontier, Director Environment and Safety
Nexfor Fraser Papers
4 Georges Bilodeau, Suite 102
Hull, Quebec Canada J8Z 1V2

Subject: Voluntary Response Action Plan (VRAP)
Great Northern Paper East Millinocket Mill
No Action Assurance Letter – Certificate of Completion

Dear Ms. Dumontier:

The Maine Department of Environmental Protection (Department) has received an application for participation in the Voluntary Remedial Action Program (VRAP) regarding the Great Northern Paper, East Millinocket site (the site and/or property) dated April 17, 2003, submitted by Fraser Papers Inc (Fraser) and Katahdin Paper Co. LLC (Katahdin). In its application Fraser and Katahdin have identified three areas of the site for inclusion in VRAP:

1) The PCB Spills, (a.k.a paper machines 5 and 6 and the Chemi-Groundwood area),
2) the Bark Pile and
3) the Old Construction Fill Area.

This letter serves as both a no action assurance letter and a certificate of completion covering the PCB Spills and the Bark Pile. More investigation is required on the Old Construction Fill Area before it can be considered for liability protections under VRAP. The subject property is located at latitude 45°37'21.08" longitude 68°34'27.19" on Main Street (Rt. 11/157) in East Millinocket. The proposed future use for the site is for a papermaking and pulp processing plant.

The Department has reviewed the following environmental assessment reports concerning the site: S.W. Cole Engineering, Inc. (Cole), Phase I Environmental Site Assessment Great Northern Paper Inc. Mill Properties, Millinocket and East Millinocket, Maine January 22, 2001, and the Department report, Final Site Inspection Report For Great Northern Paper Mill #2, East Millinocket, Maine, July 18, 2002. Additionally a document dated September 27, 1991 entitled United States Environmental Protection Agency In re: Great Northern Nekoosa Corporation respondent. EPA Docket No. TSCA-I-87-1041. Consent Agreement and Final Order was also reviewed.

Based on information provided in the above listed reports and current Department files potential environmental issues were identified. The PCB Spills is comprised of an area northwest of the mill building (the Chemi-Groundwood area) and an area at the southeast corner of the mill building (paper machine No. 5 and 6). Between 1970 and 1981 three spills of polychlorinated

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AUGUSTA, MAINE 04333-0017
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RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
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PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
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PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507

web site: www.state.me.us/dep

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biphenyl (PCB) oil occurred at the site. Contamination from these spills was remediated between 1985 and 1991. The United States Environmental Protection Agency (EPA) approved the clean-up and a monitoring plan was instituted through a consent agreement in September 1991. Currently Georgia Pacific is responsible for monitoring groundwater onsite three times a year.

The Bark Pile covers an area approximately 22 to 29 acres in size. Bark has been stockpiled at a location approximately 6,000 feet northwest of the mill building from the early 1900s until the 1970s; the pile was also used for disposal of mill trash. In 1992 Great Northern Paper began mining the bark pile, which is processed into mulch. To assess potential contamination samples from the pile were collected and analyzed annually, from 1993 to 2001, for PCBs, metals and a variety of other inorganic parameters. By 2002, approximately 100,000 tons of bark had been processed. The remainder is scheduled to be removed no later than 2010. Groundwater near the bark pile was monitored for several years and minimal impact was found. Additional groundwater sampling conducted by Sirrine in 1991 found elevated levels of aluminum and arsenic near the bark pile. Samples collected by the Department in 2001 found elevated levels of cadmium, chromium, lead, nickel and silver; no levels were above the drinking water standards.

Provided that Fraser Papers Inc. and Katahdin Paper Company LLC and their successors and/or assigns comply with the conditions outlined below and that they acquire title to the portions of the property covered by this letter, they will be granted the liability protection provided by 38 M.R.S.A. § 343-E(1). The Department will take no action against Fraser Papers Inc. and Katahdin Paper Company LLC and those persons identified in 38 M.R.S.A. § 343-E(6). Additionally, Fraser Papers Inc. and Katahdin Paper Company LLC are protected from liability for penalties, fines and natural resource damages related to the PCB Spills and Bark Pile to the extent applicable. The site is further identified as Tax Map 2 Block 1 Lot10 of the East Millinocket Tax Assessor and the parcel is described in Book 4966 page 114 at the Penobscot County registry of deeds. This protection is limited to the matters concerning the PCB Spills and the Bark Pile areas of the Great Northern Paper property, located on Main Street in East Millinocket, identified in the above listed environmental assessment reports and current Department files.

The conditions which apply to this site for Fraser Papers Inc. and Katahdin Paper Company LLC, and their successors and/or assigns to receive the protections outlined in this letter are as follows:

1. No groundwater extraction wells will be installed as a potable water source in the areas of the PCB Spills or the Bark Pile.
2. No excavation will be conducted in the area of the PCB Spills.
3. Monitoring at the PCB Spills will continue as required by EPA.
4. No buildings will be constructed on the Bark Pile or PCB Spills areas of the site without written approval of the Department.
5. When mining at the Bark Pile is completed the area will be closed as follows. The Protected Parties agree to place final cover, as specified in this condition, on the barkpile, within 6 months after completion of bark reclamation activities. The barkpile will be graded to a maximum slideslope of 3 horizontal to 1 vertical and a minimum top slope of 5%. The final cover on the barkpile will consist of 18 inches

of clay or well-graded till containing a minimum of 35% fines overlain by a 6 inch soil layer suitable for growing vegetation. The vegetative layer will be seeded with an effective ground cover within one growing season after the completion of the final cover work.

6. A copy of this letter will be filed at the Penobscot County Registry of Deeds.
7. A copy of the recorded document will be provided to the VRAP Project Manager, Jean Firth, Maine Department of Environmental Protection.
8. A plan showing the PCB Spills area and the Bark Pile will be recorded at the Penobscot County Registry of Deeds.
9. The Department and its contractors will be provided access to the site, as requested, to conduct inspections and or investigations, as necessary.

If you have any questions regarding this letter, please feel free to call Jean Firth at 207-287-7716.

Sincerely,

Brooke Barnes, Deputy Commissioner

cc: Scotia Ryer, Pierce Atwood
Bert Martin, Fraser Papers Inc.
Bill Manzer, Fraser Papers Inc.
Cyndi Darling, MEDEP

STATE OF MAINE

KENNEBEC, ss.,

April 24, 2003

Then personally appeared before the above named Brooke Barnes, Deputy Commissioner of the Maine Department of Environmental Protection and duly authorized delegee for the Commissioner, and acknowledged the foregoing instrument to be his free act and deed, and the free and deed of the Department of Environmental Protection.

Before me,

~~Notary Public~~ ATTORNEY-AT-LAW

James E. Dusch
(Print Name)

PENOBSCOT COUNTY, MAINE

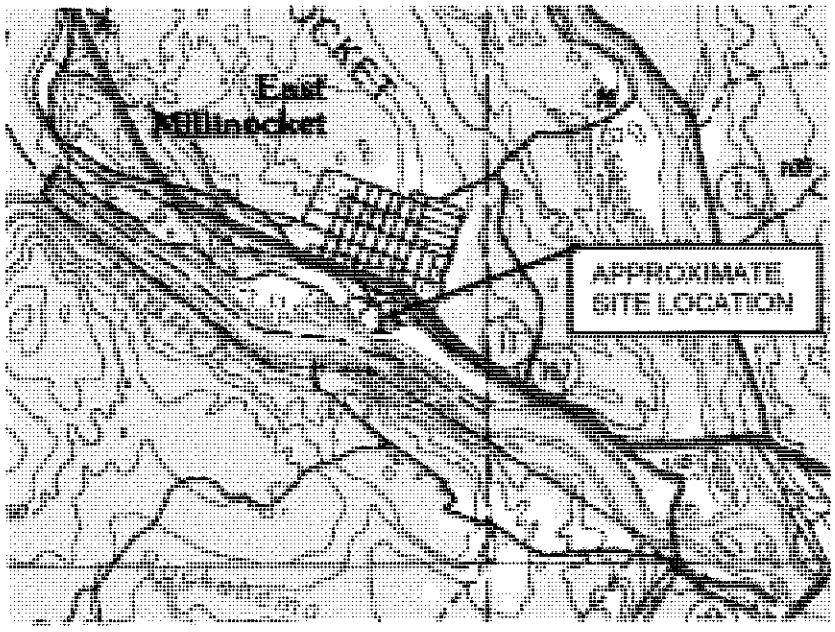
Susan F. Bulay
Register of Deeds

PHASE I
ENVIRONMENTAL SITE ASSESSMENT
KATAHDIN PAPER MILL - EAST
50 MAIN STREET
EAST MILLINOCKET, MAINE

00-1153.1 E **AUGUST 26, 2011**

PREPARED BY:

S.W.COLE ENGINEERING, INC.



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00-1153.1 E

August 26, 2011

Cate Street Capital, Inc.
Attn: Mr. Robert Desrosiers, V.P.
One Cate Street
Portsmouth, NH 03801

Subject: Phase I Environmental Site Assessment Report
Katahdin Paper Mill - East
50 Main Street
East Millinocket, Maine

1.0 INTRODUCTION

In accordance with our Proposal and Agreement dated July 13, 2011, S. W. COLE ENGINEERING, INC. (SWCE) has completed a Phase I Environmental Site Assessment (ESA) of the Katahdin Paper Company paper mill complex located at 50 Main Street in East Millinocket, Maine (the "Site"). Subsequent to initiating the Phase I ESA of the mill complex and in accordance with your request, we also conducted a reconnaissance level environmental review of miscellaneous land parcels currently owned by Katahdin Paper Company, LLC (Brookfield Asset Management) in East Millinocket, Maine that may be included in the proposed land and asset transfer to Cate Street Capital, Inc. (Client).

1.1 Purpose

The purpose of this Phase I ESA was to evaluate current and historical conditions at the Site and on adjoining properties in an effort to identify recognized environmental conditions (RECs) in connection with the Site.

A REC is defined by the American Society for Testing and Materials (ASTM) as: "the presence of or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis*

conditions that generally do not present a material risk to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies."

The identification of RECs in connection with the Site may impose an environmental liability on owners or operators of the Site, reduce the value of the Site, or restrict the use or marketability of the Site, and therefore, further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities.

1.2 Scope of Services

The Phase I ESA of the Site was conducted in general accordance with ASTM Designation E 1527-05: *Standard Practice for Environmental Site Assessments,* and included the following:

- Review of previous environmental site assessments, if any;
- Federal, State, Tribal, and Municipal environmental records review;
- Interviews with regulatory officials and personnel associated with the Site and adjoining properties;
- A Site reconnaissance visit; and
- Evaluation of information and preparation of the report provided herein.

Typically, a Phase I ESA does not include sampling or testing of air, soil, groundwater, surface water, or building materials. These activities would be carried out in a Phase II ESA, if required. For this assessment, no additions to the ASTM E 1527-05 standard were made with the exception of the following: suspected asbestos containing materials (preliminary visual assessment), lead-based paint (preliminary visual assessment), radon (data as reported by FirstSearch Technology Corporation), wetlands (preliminary visual assessment), and mold (preliminary visual assessment).

1.3 Significant Assumptions

During the course of this assessment, information was obtained from individuals, government agencies, and other sources as referenced in this report. Although attempts were made, whenever possible, to obtain a minimum of two confirmatory sources of information, in certain instances it has been assumed that the information provided from a single source is accurate. Additional significant assumptions were not made by the assessor during the course of this assessment.

1.4 Limitations and Exceptions

Along with the limitations set forth in various sections of the ASTM E 1527-05 protocol and Appendix A of this report, the accuracy and completeness of this report may be limited by the following:

- Access Limitations – Many access limitations due to safety and time constraints.
- Physical Obstructions to Observations – Many physical obstructions to observations throughout the mill complex.
- Outstanding Information Requests – None.
- Historical Data Source Failure – None.
- Other – None.

It should be noted that this assessment did not include a review or audit of operational environmental compliance issues or of any environmental management systems that may exist on the property. Property ownership, title, deed, and lien information that may be presented is for discussion purposes only and does not constitute a legal search. The documents listed in Section 11 - References were used as reference material for the completion of the assessment. Some of the information presented in this report was provided through existing documents and interviews.

The findings contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted engineering and scientific practices current at the time the work was performed. The conclusions represent the best judgment of the assessor based on the data obtained from the work. Due to the nature of the assessment and the limited data available, we cannot warrant against undiscovered and/or unreported environmental liabilities. The findings and conclusions presented in this report should not be construed as legal advice.

Should additional information become available, which differs significantly from our understanding of the conditions presented in this report, we request that this information be brought to our attention so that we may re-assess the findings and conclusions provided herein.

1.5 Special Terms and Conditions

Authorization to perform this assessment was provided to SWCE by Mr. Robert Desrosiers, Vice President – Compliance with Cate Street Capital, Inc. on July 15, 2011. Information concerning Site contact personnel was provided to SWCE by Mr. Raymond Kusche, Director of Energy Services with Cate Street Capital, Inc.

1.6 Reliance

This report has been prepared for the sole benefit of Cate Street Capital, Inc. The report may not be relied upon by any other person or entity without the express written consent of SWCE and the Client. Reliance on the information, findings, conclusions, and recommendations presented within this report are limited to within 180 days from the date of this report. We recommend that this assessment report be updated if it is to be relied upon after 180 days.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The Katahdin Paper Company (KPC) East Millinocket paper mill property is located at 50 Main Street (aka Route 11 and 157) in Penobscot County, Maine. The property is described by the Town of East Millinocket as Map 2, Block 1, Lot 10. The property is approximately 400 acres in size and is developed with a paper mill complex situated along the north side of the West Branch of the Penobscot River in an area about 2.5 miles long that averages about 0.25 mile wide.

For the purposes of this ESA, portions of the mill complex that are not owned by KPC including: the two hydroelectric power generating facilities (Dolby Dam and Mill/Grindstone Dam), the Bark Pile Parcel, and the Old Mill Dump/Old Construction Fill Area are excluded from the "Site" and are considered to be off-Site abutting/adjacent parcels. Portions of USGS topographic maps for the East Millinocket, Maine quadrangle and the Medunkeunk Lake, Maine quadrangle showing the Site area are presented as Sheet 1 – Site Location Map in Appendix B of this report. A Site Features Plan showing pertinent environmental site features discussed in this report is presented as Sheet 2 in Appendix B of this report. Color copies of photographs taken during the Site visits are included in this report as Appendix C.

Subsequent to initiating the ESA, the Client asked that SWCE include several off-Site properties in the reconnaissance phase of the assessment. The off-Site property descriptions are included in Section 7.7 – Client Specific Items. These off-Site properties are shown on a plan titled "Millinocket and East Millinocket Ownerships" dated March 29, 2011 as provided to SWCE by the Client and are understood to potentially be included in the proposed land and asset transfer from KPC to Cate Street Capital, Inc.

2.2 Site and Vicinity General Characteristics

The paper mill complex is located south of Main Street (Route 11/157), north of the West Branch of the Penobscot River, east of the Dolby Dam (at the outlet of Dolby Pond), and west of the Medway Town line. It is situated on the southern Town line of East Millinocket and in an area of the Town's lowest surface elevations, which range from approximately 325 feet above mean sea level on the northwest end adjacent to the Dolby Dam to approximately 280 feet above mean sea level on the southeast end next to the Medway Town line. Surface topography at the mill complex varies, however, the land generally slopes downward to the south and east towards and along the West Branch of the Penobscot River. Inferred groundwater flow direction at the paper mill complex is generally south-southeast toward and along the river.

Across the river south of the mill complex are hundreds of thousands of undeveloped wooded acres located in Township A, Range 7 (unorganized territory). North and up-gradient of the mill complex across Main Street is the approximate 1.2 square kilometer suburban developed portion of East Millinocket (approx. 300 acres). The 2000 census lists East Millinocket as having a residential population of 1,828 that largely reside north of Main Street across from the mill complex. The East Millinocket municipal offices, a library, bank, gasoline station, auto-body shop, auto repair garage, a few small restaurants, fire and police, and other commercial and light industrial developments are also situated along Main Street just north of the mill complex.

Land surrounding these few developed locations north of the mill complex is predominantly comprised of large undeveloped rural woodlands primarily used for wood harvesting, hunting, camping, canoeing, hiking, and fishing. It is expected that regional groundwater flow in East Millinocket is south toward the river. The installation of Dolby Dam just northwest of the mill complex flooded upstream portions of the West Branch of

the Penobscot River, Schoodic Stream, and Partridge Brook and created Dolby Pond (also called Dolby Flowage) and Partridge Brook Flowage (Sheet 1 – Site Location Map).

2.3 Current Use of Property

The Katahdin Paper mill complex closed abruptly in April of 2011. A few employees occupy the mill on a daily basis to operate the waste water treatment plant (WWTP), which processes storm water and waste water from the Town of East Millinocket, and from the idle paper mill locations in both Millinocket and East Millinocket. A few other KPC employees on Site generally include security, engineering, asset management, maintenance, and environmental personnel.

2.4 Description of Structures and Other Improvements

At the time of the Site reconnaissance visit, the mill property was developed with a 2-story approximate 240,000 square foot main mill building that houses the two on-Site paper machines (#5 and #6) and the bulk of the paper and wood processing equipment. Other structures and improvements include: a 137,000 square foot recycled paper process and pulp building, a wood yard used for receiving, storing, and processing tree-length softwood logs, a storm water settling pond, a bark storage building, a grinder room building, two large aboveground oil storage tanks, a No 6 oil steam plant, a bark boiler building, the old water treatment building, the water screen room building, several large pulp storage silos/tanks, the paper finishing building, train shed, finished product warehouse and shipping, vehicle maintenance garage, training center, two small sheds formerly used for hazardous waste storage, and a large WWTP.

Bangor and Aroostook Railroad tracks traverse along the northern edge of the Site and reach into portions of the mill complex at the wood yard to the west, the No. 6 oil offloading and storage area to the north, and the shipping and receiving end to the south. The mill complex draws process and cooling water from the river and is also connected to the East Millinocket municipal drinking water system. Electricity is provided by the on-Site hydroelectric power facility at the Mill/Grindstone Dam. Storm drains not positioned in the industrial activity areas of the Site discharge directly to the river except for the wood yard where storm water is detained in a settling pond before being discharged to the river. Storm drains positioned in the industrial activity areas discharge to the on-Site WWTP (Sheet 2 – Site Features Plan).

2.5 Current Uses of Adjoining Properties

Structures and other improvements not owned by KPC that are situated in or adjacent to the mill complex but not included in this ESA as the "Site" include: the Dolby Dam and hydroelectric power generating facility, the Mill/Grindstone Dam and hydroelectric power generating facility, the Bark Storage Parcel, and the Old Mill Dump/Old Construction Fill Area.

Adjacent land uses in East Millinocket include institutional (municipal offices, library, church, schools), residential (both single- and multi-family), retail (banking, convenience stores, restaurants), commercial (gas station, auto-body shop, auto repair garage), light industrial (ready-mix concrete plant, auto salvage, saw mill) and forestland. The Town of East Millinocket has its own sanitary sewer primary clarifier ponds (2) and uses the secondary clarifiers and aeration lagoon at the East Mill WWTP. Municipal drinking water provided by the Town of East Millinocket is from drilled wells located at Hathaway Farm on Hathaway Road about a mile northeast of the mill complex. Bangor Hydro Electric Company provides electrical service to the Town of East Millinocket. Land surrounding these few developed locations in East Millinocket is predominantly comprised of large undeveloped rural woodlands primarily used for wood harvesting, hunting, camping, canoeing, hiking, and fishing.

The Dolby Landfill (phases I, II and III, and proposed phase IV) is located about 4 miles north-northwest of the mill complex surrounded by undeveloped forestland. The Dolby Landfill is primarily a paper mill landfill and is not in current use. We understand that the Dolby Landfill also accepted some municipal solid waste from the Towns of East Millinocket, Millinocket, and Medway until approximately 1993. In 1997 approximately 3,000 cubic yards of asbestos containing material was placed in Dolby Landfill Phase III and between 1998 and 1999 an additional 3,000 cubic yards of asbestos containing material was placed in the vertical expansion of Dolby Landfill Phase II.

3.0 USER PROVIDED INFORMATION

3.1 Title Records

Ownership information for the mill complex was provided to SWCE by the Client in the form of the Great Northern Paper to Katahdin Paper Company source deed dated April 29, 2003 (Book 8702, Page 146, Penobscot County Registry of Deeds). Additionally,

SWCE reviewed some title documents available on-line from the Penobscot County Registry of Deeds in Bangor, Maine. According to the Client, the current Site Owner, KPC, a subsidiary of Brookfield Asset Management (formerly Brascan Corporation of Toronto, Ontario, Canada) purchased the property from Great Northern Paper, Inc. after bankruptcy proceedings.

Great Northern Paper Company (GNP) was reportedly first incorporated in 1898 and the East Millinocket Mill was operational in 1907. In 1970, GNP merged with Nekoosa-Edwards Paper Company and became Great Northern Nekoosa Corporation (GNN). In 1990, GNN underwent a takeover by Georgia-Pacific Corp (GP). In 1991, Bowater, Inc. and Great Northern Paper, Inc. purchased GNN (a wholly owned subsidiary of Georgia-Pacific Corp.); Bowater, Inc. owned 80% of GNP, Inc. stock. In 1999, Inexcon of Canada purchased Bowater, Inc.'s Maine holdings. A June 2001 deed (Book 7728, Page 89) is for the sale of the Great Northern Paper, Inc. property to Inexcon Maine, Inc. An April 2003 deed (Book 8702, Page 133) is for the sale of the Inexcon Maine, Inc. property to Great Northern Paper, Inc. Brascan Corp. purchased the property after a bankruptcy proceeding from Great Northern Paper, Inc. in April of 2003.

3.2 Environmental Liens and Activity/Use Limitations

SWCE has performed this assessment in general conformance with the scope and limitations of ASTM Standard E 1527-05 for the property located at 50 Main Street in East Millinocket, Maine. During the course of the assessment the Client and representatives from KPC in East Millinocket provided SWCE with some information pertaining to Activity Use Limitations (AULs) at the mill complex.

In addition, the Client completed an ASTM Standard E 1527-05 AAI User Questionnaire. Questions 1 and 2 pertaining to AULs and the answers provided by the Client are presented below:

1) "Are you aware of any environmental cleanup liens against the subject property that are filed or recorded under federal, tribal, state, or local law?" ANSWER: "No."

2) "Are you aware of any AULs, such as engineering controls, land use restrictions, or institutional controls that are in place at the Site and/or have

been filed or recorded in the registry under federal, tribal, state, or local law." ANSWER: "No."

A copy of the completed ASTM E 1527-05 AAI User Questionnaire is included in Appendix F of this report. SWCE obtained and reviewed the documents recorded at the Penobscot County Registry of Deeds concerning environmental issues at the mill complex, including the following:

- May 18, 1973, Book 2427, Page 218; Findings of Fact and Order from Maine Department of Environmental Protection (MeDEP) concerning permission to construct the on-Site KPC owned 30 million gallon per day waste water treatment plant;

- August 23, 1989, Book 4515, Page 362; Board Order from MeDEP concerning the on-Site KPC owned hazardous waste "Drum Storage Facility" closure plan approval under Interim License # I-022;

- July 25, 1990, Book 4704, Page 79; Findings of Fact and Order by MeDEP concerning the off-Site abutting (not KPC owned) hazardous waste facility closure plan approval at the "Dolby Storage Facility" (Dolby Hydroelectric Station) under Interim License #I-022;

- May 28, 1991, Book 4852, Page 183; Findings of Fact and Order from MeDEP concerning work plan approval for the installation of groundwater monitoring wells in the on-Site KPC wood yard and in the off-Site "Bark Pile Parcel" (not KPC owned);

- November 21, 1991, Book 4948, Page 217; Consent Agreement from The U.S. EPA concerning on-Site PCB cleanup and monitoring requirements under EPA Docket No. Toxic Substance Control Act (TSCA) # I-87-1041;

- February 12, 1992, Book 5006, Page 220; Modification to Findings of Fact and Order by MeDEP concerning permission to install a new effluent pipe in an on-Site trench; and

- April 24, 2003, Book 8740, Page 72; MeDEP Voluntary Response Action Plan (VRAP) No Action Assurance Letter – Certificate of Completion for KPC covering the three on-Site PCB spill areas and the off-Site Bark Pile Parcel but not the off-Site Old Mill Dump/Old Construction Fill Area;

Discussions between SWCE and Mr. Scott Whittier, Director, MeDEP Division of Oil & Hazardous Waste Storage Facilities Regulation indicated that a clean closure letter or report may not be on file with the MeDEP but he was positive that the on-Site "Drum Storage Facility" (now on land occupied by the "Paper Warehouse" building) and the off-Site "Dolby Storage Facility" (at the "Dolby Dam Hydroelectric Station") hazardous waste storage areas would have been closed in the early 1990s in compliance with the MeDEP approved closure plan. Subsequent to our discussions with Mr. Whittier, KPC personnel provided Engineer's Certification from Sevee & Maher Engineers, Inc. of clean hazardous waste closures at the "Drum Storage Facility" dated December 1989 and at the "Dolby Storage Facility" dated March 1991.

The April 24, 2003, MeDEP No Action Assurance Letter and Certificate of Completion concerning the three on-Site PCB spill areas and the off-Site Bark Pile Parcel provides liability protections to KPC under VRAP and indicates that the PCB spills have been remediated to the satisfaction of the MeDEP and that groundwater near the Bark Pile Parcel was monitored for several years and contaminant concentrations found were not above drinking water standards. The 2003 VRAP letter appears to address both the May 28, 1991 MeDEP Order about groundwater monitoring at the on-Site wood yard and the abutting off-Site "Bark Pile Parcel" and also the November 21, 1991 USEPA Consent Agreement about the three on-Site PCB spill locations. Based on our discussions with the MeDEP, it is not expected that the MeDEP has any current outstanding environmental issues requiring corrective action at the Site.

It should be noted that former East Mill owner, Georgia Pacific (Great Northern Nekoosa Corporation) is not complete for the on-Site PCB monitoring at the mill complex although its frequency has apparently been reduced by the USEPA to three times per year. Northern Services, Inc. ("Bark Pile" owner/operator) is not complete for the off-Site "Bark Pile Parcel" cap and closure and is not expected to be completely mined and capped for approximately 10 to 12 years. According to the MeDEP, the off-Site "Old Mill

Dump/Old Construction Fill" area requires more investigation before being considered for liability protection under VRAP.

Copies of the documents listed above and other MeDEP documents recorded at the Penobscot County Registry of Deeds are included in Appendix F of this report.

3.3 Specialized Knowledge

During the course of this assessment, the Client did not provide SWCE with any information pertaining to Specialized Knowledge associated with the Site. The Client completed an ASTM E 1527-05 AAI User Questionnaire. Question 3 pertaining to Specialized Knowledge and the answer provided by the Client to Question 3 is presented below:

3) "As user of this environmental site assessment, do you have any specialized knowledge or experience related to the property or nearby properties?" ANSWER: "Cate Street Capital has engaged Peter Hanson, who previously managed a paper manufacturing business, to advise it in its acquisition of the properties and to manage its business thereafter."

3.4 Valuation Reduction for Environmental Issues

Environmental issues were identified to SWCE by the current Site Owner's representatives and by the Client that could result in property value reduction. The Client completed an ASTM E 1527-05 AAI User Questionnaire. Question 4 pertaining to Fair Market Value and the answer provided by the Client is presented below:

4) "Does the purchase price being paid for this property reasonably reflect the fair market value of the property?" ANSWER: "No. The purchase price for the property does not reflect the value of the equipment and fixtures, which could be removed and sold. The purchase price does reflect the fact that environmental liabilities exist on the properties, and that the seller of the properties is not indemnifying the purchaser for these liabilities. Therefore, the potential value of fixtures is netted against the environmental liabilities to determine a fair property value."

3.5 Owner, Property Manager, and Occupant Information

An ASTM E 1527-05 Environmental Site Assessment Questionnaire for the Site owner

or occupant was completed by Mr. John Civiello, Senior Environmental Technician at Katahdin Paper Company, LLC. In his responses, Mr. Civiello indicated that past and current Site use included industrial activities (paper mill) and that underground storage tanks currently exist and formerly existed on the Site. Mr. Civiello indicated that petroleum and hazardous substances use, storage, and spills, have occurred on the Site. He indicated that wastewater treatment ponds are located at the WWTP located in the mill complex. He indicated that governmental notification of environmental violations has occurred for the Site. Mr. Civiello did not indicate that he was aware of any specific environmental issues associated with the past/current use of adjoining properties. A copy of the completed ASTM owner/occupant questionnaire is included in Appendix F of this report.

3.6 Reason for Performing Phase I

According to Mr. Raymond Kusche, Director of Energy Services with Cate Street Capital, Inc., this Phase I ESA is being conducted prior to the proposed purchase of the mill complex and portions of the off-Site KPC land in East Millinocket.

4.0 RECORDS REVIEW

4.1 Standard Environmental Record Sources

SWCE subcontracted FirstSearch Technology Corporation (FirstSearch) of Norwood, Massachusetts to conduct a search of Federal, Tribal, and State databases of known and suspected environmental contamination locations. SWCE also accessed environmental database information available online at the MeDEP central offices in Augusta, Maine. The complete FirstSearch environmental database search report and copies of selected MeDEP records reviewed are presented in Appendix D.

FirstSearch identifies Geocoded sites as those that have adequate address/location information such as a street address, latitude/longitude, etc. FirstSearch identifies listings that do not have adequate location/address information as Non-Geocoded sites. We reviewed FirstSearch's Sites Summary Report that lists all the Geocoded and Non-Geocoded sites. We reviewed the Site Detail Reports for all Geocoded sites and only those Non-Geocoded sites that had some location information such as street or facility name.

SWCE reviewed the FirstSearch report for EPA environmental records including the National Priorities List (NPL); Comprehensive Environmental Response Compensation and Liability (CERCLA) and Liability Information System (CERCLIS) database; Resource Conservation and Recovery Act (RCRA) and Information System (RCRIS), RCRA Treatment, Storage, and Disposal database; RCRA Hazardous Waste Generators database; and the Emergency Response Notification System (ERNS) database for facilities listed within the approximate minimum search distances (AMSD) from the Site as specified in ASTM Standard E 1527-05.

Table 1 below presents the federal environmental records listed by FirstSearch for the Site and for facilities within the ASTM approximate minimum search distances from the Site.

TABLE 1
FEDERAL ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
ERNS	Mill	On-Site	D20413; 1993; 1 gallon oil spill
ERNS	Mill	On-Site	H31174/328132; 1993; 1,500 gallon sulfuric acid spill, in containment, routed to on-Site WWTP
ERNS	Mill	On-Site	D30528/304699; 1993; 20 gallon hydraulic oil spill at gate to Penobscot River, booms deployed, absorbents used, source fixed
ERNS	Mill	On-Site	542462; 1998; unknown gallon lube oil spill, not found
ERNS	Mill	On-Site	517651; 1996; 10 (unknown units) calcium hydroxide at on-Site WWTP

TABLE 1 (Cont.)
FEDERAL ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
ERNS	Mill	On-Site	180953; 1990; unknown
ERNS	Mill	On-Site	D20034; 1993; 2 gallon oil spill, water booms deployed
	Mill	On-Site	543901; 1997; 1 gallon oil spill, sheen observed on river, gone before cleanup available
ERNS	Mill	On-Site	497434;1996; 1 gallon hydraulic oil spill
ERNS	Mill	On-Site	495551; 1998; 1 gallon hydraulic oil spill, release secured, booms deployed
ERNS	Mill	On-Site	D50775; 1998; 1 gallon oil spill, sheen in river boomed, sorbents used
ERNS	Mill	On-Site	220106; 1991; 750 gallon sulfuric acid spill, AST rupture, material removed to on-Site WWTP
ERNS	Mill	On-Site	233921; 1991; 2 gallon oil spill
NFRAP	Mill	On-Site	MED001098001/0102072; EPA Administrative Consent Order – PCB clean-up. 1990 Public Notice; 2002 No Further Remedial Action Planned (NFRAP)

TABLE 1 (Cont.)
FEDERAL ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
RCRA COR	Mill	On-Site	MED001098011; 1987 – 1991; hazardous waste; Corrective Action (CA) event 1992 – high priority; CA event 2000 – referred to non-RCRA/CERCLA
RCRAGN	Mill	On-Site	MED001098001; 1993; waste nitric acid
RCRA TSD	Mill	On-Site	MED001098011; 1987-1991; treatment, storage or disposal of hazardous waste, subject to corrective action
ERNS	Sub Station 3	Adjacent	NRC-700621; 2003; 1 pint non-PCB transformer oil spill onto gravel, potentially disposed of at paper mill landfill
ERNS	Dolby Dam	Adjacent	632563; 1999; 1 gallon waste oil into river, booms deployed
ERNS	Dolby Dam	Adjacent	278811; 1992; 0 gallon oil into river from dam maintenance, boom deployed
ERNS	Dolby Dam	Adjacent	309602; 1993; 0 gallon hydraulic oil spill into river, deployed boom
ERNS	Dolby Power Station 1	Adjacent	288194; 1992; 0 gallon hydraulic oil spill into river from dam maintenance, boom deployed
ERNS	Dolby Dam	Adjacent	505805; 1996; 1 gallon oil spill

TABLE 1 (Cont.)
FEDERAL ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
ERNS	Dolby Dam	Adjacent	505051; 1996; 1 gallon oil spill

SWCE reviewed the FirstSearch report for MeDEP records including State Sites (State CERCLA/CERCLIS equivalent), Solid Waste Landfills, Underground Storage Tanks (USTs) and Spills including MeDEP spill reports and leaking underground storage tanks (LUSTs).

Table 2 below presents the state environmental records listed by FirstSearch for the Site and for facilities within the ASTM approximate minimum search distances from the Site.

TABLE 2
STATE ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
VCP	Mill	On-Site	Maine VRAP 0404-80; Voluntary Response Action Plan, final VRAP certification received
SWL	Dolby Landfill	Adjacent	S-021092; Solid Waste Landfill Licenses
Brownfield	Mill	On-Site	REM00517; Uncontrolled sites, in review
LUST/ SPILLS	Mill	On-Site	B-493-2007; 20 gallon #6 fuel oil spill from AST
LUST	Mill	On-Site	B-104-2008; 200 gallon sulfuric acid spill from AST
LUST	Mill	On-Site	B-718-1998; 1,200 gallon sulfuric acid spill from AST; to the mills treatment plant

TABLE 2 (Cont.)
STATE ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
LUST/ SPILLS	Mill	On-Site	B-483-2003; unknown amount of gasoline from a previous UST discovered beneath the existing gasoline UST, contaminated soil left in place by MeDEP
SPILLS	Mill	On-Site	B-742-1997; 1 gallon unknown substance spill
SPILLS	Mill	On-Site	B-708-1996; 9 lbs non-hazardous hydrated lime; cleaned up
SPILLS	Mill	On-Site	B-28-1996; 5 gallon transformer oil; to landfill
SPILLS	Mill	On-Site	B-568-1999; 200 gallon #6 fuel oil spill; collected, mixed with bark mulch, burned in bark boiler
SPILLS	Mill	On-Site	B-309-1996; 0.2 gallon hydraulic oil spill
SPILLS	Mill	On-Site	B-383-1994; 30 gallon diesel fuel spill; sorbent pads disposed of by GNP
SPILLS	Mill	On-Site	B-500-1998; 0.5 gallon diesel fuel spill; one drum Speedi-dry disposed of by Clean Harbors
SPILLS	Mill	On-Site	B-187-2008; 350 gallon transformer oil spill; Clean Harbors to Dolby Landfill
SPILLS	Mill	On-Site	B-481-1995; unknown quantity oil, no disposal needed
SPILLS	Mill	On-Site	B-718-1998; 1,200 gallons sulfuric acid spill from AST; sent to on-Site WWTP
SPILLS	Mill	On-Site	B-433-1990; 1 lb chlorine; odor/vapor/mist
SPILLS	Mill	On-Site	B-340-1993; 1,500 gallon sulfuric acid spill; neutralized in waste stream to WWTP

TABLE 2 (Cont.)
STATE ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
SPILLS	Mill	On-Site	B-370-1993; 50 gallons sulfuric acid spill; neutralized to WWTP
SPILLS	Mill	On-Site	B-213-1991; 9,000 gallons #6 fuel oil spill; recycled wood chips burned, spread
SPILLS	Mill	On-Site	B-124-1993; 12 gallon hydraulic oil spill
SPILLS	Mill	On-Site	B-27-1992; 19 gallon lube oil spill
SPILLS	Mill	On-Site	B-448-1992; 25 gallon lube oil spill
SPILLS	Mill	On-Site	B-595-1992; 1 gallon lube oil spill
SPILLS	Mill	On-Site	B-759-1991; 1,000 gallon hazardous chemical spill; treated on site
SPILLS	Mill	On-Site	B-462-2003; 330 gallon hazardous chemical spill; treated on site at WWTP
SPILLS	Mill	On-Site	B-338-1991; 1,900 gallon sulfuric acid spill; 41 drums disposed of by Clean Harbors
SPILLS	Mill	On-Site	B-626-1990; unspecified oil spill; nothing collected
SPILLS	Mill	On-Site	B-684-1990; 20 gallon diesel fuel spill; incinerated
SPILLS	Mill	On-Site	B-70-1993; 20 gallon hydraulic oil spill
SPILLS	Mill	On-Site	B-553-1990; 200 gallon #6 fuel oil spill; burned in bark burner
SPILLS	Mill	On-Site	B-574-1990; 1 gallon hydraulic oil spill
SPILLS	Mill	On-Site	B-70-1993; 20 gallon hydraulic oil spill
SPILLS	Mill	On-Site	B-260-1990; non-oil/non-hazardous marsh sheen
SPILLS	Mill	On-Site	B-104-2008; 200 gallon sulfuric acid spill from AST; disposal by KPC (WWTP)

TABLE 2 (Cont.)
STATE ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
SPILLS	Mill	On-Site	B-92-1994; 2 gallon sulfuric acid spill; flushed to process sewer after neutralized (WWTP)
SPILLS	Mill	On-Site	B-473-2003; 13 gallon transformer oil spill; absorbent pads to municipal trash
SPILLS	Mill	On-Site	B-644-1991; 0.5 gallon lube oil spill
STATE	Mill	On-Site	REM00517; Uncontrolled Sites referred to other programs
UST	Mill	On-Site	MeDEP #9473; 1987; 6,000 gallon waste oil UST removed from maintenance garage
SPILLS	Dolby Dam	Adjacent	B-263-2005; non-oil/non-hazardous; marsh sheen
SPILLS	Mill by Bangor Hydro	Adjacent	B-77-2005; 5 gallon transformer oil spill; 4 soil drums to Pine Tree Landfill in Hampden
SPILLS	Dolby Dam	Adjacent	B-124-2006; 1 gallon diesel fuel spill to waste stream – on-Site WWTP
SPILLS	Dolby Dam	Adjacent	B-558-2006; 1 gallon hydraulic oil spill; sorbent boom until sheen evaporates
SPILLS	Dolby Dam	Adjacent	B-127-2005; 0.1 gallon unspecified oil spill
SPILLS	W Branch Penobscot	Adjacent	B-524-1995; 0 gallon unspecified oil spill
SPILLS	Dam	Adjacent	B-534-1995; 0 gallon lube oil spill
SPILLS	W Branch Penobscot	Adjacent	B-520-1995; non-oil/non-hazardous; marsh sheen

TABLE 2 (Cont.)
STATE ENVIRONMENTAL RECORDS

Database	Site Name	On-Site/Adjacent	Comments
LUST	1 Elm St.	<0.5 mile	B-195-1983; 175 gallon #2 fuel oil spill from AST; absorbent pads incinerated at Mill
LUST	3/2 Main Street	<0.5 mile	B-258-2001; 150 gallon #2 fuel oil spill from AST; to Auburn incinerator
LUST	2 Spruce Street	<0.5 mile	B-99-1998; 125 gallon kerosene spill; absorbent pads to MeDEP for later incineration
LUST	53 Main Street	<.5 mile	B-616-2006; at East Millinocket Municipal Bldg; non-oil/non-hazardous; UST involved
LUST	Town WWTP	Adjacent	B-321-2000; 1 gallon spill non-oil/non-hazardous; UST
LUST	Main St.	Adjacent	B-420-1998; UST Inspection Failures; Dead River
LUST	Main St.	Adjacent	B-402-2006; 4 gallon diesel surface spill to pavement; Dead River; to Pine Tree Landfill, Hampden
LUST	Main St.	Adjacent	B-652-1997; 1 gallon & 40 cubic yards gasoline UST involved; East Millinocket Exxon; (now Dead River)
LUST	Main St.	Adjacent	B-64-1994; 50 gallons and 100 cubic yards gasoline; UST involved; Dave's Auto Repair (now McLaughlins)
LUST	6 Beech Street	<.5 mile	B-612-2006; 0 gallon oil incident; UST involved; tank removal Opal Myrick School
LUST	101 Main Street	Adjacent	B-158-1998; 50 gallon #2 fuel oil spill; AST involved

Based on our review of the FirstSearch report, we accessed spill file information available online from the MeDEP. Spill file #B-213-1991 describes an approximate 9,000 gallon No. 6 oil spill in the rail car off-loading area. According to the spill report, about 8,000 gallons of the oil were recovered and about 30 cubic yards of impacted soil were land-farmed (aerated) on-Site. No. 6 oil impacted soil was observed in the rail car off-loading area during the Site reconnaissance visits and constitutes a REC in connection with the Site. A copy of spill report #B-213-1991 is included in Appendix F.

MeDEP Spill #B-483-2003 presents information concerning the discovery of what is describes as gasoline impacted soil behind (south) of the old paint shop in the mill complex beneath the existing 2,000 gallon gasoline UST (Reg. #16607) at a depth of about six feet below ground surface. The discovery occurred in September 2003 while cathodic protection anodes where being replaced on the double-walled steel tank by a licensed tank installer. Because the existing UST and piping showed no indication of leaking, the MeDEP decided to remediate the gasoline impacted soil when the existing tank was removed in the future. The tank was installed at the Site in 1989 and was last inspected in August 2011. The presence of gasoline impacted soil beneath the existing gasoline UST constitutes a REC in connection with the Site. A copy of the spill report is included in Appendix F.

A review of the off-Site Spill, UST and LUST information presented in the FirstSearch environmental database search report suggests that a few of the environmental incidents associated with these properties have the potential to have an adverse impact on the environmental integrity of the mill Site. This is based on the distance and direction each facility is located relative to the mill property, local topography, and inferred south-southeast groundwater flow direction in the area. Please refer to Section 4.2 below for a discussion of these few off-Site environmental incidents that may have a potential to affect the mill property.

4.2 Additional Environmental Record Sources

In addition to a review of the information presented in the FirstSearch database report, SWCE accessed and reviewed oil and hazardous material (OHM) spill, registered UST, and remediation information available online from the MeDEP. Additional OHM spill and remediation information was found for the East Mill property. OHM spill, UST, and

remediation information was also found concerning properties near the Site that have a potential to impact the Site.

Although not included in the FirstSearch report for the East Millinocket Mill, SWCE accessed MeDEP Spill #B-77-1994 and #B-79-1994 from the MeDEP website. Spill # B-77-1994 documents a 1,250 gallon No. 6 oil spill in the East Mill rail car off-loading area that occurred in February 1994. According to the report, about 60 cubic yards of No. 6 oil soaked railroad track ballast material (rocks and soil) were excavated and transported off-Site for disposal at a landfill in Hampden, Maine. Spill # B-79-1994 documents a 550 gallon No. 6 oil spill that occurred in February 1994 in the earthen tank berm around one of the two large aboveground No. 6 oil tanks at the East Mill. The spill was apparently the result of overfilling a tank truck being loaded from one of the two large aboveground No. 6 oil tanks for delivery to the on-Site steam plant. No. 6 oil impacted soil of the earthen berms at the Site was observed during the Site visits by SWCE and constitutes a REC in connection with the Site. Copies of the spill reports are included in Appendix F.

Historical environmental issues at the following two facilities are considered to be RECs in connection with the Site:

- The Dead River gasoline station at 64 Main Street has three USTs that were all installed in 1984. Two of the tanks are 10,000 gallon gasoline tanks and one is a 4,000 gallon diesel tank (Reg. #13355). There are three spill reports on file with the MeDEP for the station. Spill report B-652-1997 documents the discovery and removal of approximately 40 cubic yards of gasoline impacted soil found during underground pipe relocation activities. Spill report B-420-1998 documents UST inspection failure associated with one of the 10,000 gallon gasoline tanks in June 1998. A loose fitting on the tank was blamed for the inspection failure. The fitting was tightened and the tank continued to fail the tests reportedly due to the tank being tipped (installed in an un-level position). The MeDEP spill report does not indicate that a resolution was implemented. Spill report B-402-2006 documents a 4-gallon diesel fuel surface spill at the station caused by a ruptured fuel supply line from the dispenser to the nozzle. The spill occurred on an asphalt surface and was reportedly absorbed with speedi-dry and disposed of to the satisfaction of the MeDEP.

- Dave's Auto Repair at 79 Main Street (now McLaughlin's Auto Repair) has one spill report on file at the MeDEP. Spill report #B-64-1994 documents abandoned UST and piping removal activities in May 1994. Three USTs (Reg. #12869) were being excavated for removal when a fourth unknown tank was discovered along with gasoline contaminated groundwater and soil. Approximately 50 gallons of gasoline impacted groundwater were recovered and 100 cubic yards of gasoline impacted soil were excavated from the facility. The previously undocumented UST was found to be buried partially under the building and was therefore filled with sand and abandoned in place. A passive soil venting system and a groundwater monitoring well were installed in the contaminated area. Gasoline Range Organics (GRO) totaling over 11,000 parts per billion (ppb) were detected in the groundwater. The MeDEP drinking water standard for GRO is 50 ppb. The MeDEP did not require groundwater remediation because gasoline free product was not found and a municipal drinking water source is available in East Millinocket.

Copies of the above referenced MeDEP spill reports are included in Appendix F of this report.

4.3 Physical Setting Sources

SWCE obtained and reviewed published maps from the Maine Geological Survey (MGS) and from the Federal Emergency Management Agency (FEMA) that depict various aspects of the Site and adjacent areas.

According to the *Bedrock Geologic Map of Maine* (1985 Anderson, et al), bedrock in the Site vicinity is characterized as interbedded and undifferentiated pelite and metamorphosed sandstone commonly referred to as the Allsbury Formation that was formed approximately 400-430 million years ago during the Silurian geologic period. Depth to bedrock in the Site vicinity is mapped at approximately 20 to 40 feet below ground surface. Bedrock is visible in the river bottom below the Mill/Grindstone Dam at about 20 to 25 feet below ground surface at the mill.

According to the MGS *Surficial Geologic Map of Maine* (1985 Anderson, et al), surficial soils in the Site vicinity are composed of glacial till deposits that consist of dense layers of a mixture of silt, clay, sand, gravel, cobbles, and boulders generally located directly on top of bedrock as deposited by the late glacial ice approximately 13,000 years ago.

According to the MGS *Sand and Gravel Aquifers Map* of the East Millinocket and Medunkeunk Lake Quadrangles, the Site is not located over a significant sand and gravel aquifer. The closest mapped aquifer is located approximately one mile east of the Site along the west side of the East Branch of the Penobscot River.

The FEMA Flood Insurance Rate Map (FIRM) #230163B dated February 4, 1987 shows the Site and the immediate Site vicinity. According to the map, the Site is not located in a 500 or 100 year flood zone. The closest mapped flood zone appears to be greater than 5 miles distant from the Site.

4.4 Historical Site Use Information

As part of this assessment, SWCE conducted a search of available historical land use records for the Site. The search was conducted to assist in identifying past Site use and included a search of available municipal records at the Town of East Millinocket Municipal Offices, deeds and aerial photographs from the Penobscot County Registry of Deeds, a search of historical topographic maps, aerial photographs, city directories, and fire insurance maps available from FirstSearch, on-line historical research, and interviews.

According to our research, the Townships of East Millinocket and Millinocket were purchased in the late 1890s for the purpose of developing two paper mill sites. We understand that two working farms were in East Millinocket and Millinocket and these were purchased by the paper company. The East Millinocket paper mill was completed in 1907 and included the mill, railroad service and the Dolby Dam; some of these features are observable on 1939, 1947, 1969, 1997, and 2007 aerial photographs, and on 1951 and 1988 topographic maps. From 1907 to 2011, the Site was in operation as a paper mill. Other historical land uses for the East Mill Site were not identified as a part of this assessment.

4.5 Historical Adjoining Property Use Information

Concurrently with the historical Site use research, SWCE conducted a search of available historical land use records for the immediate Site vicinity. The search was conducted to assist in identifying past Site vicinity land use and included a search of available municipal records at the East Millinocket Town Offices, deeds, and aerial photographs from the Penobscot County Registry of Deeds, a search of historical topographic maps, aerial photographs, city directories, and fire insurance maps available from FirstSearch, on-line historical research, and interviews.

Based on the results of our review of historical adjacent property use information, it appears that property use surrounding the Site was forestland with two farms (reportedly flooded when Dolby Pond was created with the completion of Dolby Dam) until the mill was constructed in the early 1900s. Over time, land north of the mill was subdivided to provide home sites for workers at the mill, and lots for businesses and the municipality. Based on the historic aerial photographs and topographic maps, it appears that these land subdivisions occurred over time as housing needs and business opportunities grew.

The Dolby Landfill was first developed in 1975 and is located north of Main Street and the developed portion of East Millinocket and west of the approximate 330 acre Town owned forestland. The first and second waste disposal phases (I and II) are closed, waste disposal phase III is open but has been inactive since the East Mill closure in April 2011. The landfill has historically been used to dispose of wastewater treatment sludge from the mill, wood waste, bark ash (from the West Mill Bark Ash Pond), general mill solid waste, waste from GNP woodland operations, waste from the recycled paper operations at the East Mill, and wood ash from Sherman Station. It is our understanding that some municipal solid waste from the Towns of East Millinocket, Millinocket, and Medway was accepted at Dolby Landfill until approximately 1993.

The former East Millinocket Town dump was closed in 1994 and is located at the west end of Church Street north of Route 11/157 and north of and abutting KPC land. The dump is observable on the 1939 aerial photograph, and appears larger on the 1969 aerial photograph.

Copies of the historical topographic maps, aerial photographs, and fire insurance maps reviewed are included in Appendix E of this report.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Several Site reconnaissance visits were made in July 2011 by SWCE Senior Environmental Scientist, Thomas A. Trainor, and Environmental Scientist, Aleita M. Burman. The Site reconnaissance visits were led by Mr. John Civiello of Katahdin Paper Company, Inc. The visual reconnaissance consisted of observing accessible interior areas of the Site buildings and observing the developed areas of the property. The periphery of abutting and adjacent properties was also observed. A Site Features Plan is attached as Sheet 2 in Appendix B of this report. Color copies of photographs taken during the Site visit are included in this report as Appendix C.

5.2 General Site Setting

The paper mill complex is located south of Main Street (Route 11/157), north of the West Branch of the Penobscot River, east of the Dolby Dam (at outlet of Dolby Pond), and west of the Medway Town line. It is situated on the Town's southern boundary and at the Town's lowest topographic elevations which range from approximately 325 feet above mean sea level on the northwest end adjacent to the Dolby Dam and approximately 280 feet above mean sea level on the southeast end next to the Medway Town line. Surface topography at the mill complex varies, however, the land generally slopes downward to the south and east towards and along the West Branch of the Penobscot River. Inferred groundwater flow direction at the paper mill complex is expected to be south-southeast toward the river.

At the time of the Site reconnaissance visits, the mill property was developed with a 2-story approximate 240,000 square foot main mill building that houses the two on-Site paper machines (#5 and #6) and the bulk of the paper and wood processing equipment. Other structures and improvements include: a 137,000 square foot recycled paper process and pulp building, a wood yard used for receiving, storing, and processing tree-length softwood logs, a storm water settling pond, a bark storage building, a grinder room building, two large oil ASTs in unlined earth berms , a No 6 oil steam plant, a bark boiler building, the old water treatment building, the water screen room building, several

large pulp storage silos/tanks, the paper finishing building, train shed, finished product warehouse and shipping, vehicle maintenance garage, training center, two small sheds formerly used for hazardous waste storage, and a large WWTP.

5.3 Site Visit Findings

5.3.1 Hazardous Substances

Hazardous substances were observed to be stored and used in many areas of the mill complex. Some of the substances observed include: acetic acid, acetone, ethylene glycol, hydrochloric acid, hydrogen sulfide, hydrogen peroxide, mercury, methylene chloride, nitric acid, phosphoric acid, potassium hydroxide, sodium bisulfite, sodium hydroxide, sodium hypochlorite, sodium nitrate, sodium phosphate, sulfuric acid, toluene, and xylene. The chemicals observed by SWCE during the Site reconnaissance visits where either located inside the mill complex in secondary containment or in indoor areas equipped with floor drains connected directly to the on-Site WWTP. Please refer to the KPC Spill Prevention, Control, and Countermeasures Plan (SPCC) revised December 2009 for a complete listing of hazardous substance tank/container sizes and locations.

5.3.2 Petroleum Products

Gasoline, diesel fuel, No. 2 fuel oil, No. 6 fuel oil, kerosene, and lubricating oil are stored in tanks and drums across the mill complex. Please refer to the December 2009 SPCC Plan for a complete listing of petroleum tank/container sizes and locations.

5.3.3 Underground Storage Tanks

SWCE is aware of just one UST that currently exists at the East Millinocket mill complex. It is registered with the MeDEP (Reg. #16697). It is a 2,000 gallon gasoline UST located behind the old paint shop just south of the shipping and receiving end of the main mill building. The tank is a double-walled steel tank with cathodic protection and continuous electronic monitoring installed in 1989. According to KPC personnel, the tank has not been used since April 2011 and most recently passed inspection in August 2011. Please refer to Section 4.2 concerning a discussion of gasoline impacted soil discovered beneath the gasoline tank and left in place in 2003 (MeDEP Spill #B-483-2003).

MeDEP records show that five additional USTs were previously installed at the East Mill complex. Two USTs (Reg. #13518) were installed in 1955 and were abandoned in place in 1986. Both tanks were 20,000 gallon, single-walled, steel tanks that were used to store No. 2 fuel oil. Two USTs (Reg. #12859) were installed in 1974 and removed in 1991. Both tanks were 1,000 gallon, single-walled, steel tanks. One was used to store No. 2 fuel oil and the other was used to store diesel fuel. A 6,000 gallon waste oil UST was installed at the vehicle maintenance garage in the mill complex in 1979 (Reg. #9473). It was a single-walled steel tank that was removed in 1987. MeDEP tank records were not available online for Reg. #13518, #12859, or #9473. The exact installation or abandonment locations for these tanks could not be ascertained during the course of this assessment. Documentation concerning soil, groundwater, tank, and piping condition at the time of either abandonment or removal was not found during the course of this assessment. Unknown historic UST location and undocumented environmental conditions at the time of UST abandonment or removal constitutes a REC in connection with the Site. It is also possible that there have been additional USTs installed, put into service, removed or abandoned in place at the East Mill prior to regulatory record keeping.

5.3.4 Aboveground Storage Tanks

Many aboveground storage tanks (ASTs) exist at the mill complex. The tanks are used to store pulp, chemicals, and petroleum. Most tanks are located inside the mill buildings and are situated inside secondary containment systems and/or adjacent to floor drains connected directly to the on-Site WWTP. Several tanks are located outside of the mill buildings. A discussion of these outside tanks is included in the following paragraphs.

Three large concrete and masonry tanks (1,000,000 gallons, 750,000 gallons, and 750,000 gallons) are positioned in secondary containment structures and are used to store wood pulp (one circa 1987 and two circa 1954, respectively). There are two large steel ASTs (2,300,000 gallons and 750,000 gallons) positioned in unlined earthen berms made of glacial till that are used to store No. 6 fuel oil. These oil tanks were installed in 1954 and 1950, respectively and are considered to be at the end of their life cycles.

Five ASTs were observed outside of the WWTP. Two are chemical tanks and three are petroleum tanks. All were positioned inside secondary containment structures and include a 6,000 gallon phosphoric acid tank installed in 1976, a 18,000 gallon urea tank installed in 1976, a 1,000 gallon diesel tank installed in 1991, a 1,000 gallon No. 2 heating oil tank installed in 1991, and a 500 gallon diesel tank installed in 1995.

A 4,000 gallon diesel AST and dispensing pump was observed in the wood yard. This tank was installed in 1980 and is used to refuel log handling vehicles such as fork lifts and front-end loaders. It is a double-walled, steel tank. It is situated on the ground surface and is not inside of a secondary containment structure. It is in an area of the property where storm water discharges directly to the river. Because of the potential for petroleum to be spilled directly to the ground surface and possibly to the river during either tank filling or vehicle refueling activities, it is considered a REC in connection with the Site.

5.3.5 Other Suspect Containers

Many other containers of OHM were observed in the mill complex during the Site reconnaissance visits. These included dozens of 55 gallon drums of lube oil and waste oil and dozens of 350 gallon totes of paper mill chemicals. In a few instances, these containers were not positioned in secondary containment structures. The potential exists for spills to occur as a result of handling OHM in these instances but unlikely to impact the ground, surface water and/or groundwater. It is, however, encouraged that the best management practice of using spill pallets be implemented whenever possible.

5.3.6 Equipment Likely to Contain Polychlorinated Biphenyls

According to Mr. John Civiello, Senior Environmental Technician for KPC, there is no longer any PCB containing oil in the mill complex. Groundwater monitoring for three historical PCB spills to the ground surface is still on-going at the mill complex. Provided its conditions continue to be met, KPC is covered for liability protection concerning these PCB spills under an April 2003 VRAP No Action Assurance Letter from the MeDEP.

5.3.7 Interior Staining/Corrosion

At the time of the Site reconnaissance visit, SWCE observed that most areas within the mill complex exhibit evidence of OHM staining on the concrete floors.

5.3.8 Discharge Features

Floor drains and trench drains were observed by SWCE throughout the mill complex. According to Mr. Civiello all floor and trench drains in the mill complex are connected directly to the on-Site WWTP: In addition, all storm water catch basins located in the industrial areas of the complex are also directly piped to the WWTP. Some storm water catch basins located outside of the industrial areas such as in the wood yard, shipping, receiving, former on-Site hazardous waste storage, and WWTP areas discharge directly to the river (Sheet 2-Site Features Plan).

Discharge features including storm water catch basins that have the potential to impact the ground surface, groundwater, or surface water (including the river) or due to their proximity to OHM storage, handling, and use (such as the gasoline dispensing area next to the old paint shop) constitute a REC in connection with the Site. Discharge features including storm water catch basins in areas where OHM is not intentionally dispensed or routinely handled may be considered BER.

When in operation, the East Mill draws about 30 million gallons of water from the river each day. About half of this amount is used as process water and about half is used as cooling water. Process water discharge from the mill is directly to the on-Site WWTP. Cooling water is discharged back to the river.

Prior to construction of the on-Site WWTP in 1973-1974, discharge features including storm water catch basins and floor drains throughout the mill complex either discharged to the ground or to the river. Ground discharges were likely to on-Site french drains, leach fields, cess pools, etc. Discharges to the river were likely through on-Site ditches, swales, and via direct piping. It is expected that historical environmental impacts have occurred to the ground, to the groundwater, to the river water, and to the river sediments from the early 1900s when mill construction began.

It is possible that river sediments in depositional areas near the mill and in particular, sediments that have accumulated on the upstream side of the Mill/Grindstone Dam (at the mill) contain potentially elevated concentrations of metals, PCBs, dioxins, furans, and other persistent organic pollutants. Historic OHM discharges from mill operations to the ground, groundwater, river and to the riverbed constitute a REC in connection with the Site.

5.3.9 Pits, Ponds, and Lagoons

A storm water detention/settling pond that receives storm water runoff from the wood yard and discharges to the river was observed by SWCE during the Site reconnaissance visits. The pond was required by the MeDEP to reduce the amount of wood waste (chips and bark) entering the river during rain storms and snow melt. According to Mr. John Civiello, Senior Environmental Technician at the mill, KPC has a current MeDEP Multi-Sector General Permit (MER05B494) in good standing for storm water discharges associated with industrial activity and a current Storm Water Pollution Prevention Plan revised in January 2010. Mr. Civiello also stated that the mill is permitted under the Maine and National Pollutant Discharge Elimination System for separate discharges to the river. Primary and secondary clarifier ponds and a large aeration lagoon are located south of the mill complex as part of the on-Site WWTP. The Town of East Millinocket has two smaller primary clarifier ponds just north of the mill WWTP.

5.3.10 Solid Waste Dumping/Landfills

Evidence of solid waste dumping and/or landfills was not observed at the mill complex by SWCE during the Site reconnaissance visits. The Dolby Landfill located approximately 4 miles northwest of the mill was observed by SWCE during the Site reconnaissance portion of this assessment.

5.3.11 Stained Soil/Stressed Vegetation

Stained soil was not observed by SWCE at the Site during the Site reconnaissance visits. Evidence of stressed vegetation (dead trees) was observed in a drainage area northwest of the mill between the Bangor and Aroostook railroad tracks and the on-Site road that leads to the Dolby Dam. Mr. Civiello thought that the dead trees are likely a result of a local beaver population that had taken up residence in the area and not an indication of a spill or discharge of OHM to the environment. SWCE was unable to confirm or deny his explanation.

5.3.12 Wells

Several groundwater monitoring wells were observed at the mill complex and at the Dolby Landfill by SWCE during the Site reconnaissance visits. According to Mr. Civiello, the wells at the mill complex are used to monitor three historic PCB spills and the wells at the landfill are used to monitor leachate.

6.0 INTERVIEWS

During the course of this assessment, SWCE interviewed Mr. Robert Gagner, Asset Manager and Mr. John Civiello, Senior Environmental Technician at Katahdin Paper Company, LLC; Ms. Marcia McKeague, President of Katahdin Timberlands, LLC and Katahdin Forest Mangement, LLC; Ms. Jean Firth and Mr. Scott Whittier with the MeDEP, Mr. Michael Noble, Town of East Millinocket Code Enforcement Officer; and Ms. Shirley Tapley, Town of East Millinocket Assistant Clerk. Some of their comments are included in the previous text.

7.0 OTHER ENVIRONMENTAL CONSIDERATIONS

7.1 Asbestos Containing Materials

An asbestos containing material (ACM) survey was not conducted as a part of this assessment. Efforts were made, however, to identify the presence of obvious and recognizable suspect ACM. Based on visual observations made by SWCE during the Site reconnaissance visits, a significant amount of both friable and non-friable asbestos containing material exists in the mill complex. Underground sections of the approximate 40-inch diameter by 7 mile long "Slurry Transfer Pipe" that extends between the paper mill in Millinocket and the paper mill in East Millinocket is made of asbestos transite. According to the mills Senior Environmental Technician, Mr. John Civiello, an asbestos management plan was implemented at the mill in the 1990s.

7.2 Lead Based Paint

The presence of lead based paint cannot be definitively determined based on visual observations alone. Field assay testing, x-ray fluorescence, or laboratory analysis would be required. However, based on the age of building construction and renovation it is expected that many painted surfaces and sub-surfaces contain lead. Painted surfaces observed by SWCE during the Site visits varied in condition from good to poor with some evidence of peeling and flaking.

7.3 Radon

Indoor air-borne radon concentration information for the East Millinocket area was not found during the course of this assessment. The US EPA recommends remedial action for air-borne radon levels in excess of 4.0 pCi/L in residential homes. There is no EPA action level for radon in commercial buildings. Since the mill buildings are used for commercial purposes, radon is not considered to be an issue of concern.

7.4 Wetlands

Significant wetland areas were not observed by SWCE at the mill complex.

7.5 Mold

Mold was not observed by SWCE during the Site reconnaissance visits. However, it is expected that mold exists in some areas of the mill complex including both accessible and inaccessible areas and that the amount of mold is likely to increase over time the longer the complex remains unattended.

7.6 Universal Waste

According to the MeDEP, universal waste is a hazardous waste that is widely generated by individuals and businesses. Universal waste includes common products such as batteries (lead, nickel-cadmium, lithium, metal hydride) cathode ray tubes (lead containing televisions, monitors and computer screens), lamps (mercury vapor, neon, metal halide), fluorescent bulbs (mercury), mercury thermostats and thermometers, mercury switches, electronic devices (cadmium, lead, lithium, mercury) and polychlorinated biphenyl (PCB) electronic ballasts. These products contain hazardous constituents, however, they are not considered wastes until they are no longer useful, broken, or taken out of service. Land disposal restrictions apply to universal waste and burning can create toxic emissions. State laws require that these products be recycled or disposed of at a licensed facility.

Universal waste is collected, cataloged, and temporarily stored in the mill complex in specifically designated and controlled areas. Universal waste observed by SWCE included: spent fluorescent light bulbs, batteries, broken and/or out-dated computer equipment, and a few small mercury containing devices (thermometers, switches). These products will need to be recycled or disposed of off-Site at a licensed facility.

Several hundred pounds of elemental mercury that was obtained by KPC from idle equipment and instrumentation at the West Mill in Millinocket is currently stored in the on-Site East Mill training center. Although not specifically categorized as a waste, it is possible that all or most of this material may have to be recycled or disposed of as either hazardous or universal waste if the West Mill is not placed back into service, or if the mercury cannot be reused at the East Mill or cannot be sold off-Site.

7.7 Client Specific Items

As requested by the Client subsequent to initiating the Phase I ESA of the mill complex, SWCE conducted a reconnaissance level environmental review of miscellaneous undeveloped land parcels currently owned by KPC in East Millinocket that may be included in the proposed asset and land transfer to the Client. These off-Site areas are shown on a plan titled "Millinocket and East Millinocket Ownerships" dated March 29, 2011 as provided to SWCE by the Client and are also identified on an aerial photograph labeled "Katahdin Paper Company" (East Millinocket) dated 7/25/11 at a scale of 1 inch=660 feet as presented to SWCE by both the Client and Ms. Marcia McKeague, President of Katahdin Timberlands, LLC and Katahdin Forest Management, LLC. Access to some of these lots was hindered by them being landlocked behind private residences. In some cases SWCE conducted a drive-by of the lots and took photographs from the road. The undeveloped properties are described in Table 3 below:

TABLE 3
MISCELLANEOUS UNDEVELOPED KPC PARCELS

Map/Block/Lot	Comment
1/1/8	Large approximate 265,000 acre land tract in tree growth, north of Town, east of Dolby Landfill, west of the Medway Town line.
1/72/4,5,6	11 and 13 Orchard Streets (three lots), positioned in the intersection of Orchard Street and Hathaway Road with obvious encroachment by the Town roadways and adjacent residential uses.
4/91/8	Back lot behind residences on Hathaway Road appears forested and undeveloped.

The approximate 265,000 acre forested tract is designated on East Millinocket Tax Map 1 as Block 1, Lot 8. This property is located primarily north of the mill complex across Main Street, east of Dolby Pond, south of Grindstone and west of Medway. Tree growth on the large undeveloped forested tract is harvested periodically. Reconnaissance of the large off-Site forested tract consisted of slowly driving the logging roads with a four wheel drive truck and making frequent stops to access the land on foot. During the reconnaissance of the off-Site forested tract, SWCE did not observe OHM or obvious recognizable evidence of environmental impact. The southern access road to the

forested tract (just north of the west end of Church Street near the Town Transfer Station) was gated thereby limiting access to the public. The north and east access roads were not gated at the time of the reconnaissance. The west access road to the forested tract traverses from Main Street (Route 11/157) through the Dolby Landfill and was gated both at Main Street to the west and on the east side of the landfill.

The Dolby Landfill is situated in the approximate center of the large forested tract. The landfill consists of two 'closed' phases (waste cells I and II), an 'open' phase (waste cell III which is currently inactive), a 'proposed' phase (waste cell IV), a leachate collection pond, and an underground leachate pipeline that extends approximately 4 miles from the leachate collection pond at the landfill to the WWTP on the south of the mill complex. It is our understanding that the landfill complex and the leachate pipeline are not being considered for ownership by the Client.

During the reconnaissance of the off-Site forested tract, an approximate 1,000 gallon diesel fuel AST and dispensing pump was observed by SWCE at the Dolby Landfill. It is a steel tank positioned on the ground without secondary containment. Because the landfill property is not considered a part of the Site and the potential for spilled petroleum from the tank to impact adjacent Site property is negligible, this tank is not considered to be a REC in connection with the Site. Please refer to the December 2009 SPCC Plan for a complete listing of AST information.

The other four off-Site properties in East Millinocket include: three abutting lots totaling approximately 1 acre in size located at the junction of Orchard Street and Hathaway Road and designated on East Millinocket Tax Map 1 as Block 72, Lots 4, 5 and 6; and one approximate 2.5-acre undeveloped lot located north of Hathaway Road behind a few single-family homes and designated on East Millinocket Tax Map 4 as Block 91, Lot 8.

The Orchard Street and Hathaway Road properties are located in the northeast corner of the residentially developed portion of East Millinocket, west of the Medway Town line. The three Orchard Street lots are located in the intersection of Orchard Street and Hathaway Road. Portions of these parcels have been paved as roadways by the Town and landscaped by residential neighbors. Some residential encroachment for personal property storage is occurring on at least one of the parcels. SWCE did not observe

OHM or obvious recognizable evidence of environmental impact on the Orchard Street lots. According to Mr. Noble, Code Enforcement Officer with the Town, the Hathaway Road property is an undeveloped woodlot. The Hathaway Road property could not be physically accessed by SWCE without trespassing across private property.

8.0 FINDINGS AND CONCLUSIONS

We have performed a Phase I ESA in accordance with our Proposal and Agreement dated July 13, 2011 and in general conformance with the scope and limitations of ASTM Practice E 1527 concerning the Katahdin Paper Company (KPC) mill complex in East Millinocket, Maine. Any exceptions to, or deletions from, this practice are described in Section 1 of this report. Based on the results of the assessment, Recognized Environmental Conditions (RECs) and Business Environmental Risks (BERs) have been identified in connection with the Site.

Based on the results of this assessment, the following specific RECs were identified in connection with the mill complex:

1. The Site has been used for industrial purposes as a paper mill for over one hundred years. There are numerous documented oil and hazardous material spills and environmental issues associated with the property. Due to the nature of the land use at the Site, the risk of environmental impacts is inherent. Prior to construction of the on-Site WWTP in 1973-1974, discharge features including storm water catch basins and floor drains throughout the mill complex either discharged to the ground or to the river. Environmental records concerning hazardous waste, USTs, OHM spills and remediation for the Site were available as far back as the 1970s and were likely not kept prior to that time. It is therefore impossible to assess the full nature of historic environmental impacts to the Site. Historic OHM discharges from mill operations to the ground, groundwater, river and riverbed constitute a REC in connection with the Site.

2. No. 6 oil was observed on the ground surface in the earthen berms around the two large No. 6 oil tanks, in the rail car offloading area, and was also observed to be emanating out of the ground on the south side of the rail road embankment in the mill complex (MeDEP Spill #B-213-1991, #B-77-1994, #B-79-1994).

3. Gasoline and/or volatile organic compound impacted soil was discovered in 2003 beneath the existing 2,000 gallon steel gasoline underground storage tank next to the old paint shop at about six feet below ground surface. The contaminated soil was left in place by the MeDEP until such time as the existing tank system is removed (MeDEP Spill #B-483-2003).

4. A storm water catch basin located in front of the training center and next to the vehicle maintenance garage in a paved area is situated in the gasoline tank filling and refueling surface drainage area and discharges untreated overland to the river.

5. On-going regulatory mandated groundwater monitoring concerning historical polychlorinated biphenyl (PCB) spills in the former chemi-groundwood building area and just east of paper machines #5 and #6 (KPC April 2003 VRAP).

6. The 4,000 gallon steel diesel aboveground storage tank and refueling pump in the wood yard is positioned on the ground without a secondary containment structure. The absence of secondary containment around and beneath the tank presents a material threat of a release of oil from the tank during filling, refueling, or as a result of vehicular accidents or during snow plowing operations.

7. A portion of the mill complex is immediately down-gradient of off-Site historical leaking underground gasoline storage tanks at the Dead River gasoline station (formerly Exxon) at 64 Main Street (MeDEP spill #B-0652-1997) and McLaughlin's Auto Repair (formerly Dave's Auto Repair) at 79 Main Street (MeDEP spill #B-64-1994). The potential exists for contaminant migration to the Site from high risk abutting and up-gradient facilities.

8. The leachate transfer pipe from the leachate collection pond at the off-Site Dolby Landfill to the on-Site waste water treatment plant located on the southern end of the mill complex traverses beneath mill complex property and represents a threat of OHM release to the Site if a leak should develop.

9. MeDEP records show that five USTs were installed at the mill complex and either abandoned in place or removed. The exact location of the tanks that were

abandoned (thought possibly to be beneath or near the steam plant) is unknown and MeDEP documentation concerning soil, groundwater, tank, and piping condition at the time of either abandonment or removal of the USTs was not found during the course of this assessment.

Based on the results of this assessment, the following BERs were identified in connection with the mill complex:

1. Storm water catch basins in paved areas of the shipping, receiving, former on-Site hazardous waste storage, and WWTP areas discharge directly to the river. Truck, rail, and mill equipment vehicular traffic poses a material threat of a release of petroleum and other liquid hazardous material to the river through these catch basins. Because petroleum and other liquid hazardous material is not intentionally dispensed or handled immediately adjacent to some of these catch basins, this circumstance is considered a BER.

2. Based on visual observations made by SWCE during the Site reconnaissance visits, a significant amount of both friable and non-friable asbestos containing material exists in the mill complex. The presence of lead based paint cannot be definitively determined based on visual observations alone. However, based on the age of building construction and renovation it is expected that many painted surfaces and sub-surfaces contain lead. It is expected that mold exists in some areas of the mill complex including both accessible and inaccessible areas and that the amount of mold is likely to increase over time the longer the complex remains unattended.

3. Approximately 600 pounds of elemental mercury that was obtained from idle equipment and instrumentation at the West Mill in Millinocket is currently stored in the on-Site East Mill training building. Although not specifically categorized as waste, it is possible that all or most of this material may have to be recycled or disposed of as either hazardous or universal waste if the West Mill is not placed back into service, or if it cannot be reused at the East Mill, or if it cannot be sold off-Site. In addition, universal waste including spent fluorescent light bulbs, broken and/or out-dated computer equipment, switches, thermostats, etc. will need to be disposed of off-Site.

Based on the results of this assessment, the following RECs were identified in connection with the off-Site KPC property in East Millinocket:

1. Verification of a regulatory approved clean closure at the adjacent former "Old Mill Dump/Old Construction Fill Area" could not be ascertained during the course of this assessment. The April 2003 VRAP letter to KPC included liability protections concerning the on-Site PCB spill areas, the off-Site "Bark Pile Parcel" but excluded the "Old Construction Fill Area" and indicated that further investigation was needed prior to inclusion in VRAP.

2. Off-Site KPC land is situated immediately down-gradient to two closed Town landfills at the west end of Church Street.

3. Off-Site KPC land is situated abutting and down-gradient to the Dolby Landfill, to the landfill leachate pond, and to the approximate 4-mile long leachate transfer pipe that extends from the leachate pond to the WWTP located on the southern end of the mill complex.

Based on the results of this assessment, the following BERs were identified in connection with the off-Site KPC property in East Millinocket:

1. Underground sections of the approximate 40-inch diameter by 7 mile long "Slurry Transfer Pipe" that extends between the paper mill in Millinocket and the paper mill in East Millinocket is made of asbestos transite and may need to be repaired or replaced in the future.

2. The adjacent "Bark Pile Parcel" is now owned/operated by Northland Services, Inc. and has not been completely mined, capped, and closed as previously anticipated by the MeDEP. Based on current progress, it has been estimated by KPC personnel that 10 to 12 years of bark mining remains at the "Bark Pile Parcel".

9.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professionals* as defined in 40 CFR Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

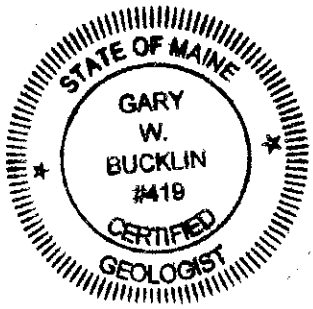
Sincerely,

S. W. COLE ENGINEERING, INC.

Aleita M. Burman
Environmental Scientist

Thomas A. Trainor, P.G.
Senior Environmental Geologist

Gary W. Bucklin, C.G.
Director, GeoSciences Division



TAT/AMB:tat-amb-gwb/jlw
P:\2000\00-1153.1 E - Cate Street Capital, Inc. - Millinocket, ME -Phase I ESA - 2 Paper Mills -TAT\Reports and Letters\East Mill\Report - East 8-26-2011.doc

10.0 REFERENCES

SOURCE	INFORMATION/CONTACT
FirstSearch Technology Corporation; Norwood, MA	Federal and Tribal databases including the U. S. Environmental Protection Agency: NPL Site List, NPL Delisted Site List, CERCLIS List, CERCLIS NFRAP List, RCRA TSD List, RCRA Generators List, RCRA CORRACTS List, Federal Institutional/Engineering Control, and ERNS Databases. State Department of Environmental Protection Databases on Spills, Landfills, Hazardous Waste Sites, Registered UST Facilities, LUST Sites, Brownfield Sites, Voluntary Clean-up Program Sites, and State Institutional/Engineering Control.
Federal Emergency Management Agency	Flood Insurance Rate Map 230163B dated February 4, 1987
Penobscot County Registry of Deeds, Bangor, Maine	Property Deeds and Aerial Photographs (1939, 1969)
FirstSearch Technology Corporation	Sanborn Fire Insurance Maps 1927, 1943, and 1954 Historical Aerial Photographs 1947, 1997, 2007 Historical Topographic Maps 1951, 1988 City Directories 1992, 1995, 2000, 2004, 2007
Maine Geological Survey	Bedrock Geologic Map of Maine 1985 Surficial Geologic Map of Maine 1985 Sand & Gravel Aquifers Maps for the East Millinocket and Medunkeunk Lake Quadrangles
Maine Department of Environmental Protection (MeDEP)	Online Registered Underground Storage Tanks Database, Spills Database, and Remediation Sites List Final Site Inspection Report for Great Northern Paper Mill #2 in East Millinocket, Maine by Jean Firth dated July 18, 2002
Other Sources	Town of East Millinocket, Maine • Assessing and Clerk – Mrs. Shirley Tapley • Code Enforcement – Mr. Mike Noble Katahdin Paper Company – Mr. John Civiello Katahdin Paper Company – Mr. Robert Gagner Katahdin Timberlands – Mrs. Marcia McKeague Storm Water Pollution Prevention Plan – 2010 Spill Prevention, Control and Countermeasures Plan – 2009 Phase I ESA Great Northern Paper Mills - 2001

APPENDIX A

APPENDIX A

Limitations

This Phase I ESA report has been prepared for the exclusive use of Cate Street Capital, Inc. for specific application to the Katahdin Paper Company paper mill in East Millinocket, Maine. We have endeavored to prepare this report in accordance with generally accepted practices. No other warranty, expressed or implied, is made.

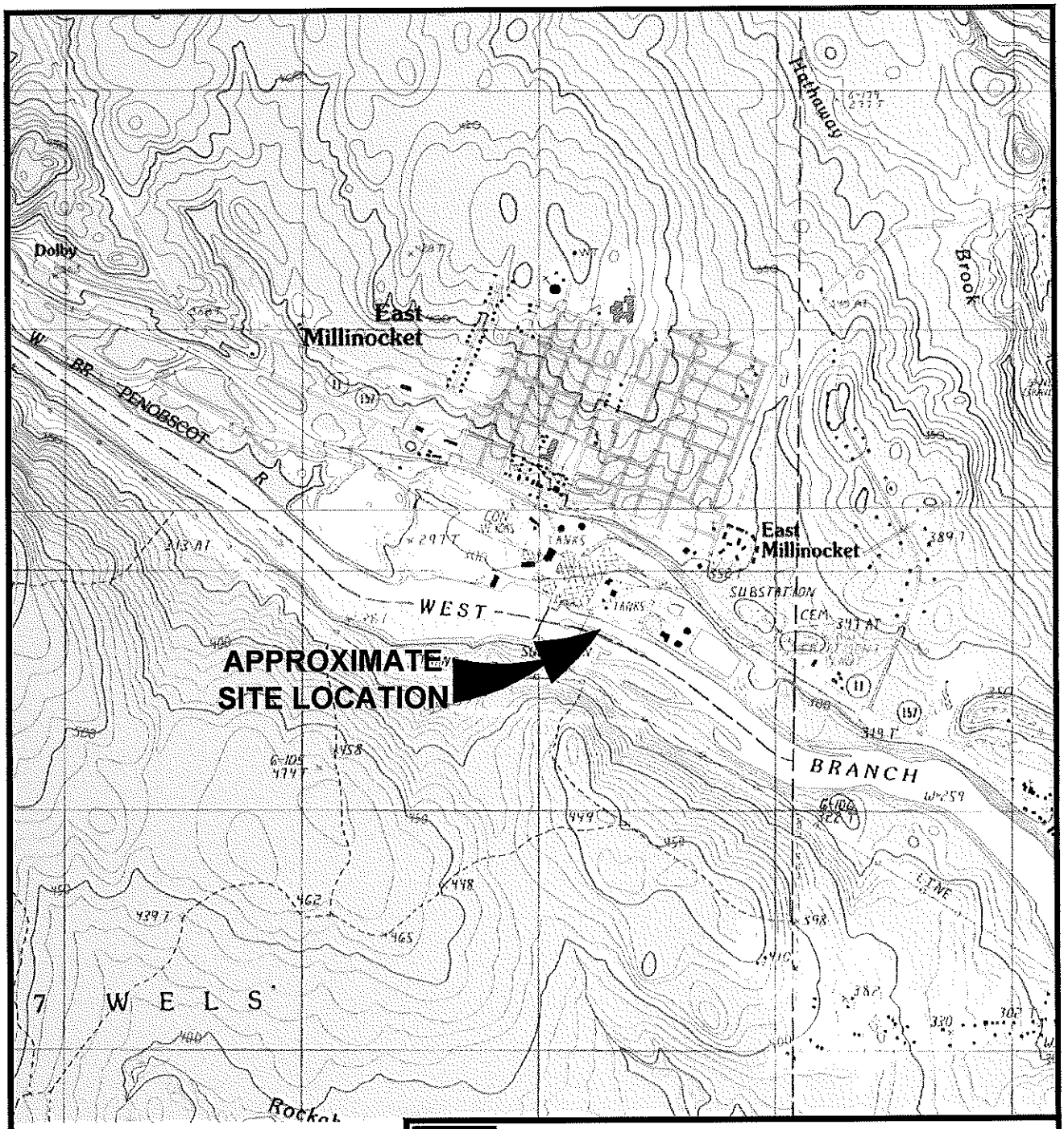
The scope of our assessment has been limited to the items specifically discussed in the text of this report. Recommendations contained in this report are based substantially upon information provided by others regarding the site and on our findings during the site visit. Should additional data or information become available, it should be reviewed by S. W. COLE ENGINEERING, INC. and the conclusions and recommendations presented in this report should be modified as appropriate.

This report cannot reflect undetected variations which may occur, nor can it reflect variations of subsurface conditions (groundwater quality or elevation) over time. S. W. COLE ENGINEERING, INC. has made no attempt to verify the compliance of the past or present owners and/or occupants of the property with local, state, or federal laws and regulations.

The S. W. COLE ENGINEERING, INC. scope of work has not included the investigation, detection, or prevention of any Biological Pollutants at the site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

It must be noted that our findings do not represent scientific certainties and are based on professional judgement. S. W. COLE ENGINEERING, INC. does not represent that the subject site contains no hazardous substances or other latent conditions beyond that noted or observed by S. W. COLE ENGINEERING, INC. during this assessment.

APPENDIX B



NOTE :

BASE MAP TAKEN FROM MAPTECH TERRAIN NAVIGATOR PRO. 7.5 MINUTE SERIES USGS TOPOGRAPHIC MAPS, EAST MILLINOCKET, MAINE AND MEDUNKEUNK LAKE, MAINE QUADRANGLES.

S.W.COLE ENGINEERING, INC.

CATE STREET CAPITAL, INC.

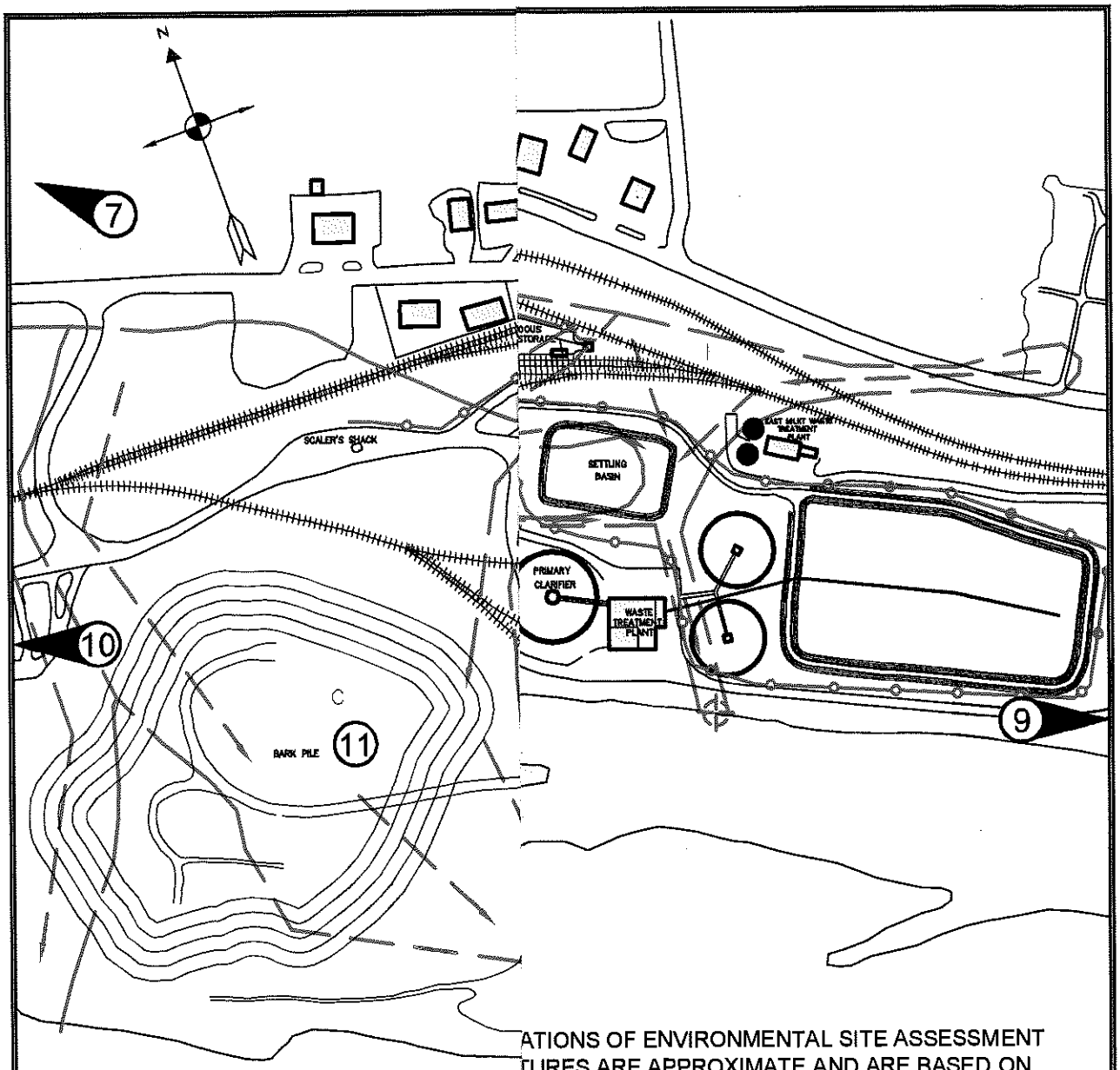
SITE LOCATION MAP

PHASE I ENVIRONMENTAL SITE ASSESSMENT
KATAHDIN PAPER MILL - EAST
50 MAIN STREET
EAST MILLINOCKET, MAINE

Job No. 00-1153.1 E
Date : 08/03/2011

Scale 1" = 2,000'
Sheet 1

R:\2000\00-1153.1\00-1153.1 Site Location Map.dwg, EAST MILLINOCKET, 8/3/2011 11:51:45 AM, DRay, DWG To PDF.pc3, ANSI expand A (8.50 x 11.00 Inches), 1:1



ATIONS OF ENVIRONMENTAL SITE ASSESSMENT
TURES ARE APPROXIMATE AND ARE BASED ON
RELATIVE LOCATIONS TO OBJECTS OBSERVED.

FEATURES PLAN WAS PREPARED FROM A SCALE
N OF THE SITE ENTITLED "KATAHDIN PAPER
PANY LLC EAST MILLINOCKET, MAINE DELIVERY
TES AND DRAINAGE AREAS" PREPARED BY D&S
INEERING, INC.

KEY TO ENVIRONMENTAL SITE ASSESSME

1. #6 OIL IN SOIL IN RAIL CAR OFFLOADIN
2. GASOLINE IMPACTED SOIL BENEATH 2
3. STORM WATER CATCH BASIN IN UST D
4. PCB SPILLS AND ON-GOING GW MONIT
5. WOODYARD 4,000 GALLON DIESEL AST
6. MILL PROPERTY IS DOWN-GRADIENT T
7. OFF-SITE KPC LAND DOWNGRADIENT A
8. STORM WATER CATCH BASINS IN PAVE
9. OFF-SITE FORMER OLD MILL DUMP/OLI
10. OFF-SITE FORMER HAZARDOUS WASTI
11. OFF-SITE BARK PILE ABUTS THE MILL P
12. FORMER HAZARDOUS WASTE DRUM S

S.W.COLE
ENGINEERING, INC.

CATE STREET CAPITAL, INC.

SITE FEATURES PLAN

HASE I ENVIRONMENTAL SITE ASSESSMENT
KATAHDIN PAPER MILL - EAST
50 MAIN STREET
EAST MILLINOCKET, MAINE

00-1153.1 E
08/30/2011

Scale 1" = 400'
Sheet 2

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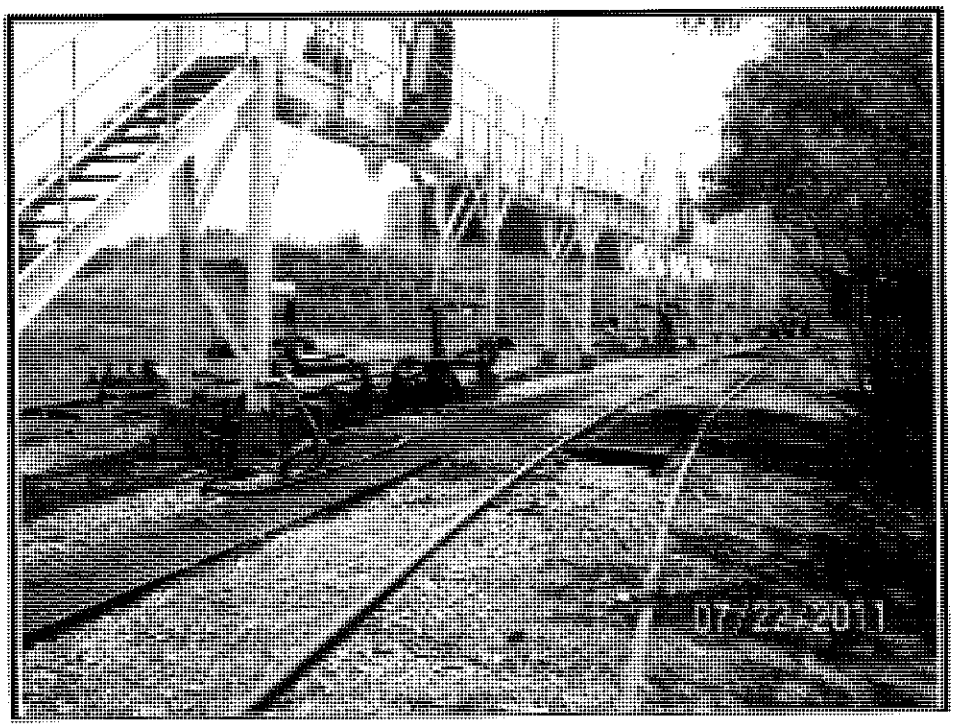
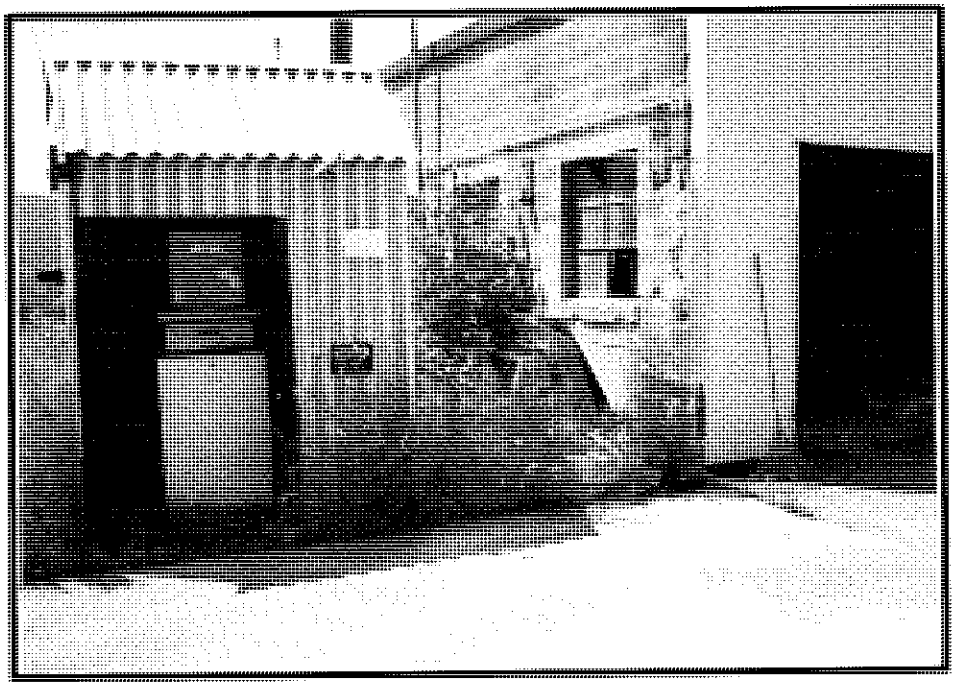
APPENDIX C



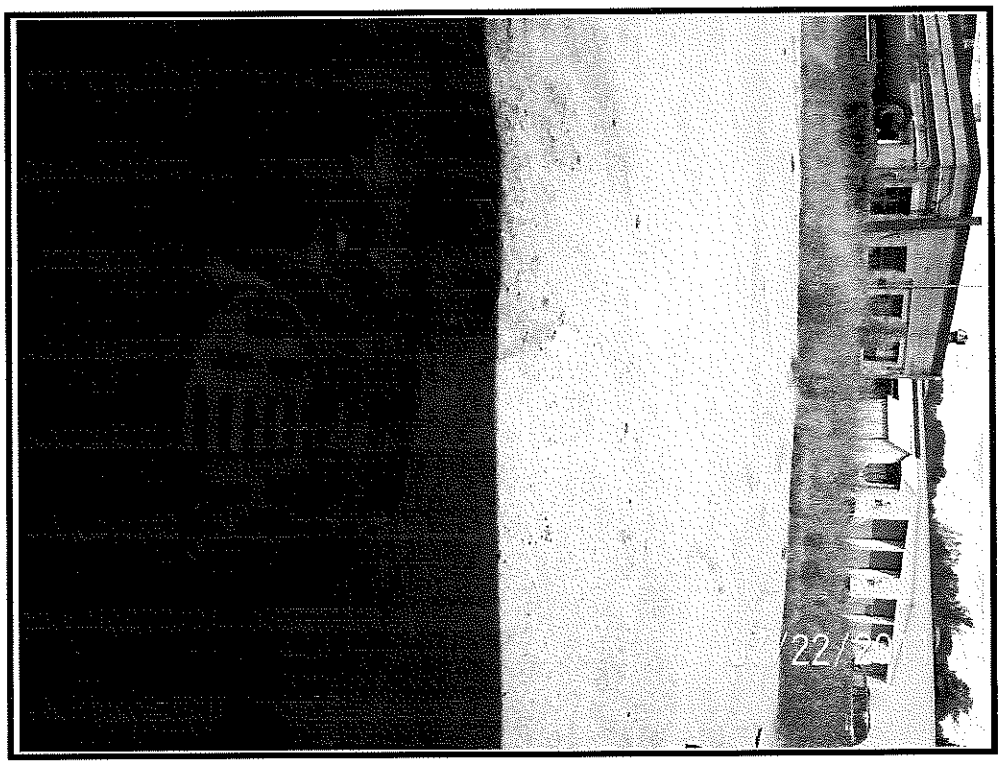
Site Feature #1 on Sheet 2-Site Features Plan, showing the No. 6 oil rail car offloading facility with the 750,000 gallon No. 6 oil tank in the background.



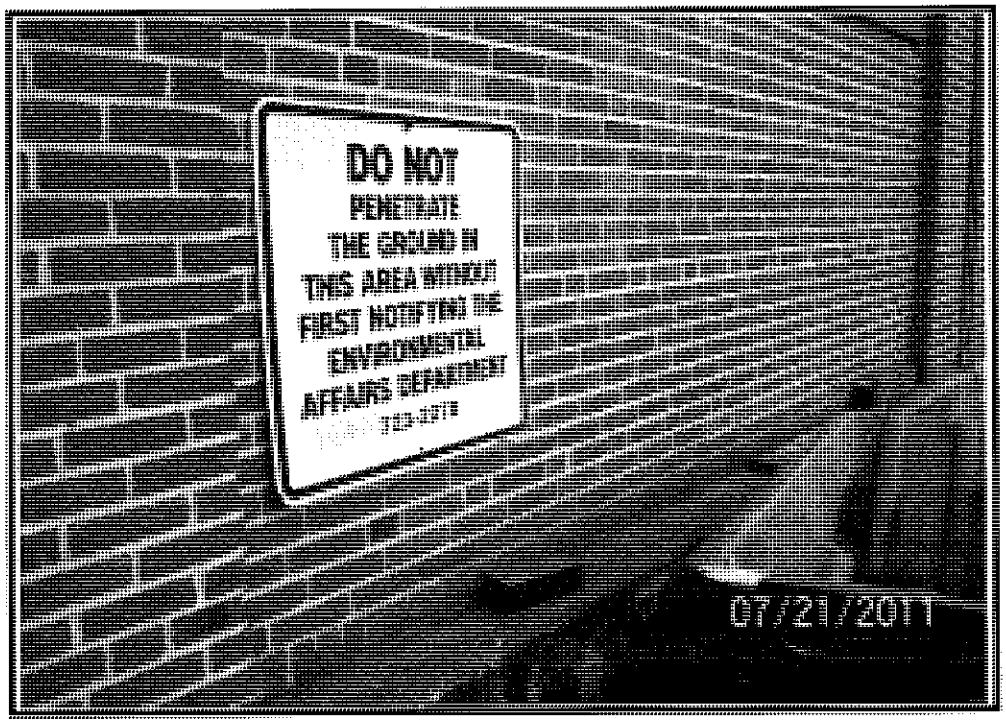
Site Feature #2 on Sheet 2 -Site Features Plan, showing gasoline underground storage tank area where gasoline impacted soil was discovered and left in place in 2003 (DEP Spill #B-483-2003).

Photos 1 and 2.doc
Katahdin Paper Co.
East Millinocket, Maine
SWCE Job #00-1153.1 E

S.W.COLE ENGINEERING, INC



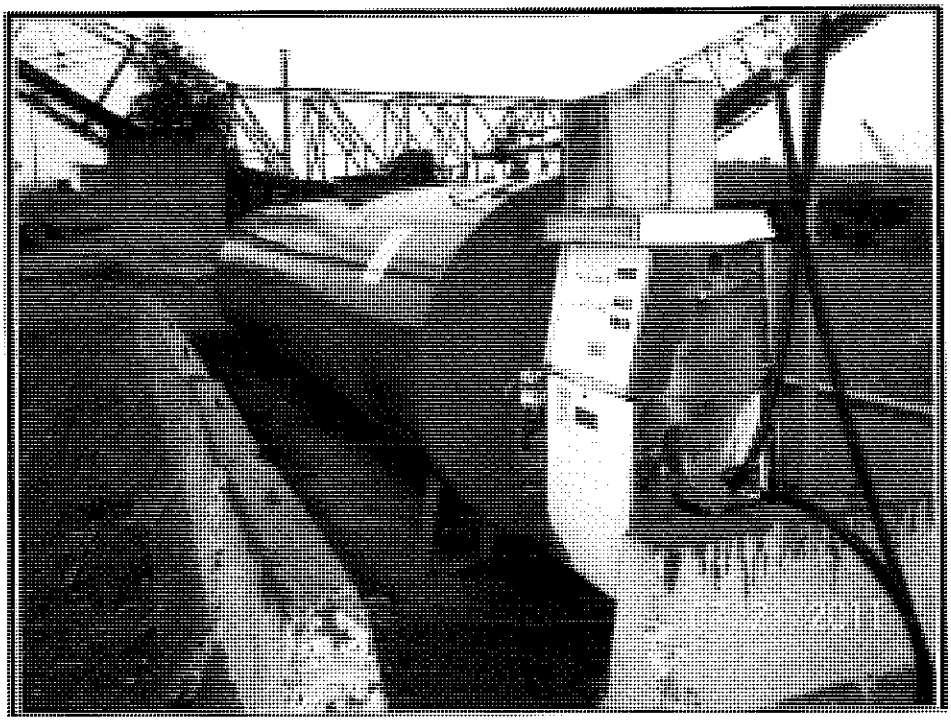
Site Feature #3 on Sheet 2-Site Features Plan, showing the storm water catch basin down-gradient of the gasoline underground storage tank area that discharges over-land to the river. (rotate photo)



Site Feature #4 on Sheet 2 -Site Features Plan, showing one of three PCB spill locations at the East Mill under a 1991 federal EPA Consent Agreement for groundwater monitoring and a Maine DEP VRAP.

Photos 3 and 4.doc
Katahdin Paper Co.
East Millinocket, Maine
SWCE Job #00-1153.1 E

S.W.COLE ENGINEERING, INC.

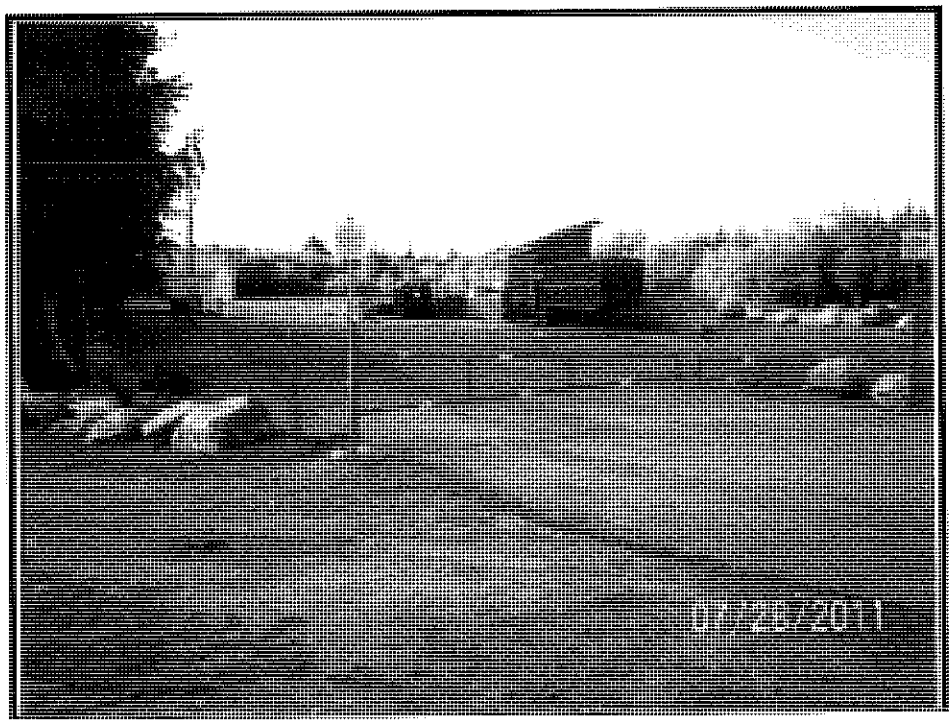


Site Feature #5 on Sheet 2-Site Features Plan, showing the 4,000 gallon diesel fuel tank in the wood yard not situated in a secondary containment structure.

Site Feature #6 on Sheet 2 -Site Features Plan, showing one of two up-gradient properties on Main Street with a history of leaking underground gasoline storage tanks.

Photos 5 and 6.doc
Katahdin Paper Co.
East Millinocket, Maine
SWCE Job #00-1153.1 E

S.W.COLE ENGINEERING, INC.

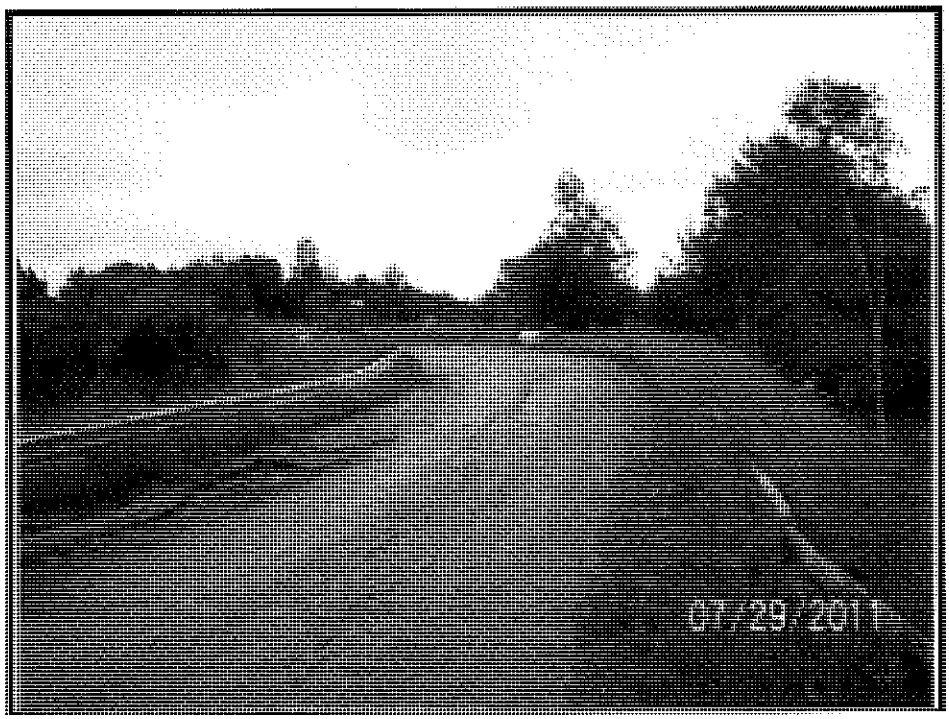


Site Feature #7 on Sheet 2-Site Features Plan, showing the East Millinocket Town Transfer Station located near two town owned and closed landfill locations abutting and up-gradient to KPC land.

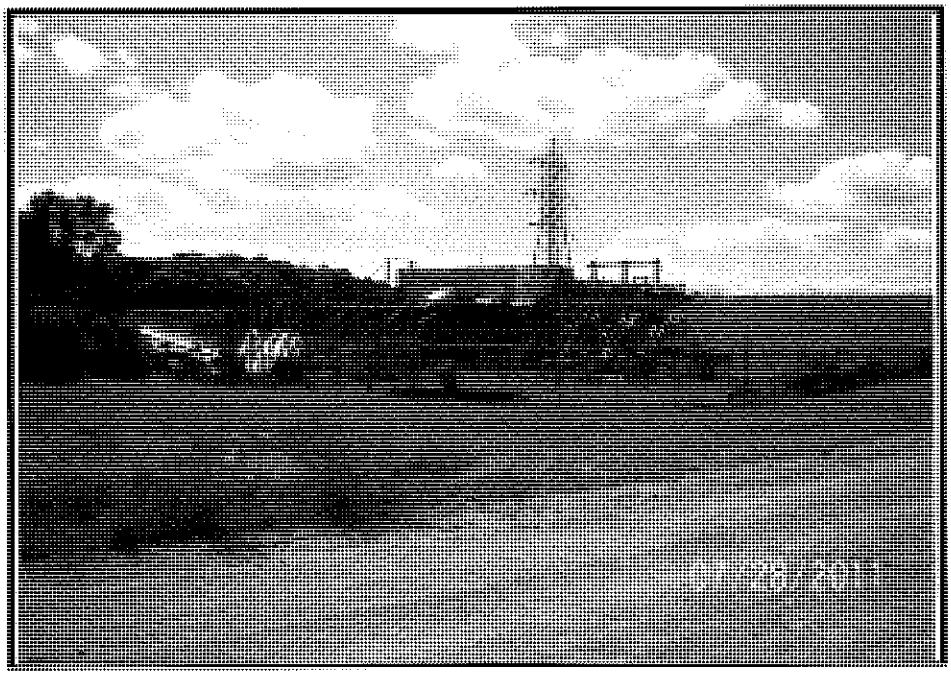
Site Feature #8 on Sheet 2-Site Features Plan, storm water catch basins in paved areas east of the mill discharge directly to the river.

Photos 7 and 8.doc
Katahdin Paper Co.
East Millinocket, Maine
SWCE Job #00-1153.1 E

S.W.COLE ENGINEERING, INC



Site Feature #9 on Sheet 2-Site Features Plan, photo showing gated entrance to the off-site Old Mill Dump/Old Construction Fill Area excluded by the DEP in the 2003 VRAP for KPC citing more investigation is necessary.



Site Feature #10 on Sheet 2-Site Features Plan, hazardous waste storage occurred from about 1980 to about under Interim License # I-022 at the "Dolby Storage Facility" located at the Dolby Dam. Photo showing the hydroelectric facility at the Dolby Dam currently not owned by KPC located north of the mill complex.

Photos 9 and 10.doc
Katahdin Paper Co.
East Millinocket, Maine
SWCE Job #00-1153.1 E

S.W.COLE ENGINEERING, INC

APPENDIX D

APPENDIX F

BOOK 2427 PAGE 218

00079

EAST

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AUGUSTA, MAINE 04330

Approved

IN THE MATTER OF

WASTEWATER TREATMENT PLANT AND SLUDGE
East Millinocket / DISPOSAL AREA
GREAT NORTHERN NEKOOSA CORP.
#24-0796-19170

Site Location

FINDINGS OF FACT AND ORDER

Approval To build WWTP 1973

After a review of the Application and Supporting Documents submitted by Great Northern Nekoosa Corporation under Title 38, Section 481, in the matter of Wastewater Treatment Plant and Sludge Disposal area in East Millinocket, the Board finds the following facts:

(1) The applicant proposes to construct a treatment plant for paper mill wastes consisting of a sludge dewatering facility, effluent pump station, primary clarifier, primary settling pond, and sludge disposal area near the west branch of the Penobscot River in East Millinocket.

(2) The site is not presently being used, is 75% scrub tree cover, and soils are Monarda and Burnham very stony silt, Made Land, and Plaisted very stony loam, and with B and E slopes.

(3) A Waste Discharge License has been granted for the project, and the applicant needs Site Location approval for Municipal Bonding approval.

(4) The plant will handle a flow of 30 MGD, containing up to 40 ton per day of suspended solids requiring a sludge idisposal srea to accomodate 18 acre feet of material per year.

(5) The applicant has the financial capacity to carry out the project.

(6) The primary clarifier is located 130 feet from the River, the settling pond is located 380 feet from the river, and the sludge disposal area, which will be diked and lined so that any runoff or drainage can be pumped back to the treatment plant.

(7) The sludge disposal site will only be used temporarily as the applicant is presently negotiating to sell the sludge to a paperboard manufacturer, and if this should not materialize, they plan to burn the sludge.

(8) The applicant has located the structures beyond the flood plain, and has provided for adequate traffic movement.

(9) The Soil & Water Conservation Commission expressed concern for soils limitations and location in relation to the flood plain; however, the applicant subsequently submitted information indicating flood limits, and relocated the sludge disposal area to overcome the objections.

Approved

WASTEWATER TREATMENT PLANT AND SLUDGE DISPOSAL AREA
East Millinocket /
GREAT NORTHERN NEKOOSA CORP.
#24-0796-19170

Site Location

FINDINGS OF FACT AND ORDER

Based on the above Findings of Fact, the Board concludes that the applicant has sustained his burden of proof under Title 38, Section 484.

Therefore, the Board approves the application of Great Northern Nekoosa Corporation to construct a waste treatment plant, sludge dewatering facility, effluent pump station, primary clarifier, primary settling pond, and sludge disposal area, in East Millinocket.

DONE AND DATED AT AUGUSTA, MAINE, THIS 18th day of MAY, 1973

DEPARTMENT OF ENVIRONMENTAL PROTECTION

For the Board:

By William R. Adams, Jr.
William R. Adams, Jr., Commissioner

PERSONALLY APPEARED BEFORE ME THE ABOVE-NAMED William R. Adams, Jr., AND ACKNOWLEDGED THE ABOVE INSTRUMENT TO BE HIS FREE ACT AND DEED.

SUBSCRIBED AND SWORN TO BEFORE ME ON THIS DAY, May 18, 1973.

Denise M. Rollins
Denise M. Rollins, Notary Public

MY COMMISSION EXPIRES MAY 2, 1980

NOTARIAL SEAL

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AUGUSTA, MAINE 04330

STANDARD CONDITIONS

1. This approval is limited to and includes the proposals and plans contained in the Record of Intent and Supporting Documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to the review and approval of the Department prior to implementation. Further subdivision of Proposed Lots by the applicant or future owners is specifically prohibited.

2. The applicant shall secure and appropriately comply with all applicable Federal, State, and Local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation. In the case of housing and related projects, the applicant shall receive approval from the appropriate municipality under the provisions of Title 30, Section 4956, of the Maine Revised Statute.

3. The applicant shall submit all information requested by the Department for review and approval prior to implementation of this project relating to:

   a. Action to be taken by the applicant to comply with the conditions of this approval.

   b. Any contracts with public or private agencies regarding activities relating to environmental protection or improvement on the project.

4. The applicant shall submit all reports and information requested by the Department demonstrating that the applicant has complied with all the conditions of this approval.

5. Should the project be found, at any time, not to be in compliance with any of the conditions of this approval, or should the applicant construct or operate this development in any way other than specified in the Record of Intent or Supporting Documents, as modified by the conditions of this approval, then the terms of this approval shall be considered to have been violated.

6. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted with conditions, and indicates where copies of those conditions may be obtained.

7. In the event that the approval applies to a project where real property will be transferred, no action by the applicant or any successor, assignee, or transferee, shall be taken until this approval or an attested copy thereof has been recorded in the Registry of Deeds for the County in which the property is located, and a certified copy of the recorded approval provided to this Department.

8. Except where otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with all conditions of this Approval.

PENOBSCOT, SS. REC'D JAN 4 1974 9 h55m AM

EAST

BK4852 PG183

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

015794

IN THE MATTER OF

GREAT NORTHERN PAPER COMPANY	) SITE LOCATION OF DEVELOPMENT
East Millinocket, Maine	)
EAST MILLINOCKET MILL	) CONDITION COMPLIANCE
#L-16637-20-E-C (APPROVAL)	) FINDINGS OF FACT AND ORDER

1991 GW Monitoring well locations for woodyard & bark p.le

Pursuant to the provisions of Title 38 M.R.S.A. Section 481 et seq., the Department of Environmental Protection has considered the application of GREAT NORTHERN PAPER COMPANY, a wholly owned subsidiary of Georgia Pacific (GNP) with its supportive data, staff summary, agency review comments, and other related materials on file and finds the following facts:

1. In Department Order #L-16637-20-A-N dated 12/20/89, the Department approved with conditions the application of GNP to construct the post-1970 improvements and modernize the woodyard at their existing paper mill in East Millinocket.

2. Special Condition #11 of Order #L-16637-20-A-N reads as follows:

> "Within 90 days of the date of this order, the applicant shall submit to the Department for review and receive approval of a groundwater monitoring plan to evaluate the existing groundwater quality and potential future impacts to groundwater quality as a result of past, current, and proposed mill operations including onsite wood waste storage, tree length log storage, peeled log storage, and rough wood storage.
>
> This monitoring plan shall include but not be limited to a site plan showing the locations of monitoring wells, a list of the parameters to be studied, a proposed schedule for implementation of the monitoring program and for sampling the monitoring wells, and provisions for remediations if monitoring shows that the groundwater has or will be contaminated."

3. The applicant has submitted a "Groundwater Evaluation Work Plan, East Millinocket Mill, Woodyard and Bark Pile, East Millinocket, Maine" dated November 1989 (as revised through 2/6/91). This revised Work Plan outlines how and where monitoring wells will be installed, what parameters will be studied, a work plan schedule for well installation and initial sampling, and format for the initial report. In the work plan schedule, the applicant proposes to install wells within 4 weeks of approval and to submit the report to the Department within 10 weeks of approval. The Work Plan does not contain an ongoing monitoring program, nor provisions for remediation, of any contamination that occurs.

The April 2003 KPC VRAP Letter includes The Bark P.le Area & States That GW near the Bark P.le was Monitored for years w/ no contaminant levels above Drinking H_2O STDs - OK

GREAT NORTHERN PAPER COMPANY
East Millinocket, Maine
EAST MILLINOCKET MILL
#L-16637-20-E-C (APPROVAL)

Z SITE LOCATION OF DEVELOPMENT
)
) CONDITION COMPLIANCE
) FINDINGS OF FACT AND ORDER

4. The applicant's consultant concluded that it is premature at this time to discuss the definition of contamination relative to groundwater quality and whether or not remediation is warranted at this site. These discussions and evaluations should be made once groundwater information is available.

5. The Work Plan was reviewed by the Bureau of Land Quality Control's Technical Services Unit which commented that the revised Work Plan including proposed well locations is acceptable. The actual ongoing groundwater monitoring program still needs to be submitted. Technical Services agreed with the consultant that it is difficult to prepare a remediation plan if a problem has not been identified. They commented that the applicant must define when (at what concentrations) remediation will be required and set up a schedule for submitting a remediation plan for review and approval when one is deemed necessary.

BASED on the above findings of fact, the Department concludes that GNP has complied with Special Condition #11 of Department Order #L-16637-20-A-N in so far as it requires the submission of a site plan showing the locations of monitoring wells, a list of parameters to be studied, and a proposed schedule for implementation of initial monitoring; and the Department grants an extension of 180 days from the date of this Order for full satisfaction of the remaining terms of the condition, which include submission of a plan for an ongoing monitoring program, and remediation provisions.

DONE AND DATED AT AUGUSTA, MAINE, THIS 28th DAY OF May, 1991.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Dean C. Marriott
DEAN C. MARRIOTT, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES...

Date Of Initial Receipt of Application 1/2/90
Date Of Application Acceptance 1/29/90

Date Filed With Board of Environmental Protection _____

SB:gnp

PENOBSCOT, ss REC'D
91 JUN 12 AM 8:58
ATTEST:
Cynthia Gallant Grove,
REGISTER

A TRUE COPY
ATTEST: David W Maduel
Debrah Richard, Director
Bureau of Land Quality Control

EAST

BK5006 PG220 005278

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

GREAT NORTHERN PAPER, INC. A SUBSIDIARY OF BOWATER, INC. East Millinocket, Maine PAPERMILL - EFFLUENT LINE CHANGE #L-16637-20-J-M (APPROVAL)	)	SITE LOCATION OF DEVELOPMENT MODIFICATION FINDINGS OF FACT AND ORDER

1992 modification INSTALL A NEW effluent pipe IN A TRENCH

Pursuant to the provisions of Title 38 M.R.S.A. Section 481 et seq., the Department of Environmental Protection has considered the application of Great Northern Paper, Inc. with its supportive data, staff summary, agency review comments, and other related materials on file and finds the following facts:

1. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-16637-20-A-N dated 4/24/90, the Department approved with conditions the application of Great Northern Paper Company to construct the post-1970 improvements and modernize the woodyard at the existing paper mill in East Millinocket, Maine.

In Department Order #W-999999-22-B-T dated 12/6/91, the Department approved with conditions the transfer of all Department licenses, license amendments, modifications, condition compliances, certifications, and other approvals held by Great Northern Nekoosa Corporation, a wholly-owned subsidary of Georgia-Pacific Corporation to Bowater Incorporated and Great Northern Paper, Inc. Included in this transfer were the licenses for the pulp and paper mill and associated facilities in East Millinocket.

B. Summary: The applicant is now proposing to replace and relocate an existing effluent pipeline at the East Millinocket mill. The new pipeline will be constructed of HPDE pipe.

2. SOLID WASTE:

Excavation of the new trench for the pipeline will require the removal and disposal of 10,000 cubic yards of coal ash that was previously disposed of onsite. The applicant has proposed to dispose half of this material as backfill in the trench for the new effluent line and half of the material at the Dolby III Landfill. The Site Location modification application was reviewed by the Bureau of Hazardous Materials and Solid Waste Control (BHMSWC). The BHMSWC commented that the Dolby III Landfill is in substantial compliance, and they have no concern with the use of this material as backfill. No other significant concerns about solid waste disposal have been identified.

3. NATURAL DRAINAGEWAYS/STORMWATER RUNOFF:

The installation of the pipeline and the subsequent regrading of the area will cause surface water runoff from a small area above an existing drainage channel to be redirected toward the channel. However, this will cause an increase of only .24 cfs to the peak flow from a 25 year storm, in that channel. The applicant's consulting engineer found that the increase

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER, INC.
East Millinocket, Maine
PAPERMILL - EFFLUENT LINE CHANGE
#L-16637-20-J-M (APPROVAL)

SITE LOCATION OF DEVELOPMENT
MODIFICATION
FINDINGS OF FACT AND ORDER

in post-construction flows will have little impact on either the drainage course or the downstream culvert. Ultimately all of the drainage from the site discharges to the Penobscot River. No significant impacts due to changes in drainage have been identified.

4. EROSION CONTROL/SURFACE WATER QUALITY:

Concerns about erosion control have been raised due to the projects close proximity to the Penobscot River. The pipeline will be installed within 100 feet of the normal high water line, but will be no closer than 40 feet to the normal high water line of the river.

The applicant has submitted an Erosion and Sedimentation Control Plan with the modification application form. This plan and the plan sheet containing erosion control details have been reviewed by and revised in response to the comments of the Bureau of Land Quality Control which found the revised plans to be in accordance with Departmental standards for erosion and sediment control.

The project does require a permit pursuant to the Natural Resources Protection Act, 38 M.R.S.A. Section 480-A et seq. The applicant has submitted a Permit-by-Rule notification form indicating that they intend to comply with the requirements for Permit-by-Rule under DEP Regulation, Chapter 305.

5. WASTEWATER DISPOSAL:

The sewer line modification was reviewed by the Bureau of Water Quality Control which found no problems with the proposal.

6. OTHER FINDINGS:

All other findings of fact, and conclusions relevant to the financial capacity, traffic movement, adverse environmental effects, soils, and road standards remain as approved under Department Order #L-16637-20-A-N and subsequent amendments.

BASED on the above findings of fact, the Department makes the following conclusions in relation to the proposed modification pursuant to 38 M.R.S.A. Section 481 et seq.:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.

B. The applicant has made adequate provision for traffic movement of all types into, out of or within the development area. Any traffic increase attributable to the proposed development will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the proposed development.

GREAT NORTHERN PAPER, INC.) SITE LOCATION OF DEVELOPMENT
A SUBSIDIARY OF BOWATER, INC.)
East Millinocket, Maine)
PAPERMILL - EFFLUENT LINE CHANGE) MODIFICATION
#L-16637-20-J-M (APPROVAL)) FINDINGS OF FACT AND ORDER

C. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in East Millinocket or in neighboring municipalities.

D. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil, provided that erosion controls are properly implemented and maintained.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal, roadways and open space required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities, roadways and open space in East Millinocket or the area served by those services or open space.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of Great Northern Paper, Inc. to replace and relocate an effluent pipeline in East Millinocket, Maine, IN ACCORDANCE WITH THE FOLLOWING CONDITIONS:

1. The Standard Conditions of Approval, a copy of which is attached.

2. In addition to any specific erosion control measures described in Finding #4 of this order, the applicant shall take all necessary actions to ensure that their activities or those of their agents do not result in noticeable erosion of soils on the site during the construction and operation of the project covered by this approval.

3. The conditions of order #L-16637-20-A-N and all subsequent amendments shall remain in effect, and are incorporated herein.

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF February, 1992.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Dean C. Marriott
DEAN C. MARRIOTT, COMMISSIONER

A TRUE COPY
ATTEST: Martha Kirkpatrick
Martha Kirkpatrick, Director
Bureau of Land Quality Control

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEALS PROCEDURES...

Date Of Initial Receipt of Application 01-22-92
Date Of Application Acceptance 01-29-92

Date Filed With Board of Environmental Protection FEB 13 1992

SB/gnpefa

FILED
FEB 13 1992
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.

2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.

3. The applicant shall submit all reports and information requested by the Board demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Municipality that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.

7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.

8. A copy of this approval must be included in or attached to all contract bid specifications for the development.

9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)
Revised November 1, 1979

PENOBSCOT, ss REC'D
92 FEB 26 AM 9:40
ATTEST:
REGISTER

EAST

033286 BK4948 PG217

MEMORANDUM OF CONSENT AGREEMENT

This Memorandum of Consent Agreement, set forth by Great Northern Nekoosa Corporation ("Great Northern") is intended to give notice that certain property at its pulp and papermaking facilities in East Millinocket, County of Penobscot is subject to a certain Consent Agreement and Final Order (the "Consent Agreement") by and between the United States Environmental Protection Agency ("EPA") and Great Northern, the terms of which are incorporated herein by reference.

1991 PCBs GW MONITORING

The Consent Agreement arose out of an Administrative Complaint (EPA Docket No. TSCA-I-87-1041) filed by the EPA pursuant to the Toxic Substances Control Act. It generally deals with certain specified actions which Great Northern has taken and will take to clean up and monitor groundwater at sites at the East Millinocket, Maine facility that were contaminated with polychlorinated biphenyls ("PCBs").

In addition to the cleanup and monitoring requirements, the Consent Agreement requires Great Northern, among other things, to: (1) comply with specified reporting and notification requirements and generally coordinate with EPA as relates to the cleanup; (2) provide EPA with access to the sites as required for implementation of the Consent Agreement; and (3) reimburse EPA for specified response costs incurred by EPA.

-ENV LIEN

The Consent Agreement expressly provides that it applies to and is binding upon EPA and Great Northern, and their successors, assigns and contractors. In addition to requiring Great Northern to file this Memorandum of Agreement, the Consent Agreement requires Great Northern to include in any deed transferring the property (and requires that any subsequent deed transferring the property include) notice that the property is subject to the Consent Agreement and that the grantee must notify EPA and the Commissioner of the Maine Department of Environmental Protection, as specifically provided, of certain excavations in certain areas identified as containing PCBs.

Title to the property may be freely conveyed provided Great Northern notifies EPA within 20 days of such conveyance, providing the name of the grantee and a description of Great Northern's obligations under the Consent Agreement, if any, that will be performed by such grantee. All obligations under the Consent Agreement are to continue to be met by Great Northern and, subject to approval by the United States, the grantee.

The Consent Agreement was filed with the EPA's Regional Hearing Clerk, Region I, RRC, John F. Kennedy Federal Building, Boston, MA 02203, on September 30, 1991. This Memorandum of Agreement is filed pursuant to the terms of the Consent Agreement.

BK4948 PG218

IN WITNESS WHEREOF, the undersigned has executed this instrument as of the 21 day of November, 1991.

GREAT NORTHERN NEKOOSA CORPORATION

By: Raymond H. Taylor AFH
Raymond H. Taylor

Its: Vice President

STATE OF GEORGIA
COUNTY OF FULTON, ss. November 21, 1991

Then personally appeared the above-named Raymond H. Taylor as Vice President of Great Northern Nekoosa Corporation and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said corporation.

Anna D. Stanley
Notary Public
Anna D. Stanley
NOTARY PUBLIC, DEKALB COUNTY, GEORGIA
MY COMMISSION EXPIRES SEPTEMBER 18, 1994

SEAL

PENOBSCOT, ss REC'D
91 NOV 27 PM 1:06
ATTEST:
Cynthia Gallant Growe,
REGISTER

Pierce, Atwood

Bk 8740 Pg72 #19548
05-21-2003 @ 09:15a

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

EAST

1 MAI 2003

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

April 24, 2003

Marie Dumontier, Director Environment and Safety
Nexfor Fraser Papers
4 Georges Bilodeau, Suite 102
Hull, Quebec Canada J8Z 1V2

Subject: Voluntary Response Action Plan (VRAP)
Great Northern Paper East Millinocket Mill
No Action Assurance Letter – Certificate of Completion

Dear Ms. Dumontier:

The Maine Department of Environmental Protection (Department) has received an application for participation in the Voluntary Remedial Action Program (VRAP) regarding the Great Northern Paper, East Millinocket site (the site and/or property) dated April 17, 2003, submitted by Fraser Papers Inc (Fraser) and Katahdin Paper Co. LLC (Katahdin). In its application Fraser and Katahdin have identified three areas of the site for inclusion in VRAP:

1) The PCB Spills, (a.k.a paper machines 5 and 6 and the Chemi-Groundwood area),
2) the Bark Pile and - BP fill below DW STOR
3) the Old Construction Fill Area. — o/b DUMP EAST OF Mill CARRIED OUT

NOT Included IN VRAP

This letter serves as both a no action assurance letter and a certificate of completion covering the PCB Spills and the Bark Pile. More investigation is required on the Old Construction Fill Area before it can be considered for liability protections under VRAP. The subject property is located at latitude 45°37'21.08" longitude 68°34'27.19" on Main Street (Rt. 11/157) in East Millinocket. The proposed future use for the site is for a papermaking and pulp processing plant.

The Department has reviewed the following environmental assessment reports concerning the site: S.W. Cole Engineering, Inc. (Cole), Phase I Environmental Site Assessment Great Northern Paper Inc. Mill Properties, Millinocket and East Millinocket, Maine January 22, 2001, and the Department report, Final Site Inspection Report For Great Northern Paper Mill #2, East Millinocket, Maine, July 18, 2002. Additionally a document dated September 27, 1991 entitled United States Environmental Protection Agency In re: Great Northern Nekoosa Corporation respondent. EPA Docket No. TSCA-I-87-1041. Consent Agreement and Final Order was also reviewed.

Based on information provided in the above listed reports and current Department files potential environmental issues were identified. The PCB Spills is comprised of an area northwest of the mill building (the Chemi-Groundwood area) and an area at the southeast corner of the mill building (paper machine No. 5 and 6). Between 1970 and 1981 three spills of polychlorinated

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17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-6477 FAX: (207) 764-1507

web site: www.state.me.us/dep

printed on recycled paper

biphenyl (PCB) oil occurred at the site. Contamination from these spills was remediated between 1985 and 1991. The United States Environmental Protection Agency (EPA) approved the clean-up and a monitoring plan was instituted through a consent agreement in September 1991. Currently Georgia Pacific is responsible for monitoring groundwater onsite three times a year.

The Bark Pile covers an area approximately 22 to 29 acres in size. Bark has been stockpiled at a location approximately 6,000 feet northwest of the mill building from the early 1900s until the 1970s; the pile was also used for disposal of mill trash. In 1992 Great Northern Paper began mining the bark pile, which is processed into mulch. To assess potential contamination samples from the pile were collected and analyzed annually, from 1993 to 2001, for PCBs, metals and a variety of other inorganic parameters. By 2002, approximately 100,000 tons of bark had been processed. The remainder is scheduled to be removed no later than 2010. Groundwater near the bark pile was monitored for several years and minimal impact was found. Additional groundwater sampling conducted by Sirrine in 1991 found elevated levels of aluminum and arsenic near the bark pile. Samples collected by the Department in 2001 found elevated levels of cadmium, chromium, lead, nickel and silver; no levels were above the drinking water standards.

Provided that Fraser Papers Inc. and Katahdin Paper Company LLC and their successors and/or assigns comply with the conditions outlined below and that they acquire title to the portions of the property covered by this letter, they will be granted the liability protection provided by 38 M.R.S.A. § 343-E(1). The Department will take no action against Fraser Papers Inc. and Katahdin Paper Company LLC and those persons identified in 38 M.R.S.A. § 343-E(6). Additionally, Fraser Papers Inc. and Katahdin Paper Company LLC are protected from liability for penalties, fines and natural resource damages related to the PCB Spills and Bark Pile to the extent applicable. The site is further identified as Tax Map 2 Block 1 Lot10 of the East Millinocket Tax Assessor and the parcel is described in Book 4966 page 114 at the Penobscot County registry of deeds. This protection is limited to the matters concerning the PCB Spills and the Bark Pile areas of the Great Northern Paper property, located on Main Street in East Millinocket, identified in the above listed environmental assessment reports and current Department files.

The conditions which apply to this site for Fraser Papers Inc. and Katahdin Paper Company LLC and their successors and/or assigns to receive the protections outlined in this letter are as follows:

1. No groundwater extraction wells will be installed as a potable water source in the areas of the PCB Spills or the Bark Pile.
2. No excavation will be conducted in the area of the PCB Spills.
3. Monitoring at the PCB Spills will continue as required by EPA.
4. No buildings will be constructed on the Bark Pile or PCB Spills areas of the site without written approval of the Department.
5. When mining at the Bark Pile is completed the area will be closed as follows. The Protected Parties agree to place final cover, as specified in this condition, on the barkpile, within 6 months after completion of bark reclamation activities. The barkpile will be graded to a maximum slideslope of 3 horizontal to 1 vertical and a minimum top slope of 5%. The final cover on the barkpile will consist of 18 inches

BARK P. VE CLOSURE REQUIREMENTS

of clay or well-graded till containing a minimum of 35% fines overlain by a 6 inch soil layer suitable for growing vegetation. The vegetative layer will be seeded with an effective ground cover within one growing season after the completion of the final cover work.

6. A copy of this letter will be filed at the Penobscot County Registry of Deeds.
7. A copy of the recorded document will be provided to the VRAP Project Manager, Jean Firth, Maine Department of Environmental Protection.
8. A plan showing the PCB Spills area and the Bark Pile will be recorded at the Penobscot County Registry of Deeds.
9. The Department and its contractors will be provided access to the site, as requested, to conduct inspections and or investigations, as necessary.

If you have any questions regarding this letter, please feel free to call Jean Firth at 207-287-7716.

Sincerely,

Brooke Barnes, Deputy Commissioner

cc: Scotia Ryer, Pierce Atwood
Bert Martin, Fraser Papers Inc.
Bill Manzer, Fraser Papers Inc.
Cyndi Darling, MEDEP

STATE OF MAINE

KENNEBEC, ss., April 24, 2003

Then personally appeared before the above named Brooke Barnes, Deputy Commissioner of the Maine Department of Environmental Protection and duly authorized delegee for the Commissioner, and acknowledged the foregoing instrument to be his free act and deed, and the free and deed of the Department of Environmental Protection.

Before me,

Notary Public ATTORNEY AT LAW

PENOBSCOT COUNTY, MAINE
Register of Deeds

James E. Dusch
(Print Name)

EAST

BOOK 4515 PAGE 362

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

026615

DRUM STORAGE FACILITY CLOSURE 1970 TO 1989 NOW THE PAPER WAREHOUSE

BOARD ORDER

IN THE MATTER OF

GREAT NORTHERN PAPER CO.	)	MAINE HAZARDOUS WASTE
EAST MILLINOCKET, PENOBSCOT COUNTY	)	SEPTAGE & SOLID WASTE
PARTIAL CLOSURE PLAN FOR INTERIM	)	MANAGEMENT ACT
HAZARDOUS WASTE FACILITY &	)	
TERMINATION OF INTERIM LICENSE	)	FINDINGS OF FACT
#I-022		

After a review of the project file which includes the Hazardous Waste Closure Plan submitted by Great Northern Paper Co. (hereinafter "Great Northern") of East Millinocket, Maine, supporting documents, staff reports, inspections and other materials on file relating to the above noted closure plan pursuant to 38 M.R.S.A., Section 1301 et. seq. and Chapter 855 of Maine's Hazardous Waste Management Rules, the Board finds the following facts:

BK4515 PG363

1. Great Northern of East Millinocket and Millinocket, Maine operated under interim license #I-022 as a hazardous waste facility since August 27, 1980. Under this license, Great Northern operated two storage facilities, the "Drum Storage Facility" which is the subject of this Order and the "Dolby Storage Facility" which will be the subject of a future closure Order. Great Northern generated and stored under its interim license, at the Drum Storage facility, the following wastes:

Waste Type	Quantity	Waste Code
Waste Oil & Lubricants	100 drums	M002

In addition the following hazardous wastes may have been stored at the facility:

Waste Type	Quantity	Waste Code
Waste Hexane Flammable Liquid	55 gallons	D001
Waste Flammable Liquid N.O.S.	385 gallons	D001
Waste Paint	330 gallons	D001

2. The Maine Hazardous Waste Management Rules and 38 M.R.S.A., Section 1319-R provide that any hazardous waste facility in operation on or subsequent to April 1, 1980 is subject to the Maine Hazardous Waste Management Rules.

3. The interim hazardous waste license and the Maine Hazardous Waste Management Rules require that Great Northern comply with the standards of 40 CFR Part 265 which include facility closure standards.

BK4515 PG364

4. Great Northern's hazardous waste storage facility called the "Drum Storage Facility" was used to store wastes from the date of the interim license, August 27, 1980, until use was discontinued in 1987.

5. Pursuant to the Maine Hazardous Waste Management Rules ("Rules") Chapter 855, Section 9A, in addition to those closure and post closure requirements of 40 CFR 265, the closure of any existing facility for hazardous waste shall be in accordance with a closure plan approved by the Board.

6. Chapter 855, Section 9 requires that a closure plan include as a minimum:

   A. Certification to the Board by the owner or operator and an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan;

   B. How and when the facility will be closed;

   C. How disposal and/or decontamination of equipment and structures will occur;

   D. The maximum inventory of wastes at the facility;

   E. Closure cost estimate; and

   F. Financial Assurance and Liability requirements for closure activities.

7. Pursuant to 38 M.R.S.A, Section 1319-S, upon approval of a closure plan for a facility for hazardous waste the Department shall file notice with the Register of Deeds for the County in which the facility is located.

8. On July 24, 1989, as finally amended, Great Northern submitted a closure plan in accordance with the requirements set forth in Chapter 855, Section 9 of the Rules and 40 CFR for its "Drum Storage Facility" in East Millinocket, Maine. The closure plan consists of:

   A. Certification of closure activites.

   B. A description of the closure activities, including soil removal and soil and groundwater testing.

   C. Provisions for groundwater monitoring.

   D. A past history of the site, including the maximum inventory and type of wastes stored.

   E. Closure cost estimates and financial assurance documents.

9. Great Northern in its closure plan for the Drum Storage facility has provided the following:

   A. The maximum inventory of waste was documented as 100 drums of waste oil, waste oil mixed with hazardous wastes, or hazardous wastes.

   B. An initial investigation of soil contamination consisting of eight test pits, sampled at locations of surficial staining and at depths ranging from ground surface to one foot in depth.

C. The results of twelve soil samples, each tested for polychlorinated biphenyls (PCB's), volatile organic compounds (VOC's), and total petroleum hydrocarbons (TPH's). No PCB's were detected in any of the samples, TPH's ranged from 110 to 81,000 ug/g, one soil sample contained a VOC - 4.9 ug/g of 1,1,1-trichloroethane.

D. A soil removal plan for stained soil involving the removal of an estimated 350 cubic yards of soil. The removed soil will be stockpiled, while awaiting analysis, on and covered by a polyethylene liner. Analysis of the soil will determine the soil's ultimate disposal location and will consist of PCB, TPH, VOC testing, and the testing for the hazardous waste characteristics of EP-Toxicity, Reactivity, Corrosivity and Ignitability.

E. A plan to verify that all contaminated soil is removed. This plan consists of a twenty foot square grid system with sample points at each of the grid intersections, roughly sixty sample points. Each sample point will be sampled for TPH. If TPH's are detected, the soil will be further analysed for PCB's and VOC's. Samples with levels of contaminants of TPH, PCB's and VOC's will be removed by the excavation of one foot of soil in depth and ten feet horizontally in all directions from the sample location. After removal of this soil, the verification procedure described above will be repeated at that location and soil removed until no levels of contaminants are detected.

In addition the surface soil will be screened for VOC's using the Jar Headspace method with verification and soil removal as described above.

F. A proposal to file, with the local zoning authority in East Millinocket, a survey plat of the Drum Storage Area. As a part of permanently locating this area, a permenent benchmark will be established.

G. A proposed closure certification from an independent professional engineer stating that the site has been cleaned up in accordance with the DEP approved Closure Plan and the Board of Environmental Protection Order.

H. A proposal to install one upgradient and two downgradient wells to monitor the groundwater under the site. The wells will be analyzed quarterly for two years for TPH and purgeable halocarbons (PH). The wells will also be analyzed for semi-volatile organic compounds (SVOA's) and if none are detected in the first year, it will be eliminated from further analysis.

After two years of analysis, the monitoring program will be reviewed to determine if continued groundwater monitoring is needed.

I. A schedule for completion of closure activities including soil excavation, analysis and well installation.

J. An itemized closure cost estimate totaling $195,000.

K. A health and safety plan for workers involved in conducting the closure activities.

L. Financial Assurance for conducting closure activities including the submittal of the 1988 Annual Report, Form 10-K, independent auditor's statement of Great Northern's parent company, Great Northern Nekoosa Corporation, and a statement from the Chief Financial Officer regarding Great Northern's financial condition as it relates to this closure activity.

10. Great Northern has not provided evidence of a liability insurance policy, but did provide evidence of self-insurance in the amounts of one million dollars per occurrence and two million dollars in annual aggregate for sudden and accidental liabilities.

11. On July 26, 1989 notice of Great Northern Paper Company's closure plan for the Drum Storge Area was published in the Bangor Daily News. No comments were received.

Based on the above Findings of Fact, the Board CONCLUDES the following:

1. Great Northern has held interim license #I-022 for a hazardous waste storage facility since August 27, 1980.

2. Great Northern's closure plan for the Drum Storage Facility meets the requirements of Chapter 855, Section 9, including the requirements for certification by an independent professional engineer with one exception:

Although Great Northern proposes a P.E. Certification of closure, it does not, itself, propose to certify that the closure plan was conducted in accordance with the Board approved closure plan.

3. In addition, the following quality control provisions are necessary to ensure proper implementation of the closure activities:

   A. The organic vapor meter must be properly calibrated according to manufacturer's specifications.

   B. The jar space method used for detection of VOA must be specified and the background ambient air conditions must be of acceptable quality..

   C. To ensure that chemical peaks are adequately identified, Method 8240 should be utilized for volatile organics analysis of the groundwater samples.

   D. Contamination which has not been removed must be assessed for future actions including but not limited to a post closure plan and license.

4. Great Northern must receive Board approval for a closure plan for those portions of its storage license I-022 which are not the subject of this Order.

However, the Board APPROVES the closure plan of Great Northern and ORDERS that the portion of the interim hazardous waste storage license (I-022) for the Drum Storage Area held by Great Northern of East Millinocket, Maine be terminated, effective upon completion of all actions called for in the approved closure plan and the conditions of this Order, subject to the following conditions of approval:

1. Standard Conditions of Approval.

2. Great Northern shall submit, not later than ninety (90) days after the date of this Order, a certification that the facility has been closed in accordance with the specifications in the approved closure plan. Such certification shall be made by Great Northern and by an independent, Maine registered professional engineer.

BK4515 PG370

3. The Department of Environmental Protection reserves the right to require Great Northern to take remedial action in the event that any contamination, hazardous waste or residuals thereof are detected on site after implementation of the outlined closure activities. The required actions may include the requirement that Great Northern obtain a post closure license from the Board.

4. Great Northern shall implement methods to:

   A. Properly calibrate the organic vapor meter in accordance with the manufacturer's specification, but in no case shall such calibration be less than twice per each day,

   B. Utilize all applicable procedures outlined in the Jar Headspace Procedure, including the agitation of all samples prior to taking any reading. This procedure shall be as published by John M. Fitzgerald, Massachusetts D.E.Q.E. in the Third Conference on Environmental and Public Health Effects of Soils Contaminated with Petroleum Products, University of Massachusetts, September 19, 1988.

   C. The Jar Headspace Procedure may only be used when the ambient air conditions are of acceptable quality. For the purpose of this Order, acceptable ambient air quality is 5.0 ppm as calibrated.

   D. The Groundwater analyses for Volatile Organic chemicals shall be performed using U.S.E.P.A. Method 8240 instead of Method 8010. The laboratory shall be instructed to conduct a library search to tentatively identify compounds.

5. The Final Report to the Department as described in the Closure Plan shall be submitted by December 30, 1989. All groundwater monitoring results shall be submitted within 45 days of sampling and a yearly report on the results of each year's groundwater monitoring results shall be submitted to the Department by December 30 of each year.

6. Following the two years of quarterly groundwater monitoring, Great Northern shall submit to the Department for its review, approval, and implementation a recommendation for further remedial actions, as appropriate.

7. Great Northern must submit a revised closure plan for the Dolby Storage Facility (interim hazardous waste license I-022) which meets the requirements of Chapter 855, Section 9 of the rules by November 1, 1989.

BK4515 PG371

DONE & DATED AT AUGUSTA, MAINE THIS 23rd DAY OF August, 1989.

BUREAU OF ENVIRONMENTAL PROTECTION

By: E. Christopher Livesay, Chairman

Please see attached sheet for appeal procedures.

SL/djp
SLPAPEROO

A TRUE COPY
ATTEST: Alan M. Prysunka
Alan M. Prysunka
Bureau of Oil & Hazardous Materials Control

PENOBSCOT, ss REC'D
89 SEP 11 AM 11:18
ATTEST:
REGISTER

EAST

023764

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BK4704 PG079

BOARD ORDER

IN THE MATTER OF

GREAT NORTHERN PAPER CO.	)	
EAST MILLINOCKET, PENOBSCOT COUNTY 04430)		MAINE HAZARDOUS WASTE
CLOSURE PLAN FOR INTERIM	)	SEPTAGE & SOLID WASTE
HAZARDOUS WASTE FACILITY &	)	MANAGEMENT ACT
TERMINATION OF INTERIM LICENSE	)	FINDINGS OF FACT & ORDER
#I-022		

1990
HAZ WASTE
Dolby STORAGE FACILITY
Closure Plan
Approval

After a review of the project file which includes the Hazardous Waste Closure Plan submitted by Great Northern Paper Co. (hereinafter "GNP") of East Millinocket, Maine, supporting documents, staff reports, inspections and other materials on file relating to the above noted closure plan pursuant to 38 M.R.S.A., Section 1301 et. seq. and Chapter 855 of Maine's Hazardous Waste Management Rules the Board finds the following facts:

1. GNP of East Millinocket and Millinocket, Maine operated under interim license number I-022 as a hazardous waste facility since August 27, 1980. Under this license GNP operated two storage facilities, the "Drum storage facility" which has an approved closure plan currently being implemented and the "Dolby Storage facility" which is the subject of this Order. The Dolby storage facility is located adjacent to the Dolby hydroelectric station in East Millinocket. The facility is located in a 60 ft. x 100 ft. brick building which is locked at all times and not open to the general public. PCB storage was provided by the construction of a concrete and steel enclosure. GNP generated and stored under its interim license at the Dolby Storage facility, the following wastes:

Waste Type*	Quantity	Waste Code
PCB Liquid	33,239 lbs.	M002
PCB Transformers	(12) 45,260 lbs.	M002
PCB Capacitors	23,170 lbs.	M002
PCB Solids	78,363 lbs.	M002
PCB Empty drums	25 drums	M002
1,1,1, Trichloroethane	3 drums	F001
Paint waste	1 drum	D001
Waste solvent	2 drums	D001

* PCB= Polychlorinated bipheynols

2. The Maine Hazardous Waste Management Rules and 38 M.R.S.A. Section 1319-R provide that any hazardous waste facility in operation on or subsequent to April 1, 1980 is subject to the Maine Hazardous Waste Management Rules.

3. The interim hazardous waste license and the Maine Hazardous Waste Management Rules require that GNP comply with the standards of 40 CFR Part 265 which include facility closure standards.

4. GNP's hazardous waste storage facility called the "Dolby Storage facility" was issued an interim hazardous waste storage facility license #I-022 by the Board on August 27, 1980.

5. Pursuant to the Maine Hazardous Waste Management Rules ("Rules") Chapter 855, Section 9A, in addition to those closure & post closure requirements of 40 CFR 265, the closure of any existing facility for hazardous waste shall be in accordance with a closure plan approved by the Board.

6. Chapter 855, Section 9 of the Rules requires that a closure plan include as a minimum:

   A. Certification to the Board by the owner or operator and an independent registered professional engineer that the facility has been closed in accordance with the specifications of the approved closure plan;

   B. How and when the facility will be closed;

   C. How disposal and/or decontamination of equipment and structures will occur;

   D. The maximum inventory of wastes at the facility;

   E. Closure cost estimate; and

   F. Financial Assurance and Liability requirements for closure activities.

7. On January 16, 1990 as finally amended, Great Northern submitted a closure plan in accordance with the requirements set forth in Chapter 855, Section 9 of the Rules and 40 CFR for its "Dolby Storage facility" in East Millinocket, Maine the closure plan consists of:

   A. Certification of closure activities;

   B. A description of the closure activities;

   C. A past history of the site including the maximum inventory and type of wastes stored;

   D. Closure estimates and financial assurance documents.

8. Pursuant to 38 M.R.S.A., Section 1319-S, upon approval of a closure plan for a facility for hazardous waste the Department shall file notice with the Register of Deeds for the County in which the facility is located.

9. Great Northern in its closure plan for the Dolby Storage facility has provided the following:

   A. The maximum inventory of waste held at the Dolby facility.

B. A description of an initial investigation of contamination, consisting of 10 wipe samples of the facility floor. An area approximately 100 cm^2 was sampled.

C. The results of the wipe samples, which demonstrated the presence of polychlorinated biphenyls (PCB's) in concentrations ranging from 1.3 to 2700 micrograms/100 cm^2.

D. A description of the closure activities to be conducted of the floor and walls at the Dolby Storage facility. The area will be dry-cleaned to remove all dirt, grease, loose paint and other materials prior to a wet-clean up using an appropriate solvent scrub. All residues generated during the cleaning process will be disposed of at a licensed hazardous waste facility. After the clean up and removal of hazardous waste residue, GNP will repaint the walls and floor of the storage area.

E. A closure cost estimate of $40,000 dollars.

F. Evidence offinancial Assurance for conducting closure activities in the form of a statement from the chief financial officer regarding Great Northern's financial condition as it relates to this closure activity.

10. Great Northern has not provided evidence of liability insurance policy, but has provided evidence of self-insurance in the amounts of one million dollars per occurence and two million dollars in annual aggregate for sudden and accidental liabilities.

11. On September 22, 1989 notice of Great Northern Paper Company's closure plan for the Dolby Storage area was published in the Bangor Daily News. No comments were received.

12. On April 2, 1987 the U.S. EPA published its PCB Spill Clean up Policy as a final rule. Also included with the rule was a discussion of risk, toxicity and environmental persistence of PCBs discharged in specific locations. This rule, among other things, establishes a clean up standard for certain discharges of PCBs on solid surfaces in restricted access industrial areas. In developing this policy EPA under the Toxic Substance Control Act has concluded that 10 micrograms per 100 square centimeters for indoor low contact surfaces, such as floors, walls, and berms, would not present significant risks to workers or to the general population. Although this policy is not binding upon RCRA nor the Department, it may provide useful guidance to the Department for PCB residuals in certain controlled industrial settings. The Department expressly does not adopt the Policy.

Based on the above FINDINGS OF FACT, the Board CONCLUDES the following:

1. GNP was granted an interim license for a hazardous waste storage facility on August 27, 1980.

2. On January 18, 1990, as finally amended, GNP submitted a closure plan which meets the requirements of Maine Hazardous Waste Management Rules, Chapter 853, Section 9.

3. The public notice requirements relating to the closure plan have been met.

4. The Board is persuaded that although not binding on the Department, EPA's PCB spill clean up policy for the closure of this interimly licensed PCB storage facility is relevant and protective of public health and the environment for the following reasons:

   A. The PCB storage area consists of a concrete floor and berm located in a locked building having no contact with soils, surface, or groundwater.

   B. The PCB storage area will be repainted after the decontamination process limiting the opportunity for dermal contact, ingestion, or inhalation of PCB's.

   C. Any spilled PCB residues from the use of the storage facility should be confined to the surface layer of the concrete within the storage area. Given the porosity of concrete, removal of PCB's to background can require the actual destruction and removal of the contaminated concrete.

Therefore, the Board APPROVES the closure plan as modified herein and ORDERS that the interim Hazardous Waste Storage Facility License for Great Northern Paper Co. of East Millinocket, Maine be terminated effective upon completion of all actions called for in the approved closure plan and this ORDER subject to the following conditions of approval:

1. All Standard Conditions of Approval;

2. GNP shall, at a minimum, conduct a facility decontamination using mineral spirits, or other Department approved solvent on all areas of the storage facility where representative sampling using the standard swipe test indicates detectable PCB residues;

3. GNP shall continue decontamination as needed until a representative sampling of the storage facility using the standard wipe test indicates that the remaining PCB residues are less than 10 micrograms per 100 square centimeters;

4. GNP shall submit no later than December 31, 1990, a certification that no hazardous waste or hazardous waste residue other than PCB's less than 10 micrograms per 100 square centimeters remain in the PCB storage area, except for those which are handled according to generator standards, and that the facility has been closed in accordance with the specifications in the approved closure plan and this Order. Such certification shall be made by GNP and an independent, Maine registered Professional Engineer;

5. The Department of Environmental Protection reserves the right to require GNP to take remedial action in the event that any contamination by hazardous waste or residuals thereof other than PCB's as specified in this Order are detected at any time on the concrete floor, walls or berm of the PCB storage area. This may include, but not be limited to the requirement that GNP obtain a post closure license from the Board; and

6. Hazardous waste residues in rinse waters or other decontamination materials from the storage facility shall be disposed of in compliance with the Maine Hazardous Waste Management Rules.

DONE AND DATED AT AUGUSTA, MAINE THIS 25th DAY OF July OF 1990.

BOARD OF ENVIRONMENTAL PROTECTION

By: E. Christopher Livesay, Chairman

Please see attached for appeal procedures.

RK/djp/RREGREAT

A TRUE COPY
ATTEST: Alan M. Prysunka
Alan M. Prysunka
Bureau of Oil & Hazardous Materials Control

PENOBSCOT, ss REC'D
90 AUG 20 AM 9:28
ATTEST:
REGISTER

Environmental

BK4526 PG184

028373

DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUGUSTA, MAINE 04333

DEPARTMENT ORDER

Regulatory

IN THE MATTER OF

GREAT NORTHERN PAPER COMPANY East Millinocket, Maine INDUSTRIAL EXPANSION L-00796-20-C-C (APPROVAL)	)	SITE LOCATION OF DEVELOPMENT ORDER CONDITION COMPLIANCE

Pursuant to the provision of Title 38, M.R.S.A., Section 483, the Department of Environmental Protection has considered the application of GREAT NORTHERN PAPER COMPANY with its supportive data, staff summary, agency review comments, and other related materials on file and finds the following facts:

1. The applicant received conditional approval from the Department of Environmental Protection by Order dated August 31, 1989 for project #L-00796-20-B-H. The applicant has submitted evidence concerning compliance with Special Condition #2 of this Order.

2. Special Condition #2 reads as follows:

   "Prior to construction of the Woodyard Modernization project, the applicant shall submit to the Department for review and receive approval evidence of final commitment of all necessary funds from Great Northern Nekoosa to complete the project."

3. The nature of the evidence submitted is as follows:

   A letter to Dean Marriott, Commissioner, Department of Environmental Protection, dated August 30, 1989, from D.C. Wright, Jr., Vice President and Chief Financial Officer, Great Northern Nekoosa Corporation, confirming that the East Millinocket Woodyard Modernization Project was approved by GNN's Board of Directors and that funds totaling $48,144,000 have been set aside for its implementation.

Based upon the above Findings, the Department concludes that Great Northern Paper Company has complied with Special Condition #2 of the Department Order #L-00796-20-C-C dated August 31, 1989.

DONE AND DATED AT AUGUSTA, MAINE, THIS 6th DAY OF September, 1989.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Dean C. Marriott
Dean C. Marriott, Commissioner

A TRUE COPY
ATTEST: Deborah Richard
Deborah Richard, Director
Bureau of Land Quality Control

Date of initial receipt of application 9-6-89
Date of application acceptance 9-6-89
JM/sb/GREATNP

STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependant upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.

2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.

3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.

7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.

8. A copy of this approval must be included in or attached to all contract bid specifications for the development.

9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)
Revised November 1, 1979

PENOBSCOT, ss REC'D
89 SEP 27 AM 8:05
ATTEST:
REGISTER

Department of Environmental

BK4766 PG198

005261

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

GREAT NORTHERN NEKOOSA CORP. East Millinocket, Maine RECYCLING/DEINKING PLANT #L-16637-20-C-N (Approval)	)	SITE LOCATION OF DEVELOPMENT FINDINGS OF FACT AND ORDER

Pursuant to the provisions of Title 38 M.R.S.A. Section 481 et seq., the Department of Environmental Protection has considered the application of Great Northern Nekoosa Corporation with its supportive data, staff summary, agency review comments, and other related materials on file and finds the following facts:

1. PROJECT DESCRIPTION:

A. History Of Project: On April 24, 1990, Great Northern Paper Company received conditional approval in Department Order L-16637-A-N for all the improvement projects that have occurred at the East Millinocket Mill since January 1, 1970, for modernization of the wood handling and processing operations at the mill, and for construction of a new warehouse building.

B. Summary: The applicant is proposing to construct a plant at the East Millinocket Mill to repulp and de-ink newspapers and magazines to generate fiber for use in the manufacture of newsprint and other groundwood printing papers. The project will be constructed in two phases. The applicant is seeking approval of both phases of the project at this time.

Phase I will consist of a 66,300 square foot Recycled Fiber Warehouse, a 5,000 square foot Chemical Building, a 26,300 square foot Deinking Building, a 900 square foot Peroxide Tank, a 3,600 square foot Clarifier Enclosure, and a 2,000 square foot HD Storage Chest.

Phase II will consist of a 31,500 square foot addition to the Warehouse, a 9,800 square foot addition to the Deinking Building, a 4,000 square foot Pulper, a 3,500 square foot Clarifier Enclosure, a 1,600 square foot HD storage chest, and a 900 square foot Peroxide Tank.

The proposed project will add approximately 5.6 acres of impervious area to the site.

Work will be done in accordance with plans entitled "Proposed Recycle Plant, Plot Plan and Project Boundary" dated 6/1/90.

The recycling/deinking process consists of the following equipment and systems needed to carry out necessary operations: a pulper, high consistency cleaners, a 3-stage coarse screening system, flotation cells, a 3-state fine screening system, centrifugal cleaners, washers, and a dispersing system.

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The annual output of the mill will approximate 91,000 Oven Dried Tons (182,000 Oven Dried Tons after Phase II) of recycled fiber which will be entirely consumed at Great Northern Nekoosa's East Millinocket paper mill. About 217,000 Air Dried Tons per year (234,000 ADT/year after Phase II) of wastepaper will be needed to supply this facility. In addition to wastepaper, several chemicals will be used in the process to facilitate the deinking process. These materials are common to the conventional paper making process.

The wastepaper to be recycled will be purchased throughout the New England-New York area and will consist of old newspapers (70 percent) and old magazines (30 percent). This material will be shipped to East Millinocket by both trucks and rail cars. All wastepaper will be unloaded into a warehouse sized to contain a 10-15 day supply. No paper will be stored outside. The warehouse will be attached to the process building; consequently, the wastepaper will not be transported outside once it is received.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be $47,000,000. Great Northern Nekoosa Corporation has submitted the most recent corporate annual report indicating that the company has sufficient funds to finance the project.

3. TECHNICAL ABILITY:

The applicant has provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant retained the services of Rust International, a professional engineering firm, to do the preliminary design work. A qualified engineering firm will be retained to do the detail design and engineering of the project.

4. SOLID WASTE:

When completed, it is anticipated that the recycle/deinking plant will generate 54 tons per day of ink sludge consisting of ink particles, clay and some fiber. This sludge will be disposed of either by incinerating at the East Millinocket bark boiler or landfilling at the Dolby III Landfill. The ash generated in the boiler will be a mixture of ink sludge residuals (primarily clay) and ash generated from the other fuels burned in the boiler. The ash will be disposed of at the Dolby III landfill.

Great Northern Nekoosa has submitted information and Toxicity Characteristic Leaching Procedure (TCLP) analyses from similar deinking plants believed to produce sludge similar to what the new plant will produce. The material produced in these plants does not meet the criteria of hazardous waste, either in its raw form at the clarifier or as ash from the bark boiler.

The Bureau of Solid Waste Management has reviewed the project and requests that the sludge be tested according to the Environmental Protection Agency's new TCLP test. Great Northern Nekoosa will need to submit results from TCLP testing on the wastes before the Department can approve the waste for final disposal at any Maine landfill.

GREAT NORTHERN NEKOOSA CORP.
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Great Northern Nekoosa has submitted a sampling and analytical plan for confirmation characterization of the primary deinking sludge. The Bureau of Solid Waste Management has found the plan acceptable provided that characterization is done on a monthly basis for the first three months after the facility becomes operational.

The Bureau of Oil and Hazardous Material Control reviewed this project and stated in its review comments that if the sludge fails the Toxicity Leaching Procedure, that Great Northern Nekoosa will be required to obtain a permit for a hazardous waste surface impoundment.

When completed, the project is anticipated to generate 11 tons per day of general solid waste. All general solid waste generated by the project is to be disposed of at the Dolby landfill.

The project is anticipated to generate 19,000 cubic yards of excess fill. Some of this material may contain bark. The applicant has proposed to separate the bark and burn it in their boiler. The remainder of the fill will be used for onsite grading, disposed of in a spoils area that meets Chapter 404 standards, or disposed of at Dolby III Landfill. The applicant has not shown the location of the spoils area on the site plans.

Construction of the project may generate ash contaminated soil. Great Northern Nekoosa obtained a special waste permit (S-0786-7D-F-N) in part to dispose of 300 cubic yards/month of ash-contaminated waste soil at Dolby III landfill. If Great Northern Nekoosa encounters ash-contaminated soil, they will need to submit the sampling and analytical work plan required by the above special waste license to Bureau of Solid Waste Management for its review and approval prior to disposal at Dolby III landfill.

All construction debris generated by the project is to be disposed of at the Dolby landfill. Clean wood generated during construction may be burned at an existing burn area on-site. The Bureau of Solid Waste Management staff has inspected Dolby III landfill and have identified significant operational concerns which they have asked be addressed. Great Northern Nekoosa has submitted to the Bureau of Solid Waste Management a compliance schedule to resolve these concerns at Dolby III landfill. The company has completed a substantial portion of the items. Department staff has reviewed the schedule and find it acceptable.

3. WATER SUPPLY:

When completed, the project is anticipated to use 1000 gallons per day of potable water. Water will be supplied by the East Millinocket Water Works. The applicant has submitted a letter from the East Millinocket Water Works dated June 12, 1990, indicating that they will be capable of servicing this project.

Process water for the project will come from the Penobscot River via an existing screening and filtering plant. The project will use an additional 800,000 gallons of water per day. The current usage by the existing mill

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is approximately 21 million gallons per day.

6. TRAFFIC:

The project is located at the existing paper mill site south of Route 157 (Main Street). Access to the proposed development is via the four entrances that intersect Route 157.

The Maine Department of Transportation (DOT) submitted the following review comments:

1. Sight distances at all affected intersections are adequate.

2. A stop sign should be erected at the North Entrance to the Mill. The stop sign at the Construction Entrance is currently down and should be repaired or replaced.

In response to the Maine Department of Transportation comments, the applicant has erected stop signs at the North Entrance and the Construction Entrance to the mill.

No new interior roads will be constructed for this project.

7. AIR QUALITY:

The Bureau of Air Quality Control reviewed the project and submitted the following comments:

A. The burning of the sludge resulting from the deinking process has already been addressed in Air Emission License Amendment A-403-71-B-M for Great Northern's East Millinocket facility.

B. Fugitive dust emissions appear to be sufficiently addressed in that all road surfaces will be paved or treated as needed to prevent dust emissions.

The applicant has stated that the truck dumping facilities will be enclosed and will capture any paper dust that may be generated as waste paper is dumped.

8. NATURAL DRAINAGE WAYS:

The West Branch of the Penobscot River flows along the Southwest property line of the mill site.

The proposed plant site is currently a developed woodyard area consisting of timber lay down areas, paved and gravel surfaces, and some vegetated areas. The topography is relatively flat with stormwater runoff conveyed to the river via a series of culverts and ditches constructed as part of the Woodyard Modernization Project. The majority of the runoff from the woodyard area is routed through an existing sedimentation basin before it discharges to the river.

There will be no effect on abutting properties due to this project. Existing flow patterns will be maintained for the recycled fiber project.

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9. STORMWATER RUNOFF:

The applicant has submitted a stormwater management plan for the site based on estimates of the pre-development and post-development runoff flows for the 2, 10, and 25 year storms using the methodology outlined in "Urban Hydrology for Small Watersheds", Technical Release #55, U.S.D.A., Soil Conservation Service.

This plan has been reviewed and approved by the Bureau of Land Quality Control's Technical Services Unit.

10. EROSION AND SEDIMENTATION CONTROL:

The applicant has submitted an Erosion and Sedimentation Control Plan as Exhibit 20 of the application. This plan and plan sheets containing erosion control details have been reviewed by and revised in response to the comments of, the Bureau of Land Quality Control's Technical Services Unit which has found the revised plans to be in accordance with the Departmental standards for erosion and sediment control.

11. SURFACE AND WATER QUALITY:

The proposed project is not within the watershed of a lake or great pond.

Stormwater runoff is collected in a sedimentation basin and discharged to the West Branch of the Penobscot River. No permit from the Bureau of Water Quality Control is needed.

The applicant has submitted an Erosion and Sedimentation Control Plan. See Finding #10.

Wastewater will be treated by the existing treatment plant before being discharged. See Finding #12.

Chemicals used in the deinking/recycling process have the potential to contaminate surface water. The applicant has not submitted for review and approval a spill prevention, containment, and counter measure (SPCC) plan for the proposed facility nor have detailed plans and material installation specifications for the spill containment facilities been included with the application. The chemical storage building is not scheduled to be constructed until after December 31, 1991.

12. BUFFER STRIPS:

The 410 acre mill property is buffered from abutting property to the east and west by a forest cover on Great Northern Nekoosa property. These undeveloped portions of the site have screened and will continue to screen the mill site from adjacent properties in both directions. The West Branch of the Penobscot River borders the property to the south. The southern bank of the river is undeveloped Great Northern Nekoosa property. To the north, the site is bounded by State Route 157/11 (also Maine Street of East Millinocket). From the main mill entrance easterly to the discontinued contractor gate, there is a green belt containing trees that provide partial screening of the mill site from the road. East of the discontinued contractor gate, the green belt becomes wider, providing almost total screening of mill property. Extending from the main mill entrance to the

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west contractor entrance, there is a narrow green belt with trees broken by several commercial structures which provide limited screening of the mill property. Beyond the contractor entrance there is a wide forested area which effectively screens the mill from the road.

Construction of the recycled fiber plant will not change the existing conditions significantly. Following construction, the undeveloped area will be revegetated with trees.

The applicant will plant 2 to 3 foot tall Red Pine trees along the northern mill property boundary extending over the length of the deinking project site. The trees will be located to avoid the abutting railroad right-of-way and to allow safe operation of the facilities. The applicant has provided a landscaping plan entitled "Proposed Recycle Plant, Landscaping Plan" dated 11/5/90.

13. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The applicant has submitted a copy of a letter from the Maine Historic Preservation Commission dated March 8, 1990, indicating that this project will have no effect upon any structure or site of historic, architectural, or archaeological significance.

No unusual or natural areas have been identified on the project site. This is based on a review of the Maine Critical Areas Data Base.

14. SCENIC CHARACTER:

No adverse impacts on scenic character have been identified. The project is located on an existing mill site. To minimize the visibility of the project, the applicant will plant Red Pine trees along the northern mill property boundary extending the length of the deinking plant site, as described in Finding #12 of this order.

15. WILDLIFE AND FISHERIES:

The project has been reviewed by the Maine Department of Inland Fisheries and Wildlife (IF&W). No concerns were raised in IF&W's review of the project.

16. SOILS:

A geotechnical investigation of the project site was conducted by S. W. Cole Engineering, Inc. S. W. Cole found 3.5 to 11 feet of fill material overlying native soils. The fill material generally consists of silty sands and sandy silts with gravel, cobbles, some boulders and varying amounts of organic material. Fill within the southerly portion of the site and below the existing paved area appears to be predominantly dense granular soil fill. Organic material, including bark, logs and woodyard debris, was encountered within the fill in explorations made east, north and west of the paved area. The thickness of organic material varied from about 2 to 5 feet at the exploration locations. The underlying native soils consisted primarily of dense glacial till. At several test borings, very stiff clayey silt and dense sandy silt soils were encountered below

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the fill material. Bedrock core samples were obtained at eight test boring locations. The depth to bedrock ranged from 18.7 to 30.1 feet, becoming deeper from east to west. Water levels at the time of exploration generally ranged from depths of about 6 to 12 feet below the ground surface.

S. W. Cole made numerous recommendations on site preparation and construction activities based on soil properties and limitations in their report entitled 'Preliminary Geotechnical Engineering Report For: Proposed Recycled Fiber Plant Project, Great Northern Nekoosa Corp., East Millinocket, Maine' dated 6/14/99.

One recommendation made by S. W. Cole was that general site preparation should include removal of all organic fill material from the building sites.

The applicant has agreed to implement all recommendations made by S. W. Cole.

17. GROUNDWATER QUALITY:

The project site is not located on a significant sand and gravel aquifer.

No on site wells are proposed and no wastewater will be disposed of in subsurface disposal systems. Solid waste will be disposed of at the Dolby III landfill.

The storage and use of chemicals in the deinking/repulping process has the potential to contaminate groundwater.

The applicant has not submitted for review and approval a spill prevention, containment, and counter measure plan for the proposed facility nor have detailed place and material installation specifications for the spill containment facilities been included with the application.

18. WASTEWATER DISPOSAL:

All process and sanitary wastewater from the recycling/deinking process will be treated in Great Northern Nekoosa's on-site wastewater treatment plant. An amended license has been received from the Department authorizing the discharge of the treated waste stream from the treatment plant for the project.

This project has been reviewed by the Bureau of Water Quality Control, which recommended approval.

19. OPEN SPACE:

The applicant has submitted a letter from the Town of East Millinocket, dated June 4, 1999, which indicates that this project as proposed, satisfies all local open space requirements.

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20. NOISE:

A noise study for this project was conducted by Noise Unlimited, Inc.

Noise associated with the operation of the proposed Recycled Fiber Plant will come from the following sources:

A. Trucks delivering waste paper

B. Hydraulic truck dumper for unloading waste paper trucks

C. Loader pushing wastepaper into the Warehouse

D. Fork lift trucks inside the Warehouse

E. Ventilation fans on the Warehouse and Process Building

F. Process equipment such as a disperser, repulping drum, screw conveyor and sludge press inside the Process Building.

Average noise levels outside the Process Building and Warehouse are expected to be 60 dBA and 50 dBA, respectively.

Noise Unlimited, Inc. concluded in its Noise Assessment that the proposed project as designed can be constructed, operated and maintained, in compliance with Maine DEP regulations, East Millinocket noise limits, and EPA guidelines.

21. FLOODING:

The recycled fiber plant will be located on an existing permitted mill site. The structures associated with the recycled fiber plant will be located about 1000 feet from the West Branch of the Penobscot River, well beyond and above the 100 year flood elevation for the river.

BASED on the above findings of fact, the Department makes the following conclusions pursuant to 38 M.R.S.A. Section 481 et seq.:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.

B. The applicant has made adequate provision for traffic movement of all types into, out of or within the development area and the traffic increase attributable to the proposed development will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the proposed development.

C. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character or other natural resources in East Millinocket and in neighboring municipalities, provided that the applicant plants the Red Pine trees as proposed.

GREAT NORTHERN NEKOOSA CORP.
East Millinocket, Maine
Recycling/Deinking Plant
#L-16637-20-G-M (Approval)

) SITE LOCATION OF DEVELOPMENT
)
)
) FINDINGS OF FACT AND ORDER

D. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil, provided that appropriate temporary and permanent erosion control methods are implemented.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur, provided that specific designs for chemical containment structures and an SPCC plan are submitted for review and approval.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal, roadways and open space required for the development; and the development will not have an unreasonable adverse effect on the existing or proposed utilities, roadways and open space, provided that solid waste is disposed of as described in finding #4 of this order and wood ash generated by the burning of clean wood construction waste is disposed of at the Dolby III Landfill.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

H. The activity is not located on adjacent to a sand dune system.

THEREFORE, the Department APPROVES WITH THE ATTACHED CONDITIONS the application of Great Northern Nekoosa Corporation to construct a recycling/deinking plant in East Millinocket, Maine in accordance with the following conditions:

1. The Standard Conditions of Approval, a copy of which is attached.

2. Prior to December 31, 1991, the applicant shall submit an amended SPCC plan that includes the new facilities, engineering detail plans and material/installation specifications for spill containment facilities to the Bureau of Land Quality Control for review and receive the approval of the Commissioner prior to commencement of construction of the chemical storage building.

3. Thirty days after the facility becomes operational, monthly TCLP sampling of the primary deinking sludge shall be performed for a period of three months. Thereafter, quarterly sampling shall occur for a period of nine months. Sampling shall be performed in accordance with the sampling and analytical plan submitted to the Bureau of Solid Waste by the applicant on November 2, 1990. During this sampling period primary deinking sludge shall be placed at Dolby III landfill in known locations such that it could be removed.

4. If the Toxicity Characteristic Leaching Procedure shows that the ink sludge is a hazardous waste, the applicant shall submit to the Bureau of Land Quality Control for review and receive approval of the Commissioner for a new plan to dispose of the waste prior to disposal of any of the material. Any other permits needed from the federal, state, and/or local government for the new disposal plan shall be obtained by the applicant prior to disposal of the waste.

BK4766 PG207

GREAT NORTHERN NEKOOSA CORP.
East Millinocket, Maine
Recycling/Deinking Plant
#L-18617-20-C-M (Approval)

) 10 SITE LOCATION OF DEVELOPMENT
)
)
) FINDINGS OF FACT AND ORDER

5. Prior to the disposal of ash contaminated soils at the Dolby XII landfill, the applicant shall submit for review and approval to the Bureau of Solid Waste a sampling and analytical plan designed to determine the physical and chemical characteristics of the waste.

If it is determined that the waste cannot be disposed of at the Dolby III landfill, the applicant shall submit a revised waste disposal plan for the ash contaminated soil to the Bureau of Land Quality Control and shall receive approval of the Commissioner for the plan prior to disposal.

6. Prior to disposal of any excavated materials generated during construction of the project using the standards set forth in Chapter 404 of the Solid Waste Management Rules, the applicant shall submit to the Bureau of Land Quality Control for review a plan showing the location of the disposal area and cross-sectional view of the disposal site.

7. Within one year from completion of construction of the deinking facility, the applicant shall plant the screen of trees shown on the landscape plan filed in the Site Location application.

8. In addition to any specific erosion control measures described in Finding 11 of this order, the applicant shall take all necessary actions to ensure that their activities or those of their agents do not result in noticeable erosion of soils on the site during the construction and operation of the project covered by this approval.

DONE AND DATED AT AUGUSTA, MAINE, THIS 10th DAY OF Dec., 1990

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Dean C Marriott
DEAN C. MARRIOTT, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEALS PROCEDURES...

Date Of Initial Receipt of Application 7/11/90
Date Of Application Acceptance 8/3/90

Date Filed with Board of Environmental Protection _____
REINK:AC

A TRUE COPY
ATTEST: Debrah Richard
Debrah Richard, Director
Bureau of Land Quality Control

STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependant upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.

2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.

3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.

7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.

8. A copy of this approval must be included in or attached to all contract bid specifications for the development.

9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

Department of Environmental Protection

PENOBSCOT, ss REC'D
90 DEC 17 AM 9:24
ATTEST:
REGISTER

(7/81)
Revised November 1, 1979

BK5002 PG232

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

004599

IN THE MATTER OF

GREAT NORTHERN PAPER, INC. A SUBSIDIARY OF BOWATER, INC. East Millinocket, Maine RECYCLING/DEINKING PLANT #L-16637-20-I-M (APPROVAL)	)	SITE LOCATION OF DEVELOPMENT MODIFICATION FINDINGS OF FACT AND ORDER

Pursuant to the provisions of Title 38 M.R.S.A. Section 481 et seq., the Department of Environmental Protection has considered the application of Great Northern Paper, Inc. with its supportive data, staff summary, agency review comments, and other related materials on file and finds the following facts:

1. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-16637-20-G-N dated 12/10/90, the Department approved with conditions the application of Great Northern Nekoosa Corporation to construct a recycling/deinking plant in East Millinocket, Maine.

In Department Order #W-999999-22-B-T dated 12/6/91, the Department approved with conditions the transfer of all Department licenses, license amendments, modifications, condition compliances, certifications, and other approvals held by Great Northern Nekoosa Corporation, a wholly-owned subsidiary of Georgia-Pacific Corporation to Bowater Incorporated and Great Northern Paper, Inc. Included in this transfer were the licenses for the pulp and paper mill and associated facilities in East Millinocket as well as the approved Recycling/Deinking Plant amendment for the East Millinocket Mill.

Special Condition #2 of Order #W-999999-22-B-T states that the transfer of Department licenses shall not become effective until the applicants certify in writing to the Department that the transfer of GNN/GP assets to Great Northern Paper, Inc. and the subsequent purchase of 80% of Great Northern Paper, Inc. stock by Bowater, Inc. has occurred. The written certification was submitted on 12/31/91.

B. Summary: The applicant is now proposing minor changes to the permitted design of the Recycling/Deinking Plant facility. The changes include an overall decrease in the size of the building footprint - from 135,300 square feet to 137,300 square feet, an increase in the height of the process building by 20 feet, an increase in height of the warehouse by 5 feet, and an increase in the amount of solid waste that will be generated. According to the applicant all other aspects of the project will remain the same. The proposed modification to the plant is shown on the plans entitled "Exhibit 3-2, Proposed Recycle Plant Plot Plan and Project Boundary Rev. A" as revised through 12/17/91.

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER, INC.
East Millinocket, Maine
RECYCLING/DEINKING PLANT
#L-16637-IC-I-N (APPROVAL)

2 SITE LOCATION OF DEVELOPMENT
BK5002 PG233
MODIFICATION
FINDINGS OF FACT AND ORDER

2. SOLID WASTE: As a result of downsizing the presently permitted 316 air dry tons per day (ADTPD) deinking facility to a 300 ADTPD facility, the total solid waste quantity going to the Dolby III landfill will increase to 93 oven dry tons per day. The physical and chemical characteristics of this material will be the same as originally permitted.

The Site Location Modification application has been reviewed by the Bureau of Hazardous Materials and Solid Waste Control which commented that the Dolby III modification for this change is acceptable. A separate Solid Waste Order will be issued relating to this change.

3. WASTEWATER DISPOSAL: According to the applicant, the changes to the plant will result in no net increase in loading to the wastewater treatment plant. The Bureau of Water Quality Control reviewed the Site Location modification application and found that the modification proposed to the plant should not significantly alter the waste load generated by this project to the wastewater treatment plant. The treatment plant has the capacity to treat the wastewater and should remain within its issue discharge license limits. The Water Bureau is concerned that GNP is using wastewater loading data/ton of pulp produced which is based on its other deinking plant in Tennessee. These numbers are significantly lower than industry standards. Should the waste load/ton of pulp prove to be more in keeping with industry standards rather than what is happening in Tennessee, GNP will probably have a hard time staying within their discharge license limits. However, GNP is required to submit monitoring reports to the Bureau of Water Quality Control. If discharge limits are exceeded, the license violations will be pursued by that Bureau under the Protection and Improvement of Waters Act, 38 M.R.S.A. Section 413.

4. OTHER FINDINGS: All other findings of fact, and conclusions relevant to the financial capacity, traffic movement, adverse environmental effects, soils, and road standards remain as approved under Department Order #L-16637-20-B-M.

BASED on the above findings of fact, the Department makes the following conclusions in relation to the proposed modification pursuant to 38 M.R.S.A. Section 481 et seq.:

A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.

B. The applicant has made adequate provision for traffic movement of all types into, out of or within the development area. Any traffic increase attributable to the proposed development will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the proposed development.

C. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in East Millinocket or in neighboring municipalities.

GREAT NORTHERN PAPER, INC.
A SUBSIDIARY OF BOWATER, INC.
East Millinocket, Maine
RECYCLING/DEINKING PLANT
#L-18697-20-I-M (APPROVAL)

) SITE LOCATION OF DEVELOPMENT
)
)
) MODIFICATION
) FINDINGS OF FACT AND ORDER

C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil, provided erosion controls are properly implemented and maintained.

E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.

F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities and solid waste disposal, roadways and open space required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities, roadways and open space in East Millinocket or the area served by those services or open space.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

H. The activity is not located on or adjacent to a sand dune system.

THEREFORE, the Department APPROVES the application of Great Northern Paper, Inc. to modify the approved recycling/deinking plant facility in East Millinocket, Maine, IN ACCORDANCE WITH THE FOLLOWING CONDITIONS:

1. The Standard Conditions of Approval, a copy of which is attached.

2. In addition to any specific erosion control measures proposed, the applicant shall take all necessary actions to ensure that their activities or those of their agents do not result in noticeable erosion of soils on the site during the construction and operation of the project covered by this approval.

3. The conditions of order #L-18697-20-G-N and all subsequent amendments shall remain in effect, and are incorporated herein.

DONE AND DATED AT AUGUSTA, MAINE, THIS 14 DAY OF January, 1992.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DEAN C. MARRIOTT, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEALS PROCEDURES...

Date Of Initial Receipt of Application 12/12/91
Date Of Application Acceptance 12/31/91

Date Filed With Board of Environmental Protection JAN 14 1992

BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

SB/gnpdeink

A TRUE COPY
ATTEST: _____
Martha Kirkpatrick, Director
Bureau of Land Quality Control

STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.

2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.

3. The applicant shall submit all reports and information requested by the Board demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.

4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.

5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Municipality that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.

6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.

7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.

8. A copy of this approval must be included in or attached to all contract bid specifications for the development.

9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)
Revised November 1, 1979

PENOBSCOT ss REC'D
92 FEB 20 AM 9:44
ATTEST:
REGISTER

BK6981PG110

007209

NOTICE OF LOCATION OF ASBESTOS WASTE DISPOSAL AREA
on Land of
GREAT NORTHERN PAPER, INC.
East Millinocket, Penobscot County, Maine

THIS NOTICE OF LOCATION OF ASBESTOS WASTE DISPOSAL AREA (this "Notice") dated as of February 5, 1999 is made by GREAT NORTHERN PAPER, INC., a Delaware corporation having a place of business in East Millinocket, Penobscot County, Maine ("GNP").

RECITALS

A. GNP owns certain real property situated in the Town of East Millinocket, County of Penobscot and State of Maine, being a 10.20 acres parcel situated easterly of Route 157, in said Town of East Millinocket, more particularly described on Exhibit A attached hereto and by this reference incorporated herein (the "Facility Site"), and being a portion of the land described in deed from Great Northern Nekoosa Corporation to Great Northern Paper, Inc. dated December 31, 1991 and recorded in the Penobscot County Registry of Deeds in Book 4966, Page 125. The Facility Site is depicted on the Plan drawing YB-23043 Dolby III Landfill Cell 9 Construction Final Grading Plan dated 9/8/94, Job #94654, prepared by Sevee & Maher Engineers, Inc., revised to 1/5/99, on file at the offices of GNP, Inc., One Katahdin Avenue, Millinocket, Maine 04462-1398, recorded herewith in Plan Book 1999 Page 11, and referred to herein as the "Plan."

B. Pursuant to the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sec. 1301 et seq. and 06-096 CMR Chapter 400 et seq. (Maine Solid Waste Management Regulations, effective May 24, 1989, as amended), and specifically Regulation 404.4(B)(5)(u), GNP has agreed to provide notice at the Penobscot County Registry of Deeds of the dates of operation of the asbestos waste disposal facility at the Facility Site, and the date of closure of such disposal area, the coordinates of the area and the location, composition, extent and depth of asbestos waste deposited.

NOW THEREFORE, GNP hereby provides notice of the location of the Facility Site and the composition, extent and depth of the waste deposited and that the land has been used as a solid waste landfill.

1. Notice of Location of Asbestos Waste Disposal Area. GNP hereby provides notice that Construction of Dolby III Landfill in the Town of East Millinocket was approved by the Board of Environmental Protection on June 13, 1984. Construction was completed in 1987 and the facility began accepting waste from company operations and the Towns of Millinocket, East Millinocket and Medway. Acceptance of municipal waste ceased in 1993. During 1997 approximately 3000 cubic yards of asbestos

containing waste was accepted at Dolby III and disposed of in Cell 9 of the facility as indicated in the attached Plan.

The location of the soil containing asbestos material is at various places throughout the Facility Site, as approved by the MDEP. The limits of the soil containing asbestos material are within the boundaries of the Facility Site. The coordinates for the northeast corner of the Facility Site, identified on the Plan are N665050.00 and E474480.00.

2. Governing Law. This Notice shall be governed by and interpreted in accordance with the laws of the State of Maine.

IN WITNESS WHEREOF, the said Great Northern Paper, Inc. has caused this instrument to be signed and sealed by its duly authorized officer as of the date set forth in the introductory paragraph hereof.

GREAT NORTHERN PAPER, INC.,
a Delaware corporation

Witness

By _____
Its President

Donald G. McNeil
Typed or Printed Name

STATE OF MAINE
COUNTY OF Penobscot, ss. February 5, 1999

Then personally appeared the above-named Donald McNeil, as President of Great Northern Paper, Inc. and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Great Northern Paper, Inc.

Before me,

_____
Notary Public
Elizabeth C Rider
Typed or Printed Name

SEAL

gnp*jfw*short notice

-My Commission expires 1-2001

EXHIBIT A

GREAT NORTHERN PAPER, INC.
ASBESTOS WASTE DISPOSAL AREA

A certain parcel of land located in the Town of East Millinocket, Penobscot County, State of Maine, at approximate latitude 45°39'20", longitude 68°36'07" as shown on the East Millinocket, Me., 7.5 minute quadrangle, 1988 Provisional Edition, United States Department of the Interior Geological Survey, said parcel adjoining the easterly side of a private access road in Great Northern Paper Inc., Dolby III landfill easterly of State Route 157, the entrance to said landfill being 0.80 miles southerly of the intersection of the East Millinocket town line and Route 157, more particularly described as follows:

COMMENCING at a point with North coordinate 664114.77, East coordinate 474044.75 as shown on Great Northern Paper plan YB-23043 entitled, Dolby III Landfill, Cell 9 Construction, Final Grading Plan, prepared by Sevee & Maher Engineers Inc., dated 1/5/99, and identified as the POINT OF BEGINNING;

1. THENCE North 04°52'07" East a distance of 905.00 feet;
2. THENCE North 84°39'43" East a distance of 360.00 feet;
3. THENCE South 00°00'00" West a distance of 1000.00 feet;
4. THENCE South 32°56'30" West a distance of 205.00 feet;
5. THENCE North 88°09'56" West a distance of 225.00 feet;
6. THENCE North 23°17'59" West a distance of 250.00 feet to the POINT OF BEGINNING;

CONTAINING 10.2 Acres.

Bearings are referenced to the aforementioned plan of Great Northern Paper, to be recorded herewith.

BEING a portion of the East Millinocket parcel described in the deed from Great Northern Nekoosa Corporation to Great Northern Paper, Inc. dated December 31, 1991 and recorded in the Penobscot County Registry of Deeds in Book 4966, Page 125.

PENOBSCOT. ss RECEIVED
1999 MAR 11 A 10:36
Susan F. Bulay
REGISTER

Pierce Atwood

BK07122 PG073 26824
07-27-1999 @ 01:03p

NOTICE OF LOCATION OF ASBESTOS WASTE DISPOSAL AREA
on Land of
GREAT NORTHERN PAPER, INC.
East Millinocket, Penobscot County, Maine

THIS NOTICE OF LOCATION OF ASBESTOS WASTE DISPOSAL AREA (this "Notice") dated as of July 21, 1999 is made by GREAT NORTHERN PAPER, INC., a Delaware corporation having a place of business in East Millinocket, Penobscot County, Maine ("GNP").

RECITALS

A. GNP owns certain real property situated in the Town of East Millinocket, County of Penobscot and State of Maine, being a 32.0 acres parcel situated easterly of Route 157, in said Town of East Millinocket, more particularly described on Exhibit A attached hereto and by this reference incorporated herein (the "Facility Site"), and being a portion of the land described in deed from Great Northern Nekoosa Corporation to Great Northern Paper, Inc. dated December 31, 1991 and recorded in the Penobscot County Registry of Deeds in Book 4966, Page 125. The Facility Site is depicted on the Plan drawing YB-23591 Dolby II Landfill Regrading Dolby II South Site Development Plan dated July 12, 1999, Job #67996 and Job #95068, prepared by Sevee & Maher Engineers, Inc., on file at the offices of GNP, Inc., One Katahdin Avenue, Millinocket, Maine 04462-1398, recorded herewith in Plan Book 1999 Page 49, and referred to herein as the "Plan."

B. Pursuant to the Maine Hazardous Waste, Septage and Solid Waste Management Act, 38 M.R.S.A. Sec. 1301 et seq. and 06-096 CMR Chapter 400 et seq. (Maine Solid Waste Management Regulations, effective May 24, 1989, as amended), and specifically Regulation 404.4(B)(5)(u), GNP has agreed to provide notice at the Penobscot County Registry of Deeds of the dates of operation of the asbestos waste disposal facility at the Facility Site, and the date of closure of such disposal area, the coordinates of the area and the location, composition, extent and depth of asbestos waste deposited.

NOW THEREFORE, GNP hereby provides notice of the location of the Facility Site and the composition, extent and depth of the waste deposited and that the land has been used as a solid waste landfill.

1. Notice of Location of Asbestos Waste Disposal Area. GNP hereby provides notice that Construction of Dolby II Landfill in the Town of East Millinocket was approved by the Board of Environmental Protection on June 14, 1978. Construction was completed in 1978 and the facility began accepting waste from company operations and the Towns of Millinocket, East Millinocket and Medway. Dolby II was closed in 1987. On June 12, 1996 the license for Dolby II was amended to allow a vertical

expansion which would accept wastes from company operations, including asbestos wastes. Between April 1998 and March 1999 approximately 3000 cubic yards of asbestos containing waste was accepted and disposed of in the vertical expansion of Dolby II as indicated in the attached Plan. The vertical expansion of Dolby II was closed in 1999.

The location of the soil containing asbestos material is at various places throughout the Facility Site, as approved by the MDEP. The limits of the soil containing asbestos material are within the boundaries of the Facility Site. The coordinates for the westerly line and point of beginning of the Facility Site, identified on the Plan are N. 663874.16 and E. 475456.99 .

2. Governing Law. This Notice shall be governed by and interpreted in accordance with the laws of the State of Maine.

IN WITNESS WHEREOF, the said Great Northern Paper, Inc. has caused this instrument to be signed and sealed by its duly authorized officer as of the date set forth in the introductory paragraph hereof.

GREAT NORTHERN PAPER, INC.,
a Delaware corporation

Witness

By _____
Its President

Donald G. McNeil
Typed or Printed Name

STATE OF MAINE
COUNTY OF Penobscot, ss. 5/21, 1999

Then personally appeared the above-named Don McNeil, as President of Great Northern Paper, Inc. and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said Great Northern Paper, Inc.

Before me,

_____
Notary Public
Wendi J. Smith
Typed or Printed Name

MY COMMISSION EXPIRES 1/18/20 SEAL

gnp*jfw*short notice

EXHIBIT A

GREAT NORTHERN PAPER, INC.
ASBESTOS WASTE DISPOSAL AREA

A certain parcel of land located in the Town of East Millinocket, Penobscot County, State of Maine, at approximate latitude 45°39'20", longitude 68°36'07" as shown on the East Millinocket, Me., 7.5 minute quadrangle, 1988 Provisional Edition, United States Department of the Interior Geological Survey. Said parcel is located in the Great Northern Paper Inc., Dolby II Landfill, which is located on the easterly side of State Route 157. The entrance to said landfill being 0.8 miles southerly of the intersection of the East Millinocket town line and Route 157. Said parcel being more particularly described as follows:

BEGINNING at a point with North coordinate 663874.16, East coordinate 475456.99 as shown on Great Northern Paper plan YB-23591 entitled Dolby II Landfill Regrading, Dolby II South Site Development Plan Dated July 12, 1999 and identified as the POINT OF BEGINNING

1. THENCE North 08°21'18" East a distance of 731.03 feet;

2. THENCE Northeast along a tangential curve with a radius of 100.00 feet and arc length of 95.92 feet;

3. THENCE North 63°18'40" East a distance of 353.32 feet;

4. THENCE Northeast along a tangential curve with a radius of 250.00 feet and a arc length of 254.78 feet;

5. THENCE South 58°17'49" East a distance of 123.83 feet;

6. THENCE Southeast along a tangential curve with a radius of 100.00 feet and a arc length of 51.64 feet;

7. THENCE South 28°42'35" East a distance of 508.94 feet;

8. THENCE Southerly along a tangential curve with a radius of 100.00 feet and a arc length of 63.94 feet;

9. THENCE South 07°55'38" West a distance of 742.29 feet;

10. THENCE Southeast along a tangential curve with a radius of 100.00 feet and a arc length of 110.99 feet;

11. THENCE South 55°39'54" East a distance of 169.62 feet;

12. THENCE South 34°20'06" West a distance of 106.76 feet;

13. THENCE Southwest along a tangential curve with a radius of 100.00 feet and a arc length of 62.38 feet;

14. THENCE South 70°04'44" West a distance of 310.62 feet;

15. THENCE Northwest along a tangential curve with a radius of 150.00 feet and a arc length of 168.65 feet;

16. THENCE North 45°30'03" West a distance of 166.52 feet;

17. THENCE Northwest along a tangential curve with a radius of 100.00 feet and a arc length of 69.16 feet;

18. THENCE North 05°52'33" West a distance of 398.75 feet;

19. THENCE Westerly along a tangential curve with a radius of 50.00 feet and a arc length of 64.74 feet;

20. THENCE North 80°03'36" West a distance of 332.49 feet;

21. THENCE Northerly along a tangential curve with a radius of 100.00 feet and a arc length of 154.31 feet to the POINT OF BEGINNING

CONTAINING 32.0 Acres

Bearings are referenced to the aforementioned plan of Great Northern Paper, to be recorded herewith.

BEING a portion of the East Millinocket parcel described in the deed from Great Northern Nekoosa Corporation to Great Northern Paper, Inc. Dated December 31, 1991 and recorded in the Penobscot County Registry of Deeds in Book 4966, Page 125.

STATE OF MAINE
RONALD M. CARPENTIER
PROFESSIONAL LAND SURVEYOR
1/12/99

Prepared by:
Squaw Bay Corp
Ronald M. Carpentier, P.L.S.

PENOBSCOT COUNTY, MAINE
Susan F. Bulay
Register of Deeds

Pierce Atwood

To: TAT 7/29/11
From: AMB

EAST MILLINOCKET
ED 11-2-05

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CC: Frank Stratton
Danny Ventrella

EAST
MUNI - DUMP / LANDFILLS

JOHN ELIAS BALDACCI
GOVERNOR

DAWN R. GALLAGHER
COMMISSIONER

November 17, 2005

Ms. Shirley Tapley, Administrative Assistant
Town of East Millinocket
53 Main Street
East Millinocket, Maine 04430-1199

Re: Closed Landfill Inspection – East Millinocket

Dear Ms. Tapley:

On July 19, 2005 Department of Environmental Protection staff visited the closed East Millinocket municipal landfill located off Church Street at the transfer station property. Records in the Landfill Closure and Remediation Program indicate that this site closed in 1994. The last inspection occurred in 2002. The Department wishes to furnish you with the following observations and recommendations.

Observations:

The site appeared to be covered with a mixture of grasses and legumes. In general the vegetation appeared to be in excellent condition, site conditions appear similar to that noted in 2003.

All slopes at the site appeared to be stable. No erosion features were observed. No leachate seeps were observed nor were any rodent burrows noted. The landfill cap appeared to cover all buried waste. A patch of Japanese knotweed, an invasive plant has become established on the west end of the site.

Access to the site is by way of the transfer station road. At the present time, it does not appear ATV riders access the site.

Review of our records does not indicate that a deed affidavit was developed for the site at the time of closure.

Recommendations:

Continue to mow the landfill cap on an annual basis. Annual mowing of the cap vegetation will prevent trees or brush from establishing on the cap. Tree roots tend to penetrate through the cap, creating pathways from water infiltration. In the future, the site may benefit from the application of fertilizer or farm manure to replace declining soil nutrients if thinning of the vegetation becomes a problem. The Japanese knotweed has deep penetrating roots and will need to be controlled during the next season. Information has been enclosed regarding suggested control methods.

Most landfill sites have developed a deed affidavit that is filed with the County Registry of Deeds. This affidavit is designed to notify future owners of the property that a municipal solid waste disposal area exists on the property. The DEP does not have a copy of the affidavit in its files. When the site was closed in 1994, a deed affidavit was requested. Several years ago, legislation was revised to require the development of deed affidavits on all closed landfill sites. Correspondence inquiring about a deed affidavit was sent to the Town of East Millinocket in 2002 and 2003 but it appears that no response was received.

Please check your records to see if a landfill deed affidavit was drafted and forward me a copy if one is available. If an affidavit was not developed during the closure process, please take this opportunity to do so now. When completed, the affidavit should be registered at the County Register of Deeds. Several examples of deed affidavits have been included to guide you.

The deed affidavit should contain the following information:

1. where to find a copy of the closing plans for the landfill (the DEP usually has at least some information and can be cited as the source of information if the municipality no longer has the plans for sites that closed between 1970 and 2000);
2. that the land has been used for a solid waste landfill;
3. that post-closure use of the property must never be allowed to disturb the integrity of the final cover, liner system, monitoring systems or other components of the closed landfill without the prior written approval of the DEP.
4. the tax map # and lot # of the landfill parcel;
5. copy of the parcel tax map
6. the book and page # of the parcel deed as registered with the County;
7. the book and page # of the deed affidavit as registered with the County; and
8. the date the deed affidavit was executed.

The objective of the affidavit is to notify any future owners of the property that a landfill exists at that location. Although the land parcel is currently utilized as the Town's solid waste transfer facility, at some point in the future the Town could conceivably alter its use of the site. Unless people involved had personal knowledge of its existence, the presence of the former dumpsite may be forgotten.

If you have any concerns or questions, please contact me at (207) 287-8552.

Sincerely,

Theodore E. Wolfe
Landfill Closure and Remediation Program
Division of Remediation
Bureau of Remediation and Solid Waste Management

Enclosure

Shirley Tapley
Asst. Town Clerk

Shari
Town Clerk

ANNUAL REPORT OF SAMPLING AND TESTING

2010

POST-REMEDIATION GROUNDWATER MONITORING PROGRAM

PCB REMEDIATION PROJECT

at the
East Millinocket Operations
of
Katahdin Paper Company
East Millinocket, Maine

December 2010

Prepared for

GEORGIA-PACIFIC, LLC

by

PREMO GROUP INC.

PREMO® Group Inc

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1.0 INTRODUCTION

This report summarizes the results of the annual groundwater sampling and analysis conducted on October 7 and 8, 2010 at the East Millinocket Operations of the Katahdin Paper Company. The sampling and laboratory analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan* (Monitoring Plan), revised April 1992, and subsequently modified and accepted by the U.S. Environmental Protection Agency (EPA) – Region 1 on June 21, 1993 and the Maine Department of Environmental Protection (MEDEP) on June 30, 1993. The 2010 annual sampling and analyses were also performed in accordance with the EPA letters dated September 7, 2006 (see Appendix A) and December 18, 2006.

The groundwater monitoring program was initiated to monitor polychlorinated biphenyls (PCB) and chlorobenzene concentrations in groundwater downgradient of three remediated spill sites at the mill. The three sites are referred to as the No. 5 Paper Machine site, the No. 6 Paper Machine site, and the Chemi-Groundwood site (see Figure 1 for locations).

Twelve monitoring wells are sampled on an annual basis. The two upgradient well clusters, installed in the summer of 1989, consist of wells 206-A and 206-B and wells 211-A and 211-B. The eight downgradient wells, installed in the fall of 1991, consist of the 800-series wells. The locations of the wells are shown in Figure 1. Logs and construction details of the wells were presented in the Monitoring Plan.

This is the fifty-ninth groundwater sampling event conducted since remediation in 1989 and 1990. Prior to 2007 sampling events were completed on a quarterly basis. Four annual sampling events have been completed since 2007.

Information presented in this report includes sampling methods, analytical methods, field and laboratory test results, quality control results, qualitative assessment of the raw chromatograms, an updated groundwater contour map, and pool elevations on the West Branch of the Penobscot River.

2.0 GROUNDWATER ELEVATIONS

Prior to sampling, the depth to groundwater was measured from the top of casing in each monitoring well and the general condition of each well was noted. Groundwater elevations based on the October 7, 2010 water level measurements are summarized in Table 1. The groundwater elevations from the shallow wells were used to prepare the groundwater contour map (see Figure 1). The groundwater flow direction is southwest toward the Penobscot River, which is consistent with the historic groundwater flow

direction.

Pool elevations were obtained for the West Branch of the Penobscot River, both upstream and downstream of the dam at the mill. Based on monitoring conducted at the Millinocket Dispatchers Station, an upstream pool elevation of 287.41 feet was recorded on October 8, 2010. The downstream pool elevation was determined to be 263.64 feet, based on the turbine discharge flow of 5,100 cubic feet per second (cfs) and the tailwater rating curve from GNP-ER No. 4-8828 (see Appendix B).

3.0 GROUNDWATER SAMPLING

3.1 Preparation for Sampling

Prior to sampling, groundwater was purged from each well using a peristaltic pump and dedicated polyvinyl chloride (PVC) tubing. The amount of purge water pumped was dependent on the well volume and the stabilization of field parameters. The volume was calculated using the following equation:

$V = \pi r^2(X-D)$

where:

V = Volume (cubic feet)
r = Radius of monitoring well (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

The average rate at which water was pumped from each well was adjusted to approximately 0.5 liters per minute or less. This rate was generally held constant throughout the purging procedures. Purge water was placed in Drums A and B during the October 2010 sampling event. A water sample was collected from each drum to provide data for drum disposal.

Pumping rates were also adjusted to minimize drawdown for each well. Maximum drawdowns were based on the initial depth to groundwater reading and the following equation:

$d = 0.20(X-D)$

where:

d = Maximum drawdown (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

During purging and sampling, the depth to groundwater was periodically monitored and compared to the maximum drawdown depth. In addition, a minimum of four

conductivity, pH, turbidity, and temperature readings were obtained during purging. When the most sensitive parameter (typically turbidity) stabilized and a volume of water greater than or equivalent to the well casing volume was removed, a groundwater sample was collected from the well.

These procedures were followed for each well, except for wells 206-A, 206-B, 802, 803-S, 803-D, and 805-D, where the drawdown criteria was exceeded. As a result of extremely slow rates of recovery, the water levels in monitoring wells 206-A and 803-D lowered beyond the limit of the peristaltic pump; therefore, three well volumes were removed from each well using a bailer. These deviations are not considered to have adverse impact on the sampling program or water quality. Purging details for each well are presented on the Groundwater Sampling Logs in Appendix C.

Identification and calibration of field instruments are discussed in the Section 5.1 of this report.

3.2 Sampling

Upon completion of purging, each well was sampled using the peristaltic pump and dedicated tubing with the exceptions of wells 206-A and 803-D, which were sampled with a disposable bailer. Groundwater samples were collected in 1-liter amber glass containers. A field duplicate sample and equipment rinsate blank were collected from monitoring well 803-S during this sampling event.

Sample information was entered on adhesive sample identification labels and secured to the jars. The jars were placed in insulated coolers and packed with ice and packing material. The coolers were sealed and shipped to Pace Analytical in Greensburg, Pennsylvania and Northeast Labs (formerly Binax/NEL) in Waterville, Maine, for testing. Chain-of-Custody records are included in Appendix C.

4.0 ANALYTICAL TESTING AND RESULTS

4.1 Analytical Procedures

The groundwater samples collected during the October 7 and 8, 2010 sampling event were received and logged by Pace Analytical Services on October 9, 2010. The samples for chlorobenzene analysis were subcontracted to Northeast Labs to achieve the project-required quantitation limits. The samples were analyzed by USEPA Method 8082 for the following compounds:

Chlorobenzenes	PCBs
1,2,3 –trichlorobenzene	Aroclor 1016
1,2,4- trichlorobenzene	Aroclor 1221
1,3,5- trichlorobenzene	Aroclor 1232
1,2,4,5-tetrachlorobenzene	Aroclor 1242
1,2,3,5-tetrachlorobenzene	Aroclor 1248
1,2,3,4-tetrachlorobenzene	Aroclor 1254
Pentachlorobenzene	Aroclor 1260

4.2 Analytical Results

PCBs and chlorobenzenes were not detected above the quantitation limit in any of the groundwater samples or the drum samples collected in October 2010. Details and results of the laboratory testing are presented in the analysis reports in Appendix D and summarized in Table 2. The drummed purge water was disposed in the on-site wastewater treatment system.

PCBs have not been detected in the sampling events conducted since the program was initiated in 1993 with the exceptions of the December 1995 and June 1997 sampling events. The PCB samples were reanalyzed during the December 1995 sampling round due to quality control (QC) targets not being met, and PCBs were not detected in the reanalysis. The PCB detections in June 1997 were also associated with QC targets that were not achieved. Subsequent PCB sampling conducted in August 1997 did not indicate the presence of PCBs in groundwater.

Although chlorobenzenes have not been detected at the site since 2006, two chlorobenzenes (1,2,4-trichlorobenzene and 1,3,5-trichlorobenzene) have been detected in well 804-S historically. The concentrations of 1,2,4-trichlorobenzene detected in well 804-S were well below the current MCL and Maine Maximum Exposure Guideline (MEG) of 70 ug/L. The concentrations of 1,3,5-trichlorobenzene detected in well 804-S were also below the current MEG of 40 ug/L for drinking water.

5.0 QUALITY CONTROL

5.1 Field Quality Control

Field quality control samples including one field duplicate and one equipment rinsate blank were collected on October 7, 2010. The target sampling precision goal identified in the Monitoring Plan, dated April 1992, is less than 30 percent and the goal for the field equipment blank is less than 0.5 mg/L. Results of field duplicate samples 803-S and GWD 100710 were both below the quantitation limits indicating acceptable sampling precision. The PCB and chlorobenzene results for the equipment

rinsate sample RB 100710 were below the quantitation limits. Results of the field duplicate samples and the equipment blank sample met the target goals identified for this project.

Calibration details and instrument identification data for the field instruments are presented in the Field Instrument Calibration Daily Operation Logs provided in Appendix C. The laboratory analytical reports including the results for the field QC samples are included in Appendix D.

5.2 Laboratory Quality Control

Laboratory quality control, including an evaluation of the PCB chromatograms, is summarized in the data validation narrative provided as Appendix E. The target laboratory accuracy goal identified in the Monitoring Plan, dated April 1992, is 60 to 120 and the target precision goal is less than 20. Matrix spike and laboratory control sample recovery values were compared to the 60 to 120 percent target to assess accuracy. The relative percent difference (RPD) between matrix duplicate results was compared to the 20 percent target to assess precision.

Matrix spike samples and laboratory control samples were analyzed with the October 2010 groundwater samples to assess method accuracy. The average accuracy for the matrix spike and the laboratory control samples are as follows:

Matrix Spike Samples

Compound	Accuracy*
1,2,3- trichlorobenzene	68.08
1,2,4- trichlorobenzene	76.63
1,3,5- trichlorobenzene	71.58
1,2,4,5-tetrachlorobenzene	81.08
1,2,3,5-tetrachlorobenzene	66.93
1,2,3,4-tetrachlorobenzene	76.80
Pentachlorobenzene	92.85
Targets	**60 – 120**

* Average Percent Recovery

Laboratory Control Samples

Compound	Accuracy*
1,2,3- trichlorobenzene	71.28
1,2,4- trichlorobenzene	79.94
1,3,5- trichlorobenzene	75.60

1,2,4,5-tetrachlorobenzene	86.99
1,2,3,5-tetrachlorobenzene	73.21
1,2,3,4-tetrachlorobenzene	82.31
Pentachlorobenzene	99.60
Targets	**60 – 120**

* Average Percent Recovery

The QC target for accuracy of 60 to 120 percent was achieved for each analyte. The calculations for the average percent recoveries for individual analytes are summarized in Table 3 and 4. Additional information regarding the accuracy of the data is presented in the data validation summary provided as Appendix E. The matrix spikes and the laboratory control sample results are presented in Appendix D.

The QC target of 20 for precision was evaluated through laboratory control sample duplicates and matrix duplicate samples. The precision goal was achieved for each analyte except one RPD of 21 for 1,2,3-trichlorobenzene. The data were not impacted as the associated sample results were non-detect as described in the data validation summary provided in Appendix E.

6.0 CORRECTIVE ACTION

Corrective actions due to laboratory quality control for data collected during the October 2010 sampling event were not required.

7.0 SITE CLOSURE

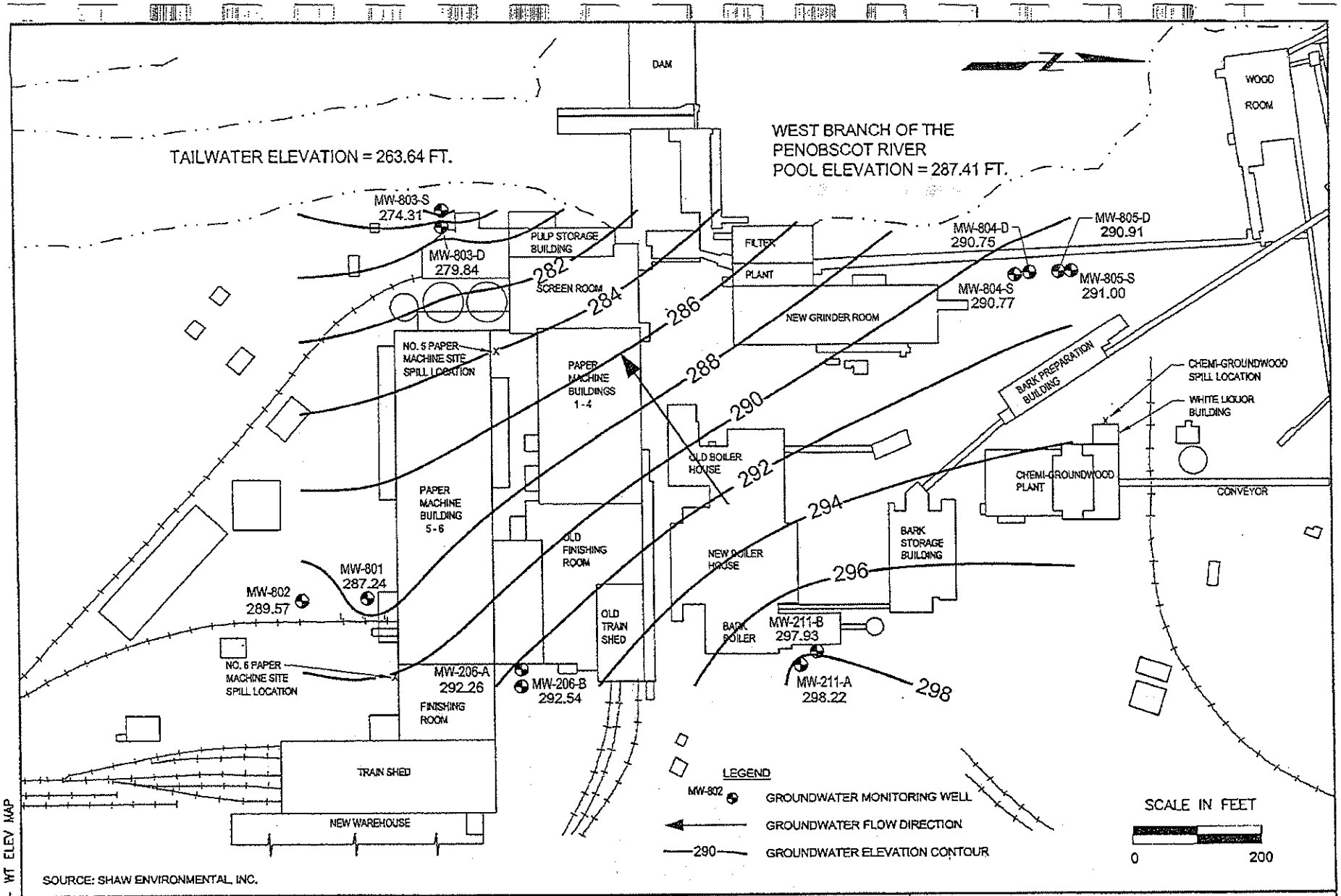
The Consent Agreement and Final Order (EPA Docket No. TSCA-I-87-1041) indicates that the parties agree to a "degree of cleanup of PCBs released". The Consent Order allows for elevated concentrations of PCBs and chlorobenzenes to remain on the Site as long as a groundwater monitoring plan was developed and implemented to monitor the potential for off-site migration. A Groundwater Monitoring Plan, revised April 1992 was approved by EPA Region 1 and the Maine Department of Environmental Protection (MEDEP). Groundwater monitoring was conducted on a quarterly basis in accordance with the Groundwater Monitoring Plan until 2007.

On August 21, 2006, a letter was written to the EPA requesting the cessation of groundwater sampling at the Site based on detected concentrations of 1,2,4-trichlorobenzene well below the action level for 4.5 years. The EPA responded to this letter on September 7, 2006 stating that they did not agree that the groundwater monitoring could be eliminated but that a reduced monitoring program could be considered. The EPA requested one additional sampling round under the conditions stated in the letter and that after the data

had been submitted, the EPA would consult with the MEDEP to make a determination. In a letter dated December 18, 2006, EPA accepted a reduced monitoring program and reduced the sampling frequency from quarterly to annually.

Groundwater monitoring has been conducted at the site since 1993. PCBs and chlorobenzenes have not been detected at the site since March of 2006. Analytical data indicates that historical chlorobenzene detections were below the current regulatory drinking water criteria. Based on the results of the monitoring program to date, Georgia-Pacific and PREMO respectfully request that EPA Region I grant a reduction in the number of monitoring wells included in the monitoring program from twelve to eight wells. We propose that sampling of upgradient monitoring wells 206-A and 206-B be discontinued as concentrations have been non-detect since the monitoring program began in 1993 and upgradient wells 211-A and 211-B provide sufficient upgradient groundwater data for the site. In addition, we propose discontinuing the sampling of monitoring wells 805-D and 805-S. These wells along with wells 804-S and 804-D provide groundwater data downgradient of the Chemi-Groundwood spill site. PCBs and chlorobenzenes have not been detected in wells 805-D or 805-S since monitoring began in 1993 but have historically been detected in groundwater samples from well 804-S. The 805 wells are located in close proximity (approximately 50 feet north) to well cluster 804. Based on the historical groundwater monitoring data and current potentiometric surface map, wells 804-S and 804-D appear to provide better monitoring data than wells 805-S and 805-D. The revised monitoring program would include:

- Monitoring wells 211-A and 211-B to monitor upgradient groundwater concentrations;
- Monitoring wells 801 and 802 to monitor the potential for migration of constituents from the No. 6 Paper Machine Site Spill Location;
- Monitoring wells 803-S and 803-D to monitor the potential for migration of constituents from the No. 5 Paper Machine Site Spill Location;
- Monitoring wells 804-S and 804-D to monitor the potential for migration of constituents from the Chemi-Groundwood Spill Location.



SOURCE: SHAW ENVIRONMENTAL, INC.

FILENAME: 309024 - WT ELEV MAP

GEORGIA-PACIFIC, LLC
EAST MILLINOCKET MILL FACILITY
EAST MILLINOCKET, MAINE

PREMO PROJECT NO. 309024

PREMO Group Inc.

1880 WEST OAK PARKWAY, BLDG 100, SUITE 106
MARIETTA, GEORGIA 30062

WATER TABLE ELEVATION MAP
OCTOBER 2010

DATE: DEC 2010

FIGURE: 1

TABLE 1
DEPTH TO GROUNDWATER MEASUREMENTS
EAST MILLINOCKET MILL

MW No.	Date	Depth to Groundwater (ft)	Top of Standpipe Elevation (ft)	Groundwater Elevation (ft)
206A	October 7, 2010	21.86	314.12	292.26
206B	October 7, 2010	21.59	314.13	292.54
211A	October 7, 2010	8.78	307.00	298.22
211B	October 7, 2010	8.63	306.56	297.93
801	October 7, 2010	9.06	296.30	287.24
802	October 7, 2010	6.98	296.55	289.57
803D	October 7, 2010	4.45	284.29	279.84
803S	October 7, 2010	10.08	284.39	274.31
804D	October 7, 2010	6.38	297.13	290.75
804S	October 7, 2010	6.68	297.45	290.77
805D	October 7, 2010	6.79	297.70	290.91
805S	October 7, 2010	7.21	298.21	291.00

ASTM E 1527 – 05
PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (*the "Brownfields Amendments"*) the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in the determination that the *"all appropriate inquiry"* is not complete.

Site Name: Katahdin Paper Mill West and East

Site Address: 1 Katahdin Ave, Millinocket, Maine

50 Main Street, East Millinocket, Maine, and various related parcels in Millinocket and East Millinocket

S. W. Cole Engineering Job No.: 00-1153.1 E

User Name: Cate Street Capital, Inc.

Preparer's Name: Cate Street Capital, Inc.

1. **Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).**

Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state, or local law?

Answer: No

2. **Activity and land use limitations that are in place on the property or that have been filed and recorded in the Registry of Deeds(40 CFR 312.26).**

Are you aware of any activity use limitations (AULs), such as *engineering controls*, land use restrictions, *or institutional controls* that are in place at the site and/or have been filed or recorded in the registry under federal, tribal state or local law?

Answer: No

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

As the *user* of this environmental site assessment, do you have any specialized knowledge or experience related to the property or the nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by these types of businesses?

Answer: Cate Street Capital has engaged Peter Hanson, who previously managed a paper manufacturing business, to advise it in its acquisition of the properties and to manage its business there.

4. **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).**

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

Answer: No. The purchase price for the property does not reflect the value of the equipment and fixtures, which could be removed and sold. The purchase price does reflect the fact that environmental liabilities exist on the properties, and that the seller of the properties is not indemnifying the purchaser for these liabilities. Therefore, the potential value of fixtures is netted against the environmental liabilities to determine a fair property value.

5. **Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of a release or threatened releases? For example:

a. Do you know the past uses of the *property*?

Answer: Both locations have been used for pulp and paper manufacturing

b. Do you know of specific chemicals that are present or once were present at the *property*?

Answer: Calcium carbonate, magnesium compounds, sulfur compounds, chlorine compounds, various caustics and acids, oil, diesel, baled kraft pulp and items on list attached, among others. The Millinocket site formerly housed a sulphite pulp mill that used magnesium in its processes and generated red liquor.

c. Do you know of spills or other chemical releases that have taken place at the *property*?

Answer: None that were not identified by the Phase I Site Assessment

d. Do you know of any environmental cleanups that have taken place at the *property*?

Answer: None that were not identified by the Phase I Site Assessment

6. **The degree of obviousness of the presence or the likely presence of contamination at the property, and the ability to detect contamination by the appropriate investigation (40 CFR 312.31).**

As the *user* of the environmental site assessment, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

Answer: Oil and chemical storage containers exist on the property. It is likely that oil or chemicals were spilled during delivery or transfer from container to process at some point.

I certify that the above information is true and accurate to the best of my knowledge.

Preparer's Signature:

Cate Street Capital, Inc.

By _____ Date: 8/26/2011

ASTM E 1527-05
ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Site Address: East Millinocket Mill Site

Site Description: Pulp / Paper Mill

Owner/Occupant Completing this Questionnaire: John Civiello

Question

1A. Is the *property* used for an industrial use?

(Yes) No Unknown

1B. Is any *adjoining property* used for an industrial use?

Yes (No) Unknown

2A. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?

(Yes) No Unknown

2B. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial purpose?

Yes (No) Unknown

3A. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

3B. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Gasoline Station

Question

4A. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

4B. Did you observe any evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Gasoline Station

5A. Are there *currently* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Paint - 50 gal. in aggregate

(Yes) No Unknown

5B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes No (Unknown)

6A. Are there *currently* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

(Yes) No Unknown

6B. Did you observe evidence or do you have any prior knowledge that have been *previously* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

(Yes) No Unknown

Question

7A. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?

Yes (No) Unknown

7B. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the *property that is of an unknown origin?*

Yes (No) Unknown

8A. Are there *currently* any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

(Yes) No Unknown — 2 Lagoons in wastewater treatment system.

8B. Did you observe any evidence or do you have any knowledge that there have been *previously*, any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

Same

(Yes) No Unknown

9A. Is there *currently* any stained soil on the *property?*

(Yes) No Unknown

9B. Did you observe evidence or do you have any prior knowledge that there has been *previously*, any stained soil on the *property?*

(Yes) No Unknown

10A. Are there *currently* any registered or unregistered storage tanks (above or underground) located on the *property?*

(Yes) No Unknown

10B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any registered or unregistered storage tanks (above or underground) located on the *property?*

(Yes) No Unknown

Question

11A. Are there *currently* any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

(Yes) No Unknown

11B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

(Yes) No Unknown

12A. Is there *currently* evidence of leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

(Yes) No Unknown

12B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

(Yes) No Unknown

13A. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system? No private wells.

Yes (No) Unknown

13B. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency? No private Wells.

Yes (No) Unknown

Question

14. Does the Owner or Occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15A. Has the Owner or Occupant of the property been informed of the *past existence* of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15B. Has the Owner or Occupant of the property been informed of the *current* existence of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15C. Has the Owner or Occupant of the property been informed of the *past* existence of environmental violations with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15D. Has the Owner or Occupant of the property been informed of the *current* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

16. Does the Owner or Occupant of the property have any knowledge of any environmental site assessment of the *property* or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

(Yes) No Unknown

Question

17. Does the Owner or Occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the *property* by any Owner or Occupant of the property?

(Yes) No Unknown

18A. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *storm water* system?

Yes (No) Unknown

18B. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *sanitary sewer* system?

Yes (No) Unknown

19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, (tires) automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*? Tires - aboveground storage

(Yes) No Unknown

20. Is there a transformer, capacitor, or any hydraulic equipment on the *property* for which there are any records indicating the presence of PCBs?

Yes (No) Unknown

Owner/Occupant Comment Section:

_____

_____

_____

_____

_____

Signature of Owner/Occupant:_____Date:_____

ASTM E 1527-05
ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Site Address: Dolby Site (excluding landfill)

Site Description: Forrested land

Owner/Occupant Completing this Questionnaire: John Civiello

Question

1A. Is the *property* used for an industrial use?

Yes (No) Unknown

1B. Is any *adjoining property* used for an industrial use?

(Yes) No Unknown

2A. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?

Yes (No) Unknown

2B. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial purpose?

(Yes) No Unknown

3A. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

3B. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Land fill

Question

4A. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

4B. Did you observe any evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? Land Fill

(Yes) No Unknown

5A. Are there *currently* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes (No) Unknown

5B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes (No) Unknown

6A. Are there *currently* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

Yes (No) Unknown

6B. Did you observe evidence or do you have any prior knowledge that have been *previously* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

Yes (No) Unknown

Question

7A. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?

Yes (No) Unknown

7B. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the *property that is of an unknown origin?*

Yes (No) Unknown

8A. Are there *currently* any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

Yes (No) Unknown

8B. Did you observe any evidence or do you have any knowledge that there have been *previously*, any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

Yes (No) Unknown

9A. Is there *currently* any stained soil on the *property?*

Yes (No) Unknown

9B. Did you observe evidence or do you have any prior knowledge that there has been *previously*, any stained soil on the *property?*

Yes (No) Unknown

10A. Are there *currently* any registered or unregistered storage tanks (above or underground) located on the *property?*

Yes (No) Unknown

10B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any registered or unregistered storage tanks (above or underground) located on the *property?*

Yes (No) Unknown

Question

11A. Are there *currently* any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

Yes (No) Unknown

11B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

Yes (No) Unknown

12A. Is there *currently* evidence of leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

Yes (No) Unknown

12B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

Yes (No) Unknown

13A. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?

Yes (No) Unknown

13B. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?

Yes (No) Unknown

Question

14. Does the Owner or Occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15A. Has the Owner or Occupant of the property been informed of the *past existence* of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15B. Has the Owner or Occupant of the property been informed of the *current* existence of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15C. Has the Owner or Occupant of the property been informed of the *past* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15D. Has the Owner or Occupant of the property been informed of the *current* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

16. Does the Owner or Occupant of the property have any knowledge of any environmental site assessment of the *property* or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

Yes (No) Unknown

Question

17. Does the Owner or Occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the *property* by any Owner or Occupant of the property?

Yes (No) Unknown

18A. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *storm water* system?

Yes (No) Unknown

18B. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *sanitary sewer* system?

Yes (No) Unknown

19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?

Yes (No) Unknown

20. Is there a transformer, capacitor, or any hydraulic equipment on the *property* for which there are any records indicating the presence of PCBs?

Yes (No) Unknown

Owner/Occupant Comment Section:

_____

_____

_____

_____

_____

Signature of Owner/Occupant:_____Date:_____

IE

GREAT NORTHERN NEKOOSA
A WHOLLY OWNED SUBSIDIARY
OF
GEORGIA-PACIFIC CORPORATION

MILLINOCKET, MAINE

CLOSURE REPORT

FOR

THE DOLBY STORAGE FACILITY
AT EAST MILLINOCKET MILL

PREPARED BY

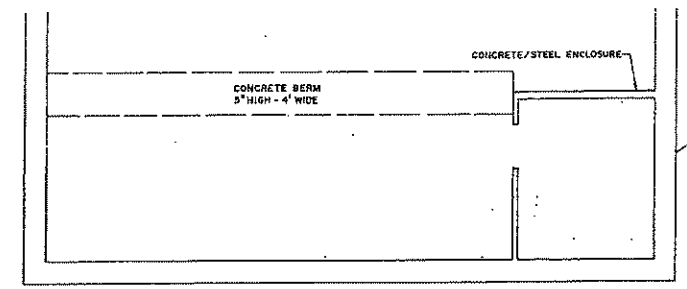
SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

MARCH 1991

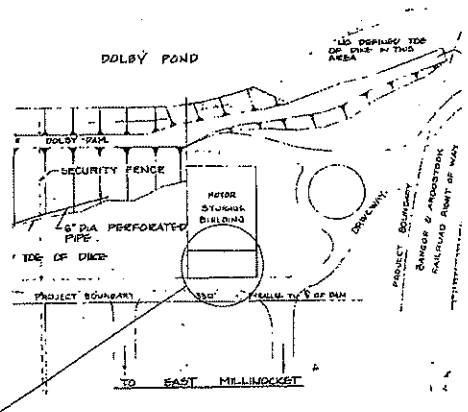
4.0 SUMMARY

The Dolby Storage Facility was closed between October 15 and November 28, 1990. PCB-contaminated concrete and soils were removed from the site and disposed of in an approved disposal facility. Approximately 20 cubic yards of dry clean-up material, including dirt, clothing, concrete and soils were generated as part of the closure activities. In addition, approximately 4.0 55-gallon drums of cleaning liquids were generated as part of the cleaning associated with the closure of the facility. All of these materials have been transported to a licensed hazardous waste disposal facility. GNP is presently using the Dolby Storage Facility as a storage area for electrical motors.

It is the professional engineering opinion of SME that this site has been closed in accordance with the MDEP approved closure plan and the Board of Environmental Protection Order dated July 25, 1990.



DOLBY STORAGE FACILITY



LOCATION PLAN

CLOSURE CERTIFICATION

Great Northern Paper Company operated the Dolby Storage Facility as a hazardous waste storage area on-Site (refer to Section 9.02.2). Sevee & Maher Engineers, Inc. which was responsible for closure activity observation pursuant to its contract with Great Northern Paper Company, states to the Maine Department of Environmental Protection, that it is the professional engineering opinion of Sevee & Maher Engineers, Inc., based on observations and testing, that closure of the Dolby Storage Facility was in accordance with the Maine Department of Environmental Protection approved closure plan and the Board of Environmental Protection Order.

Sevee & Maher Engineers, Inc.
Project Officer

Date: 12/19/90

Peter M. Maher, P.E.

STATE OF MAINE — PETER M. MAHER — 6122 — REGISTERED PROFESSIONAL ENGINEER

0 5 10 15 20 FEET

DRAWING NO	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHD	APP'D	JOB No

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

JOB NO.

DRAWN	R.A.F.
CHK'D	
ACCD	
DWG #	
APP'D	

ISSUE CODE

P-PRELIM	B-BID
M-MIL T.O.	C-CONST

SCALE

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY STORAGE AREA
EAST MILLINOCKET MILL
SURVEY PLOT

JOB NO. 91510
ENG. REQ NO.
FILE NO. 3-00-7084.0621

YB-19352

Great Northern Paper
MILLINOCKET, MAINE

CLOSURE REPORT
FOR
THE DRUM STORAGE FACILITY AT EAST MILLINOCKET MILL

PREPARED BY

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

DECEMBER 1989

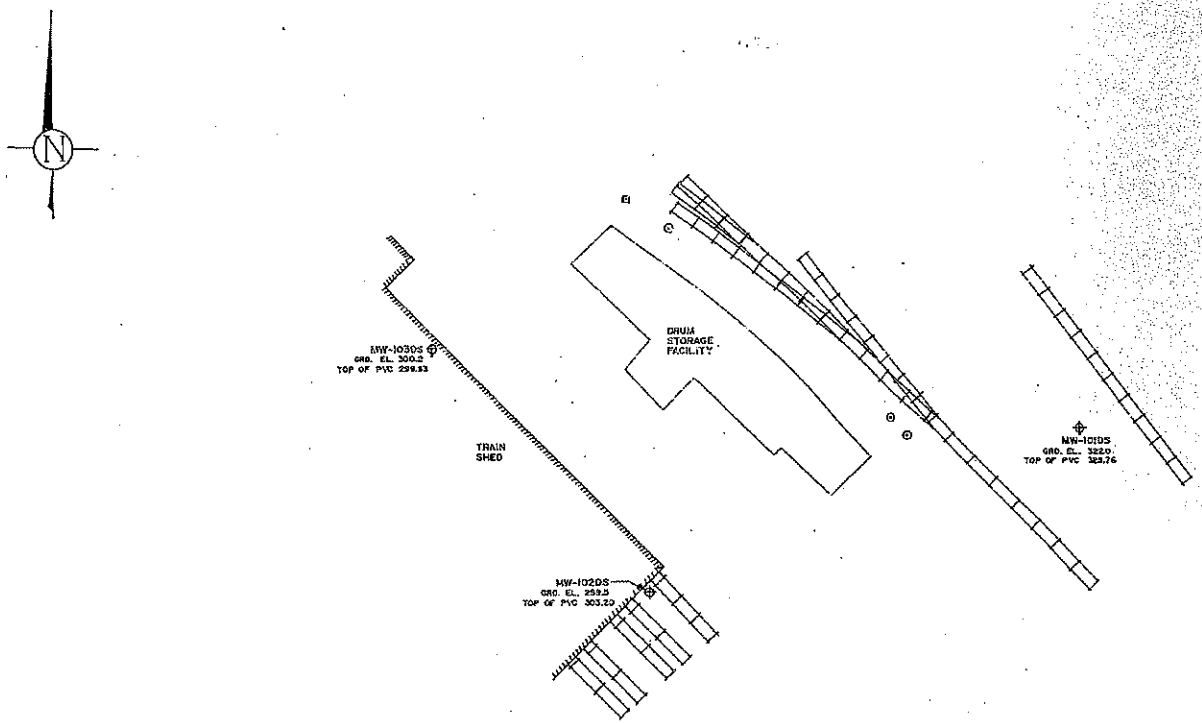
5.0 SUMMARY

The Drum Storage Facility was closed between August 24, 1989 and September 29, 1989. All waste oil contaminated oil was removed from this site and disposed at the CWS landfill in Norridgewock, Maine. Approximately 400 cubic yards of soil was removed to Norridgewock.

The results of composite and discrete sampling of the on-site soils suggests that the excavated soils were contaminated by waste oil. Three monitoring wells were installed at the site to measure volatile organic compounds, total petroleum hydrocarbons and acid/base/neutral extractable organic compounds in the vicinity of the Drum Storage Facility. The first sampling episode conducted in October 1989 has shown that there are no detectable amounts of these compounds in the groundwater downgradient of the Drum Storage Facility.

GNP is presently constructing a new paper warehouse at the location of the Drum Storage Facility. This warehouse and the adjacent paved areas will completely cover the footprint of the Drum Storage Facility and provide a cap over the site. This cap will minimize infiltration which might otherwise enter the site.

It is the professional engineering opinion of SME that the site has been closed in accordance with the DEP approved closure plan and the Board of Environmental Protection Order dated August 23, 1989.



LEGEND

- IRON PIN
- WOODEN STAKE
- MONITORING WELL

CLOSURE CERTIFICATION

Great Northern Paper Company operated the Drum Storage Facility as a hazardous waste storage area under interim license #3-032. Sevee & Maher Engineers, Inc. which was responsible for closure activity observation pursuant to its contract with Great Northern Paper Company, states to the Maine Department of Environmental Protection, that it is the professional engineering opinion of Sevee & Maher Engineers, based on observations and testing, that closure of the Drum Storage Facility was in accordance with the Maine Department of Environmental Protection approved closure plan and the Board of Environmental Protection Order.

Date: December 20, 1988 Project Officer: Peter M. Maher, P.E.

GRAPHIC SCALE

40 0 20 40 80 160

IN FEET

1 INCH = 40 FT.

DRAWING NO.	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHD	APPVD	JOB NO.

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

ISSUE CODE
P - PRELIM | B - BASE
M - UNLTD | C - CONST
SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

FIGURE 4
DRUM STORAGE FACILITY
EAST MILLINOCKET MILL
SURVEY PLAT

JOB NO.
ENG. REC. NO.
DRF. NO.

B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 77 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE. Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1,250.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 16, 1994 Time Of Spill: 0745 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 07 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION

Spill Number B - 77 - 94

Total Product Recovered : 1,250.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : G

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 60.90 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : disposed of by Clean Harbors

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-77-94
02/16/94 07:45

Scott Davis of Clean Harbors Inc. called to request a contaminated debris shipment form for the disposal of #6 oil soaked railroad ballast from a spill that occurred at Great Northern Paper in East Millinocket. It was reported that a valve failed on a tank car spilling anywhere from 1000-1500 gallons onto the railroad bed. Curious as to why the spill wasn't reported by Great Northern I decided to venture up there to investigate.

When I arrived I met with Judy Moore, Environmental Specialist for the mill. She informed me that they didn't think they had to report spills that occurred within secondary containment. I explained to her otherwise and dropped the matter. In any event I was informed that the railroad bed where the tank cars were off-loaded sat within a secondary containment area that was heated with steam to keep the #6 oil flowing in the event of a spill. This containment area is ultimately connected to an oil-water separator. Looking the system over it was clear that the system did it's job.

Altogether about 60 yards of #6 oil soaked ballast was removed by Clean Harbors Inc. and disposed of at Sawyer Environmental in Hampden. The area was then filled with new ballast in preparation for another spill which hopefully will not occur. No resources of the State are believed to be affected from this particular spill.

File No. Spill File

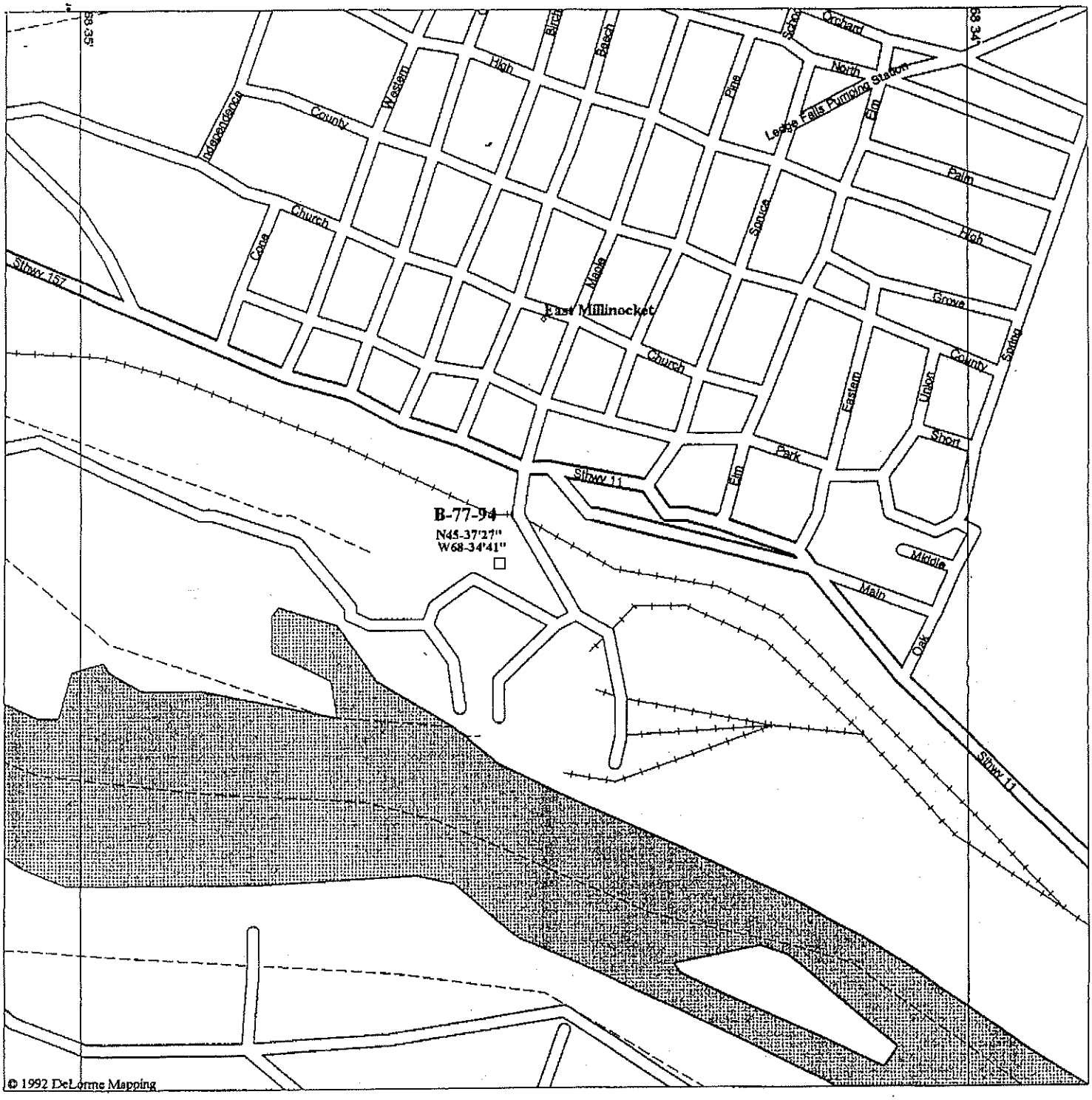
March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Rail Car
Date of spill:	February 16, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 1000 to 1500 gallons of Bunker C oil lost to containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Valve on rail car was broken. Valve was in closed position but leaked when cap was removed. Cap was replaced and leak stopped. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Working with Bangor & Aroostook Railroad concerning tank car maintenance issues.
Phone reported to:	Contacted DEP through Clean Harbors for approval of disposal of cleanup material at Sawyer Environmental.

C. E. Akeley



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:13:18 1994

Date 2/16/94 DEP SPILL # B. 77. 94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCKET

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP represenative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

Solids consist of (check as appropriate)

___sand, gravel or soil
___speedy-dri
___sorbent
__X__other RR. BALLAST & SNOW (descibe or lists)

Facility is (check One)

__X__Landfill
___Land Spreading Site
___Asphalt Plant
___Asphalt Pug Mill
___other _____ (describe)

T.W. Varney
Signature- DEP Representative

R. Manill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 79 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 550.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 15, 1994 Time Of Spill: 1100 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 17 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION **Spill Number B - 79 - 94**

Total Product Recovered : 550.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 15.90 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : burnt in mills boiler

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

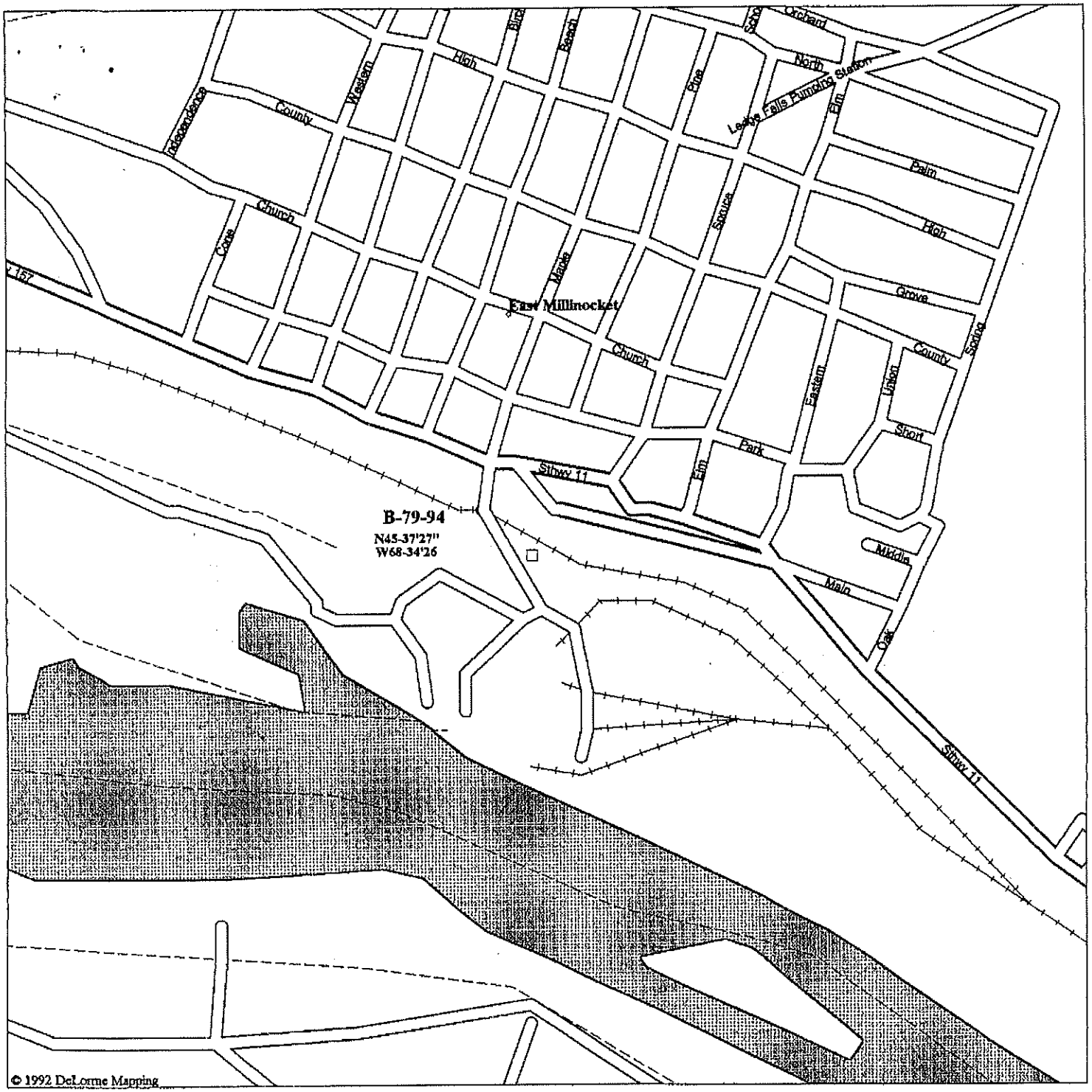
Please, document your information carefully. It may be needed for future reference or legal action.

B-79-94
02/16/94 12:00

Scott Davis of Clean Harbors Inc. of Bangor called to request a shipment form for the disposal of #6 oil contaminated debris resulting from two separate spills at Great Northern Paper in East Millinocket. Mr. Davis was then questioned as to the cause of the spills since neither of them were reported. This call was received by Tom Varney of this office. The first spill was associated with an overfill of a tank truck. The second was associated with a railroad tank car. The latter will be covered in spill report No. B-77-94.

When I arrived I met with Judy Moore, Environmental Specialist for Great Northern. It was explained to me that during the previous evening a worker from Superior Carriers Inc. of Bangor was gravity loading a tank truck when a valve failed overfilling the truck. Approximately 500-600 gallons of #6 fuel oozed into an earthen dike where it hardened in the cold temperatures. Inspection of the area shown that the oil was well contained on top of the snow. It appeared that the oil could easily be scraped up, mixed with wood chips, and burnt in the facilities boiler.

I was also informed that there was a secondary valve that could have been turned off preventing the spill. Why this was not done remains a mystery. In any event the worker from Superior Carriers was fired. No resources of the State were affected in this rather "non-sensitive" area.



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:19:40 1994

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Filling of oil truck
Date of spill:	February 15, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 500 to 600 gallons of Bunker C oil spilled into containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Truck was being filled to transport oil to steam plant. Shutoff switch failed. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Shutoff switch replaced.
Phone reported to:	Contacted DEP through Clean Harbors on Feb. 16 for approval for disposal of cleaned up material at Sawyer Environmental.

C. E. Akeley

Date 2/16/94 DEP SPILL # B. 77. 94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCKET

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP representative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

Solids consist of (check as appropriate)

___sand, gravel or soil
___speedy-dri
___sorbent
___other RR. BALLAST & SNOW (describe or lists)

Facility is (check One)

___Landfill
___Land Spreading Site
___Asphalt Plant
___Asphalt Pug Mill
___other _____ (describe)

TW. Varney
Signature- DEP Representative

R. Manill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/213/91

Subject:
Name (Last, First MI): GEORGIA PACIFIC
Address: ONE KATAHDIN AVE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: B
Amount spilled: 9000.90 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 06
Date of Spill: _____ (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 91/04/15 (yy/mm/dd) Time Reported: 1942 (Military)
Cause: 03 Detection method: 2F
Incident code: AIDL DEP response time involved: 5.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. VARNEY, T.W. TW
2. _____ MFM
3. _____

Person Reporting Incident:
Name (Last, First MI): PETERS, NADIA
Address: GEORGIA PACIFIC Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 9000.90 gals.Y cu. yds.N lbs.N bbls.N
Method: AF Non-recyclable: _____ gals.N bbls.N
Solids: combustible: 20.9 cu. yds.Y tonsN
non-combustible: 30.9 cu.yds.
Recyclable material: 8000.90 gals.Y cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
OIL RECYCLED WOOD CHIPS BURNED SOIL SPRD

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: #6 fuel oil

Georgia-Pacific Corporation
Northern Paper Division
One Katahdin Avenue
Millinocket, Maine 04462-1398
Telephone (207) 723-5131

File No. 608.20

April 29, 1991

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is the written report for the spill from the East Millinocket mill fuel oil unloading system which was discovered April 15, 1991. The spill was reported by phone to you the same day.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. 608.20

April 29, 1991

GEORGIA-PACIFIC, NORTHERN PAPER DIVISION
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket Operation
Source of spill:	Bunker C fuel oil car unloading system
Date of spill:	Discovered April 15, 1991
Time span of spill:	Unknown
Body of water impacted:	None
Volume lost to stream:	Approximately 800 gallons of Bunker C fuel oil lost to ground around unloading area
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable
Visual inspection of the river:	Not applicable
Comments:	Fluid oil and water being pumped up, separated and the oil burned. Salvage wells and excavation, as directed by Tom Varney of Bangor DEP, being used to remediate contaminated soil.
Steps to be taken to prevent reoccurrence:	Damaged line has been replaced. Rest of line to be inspected and replaced if necessary.
Phone reported to:	Tom Varney, DEP Bangor, and National Response Center, Case #68181, by Nadia Peters on 4/15/91

C. E. Akeley

Spill #B/2/3/91

Georgia-Pacific Paper Co.
East Millinocket
April 15, 1991

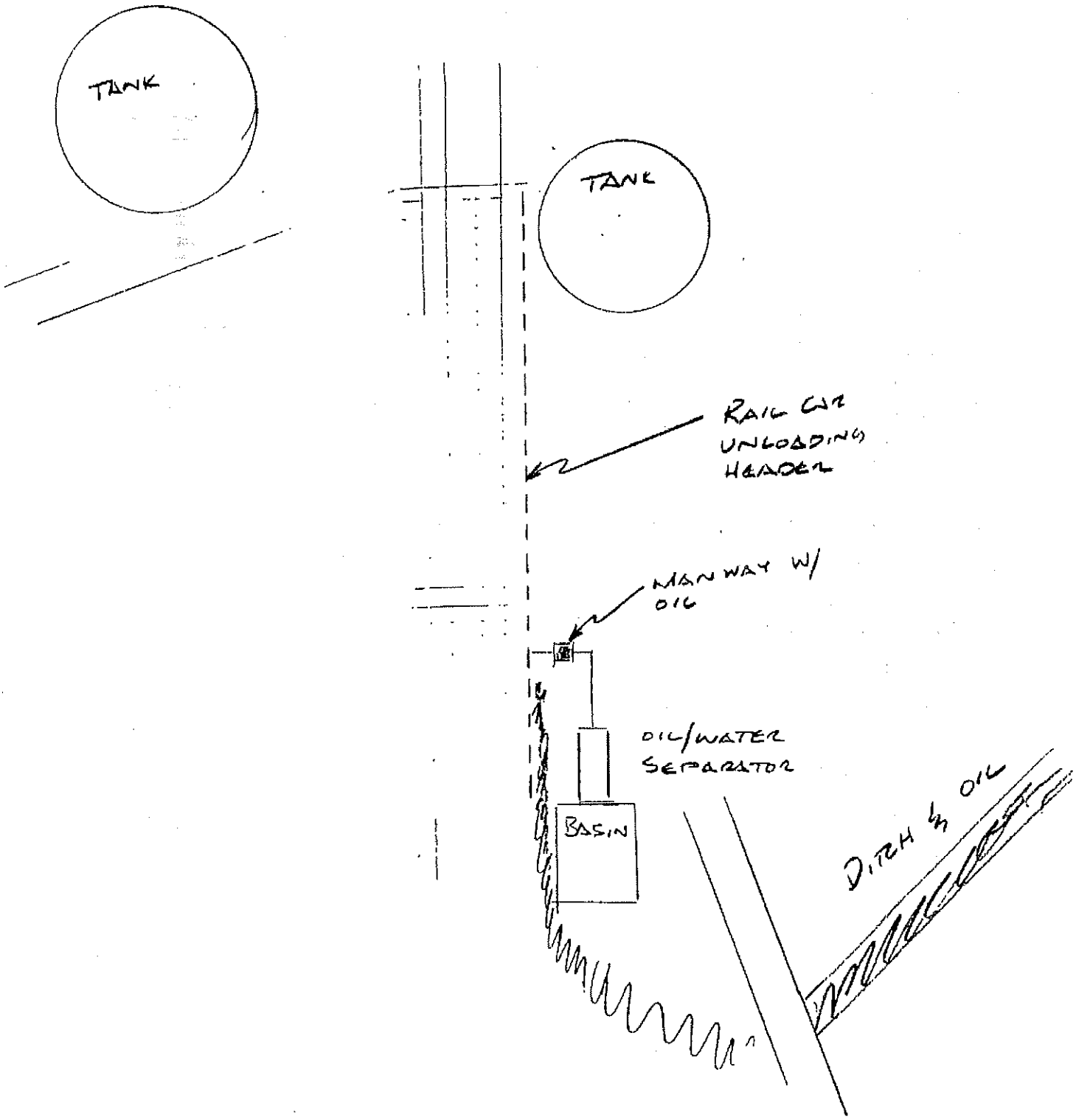
Nadia Peters reported to me the loss of several hundred gallons of #6 oil at the East Millinocket Mill. Investigating on the 16th of April, Ms. Peters and I visited the site, and I observed #6 oil seeping out of the railroad embankment on the town side of the East Millinocket mill. What apparently has happened, is that there is a leak somewhere in the underground line that feeds #6 oil to the two above-ground storage tanks on site. Rail cars loaded with #6 oil are pulled onto a siding, and umbilical cords hooked up to the belly valves of these cars. The cars are steam heated and the #6 oil is drained from the cars through the umbilical cords into an underground header pipe that leads to above-ground storage tanks previously mentioned. Somewhere in that underground header is a leak that apparently has been leaking for sometime; the leak went unnoticed because of snowcover in East Millinocket and because the area in question down over the bank is seldom visited by mill personnel. On the 15th of April the yard crew was cleaning up this area, actually removing an abandoned rail spur, when it was noticed that a ditch adjacent to the rail spur was full of #6 oil. Tracing it back upslope, it was discovered that the oil/water separator downslope of the oil unloading area was full of oil, as was a water basin just below the oil/water separator tank. Further, oil was seeping out of the bank just below the rail line where the #6 cars are unloaded.

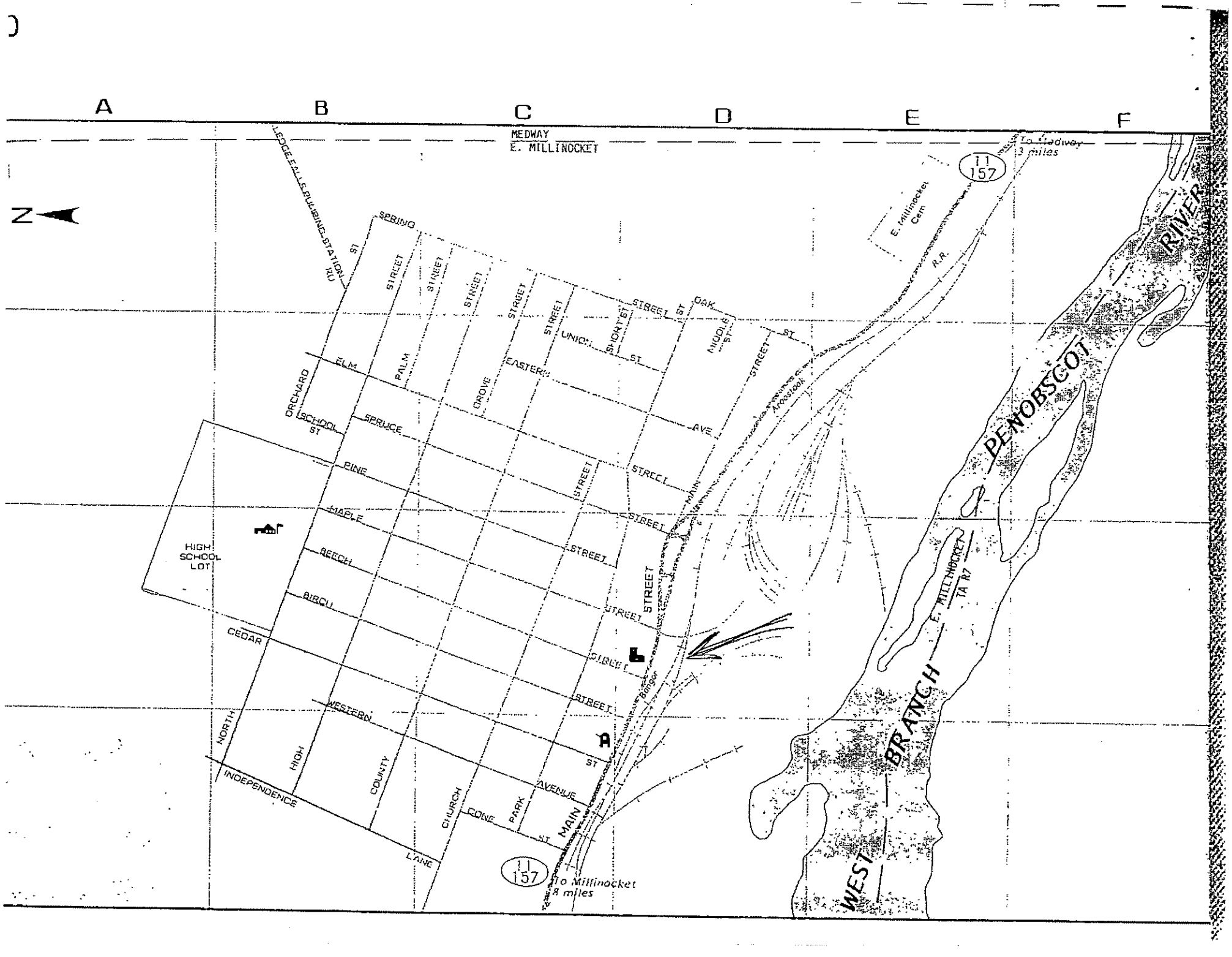
Clean Harbors was summoned by G-P personnel on the evening of the 15th and they recovered from the oil/water separator and water basin, over 8000 gallons of #6 oil, which was taken to the East Millinocket mill to be burned in that mill's boilers. That left a substantial amount of oil still in the basin itself as well as oil in the previously mentioned ditches. On the morning of the 16th, Clean Harbors arrived onsite with a vactor truck and was preparing to recover more oil from the ditches. My suggestion to Nadia Peters, was that when G-P discovers where in the oil header their leak is, that they use their excavation at that point to sink a recovery well, and also to sink another recovery well or two along the right of way for the rail line. That will save digging up and making a large excavation in the rail right of way. When I left the scene, mill engineer Al Davenport, and a crew were pressurizing the underground header with air to try and figure out somehow where the leak might be. It was noticed that their pressurizing of this line forced the oil to flow faster in a manway on the line that feeds the oil/water separator. It is theorized therefore, that the leak in the underground header is somewhere in that vicinity. Once all the free oil that CAN be collected has been collected by Clean Harbors personnel, the plan in mind is to distribute wood chips in the ditches where the oil

Spill #B/213/91

is laying, use the wood chips to sorb up the free oil then recover the wood chips to be burned in the chip boiler in the East Millinocket mill.

TV/sh
REC: File Report




A
B
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MEDWAY
E. MILLINOCKET
N
LEDGE FALLS PLUMBING STATION RD
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SHORT ST
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GROVE
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CEDAR
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WESTERN AVENUE
NORTH HIGH
INDEPENDENCE LANE
COUNTY
CHURCH
CONG PARK ST
MAIN ST
A ST
HIGH SCHOOL LOT
11
157
To Millinocket
8 miles
To Medway
3 miles
E. Millinocket Cem
R.R.
Aroostook
MAIN STREET
BRIDGE
E. MILLINOCKET
TA R7
PENOBSCOT RIVER
WEST BRANCH

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-483-2003**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT RANDALL
Primary Product: Gasoline Unspecified {20} UNKNOWN
Subject/Owner: GREAT NORTHERN PAPER INC - AKA KATAHDIN PAPER - -

Off...

I EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Underground Storage Tank {TU}
Cause: Other - Unknown {18}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Other {I}

Reported Date/Time

09/29/2003 14:30

Subject/Owner (Potential Responsible Party)

Contact: --GREAT NORTHERN PAPER INC - AKA KATAHDIN PAPER
ONE KATAHDIN AVE
MILLINOCKET ME 04462-1398 USA
207-723-5131

Comment: Contaminated soil discovered while installing cathodic protection anodes on underground storage tank.

Reporter

Contact: CARL AKELEY--GREAT NORTHERN PAPER INC
50 MAIN ST
RT 157
EAST MILLINOCKET ME 04430 USA
207-732-2278

Comment:

Other Contact

Contact: DAVID BEAUMENT--BEAUMENT GENERATOR
PO BOX 352
HATHAWAY RD
MEDWAY ME 04460 USA
207-746-5459

Comment: Licensed tank installer.

Primary Responder and Other Employees

ROBERT RANDALL (Primary Responder)

No Further Response Action Expected

II SITE

Location

Location Type: Business - Industrial {ID}
Name: GREAT NORTHERN PAPER
Street Address: RT 157 - 50 MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Underground Tank| Site# 16697

III. CLEANUP

Product Reported

Gasoline Unspecified {20}

Products Found/Amount Spilled

Gasoline Unspecified {20}/ UNKNOWN (Primary Product)

Material Recovered

None {NO} - 0 gals. ESTIMATE

Recovery/Treatment Method

None {K}

Cleanup DTREE

Disposal Information

Contaminated soil left in place for the time being, rather than undermine the active tank system.

IV. NARRATIVE

This office received a call at 1430 on 9/29/03, from Carl Akeley (Great Northern Paper Company) reporting an oil spill at their facility in East Millinocket. He stated that they were in the process of replacing the anodes on a double walled tank that had been installed at the mill in 1989 and had encountered some gray, what appears to be, gasoline contaminated soil, approximately 6 feet below the surface. There was no indication that the tank was leaking. It was indicated that the soil smells like old gasoline and may possibly be from the previous tanks on site. They were not sure if anyone from DEP had been at the facility in 1989 when the tanks were removed or if any notification had been made about finding contaminated soil at that time. I later checked our records, but did not find any indication of a problem in the files. Arrangements were made to visit the site on the following day.

September 30, 2003 (Tues.): Proceeding to East Millinocket, I met with Mr. Akeley and Dave Beaument (Beaument Generator; Medway) and went over the situation with them. This particular 2000 gallon tank was installed next to their old paint shop in 1989 and is used primarily to fuel company vehicles and equipment. The tank is double walled and has suction piping. According to Mr. Beaument, who is a licensed tank installer, there was no indication that the tank or piping is leaking at this time. Although there was no obvious source for the contamination, it appeared to be from the previous tank installation on site. Rather than dig around the present tank and possibly undermine it, the decision was made to leave the contamination in place for the time being and plan on dealing with it, at some point down the road, when the tank is scheduled for removal. From PID meter readings around the tank, it appears that most of the contamination is contained in the bottom of the excavation under the tank.

REC: File report.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEP
MASTER UNDERGROUND STORAGE TANKS-EASTERN REGION
SORTED BY TOWN

REG #	TANK_NO	FACILITY_NAME	STREET_ADDRESS 1	TOWN	SENS_AREA	STAT	FACILITY_T	INSTALLED	VOLUME	PRODUCT	DATE REMOVED
12861	1	MUNICIPAL BUILDING	MAIN ST	EAST MILLINOCKE	N	F	M	10/1/1969	2000	02	
12861	2	MUNICIPAL BUILDING	MAIN ST	EAST MILLINOCKE	N	B	M	7/1/1989	1000	02	
11114	1	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	2	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	3	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	4	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	5	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	6	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	7	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	8	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	9	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	10	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
16697	1	OIL & PAINT SHOP	MAIN ST	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
5124	1	OPAL MYRICK SCHOOL	6 BEECH ST	EAST MILLINOCKE	N	B	D	12/1/1989	2000	23	
5124	2	OPAL MYRICK SCHOOL	6 BEECH ST	EAST MILLINOCKE	N	F	M	10/1/1969	6000	05	
9949	1	PARK MANOR APARTMENTS	3 MAPLE ST	EAST MILLINOCKE	N	B	M	6/1/1990	6000	05	
12862	1	POLICE & FIRE STATION	MAIN ST	EAST MILLINOCKE	Y	F	F	1/1/1979	3000	02	
12862	2	POLICE & FIRE STATION	MAIN ST	EAST MILLINOCKE	N	F	M	10/1/1969	1000	02	
8648	1	POWERS, WILLIAM	43 HIGH ST	EAST MILLINOCKE	N	B	M	7/1/1989	1000	02	
5123	1	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	F	E	10/1/1969	550	02	
5123	2	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	F	M	1/1/1957	10000	05	
5123	3	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	F	M	1/1/1983	500	02	
1309	1	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	B	M	6/1/1990	10000	05	
1309	2	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	2000	21	
1309	3	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	2000	23	
1309	4	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	1000	29	
1309	5	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	B	M	7/1/1989	2000	29	
12863	1	TOWN GARAGE	MAIN ST	EAST MILLINOCKE	N	B	M	7/1/1989	2000	23	
12863	2	TOWN GARAGE	MAIN ST	EAST MILLINOCKE	N	F	M	6/1/1983	500	02	
6188	1	US POST OFFICE	MAIN & CEDAR	EAST MILLINOCKE	N	B	M	7/1/1989	500	02	
20170	1	COMBINED FILE	120 HATCHERY RD	EAST MILLINOCKE	N	F	I	1/1/1974	1000	02	
18853	1	HOWARDS MARKET	RT 1	EAST ORLAND	Y	X	X	10/1/1969	2000	02	
18853	1	HOWARDS MARKET	RT 1	EAST ORLAND	Y	B	B	6/20/1994	8000	23	
4294	1	IRVING WILBUR & SON INC	RT 200	EAST ORLAND	Y	B	B	6/20/1994	4000	28	
4294	2	IRVING WILBUR & SON INC	RT 200	EASTBROOK	Y	F	C	10/1/1969	1000	29	
2390	1	RMLR	SUGGAR HILL RD	EASTBROOK	Y	F	C	10/1/1969	500	29	
16421	1	ARGENTA FACTORY	25 SEA ST	EASTBROOK	N	F	I	1/1/1976	515	23	
18511	1	BANGOR SAVINGS BANK	WATER ST	EASTPORT	N	F	D	10/1/1969	2550	12	
				EASTPORT	N	F	C	10/1/1969	500	02	

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 64 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): KATAHDIN GAS INC.

Address: POB 799 Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5454

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: DAVE'S AUTO REPAIR

Address: MAIN ST Location ID: 19691

Town: EAST MILLINOCKET Zip: 04430

Latitude N: 45 / 37 / 36.00 Longitude W: 68 / 34 / 41.00

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 100.90 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 20 (Table B) Product Actually Found: 20 (Table B)

Date Of Spill: Time Of Spill: (Military)

Date Reported: May. 06, 1994 Time Reported: (Military)

Cause Of Spill: 09 (Table C) Detection Method: 4 J (Table D)

Incident Code: C - SS - S - U (Table E)

DEP response time involved: 18 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : VARNEY, THOMAS

PERSON REPORTING EVENT

Name (Last, First, MI): VARNEY, TOM

Address: ME DEP Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 941-4570

CLEAN-UP INFORMATION **Spill Number B - 64 - 94**

Total Product Recovered : (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : I

Non Recyclable : 50.90 G (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 100.90 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :

OTHER ACTIONS

Expenditure (s) - From Surface Water Fund	N	(Y or N)
From Ground Water Fund	N	(Y or N)
From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected	N	(Y or N)
Enforcement Referral	N	(Y or N)
Insurance Fund Claim	N	(Y or N)
Tech Services Referral	N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status
12869 -	1	4,000	A	8	M	AB
12869 -	2	4,000	A	8	M	AB
12869 -	3	2,000	A	8	M	AB
12869 -	4	2,000	A	8	M	AB

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative.
Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).
Include known chemical names when report is about Hazardous Materials.
Please, document your information carefully. It may be needed for future reference or legal action.

Initial Clean-up Actions Agreement

Page _____ of _____

DEPT. OF ENVIRONMENTAL PROTECTION

BUREAU OF HAZARDOUS MATERIAL & SOLID WASTE
RESPONSE SERVICES DIVISION

Facility Name: DAVE'S (FORMERLY JAKE'S) Address: 79 MAIN ST, E. MILLINOCKE

Owner: RALPH BRAGDON

Registration No. 12869 DEP Spill No. B. 64.94

Date: _____

I Thomas W. Varney have investigated Dave's Auto Repair
(signature of DEP Rep) (facility name)

site and find the following clean-up actions necessary before JUNE 1, 1994. (specify an agreed date)

1. REMOVAL OF 3 ABANDONED UNDERGROUND GASOLINE TANKS, AS SPECIFIED IN 38 MRSA SUBCHAPTER II-B AND CHAPTER 691 OF THE ME. D.E.P.'S RULES.

2. REMOVAL AND/OR REMEDIATION OF CONTAMINATED SOIL AND GROUNDWATER, AS DETERMINED BETWEEN D.E.P. PERSONNEL & A MAINE CERTIFIED SITE ASSESSOR.

I understand that compliance with the above does not define the limits of remediation or release the facility owner from responsibility for further remediation.

R.E. Bragdon
OWNER OR REPRESENTATIVE

2/2/94
DATE

White - Licensing & Enforcement Copy; Canary - Investigator's Copy; Pink - Owner's Copy

CLUPAGREE 1/92

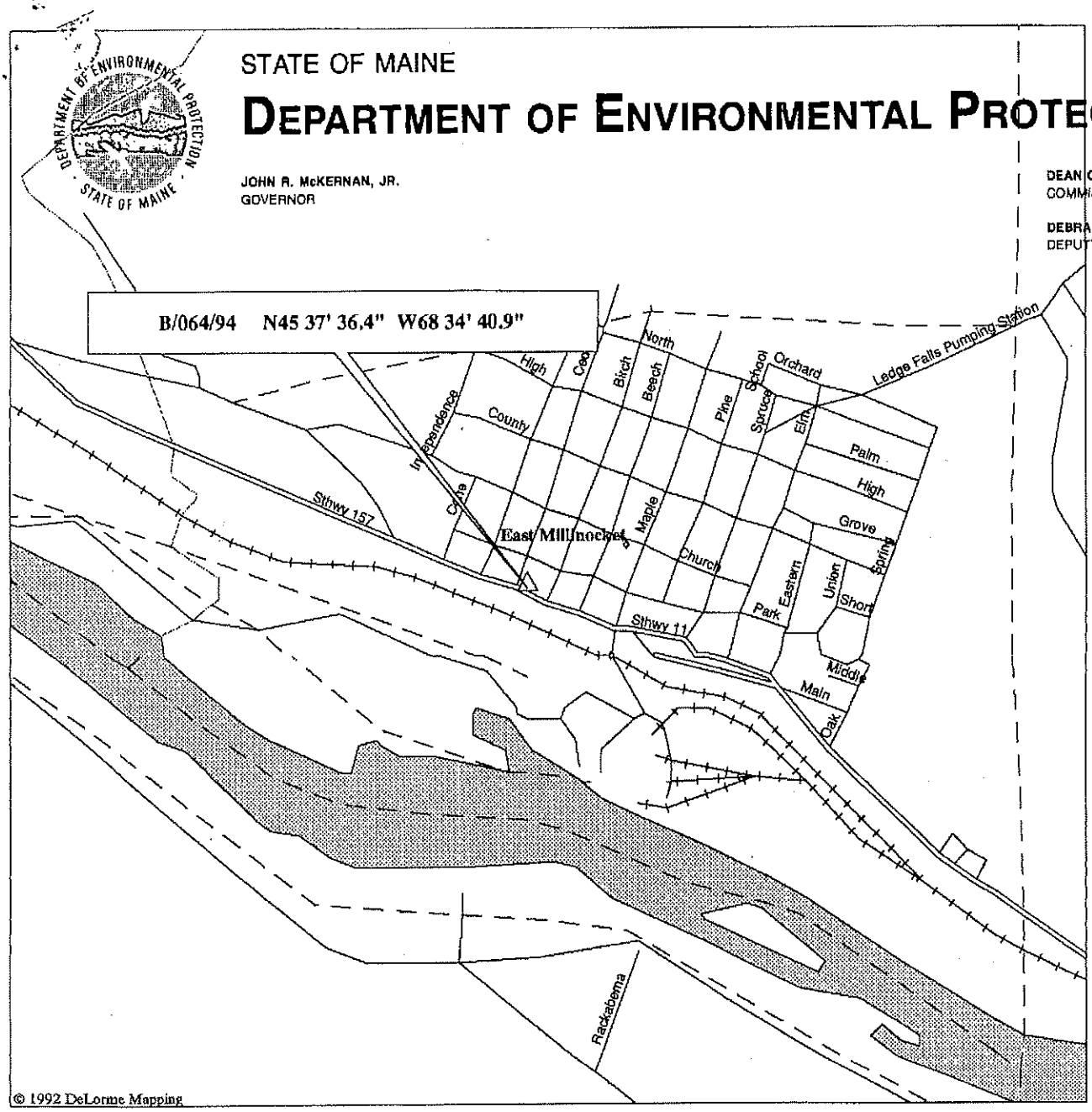
STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN R. McKERNAN, JR.
GOVERNOR

DEAN C. MARRIOTT
COMMISSIONER

DEBRAH RICHARD
DEPUTY COMMISSIONER



LEGEND

- State route
- Small town
- Interstate route
- Boundary
- Road
- State highway
- Railroad
- River
- Powerline
- Open water

Scale 1:15,625 (at center)

1000 Feet

500 Meters

Tank Removal at Dave's Place
Mag 15.00
Tue Aug 23 10:18:09 1994

AUGUSTA
STATE HOUSE STATION 17
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
OFFICE LOCATED AT: RAY BUILDING, HOSPITAL STREET

PORTLAND
312 CANCO ROAD
PORTLAND, ME 04103
(207) 879-6300 FAX: (207) 879-6303

BANGOR
106 HOGAN ROAD
BANGOR, ME 04401
(207) 941-4570 FAX: (207) 941-4584

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, ME 04769
(207) 764-0477 FAX: (207) 764-1507

printed on recycled paper

Abandonment of (an) Underground Tank(s) in Place

J W. Varney (signed) of the Department of Environmental Protection has determined that the following underground tank(s) at facility

facility name DAVE'S AUTO REPAIR phone # _____

address 79 MAIN ST town E. MILLINOCKET

owner's name RALPH BRAYDON phone # 723 5454

address BOX 799 town MILLINOCKET 04462

reg. # 12869

_____ meets the following condition for abandonment in place — (abandonment in place is permitted by regulation) (check conditions applicable).

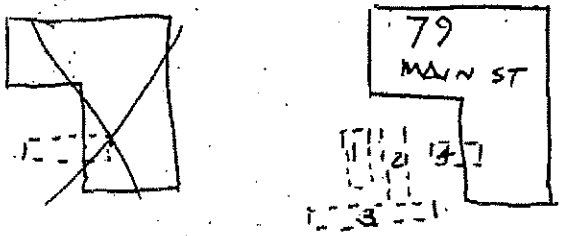
✓ a. Located beneath a building or other permanent structure which cannot be practically replaced;

_____ b. Of a size and type of construction that it cannot be removed;

_____ c. Inaccessible to heavy equipment necessary for removal; or

_____ d. Positioned in such a manner that removal would endanger the structural integrity of nearby tanks.

Describe or diagram location of tank(s) meeting conditions (list tank number(s) as listed on registration certificate).



1, 2, 3 REMOVED. #4 FILLED IN PLACE

_____ conditions above not demonstrated, Board of Environmental Protection variance required or tank must be removed (see notes).

DO NOT PROCEED WITH ABANDONMENT IN PLACE UNTIL AND UNLESS A BOARD VARIANCE IS GRANTED.

Describe or diagram location of tank(s) requiring a variance.

WAIVER FROM THE REQUIREMENT THAT A NOTICE OF ABANDONMENT BY REMOVAL OF AN UNDERGROUND OIL TANK BE FILED THIRTY DAYS PRIOR TO REMOVAL

Due to Exceptional circumstances the Department of Environmental Protection grants a waiver to the thirty day filing period for abandonment by removal of the listed underground tanks, provided that the owner or operator meets the following conditions:

1. A written notice of removal is filed with the Department and the local fire department within one day of receiving this waiver.

2. The Department is kept advised of removal plans and schedule so that a department representative can observe the removal of the tank(s) and the excavation from which the tank(s) was/were removed.

B 2477 94

Tank(s) owned by:

Name RALPH BRANCON Phone # 723-5454

Mailing Address _____ Town T1 R3 WELS

Located at:

Name DAVE'S AUTO REPAIR Phone # _____

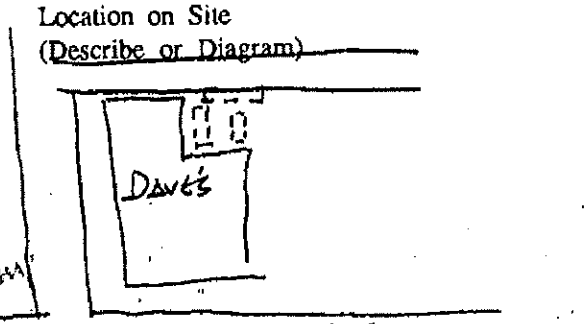
Address 79 MAIN Town E. MILLINOCKET

Reason for Waiver: EXPEDIENCE

List tank(s) below:

Registration #	Size
12869	2K
	4K
	4K

Location on Site (Describe or Diagram)



Planned Date of Removal: 5/6/94

This waiver is granted on (date) 5/6/94 by

T.W. VARNEY, a copy of which is presented to

DAVE BEAUMONT.

(Name of individual receiving the copy)

White - Enforcement Copy Canary - Investigator's Copy Pink - Tank Owner's Copy

90WAVEF

Initial Clean-up Actions Agreement

DEPT. OF ENVIRONMENTAL PROTECTION

BUREAU OF HAZARDOUS MATERIAL & SOLID WASTE
RESPONSE SERVICES DIVISION

Facility Name: DAVE'S AUTO REPAIR Address: 79 MAIN ST. E. MILLINOCKET

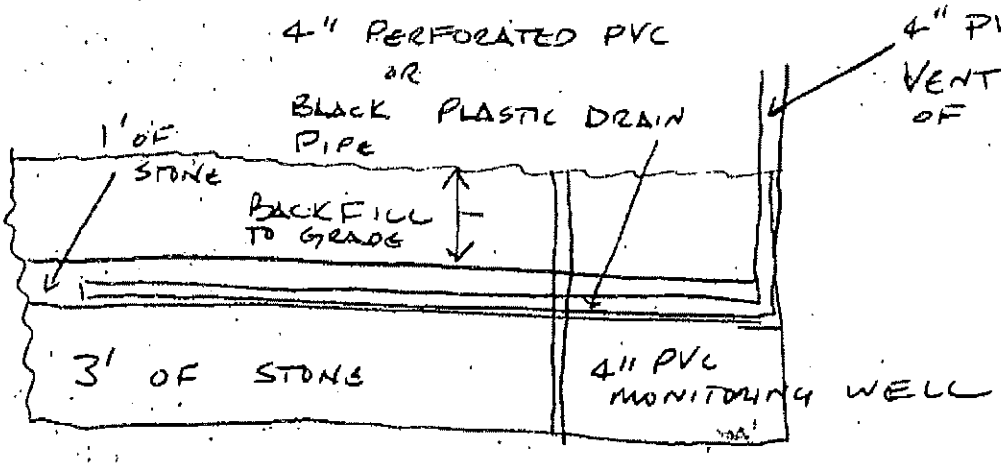
Owner: RALPH BRAGDON

Registration No. 12969 DEP Spill No. B 247 94

Date: 5/6/94

I J.W. Varney (signature of DEP Rep) have investigated DAVE'S AUTO REPAIR (facility name) site and find the following clean-up actions necessary before 5/9/94 . (specify an agreed date).

1. PASSIVE SOIL VENTING SYSTEM & GROUND WATER MONITORING WELL



I understand that compliance with the above does not define the limits of remediation or release the facility owner from responsibility for further remediation.

David J Beaumont — OWNER OR REPRESENTATIVE

5/6/94 — DATE

White - Licensing & Enforcement Copy; Canary - Investigator's Copy; Pink - Owner's Copy

CLUPAGREE 1/92

MAY 10 1994

Maine Departmental of Environmental Protection,
Bureau of Oil & Hazardous Materials Control
State House Station #17, Augusta, Maine 04333
Telephone: 207-289-2651
Attn: Tank Removal Notice

2 cp PK '94

NOTICE OF INTENT
TO ABANDON (REMOVE) AN
UNDERGROUND OIL STORAGE FACILITY

Name of Facility Owner: Kat. Gas Inc. Telephone No: 723 5454
Mailing Address: P.O. Box 799
City: Mill Inactive State: Me Zip Code: 04462
Contact Person (name, address & telephone no.):
Name of Facility: Davey Forwarding Jacket Registration No.: D 6474
Facility Location: Maine St. East Millinocket 12869

1. Identify the tanks at this location which are to be removed:

Tank Number	Age of Tank (Years)	Tank Size (Gallons)	Type of Product Most Recently Stored
A.	1	4000	Gasoline
B.	2	4000	
C.	3	2000	
D.			

2. Directions to Facility (be specific): 79 Maine St East Millinocket
Tom Varney will have 30 Day notice to D.E.P.

3. Is tank(s) used for the storage of Class I liquids (e.g. gasoline, jet fuel)? Yes___ No___ (IF YES, REMOVAL OF THE TANK MUST BE UNDER THE DIRECTION OF A CERTIFIED TANK INSTALLER OR PROFESSIONAL FIREFIGHTER.)

4. Name and telephone number of contractor who will do the tank removal: 746-3790 Dick Fisk

Certified Tank Installer Certification Number & Name (if applicable):
Beaumont & Millett

Professional Firefighter Yes ✓ No ___ (Affiliation:)

5. Expected date of removal: 5/6/94 Contractor called with Date of Removal on 5/6/94

I hereby provide Notice that I intend to properly abandon the underground oil storage facility as described above.

Date: 5/6/94

R.E. Braydon Pres.
Signature of Tank Owner or Operator

R.E. BRAGDON Pres.
Printed Name and Title

THIS FORM MUST BE FILED WITH THE DEPARTMENT AND LOCAL FIRE DEPARTMENT 30 DAYS PRIOR TO REMOVAL - RETURN POSTCARD WHEN TANK(S) HAS BEEN REMOVED.

Mail original and yellow copy to DEP; pink copy to fire dept.; retain gold copy

Millett Associates

Civil/Environmental Engineering

1 JUN 1994
RECEIVED
Environmental
Protection
-Bangor-

June 22, 1994

UST Program Administrator
Bureau of Oil and Hazardous Materials Control
Maine Department of Environmental Protection
State House Station 17
Augusta, ME 04333

RE: UST Removal Site Assessment: Dave's Auto Repair, 79 Main Street
East Millinocket, Maine

Dear Administrator:

Please find enclosed a site assessment for three gasoline tanks removed at the above mentioned facility. This work was undertaken on May 6th, 1994.

If you have any questions, please feel free to contact me at your convenience.

Sincerely,

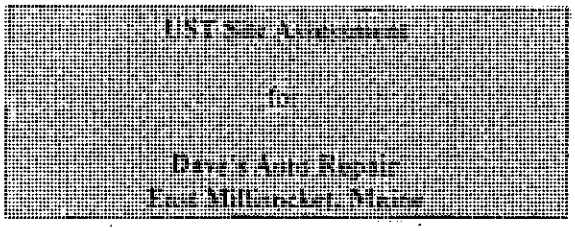
Michael A. Millett

Michael A. Millett, P.E.
Millett Associates

MAM/mm 94056
Enc.

cc: Dave Beaumont, Beaumont Generator
Tom Varney, MEDEP Bangor
Judith Doore, Admin. Asst., E. Millinocket

STATE OF MAINE
MICHAEL A. MILLETT
6377
REGISTERED
PROFESSIONAL ENGINEER



Tank Site: 49 Main Street
East Millinocket, Maine

June 1994

Prepared by:
Millett Associates
Bangor, Maine

SITE ASSESSMENT SUMMARY

Summary

Tank Owner: Ralph Bragdon
Millinocket Lake
Millinocket, ME 04462
tel. 723-5454

Operator: Not in Use

Facility Name: Dave's Auto Repair
70 Main Street
East Millinocket, Maine 04430
tel. 746-9220

Tank Registration Number: 12869

Date of Tank Removal: May 6th, 1994

Licensed Installer: Dave Beaumont

Date of Site Assessment: May 6th, 1994

Evidence of Discharge or Leak: Yes

SECTION 1

Detailed Site Data and Results

1.0 Site Assessment Purpose

The purpose of this site assessment is to identify the extent, if any, of discharges or leaks of petroleum product(s) from an underground storage facility at the time of tank removal.

1.1 Facility and Location

The facility for which this site assessment addresses is located in the Town of East Millinocket on Main Street at the intersection with Birch Street Figure 1 is a U.S.G.S. map depicting the site location relative to the East Millinocket area. Figure 2 is a larger scale site map indicating site features. The site is not over a mapped sand and gravel aquifer. The nearest aquifer is located approximately 1.5 miles east of the site. Land use in the area is a combination of commercial and residential. Residential uses with basements are found upgradient of the site. Immediately downgradient of the facility is the Bowater paper mill. The site is bounded by roadways on the south and west, a parking lot to the north, and a commercial building to the east.

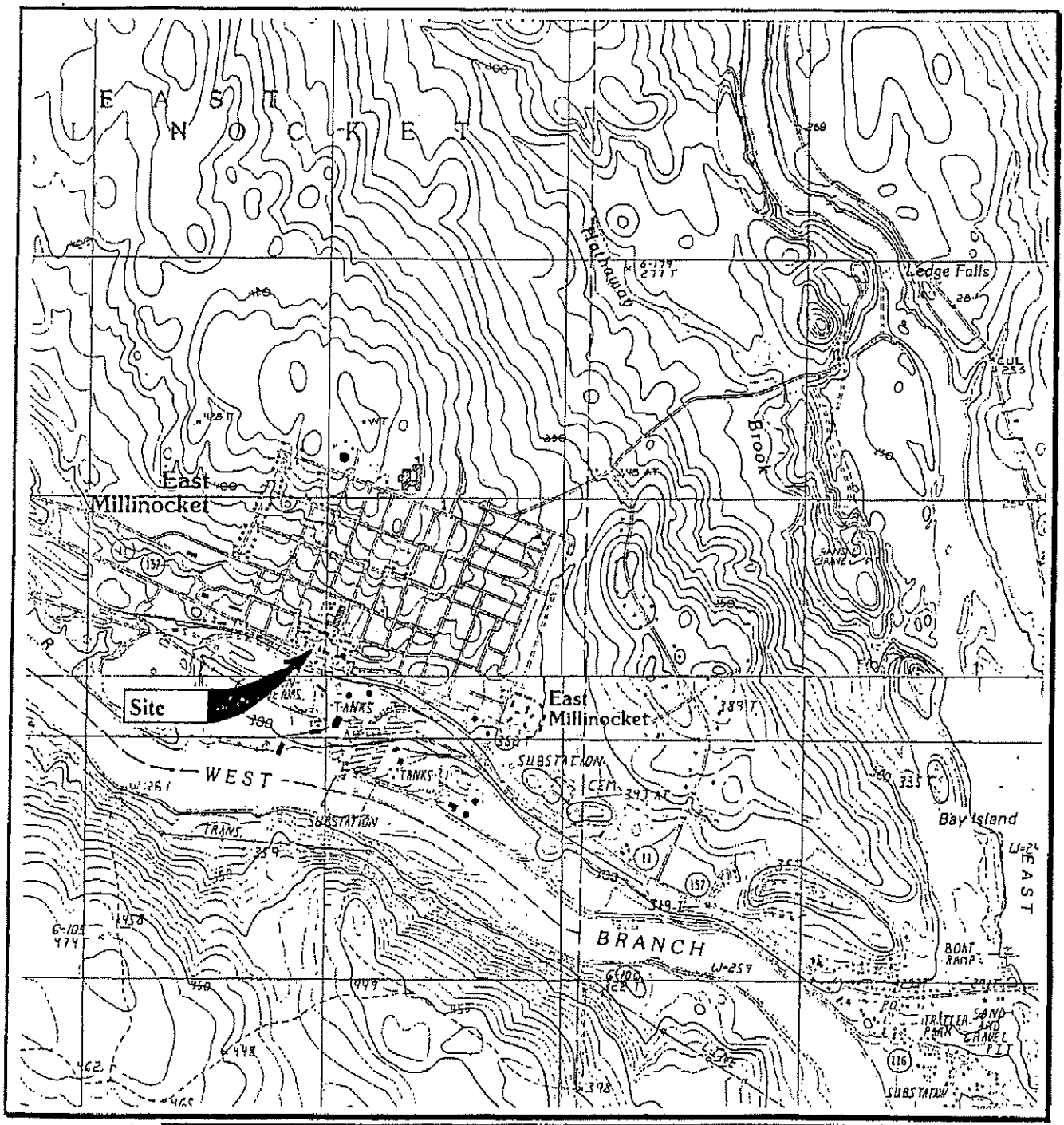
The site is identified on the Town of East Millinocket tax assessment maps as Map 13, Lot 1. The site has three active registered storage tanks for petroleum identified as outlined below in Table 1.

Table 1

Tank Inventory (gallons)

Tank 1	2000 gasoline
Tank 2	4000 gasoline
Tank 3	4000 gasoline

The entire site, as well as the surrounding area, is served by the public water and sewer system. The public water supply is a substantial distance from the site. There are no immediate buildings in the area with a potential for vapor collection. Referencing the definition of a sensitive geologic area, this area does not fit that description.



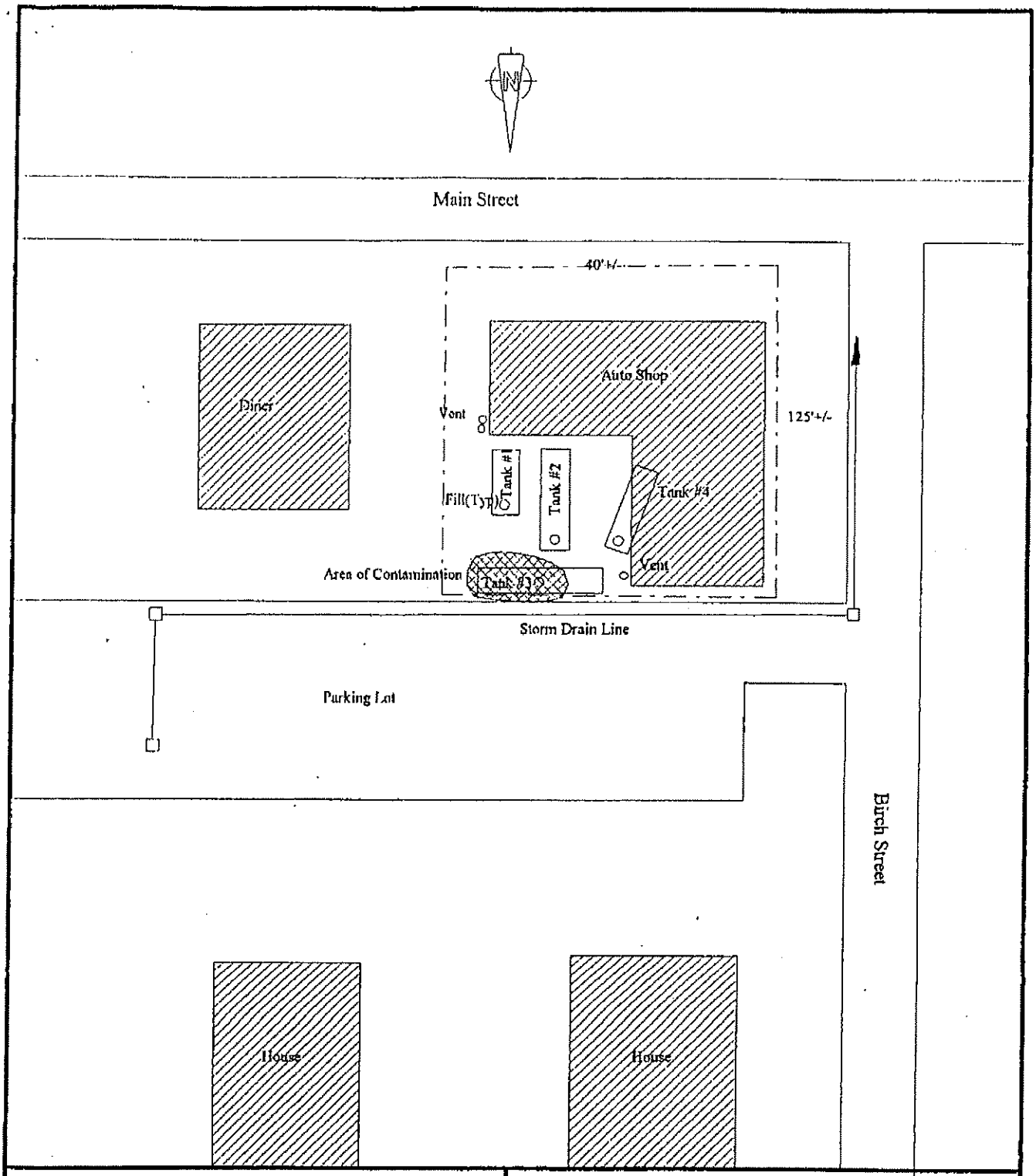
Millett Associates
Civil/Environmental Engineering

293 Birch Street, Bangor, Maine 04401
Phone (207) 942-6515

Figure 1 - U.S.G.S. Map

Dave's Auto Repair
79 Main Street
East Millinocket, Maine

Scale: 1"=2000'
Source: East Millinocket Quadrangle



Millett Associates
Civil/Environmental Engineering

293 Birch Street, Bangor, Maine 04401
Phone (207) 942-6515

Providing Engineering Expertise....
With a Personal Touch.

Figure 2 - Site Plan

Dave's Auto Repair
79 Main Street E. Millinocket
UST Site Assessment

Scale: None
Source: None

1.2 Facility and Site History

The site has been used as a service station since it was built in the early 1950's. Until 5 years ago, the station was active and was operated by Bragdon Petroleum Company. This company is no longer in business as the were bought by Irving Oil a few years ago. This facility has been used as an automotive repair garage since the tanks were taken out of service. Fueling used to occur out near Main Street while the tanks were located in the rear, but the pump and appurtenances have been removed a long time ago.

The tanks removed for this assessment were not the original tanks for the site. These were placed into service somewhere in the late 1970's or early 1980's. It is thought that tank 2 was replaced a leaking tank of similar size. Tank #2 is thought to be the oldest by a few years. None of the tanks contained an unusual amount of water.

1.3 Description of Site Assessment Methods Utilized

A photoinization device (PID) was utilized to determine the hydrocarbon concentration in the tank farm area. This device, a Photovac Microtip MP-1000, is calibrated and checked regularly against 100 parts per million (ppm) isobutylene and zero gas to ensure accuracy. All field analyses were performed using the poly-bag method as outlined in Appendix Q of the Chapter 691 regulations.

The State of Maine Standards for petroleum contamination soil dictate that PID test results 50 ppm and over for heavy type oil facilities and 200 ppm for gasoline facilities require notification to the Department of Environmental Protection within 24 hours. Remediation efforts vary depending on the severity of the contamination and nearby receptors.

1.4 Findings of the Site Assessment

The tank removal began by uncovering the tank tops. Soil from around the fill pipes of the tanks had a benzene equivalent concentration (hereinafter referred to as BEC) as shown in Table 2.

Table 2

Fill Pipe BEC's

Tank 1	7.5 ppm
Tank 2	80 ppm
Tank 3	1200 ppm

Soils around the perimeter of the tanks was predominantly fill material over glacial till. The tanks were bedded in sand or sandy gravel. Native soils in the area are glacial till in nature.

Soil was sampled over the perimeter of the tank#1 beginning at the ground surface. Till was observed at a depth of 4 to 5 feet. Soil sampled over the perimeter of the tank and the full tank depth had a BEC level range of 2 to 10 ppm. Groundwater was encountered at

approximately 8 feet from the surface. After the tank was removed, soil from the tank base had a BEC level of 10 ppm. The tank itself, a single wall welded steel tank, was found to be in fair condition as it was moderately pitted. The tank had the appearance of a used tank, but no protrusions of the surface were noted. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

Tank #2 was removed next. Soil from the south end of the excavation had BEC level of 4 ppm, similar to that of tank #1. Soil remained at low BEC levels (i.e. < 25 ppm) until the northern end of the tank was encountered. At this end, soil, both backfill and bedding, had a BEC level on the order of 1000 ppm. Once the tank was removed, soil under the tank at a depth of 8 feet was found to have a BEC level of 1100 ppm in gray stained gravel and till. Soil remained at that level until a depth of 9.5 feet, where it changed to a brownish colored till material and saturated with water. Contamination levels dropped to 20 ppm in this soil. The tank itself, an asphalt coated single wall welded steel tank, was found to be in good condition with minimal pitting. The tank was very rusted on the upper half. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

Tank #3 was removed last. Soil around the easterly end of the tank at depth of 6 feet had a BEC level of 20 to 10 ppm. The far westerly end similarly had levels of less than 10 ppm. Around the fill pipe and down the sides of the tank, BEC levels remained at 800 to 1000 ppm. Once the tank was removed, soil from the base under the fill pipe was found to have a BEC level of 900 ppm. Further excavation showed levels of 600 to 700 at a depth of 10 feet. The contamination spread to the east end of the excavation where levels were found to be 300 ppm at the tank base. The tank itself, an asphalt coated single wall welded steel tank, was found to be in fair condition with minor to moderate pitting. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

An unknown tank was found near the building where it was partially covered by the building. This tank, a welded steel tank, was found to be full of water and no product. Soil from around the fill pipe showed a BEC level of 3 ppm. Soil from near the base of the tank had a BEC level of 5 ppm.

Photos are attached to this report that provide a visual picture of the tank removal and soil conditions.

SECTION 2

Conclusions and Recommendations

2.0 Conclusions

It is apparent that overfills or spillage at the fill did occur at this facility in the past, especially on tank #3. Spilled petroleum migrated down the tank walls and remained at the tank base, which is common with the overfill situation.

It is known by a local contractor that tank #2 was a replacement for a leaking tank back in the late 1970's. The contamination observed at the base of the tank is thought to be that of the former tank leak, and not from the tank removed for this assessment.

The excavation for tank #1 was clean.

The unknown tank by the building was most likely a gasoline tank as it was substantial in size, estimated at 3000 to 4000 gallons. Being under the building, it could not be removed. Instead, the water was removed and the tank will be properly abandoned in place.

A water sample was taken from groundwater in the excavation of tank #3. This sample showed a gasoline level of 11,800 ppb based on MEDEP test 4.2.1. This is above the drinking water standards of 50 ppb. No free product was observed in the excavation.

2.1 Recommendations

Tom Varney of the MEDEP Bangor office was on-site for this removal. The facility is located amidst a basically the commercial area of the community and downgradient of any basements. The entire area is served by public utilities. As such, it is regarded as a non-sensitive area and baseline clean-up standards applied. As much soil as possible was removed from the excavation. Excavation are was limited by the proximity of a municipal parking lot and a storm drain line running at the edge of the lot. Approximately 100 cubic yards of soil was removed for later disposal at a nearby asphalt plant. With remaining contamination levels on the order of 600 to 700 ppm, a passive soil venting system was installed at the site.

The water sample showed groundwater contamination, which was suspected due to the presence of a sheen during excavation. A PVC monitoring well was constructed on the site as it was being backfilled so that future samples of the groundwater could be retrieved.

Since the area is regarded as non-sensitive, remaining contaminated soil is not an environmental concern and should be treated by the venting system. Additional groundwater work is not necessary at this time. Based on the work completed and the non-sensitive nature of the surrounding area, no other remedial work is anticipated for this site.

SECTION 3

Limitations

This report has been prepared for the exclusive use of Dave Beaumont with application to the referenced facility. This report has been prepared to conform with the site assessment requirements of the Regulations for Registration, Installation, Operation, and Closure of Underground Storage Facilities, Chapter 691. The conclusions are based on the scope of work performed and the conditions at the site at the time of the assessment. No other warranty, expressed or implied, is indicated.

The scope of this investigation has been limited to the items specifically discussed in the text of this report. Recommendations contained in this report are based substantially upon information provided by others regarding the site and our findings during the physical site assessment. Should any additional data or information become available, it should be reviewed by Millett Associates and the conclusions and recommendations presented in this report modified.

This report cannot reflect undetected variations which may occur nor can it reflect variations of subsurface conditions (groundwater quality or elevations) over time. Millett Associates has made no attempt to verify the compliance of the past or present owners and/or occupants of the property with local, state, or federal laws.

It must be noted that our findings do not represent scientific certainties and are based on professional judgment. Millett Associates does not represent that the subject site contains no hazardous substances or other latent conditions beyond that detected or observed by Millett Associates during this assessment.

Photo 1: Facility as seen at rear looking toward Main Street.

Photo 2: Tanks 3 (foreground) and 4. Note gray stained contaminated soil near fill pipe.

Photo 3: (turn picture vertically) Soil conditions. Note fill material over till.

Photo 4: Tank #1 as removed.

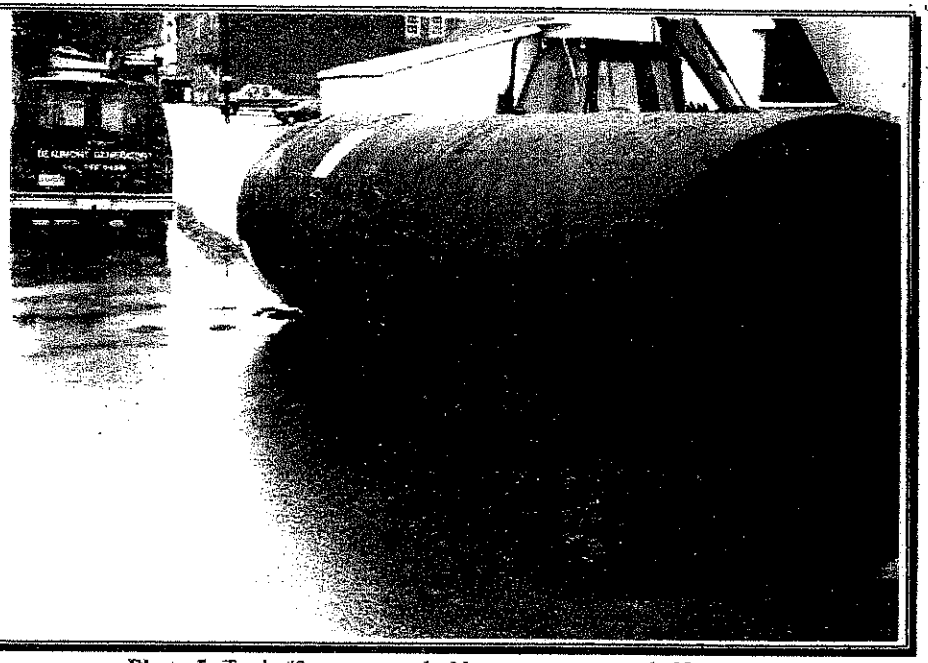


Photo 5: Tank #2 as removed. Note rust on upper half.

Photo 6: Tank #3 as removed.

Photo 7: Unknown tank found near building relative to tank #3.

B-064-94

In the Autumn of 1993, the State Fire Marshal's office had ordered Ralph Bragdon to dismantle two above ground oil storage facilities, one in Millinocket, and the other in East Millinocket. Bragdon hired PDSI of Dover, N.H. to do the work , and by freeze-up, the tanks were cut up and disposed.

Since Bragdon seemed to be in a compliance mode, I thought I'd try to get him to remove the abandoned tanks at Dave's Auto Repair on Main St. in East Millinocket, another of his properties. On February 2, 1994, I tracked him down at his residence and got him to sign an initial clean-up agreement, promising to take the tanks out by June 1.

The removal occurred on May 6, with Dave Beaumont as the licensed installer, and Mike Millett as the site assessor. (See attached site assessment)

Three tanks were removed in all. During the digging a fourth, unknown tank was encountered. Since that tank extended partially under the building, I gave permission to fill it in place.

No extensive contamination was encountered until tank #3 was removed. Soil that could be expeditiously removed was trucked to Tilcon in Medway, to be made into asphalt. Because of groundwater in the hole, and the close proximity of a storm drain line, a passive soil vent system was installed early the following week, by Dave Beaumont.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-402-2006**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT F SHANNON
Primary Product: Diesel {29} - 4 gals. ESTIMATE
Subject/Owner: DEAD RIVER CO - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Underground Storage Tank {TU}
Cause: Mechanical Failure - Piping/Hose {06}

Spill Date/Time

07/14/2006 09:00

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

07/14/2006 09:45

Subject/Owner (Potential Responsible Party)

Contact: --DEAD RIVER CO
55 BROADWAY
BANGOR ME 04402 USA
207-947-8641

Comment:

Reporter

Contact: PAUL BROWN-MANAGER-DEAD RIVER CO
MAIN ST
EAST MILLINOCKET ME 04430 USA
207-723-5151

Comment:

Primary Responder and Other Employees

ROBERT F SHANNON (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type: Terminal - Service Station {SS}
Name: DEAD RIVER OIL CO
Street Address: MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Underground Tank(s) Involved-13355

III. CLEANUP

Product Reported

Diesel {29}

Cleanup DTREE

Products Found/Amount Spilled

Diesel {29}/ - 4 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 30 lbs. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

Pine Tree Landfill

IV. NARRATIVE

On 7/14/06, I received report of four gallons of diesel fuel spilled onto the asphalt parking lot of the Dead River fueling station on the Main Road. The spill was caused by the rupture of the fuel supply line from the dispenser to the nozzle. The pump was shut off and the fire department was notified. Upon arriving, the Fire Department applied approximately 30 pounds of speedy dry to the spill area, absorbing the liquid product that did not seep into the asphalt.

The ruptured hose was replaced and all of the speedy dry was bagged for disposal at Pine Tree Landfill. Public water is provided to public.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0420 - 98

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): DEAD RIVER COMPANY

Address: MAIN ST Town: EAST MILLINOCKET

State: ME Zip Code: 04430 Telephone: (207) 746-3819 Ext:

Comments: LOOSE FITTING ON TANK TOP VOIDS PRECISION TEST

LOCATION / FACILITY INFORMATION

Name of Spill Location: DEAD RIVER COMPANY

Address: MAIN ST Location ID: 28980

Minor Civil Division: **EAST MILLINOCKET** Local Name:

Latitude N: 45 37 31 Longitude W: 68 34 32

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 0.00 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 23 (Table B) Product Actually Found: 00 (Table B)

Date Of Spill: Time Of Spill:

Date Reported: June 30, 1998 Time Reported: 2235

Cause: 0 (Table C) Detection Method: 6 D (Table D)

Incident Code: C - SS - N - U (Table E)

Response Time Involved: 4.2 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **VARNEY, THOMAS** TWV MFM

REPORTING INFORMATION

Name(Last, First, MI): DEAD RIVER COMPANY

Address: MAIN ST Town: EAST MILLINOCKET

State: ME Zip Code: 04430 Telephone: (207) 746-3819 Ext:

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.00 G Method: K (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: D-Tree Date:

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info:

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number: 13355 Number of Tanks Abandoned:

NARRATIVE

Unable to get the tanks to pass the annual SIA at this station, Dead River commissioned TANKNOLOGY to perform a precision test on them. The super tank couldn't pass the precision test, and the technician judged it to be leaking in the upper 25% of the tank. Dead River shut that tank down, and on July 1 I met Alan Ingraham and Warren Overlock on site.

The piping at this station had been replaced the previous winter by G.R. Adams. It was decided among the three of us that Adams would be contacted to test the piping by pressurizing it with helium , then using a meter to detect helium leaking from the pipes.

In fact, the test never occurred, because Adams found a loose fitting,associated with the submersible pump, inside the secondary containment sump atop the tank. That fitting was tightened, of course, and on 7/20, I asked that Dead River conduct another precision test on the tank. (Butch Furrough is of the opinion that the tank is tipped, and although the fittings are tight, still won't pass its SIA.)

LEGEND

- Population Center
- State Route
- Town, Small City
- Street, Road
- Major Street/Road
- State Route
- Railroad
- River
- Open Water
- Utility (powerline)

Scale 1:15,625 (at center)

1000 Feet

500 Meters

Mag 15.00
Wed Jul 08 16:30:12 1998

Map From DeLorme MapExpert
Freeport, ME

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0652 - 97

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): DEAD RIVER OIL CO.

Address: POB 1427 Town: BANGOR

State: ME Zip Code: 04402-1427 Telephone: ( ) - Ext:

Comments: GAS CONTAMINATED SOIL AT GAS STATION

LOCATION / FACILITY INFORMATION

Name of Spill Location: E MILLINOCKET EXXON

Address: MAIN ST Location ID: 28297

Minor Civil Division: EAST MILLINOCKET Local Name:

Latitude N: Longitude W:

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 0.99G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 20 (Table B) Product Actually Found: 20 (Table B)

Date Of Spill: Time Of Spill:

Date Reported: November 12, 1997 Time Reported: 1155

Cause: 18 (Table C) Detection Method: 6 H (Table D)

Incident Code: C - SS - L - U (Table E)

Response Time Involved: 6.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) LUCE, DARRYL

REPORTING INFORMATION

Name (Last, First, MI): FURROUGH, CLYDE-G.R. ADAMS

Address: 1185 HAMMOND ST Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 942-9573 Ext:

Spill Number: B - 0652 - 97

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.99 G Method: G (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: B1 D-Tree Date:

Contaminated Soil: 38.99 Y (Cubic Yards or Tons)

Disposal Info: stock piled under plastic for spring disposal

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number: 13355 Number of Tanks Abandoned:

NARRATIVE

Mr. Furrough called to report contaminated soil found while relocating piping at the E. Millinocket Exxon. This was in an area not presently occupied by piping or tanks so we don't know how the contamination got there. The site is baseline 1, and at the level contaminated, the soil, did not need removal. However, since the new piping could not use the native soil it had to be removed and handled accordingly. Being mid-November, landspreading was not a current option nor was the local batch plant. It was decided to stockpile the dirt at the Dead River bulk plant in Millinocket and dispose of it this spring.

B-652-97

MILLINOCKET

LAND SPREADING AGREEMENT FORM

DARRYL LUCE has inspected the proposed land spreading
(Name of Inspector)
site at DEAD RIVER CO., MILLINOCKET FACILITY, 795 CENTRAL ST
(Location of Site)
in the Town of MILLINOCKET, Maine.
(Name of Town)

The site named above has been found satisfactory for land spreading in accordance with Department Land Spreading Guidelines (attached). Limitations to this agreement are listed below.:

APPROXIMATELY 38 CUBIC YARDS OF GASOLINE CONTAMINATED SOIL

STANDARD GUIDELINES

I, Alan G Ingraham of Dead River Company
(Company Representative) (Company Name)
agree to abide by the attached guidelines and limitations outlined above in spreading oil contaminated soil on the site identified above. I further agree to abide by all Local, State and Federal codes, regulations, and laws. The site will be open to inspection by DEP personnel for the duration of the Land Treatment process. I further acknowledge that my company bears the full responsibility for all operations on and at this site and that my company will notify the town of our operation by sending them the PINK copy of this Agreement Form within seven (7) days.

Alan G Ingraham
Company Representative

10/09/98
Date signed

White - Company Rep. Canary - DEP Rep. Pink - Town

DARRYL LUCE 941-4625
ME DEP
106 HOGAN RD
BANGOR, ME. 04401

East Mill Underground Storage Tanks

16697*01/24/1990*OIL & PAINT SHOP*MAIN ST*EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO
LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430*
*2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*1*2000*ACTIVE*ACTIVE* * *12/01/1989*12/01/1989*DOUBLE-
WALLED CP STEEL*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT
ELEC MON*BELOWGROUND*Y*1*UNLEADED
GASOLINE*SUCTION*SUCTION*12/01/1989*F/GLASS -
PETROLEUM*2000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION
SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*12/01/1989*DROP_TUBE*DROP
TUBE*06/04/2010*45.62242168*-68.57165467

13518*05/21/1987*E MILLINOCKET MILL STR PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO
LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430*
*2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*1*20000*ABANDONED_IN_PLACE*ABANDONED IN PLACE* *
*01/01/1986*01/01/1955*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*20000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN
PLACE*01/01/1986*UNKNOWN*UNKNOWN* **

13518*05/21/1987*E MILLINOCKET MILL STR PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO
LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430*
*2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*2*20000*ABANDONED_IN_PLACE*ABANDONED IN PLACE* *
*01/01/1986*01/01/1955*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*20000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN
PLACE*01/01/1986*UNKNOWN*UNKNOWN* **

13057*03/24/1987*E MILLINOCKET WAST TREAT FAC*TREATMENT PLANT RD*EAST
MILLINOCKET*EAST MILLINOCKET*2077463376*TOWN "&" SCHOOL*N* *N* *N* *N*
EAST MILLINOCKET TOWN OF *53 MAIN ST*EAST MILLINOCKET*ME*04430*
*2077463376*EAST MILLINOCKET TOWN OF* *53 MAIN ST*EAST
MILLINOCKET*ME*04430* *2077463376*1*2000*ABANDONED_IN_PLACE*ABANDONED
IN PLACE* * *06/14/2000*08/01/1985*F/GLASS SINGLE-
WALLED*MANUAL_GROUNDWATER_SAMPLE*MANUAL GROUNDWATER
SAMPLING*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN* *GALVANIZED
STEEL*2000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN
PLACE*06/14/2000*UNKNOWN*UNKNOWN* *45.62077194*-68.56715405

12859*03/11/1987*EAST MILLINOCKET TREAT PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *Y*NEAR PUBLIC WATER*N* *N* *GREAT
NORTHERN PAPER INC* *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*1*1000*REMOVED*REMOVED* *
*12/01/1991*01/01/1974*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*1000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*12/01/1991*UNKNO
WN*UNKNOWN* **

12859*03/11/1987*EAST MILLINOCKET TREAT PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *Y*NEAR PUBLIC WATER*N* *N* *GREAT
NORTHERN PAPER INC* *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*2*1000*REMOVED*REMOVED* *
*12/01/1991*01/01/1974*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*DIESEL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*1000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*12/01/1991*UNKNO
WN*UNKNOWN* **

9473*11/06/1986*E MILLINOCKET MAINT GARAGE*EAST MILLINOCKET
MILL*MILLINOCKET*MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N*
GREAT NORTHERN PAPER INC *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*1*6000*REMOVED*REMOVED* *
*11/01/1987*01/01/1979*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*WASTE OIL/USED MOTOR
OIL*UNKNOWN*UNKNOWN* *GALVANIZED
STEEL*6000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*11/01/1987*UNKNO
WN*UNKNOWN* **

East Mill Up-Gradient Abutting USTs

13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*1*10000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*UNLEADED GASOLINE*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBLE DOUBLE-WALLED PIPING*10000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*DROP_TUBE*DROP TUBE*11/24/2010*45.62564123*-68.57684228
13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*2*10000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*PREMIUM UNLEADED*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBLE DOUBLE-WALLED PIPING*10000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*VENT_BALL*VENT BALL*11/24/2010*45.62564123*-68.57684228

13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*3*4000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*DIESEL*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBL E DOUBLE-WALLED PIPING*4000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*VENT_BALL*VENT BALL*11/24/2010*45.62564123*-68.57684228

19163*09/12/1995*EMERY LEE & SONS INC*RT 157*EAST MILLINOCKET*EAST MILLINOCKET*2077465548*COMMERCIAL*N* *N* *N* *N* *EMERY LEE & SONS* *PO BOX 605*MEDWAY*ME*04460*0390*2077465548*LEE, EMERY J JR* *HCR 69 BOX 739*MEDWAY*ME*04460* *2077465548*1*8000*ACTIVE*ACTIVE* * *07/26/1995*07/26/1995*JACKETED TANK - DOUBLE-WALLED*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*Y*1*DIESEL*SUCTION*SUCTION*07/26/1995*F/GLASS - PETROLEUM*4000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*07/26/1995*DROP_TUBE*DROP TUBE*09/30/2010*45.63224097*-68.59365043

19163*09/12/1995*EMERY LEE & SONS INC*RT 157*EAST MILLINOCKET*EAST MILLINOCKET*2077465548*COMMERCIAL*N* *N* *N* *N* *EMERY LEE & SONS* *PO BOX 605*MEDWAY*ME*04460*0390*2077465548*LEE, EMERY J JR* *HCR 69 BOX 739*MEDWAY*ME*04460* *2077465548*1*8000*ACTIVE*ACTIVE* * *07/26/1995*07/26/1995*JACKETED TANK - DOUBLE-WALLED*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC

MON*BELOWGROUND*Y*2*DIESEL*SUCTION*SUCTION* *F/GLASS -
PETROLEUM*4000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION
SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*07/23/1995*DROP_TUBE*DROP
TUBE*09/30/2010*45.63224097*-68.59365043

East Mill Up-Gradient Non-Abutting Tanks

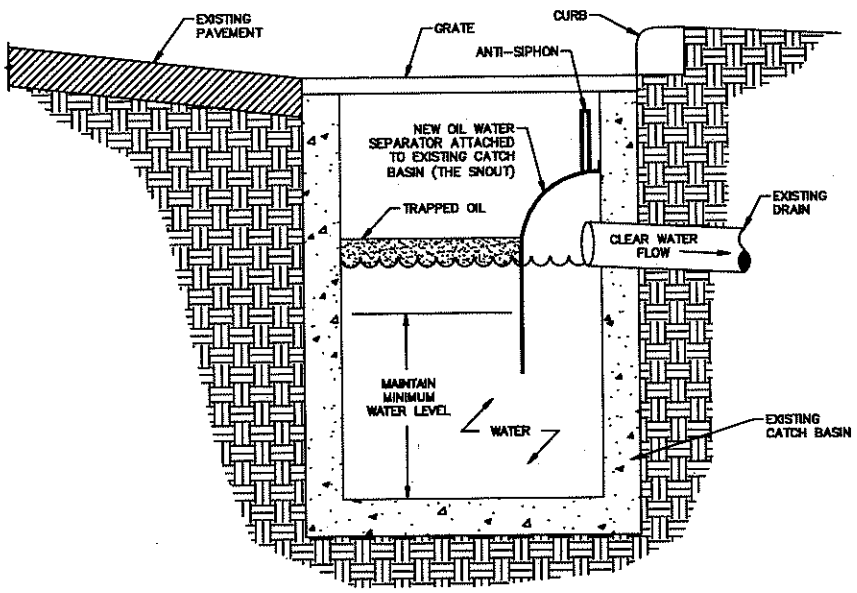
12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *1*2000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*UNLEADED GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*2000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* *45.62619236*-68.57670464

12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *2*4000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*REGULAR GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*4000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* **

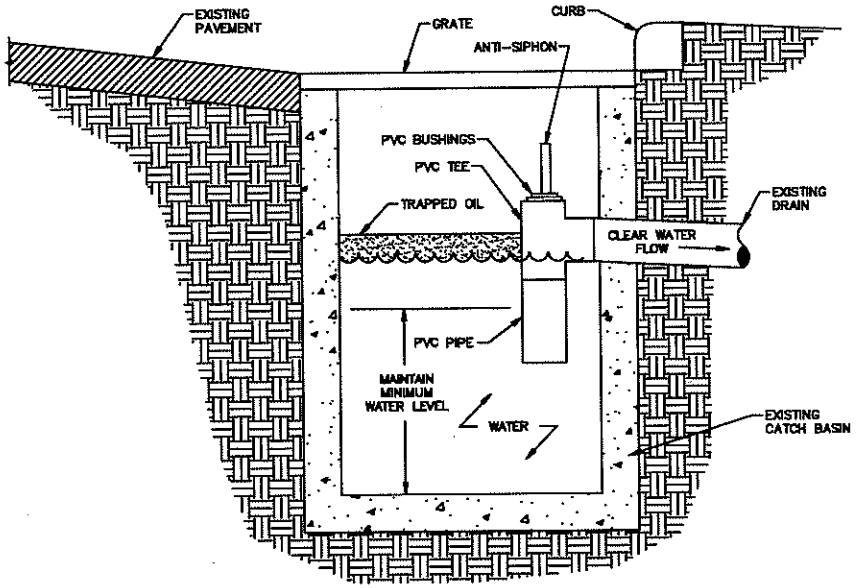
12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *3*4000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*UNLEADED GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*4000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* **

21344*10/17/2007*DYSARTS - EAST MILLINOCKET*2 INDUSTRIAL DRIVE*EAST MILLINOCKET*EAST MILLINOCKET*2079424878*PRIVATE FUELING *Y*NEAR PRIVATE WATER*N* *N* *N* *DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*1*20000*PLANNED*PLANNED FOR INSTALLATION* * *09/19/2007*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*NONE*NONE*ABOVEGROUND*N*1*DIESEL*SUCTION*SUCTION*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*12000*NONE*NONE*ABOVEGROUND*PLANNED*PLANNED FOR INSTALLATION*09/19/2007*ELECTRONIC*ELECTRONIC* *45.63484936*-68.59786148

21344*10/17/2007*DYSARTS - EAST MILLINOCKET*2 INDUSTRIAL DRIVE*EAST MILLINOCKET*EAST MILLINOCKET*2079424878*PRIVATE FUELING *Y*NEAR PRIVATE WATER*N* *N* *N* *DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*1*20000*PLANNED*PLANNED FOR INSTALLATION* * *09/19/2007*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*NONE*NONE*ABOVEGROUND*N*2*DIESEL*SUCTION*SUCTION*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*8000*NONE*NONE*ABOVEGROUND*PLANNED*PLANNED FOR INSTALLATION*09/19/2007*ELECTRONIC*ELECTRONIC* *45.63484936*-68.59786148



OIL TRAP USING THE SNOUT



OIL TRAP USING PVC

MAINE DEP REMEDIAL SITES LIST

REM00514	MAINE LEATHERS COMPANY	117 VAUGHN ROAD	UNCONTROLLED SITES	45.18282692	-69.21770388	Unknov	Investigation in Progress
REM00514	MAINE LEATHERS COMPANY	117 VAUGHN ROAD	BROWNFIELDS	45.18282692	-69.21770388	Unknov	Investigation in Progress
REM01744	MOOSEHEAD MANUFACTURING	5 EAST MAIN STREET	VRAP	45.18376164	-69.23068783	True	No Further Action
REM01744	MOOSEHEAD MANUFACTURING	5 EAST MAIN STREET	BROWNFIELDS	45.18376164	-69.23068783	True	No Further Action
REM01812	TOWN GRAVEL PIT	GRAVEL PIT ROAD	UNCONTROLLED SITES	45.14880357	-69.24462124	Unknov	Remediation Needed
REM00515	VARNUM CATTLE		UNCONTROLLED SITES	45.18511055	-69.19199767	False	Referred to Other Programs

EAGLE LAKE

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00106	EAGLE LAKE MUNICIPAL LANDFILL	CONVENT RD	LANDFILL CLOSURE	47.04059067	-68.61393358	Unknov	Operation and Maintenance

EAST MACHIAS

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00107	EAST MACHIAS MUNICIPAL LANDFILL	DUMP ROAD	LANDFILL CLOSURE	44.73480344	-67.38137844	True	Operation and Maintenance
REM01935	EMARC	WILLOW STREET	VRAP	44.73525400	-67.39145382	Unknov	In Review
REM01959	G.E. GODING	888 EAST MAIN STREET	VRAP	44.72235788	-67.41544317	Unknov	In Review

EAST MILLINOCKET

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM01575	EAST MILLINOCKET BARK PILE	ROUTE 11/ROUTE 157	VRAP	45.62508828	-68.58562315	True	No Further Action
REM00108	EAST MILLINOCKET MUNICIPAL LANDFILL	CHURCH ST.	LANDFILL CLOSURE	45.63247958	-68.58896049	True	Operation and Maintenance
REM01454	GREAT NORTHERN ASSETS	KATAHDIN AVENUE	VRAP	45.64546788	-68.70757353	True	No Further Action
REM00517	GREAT NORTHERN PAPER MILL #2	MAIN STREET	UNCONTROLLED SITES	45.62231648	-68.57425615	Unknov	Referred to Other Programs

EASTBROOK

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00109	EASTBROOK MUNICIPAL LANDFILL	RT 200/EASTBROOK RD.	LANDFILL CLOSURE	44.64861746	-68.26609030	Unknov	Operation and Maintenance

EASTON

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00110	EASTON MUNICIPAL LANDFILL	HOULTON RD (RT 1A & 165)	LANDFILL CLOSURE	46.65652190	-67.86723193	True	Operation and Maintenance
REM01971	GAGNON PROPERTY	324 STATION ROAD	VRAP	46.66260304	-67.91073633	Unknov	In Review
REM01764	MCLEANS AUTO PARTS	251 & 252 STATION ROAD	VRAP	46.65763576	-67.91098816	False	No Further Action
REM01717	MCPHERSON PROPERTY	369 STATION ROAD	VRAP	46.66368148	-67.91001407	False	No Further Action
REM00518	VAHLSING WAREHOUSE	STATION ROAD	UNCONTROLLED SITES	46.66368868	-67.90507427	False	Investigation Needed

Disclaimer: Despite our efforts to be accurate, this report may contain errors. This report is presented with a good-faith representation that the information provided herein is generally reliable. Data contained in this report does not include all programs within the Department that apply Institutional Controls. Information in this report is not valid for legal purposes. If you need further information, please contact Nick Hodgkins at (207) 287-4854.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ENVIRONMENTAL SERVICES DIVISION
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

October 1, 1991

Mr. Raymond H. Tucker
Vice President
Great Northern Nekoosa Corporation
Katahdin Avenue
Millinocket, Maine 04462

Re: Removal Action at Great Northern Sites,
East Millinocket, Maine
EPA Docket No. TSCA-I-89-1041

Dear Mr. Tucker:

This letter regards completion of the removal action referenced in the Consent Agreement and Final Order ("Agreement"), EPA Docket No. TSCA-I-89-1041. The Respondent to the Agreement is Great Northern Nekoosa Corporation ("Respondent"). The removal action was performed at the Great Northern No. 5 Paper Machine Site, No. 6 Paper Machine Site, and the Chemi-Groundwood Site ("Sites"), all of which are located at Great Northern's East Millinocket, Maine facility.

EPA has received the final removal work report ("Report") entitled "Report of PCB Cleanup Activities and Groundwater Monitoring" prepared by Stone & Webster Engineering Corp. and dated March 1991. In accordance with paragraph 23 of the Agreement, EPA conditionally approves the Report. Final approval of the Report is contingent upon receipt by EPA of amendments to the Report that Respondent has agreed to make pursuant to EPA comments.

Based upon currently available information, including representations made in the Report and other deliverables and information submitted by and on behalf of the Respondent, the actions taken at the Sites have reduced the immediate potential for direct contact with contaminated surface and near-surface soils and decreased the potential for migration of contaminants to the West Branch of the Penobscot River. Additionally, based on representations made by or on behalf of Respondent, actions taken with respect to the contaminated brick wall at the No. 5 Paper Machine Site appear to minimize the threat of direct contact with contaminants from that source. Finally, data from the groundwater monitoring network provided to EPA by the Respondent indicates that the Town of East Millinocket is hydraulically upgradient of the contaminant source, indicating that it is unlikely that drinking wells located within the town would be affected by contamination identified at the Sites.

Based upon the above, EPA has concluded that the necessary action has been taken to mitigate the public health hazards and threats and other threats posed by the Site, as set forth in the Action Memorandum dated August 7, 1989.

Please be advised that this determination does not constitute a release from liability, covenant not to sue, or waiver of any claims which EPA may have against the Respondent, other than such liability as is otherwise released in the Agreement.

Sincerely,

Arthur Wing
On-Scene Coordinator

cc: Mary Dever, EPA Enforcement Coordinator - ESD
Kathleen E. Woodward, EPA Assistant Regional Counsel - ORC
Gregory Dain, EPA Assistant Regional Counsel - ORC
Daniel E. Boxer, Esq. - Pierce, Atwood

APPENDIX G

S.W.COLE ENGINEERING INC.

Our Clients Make Better Decisions
From the Ground Up.

Aleita M. Burman, C.S.S., L.S.E.
Senior Wetland Scientist
Ecological Team Leader

Education:
B.S. Natural Resources, Soil and Water Conservation, University of Maine

A.A.S. Ecology and Environmental Science, Paul Smith's College

Registrations:
Maine Licensed Site Evaluator

Maine Certified Soil Scientist

New Hampshire Certified Wetland Scientist

Specialized Training:
Maine DEP Basic Erosion Control Practices

Certified Onsite Subsurface Wastewater Disposal System Inspector

Affiliations:
Maine Assn. of Site Evaluators (MASE)

Maine Assn. of Wetlands Scientists (MAWS)
- Legislative Committee Member, 2010 to present

Maine Assn. of Professional Soil Scientists (MAPSS)
- Membership Chair, 2003-04
- Vice President, 2001-02
- Treasurer, 1999-2001

Civic Activities:
Orrington Planning Board, 1998-2000; Committee Chair, Pack 44 Orrington Cub Scouts, 2008-2011

BANGOR OFFICE

Lee Burman was born in Syracuse, New York and grew up in the Syracuse area. Lee's choice of careers is no surprise. She was raised in rural upstate New York exploring the hundreds of acres of surrounding farmland and woods, collecting fossils, gardening and spending time in the woods and water. She graduated from Paul Smith's College in Paul Smiths, New York, earning an A.S. in Ecology and Environmental Science, and from the University of Maine, earning a B.S. in Natural Resources. Lee has lived in Maine for more than 20 years.

Lee joined S. W. Cole Engineering, Inc. in 1997. She is a Maine certified soil scientist and licensed site evaluator, and a New Hampshire certified wetland scientist. Lee has more than 19 years of environmental science experience, encompassing wetland science, soil science, soil site evaluation, regulatory compliance and permitting, biological assessment, wildlife assessment, forestry, air and water quality testing, radon testing and asbestos abatement. Her wetland science experience includes more than 14 years of guiding clients through the development process, including identification of protected natural resources, avoiding and minimizing resource alterations, compliance with resource regulations and obtaining resource alteration permits when required.

In addition to her vast knowledge of wetland science, Lee has extensive experience in fieldwork to identify wetlands, streams, vernal pools and other protected natural resources, resource reporting, wetland functional assessments, vernal pool assessments, dredge assessments, wetland restoration planning and wetland mitigation planning. She has prepared and submitted resource alteration permit applications to, and worked with, the Maine Department of Environmental Protection, U.S. Army Corps of Engineers, New Hampshire Department of Environmental Services, and Maine Land Use Regulation Commission. Lee also speaks on wetlands, permitting and vernal pools.

Lee's career is the culmination of her many lifetime experiences and interests. She enjoys her job because of the mix of science and people – the science is interesting and compelling, and she also enjoys speaking with and working with people daily. Lee's personable approach, organizational skills and knowledge of wetlands and soils issues and regulations are often recognized by our clients.

Outside of work, Lee enjoys spending time with her family and exploring the world outside. Lee has also worked as a professional vocalist for many years.

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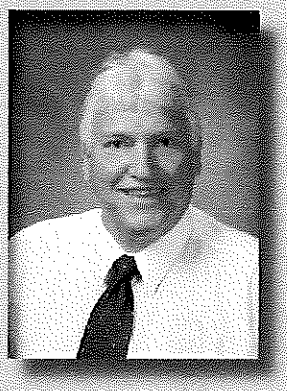

Thomas A. Trainor, P.G., E.A.C.
Senior Environmental Geologist

Education:
B.A., Environmental Science / Geology, Colby College

Graduate Courses in Geotechnical Engineering University of Southern Maine

Registrations:
Professional Geologist (P. G.), New Hampshire (#466)

Nat. Society of Environmental Consultants (EAC #3545)

Licensed Asbestos Inspector, Maine (#AI-0432) and New Hampshire (#0245-I)

Certifications:
OSHA 40-Hour Health and Safety Course

Certified 24-hour Asbestos Inspector

Certified Maine Environmental Specialist, Oil and Hazardous Materials Specialist, Geologic Technician

Tom Trainor is a professional geologist, a certified environmental assessment consultant and a licensed asbestos inspector. Over the past 20 years, he has fuctioned primarily as an environmental geologist and project manager. His experience includes environmental and geotechnical field investigations; environmental site assessments; borehole advancement and well installation; contaminated media sampling including air, groundwater, surface water, sediment and soil and soil vapor; storm water pollution prevention plans; erosion and sedimentation control plans; spill prevention plans; and remedial action plans.

A native of Maine, Tom was raised in Cumberland and graduated from Greely High School. After receiving his bachelors degree in environmental science and geology from Colby College in Waterville, Tom went to work for the marine division of Western Geophysical Company of America. He started as a technician, working on the back deck of seismic research boats, and worked his way to marine geophysical supervisor in charge of several 200-foot-long, state of the art seismic data acquisition boats. Over the course of his career with Western Geophysical, Tom worked in the Atlantic Ocean, the Gulf of Mexico, the Pacific Ocean and the Arctic Ocean as well as in Alaska, British Columbia, the Northwest Territories, ther Panama Canal, South America, and the west coast of Africa.

Recently, Tom has worked as both lead geologist and project manager on a fuel oil company site in Maine with gasoline and diesel fuel free product contamination left onsite by a former owner via unreported leaking underground storage tanks. On this project, Tom conducted Phase I and Phase II environmental site assessments, and advanced soil borings and probes, and he also completed groundwater monitoring well installations, magnetometer surveys, test pit investigations, floor drain and septic system investigations and remedial skimmer pump installations and operations for automated petroleum free product removal. He also conducted soil and groundwater sample and laboratory analysis programs and implemented an aerobic microbe bioremediation slurry injection program.

Tom's project experience also includes:

Senior Geologist and Project Manager conducting ASTM Phase I and Phase II environmental site assessments for Maine financial instutions seeking to limit their environmental risk exposure.

Environmental Control Manager for lead- and polychlorinated biphenyl-containing paint removal operations from 62 United States Navy very-low frequency (VLF) submarine communication towers in Cutler, Maine.

Environmental Management Inc.

51 River Road Brunswick, Maine 04011
(207) 729-7549

This is to certify that:

Thomas Trainor

Has completed the requisite 4-hour refresher training, and has passed an examination for reaccreditation as an:

Asbestos Inspector

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646
and Maine State Regulations 06-096 CMR 425.8 (E)

April 5, 2011

4/5/2011	100	4/4/2012
Examination Date	***Test Score***	***Expiration Date***

	AI-R-TP0018-11-0201
President / Director of Training	***Certificate Number***

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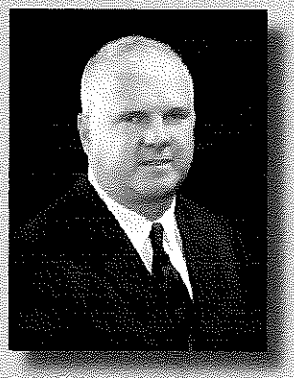


Gary W. Bucklin, C. G.
Director of
GeoEnvironmental Services
Senior Geologist

Education:
B.A., Earth Science
University of Southern Maine

Registrations:
Maine Certified Geologist

New Hampshire Professional Geologist

Certifications:
Certified Nuclear Densometer Operator

OSHA 40-Hour Hazardous Waste Site Worker Course

OSHA 8-Hour Hazardous Waste Supervisory Course

Qualifications:
Third Party Erosion Control Inspection Qualified

Affiliations:
Geological Society of Maine

Maine Mineral Resources Assn.

National Groundwater Assn.

New Hampshire Council of Professional Geologists

GRAY OFFICE

Gary Bucklin is a native of Durham, Maine. He attended schools in Durham and Freeport and graduated from the University of Southern Maine, earning a B.A. in Earth Science. After college, he went to work for Maine Electronics, a circuit board manufacturing plant, and then worked as a technician in construction materials testing for seven years. Gary's interest in geology began as a hobby before it became his career. He has been a rockhound, collecting rock specimens and gems in the hills and mountains of western Maine, for many years.

Gary is known to S. W. Cole Engineering, Inc. clients for his personable, down-to-earth approach and strong work ethic. He joined S. W. Cole Engineering, Inc. as an engineering technician in November 1990. He was reassigned to the position of environmental scientist in March 1993, as a project manager in 1996, geologist in 1997 and senior geologist in 2001. His responsibilities include providing services related to gravel pit permitting, Phase I and Phase II environmental site assessments, underground storage tank site assessments, groundwater monitoring and soil sampling, coordinating and monitoring of soil borings, soil gas probe surveys and test pits, and report preparation.

Gary has over seven years prior experience in the construction materials testing field including owners representative responsibilities with a variety of projects such as landfills, wastewater treatment facilities, commercial buildings, and schools. Environmental projects have included a CERCLIS manufactured gas plant site, waste processing facilities, industrial facilities, large tract timberlands and UST sites in Maine, New Hampshire, Massachusetts, New York, Rhode Island and Vermont. He has worked on projects in the MDEP VRAP program, and served as the project manager for two brownfields projects and seven third-party erosion control projects in Maine.

Gary serves as the corporate health and safety officer for S. W. Cole Engineering, Inc. He is the director of geoenvironmental services for the company and has served on the Board of Directors since 2008. A licensed geologist in both Maine and New Hampshire, Gary has numerous certifications and qualifications and is a member of several local and national geological societies.

Specialized Training:

- NGWA Groundwater Exposition, Las Vegas, NV, December 2002
- NGWA Groundwater Exposition, Nashville, TN, December 2001
- NGWA Assessment & Management of MTBE Impacted Sites Conference, Portland, ME, June 1999

SPCC PLAN COVER SHEET

Applicability

Attached is a copy of an SPCC Plan for the East Millinocket facility of Great Northern Paper Company LLC. By virtue of the quantity of petroleum products stored and used at its facilities, Great Northern Paper Company LLC is required to implement an SPCC Plan meeting the requirements for such a plan contained in 40 CFR, Part 112 . This plan is submitted to meet those requirements.

Certification

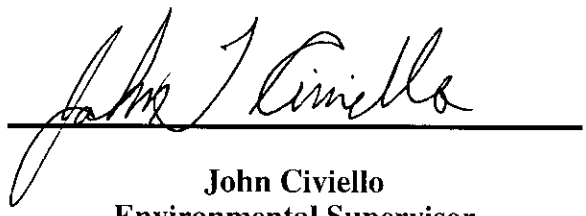
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate and complete.

Signature: John Civiello Date: 9-25-13
Name: John Civiello Title: Environmental Supervisor

Signature: Willis Blevins Date: 9-21-13
Name: Willis Blevins Title: Director of Operations

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) PLAN

Prepared by:



John Civiello
Environmental Supervisor

Approved by:

Willis Blevins
Director of Operations

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INTRODUCTION

INTRODUCTION

Great Northern Paper's operations rely heavily on the use of electrical and mechanical equipment, some of which contain petroleum products. In the past, some of the electrical equipment has contained PCB (Polychlorinated biphenyl), or PCB contaminated oil. Procedures for handling this material are still included in this plan, since many of the procedures also apply to hazardous wastes in general. Also, large quantities of chemicals, petroleum products and pulp slurries (stock) are stored and used in the mill. Maintenance operations within the facility covered by this plan result in the generation of used oil, which must be stored and disposed of. Miscellaneous chemical wastes are also produced by some operations and corrosive wastes are neutralized in certain operations. Because of the large quantities of these materials stored and used at the mill, a Spill Prevention, Control and Countermeasure Plan (SPCC) was established to insure that proper controls are placed on the handling of such products and that equipment necessary to protect the environment from spills is available.

It must be recognized that implementation of an SPCC Plan does not occur overnight, and, for facilities such as Great Northern Paper's, is an on-going process. Upgrading of existing containment structures and construction of new containment facilities will occur over time as needs arise. The facility Environmental Supervisor is designated as the accountable person for coordinating discharge prevention activities and maintaining and upgrading this plan. This plan will be reviewed at least annually for needed revisions and upgraded as necessary. At a minimum, a complete revision will be issued every three years. The accountable person will assure that all employees are briefed annually on their obligations under the plan and will maintain records of these briefings for at least five years.

This revision represents the latest update of this Plan first published in October, 1976. The last revision was published January 26, 2010.

Scope and Applicability of Plan Coverage

Section 311 of the Federal Clean Water Act and State of Maine Wastewater Discharge licenses require Great Northern Paper to maintain an SPCC Plan for the East Millinocket facility. Chapter 850, Section 3 (c) (2) of the Maine DEP regulations requires reporting of spills of any quantity of hazardous material to DEP unless an acceptable SPCC Plan has been submitted to DEP for the facility. Following submittal of such a plan, this facility need only report spills of substances exceeding reporting requirements of the Federal Clean Water Act Section 311.

Maine Wastewater Discharge licenses issued by the DEP for the Great Northern Paper mill require the establishment and maintenance of a Spill Control and Response Plan for chemicals and pulp slurries.

Federal SPCC regulations at 40 CFR Part 112 require facilities storing certain quantities of petroleum products to establish and implement an SPCC Plan for prevention and control of spills of such products. In addition to the federal regulations requiring control of petroleum spills to protect surface water, State of Maine regulations require an SPCC Plan to address spills, which could impact groundwater.

The State of Maine laws and regulations which govern in-service use of PCB's, stored PCB equipment and the disposal of PCB as a hazardous waste require the company to adhere to the procedures described herein.

INTRODUCTION

This plan is intended to satisfy all of the above listed requirements.

This plan, combined with Great Northern Paper's MSDS data base, chemical unloading procedures and Pre-Emergency Planning Manuals also constitutes the Contingency Plan and Emergency Procedures required under Chapter 854 of Maine's Hazardous Waste Management Rules and 40 CFR 264, Subpart D. The controls and countermeasures in this plan are applicable to the facilities elementary neutralization units.

This plan, together with Great Northern Paper's MSDS data base, Pre-Emergency Planning Manuals and municipal and county emergency response plans constitute the East Millinocket operations' emergency response plans as required by Title 37B, M.R.S.A. Chapter 13.

FACILITIES COVERED

INTRODUCTION

Facilities Covered By This Plan

East Operation (East Millinocket)

NOTE: Figure 1 locates the facility in northern Maine

Plan Organization and Response Summary

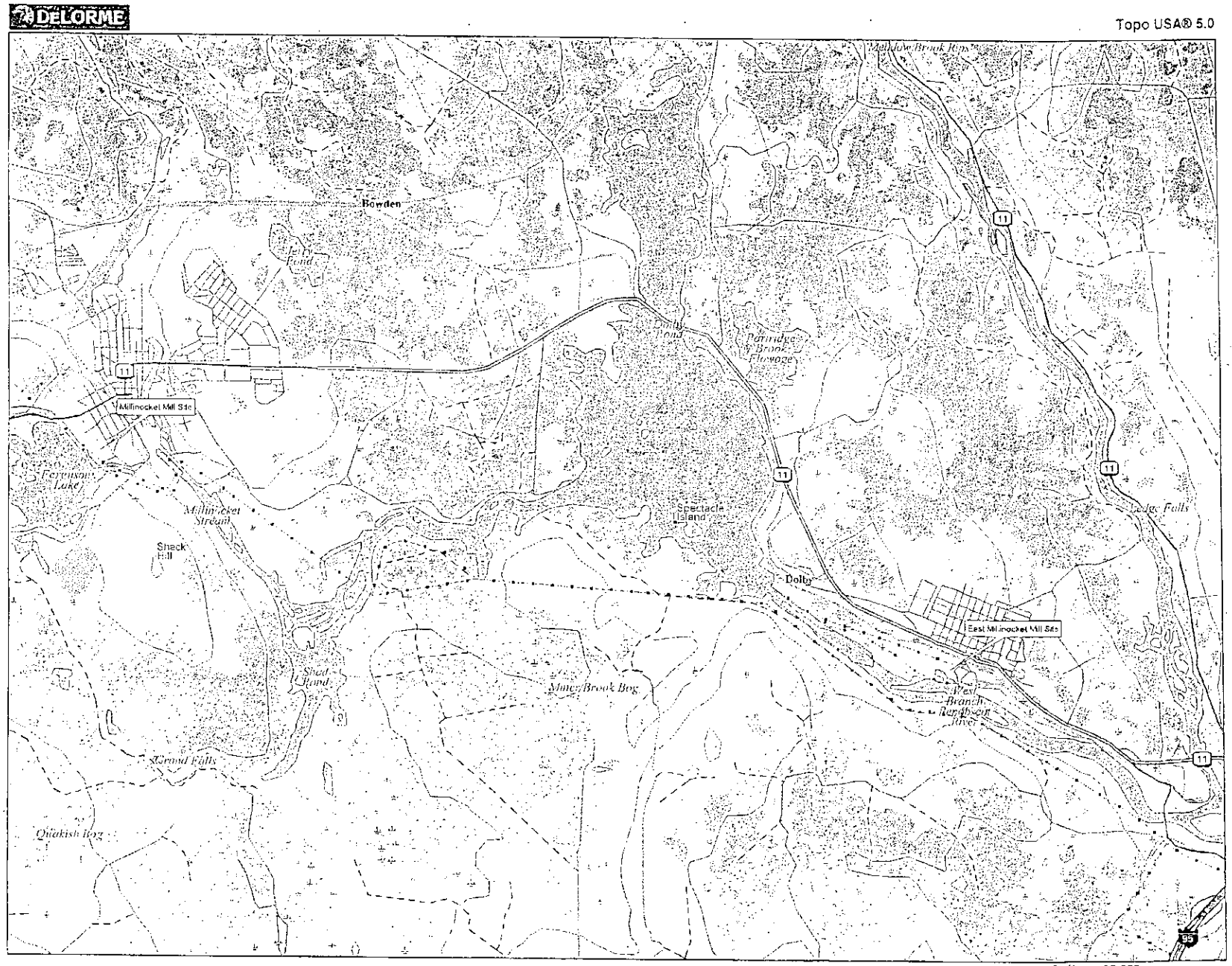
This SPCC Plan describes all Great Northern Paper locations where petroleum, process and chemical materials are stored or used. It also prescribes material handling, spill prevention, emergency response and cleanup procedures, as well as cleanup material and equipment availability and reporting procedures.

The Plan has been prepared for the primary purpose of protecting the environment and must be strictly adhered to. Any spill into the environment of mill process materials (stock and/or white water, untreated or partially treated effluent), petroleum products, chemicals, hazardous materials, corrosive or other hazardous wastes, PCB oil or PCB contaminated oil must trigger a response initiated by the supervisor or his designate, of the responsible operating department as directed within this Plan. In summary, the response procedures are:

- Take immediate steps to stop the spill and prevent it from contaminating surface water, groundwater and/or air.
- Notify the Environmental Department via Security at 723-2351 in East Millinocket as soon as possible. Environmental and Security personnel will mobilize any necessary outside resources.
- Within the constraints of available equipment, materials and trained manpower, contain and clean up the spill and properly dispose of the cleanup material.
- Take steps to prevent a reoccurrence of the spill.

Emergency spill procedures for petroleum products, hazardous materials and hazardous wastes are described in detail on Pages 12 - 15. In the event of a very large spill or particularly hazardous spill at the Great Northern Paper's mill requiring response resources beyond those described in this plan, the Penobscot County HazMat team can be accessed by Security through the local fire department by calling 911.

FIGURE 1



Revision: 07/23/07

HANDLING AND PREVENTION

MATERIALS HANDLING AND SPILL PREVENTION

Handling

1. All petroleum products, chemicals, pulp slurries, hazardous waste, PCB equipment and materials, should be considered a potential spill hazard at all times during transportation, unloading, storage and use. There are certain materials and storage locations that merit special attention. The #6 oil storage tank has a potential under worst-case conditions to release 750,000 gallons of product. This tank is contained, but in the event of containment failure, product would drain to the wastewater treatment plant by way of the process sewers. The paper machine lube systems contain approximately 25,000 gallons. These systems would drain to the wastewater treatment plant by way of the process sewers in case of a leak. Hazardous materials such as caustic soda, sulfuric acid and sodium hypochlorite as well as smaller containers of petroleum products are stored at various locations in the mill, as indicated on the inventory lists and facility diagram attached. Most of these products are within the process sewer drainage system. The inventory lists and diagrams show the specific location and volume of each.

2. When loading or unloading any product, the following should be checked:

    a. Sufficient quantities of cleanup material are readily available in the event of a spill.
    b. Piping or hose connections to and from both loading and unloading tanks are free of leaks.
    c. All emergency shutoff valves and alarm systems are operational.
    d. All valves have been secured after operation is complete.
    e. A Great Northern Paper employee oversees the hookup and disconnection of all transfer lines. The driver of any bulk delivery truck will be present the entire time chemical or petroleum product is being transferred from his truck.
    f. Some chemical tanks require an employee to physically watch the level while being filled to prevent an overflow.
    g. Unloading of Bunker C oil will be conducted only when operators are present at the oil farm.

3. Smaller containers of petroleum products (55 gallon drums) must be subject to the same precaution as larger storage containers.

4. When transferring lubricating oil, chemicals, etc., the following should be checked:

    a. Discharge container is over a proper catch basin or containment structure, as described below.
    b. Sight glass or gauge levels are appropriate and monitored to prevent overfilling of a product in a lube system.
    c. Equipment and surrounding areas are cleaned after completion of the transfer.

5. All facilities are to be equipped with clearly labeled containers for used oil. These containers are the only disposal vessel for this product. No materials (especially solvents) other than used oil are to be stored in these containers. These containers are to be kept in approved containment, as described below, or in areas draining to the mill process sewer system.

6. No used oil will be used as fuel unless it has been analyzed and found to be non-hazardous. Contaminated used oil will be manifested to a licensed waste disposal facility within 90 days of generation of a full container. A member of the Environmental Department will direct this activity.

7. Solvent or other chemical wastes will be stored only in approved, labeled containers and disposed of only at properly licensed facilities after transport under appropriate manifests. These wastes will leave company facilities within 180 days of generation of a full container.

Prevention (petroleum products, chemicals, hazardous wastes including corrosives, or stock)

1. Both above-ground and below-ground storage facilities are in use at Great Northern Paper. If a tank is underground, (see Attachment VII, Underground Tank Policy and Procedures) one of the ways to detect a leak is with a very well controlled inventory system. Operation or use of any underground tank must include continuous monitoring of the interstitial space between the two walls of the tank.

2. Approval by the Great Northern Paper's Environmental Department must be obtained prior to the installation, replacement, removal or abandonment of any underground oil storage facilities. This will insure that all of the pertinent permits have been acquired from the Department of Environmental Protection in accordance with Chapter 690, and that all of the current standards for the design, installation and operation have been met.

3. All aboveground petroleum, chemical, hazardous waste and stock storage tanks must be contained by some type of diking arrangement or another acceptable alternate provision. For large stock tanks, acceptable spill control alternates include level alarms, paved reclaim areas, etc.

    a. Outside storage tanks may be diked with earthen material, concrete or other compatible materials. Earthen dikes are acceptable provided a surveillance program is operational to insure proper dike maintenance. All earthen dikes shall be constructed of relatively impermeable soils and stable. Where earthen dikes are used, earth must not be allowed to contact the bottom of the tank such that visual inspection is hindered. All containment structures must have sufficient freeboard to contain the contents of the largest tank in the structure with an additional margin to allow for precipitation. In general, a containment is capable of holding 110% of the capacity of the largest tank is acceptable. Containment structures must be undamaged and adequately impervious to contain the material being stored. Containments, which may trap rainwater, must be provided with a means of emptying the rainwater. Drainage may only be by pumping or opening a manually operated drain valve. Drainage must be under the direction of a responsible supervisor. The supervisor must assure that the water is free of contaminant before draining and that water is drained away from flood areas. Outside storage areas for drums and totes will meet these same requirements.

    b. Inside storage tanks or drums shall be diked, fitted with overflow to sewer or otherwise protected to contain spills and direct residues to treatment. Portable tanks must be positioned such that any discharge will be directed to a process sewer or a containment device, constructed of compatible materials and must be provided with containment which is capable of containing 110% of the volume of the largest container. The facility diagram shows which areas of the mills are within areas draining to the process sewers. Storage located inside a room may be considered diked providing some provision is made to contain spills in the immediate area, such as a floor sloping away from a door or placing a stop at the entrance. Containers of hazardous waste must be diked to contain any spills. Such material will never be directed to a sewer. Any alternate form of containment must also be capable of handling 110% of the capacity of the largest tank controlled by it.

c. Plans for providing containment around aboveground storage tanks will be approved prior to construction, by Great Northern Paper's Engineer. All newly installed tanks outside areas which drain to the process sewer system must provide 110% containment of the largest vessel within containment. All containment structures will be constructed of materials compatible with the materials to be contained. After construction, and before the job is closed out, Environmental will conduct a final inspection to verify that the objectives of the plan have been met.

4. Piping to and from storage tanks must be compatible with the material being transferred and installed in a manner that will protect it from damage. Piping shall, as much as possible, be located to avoid damage from foot and vehicle traffic. If piping must be located where it could be damaged, it must be clearly marked. Pipe supports must be designed and installed to protect piping from abrasion and corrosion and to allow expansion. All newly installed buried piping must have a protective coating and be equipped with interstitial space monitoring and cathodically protected as required. The underground sections of piping for #6 Oil in East Millinocket were replaced in the 1990's. The system is double walled and equipped with interstitial space monitoring including visual and audible alarms that can be seen and heard from the Security Gate. Integrity and leak testing will be conducted on all underground piping at the time of installation. Pipes not in service shall be removed or tightly capped. Provisions shall be made to contain and collect any spillage, which might occur from unloading and transfer piping, which may be located outside containment. The only locations where there are significant runs of unloading or transfer piping are within the #6 oil system. At East Millinocket, #6 oil unloading and transfer piping is located within containment or in an area, which drains to the process sewer. Transfer piping is well protected from physical damage and in an area subject to observation by Security and operating and maintenance personnel. The locations of the #6 oil unloading and transfer piping are shown on the tank and transformer drawings.

5 #6 oil in storage tanks is steam heated through 20-foot long U tube heaters in the bottom of each tank. The condensate returned from this process is sewered to avoid contamination of the steam plant system. The condensate is monitored for evidence of major leaks, and heaters are replaced when necessary based on this monitoring.

6 The oil/water separator at East Millinocket is inspected following unloading of rail cars. There is an oil spill alarm at the #6 Oil pump house in East Millinocket. The steam plant's #6 Oil day tank is equipped with high level alarms which ring in to the Steam Plant control room, which is manned 24 hours a day. The E/I Department tests the alarms quarterly and records are maintained by the Utilities Department.

SECURITY

SECURITY

1. Security personnel, who are on duty 24-hours per day seven days per week, routinely inspect facilities to insure implementation of security measures. At any given time, two security guards are on duty, one at the guard house and one making security rounds at the facility, including storage areas for process materials, petroleum products and chemicals.

2. For those transformers located in fenced areas, gates are locked at all times. Access is controlled and allowed only via authorized personnel.

3. The master flow and drain valves and any other valves or access ports that will permit the outward flow of petroleum products, chemicals, used oils or pulp slurries from the primary or secondary containment structures to the surface shall be maintained in the closed position. Water drainage taps on the bottom of the #6 oil tanks are closed and locked when not in use. Inspections (see Inspections and Training section of this plan) shall include procedures to assure that stormwater is drained from containment whenever necessary to assure the effectiveness of the structure and that drain valves are in the closed position when draining is complete.

4. The loading/unloading connections of oil pipelines and chemical tanks are to be securely capped, blank-flanged, or consist of a normally locked valve when not in-service for an extended time. Access to these connections is controlled through the facility's security procedures and material receipt/delivery procedures.

5. Chemical and pulp storage tanks, which are located inside the mill and outside on mill property, are accessible only to authorized mill employees. Access to the property is controlled by security personnel at all times.

6. Most tanks at GNP facilities are surrounded by fencing, or, where fencing is not possible, a natural barrier such as dense woods. Location of fencing is shown on the facility diagram. An exception is the #6 Oil storage area at the East Millinocket mill, for which GNP is making an Environmental Equivalence claim. To effectively fence this area would require blocking the rail access to the unloading area as well as the main entrance to the East Millinocket mill. GNP has installed a system of two cameras mounted near the top of the steam plant precipitator building. (See East Millinocket drawing under Facilities Covered and East Millinocket Tank and Transformer Location Drawing.) This high vantage point was selected to provide a view all around the storage tank and the rail cars in the unloading area. A wireless link provides communication from the precipitator building to the Security Gate, which is equipped with a closed circuit TV monitor and is manned by on duty security personnel 24 hours a day.

RESPONSIBILITIES

RESPONSIBILITIES

1. Operating personnel are responsible for handling material in accordance with this plan and for assuring the integrity and proper operation of all spill prevention and control materials and equipment in their areas.

2. Operating foremen are responsible for reporting any spills or leaks as specified in this plan.

3. Operating foremen and personnel are responsible for implementing first response procedures as described in this plan.

4. The Environmental Department is responsible for coordination of the provisions of this plan with the operating departments, facility inspections, all agency contacts, coordination of shipments of wastes with Purchases and Stores, manifest preparation and/or tracking, inspection and approval of disposal contracts, maintenance and operation of the Spill Response Team and assuring that agreements with outside responders are maintained.

EMERGENCY RESPONSE/CLEANUP

EMERGENCY SPILL RESONSE AND CLEANUP PROCEDURES

All Spills Are To Be Immediately Reported to Security, Then To the Environmental Department

Spill Response

1. Shut off source of leak or spill.

2. In the event of a spill during transport or unloading, if the spill has escaped containment structures, contain the spill using any means available, i.e.

   a. Earthen dams
   b. Speedi-Dri
   c. Sawdust, wood chips, bark, etc.
   d. Bagged sorbent materials, sorbent booms, sorbent blanket, rags, etc.

   The Cleanup Equipment Inventory lists the location, inventory, telephone numbers and a map for cleanup materials and equipment located at Great Northern Paper installations. In addition, all vehicles transporting hazardous materials shall carry a supply of Speedi-Dri and a shovel.

3. If a product has reached surface water:

   a. Contain the product.
   b. Clean up as much as possible. Cleanup should be done only under supervision of foreman and/or the Environmental Department. Hazardous materials spills requiring assistance from outside the immediate area in which they occur must be handled by persons trained and qualified as emergency responders.

4. Immediately notify your supervisor and report the spill.

5. Supervisors shall call Security in East Millinocket at 723-2351. In the event of a transportation emergency, the driver will contact Security directly.

6. Security will record the following information:

   a. Date
   b. Time call received
   c. From whom the call was received
   d. Spill data
      (1) Time of occurrence and duration
      (2) Type of product or chemical
      (3) How much spilled (approximately)
      (4) Location of nearest body of water
      (5) Location of spill

7. Security will notify the Environmental Department, or other Spill Team Member ANY TIME DAY OR NIGHT, when a spill is reported. The Environmental Department or Spill Team may be contacted by calling one of the people on the Spill Call-in List starting with the first name. Continue calling down the list until someone is reached.

8. After the Environmental Department or Spill Team Member has been contacted, Security will record:

   a. The name of the person contacted on the Spill Call-in List.
   b. The time the person was contacted.

9. If need be, the Environmental Department contact will go to the spill site, immediately assess the situation and supervise containment and cleanup. Spill response personnel from the Penobscot County Haz-Mat team are also available by calling the local fire department at 911.

10. The Environmental Department personnel contacted by Security will make all required contacts with regulatory and emergency response agencies as spelled out in Great Northern Paper's Spill Reporting Procedure.

Cleanup

1. Use the MSDS database and the Emergency Response Guidebook For Hazardous Material Incidents as a guide in determining what actions should be taken. Available emergency response equipment is listed in the Cleanup Equipment Inventory List in this plan.

2. Assess fire or explosion potential and take the following actions as required:

   a. Evacuate personnel as necessary.
   b. Contact Plant Safety and Security Department.
   c. Fire response equipment, accessible through the Plant Engineering Department, is listed in the Cleanup Equipment Inventory List.
   d. Fire response equipment and personnel accessible through the East Millinocket Fire Department

3. Assess ventilation requirements and take the following actions as required:

   a. Open doors and windows.
   b. Evacuate personnel.
   c. Wear self-contained (positive pressure) breathing apparatus.

4. Wear appropriate protective clothing.

5. For all spills:

   a. Shut off ignition sources, no flares, smoking or flames in the hazard area.
   b. Stop the leak.
   c. Take up small spills with sand or other non-combustible materials and place in containers for later disposal.
   d. Dike around large spills.

6. Isolate hazard area and deny entry:

   a. Rope off area and label with Restricted Area tape and use appropriate signs.
   b. Allow only the necessary personnel with protective clothing and appropriate training in the work area.

7. Monitor sewer drains if the spill is inside and monitor outside drain ditches if the spill is close to an external drain or if the spill occurs outside the plant. The Facility Diagram shows where spills in various areas of the mill will flow. For any spill draining to the process sewer, the wastewater treatment plant operator must be notified immediately to increase monitoring for upsets at the wastewater treatment plant.[1] Increased monitoring may include, but is not limited to, pH and solids monitoring and visual observation.

   a. Check wells for possible groundwater contamination.
   b. Check for migration to mill sewers and water supply.
   c. As practical, prevent migration to all surface and groundwater by means of drainage ditches by the appropriate use of portable sorbent booms, bark, dirt and other available sorbents.
   d. Block all down gradient catchment basins on the plant site to prevent the spilled product from entering the stormwater drainage system.

8. Clean up the spill area using sorbent materials.

9. Establish a clean area. The clean area will have clean water, soap, disposable towels and an eyewash bottle to allow personnel to wash possible exposed areas prior to leaving.

10. Remove and isolate contaminated clothing and shoes at the site for later disposal.

11. Properly dispose of all spilled material, contaminated clothing and cleanup materials. Those materials, which qualify, must be handled as a hazardous waste. Refer to the Disposal and Storage section of this plan.

12. Take all necessary measures to prevent a recurrence.

[1] The design maximum flow capacity of the Wastewater Collection and Treatment system is 36.9 million gallons per day. That is equal to 25,625 gallons per minute. For the unloading rack area, this per minute volume exceeds the maximum capacity of the largest single compartment of a tank car/truck loaded/unloaded at the facility.

13. File an Environmental Spill Report with the Environmental Department within 24-hours of the spill.

The Environmental Department representative responding to a spill shall work closely with the appropriate government agencies during any reporting and corrective action investigations. He will advise the Mill Manager, HR manager and department superintendent of the progress and actions related to oil, hazardous material, hazardous waste, chemical or stock spills.

Following stabilization, control and cleanup of a hazardous materials incident, a complete investigation into the cause of the incident shall be conducted by the Environmental Department and, as appropriate, the Hazardous Substance Incident Commander and representatives from the State of Maine Department of Environmental Protection, Department of Transportation, the U.S. Environmental Protection Agency and the Department of Health and Human Services. Following the investigation all necessary reports shall be submitted to these local, state and federal agencies.

INSPECTIONS AND TRAINING

INSPECTIONS AND TRAINING

Employee Training

A detailed description of Great Northern Paper's chemical safety training program is contained in Great Northern Paper's Hazard Communication Program. Some training measures most directly relating to spill prevention and control are as follows. Records of training are maintained for at least five years.

1. All Great Northern Paper employees are presented a general chemical safety training program, on hire, and a refresher course annually thereafter. Included in this training is instruction on hazard recognition, who to contact in the event of a spill, and actions to be taken to contain spills, prevent injury and minimize environmental impact, until fully trained spill response personnel arrive. Spill response training is prepared and presented by the Environmental Department. Training records are maintained by the Environmental Department.

2. All Great Northern Paper supervisors are also presented the general chemical safety training program. In addition, supervisors are provided more detailed instruction on spill reporting requirements, regulations on handling and disposal of hazardous materials and hazardous wastes, including corrosive wastes, and their obligation to transmit information to their subordinates on the hazards and appropriate precautions for dealing with the specific chemicals in their area of responsibility.

3. All employees directly involved with the storage and handling of hazardous wastes are presented an annual training program, in addition to the general chemical safety training program, which details the specific spill prevention and control measures required in their job.

4. Great Northern Paper Spill Response Team members are provided detailed and extensive training to qualify them to supervise spill control, cleanup and disposal activities. This training is described in more detail in the Spill Response Team section of this plan.

Inspections

1. Inspections shall be conducted with the guidance of Great Northern Paper's Environmental Department. Area supervisors shall be responsible for assuring integrity of spill prevention and control structures on a day to day basis and for seeing that containment structures are kept free of excessive rainwater and that drain valves are closed after rainwater is removed. When preparing to drain a containment structure, the responsible supervisor will first assure that there is no visible sheen or other contamination in the water. Any contamination that is present must be removed before the containment is drained. The responsible supervisor will see that the valve is securely closed after draining. The activity will be documented and records maintained in the operating department.

2. All bulk chemical storage facilities and chemical warehouses shall be inspected annually by the Environmental Department.

3. The boiler water treatment plant waste neutralization pits and piping systems will be inspected annually by the Environmental Department. Any other elementary neutralization units will be inspected at a frequency sufficient to assure their structural integrity.

4. Weekly inspections shall be conducted at the hazardous waste storage facilities as long as Great Northern Paper qualifies as a small quantity generator (SQG). Environmental personnel will conduct the inspections, and note such inspections on the Hazardous Waste Storage Area Inspection check-sheet. Should GNP qualify as a large quantity generator, daily inspections will be required.

5. Annual inspections shall be conducted by the Environmental Department of all storage tanks containing petroleum products, chemicals and stock. Area supervisors shall monitor these same areas on a day to day basis. Inspections by supervisors shall include frequent inspections of the outsides of all tanks, containment structures, piping, including exposed sections of underground piping, and any high level alarms and automatic cutoffs. Any evidence of structural damage or product discharge shall be noted in the area log, reported to the Environmental Department and immediately corrected. At least monthly, the area supervisors, or their designees, shall document the inspection of tanks, containment and piping by completing an SPCC Facility inspection checklist and forwarding it to the Environmental Department. These documents will be kept on file in the Environmental Department files. Wastewater treatment plant operators will perform frequent observations of the waste treatment clarifiers and lagoons to assure no petroleum sheen or slick is present. Any irregularities will be recorded in the wastewater treatment plant log and reported to the treatment plant supervisor and Environmental Department. If oil is observed, the operator will immediately contact his supervisor and the Environmental Department to determine where the sheen is coming from and to see that it is corrected.

6. After an inspection has been completed by the Environmental Department, a report of the findings and any recommendations will be forwarded to the operating supervisors responsible for each area, and a copy will be filed by the Environmental Department. Copies of inspection forms for facilities and for response equipment are attached to this section. Any problems noted shall be corrected immediately. Inspections conducted by the operating departments will be documented in the department and made available for review by the Environmental Department and any regulatory authority. Reports of any non-destructive testing of tanks and piping, along with comparison records, will be maintained by the Environmental Department and made available for review on request. The most recent internal tank inspections were:

- The Day Tank for #6 oil in the Steam Plant in October of 2004.
- The 750,000 gallon #6 tank in August of 2009.
- 275 gallon kerosene tank in paper room basement in February of 2012.
- 1,000 gallon Diesel tank in Grinder Roof in February of 2012.
- 1,000 gallon Diesel tank at Wastewater Treatment Plant in February of 2012.
- 1,000 gallon #2 fuel tank at Wastewater Treatment Plant in February of 2012.
- 4,000 gallon Diesel tank in the wood-yard in February 0f 2012.

The 2.3 million gallon #6 oil storage tank was removed from service and scrapped in January of 2013.

INSPECTIONS AND TRAINING

1. A team of Spill Prevention Specialists has been assembled at Great Northern Paper to provide training in spill prevention and response and to provide assistance with spill response should a spill occur. These persons are full time employees of Great Northern Paper, and include an Environmental Department employee with overall responsibility for providing compliance assistance to the mill operating departments, monitoring to assess compliance and communicating with regulatory agencies. While on duty, these team members are immediately available to assist with spill response issues. When off duty, they are available by phone and can respond within an hour of being contacted. Great Northern Paper's Security personnel are also available to help with spills until the spill team members can arrive on the scene.

2. Members of the Spill Team have all attend annual safety training provided by Great Northern Paper's Safety Department. Training is documented in the Environmental and Safety Departments' training records. Training includes the following.

    a. Familiarization with general plant safety procedures.
    b. Familiarization with appropriate aspects of industrial hygiene and chemical safety, including monitoring of concentrations of hazardous materials and selection of appropriate protective equipment.
    c. Familiarization with the SPCC Plan and companion documents, including the MSDS database and Pre-Emergency Planning Manual.
    d. Review of appropriate equipment and maintenance and inspection procedures for unloading and storage areas.
    e. Review of spill notification and reporting requirements and procedures.
    f. Review of spill prevention and response procedures.

SPILL RESPONSE TEAM

SPILL RESPONSE TEAM

FOR ALL SPILLS CALL THE SECURITY GATE AT 723-2351
THEY WILL USE THE FOLLOWING LIST TO CALL FOR COVERAGE

MONDAY TO FRIDAY DAY SHIFT

Name	Title	Office Tel. No.	Home Tel. No.
John T. Civiello	Environmental	723-2201	731-6736
Steve Peabody	Maintenance Manager	723-2276	746-5682
Galen McLauglin	Maintenance Foreman	723-2437	NA
Night Pulp Mill Tour Foreman	NA	723-2478 OR BY RADIO	NA
Night Paper Room Tour Foreman	NA	723-2365 OR BY RADIO	NA

NIGHTS, WEEKENDS AND HOLIDAYS

Name	Title	Office Tel. No.	Home Tel. No.
Night Pulp Mill Tour Foreman	NA	723-2478 OR BY RADIO	NA
Night Paper Room Tour Foreman	NA	723-2365 OR BY RADIO	NA
John T. Civiello	Environmental	723-2201	731-6736
Steve Peabody	Maintenance Manager	723-2276	746-5682

ATTACHMENTS

Attachments

Spill Response Team Call-In List

Environmental Spill Report

Inventory List of Cleanup Equipment

Spill Response Organizational Chart

Spill Reporting Procedures

Underground Tank Policy and Procedures

East Millinocket Mill Petroleum Storage and Containment

East Millinocket Mill Pulp and Chemical Storage and Containment

Prints of Storage Tank Containment Structures

Maps Showing Tank and Transformer Locations

SPILL CALL-IN LIST

SPILL CALL-IN LIST

FOR ALL SPILLS CALL THE SECURITY GATE AT 723-2351
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Revision: 05/29/2013

SPILL REPORT FORM

Great Northern Paper Company LLC..
Environmental Department

TO: Environmental Department DATE: _____

FROM: _____ DEPARTMENT: _____

SUBJECT: ENVIRONMENTAL SPILL REPORT

Reported to Environmental Affairs/Security by _____
_____on_____at_____a.m. / p.m.
A sample was taken at_____a.m. / p.m.
Date/Time of Spill_____Quantity of Spill_____
Location of Spill_____Spill was contained_____Yes_____No
Type of Spill_____Mill Process_____Petroleum Product_____Chemical
If Petroleum or Chemical, identify by Name_____
Description of Equipment or Process that Spill originated from and cause_____

_____

_____

_____

Spill Impacted_____Process Sewer_____Lake, Stream, River or Potable Water_____Other
Identify by Name_____
If Lake, River or Stream impacted, briefly describe visual impact_____

_____

_____

Describe clean-up procedure or other follow-up_____

_____

_____

**** Describe method of disposal, volume of cleaned-up material, date cleanup material was disposed and disposal facility location**_____

_____

_____

Identify steps taken to prevent a reoccurrence_____

_____

**** All material used to cleanup or contain spilled material needs to be properly disposed of within 48 hrs after the incident.**

ENVIRONMENTAL USE ONLY

Reported to_____Agency_____

_____Agency_____

Follow-up Required_____Yes_____No Initial_____

CLEANUP EQUIPMENT INVENTORY

Cleanup Equipment Inventory

East Millinocket Mill Area

Location: Great Northern Paper Company LLC
50 Main Street
East Millinocket, ME. 04430
Telephone – Security, 723-2351 (24 Hour Service, Also Equipped with Base Radio, 90 Watt unit on Frequency 153.125) Location noted on facility drawings.

Store Room
Telephone – 723-2551 or through Security 723-2351
Material: 8 to 10 8"x10' Oil Sorbant Booms
3 to 5 300'x36" Rolls Sorbant Blanket
2 to 4 Boxes 18"x18" Sorbant Mats
20 to 40 Bags Speedi-Dri

Maintenance Department
Telephone – 723-2795 or through Security 723-2351
Minimum of 30 Sets of Assorted Hand Tools in Shop
Base radio, 90-Watt on Frequency 152.420
45 Portable Radios on Frequency 152.420
More than 100 Portable Fire Extinguishers
25 Hydrants, Minimum 80 Lbs. Pressure
No Foam Units Available on Site

Yard Department
Telephone – Through Security 723-2351
Heavy Equipment – Tractor, Loaders, Trucks Etc.
Mobile Radios – on Frequency 152-420
Dirt and Sand for Diking and Absorbing Spills

Training Center – Environmental Department
Telephone 723-2201 or through Security 723-2351

Woodroom and Steam Plant
Telephone – Through Security 723-2351
Several Thousand Cubic Yards of Bark, Sawdust and Wood waste for Diking and Absorbing Spills

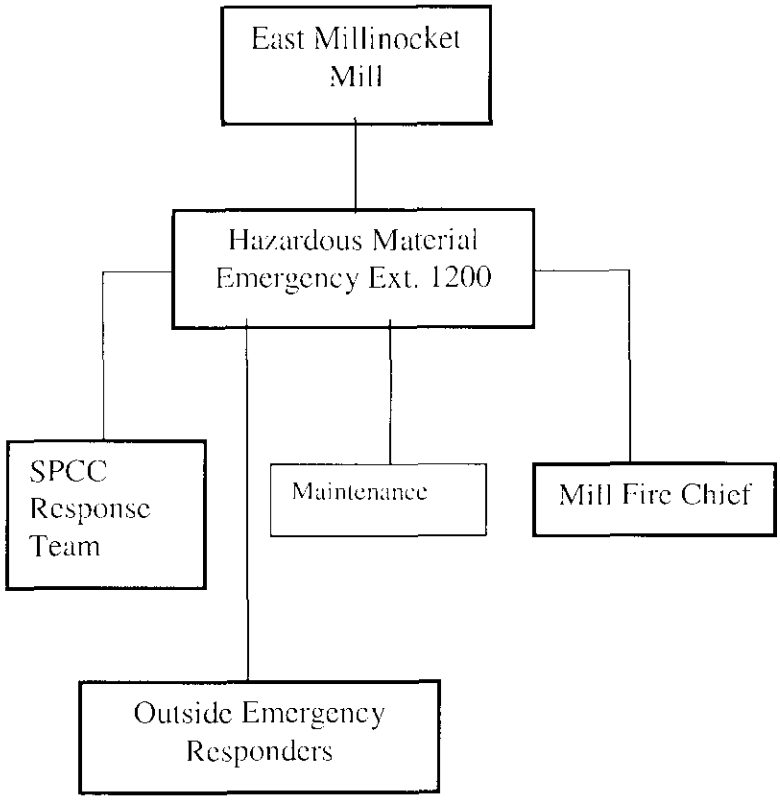
Confined Space Rescue Team
Telephone – Through Security 732-2351
Various Rescue Equipment

Note: The local fire department can be accessed by dialing 911. In addition to the normal fire fighting resources, the fire departments can access the area HazMat team. All calls to 911 should be made by the Security Department to ensure coordination with on site response personnel.

Revision: 5/29/13

ORGANIZATIONAL CHART

EMERGENCY SPILL RESPONSE ORGANIZATIONAL CHART



REPORTING PROCEDURES

SPILL REPORTING PROCEDURES

The purpose of this procedure is to outline, in general terms for Environmental Department personnel who must report to regulatory agencies, our procedures and responsibilities when notified by security that a spill has occurred. These procedures apply for spills from all company operations. Obviously, each situation will require a different response and some judgment will have to be exercised when a call is received. However, in general, we should proceed as follows:

1. When security calls, try to get as much information from him as possible. Ask for the date, time, location, nature of the spill, materials involved, quantities, etc., but most of all, get the name of the foreman or person who reported the spill to security.

2. Call the foreman or person who reported the spill and confirm the information, which you have received. Find out from this person what materials have been spilled, what quantities are involved, what the status of the spill is at that moment, what containment measures have been taken, whether or not the spilled material has entered a stream, process sewer, storm sewer or licensed "clean water sewer" (i.e., the boiler house sewer)

3. Determine what, if any, level of response the Environmental Department needs to make as a result of the incident. This will have to be determined through discussions with the foreman or person who has reported the spill. Even if the spilled material has not reached the river or some other sensitive area, find out from the foreman if he has spill control material and people available to handle the incident and, be sure to ask if he needs any help.

4. If needed, the Penobscot County HazMat Team can be contacted through the local fire department by calling 911.

5. If the spill is reportable, i.e., oil, chemicals or stock has bypassed the treatment plant and entered the river or threatens a body of water or potable water source, or reportable chemicals have been discharged to the land, water or air, an Environmental Department representative must make an immediate visit and inspection of the site to collect first hand information regarding the spill.

SPILL REPORTING PROCEDURES

6. Report the spill to the appropriate local, state and federal Agencies.

The phone numbers are as follows:

Oil & Petroleum Product Spills (if impact surface or groundwater)	Department of Environmental Protection Bureau of Oil & Hazardous Materials Augusta, ME 04333	(207) 941-4570 (regular office hrs.) 1-800-482-0777 (holidays & after hrs.)
(if impact surface water)	National Response Center	(800) 424-8802
Hazardous Material & Wastes (see attached hazardous matter list)	Notify above agencies and numbers. In addition to the Fire Chief in the Community where the spill occurred:	
	Millinocket East Millinocket Medway	(207) 723-7026 (207) 746-9951 (207) 746-3370
SARA Hazardous Materials or Wastes (if they spread beyond facility property line, see attached list of reportable materials and quantities)	Notify above agencies and numbers. In addition to the County Sheriffs Office in:	
	Penobscot County	(207) 945-4313 1-800-696-5403
	Piscataquis County	(207) 564-3304 1-800-432-7372
	Somerset County	(207) 474-6885 1-800-452-1933
	Also Notify: Maine State Police	1-800-452-4664 1-800-432-7381

For the SARA reportable materials, a written report must also be filed with the State Emergency Response Commission, Local Emergency Planning Committee and DEP within 14 days.

Stock and nonhazardous chemical spills or treatment plant bypasses need only be reported to DEP. Spills occurring on weekends or Holidays need not be reported to DEP until the following workday. Oil spills and hazardous material spills that impact water surface or groundwater must be reported to both DEP and National Response Center immediately. Be sure to get the name of the person you have reported the spill to and note the time of your conversation.

7. If the incident is not reportable, and immediate response by the Environmental Department or HazMat responders is not needed, follow up on the incident with the foreman or area superintendent at a later time as soon as convenient (the next morning if the incident occurred in the middle of the night, for example.) In your follow-up make sure that clean up has been done properly, waste materials appropriately disposed of, clean-up supplies replenished, etc.

8. If the spill has entered the process sewer system and will be taken care of by the treatment plant, instruct the foreman that, if he needs to do nothing else, he should at least contact the waste treatment plant operator and alert him to the fact that the material has been sewered. This will alert the treatment plant operator of any sudden change in effluent pH, solids or scum skimmer load.

9. Ask the foreman to fill out a Spill Report and forward it to the Environmental Department within 24 hours. Remind the foreman that he/she is responsible for estimating, as accurately as possible, the quantities of materials spilled. In the case of a process spill, this should include collection of the samples for analysis by the Quality Assurance Labs.

10. If the spill has been reported to the Agencies, Form 100 Agency Environmental Spill Report is to be filled out by the individual in Environmental Department who has the responsibility of generating an Agency follow-up report if the Agency requests it. Include the names of persons the incident was reported to, note the date and time of the report and summarize your discussion. Make particular note of any instructions or requests the Agency has given you. This report should be written on the <u>next working</u> day following the spill.

SPILL REPORTING PROCEDURES

MATERIALS REPORTABLE UNDER SARA OR CERCLA

Material	Reportable Quantity (Lbs.)	Approximate Gallons
Acetic Acid	5,000	570
Acetone	5,000	760
Arochlors (PCB)	10	
Asbestos	1	
Benzene	1,000	130
Cresols	1,000	110
2,4-D*	100	10
Diazinon*	1	
2-Ethoxyethanol**	1	
Ethylene Glycol	5,000	540
Hexane	1	
Hydrochloric Acid	5,000	500
Hydrogen Sulfide	100	
Hydrogen Peroxide	1,000	100
Mercury	1	
Methylene Chloride	1,000	90
Nitric Acid	1,000	80
Phosphoric Acid	5,000	350
Potassium Hydroxide	1,000	80
Pyrethrins*	1	
Sodium Bisulfite	5,000	
Sodium Hydroxide	1,000	75
Sodium Hypochlorite	100	10
Sodium Nitrite	100	
Sodium Phosphate	5,000	
Sulfuric Acid	1,000	65
Tetrachloroethylene	1	
Toluene**	1,000	135
Vanadium Pentoxide	1,000	
Xylene**	1,000	135
Hazardous Wastes		
Ignitable	100	
Corrosive	100	
Reactive	100	
EP Toxic (depends on specific contaminants)	1-1000	

(*) Component of certain pesticides
(**) Component of certain paints and thinners

Spills above RQ beyond property lines are reportable to fire department, LEPC (through sheriff), State Police, DEP and National Response Center. Report immediately. Written report to SERC, LEPC and DEP within 14 days.

TANK POLICY/PROCEDURES

UNDERGROUND TANK POLICY AND PROCEDURES

The following procedures are to be followed relative to Great Northern Paper's underground tanks. DEP and EPA underground tank regulations provide that we establish these procedures. The procedures are divided into three sections: TANK MAINTENANCE, TANK ABANDONMENT, and tank installation.

TANK MAINTENANCE

1. All new and replacement tanks must be constructed of fiberglass, cathodically protected steel of equally non-corrosive materials.
2. Any evidence of a leak must be noted and reported to the DEP within 24 hours; immediate action must be taken to confirm and correct the leak. Additionally, the released material must be immediately cleaned up to the satisfaction of the DEP.
3. All underground storage tanks must have an acceptable leak detection system. This may include monthly reconciliation of daily product inventory and annual precision test, continuous of manual-monitoring of free product in groundwater of interstitial space, continuous vapor monitoring or automatic tank gauging and daily inventory.
4. All results of precision tests must be submitted to the DEP. It is important to do these tests right, since tanks are considered to be leaking if the hydrostatic precision tests indicate that as little as 0.1 gallons per hour are escaping from the tank or tank piping.
5. Any tank activity is to be reported to the Environmental Department, so that the proper agency notices can be filed and the tank inventory kept up to date. Additionally, the Environmental Department must be consulted before any activity is planned to assure that the planned activity is allowed by regulatory requirements.
6. Maintenance and reconciliation of daily inventory is required for days when oil is added to or withdrawn from a tank. Data must be summarized monthly and kept for three years.
7. All leak detection equipment shall be regularly monitored, tested and records retained in compliance with all applicable regulations.
8. Where allowed, relining or repairs to underground storage tanks must be conducted in accordance with all applicable regulations.
9. Tank material, piping material and any other equipment of material, which may come in contact with the tank contents, must be chemically and physically compatible with those contents.
10. New and replacement tanks may not be installed beneath a building or other permanent structure, within 100 feet of an existing public or private drinking water supply not owned or used solely by Great Northern Paper, or within 25 feet of a classified surface water body.

UNDERGROUND TANK POLICY AND PROCEDURES

TANK ABANDONMENT

1. Any tanks, which are taken out of service for 12 months or more, are, under the regulations, considered to be abandoned. If any tank is to be out of service for 3 to 12 months, all leak detection and corrosion control equipment must remain in operation.
2. Written approval must be obtained from the DEP for permission to leave a tank in place that is to be taken out of service for 12 months or more. Such permission may only be granted for one (1) additional 12-month period. To gain such approval, we must be able to demonstrate that, at a minimum, the following can be satisfied:
    a. There are no leaks.
    b. All tank care requirements for tanks out of service for 3 to 12 months must be continued.
    c. The tank is to be hydrostatically tested before being returned to service
    d. The tank installation design meets regulation requirements.
3. If a tank is to be abandoned, the Environmental Department must be notified ahead of time, so that we can file a required notice with the DEP at least 30 days prior to tank abandonment.
4. If a tank is to be removed, all requirements of Appendix J of Chapter 691 of DEP rules must be adhered to. A site assessment must be performed for removal of tanks which contained waste oil of motor fuel:
    a. Piping must be drained into the tank, and then the tank must be pumped out. It is preferred that tank contents are to be utilized, but if not, they must be disposed of in accordance with waste oil procedures.
    b. After the top of the tank is exposed, lines and gauges are to be removed, and the open ends capped or plugged. Also, and remaining tank openings are to be plugged.
    c. The tanks are to be rendered gas free by either purging with dry ice or ventilated with compressed air.
    d. After purging, a minimal one-eighth inch vent hole is to be left in the tank for pressure release resulting from temperature changes.
5. The removed tank, if it is bare steel of asphalt coated steel, cannot be reinstalled as an underground storage tank.
6. Fiberglass and cathodically protected tanks may be sold or reused as long as we can obtain a manufacturer's guarantee on the tank and piping for another ten years of use. If a tank is sold, the bill of sale must advise the purchaser that the tank previously had contained oil products and that it is not suitable for drinking water. The bill of sale must also include the wording quoted in item No. 7 below which must appear on the tank itself.
7. Tanks which are stored after removal, must be stored in areas not accessible to the general public and must be labeled with the following: *"Tank has contained gasoline, or flammable liquid, not gas free, and not suitable for food or drinking water."*
8. Acceptable means of disposal of tanks is sale to a junk or scrap dealer, disposal at an approved tank processing facility, use as a culvert in compliance with all

applicable environmental regulations or by other techniques approved by the DEP and State Fire Marshal.

9. A variance must be obtained from the DEP to abandon a tank by filling in place. Contact the Environmental Department prior to considering in place abandonment to determine the likelihood of obtaining a variance. A Site assessment is required when any tank is to be abandoned in place. Procedures outlined in Appendix K of Chapter 691 of DEP rules must be followed.
10. The tank removal project will be followed closely by the removal crew foreman or engineer and information regarding the removal operation and site/tank conditions recorded on the Great Northern Paper Underground Tank Removal Form. The form will be filed with the job records pertaining to this removal operation.

UNDERGROUND TANK POLICY AND PROCEDURES

TANK INSTALLATION

1. No tank, which is to be removed, will be replaced unless the replacement tank is needed to support company operations.
2. To the extent possible, underground tanks deemed to be needed for continued support of company operations, will be replaced with above ground tanks. Only when safety concerns or special circumstances exist will new underground tanks be installed.
3. All new above ground tank installations will be equipped with adequate containment structures and must be installed, and operated in accordance with State Fire Marshal rules.
4. Notify the Environmental Department prior to the desired installation of new or replacement underground tanks. Five (5) days prior to installation, the Environmental Department is responsible for preparing and filing the required DEP notice and registration, and tank warranty information. The notice is to be submitted to both the DEP, and the State Fire Marshall's Office.
5. Tanks may only be installed by a certified underground tank installer in accordance with all requirements of Appendix D of Chapter 691 of DEP rules. Contractors must be in possession of a valid underground tank installers certificate to be approved.. Great Northern Paper shall ensure that the tank installer provides written certification to DEP within 30 days of tank installation that the tank materials, design and installers are all in compliance with Chapter 691 of DEP rules.
6. All new or replacement tanks, underground piping, and below ground ancillary equipment in contact with the soil must be constructed of fiberglass, cathotically protected steel, of other non-corrosive material approved by DEP.
7. For those tanks of facilities with a total capacity in excess of 1,100 gallons, monitoring wells must be installed. If groundwater is within 15 feet of ground surface, a minimum of 2 vertical wells are required. If there is greater than 15 feet to groundwater, an impervious barrier, or one (1) monitoring well is required. If double walled tanks with interstitial space monitors are utilized, no monitoring wells are required.
8. When monitoring wells are installed, they are to be sampled weekly, and visually observed for a sheen. If there is evidence of a leak, a 50 ml sample shall be sent to a laboratory for volatile organics analyses. Weekly well monitoring results, and where appropriate, tank interstitial space monitoring results are to be recorded and records maintained.
9. New and replacement underground storage tanks for motor fuel must have secondary containment, continuous interstitial space monitoring and overfill and spill prevention equipment.

PETROLEUM STORAGE (EAST MLKT)

PETROLEUM STORAGE AND CONTAINMENT
EAST MILLINOCKET MILL

Location	Number of Tanks	Capacity Gallons	Type of Product	Date Installed	Containment	Reg. No.	Tank No.
Bulk Tanks							
WWTP	1	1,000	Heating Oil EA207	1991	Double Wall, Sloped to Process Sewer		1
WWTP	1	1,000	Diesel EA207	1991	Double Wall, Sloped to Process Sewer		2
Steam Plant	1	1,000	#2 Fuel Oil	1998	Double Wall Inside Bldg.		4
Steam Plant	1	20,000	Heating Oil (Abandoned)	1955	Tank Policy		5
Steam Plant	1	20,000	Heating Oil (Abandoned)	1955	Tank Policy		6
Oil Farm	1	750,000	#6 Fuel Oil	1950	Earth Dike 1 Million Gallon Capacity, Oil/water separator		7
Old Maint. Garage	1	1,000	Diesel	2013	Double Wall, Sloped to Process Sewer		8
Oil House	1	2,000	Gasoline	1989	Tank Policy	16697	10
Steam Plant	1	25,000	#6 Fuel Oil	1955	Steel Tank Encased in Reinforced Concrete. Level Indication and Alarms. Drains to Process Sewer		11
Oil Farm	1	1,000	Oil/Water Separator	1955	Fence, Dike, Drains to Process Sewer		13
Woodyard	1	4,000	Diesel EA204	1980	Double Wall, Impact Barrier		14
Filter House	1	1,000	Diesel	1998	In Bldg. >11,000 gal. Concrete Dike		15
No. 6 P.M. Basement	1	275	Kerosene	1980	In Bldg. Drains to Process Sewer		16
Warehouse W and millwide	100	55 gal	Machine Oil		Various Maintenance Areas. Drains to Process Sewer		12
Operational Equipment							
Millwide	**	26,446 Total	Transformer Oil	1980	Concrete Dikes Various Capacities		
#5 Lube System	1 System	14,500	Lube Oil	1987	In Bldg. Drains to Process Sewer		58
#6 Lube System	1 System	11,700	Lube Oil	1987	In Bldg. Drains to Process Sewer		59
Unloading Areas							
Oil Farm	2 Trucks	7,000	#6 Fuel Oil		Earth Dike Oil/water separator, area drains to Process Sewer		9

** See Transformer Inventory

Revision: 2013

PULP/CHEMICAL STORAGE (EAST MLKT)

Pulp and Chemical Storage and Containment

East Millinocket Mill

Location	No. of Tanks	Capacity (gals.)	Type of Product	Date Installed	Containment	Tank Number
Boiler House	1	8,600	Sulfuric Acid	1992	Concrete Dike Overflow to process sewer	17
Boiler House	1	12,000	50% Caustic	1957	Concrete Dike Overflow to process sewer	18
Boiler House	1	30,000	Waste Pit	1992	Inside Building Process Sewer	19
Hypochlorite Storage Bldg	2	4000	Sodium Hypochlorite	2003	110% Containment	20
Southside of Mill	2	750,000	Groundwood Pulp	1954	Permanent berm to process sewer	21
Southside of Mill	1	750,000	Broke Pulp	1954	Permanent berm to process sewer	22
Southside of Mill	1	1,000,000	Groundwood Pulp	1987	Permanent berm to process sewer	23
WWTP	1	18,000	Urea	1976	Excess flow valve response plan	24
WWTP	1	6,000	Phosphoric Acid	1976	Empty	25
Old Grinder Room	9 totes	330	V-Brite	1982	Concrete Dike Overflow to process sewer	27
Hydropulper	1	7,000	Starch Raisabond 15)	1997	Overflow to process, Empty	28
Hydropulper	1	14,000	Nalco ES325	1997	Inside Building, Empty	29
Hydropulper	1 tote	330	Starch Raisabond 30	2009	Overflow to process	
WWTP		61 Ton	Lime Silo	1987	Empty/Abandoned	30
Southside of Mill	1	1,000,000	Groundwood Pulp Storage	1990	Permanent berm to process sewer	31
WWTP	1	6,000	Ferric Sulfate	1996	Containment 110% of Tank	32
Old Paper Room	1	60,000	Clay	1997	Inside Building	
Old Paper Room	1	60,000	TiO_2	1997	Inside Building	
Nos. 5 and 6 P.M.	1	1.5 00	Day Tank Polymer (ES325)	1997	Overflow to process sewer	33
Nos. 5 and 6 P.M.	2	2,500	Polymer R9820	1997	Overflow to process sewer	34
Nos. 5 and 6 P.M.	1	1,500	Day Tank Polymer (R9820)	1997	Overflow to process sewer	35
Nos. 5 and 6 P.M.	1	3,000	Cleaner (Chute Clear Felt)	1997	Containment 110% of Tank	36
Nos. 5 and 6 P.M.	1	3,000	Cleaner (Chute WPF-80CN)	1997	Containment 110% of Tank	37
#5&#6 PM Wet End	2 tote	330	Acetic Acid	2000	Overflow to process sewer	38
Nos. 5 and 6 P.M.	1 tote	330	Sodium Hypochlorite	2003	Overflow to process sewer	

CHEMICAL TANKS

Recycle Fiber Plant

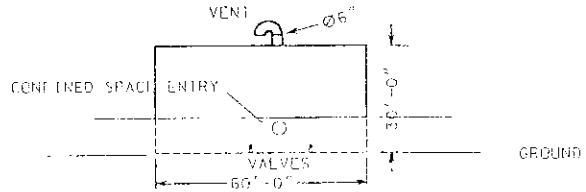
Chemical Name	Capacity (gals.)	Date Installed	Containment	Tank Number
Sodium Hydroxide	16,500	1993	Empty	40
Sodium Silicate	16,500	1993	Empty	41
Lionsurf NR507	5,575	1993	Empty	42
Sulfuric Acid	8,200	1993	Empty	43
Hydrogen Peroxide	(2) 10, 000	1993	Empty	44
Surfactant (Kemira NR-674)	8,225	1993	Empty	45
Sodium Hydrosulfite	21,000	1993	Locked Valve to Process Sewer, Concrete Dike	46
Sulfite Dioxide (SO_2)	Empty	1993	Empty	47
Borol	Empty	1993	Empty	48
Primary Polymer (Profloc 2111)	6,662	1993	Empty	49
Primary Polymer Feed Tanks, Acid and Alkaline Clarifier	(2) 1,000	1993	Empty	50
Secondary Polymer (Fennofix 502)	7,614	1993	Empty	51
Sludge Polymer (Profloc 2140)	6,500	1993	Empty	52
Sludge Polymer Feed Tank (Profloc 2140)	1,500	1993	Empty	53
Lionsurf NR507	7,000	1993	Empty	54
Talc Slurry	7,500	1999	Empty	56

*TANK IS IN CHEMICAL BUILDING

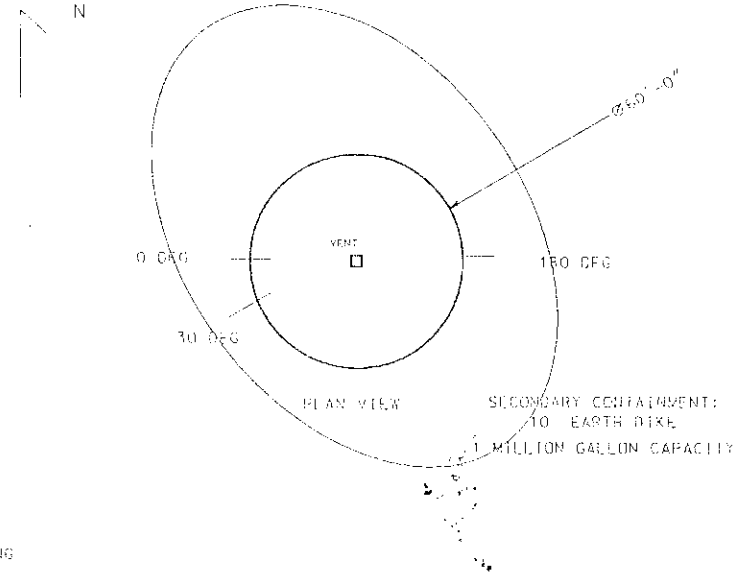
STORAGE TANK STRUCTURES

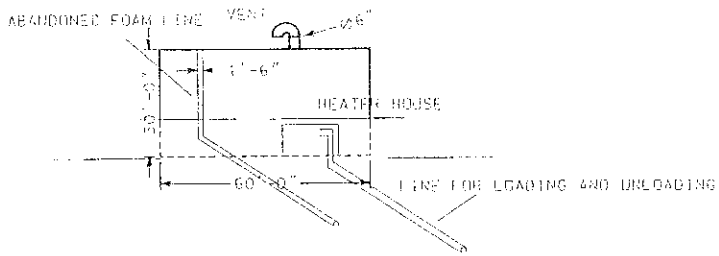
750,000 GALLON #6 OIL TANK: EAST MILLINOCKET

NEAREST PROPERTY LINE: 150' NORTH
NEAREST BUILDING: 50' SOUTHWEST

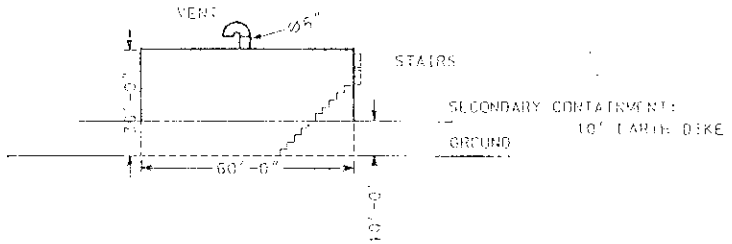


ELEVATION VIEW: 0 DEGREES





ELEVATION VIEW: 30 DEGREES COUNTERCLOCKWISE



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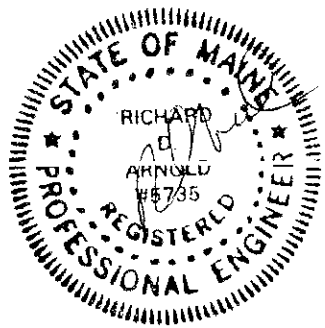


KATAHDIN PAPER COMPANY LLC

TANK NO: 61

DRAWN BY: AMANDA BIRMINGHAM

SCALE: 1:512

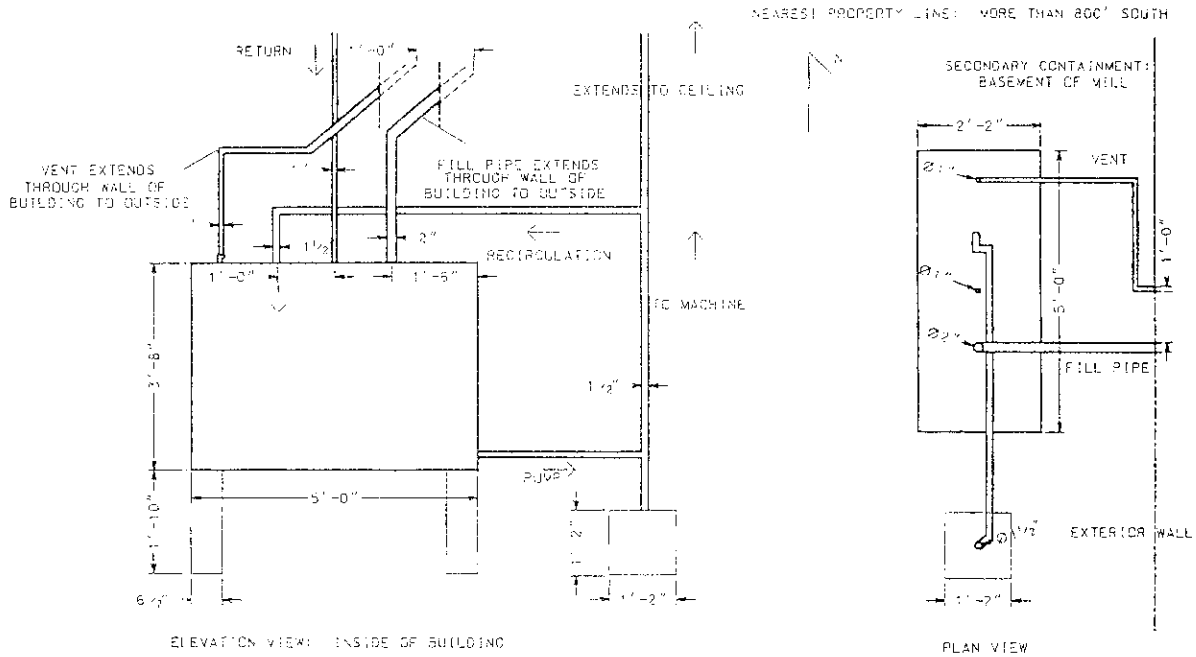
APPROVED BY:

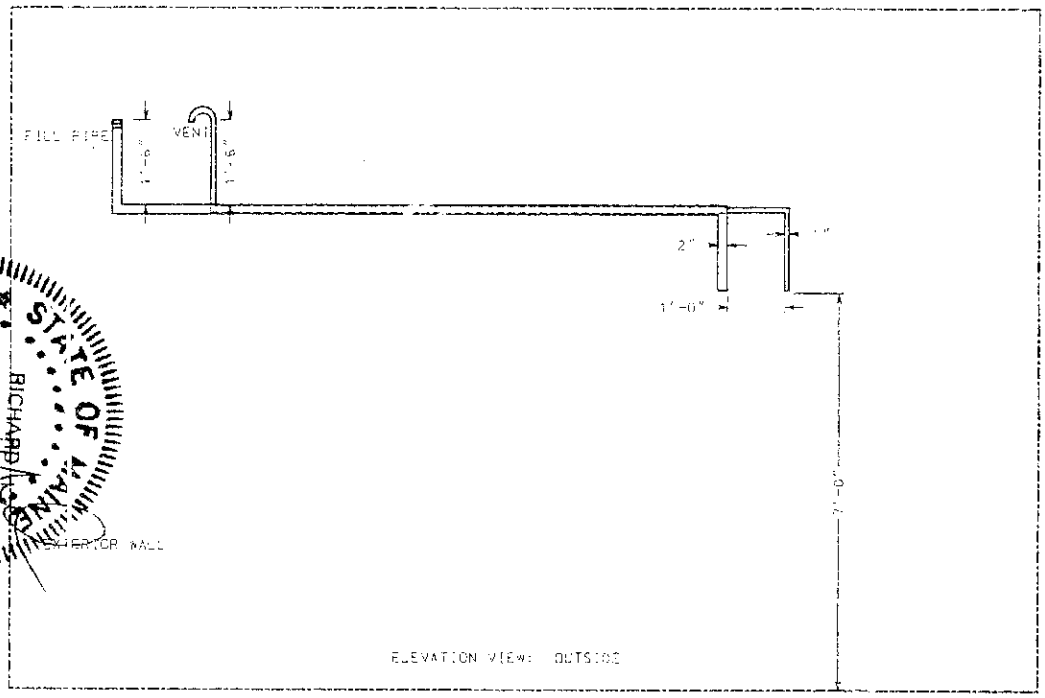
DATE: 8/12/04

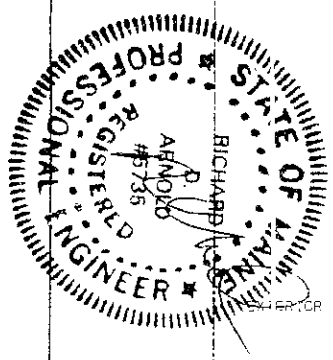
C1

Existing Installation

275 GALLON KEROSENE TANK: #6 PM BASEMENT, EAST MILLINOCKET

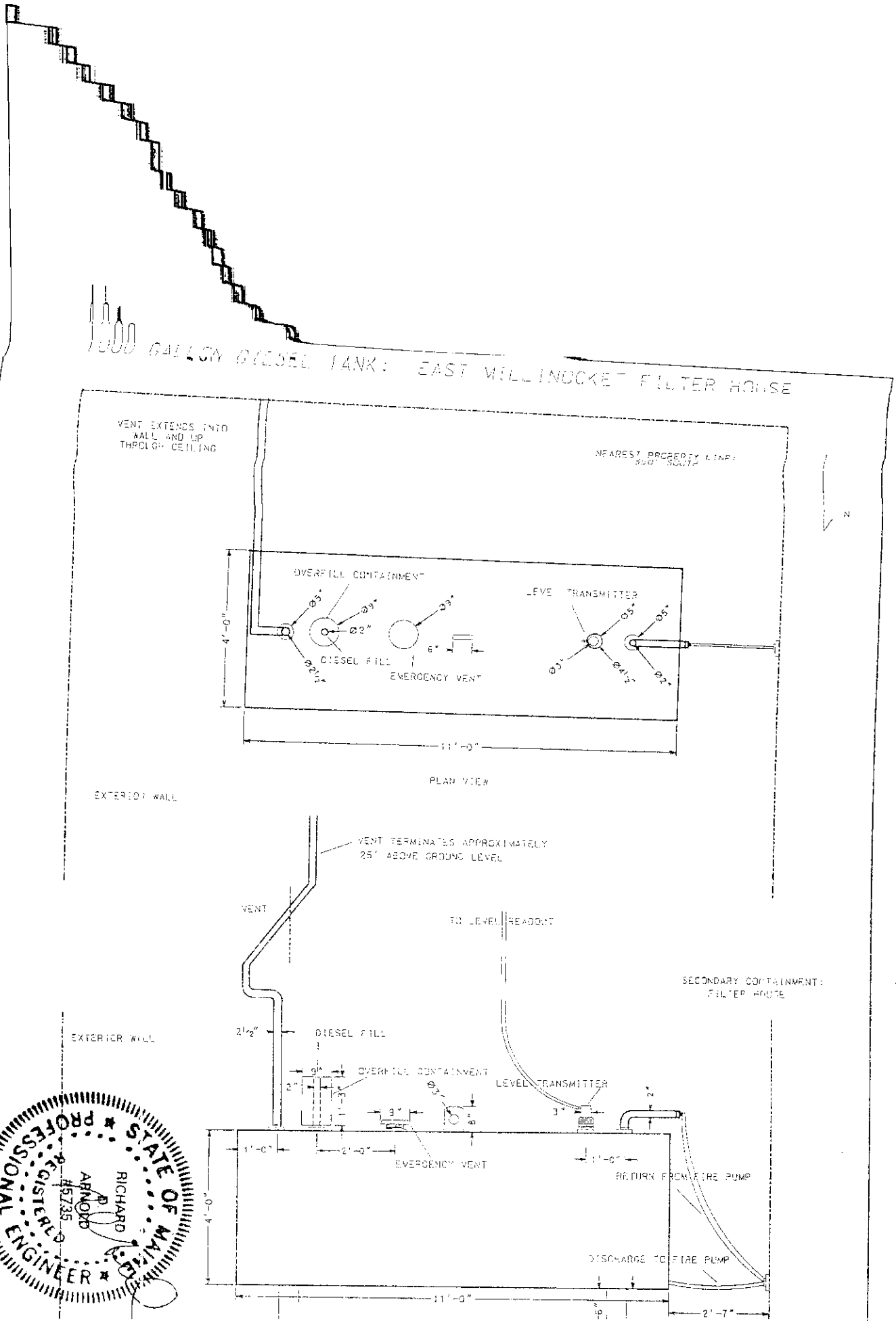






D1	KATAHDIN PAPER COMPANY LLC	TANK NO: 109
	DRAWN BY: AMANDA BIRMINGHAM	SCALE: 1:32
	APPROVED BY:	DATE: 8/12/04

Existing Installation


1500 GALLON DIESEL TANK: EAST MILLINOCKET FILTER HOUSE
VENT EXTENDS INTO WALL AND UP THROUGH CEILING
NEAREST PROPERTY LINE
320' SOUTH
N
OVERFILL CONTAINMENT
LEVEL TRANSMITTER
Ø5"
Ø9"
Ø3"
Ø2"
Ø2½"
6"
DIESEL FILL
EMERGENCY VENT
Ø3"
Ø5"
Ø5"
Ø4½"
Ø2"
4'-0"
11'-0"
PLAN VIEW
EXTERIOR WALL
VENT TERMINATES APPROXIMATELY 25' ABOVE GROUND LEVEL
VENT
TO LEVEL READOUT
SECONDARY CONTAINMENT: FILTER HOUSE
EXTERIOR WALL
2½"
DIESEL FILL
9"
2"
OVERFILL CONTAINMENT
LEVEL TRANSMITTER
3"
3"
Ø2"
45°
2"
1'-0"
2'-0"
EMERGENCY VENT
1'-0"
RETURN FROM FIRE PUMP
4'-0"
DISCHARGE TO FIRE PUMP
11'-0"
2'-7"
STATE OF MAINE
PROFESSIONAL ENGINEER
REGISTERED
RICHARD P. ARNOLD
#5735

APPENDIX I – TRANSFORMER INVENTORY

Transformer Inventory

Location	Transformer ID Number	Date Installed	Fluid Capacity Gallons	Date Tested	<50 ppm
Millinocket Mill					
Steam Plant No. 1 Power Trans.	T34	1958	4,160	7/20/87	35
Steam Plant No. 2 Power Trans.	T35	1958	4,160	7/20/87	35
Steam Plant	T53	1989	850	Nameplate	Silicone
Steam Plant	T54	1989	850	Nameplate	Silicone
Steam Plant	T55	1989	850	Nameplate	Silicone
MGO	T61	1987	247	Nameplate	Silicone
MGO	T62	1987	541	Nameplate	Silicone
No. 4 Turbo. Generator	T63	1972	4,147	8/87	Oil
Steam Plant	T64	1987	278	Nameplate	Silicone
# 11 P.M. Building	T68	1987	240	8/87	Silicone<2
# 11 P.M. Building	T69	1987	240	8/87	Silicone<2
# 11 P.M. Building	T70	1987	240	8/87	Silicone<2
# 11 P.M. Building	T71	1987	326	8/87	Silicone<2
# 11 P.M. Building	T72	1987	326	8/87	Silicone<2
# 11 P.M. Building	T73	1987	379	8/87	Silicone<2
# 11 P.M. Building	T74	1987	240	8/87	Silicone<2
# 11 P.M. Building	T75	1987	278	Nameplate	Silicone<2
# 11 P.M. Building	T76	1987	500	Nameplate	Silicone<2
# 11 P.M. Building	T77	1987	237	8/87	Silicone<2
# 11 P.M. Building	T78	1987	237	8/87	Silicone<2
# 11 P.M. Building	T79	1987	237	8/87	Silicone<2
# 10 P.M. Building	T162	1979	255	8/87	Silicone<2
Clarifier	T164	1989	399	Nameplate	Silicone
River Bank	T173	1987	270	8/87	Silicone
# 11 P.M. South of Coater	T178	1997	834	Nameplate	Silicone
Spare – Stored #11 Train Shed	SP1-NT	1983	718		Silicone
Spare – Stored #11 Train Shed	SP2-3	1983	278		Silicone
Substation #2	K26P.T.B910143	1988	12		Silicone
Substation #2	EAST P.T.	1988	1		Silicone
Substation #2	WEST P.T.	1988	1		Silicone
Substation #2	K30 P.T.	1988	15		Silicone
Substation #2	EAST P.T.	1988	1		Silicone
Substation #2	Ctr. P.T.	1988	1		Silicone
Substation #2	WEST P.T.	1988	1		Silicone
Substation #3	EAST P.T.	1988	1		Silicone
Substation #3	WEST P.T.	1988	1		Silicone

Transformer Inventory

Location	Transformer ID Number	Date Installed	Fluid Capacity Gallons	Date Tested	<50ppm
East Millinocket Mill					
# 6 P.M. Wet End	T114				Silicone
# 5 P.M. Wet End Sub	T114A				Silicone
# 6 P.M. Wet End	T116				Silicone
# 6 P.M.	T140	1987	454		Silicone
# 5 P.M.	T141	1987	454		Silicone
# 5 P.M.	T142		690	8/87	Silicone
# 5 P.M.	T143	1987	454		Silicone
# 5 P.M.	T144	1987	454		Silicone
# 5 P.M.	T145	1987	454		Silicone
# 5 P.M.	T146	1987	454		Silicone
# 6 P.M.	T251	1987	454		Silicone
# 6 P.M.	T252	1987	454		Silicone
# 6 P.M.	T253	1987	454		Silicone
# 6 P.M.	T254	1987	454		Silicone
# 6 P.M.	T255	1987	454		Silicone
# 6 P.M.	T256	1987	454		Silicone
# 6 P.M.	T257	1987	454		Silicone
Transformer House	T103B	1926	880		Oil
Transformer House	T103C	1926	880		Oil
Transformer House	T103D	1926	880		Oil
Transformer House	T103E	1989	990	Nameplate	Silicone
# 5 & 6 Machine Room	T122	1988		Nameplate	Silicone
Steam Plant	T123	1987	2,344	Nameplate	Silicone
Steam Plant	T113	1987	2,344	Nameplate	Silicone
Steam Plant	T132	1973	5,278	Retrofitted	4
Bark Burner	T135	1980	646	8/87	2.5
Bark Burner	T136	1980	291	8/87	Silicone<2
Bark Prep Building	T137	1980	291	8/87	3.9
Groundwood	T138		690	8/87	<2
Groundwood	T139		454	8/87	<2
Potential Transformers					Oil
Phase A West Riverside	66636333				
Phase B West Middle	7131146				
Phase C West Townside	7134055				
Phase A-B Westinghouse	7131148				
Phase C-B Westinghouse	7131147				
Spare	8539				
Spare	SP2-1	1990	920	Nameplate	Silicone
Spare	SP2-2	1990	921	8/87	<2
Spare 40 Hz # 6 Side	SP2-4				Silicone
Foam House	4998502			7/83	
Under 15 Track	1476045			1988	<2

Revision: 5/15/13

Transformer Inventory

Location	Transformer ID Number	Date Installed	Fluid Capacity Gallons	Date Tested	<50 PPM
East Millinocket Mill					
Townside OPR on OFR Roof 15kVA	5135281				<2
ZigZag Grounding Xformer on T124 Sub 3	68E15284				Oil
Lighting Panels Under #15 Track	4562688				Oil
Engine Room Under #15 Track	S/N1476045				Oil
Old Header Under #15 Track					Oil
Townside OPR on OFR Roof 25kVa	S/N3490006				Oil
ZigZag Grounding Xformer T132	74A1139T147				Oil
60 Hz BHE Tie Sub 3	T117				Oil
Screen Toom 2300	T118				Silicone
Screen Room	T130				Silicone
Filter Plant	T131				Silicone
60 Hz NE Screen Room	T134				Silicone
Court Yard	T106				Silicone
Wood Room	T133				Silicone
Spare	T264				Silicone
Clarifier	T260				Silicone
Portal Crane	T261				Silicone
Woodyard/Slasher	T262				Silicone
Sorter Building	T102				Silicone
M2S3 Station Service	1115992-74B				Oil
P.T. @ T124 60 Hz Switchyard Sub 3					
P.T. Upriver 60 Hz River Crossing in Sub					
P.T. Downriver 60 Hz River Crossing in Sub					
P.T. BHE Tie-in 60 Hz Sub 3					
P.T. Dolby 40 Hz					
Phase A APT-200 Upriver	66K16120				Oil
Phase B APT-200	734955				Oil
Phase C APT-200 Downriver	66K1619				Oil
Phase A on T85 60 Hz					
Phase B on T85 60 Hz					
Phase C on T85 60 Hz					
RECYCLE FIBER PLANT					
PAL3086-0102	T266	1993	189	1/93	Silicone
PAL3086-0101	T267	1993	189	1/93	Silicone
SET6818-0102	T268	1993	739	1/93	Silicone
SET6818-0101	T270	1993	739	1/93	Silicone
PAL3086-0103	T265	1993	189	1/93	Silicone

Revision: 5/15/13

PHASE I ENVIRONMENTAL SITE ASSESSMENT, CONCEPTUAL SITE MODEL, & DATA GAP ANALYSIS

Great Northern Paper #2
50 Main Street
East Millinocket, ME

September 2014

TRC Project No: 208136

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TRC Project Manager
TRC Environmental Professional

TRC
Results you can rely on

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EXECUTIVE SUMMARY

Subject to the qualifications and limitations stated in Section 1.0 of this report, TRC Environmental Corporation (TRC) was retained by the Maine Department of Environmental Protection (MEDEP, "Client" or the "User") to perform a Phase I Environmental Site Assessment (ESA), Data Gap Analysis, and Conceptual Site Model of the Great Northern Paper #2 property located on Main Street in the town of East Millinocket, Penobscot County, Maine (herein referred to as the "Site"). The Phase I ESA described in this report was performed in accordance with the scope and limitations of the American Society of Testing and Materials Practice E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13). Limiting conditions and/or deviations from the ASTM E 1527-13 standard are described in Sections 1.3 and 7.7 of this report.

The approximately 400-acre Site has been the location of a paper mill since approximately 1907, producing paper products until 2011. The Site is comprised of numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a waste water treatment plant. A Site location map is included as **Figure 1**.

As a result of the Phase I ESA, including but not limited to our visual observation of the Site; review of historical information, environmental databases, and information provided by the User; interviews with current Site representative(s); and TRC's professional judgment, evidence of four *recognized environmental conditions* (RECs) and three *historical recognized environmental conditions* (HRECs) were associated with the Site, as defined by the ASTM E 1527-13 standard. The conditions identified as RECs are shown on **Figure 2**, as applicable.

Recognized Environmental Conditions

REC #1: Likely Impacts from Historical Site Use – The likely presence of petroleum products and hazardous materials in the subsurface from historical releases and Site use constitutes a REC in association with the Site.

REC #2: Soil impacts Around the Refueling Station – Volatile organic compound (VOC) impacted soil was discovered in 2003 approximately 6 feet below ground surface beneath the existing 2,000-gallon steel gasoline underground storage tank (UST) next to the old paint shop. Impacted soil was left in place until the existing tank system is removed or replaced; therefore, this impact is considered a REC in association with the Site.

REC #3 – Observation of #6 Oil Release within Unlined Eastern Berm – During Site reconnaissance on July 15, 2014, a release of #6 oil was observed within the unlined earthen berm of the 750,000-gallon #6 oil aboveground storage tank (AST). In addition, #6 oil was observed on the ground surface at the adjacent petroleum offloading area. This release of #6 oil to the environment constitutes a REC in association with the Site.

REC #4: Staining on Structure and Soil in the Vicinity of the Slasher – During Site reconnaissance on July 15, 2014, heavy staining was observed in the area of the Slasher from hydraulic and lubrication oil releases; this constitutes a REC in association with the Site.

REC #5: Undocumented UST Closures – Three of the five historical USTs at the Site were reportedly abandoned in place before 1995. It is reported that these three USTs contained #2 fuel oil. Based on the lack of available records and unknown condition of the tank and/or subsurface at the time of abandonment; these three USTs constitutes a REC in association with the Site.

Historical Recognized Environmental Conditions

HREC #1: Historical PCB Impacts to Groundwater – Historically three release of polychlorinated biphenyl (PCBs) have occurred at the Site. Long term groundwater monitoring has been conducted in these areas since the early 1990s. During the 2012 and 2013 sampling events, analytical results indicated concentrations below that of detectable concentrations. In 2003, the MEDEP VRAP provided a letter stating that since none of the groundwater results were above drinking water standards, the area has been considered remediated to the satisfaction of the MEDEP. Based on the recent analytical data and the 2003 MEDEP VRAP letter; these spills constitute a HREC in conjunction with the Site.

HREC #2 – Historical #6 Oil Release within Unlined Eastern Berms – In the early 1990s, three spills of #6 oil within the earthen berms around the two large #6 oil tanks (in the rail car offloading area and on the south side of the rail road embankment) occurred and were subsequently remediated. Based on the remediation documented in the spill report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.

HREC #3: Historical Off-Site Releases – A portion of the Mill complex is immediately down-gradient of off-Site historical leaking underground gasoline storage tanks at the Dead River Gasoline Station (formerly Exxon) and McLaughlin's Auto Repair (formerly Dave's Auto Repair). There are three Spill Reports in conjunction with the Dead River Gasoline Station and one in conjunction with McLaughlin's Auto Repair. Based on the response actions and/or remedial efforts documented in the spill report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.

Legal Notice

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1.0 INTRODUCTION

TRC Environmental Corporation (TRC) has prepared this Phase I Environmental Site Assessment (ESA) for the Maine Department of Environmental Protection (MEDEP, "Client" or the "User").

This report was prepared for and may be relied upon by the Client for the purposes set forth herein; it may not be relied on by any party other than the Client and reliance may not be assigned without the express approval of TRC. Authorization for third party reliance on this report will be considered by TRC if requested by the Client. TRC reserves the right to deny reliance on this report by third parties.

1.1 Purpose and Scope of Services

The following Phase I ESA was performed for the Great Northern Paper #2 property located on Main Street in East Millinocket, Maine (hereinafter the "Site"). A Site location map is included as **Figure 1**. This Phase I ESA has been prepared by TRC in accordance with the American Society for Testing and Materials E 1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-13) and is intended for the sole use of MEDEP.

The purpose of this assessment is to identify *Recognized Environmental Conditions* (RECs) at the Site, as defined by the ASTM E 1527-13 standard. The completion of this Phase I ESA report may be used to satisfy one of the requirements for the User to qualify for the *innocent landowner*, *contiguous property owner*, or *bona fide prospective purchaser* limitations pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), thereby constituting *all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial or customary practice* as defined by 42 U.S.C. §9601(35)(B) of CERCLA.

TRC understands this assessment is not funded with a federal grant awarded under the United States Environmental Protection Agency (U.S. EPA) Brownfields Assessment and Characterization program.

The Scope of Services for this Phase I ESA included the following tasks:

- Site and vicinity reconnaissance;
- Site and vicinity description and physical setting;
- Historical source review and description of historical Site conditions;
- Interviews with owners, operators, and/or occupants of the Site, and/or local officials;
- Review of environmental databases and regulatory agency records;
- Review of previous environmental reports/documentation, as applicable;
- Review of environmental liens, if provided or authorized to obtain by the User; and
- Preparation of a report summarizing findings, opinions and conclusions.

Pursuant to the ASTM E 1527-13 standard, recommendations to conduct Phase II sampling or other assessment activities are not required to be included in this report. TRC can provide such recommendations upon request.

1.2 Additional Services

Items outside the scope of the ASTM E 1527-13 standard include, but are not limited to, the following:

- Asbestos-containing building materials
- Radon
- Lead-based paint
- Lead in drinking water
- Wetlands
- Regulatory compliance
- Cultural and historic resources
- Industrial hygiene
- Health and safety
- Ecological resources
- Endangered species
- Indoor air quality unrelated to *releases* of *hazardous substances* or *petroleum products* into the environment
- Biological agents
- Mold

In addition to the standard inquires required by ASTM 1527-05, TRC was tasked with preparing a data gap analysis (DGA) and conceptual site model (CSM) using historical information and soil and groundwater analytical data collected at the Site. These additional services have been provided in Section 9.0.

A 2011 ESA performed by S.W. Cole listed asbestos, lead-based paint, and mold as a Business Environmental Risk (BER) in conjunction with the Site; however, these materials are outside the scope of the Phase I ESA process as defined by ASTM. Please see Section 4.3 for further information.

1.3 Deviations to ASTM E 1527-13 Standard

Notwithstanding additions to the ASTM E 1527-13 standard, as listed in Sections 1.2 and 9, if applicable, no significant deviations or deletions to the ASTM standard were made during this Phase I ESA.

2.0 SITE DESCRIPTION

2.1 Site Location and Legal Description

The Site is located at 50 Main Street in East Millinocket, Penobscot County, Maine. The Site is approximately 400 acres and is located in a residential/commercial and undeveloped area of north-central Maine. The Site has been the location of a paper mill since approximately 1907, producing paper products until its shut down in 2014. The Site is comprised of numerous buildings, a wood yard, a storm water retention pond, aboveground oil storage tanks, storage sheds, parking areas, a vehicle maintenance garage, several pulp storage silos, and a waste water treatment plant. A Site Location Map is included as **Figure 1,** a Site Plan is included as **Figure 2**, and a Site Details Plan is included as **Figure 3**.

2.2 Site Improvements

Current on-Site improvements are listed in the following table. A Site layout plan is included as **Figure 2**.

Table 2.1 - Site Improvements

Site Feature	Description
Buildings (stories)	• A 2-story approximate 240,000 square foot main Mill building that houses the two on-Site Paper Machines (#5 and #6) and the bulk of the paper and wood processing equipment • A 137,000 square foot recycled paper process and pulp building • A bark storage building • A grinder room building • A #6 oil steam plant • A bark boiler building • The old water treatment building • The water screen room building • The paper finishing building • Train shed • Finished product warehouse and shipping • Vehicle maintenance garage • Training center • Two small sheds formerly used for hazardous waste storage
Construction date(s)	Various; Mill was operational/constructed as of 1907
Exterior areas	• A wood yard used for receiving, storing, and processing tree-length softwood logs • A storm water settling pond • A waste water treatment plant (WWTP) • Parking area(s)
On-site roads/rail lines	Approximately 10 lines, all running east-west/west-east
Other large equipment	• Two large aboveground oil storage tanks • Several large pulp storage silos/tanks
Potable water supply	East Millinocket municipal drinking water system
Sewage disposal system(s)	On-Site WWTP
Heating/Cooling system fuel source(s)	Combination of hydroelectric power fuel oil, pulping liquors, wood waste, and sawdust

Table 2.1 - Site Improvements

Site Feature	Description
Back-up fuel source(s)	N/A
Electricity supplier(s)	On-Site hydroelectric power facility at the Mill/Grindstone Dam
Storm water system	Drains discharge directly to the river except the wood yard where storm water is detained in a settling pond before being discharged to the river

2.3 Current and Historical Site Use

2.3.1 Current Site Use(s)

Site operations shut down in April of 2014 due to financial hardships. Limited employees occupy the Mill on a daily basis to operate the WWTP, which actively processes storm water and waste water from the Town of East Millinocket, and from the idle paper mill's in both Millinocket and East Millinocket. A small number of other employees on-Site generally include security, engineering, asset management, maintenance, and environmental personnel.

2.3.2 Previous Owner and Operator Information

Based on information reviewed during the historical records review (Section 4), and/or interviews conducted during this Phase I (Section 6), historical Site ownership and operator information is provided in the tables below.

Table 2.2 - Previous Owner and Operator Information

Site Owner	From	To
Cate Street Capital, LLC	Circa 2011	Present
KPC, a subsidiary of Brookfield Asset Management (formerly Brascan Corporation of Canada)	Circa 2003	Circa 2011
Bankruptcy Court	Circa 2000	Circa 2003
Inexcon of Canada, owned 80% Great Northern Paper Company (GNP), owned 20%	Circa 1999	Circa 2000
Bowater Inc., owned 80% GNP, owned 20%	Circa 1991	Circa 1999
Georgia-Pacific Corp (GP)	Circa 1990	Circa 1991
Great Northern Nekoosa Corporation (GNN)	Circa 1970	Circa 1990
Great Northern Paper (GNP)	Circa 1907	Circa 1970

2.4 Physical Setting

According to the United States Geological Survey (USGS) topographic map, Medunkeunk Lake, Maine Quadrangle dated 1988, (**Figure 1**), the Site is located north-adjacent to the Penobscot River, the Site topographic elevation is approximately 312 feet above mean sea level (MSL), and local topography slopes to the south. The topographic downward slope observed at the Site during the Site reconnaissance is generally towards the south.

According to the *Significant Sand and Gravel Aquifer Map* for Medunkeunk Lake, Maine Quadrangle, dated 2001, the Site is not located within a Significant Sand and Gravel Aquifer which has moderate to low or no potential yield (less than 10 gallons per minute). This aquifer consists primarily of underlain till, marine deposits, eolian deposits, alluvium, swamps, thin glacial sand, gravel deposits, or bedrock, and yields are generally less than 10 gallons per minute in deposits hydraulically connected with surface water bodies. A copy of the Medunkeunk Lake, Maine Quadrangle Significant Sand and Gravel Aquifer map has been included in **Appendix C**.

The database radius report provided by Environmental Data Resources, Inc. (EDR) of Milford, Connecticut was reviewed to obtain information regarding the dominant soil composition in the Site vicinity. This information is summarized below:

Hydric Status:	Hydric
Soil Surface Texture:	Loamy fine sand
Soil Component Name:	ADAMS
Deeper Soil Types:	Loamy sand

Please refer to the Geocheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in the Site vicinity. According to EDR, the Site is located in a Federal Emergency Management Agency (FEMA) flood zone.

3.0 USER PROVIDED INFORMATION

According to the ASTM E 1527-13 standard, certain tasks that may help identify the presence of RECs associated with the Site are generally conducted by the Phase I ESA User. These tasks include: providing, or authorizing the *environmental professional* to obtain, recorded land title records for environmental liens or activity and land use limitations (AULs); providing specialized knowledge related to RECs at the Site (e.g., information about previous ownership or environmental litigation); providing commonly known or *reasonably ascertainable* information within the local community about the *property* that is material to RECs in connection with the *property*; and informing the *environmental professional* if, as believed by the User, the purchase price of the *property* is lower than the fair market value due to contamination. A list of requested information was included in TRC's e-mail dated July 9, 2014 (see Section 1.1).

The Owner (through the User) provided additional documentation as defined in the ASTM E 1527-13 standard; those documents can be found in both **Appendix B** and **Appendix E**.

For the purposes of this Phase I, Mr. John Civiello (Environmental Manager, Cate Street) has been identified as the Owner's Representative.

TRC was provided with commonly known and/or reasonably ascertainable information regarding the Site by the Owner's Representative. This information was used during this Phase I ESA and has been incorporated in this report as applicable.

3.1 Title & Judicial Records for Environmental Liens or Activity and Use Limitations

The User was not aware of any liens imposed against the Site.

3.2 Specialized Knowledge

The User was not aware of specialized knowledge related to RECs at the Site.

3.3 Property Value Reduction Issues

The User was not aware of property valuation reduction issues regarding the Site.

3.4 Commonly Known or Reasonably Ascertainable Information

No commonly known or reasonably ascertainable information was provided to TRC by the User.

3.5 Reason for Conducting Phase I

It is TRC's understanding the User requires a Phase I ESA to specifically evaluate the history of the Site, to assess if the current/former operations at the Site had/have the potential to impact the environment, and identify data gaps and provide a basis for future environmental Site investigations. The Client has indicated that specific adherence to ASTM 1527-13 is not required because this assessment is not part of a real estate transaction.

4.0 RECORDS REVIEW

4.1 Sources of Information

Information regarding the Site and vicinity historical uses was obtained from various publicly available and practically reviewable sources including:

- Aerial photographs (scale: 1" = 500', 750', and 1,000') dated 1947, 1975, 1991, 1997, 2006, 2007, 2009, and 2011;
- Topographic maps dated 1951, 1954, 1958, 1960, 1975, 1985, 1988, and 2011;
- Historical Sanborn® Fire Insurance Maps (Sanborn Maps) dated 1916, 1943, 1927, and 1954;
- Local municipal records;
- An environmental database report; and
- Interview with Owner's Representative Mr. John Civiello.

Historical research documentation is included in **Appendix C**.

4.1.1 Site History

Operational History

Table 4.1 - Site History

Year	Site History
Circa 1890 – circa 1907	Working farm.
Circa 1907 - present	Paper mill manufacturing operations (refer to Table 2.2 for current Site improvements), railroad service, etc.

Based on the information reviewed, it does not appear topographic contours in the Site area have significantly changed during the time period reviewed.

4.1.2 Adjoining Property History

Table 4.2 - Adjoining Property History

Direction	Adjoining Property History
North	Main Street followed by home sites for workers at the Mill, and lots for businesses and the municipality.
East	Old Mill Dump/Construction Fill Area.
South	The Penobscot River.
West	Bark Pile and former hazardous waste storage facility.

It should be noted that the off-site Bark Pile is not expected to be completely mined and capped for several years. Likewise, according to MEDEP, the off-site Construction Fill Area located to the east of the Site requires more investigation.

4.1.3 Surrounding Property History

Table 4.3 - Surrounding Property History

Direction	Surrounding Property History
North	330-acre Town owned forestland.
East	Undeveloped land.
South	Undeveloped land.
West	The Dolby Landfill was first developed in 1975 (closed in 1994) and is located north of the developed portion of East Millinocket and west of the Town forestland.

The 2011 ESA performed by S.W. Cole lists the leachate transfer pipe from the leachate collection pond at the off-Site Dolby Landfill to the on-Site WWTP located on the southern end of the mill complex as a REC because the pipe traverses beneath Mill complex property and represents a threat of Oil or Hazardous Materials (OHM) releasing to the Site if a leak should develop. However, no environmental concerns or releases in connection with this pipe have been identified, therefore, it does not constitute a REC.

4.2 Database Report & Environmental Record Review

4.2.1 Subject Site

Site information included in the database search report is summarized in the following table:

Site Facility Name(s) and/or Listed Address(es)	Great Northern Paper Main Street
EDR Map No(s).	A1 - A30, A32, and B34
Database(s)	ME LUST, ME RGA HWS, RCRA-TSDF, CERC-NFRAP, CORRACTS, RCRA-SQG, PADS, NY MINIFEST, PRP, ME LAST, ERNS, ME SHWS, ME ALLSITES, ME RGA LF, MLTS, ME AST, ME SPILLS, ME TIER 2, US AIRS, RMP, TRIS, ICIS, FINDS, ME INST CONTROL, ME VCP, ME AIRS, and ME UST

Description/ID No(s).	EDR IDs: S106404265, S114992976, 1000158624, S. S110767836, 105001304, 2011966257, S106891047, S114991305, S114986262, 1001207932, S113451128, 1000158625, 1011826389, 1011817117, S109080314, 1016146267, 1016462670, 2003700621, S109068904, U004183677, S108053344, 1016072566, 1014898217, S107695603, S109805753, S109813466, S109805650, S109813469, S109811093, S109813655, S109813549, and U003052917 EPA IDs: MED001098011 and 04430GRTNRMAINS Spill IDs: B-259-1984, B-167-1985, B-345-1987, B-332-1989, B-614-1989, B-553-1990, B-370-1993, B-77-1994, B-76-1994, B-276-1994, B-468-1994, B-28-1996, B-309-1996, B-708-1996, B-742-1997, B-718-1998, B-568-1999, B-321-2000, B-462-2003, B-483-2003, B-493-2007, B-104-2008, B-187-2008, B-252-2008, B-173-2009, B-291-2009, B-663-2009, B-656-2012, and B-56-2011

The Spill listings for the Site available in the EDR report and via on-line files maintained with the MEDEP are summarized in the following table:

Database Review Summary		
Database	**Reference ID**	**Details**
SPILLS	B-259-1984	In 1984, a spill of an estimated 2 gallons of PCB oil was made. The spill was recovered with sorbents. No further response action is expected.
SPILLS	B-167-1985	In 1988, a spill of less than 1 gallon of PCB oil was made. The contaminated soil was recovered via excavation. No further response action is expected.
SPILLS	B-345-1987	In 1987, a spill of an estimated 50 gallons of a hazardous chemical was made. The spill was treated in place and was flushed to the WWTP. No further response action is expected.
SPILLS	B-332-1989	In 1989, a spill of less than 1 gallon of PCB oil was made. The contaminated soil was recovered via excavation and was manifested to a hazardous waste disposal facility. No further response action is expected.
SPILLS	B-614-1989	In 1989, a spill of an estimated 5 gallons of hydraulic oil was made. The spill was recovered via excavation and sorbents and the contaminated soil was land farmed. No further response action is expected.
SPILLS	B-553-1990	In 1990, a spill of an estimated 200 gallons of #6 fuel oil was made. The spill was recovered with sorbents and the contaminated pads were burned. No further response action is expected.
SPILLS	B-213-1991	In 1991, a spill of an estimated 9,000 gallons of #6 fuel oil was made. The spill was recovered using sorbents and vacuum trucks. The contamination was either burnt in the Mill's boiler or was land spread. No further response action is expected.
SPILLS	B-370-1993	In 1993, a spill of an estimated 50 gallons of sulfuric acid was made. The spill was treated in place and was neutralized to the process sewer. No further response action is expected.
SPILLS	B-77-1994	In 1994, a spill of an estimated 1,250 gallons of #6 fuel oil was made. The spill was recovered via excavation and the contaminated soil was disposed of by Clean Harbors. No further response action is expected.
SPILLS	B-79-1994	In 1994, a spill of an estimated 550 gallons of #6 fuel oil was made. The spill was recovered using sorbents and the contaminated pads were burnt in the Mill's boiler. No further response action is expected.
SPILLS	B-276-1994	In 1994, a spill of an estimated 100 gallons of hydraulic oil was made. The spill was recovered using wood chips and sorbents and the contaminated items were burnt in the Mill's boiler. No further response action is expected.

Database Review Summary		
Database	**Reference ID**	**Details**
SPILLS	B-468-1994	In 1994, a spill of an estimated 100 gallons of #6 fuel oil was made. The spill was recovered using sorbents and the contaminated pads were burnt in the Mill's boiler. No further response action is expected.
SPILLS	B-28-1996	In 1996, approximately 5 gallons of transformer oil leaked from a transformer. The material was tested and discovered to be non-hazardous. Approximately one cubic yard (yd^3) of contamination was taken to an approved landfill. No surface or ground water was affected. No further response action is expected.
SPILLS	B-309-1996	In 1996, a burst hydraulic hose on a log loader resulted in the loss of about 1 quart of hydraulic oil to the Penobscot River. The Mill's personnel deployed sorbents and recovered approximately half of what was spilled. No further response action is expected.
SPILLS	B-708-1996	In 1996, a report was made that 9 pounds of lime was spilled from a silo. The spilled lime was collected/picked-up and was re-used. No further response action is expected.
SPILLS	B-742-1997	In 1997, a report of a sheen on the water of the Penobscot River was made by a security guard working at the Mill. A search by the Mill's personnel could not only not find a source, but no sheen either, after the original report. No further response action is expected.
LAST	B-718-1998	In November, 1998, a report of a spill of 1,200 gallon of 98% sulfuric acid was made. The acid was released when a valve malfunctioned; most of the acid was contained in secondary containment. The acid was treated in place with large amounts of soda ash and was then sent to a licensed treatment facility. No further response action is expected.
SPILLS	B-568-1999	In September, 1999, approximately 200 gallons of #6 oil leaked into a steam line due to corrosion and went into the Mill's sewer (and then to the WWTP). The #6 oil was collected by Industrial Vacuum and was absorbed with bark for use as fuel in the Mill's bark boiler. A boom was also deployed at the inlet to the aeration basin. There was no visible impact on the aeration basin, secondary clarifiers, or the river. No further response action is expected.
SPILLS	B-321-2000	In August, 2000, a call to request a waiver to abandon a 2,000 gallon fuel oil tank in place at the WWTP was made. The waiver was granted and the removal was attended. Investigation showed that the tank could not be removed due to a nearby large diameter sewer line. The tank was exposed, cut opened, and cleaned. There appeared to be no evidence of spillage. It may be noted that the area is considered "non-sensitive." No further response action is expected.
SPILLS	B-462-2003	In 2003, a Mill worker had lost a 330-gallon tote of sodium hydroxide off a fork truck while negotiating a ramp within the Mill. The tote spilled directly over a sewer grate that went directly to their WWTP. Recovery was not attempted. Chemical that did not go down the sewer was washed into it. No further response action is expected.
LUST	B-483-2003	In 2003, a report of an oil spill was made. During the process of replacing the anodes on a double walled tank that had been installed at the Mill in 1989, workers encountered gray, what appeared to be gasoline contaminated soil, approximately 6 feet below the surface. There was no indication that the tank was leaking but it was indicated that the soil smelled of gasoline. The following day during investigation, there was no obvious source for the contamination; it appeared to be from previous tank installation(s) on-Site. Rather than dig around the present tank and possibly undermine it, DEP made the decision to leave the contamination in place until the tank is scheduled for removal.
LAST	B-493-2007	In 2007, a report of 20 gallons of #6 fuel oil spill due to piping failure was made. Mill personnel used sorbent materials to clean up the contamination. No further action is expected.

Database Review Summary		
Database	**Reference ID**	**Details**
LAST	B-104-2008	In February, 2008, a report of a leak of approximately 200 gallons of sulfuric acid was made. The cause was a corrosion hole in the sulfuric acid supply line. Unfortunately, the leak was not contained by the secondary containment system because of a leaking valve. However, this second system failure was able to be controlled by treating the sulfuric acid in the Mill's on-Site WWTP. Clean Harbors was called to pump the approximate 2,000 gallons from the tank, allowing repairs to be made. No further response action is expected.
SPILLS	B-187-2008	In April, 2008, a report that a transformer had failed and lost approximately 400 gallons (later corrected to 350 gallons) was made. Mill personnel were unaware that the liquid in the dike was silicon transformer oil, and released approximately 200 gallons through the dike drain. It was then realized that it was transformer oil and the valve was closed. The liquid outside the dike was covered with sand to both stop the migration of oil and to absorb it. The water and oil still inside the dike was recovered by Clean Harbors and transported off-Site. The outside clean-up created approximately seven yd^3 of sand and soil which was deposited in the Dolby landfill. No further response action is expected.
SPILLS	B-252-2008	In 2008, it was reported that approximately 50 gallons of #6 fuel oil had been discovered in a depression below the railroad where #6 fuel oil is unloaded. This line had leaked some years before and a recovery well was installed and operated until no more product was recovered. It was believed that the oil is the result of the older oil problem; being that, due to historically high ground water table in spring, some residual oil not collected previously was forced to the surface. Mill personnel collected the free product with sorbents and the area was observed for further oil. No further contamination was reported. No further response action is expected.
SPILLS	B-173-2009	In 2009, during the moving of a waste oil tote, the forklift doing the moving "slipped" on ice. The tote fell and the top was punctured. Approximately 125 gallons of oil were spilled. Sawdust was used as a sorbent to collect the oil. The contaminated sawdust was burnt in the Mill's boiler. No further response action is expected.
LAST	B-291-2009	In May 2009, it was reported that an estimated 50 gallons of hydraulic oil released from a 275 gallon day tank. Wood chips were deployed onto the spill area and later burned. The spilled oil was contain to an area and no receptors were impacted. No further response action is expected.
SPILLS	B-663-2009	In November, 2009, a report of an estimated 30 gallon hydraulic leak from a blown hydraulic line on a loader was made. The fluid was released into a catch basin where it was recovered using sorbent pads. The sorbent pads were disposed of at the Mill's landfill. No further response action is expected.
LAST	B-656-2010	In December, 2010, a report of a spill of 400 gallons of #6 fuel oil was made. A day tank had overflowed and spilled through the overfill pipe onto the ground outside of the building that houses the day tank. Approximately 100 gallons of product made its way to a sewer drain and to the Mill's WWTP. The remaining product was contained and cleaned-up using the Mill's bark fuel as a sorbent. Approximately 20 yd^3 of contaminated bark fuel was disposed of in the Mill's bark boiler. No further response action is expected.
SPILLS	B-56-2011	In February, 2011, it was reported that 1 gallon of lube oil spilled to a concrete floor. A Mill worker was refilling the lube oil for a bearing on one of the pieces of machinery and accidentally overfilled the reservoir. The oil on the floor was cleaned-up with sorbent material. No further response action is expected.
UST	16697	One 2,000 gallon double-walled tank was installed in December, 1989. The tank contains unleaded gasoline and is currently listed as "active."

4.2.2 Adjoining & Surrounding Property Record Review

TRC evaluated the following factors to evaluate whether additional environmental records with respect to the adjoining and/or surrounding properties should be reviewed:

(1) Whether the property is up-gradient or down-gradient of the Site vis-à-vis **groundwater migration** based on the local topography, and the assumed groundwater depth and the assumed shallow groundwater-flow directions beneath the Site;

(2) Whether the property is up-gradient or down-gradient of the Site vis-à-vis **vapor migration** based on readily available information pursuant to the ASTM E 1527-13 standard including soil and geological characteristics; contaminant characteristics; contaminated plume migration data; and significant conduits that might provide preferential pathways for vapor migration such as major utility corridors, sanitary sewers, storm sewers, and significant natural conduits such as Karst terrain (vapor migration may also be influenced by the age and design of infrastructure features associated with these conduits);

(3) Property case status (i.e., whether the MEDEP has issued a No Further Action letter);

(4) Type of database and whether the presence of contamination is known; and

(5) The distance between the listed property and the Site. Database listings were reviewed for properties located within a 1/4-mile radius of the Site.

Based on this evaluation, TRC limited the review of additional environmental records to the properties listed below, since the potential for contamination to be migrating to the Site from the other properties identified by the database search is considered low.

Facility Name and/or Address	Exxon / Dead River Gasoline Station 64 Main Street
Approximate Location Relative to Site	200 feet north
EDR Map No.	E77, E78, and E91
Databases	ME LUST and ME UST
Description/ID Number	EDR IDs: S106787694, S106796296, and U000245492 Spill IDs: B-652-1997, B-420-1998, and B-402-2006
Presumed Hydrogeologic Setting	Up gradient

Database Review Summary	In 1997, it was reported that contaminated soil was found while relocating piping at the Exxon station. Being mid-November, land spreading was not a current option nor was the local batch plant. It was decided to stockpile the dirt at the Dead River bulk plant in Millinocket and dispose of it in the spring. In 1998, Dead River was unable to get one of their USTs to pass its annual precision test; the testing technician judged it to be leaking in the upper 25% of the tank. Therefore, Dead River shut that tank down. A loose fitting was found associated with the submersible pump, inside the secondary containment sump. That fitting was tightened, and Dead River conducted another precision test on the tank. In July, 2006, a report of a spill of four gallons of diesel fuel was made. The spill was caused by the rupture of the fuel supply line from the dispenser to the nozzle. The pump was shut off and the fire department was notified. Upon arriving, the Fire Department applied approximately 30 pounds of sorbents to the spill area, absorbing the liquid product that did not seep into the asphalt. The sorbent pads were bagged for disposal at Pine Tree Landfill. Two 10,000 gallon USTs were installed at the property in 1984 (registration number 13355). As of May, 2014, the tank's status was listed as "planned for removal." No further response action is expected at the property. The potential existed for contaminant migration to the Site from this abutting, up-gradient facility; however no further response action is expected. Therefore, it constitutes an HREC in association with the Site.

Facility Name and/or Address	McLaughlin's Auto Repair / Dave's Auto Repair 79 Main Street
Approximate Location Relative to Site	200 feet north
EDR Map No.	E87
Databases	ME LUST
Description/ID Number	EDR ID: S106794934 Spill ID: B-64-1994
Presumed Hydrogeologic Setting	Up gradient
Database Review Summary	In 1994, approximately 100 gallons of gasoline spilled due to the overfilling of UST(s). The spill was treated in place. No further response action is expected at the property. The potential existed for contaminant migration to the Site from this abutting, up-gradient facility; however no further response action is expected. Therefore, it constitutes an HREC in association with the Site.

A number of small spills were also recorded with the MEDEP, none of which were given reference IDs due to the size/type (i.e. <5 gallons) of said spills.

TRC conducted an on-line search of available files maintained with the MEDEP; only select Spill Reports were available for review. TRC also conducted a review of available files provided to TRC by the User. Those documents are summarized in Section 4.3 and can be found in **Appendix E**.

4.3 Previous Reports

The following environmental reports regarding the Site and adjacent properties were provided for TRC's review by the User or through the MEDEP File Room:

- 1976 - 2013, *Spill Prevention, Control and Countermeasure (SPCC) Plan*s, prepared by various authors
- 1983 – 1996, *various PCB Reports*, prepared by various authors
- 1987 – 1992, *Hazardous Substance and Emergency Plans*, prepared by various authors
- 1989, *Health Effect Reports*, prepared by Envirologic Data
- 1992 - 2013, *various Groundwater Monitoring Reports*, prepared by various authors
- 2002, *Final Inspection Report*, prepared by MEDEP
- 2011, *Environmental Site Assessment*, prepared by S.W. Cole Engineering, Inc.

1976 - 2013, SPCC Plans, prepared by various authors

Numerous SPCC Plans have been written since 1976. Those available for review include:

- October 1976 (1990 Update), prepared by Great Northern Paper
- March 1992 (1995 Update), prepared by Bowater
- September 2013, prepared by Great Northern Paper

The purpose of an SPCC Plan is to prevent oil spills from occurring, and to perform safe, efficient and timely response in the event of a spill or leak. In accordance with U.S. EPA oil pollution prevention regulations (40 CFR 112), the Site must prepare and implement an SPCC Plan for facilities that could reasonably be expected to discharge oil into or upon navigable waters or adjoining shorelines and meet one of the following conditions:

- Above-ground oil storage capacity exceeds 1,320 gallons; or
- Underground oil storage capacity exceeds 42,000 gallons, unless the underground tanks are subject to all of the technical requirements of 40 CFR 280 or a state program approved under 40 CFR 281. (Maine's approved program is Department of Environmental Protection, Chapter 691 -Rules for Underground Storage Facilities.)

As defined by 40 CFR Part 112, oil includes all grades of motor oil, hydraulic oil, lube oil, fuel oil, gasoline and diesel, automatic transmission fluid (ATF), waste oil, and transformer mineral oil. The citation definition of oil also includes non-petroleum oils such as animal or vegetable oils and synthetic oils.

The Site meets the aforementioned criteria, and therefore, an SPCC must be updated at a minimum of every 5 years.

As listed in the "Petroleum Storage" Section of the most recent revision of the SPCC Plan (2013), the petroleum storage at the Mill has been summarized in the table below:

Location	Number of Tanks	Capacity Gallons	Product Type
WWTP	1	1,000	Heating Oil EA207
WWTP	1	1,000	Diesel EA207
Steam Plant	1	1,000	#2 Fuel Oil
Steam Plant	1	20,000	Heating Oil (abandoned)
Steam Plant	1	20,000	Heating Oil (abandoned)
Oil Farm	1	750,000	#6 Fuel Oil
Old Maintenance Garage	1	1,000	Diesel
Oil House	1	2,000	Gasoline
Steam Plant	1	25,000	#6 Fuel Oil
Oil Farm	1	1,000	Oil/water separator
Wood yard	1	4,000	Diesel EA204
Filter House	1	1,000	Diesel
#6 P.M. Basement	1	275	Kerosene
Warehouse W and mill wide	100	55	Machine Oil
Mill wide	N/A	26,446 (total)	Transformer Oil
#5 Lube System	1 (system)	14,500	Lube Oil
#6 Lube System	1 (system)	11,700	Lube Oil
Oil Farm	2 (trucks)	7,000	#6 Fuel Oil

Pulp and chemical storage at the Mill can be found in the 2013 SPCC Plan.

The 2013 SPCC Plan can be found in its entirety in **Appendix E**.

1983 – 1996, various PCB Reports, prepared by various authors

Numerous reports pertaining to the on-going regulatory mandated groundwater monitoring concerning historical PCB spills in the former Chemi-Groundwood building area and just east of Paper Machines #5 and #6 were available for review:

- PCB Contingency Plan, August 1983, prepared by CFW & Associates
- Recommended PCB Closure Plan in the Vicinity of No. 5 and No. 6 Paper Machine Buildings, March 1986, prepared by E.C. Jordan Co.
- Chemi-Groundwood PCB Site Background Paper, March 1987, prepared by E.C. Jordan Co.
- Work Plan for Field Investigations Chemi-Groundwood Site, July 1987, prepared by Stone and Webster Engineering Corporation
- Work Plan for Field Investigations: Number 5 Paper Machine Building Site, July 1987, prepared by Stone and Webster Engineering Corporation

- Work Plan for Field Investigations: Number 6 Paper Machine Building Site, July 1987, prepared by Stone and Webster Engineering Corporation
- Data Package for Chemi-Groundwood Site, April 1988, Stone and Webster Engineering Corporation
- Data Package: Number 5 Paper Machine Site, April 1988, prepared by Stone and Webster Engineering Corporation
- Data Package: Number 6 Paper Machine Site, April 1988, prepared by Stone and Webster Engineering Corporation
- PCB Remediation Plan for Chemi-Groundwood Site, July 1988, prepared by Stone and Webster Engineering Corporation
- Remediation Plan: Number 5 Paper Machine Building Site, July 1988, prepared by Stone and Webster Engineering Corporation
- Remediation Plan: Number 6 Paper Machine Building Site, July 1988, prepared by Stone and Webster Engineering Corporation
- PCB Remediation QAPP, July 1989, prepared by Stone and Webster Engineering Corporation
- PCB Remediation Technical Specification, July 1989 (revised), prepared by Stone and Webster Engineering Corporation
- PCB Monthly Status Reports, August 1989, January 1990, etc., prepared by various authors
- Data Package for Report of PCB Cleanup, March 1991, prepared by Stone and Webster Engineering Corporation
- No Further Action (NFA), 1996, prepared by the Maine Bureau of Remediation and Waste Management

On the Chemi-Groundwood Site, an accidental release of coolant fluid occurred when a transformer failed in 1970. It was reported that 100 gallons were released; the spill was not cleaned up as the plant was not operating and electrical service was not needed at that time. The transformer was removed in 1981 and by then, only 30 gallons of the total capacity of 920 gallons of coolant fluid remained in the transformer.

On the Number 5 Paper Machine Site, transfer fluid was spilled near the northwest corner of the building in May, 1981. The spill was estimated at 150 gallons. Four years later soil sampling was conducted and soil contamination was proven present.

On the Number 6 Paper Machine Site, a transformer on the southeast corner of the building was accidentally hit by a front-end loader plowing snow spilling approximately 600 gallons of Aroclor 1260 (a mixture of PCB congeners) in January, 1978. The spilled fluid was contained in a dike and sand was spread over the area; the dike was left in place until the following spring. By June 1985, testing of soils proved contamination had not only remained, but had spread.

Further details of these releases are summarized throughout this report.

1987 – 1992, Hazardous Substance and Emergency Plans, prepared by various authors

Several Plans pertaining to Site emergencies were available for review:

- Emergency Contingency Plan, Transportation Work Plan, and Driver Information Packets, 1987, E.C. Jordan Co.
- Pre-Emergency Planning Manual, October 1990, Georgia-Pacific Corporation
- Pre-Emergency Planning Manual, February 1992, Bowater

The aforementioned Plans summarize procedures to ensure the safety of personnel during an emergency through proper training and well-defined evaluation procedure. The Plans also aim to reduce the loss of property and expedite the resumption of production.

Relevant portions of these Plans have been summarized throughout this report.

1989, Health Effect Reports, prepared by Envirologic Data

Two Health Effect Reports prepared by Envirologic Data were available for review:

- Supplementary Evaluation of Potential Health Effects Associated with the Post-remediation Conditions at the Chemi-Groundwood and No. 6 Paper Machine Sites, 1989, Envirologic Data
- Evaluation of Potential Health Effects Associated with the Post-remediation Conditions at the No. 6 Paper Machine Site: Chlorobenzenes, 1989, Envirologic Data

The Health Effect Reports prepared by Envirologic Data evaluated the potential health risks associated with the presence of PCBs following remediation; the analyses examined the potential health risks associated with residual levels remaining at the Site.

Relevant portions of these reports have been summarized throughout this report.

1992 - 2013, various Groundwater Monitoring Reports, prepared by various authors

Several reports over more than two decades discuss procedures to conduct and the results following groundwater sampling at the Site:

- Post-remediation Groundwater Monitoring Plan, April 1992 (revised), Stone and Webster Engineering Corporation
- Report of Sampling and Testing: Stone and Webster Engineering Corporation
    - First Quarter, 1995
    - Third Quarter, 1995
    - Fourth Quarter, 1996
    - First – Fourth Quarters, 1997
    - First – Fourth Quarters, 1999
    - First – Fourth Quarters, 2000
    - First – Fourth Quarters, 2001

  - First – Fourth Quarters, 2002
  - First – Fourth Quarters, 2003
  - First – Fourth Quarters, 2004
- 2003 MEDEP No Action Assurance Letter and Certificate of Completion under VRAP
- 2011 Annual Report of Sampling and Testing, December 2011, Georgia-Pacific
- 2012 Annual Report of Sampling and Testing, December 2012, Earthcon
- Annual Report of Sampling and Testing, December 2012, Premo Group Inc.
- 2013 Annual Report of Sampling and Testing, December 2013, Earthcon

Quarterly post-remediation groundwater sampling has been conducted at the Site over a number of years with varying results. On many occasions, all analytical results indicated concentrations below that of detectable concentrations. In other cases, certain analytes were detected in certain wells. During the most recent sampling event, taking place in 2013, all analytical results indicated concentrations below that of detectable concentrations. The 2003 VRAP letter discusses the groundwater results and since none were above drinking water standards, the area has been considered remediated to the satisfaction of the MEDEP.

Further details in regards to the groundwater sampling conducted at the Site has been summarized throughout this report; the 2013 report can be found in **Appendix E**.

2002, Final Inspection Report, prepared by MEDEP

MEDEP prepared a Site Inspection (SI) Report for the purposes of collecting information concerning conditions at the Site, and to assess the potential threats to human health and the environment. The SI was limited in scope and was not intended to supersede other, more detailed reports.

The Final Inspection report can be found in **Appendix E**.

2011, Environmental Site Assessment, prepared by S.W. Cole Engineering, Inc.

Based on the results of the environmental assessment conducted by S.W. Cole Engineering, Inc. the following RECs were identified in association with the Mill in 2011:

- The Site has been used for industrial purposes as a paper mill for over one hundred years. There are numerous documented oil and hazardous material spills and environmental issues associated with the property. Due to the nature of the land use at the Site, the risk of environmental impacts is inherent. Prior to construction of the on-Site WWTP in 1973-1974, discharge features including storm water catch basins and floor drains throughout the mill complex either discharged to the ground or to the river. Environmental records concerning hazardous waste, USTs, OHM spills and remediation for the Site were available as far back as the 1970s and were likely not kept prior to that time. It is therefore impossible to assess the full nature of historical environmental impacts to the Site. Historical OHM discharges from mill operations to the ground, groundwater, river and riverbed constitute a REC in connection with the Site.

- No. 6 oil was observed on the ground surface in the earthen berms around the two large No. 6 oil tanks, in the rail car offloading area, and was also observed to be emanating out of the ground on the south side of the rail road embankment in the mill complex (MEDEP Spill #B-213-1991, #B-77-1994, #B-79-1994).
- Gasoline and/or volatile organic compound impacted soil was discovered in 2003 beneath the existing 2,000 gallon steel gasoline underground storage tank next to the old paint shop at about six feet below ground surface. The contaminated soil was left in place by the MEDEP until such time as the existing tank system is removed (MEDEP Spill #B-483-2003).
- A storm water catch basin located in front of the training center and next to the vehicle maintenance garage in a paved area is situated in the gasoline tank filling and refueling surface drainage area and discharges untreated overland to the river.
- On-going regulatory mandated groundwater monitoring concerning historical PCB spills in the former Chemi-Groundwood building area and just east of Paper Machines #5 and #6 (April 2003 VRAP).
- The 4,000 gallon steel diesel aboveground storage tank and refueling pump in the wood yard is positioned on the ground without a secondary containment structure. The absence of secondary containment around and beneath the tank presents a material threat of a release of oil from the tank during filling, refueling, or as a result of vehicular accidents or during snow plowing operations.
- A portion of the mill complex is immediately down-gradient of off-Site historical leaking underground gasoline storage tanks at the Dead River gasoline station (formerly Exxon) at 64 Main Street (MEDEP Spill #B-0652-1997) and McLaughlin's Auto Repair (formerly Dave's Auto Repair) at 79 Main Street (MEDEP Spill #B-64-1994). The potential exists for contaminant migration to the Site from high risk abutting and up-gradient facilities.
- The leachate transfer pipe from the leachate collection pond at the off-Site Dolby Landfill to the on-Site WWTP located on the southern end of the mill complex traverses beneath mill complex property and represents a threat of OHM release to the Site if a leak should develop.
- MEDEP records show that five USTs were installed at the mill complex and either abandoned in place or removed. The exact location of the tanks that were abandoned (thought possibly to be beneath or near the steam plant) is unknown and MEDEP documentation concerning soil, groundwater, tank, and piping condition at the time of either abandonment or removal of the USTs was not found during the course of this assessment.

The ESA Report can be found in its entirety in **Appendix E**.

4.4 Other Environmental Record Sources

Per the ASTM standard, local or additional state records were reviewed to enhance and supplement the ASTM-required federal and state records reviewed and discussed earlier in this report. These additional records include state agency lists of: waste disposal facilities; brownfield properties; hazardous waste/contaminated facilities; registered storage tanks; records of emergency release reports; and records of contaminated public wells.

Local sources contacted to obtain this information include: the Fire Department's Mr. Peter Laree, the Town Selectmen's Administrative Assistant Ms. Shirley Tapley, and the Town Clerk Ms. Erica Ingalls. These sources were contacted via phone or e-mail on July 14, 2014.

Mr. Peter Laree responded stating that during his 35 years of experience with the Fire Department, he does not recall any specific incidents at the Mill. He stated that all fires reported to the Department were handled by the Mill's response team before the Fire Department responded. Mr. Laree also stated that the Fire Department does not keep written records of fires in the Town.

Ms. Shirley Tapley responded on July 15, 2014 stating that she has been employed with the Town for the past 10 years and was not aware of environmental concerns at the Mill. Ms. Tapley also reviewed Town files and did not find any records of environmental concerns in conjunction with the Mill.

At the issuance of this report, no response has been received from Ms. Erica Ingalls.

5.0 SITE RECONNAISSANCE

5.1 Methodology and Limiting Conditions

Mr. Charlie Springer, Project Manager, and Mr. Patrick Gere, Environmental Engineer, conducted a Site reconnaissance of accessible areas on and around the Site on July 15, 2014 for the purpose of identifying potential RECs. Mr. John Civiello, Cate Street's Environmental Manager (Owner's Representative), answered questions during the reconnaissance. Photographs taken during the reconnaissance are provided in **Appendix D**. A Site layout plan is included as **Figure 2**.

It should be noted that the Site is a heavy industrial property which has functioned as a pulp and paper mill for over 100 years. Work undertaken at this facility used hazardous materials and petroleum products. While the Site exhibits heavy staining in certain areas, it is not unexpected for the type of work undertaken at the facility.

During the Site reconnaissance, the Site in its entirety could not thoroughly be inspected due to safety considerations around Mill equipment. This limiting condition, however, is not expected to impact the results of this Phase I ESA.

5.2 Interior and Exterior Site Observations

Unless otherwise noted, the items listed in the table below appeared in good condition with no visual evidence of staining, deterioration or a discharge of hazardous materials; and there are no records of a release in these areas based on available information. Items where further description is warranted are discussed in the section(s) following the table.

Table 5.1 - Interior and Exterior Site Observations

Item	Present (Current/Historical/No)
Hazardous material storage or handling areas	Current
Aboveground storage tanks (ASTs) and associated piping	Current
Underground storage tanks (USTs) and associated piping	Historical
Drums & containers (≥5 gallons)	Current
Odors	Current
Pools of liquid, including surface water bodies and sumps (handling hazardous substances or substances likely to be hazardous only)	Current
Polychlorinated Biphenyls (PCBs) / Transformers	Historical
Stains or corrosion	Current
Drains & sumps	Current
Pits, ponds & lagoons	Current
Stressed vegetation	Current
Historical fill or any other fill material	Historical
Wastewater (including storm water or any discharge into a drain, ditch, underground injection system, or stream on or adjacent to the Site)	Current
Wells (including dry wells, irrigation wells, injection wells, abandoned wells, or other wells)	Current
Septic systems or cesspools	No

During Site reconnaissance and through discussions with Mr. John Civiello (Owner's Representative) the below observations were noted:

Hazardous Material Storage or Handling Areas

Hazardous materials are used and were observed across the Site in 55-gallon drums and 350-gallon containers. A partial list of hazardous materials used at the Site are acetic acid, acetone, ethylene glycol, hydrochloric acid, hydrogen sulfide, hydrogen peroxide, mercury, methylene chloride, nitric acid, phosphoric acid, potassium hydroxide, sodium bisulfite, sodium hydroxide, sodium hypochlorite, sodium nitrate, sodium phosphate, sulfuric acid, toluene, and xylene. Observed hazardous materials were located within buildings (connected to the WWTP) or in secondary containment. Generally speaking, ASTs and containers observed were in good condition. Areas of spills from ASTs and containers were within the collection system of the WWTP. Please see the 2013 SPCC in Appendix E and discussed in Section 4.3 for additional information on hazardous material storage.

Petroleum Products Storage or Handling Areas

Heating oil, gasoline, diesel, #2 fuel oil, #6 fuel oil, kerosene, and machine oil, are stored in ASTs, 55-gallon drums and 350-gallon containers across the Site. Observed petroleum products were located within buildings (connected to the WWTP) or in secondary containment. Generally speaking, ASTs and containers observed were in good condition. Areas of spills from ASTs and containers were within the collection system of the WWTP. Please see the 2013 SPCC in Appendix E and discussed in Section 4.3 for additional information.

Underground Storage Tanks

Historically, there were five USTs on-Site; two USTs were observed beneath the old water treatment building. These USTs were reportedly cleaned and filled with sand; they cannot be removed due to structural concerns. The other three were abandoned in place sometime before 1995. Mr. Civiello has no records prior to 1995; he believes, though, that these three historical USTs contained #2 fuel oil. No abandonment documentation was identified. The 2011 ESA performed by S.W. Cole listed these three USTs as a REC, given the unknown conditions and lack of available records.

Please see the 2013 SPCC in Appendix E and discussed in Section 4.3 for additional information on USTs.

Aboveground Storage Tanks

Numerous ASTs exist on-Site. Observed ASTs are located within buildings (connected to the WWTP) or in secondary containment. Generally speaking ASTs were in good condition. Areas of spills from ASTs and containers were within the collection system of the WWTP.

A 4,000 gallon steel diesel AST and refueling pump was observed in the wood yard. The AST was observed to be protected by concrete barriers. No staining or evidence of a release was observed. The 2011 ESA performed by S.W. Cole (please see section 4.3 for details) identifies

this AST as a REC, given the absence of secondary containment around and beneath the tank; which presented a material threat of a release of oil from the tank during filling, refueling, or as a result of vehicular accidents or during snow plowing operations. However, the 2013 SPCC Plan lists the AST as having double wall construction and an impact barrier (observed during the Site Recon). Given the secondary contaminant and impacted barrier, the AST is not considered a REC in conjunction with the Site.

A release of #6 oil was observed within the unlined earthen berm of the 750,000-gallon #6 oil AST. In addition, #6 oil was observed on the ground surface at the adjacent petroleum offloading area.

Please see the 2013 SPCC in Appendix E and discussed in Section 4.3 for additional information.

Polychlorinated Biphenyls (PCBs) / Transformers

Reportedly, PCB oils and containing equipment were removed from the Site in the past. Three historical releases of PCBs are currently being monitored in groundwater. Recent data indicates that PCBs are below the laboratory detection limits and the MEDEP has provided a VRAP No Further Action Assurance letter for the releases.

Please see the 2013 SPCC in Appendix E and discussed in Section 4.3 for additional information on the location of transformers at the Site.

Stains or Corrosion

TRC observed numerous areas of staining within the Mill structures. These areas were located within the capture system of the WWTP and/or on intact concrete. Generally speaking minimal staining was observed in exterior areas. This staining can be considered typical of the use of the Site as an industrial property. Three areas of heavy staining were observed outside of Mill structures on the ground surface:

- #6 oil release within the unlined earthen berm of the 750,000-gallon #6 oil AST
- #6 oil release on the side of the Old Water Treatment Building
- Hydraulic and lubrication oil releases in the area of the Slasher

Drains & Sumps

Drains and sumps were observed at the Site within the Mill structures. According to Mr. Civiello, all drains and sumps were connected to the on-Site WWTP in the mid-1970s. Storm water catch basins located in external areas of the mill area of the Site are connected to the WWTP. Storm water catch basins located in the wood yard, shipping, receiving, and WWTP areas discharge directly to the river.

The 2011 ESA performed by S.W. Cole lists the storm water catch basins as a BER; specifically, the storm water catch basin located in front of the training center and next to the vehicle maintenance garage is listed as a REC, given it is situated in the gasoline tank filling and

refueling surface drainage area and discharges untreated overland to the river. However, no environmental concerns have been found in correlation to these catch basins, and therefore, are not considered a REC in conjunction with the Site.

Pits, Ponds & Lagoons

TRC observed primary and secondary clarifier ponds and a large aeration lagoon at the WWTP. In addition, a storm water detention/settling pond that receives storm water runoff from the wood yard was observed. This storm water detention/settling pond is not connected to the WWTP and discharges directly to the river.

Historical Fill or Any Other Fill Material

TRC did not observe evidence of fill at the Site.

Wastewater

All process water from Mill operations is treated in the WWTP which has a DEP Multi-Sector General Permit (MER058494) to discharge to the river. Since 2011, the WWTP has had three bypass violations relating to discharge to the river. In each case, untreated (or partially treated) process water was released into the river.

Wells

Several groundwater monitoring wells were observed at the Site. According to Mr. Civiello, the monitoring wells are used to monitor the three historical PCB spills.

Other Observations

Approximately 600 pounds of elemental mercury is stored in the training building. The mercury was obtained from idle equipment and instrumentation at the West Mill in Millinocket. The mercury is contained in sealed poly containers (less than 1 liter each), within secondary containment (a "kiddy pool"), and secured within a locked room. The 2011 ESA performed by S.W. Cole listed this elemental mercury storage as a BER.

It was noted that the recycled paper process and pulp building was shutdown in 2011 due to changes in market conditions. Currently the Site does not receive raw materials/chemicals or ship product via rail. All transport is completed by truck. The Site is connected to the Central Maine and Quebec Railroad system.

5.3 Adjoining and Surrounding Properties Reconnaissance

5.3.1 Adjoining Properties

During the Site reconnaissance, TRC viewed the adjoining properties from the Site and publicly accessible areas (e.g., public roadways, etc.).

Table 5.2 - Adjoining Properties Reconnaissance

Direction from Site	Current Land Use Description
North	Main Street, residential and commercial development (the Town of East Millinocket), the Town of East Millinocket's WWTP, and a rail line.
East	The Old Mill Dump/Construction Fill Area.
South	The Penobscot River.
West	The Bark Pile which is currently operated by Northland Bark Mulch.

5.3.2 Surrounding Properties

Surrounding properties generally include undeveloped land. To the north, beyond the Town of East Millinocket, is dense vegetated land; to the east, undeveloped vegetated land with light residential and commercial development, including a cemetery; to the south, dense vegetated land and a substation beyond the Penobscot River; and to the west, the Dolby landfill with light commercial development.

6.0 INTERVIEWS

The following persons were interviewed to obtain historically and/or environmentally-pertinent information regarding RECs associated with the Site.

- Mr. John Civiello, Environmental Manager of Cate Street.

The information provided by each is discussed and referenced in the text of this report. Other references and sources of information are included in **Appendix E**.

7.0 FINDINGS, OPINIONS AND CONCLUSIONS

Potential findings can include RECs, historical RECs (HRECs), controlled RECs (CRECs), and de minimis conditions, pursuant to the ASTM E 1527-13 standard.

RECs are defined as the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: (1) due to any *release* to the environment; (2) under conditions indicative of a *release* to the *environment*; or (3) under conditions that pose a *material threat* of a future *release* to the *environment*.

HRECs are defined as a past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the *property* and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the *property* to any required controls (for example, *property* use restrictions, *activity and use limitations, institutional controls*, or *engineering controls*).

CRECs are defined as a REC resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, *property* use restrictions, *activity and use limitations, institutional controls*, or *engineering controls*).

De minimis conditions are defined as a condition that generally does not present a threat to human health or the *environment* and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis conditions* are not RECs nor CRECs.

TRC has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13 at the property located on Main Street in East Millinocket, Maine (Site), see **Appendices F and G**. Deviations from this standard are described in Sections 1.3 and 7.6 of this report.

7.1 RECs and CRECs

This assessment has revealed evidence of five RECs in connection with the Site which are described below and shown on Figure 2.

REC #1: Likely Impacts from Historical Site Use

The Site is currently a 400-acre inactive pulp and paper mill containing developed and undeveloped land. The Site has operated as a pulp and paper mill for over 100 years with associated support features/structures including petroleum/chemical storage tanks/areas, petroleum/chemical underground pipelines, a WWTP, pulping process equipment, etc. Staining was observed around equipment within and around multiple mill structures (within the capture zone of the WWTP).

Based on the available information reviewed and the Site visit, current facility practices appear to be in accordance with applicable regulations. However, historical housekeeping practices and environmental regulatory requirements were not at today's standards. In addition, numerous reported historical releases of a variety of petroleum products and hazardous materials have occurred at the Site, some of which have been released directly to the ground surface and some from current/historical structures. Records of reported historical releases are available and document response actions/remediation. However it is likely that similar types of releases occurred throughout the Site's entire operational history but are undocumented and possibly not remediated.

Based on TRC's experience with similar sites, the possibility exists for historically poor housekeeping practices and the potentially undocumented/un-remediated historical releases to have impacted surface and subsurface conditions at the Site. According to Site representatives, no environmental assessment of soil, vapor, and/or groundwater has been conducted at the Site (except for the groundwater monitoring concerning PCB spills in the former Chemi-Groundwood building area and just east of Paper Machines #5 and #6), therefore the conditions of the subsurface beyond those areas are unknown.

The likely presence of petroleum products and hazardous materials in the subsurface from historical releases and Site use constitutes a REC in association with the Site.

While it is probable that soil and groundwater contamination exist at the Site, these impacts are unlikely to affect the facility's use as an industrial paper mill. Appropriate care should be taken during future construction projects which disturb soils, groundwater, and/or have the potential to be in areas where vapors associated with past releases may be present in the developed areas of the Site.

REC #2: Soil impacts Around the Refueling Station

According to Spill Report B-483-2003, during the process of replacing the anodes on an existing 2,000-gallon double walled steel gasoline UST located next to the old paint shop that had been installed at the Mill in 1989, workers encountered gasoline and/or volatile organic compound impacted soil about 6 feet below ground surface. There was no indication that the tank was leaking. The following day during investigation, there was no obvious source for the contamination; it appeared to be from a previous tank installation on-Site. Impacted soil was left in place until the existing tank system is removed or replaced; therefore, this impact is considered a REC in association with the Site.

REC #3 – Observation of #6 Oil Release within Unlined Eastern Berm

During Site reconnaissance on July 15, 2014, a release of #6 oil was observed within the unlined earthen berm of the 750,000-gallon #6 oil AST. In addition, #6 oil was observed on the ground surface at the adjacent petroleum offloading area.

This release of #6 oil to the environment constitutes a REC in association with the Site.

REC #4: Staining on Structure and Soil in the Vicinity of the Slasher

During Site reconnaissance on July 15, 2014, TRC observed heavy staining of hydraulic and lubrication oil on the ground surface and structures in the area of the Slasher (outside the capture zone of the WWTP). The exact extent/quantity of the release is not known.

This release of petroleum to the environment constitutes a REC in association with the Site.

REC #5: Undocumented UST Closures

Three of the five historical USTs at the Site were reportedly abandoned in place before 1995. It is reported that these three USTs contained #2 fuel oil. No environmental records were available prior to 1995 and no abandonment documentation was identified.

Based on the lack of available records and unknown condition of the tank and/or subsurface at the time of abandonment; these three USTs constitutes a REC in association with the Site.

7.2 HRECs

This assessment has revealed evidence of three HRECs in connection with the Site:

HREC #1: Historical PCB Impacts to Groundwater

Historically three release of PCBs have occurred at the Site. Long term groundwater monitoring has been conducted in these areas since the early 1990s.

- At the former Chemi-Groundwood building, an accidental release of coolant fluid occurred when a transformer failed in 1970. It was reported that 100 gallons were released; the spill was not tended to as the plant was not operating and electrical service was not needed at that time. The transformer was removed in 1981 and by then, only 30 gallons of the total capacity of 920 gallons of coolant fluid remained in the transformer.
- At the Number 5 Paper Machine building, transfer fluid was spilled near the northwest corner of the building in May, 1981. The spill was estimated at 150 gallons. Four years later soil sampling was conducted and soil contamination was proven present.
- At the Number 6 Paper Machine Site building, a transformer on the southeast corner of the building was accidentally hit by a front-end loader plowing snow spilling approximately 600 gallons of Aroclor 1260 (a mixture of PCB cogeners) in January, 1978. The spilled fluid was contained in a dike and sand was spread over the area; the dike was left in place until the following spring. By June 1985, testing of soils proved contamination had not only remained, but had spread.

Quarterly post-remediation groundwater sampling has been conducted in these areas over a number of years with varying results. On many occasions, analytical results indicated concentrations below that of detectable concentrations. In other cases, certain analytes were detected in certain wells. During the most recent sampling events, taking place in 2012 and 2013,

analytical results indicated concentrations below that of detectable concentrations. See Appendix E for 2013 analytical data.

In 2003, the MEDEP VRAP provided a letter stating that since none of the groundwater results were above drinking water standards, the area has been considered remediated to the satisfaction of the MEDEP.

Based on the recent analytical data and the 2003 MEDEP VRAP letter; these spills constitute a HREC in conjunction with the Site.

HREC #2 - Historical #6 Oil Release within Unlined Eastern Berm

In the early 1990s, three spills of #6 oil within the earthen berms around the two large #6 oil tanks (in the rail car offloading area and on the south side of the rail road embankment) occurred and were subsequently remediated. The MEDEP spill report indicated that "no further action was expected" at each of the spills.

- In 1991, according to Spill Report B-213-1991, a spill of an estimated 9,000 gallons of #6 fuel oil occurred. The spill was remediated using sorbents and vacuum trucks. The contamination was either burnt in the Mill's boiler or was land spread.
- In 1994, according to Spill Report B-77-1994, a spill of an estimated 1,250 gallons of #6 fuel oil occurred. The spill was remediated via excavation and the contaminated soil was disposed of by Clean Harbors. I
- In 1994, according to Spill Report B-79-1994, a spill of an estimated 550 gallons of #6 fuel oil occurred. The spill was remediated using sorbents and the contaminated pads were burnt in the Mill's boiler.

Based on the remediation documented in the spill report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.

HREC #3: Historical Off-Site Releases

A portion of the Mill complex is immediately down-gradient of off-Site historical leaking underground gasoline storage tanks at the Dead River Gasoline Station (formerly Exxon) and McLaughlin's Auto Repair (formerly Dave's Auto Repair). There are three Spill Reports in conjunction with the Dead River Gasoline Station: B-652-1997, B-420-1998, and B-402-2006; and one in conjunction with McLaughlin's Auto Repair: B-64-1994. Response or remedial actions have occurred. The MEDEP spill report indicated that "no further action was expected" at each of the spills.

- In 1994, approximately 100 gallons of gasoline spilled due to the overfilling of UST(s). The spill was treated in place.
- In 1997, it was reported that contaminated soil was found while relocating piping at the Exxon station. Being mid-November, land spreading was not a current option nor was the local batch plant. It was decided to stockpile the dirt at the Dead River bulk plant in Millinocket and dispose of it in the spring.

- In 1998, Dead River was unable to get one of their USTs to pass its annual precision test; the testing technician judged it to be leaking in the upper 25% of the tank. Therefore, Dead River shut that tank down. A loose fitting was found associated with the submersible pump, inside the secondary containment sump. That fitting was tightened, and Dead River conducted another precision test on the tank.
- In July, 2006, a report of four gallons of diesel fuel spilling was made. The spill was caused by the rupture of the fuel supply line from the dispenser to the nozzle. The pump was shut off and the fire department was notified. Upon arriving, the Fire Department applied approximately 30 pounds of sorbents to the spill area, absorbing the liquid product that did not seep into the asphalt. The sorbent pads were bagged for disposal at Pine Tree Landfill.

Based on the response actions and/or remedial efforts documented in the spill report and MEDEP's statement of "no further action was expected"; these spills constitute a HREC in conjunction with the Site.

7.3 *De Minimis* Conditions

This assessment has revealed evidence of a *de minimis* condition in connection with the Site.

1. A number of small spills were recorded with the DEP, none of which were given reference IDs, due to the size/type (i.e. <5 gallons) of said spills. These spills are considered de minimis in nature.

7.4 Data Gaps

TRC has made an appropriate inquiry into the commonly known and reasonably ascertainable resources concerning the historical ownership and use of the Site back to the first development per 40 CFR Part 312.24 (*Reviews of Historical Sources of Information*). Data gaps identified during this assessment include the following:

1. TRC conducted an on-line search of available files maintained with the MEDEP; only select Spill Reports were available for review. This data gap is unlikely to affect the conclusions drawn in this report.

7.5 Limiting Conditions and Deviations

This assessment has revealed the below limiting condition and deviation in connection with the Site.

1. During the Site reconnaissance, the Site in its entirety could not thoroughly be covered due to safety considerations around Mill equipment. This limiting condition, however, is not expected to impact the results of this Phase I ESA.

7.5.1 Accuracy and Completeness

The ASTM E 1527-13 standard recognizes inherent limitations for Phase I ESAs that apply to this report, including:

- Uncertainty Not Eliminated – No Phase I ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Data gaps identified during this Phase I ESA are listed in Section 7.5.

- Not Exhaustive – A Phase I ESA is not an exhaustive investigation.

- Past Uses of the Property – A review of standard historical sources at intervals less than five years is not required.

The Client is advised that the Phase I ESA conducted at the Site is a limited inquiry into a property's environmental status, cannot wholly eliminate uncertainty, and is not an exhaustive assessment to discover every potential source of environmental liability at the Site. Therefore, TRC does not make a statement i) of warranty or guarantee, express or implied for any specific use; ii) that the Site is free of RECs or environmental impairment; iii) that the Site is "clean"; or iv) that impairments, if any, are limited to those that were discovered while TRC was performing the Phase I ESA. This limiting statement is not meant to compromise the findings of this report; rather, it is meant as a statement of limitations within the ASTM standard and intended scope of this assessment. Specific limiting conditions identified during the Site reconnaissance are described in Section 5.1. Subsurface conditions may differ from the conditions implied by surface observations, and can be evaluated more thoroughly through intrusive techniques that are beyond the scope of this assessment. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes.

This report presents TRC's site reconnaissance observations, findings, and conclusions as they existed at the time of the Site reconnaissance. TRC makes no representation or warranty that the past or current operations at the property are, or have been, in compliance with all applicable federal, state and local laws, regulations and codes. TRC makes no guarantees as to the accuracy or completeness of information obtained from others during the course of this Phase I ESA report. It is possible that information exists beyond the scope of this assessment, or that information was not provided to TRC. Additional information subsequently provided, discovered, or produced may alter findings or conclusions made in this Phase I ESA report. TRC is under no obligation to update this report to reflect such subsequent information. The findings presented in this report are based upon reasonably ascertainable information and observed Site conditions at the time of the assessment.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not assessed. Regardless of the findings stated in this report, TRC is not responsible for consequences or conditions arising from facts that were not fully disclosed to TRC during the assessment.

An independent data research company provided the government agency database referenced in this report. Information regarding surrounding area properties was requested for approximate minimum search distances and was assumed to be correct and complete unless obviously contradicted by TRC's observations or other credible referenced sources reviewed during the assessment.

TRC is not a professional title insurance or land surveyor firm and makes no guarantee, explicit or implied, that any land title records acquired or reviewed, or any physical descriptions or depictions of the property in this report, represent a comprehensive definition or precise delineation of property ownership or boundaries.

7.5.2 Warranties and Representations

This report does not warrant against: (1) operations or conditions which were not evident from visual observations or historical information provided; (2) conditions which could only be determined by physical sampling or other intrusive investigation techniques; (3) locations other than the client-provided addresses and/or legal parcel description; or (4) information regarding off-Site location(s) (with possible impact to the Site) not published in publicly available records.

7.5.3 Continued Validity/User Reliance

This report is presumed to be valid, in accordance with, and subject to, the limitations specified in the ASTM E 1527-13 standard, for a period of 180 days from completion, or until the Client obtains specific information that may materially alter a finding, opinion, or conclusion in this report, or until the Client is notified by TRC that it has obtained specific information that may materially alter a finding, opinion, or conclusion in this report. Additionally, pursuant to the ASTM E 1527-13 standard, this report is presumed valid if completed less than 180 days prior to the date of acquisition of the property or (for transactions not involving an acquisition) the date of the intended transaction.

7.5.4 Significant Assumptions

During this Phase I ESA, TRC relied on database information; interviews with Site representatives, regulatory officials, and other individuals having knowledge of Site operations; and information provided by the User as requested in our authorized Scope of Work. TRC has assumed that the information provided is true and accurate. Reliance on electronic database search reports is subject to the limitations set forth in those reports. TRC did not independently verify the information provided. TRC found no reason to question the validity of the information received unless explicitly noted elsewhere in this report. If other information is discovered and/or if previous reports exist that were not provided to TRC, our conclusions may not be valid.

8.0 REFERENCES

Table 8.1 - References Information

Description/Title of Document(s) Received or Agency Contacted	Date Information Request Filled/Date of Agency Contact	Information Updated	Reference Source
All Appropriate Inquiries Rule	November 2006	N/A	*Standards and Practices for All Appropriate Inquiries*. 70 Fed. Reg. 66070, titled 40 CFR Part 312
American Society for Testing and Materials	November 2005	N/A	*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM Designation E 1527-13
Environmental Data Resources, Inc.	July 9, 2014	N/A	*The EDR Aerial Photo Decade Package*, Inquiry Number 3999659.5
Environmental Data Resources, Inc.	July 11, 2014	N/A	*Certified Sanborn® Map Report* Inquiry Number 3999659.3
Environmental Data Resources, Inc.	July 9, 2014	N/A	*The EDR Radius Map with GeoCheck®; Inquiry Number 3999659.2s*
Maine Department of Environmental Protection	July 10, 2014	N/A	*Interactive Maps* http://www.maine.gov/dep/gis/datamaps/index.htm#Google_Earth_Maps
Maine Geological Survey	July 10, 2014	N/A	*Surficial Geology of the Medunkeunk Lake, Maine Quadrangle*
Maine Geological Survey	July 10, 2014	N/A	*Significant Sand and Gravel Aquifers in the Medunkeunk Lake, Maine Quadrangle*
United States Fish and Wildlife Services National Wetland Inventory	July 10, 2014	N/A	Wetlands Mapper http://www.fws.gov/wetlands/Wetlands-Mapper.html
United States Geological Survey	July 10, 2014	N/A	Map Locator & Downloader
United States Geological Survey	1985	N/A	*Bedrock Geologic Map of Maine*

9.0 ADDITIONAL SERVICES

In addition to the ASTM 1527-13 Phase I ESA, TRC was tasked with preparing a Conceptual Site Model (CSM) and Data Gap Analysis (DGA) using the limited data available for the Site. These additional services are provided below.

9.1 Conceptual Site Model

The following section provides a current CSM for the Site. This CSM represents TRC's current understanding based on existing data. The CSM may evolve over time as additional information becomes available.

9.1.1 Current Site Use

The Site is a paper mill which is not currently in operation.

Northland Bark Mulch operates a bark mulch processing operation in the Bark Pile area (off-Site). This bark pile is not anticipated to be completely mined and capped for another several years.

The Site is located in a residential and undeveloped area of north-central Maine. Properties to the north and east are generally residential or commercial, and properties to the east and west consist of undeveloped forestland.

9.1.2 Historical Site Use

The Site has been the location of a paper mill since approximately 1907, producing paper products until its shutdown in 2014.

The Mill property is developed with a 2-story approximate 240,000 square foot main mill building that houses the two functional on-Site Paper Machines (#5 and #6) and the bulk of the paper and wood processing equipment. Other structures and improvements include: a 137,000 square foot recycled paper process and pulp building, a wood yard used for receiving, storing, and processing tree-length softwood logs, a storm water settling pond, a bark storage building, a grinder room building, two large aboveground oil storage tanks, a #6 oil steam plant, a bark boiler building, the old water treatment building, the water screen room building, several large pulp storage silos/tanks, the paper finishing building, train shed, finished product warehouse and shipping, vehicle maintenance garage, training center, two small sheds formerly used for hazardous waste storage, and a large WWTP.

Central Maine and Quebec Railway tracks traverse along the northern edge of the Site and reach into portions of the Mill complex at the wood yard to the west, the #6 oil offloading and storage area to the north, and the shipping and receiving end to the south. The Mill complex draws process and cooling water from the river and is also connected to the East Millinocket municipal drinking water system. Electricity is provided by the on-Site hydroelectric power facility at the Mill/Grindstone Dam. Storm drains not positioned in the industrial activity areas of the Site

discharge directly to the river except for the wood yard where storm water is detained in a settling pond before being discharged to the river. Storm drains positioned in the industrial activity areas discharge to the on-Site WWTP.

The approximate locations of these features are indicated on **Figure 3**.

9.1.3 Anticipated Future Site Use

It is anticipated that the Site will continue to be used for industrial activity into the future.

9.1.4 Geologic and Hydrogeologic Conditions

According to the USGS topographic map, Medunkeunk Lake, Maine Quadrangle dated 1988, (**Figure 1**), the Site is located north-adjacent to the Penobscot River, the Site topographic elevation is approximately 312 feet above MSL, and local topography slopes to the south. The topographic downward slope observed at the Site during the Site reconnaissance is generally towards the south.

According to the *Significant Sand and Gravel Aquifer Map* for Medunkeunk Lake, Maine Quadrangle, dated 2001, the Site is not located within a Significant Sand and Gravel Aquifer which has moderate to low or no potential yield (less than 10 gallons per minute). This aquifer consists primarily of underlain till, marine deposits, eolian deposits, alluvium, swamps, thin glacial sand, gravel deposits, or bedrock, and yields are generally less than 10 gallons per minute in deposits hydraulically connected with surface water bodies. A copy of the Medunkeunk Lake, Maine Quadrangle Significant Sand and Gravel Aquifer map has been included in **Appendix C**.

The database radius report provided by EDR of Milford, Connecticut was reviewed to obtain information regarding the dominant soil composition in the Site vicinity. This information is summarized below:

Hydric Status:	Hydric
Soil Surface Texture:	Loamy fine sand
Soil Component Name:	ADAMS
Deeper Soil Types:	Loamy sand

Please refer to the Geocheck Physical Setting Source Summary of the EDR report presented in **Appendix A** for further information regarding the soil composition in the Site vicinity. According to EDR, the Site is located in a FEMA flood zone.

9.1.5 Nature and Extent of Documented Impacts

Table 9.1 below summarizes the various Site Settings, Areas of Concern, potential contaminants associated with each of these areas, and the soil and/or groundwater sampling historically conducted within these areas.

Table 9.1 - Nature and Extent of Documented Impacts

Site Setting	AOC	AOC Description	Potential Contaminants
Mill Operations	Chemi-Groundwood Building (AOC #1)	A leaking transformer on the outside south wall of the Chemi-Groundwood building caused areas of PCB-oil to spill into the soil. The building was opened in the early 1950's; the PCB release occurred in 1970. Usage of the building continued until 1969. PCB contamination remediation occurred in 1989. Which involved removal of approximately 6,000 yd^3 of contaminated soil. Afterwards, the surface had been paved. Analytical results of soil samples showed PCB concentrations ranging from <2 – 6,000 parts per million (ppm). Groundwater monitoring has been on-going quarterly since at least 1995. The Chemi- Gorundwood Building contained numerous historical ASTs and USTs which contained various chemicals and petroleum products. During the long operational history of the mill, historical use of products, loading and unloading of materials, tank cleaning, and other activities likely led to releases at this AOC. No environmental samples other than PCBs and chlorinated benzenes are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds
	Number 5 Paper Machine Site (AOC #2)	Two over-pressured transformers on the outside of the Number 5 Paper Machine building ruptured and spilled oil in a 60 foot by 30 foot by 5 foot deep area. The building was erected in the early 1900's; the PCB release occurred in May, 1981. The building was in use until 2014. Remediation of the contaminated soil, occurring from 1989-1990, included excavation of approximately 5,250 yd^3 of soil (combined with Number 6 Paper Machine Site contaminated soil). Afterwards, the surface had been paved. Analytical results from soil samples collected in 1988 ranged from <5 – 30,000 mg/kg of PCB. Groundwater monitoring has been on-going quarterly since at least 1995; maximum PCB concentration in groundwater samples taken was 1.6 µg/L. The Number 5 Paper Machine contained numerous historical ASTs which contained various chemicals and petroleum products. During the long operational history of the mill, historical use of products, loading and unloading of materials, tank cleaning, and other activities likely led to releases at this AOC. No environmental samples other than PCBs and chlorinated benzenes are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds

Table 9.1 - Nature and Extent of Documented Impacts

Site Setting	AOC	AOC Description	Potential Contaminants
	Number 6 Paper Machine Site (AOC #3)	Construction equipment hit a transformer outside the Number 5 Paper Machine building spilling approximately 600 gallons of PCB oil into the soil. The building was erected in the early 1900's; the PCB release occurred in 1978. The building was in use until 2014. Remediation of the contaminated soil, occurring in 1989, included excavation of approximately 5,250 yd^3 of soil (combined with Number 5 Paper Machine Site contaminated soil). Afterwards, the surface had been paved. Analytical results from soil samples collected in 1988 ranged from <5 – 230 mg/kg of PCB. Groundwater monitoring has been on-going quarterly since at least 1995. The Number 6 Paper Machine contained numerous historical ASTs which contained various chemicals and petroleum products. During the long operational history of the mill, historical use of products, loading and unloading of materials, tank cleaning, and other activities likely led to releases at this AOC. No environmental samples other than PCBs and chlorinated benzenes are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds
	Paint Shop Building (AOC #4)	The structure is a 30 foot by 30 foot concrete-floored building. The west half contains a variety of paint-related chemicals in small metal cans. No floor drains exist in the west half of the building. Numerous containers are located in the eastern half; including 55-gallon drums that read "transformer oil," "waste oil MNC-2," etc. Stained areas exist in the building. All floor drains lead to the WWTP. No evidence of a release has been noted, but there is the high potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs SVOCs, and/or metals
	Automotive Maintenance Building (AOC #5)	The automotive maintenance building is a 40 foot by 40 foot cement floored building used to maintain automobiles. Relatively small quantities of spilled waste oil and automotive related chemicals are located within the building. No controlled releases have been observed, but there is a low potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds

Table 9.1 - Nature and Extent of Documented Impacts

Site Setting	AOC	AOC Description	Potential Contaminants
	Kraft Hydra-Pulper Building (AOC # 6)	The Kraft Hydra-Pulper building is part of the main Mill building. Chemicals stored/used include a 250-gallon caustic soda tank and transfer system. Other chemicals include approximately 20 250-gallon steel tanks of sodium hydrosulfite. The building was constructed in the early 1900's and was in use until 2014. Although staining can be observed in the building, no documentation of a release was found in U.S EPA or MEDEP files. Therefore, there is the low potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds
	Machine Room Building Storage Area (AOC #7)	The Machine Room Building Storage area stores fifteen 250-gallon steel tanks of acetic-acid dyes and caustic sodas. The building was constructed in the early 1900's and was in use until 2014. No releases were observed and no documentation of a release was found in U.S. EPA or MEDEP files, but there is a low potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds
	Hazardous Waste Buildings (AOC #8)	Two metal 8 foot by 12 foot sheds on concrete pads were used for temporary storage of hazardous wastes. The storage sheds are fitted with sealed doors and concrete berms. The sheds began storing hazardous waste in 1988 and were in use until 2014. No releases were observed and no documentation of a release was found in U.S. EPA or MEDEP files, but there is a low potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds
	Sulfite Storage Tank (AOC #9)	The above-ground 1,000,000-gallon sulfite tank was in use as of 1987 and was until 2014. No releases were observed and no documentation of a release was found in U.S. EPA or MEDEP files, but there is a low potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	Sulfite
	Vicinity of the Steam Plant (AOC #10)	This AOC includes numerous current and historical ASTs and USTs which contain (or contained) various chemicals (including magnesium bisulfite, caustic soda, hydrogen peroxide, sodium borohydride, sodium hydrosulfite, magnesium hydroxide, hydrochloric acid) and waste oil. During the long operational history of the mill, historical loading and unloading of materials, tank cleaning, and other activities likely led to the occurrence of releases in this AOC. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds

Table 9.1 - Nature and Extent of Documented Impacts

Site Setting	AOC	AOC Description	Potential Contaminants
Waste Water Treatment Plant	Waste Water Treatment Plant and influent pipe (AOC #11)	The WWTP was constructed in 1974 and houses two 500-gallon steel tanks containing percol 757 (a polymer) and one 6,000-gallon tank containing phosphoric acid. The tanks are located above ground on a concrete floor. Small areas of staining can be observed in the WWTP. No releases were observed and no documentation of a release was found in U.S. EPA or MEDEP files, but there is a low potential for a release. The WTTP influent pipe ruptured in the Fall of 1991 releasing approximately 46,000-gallons of influent (Mill sewage) into surrounding soils. The plant was shut down for 9 days while the pipeline was repaired. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs, and/or petroleum compounds
Bark Pile (off-Site)	Bark Pile (AOC #12)	The Bark Pile, located west of the main Mill building, is approximately 600 feet long, 500 feet wide, and 30 feet high. The bark pile was used to dispose of waste bark and is also used for "Mill trash." The Bark Pile was first utilized in the early 1900's and was operational until 1970. No release controls were observed and no documentation of a release was found in U.S. EPA or MEDEP files, however, there is the high potential for a release. No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds

Additionally, multiple USTs are known to have existed within the Mill complex area, and likely many unknown USTs have historically been present within the Mill complex area. Tank removal information was not available during this assessment.

Please see Figure 3 for the location of AOCs.

9.1.6 Potential Human and Environmental Receptors

According to MEDEP's 2002 Final Inspection Report, the population residing within four miles of the site obtains drinking water from groundwater wells, both public and private sources. The towns of East Millinocket, Millinocket, Medway, TAR7 WELS, and Grindstone are located within four miles of the Site. The East Millinocket Water District supplies a portion of the population of East Millinocket and Medway with public water. The water supply for the Town of East Millinocket is from wells located within the one mile distance ring from the Site. There are no private drinking water wells within 0.5 miles of the Site. The closest private domestic well to the Site is within 0.5 to one mile radius from the Site.

Potential human and environmental receptors are outlined below:

Potential Human Receptors:

- Current Site construction workers;
- Future Site industrial workers;
- Surrounding residential population (via ingestion of groundwater as drinking water, or surface water through dermal contact); and
- Trespassers.

Potential Environmental Receptors:

- Penobscot River;
- Groundwater (as a discharge to a surface water body); and
- Wildlife, including aquatic species, in the vicinity of the Site.

The Site is fenced and has restricted access through a gate house.

9.2 Data Gap Analysis

The following table provides a summary of identified data gaps based on the current CSM.

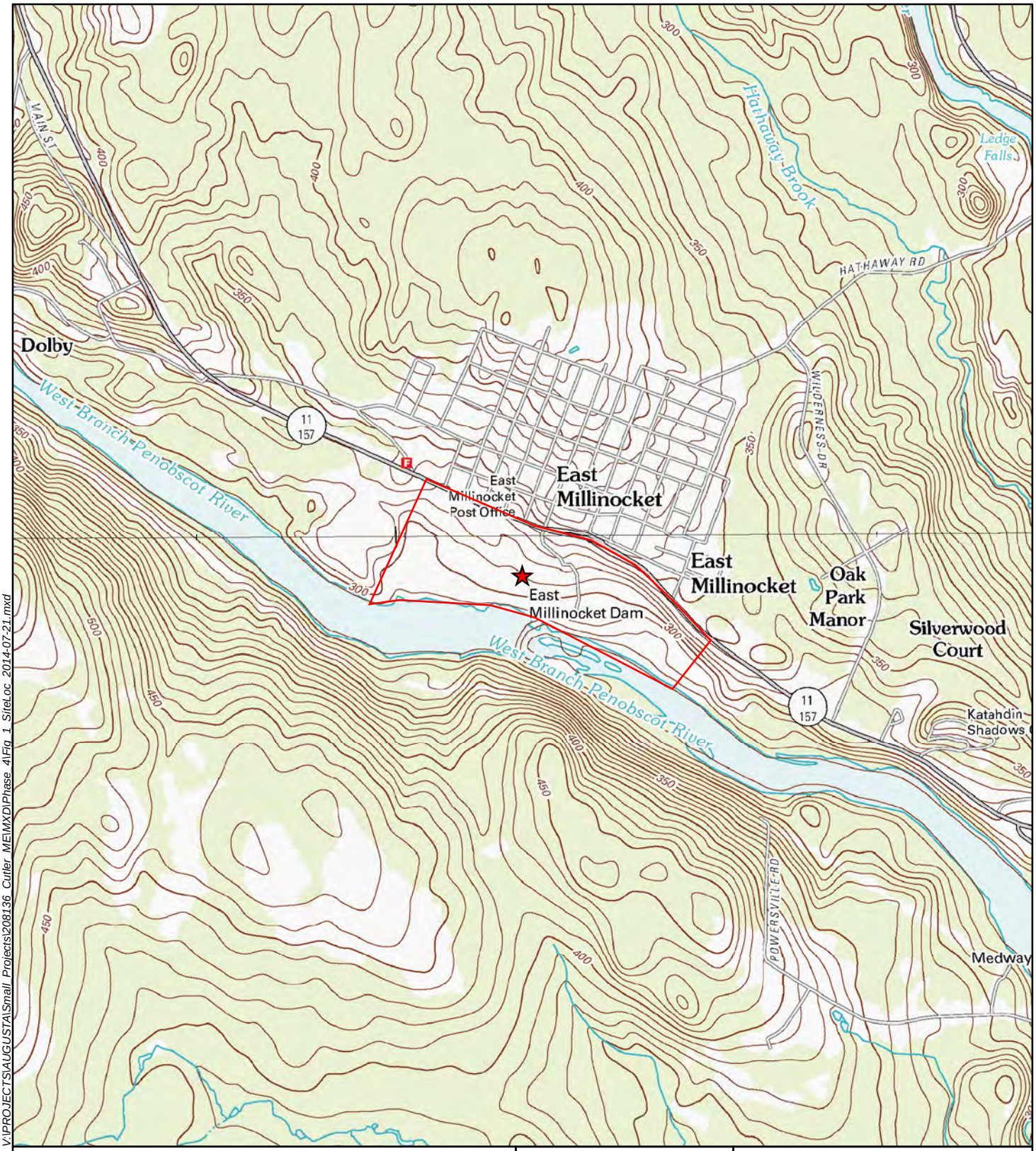
Table 9.2 - Summary of Data Gaps

Location	AOC	Identified Data Gap and Rationale	Potential Contaminants	Recommendation to Close Data Gap
Mill Operations	Chemi-Groundwood Building (AOC #1)	No environmental samples other than PCBs and chlorinated benzenes are known to have been collected in the vicinity of these AOCs.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds	Conduct soil and groundwater sampling around and beneath the vicinity of these AOCs and analyze for VOCs, SVOCs, metals, and/or petroleum compounds.
	Number 5 Paper Machine Site (AOC #2)			
	Number 6 Paper Machine Site (AOC #3)			
	Paint Shop Building (AOC #4)	Based on available documentation, neither soil nor groundwater beneath and down gradient of the Mill complex have been evaluated (except for the area of the PCB spill). The Mill complex has housed a great variety of chemicals, numerous releases have been documented, and floor drains and storm drains located within the facility likely discharged to the ground or directly to Penobscot River prior to the construction of the Wastewater Treatment Plant in 1974. None of these potential issues have been assessed. Additionally, multiple USTs are known to have existed within the mill complex area, and likely many unknown USTs have historically been present within the mill complex area. Tank removal information was not available during this assessment.	VOCs, SVOCs, Metals, PCBs, petroleum compounds	Conduct soil and groundwater sampling around and beneath the Mill buildings, and to the south (presumed downgradient direction) of the Mill complex between the Mill complex/ASTs and Penobscot River. Collect soil gas samples beneath occupied structures. Collect sediment and surface water samples from the Penobscot River.
	Automotive Maintenance Building (AOC #5)			
	Kraft Hydra-Pulper Building (AOC # 6)			
	Machine Room Building Storage Area (AOC #7)			
	Hazardous Waste Buildings (AOC #8)			
	Sulfite Storage Tank (AOC #9)			
	Vicinity of the Steam Plant (AOC #10)			
Waste Water Treatment Plant	Waste Water Treatment Plant and influent pipe (AOC #11)	No environmental samples are known to have been collected in this vicinity of this AOC.	VOCs, SVOCs, metals, PCBs, and/or petroleum compounds	Conduct soil and groundwater sampling around and beneath the WWTP.

Table 9.2 - Summary of Data Gaps

Location	AOC	Identified Data Gap and Rationale	Potential Contaminants	Recommendation to Close Data Gap
Bark Pile (off-Site)	Bark Pile (AOC #12)	Based on available documentation, soil and groundwater has not been sampled in this area.	VOCs, SVOCs, metals, PCBs and/or petroleum compounds	Conduct soil sampling to evaluate potential soil impacts from the Bark Pile, and conduct additional groundwater sampling to evaluate the nature and extent of groundwater impacts.

FIGURES



V:\PROJECTS\AUGUSTA\Small Projects\208136 Cutler ME\MXD\Phase 4\Fig 1 SiteLoc 2014-07-21.mxd

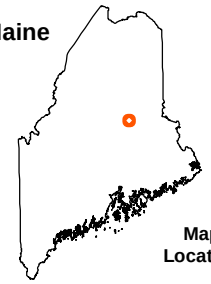
Legend

- Site Location
- Approximate Site Boundary

N

East Millinocket and Medunkeunk Lake
7.5-Minute USGS Topographic Quadrangle

0 1,000 2,000 Feet

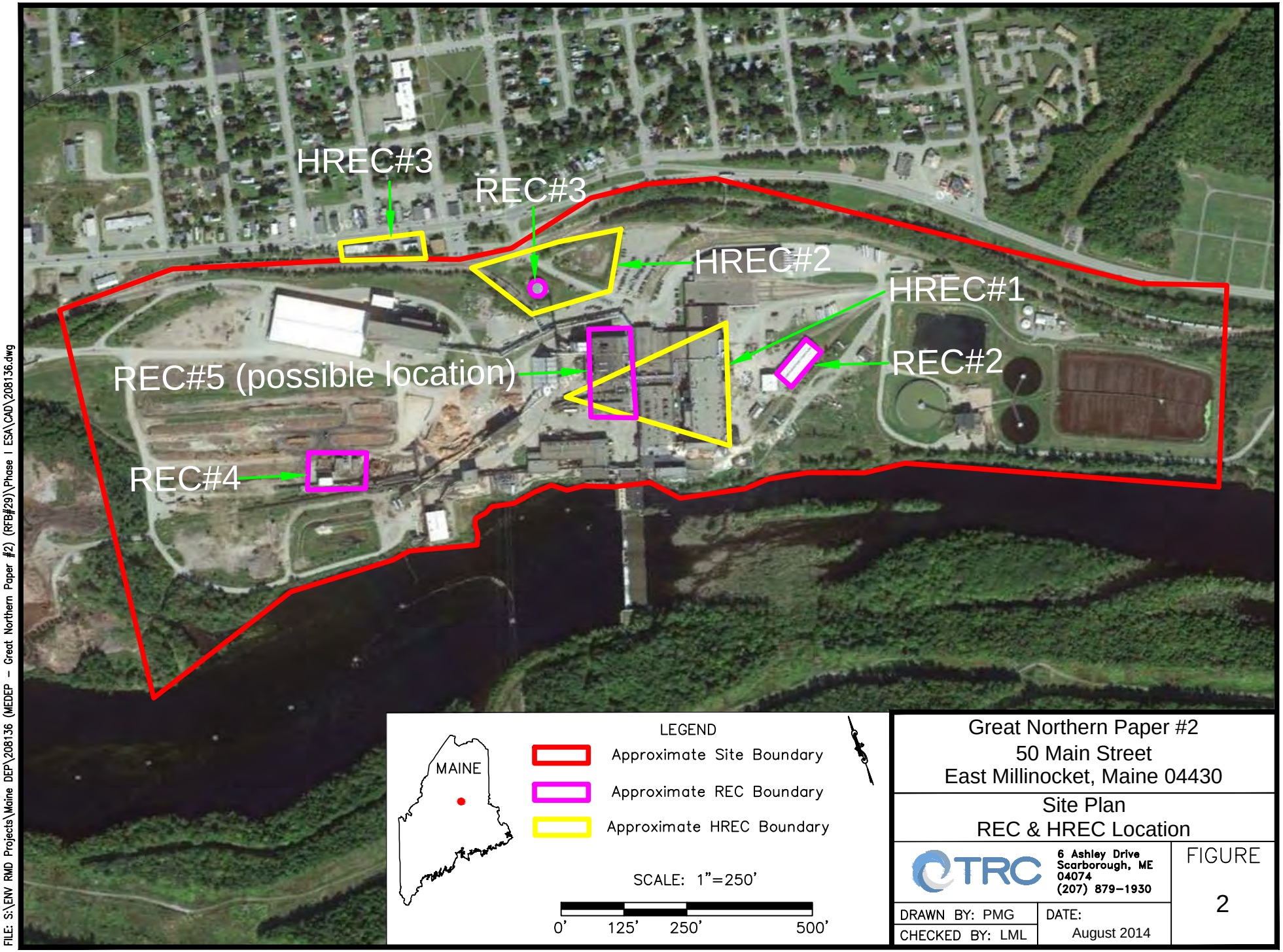


TRC
14 Gabriel Drive
Augusta, ME 04330
(207) 620-3800

SITE LOCATION MAP

GREAT NORTHERN PAPER #2
50 MAIN STREET
EAST MILLINOCKET, MAINE

FIGURE 1 | AUGUST 2014



Great Northern Paper #2
50 Main Street
East Millinocket, Maine 04430

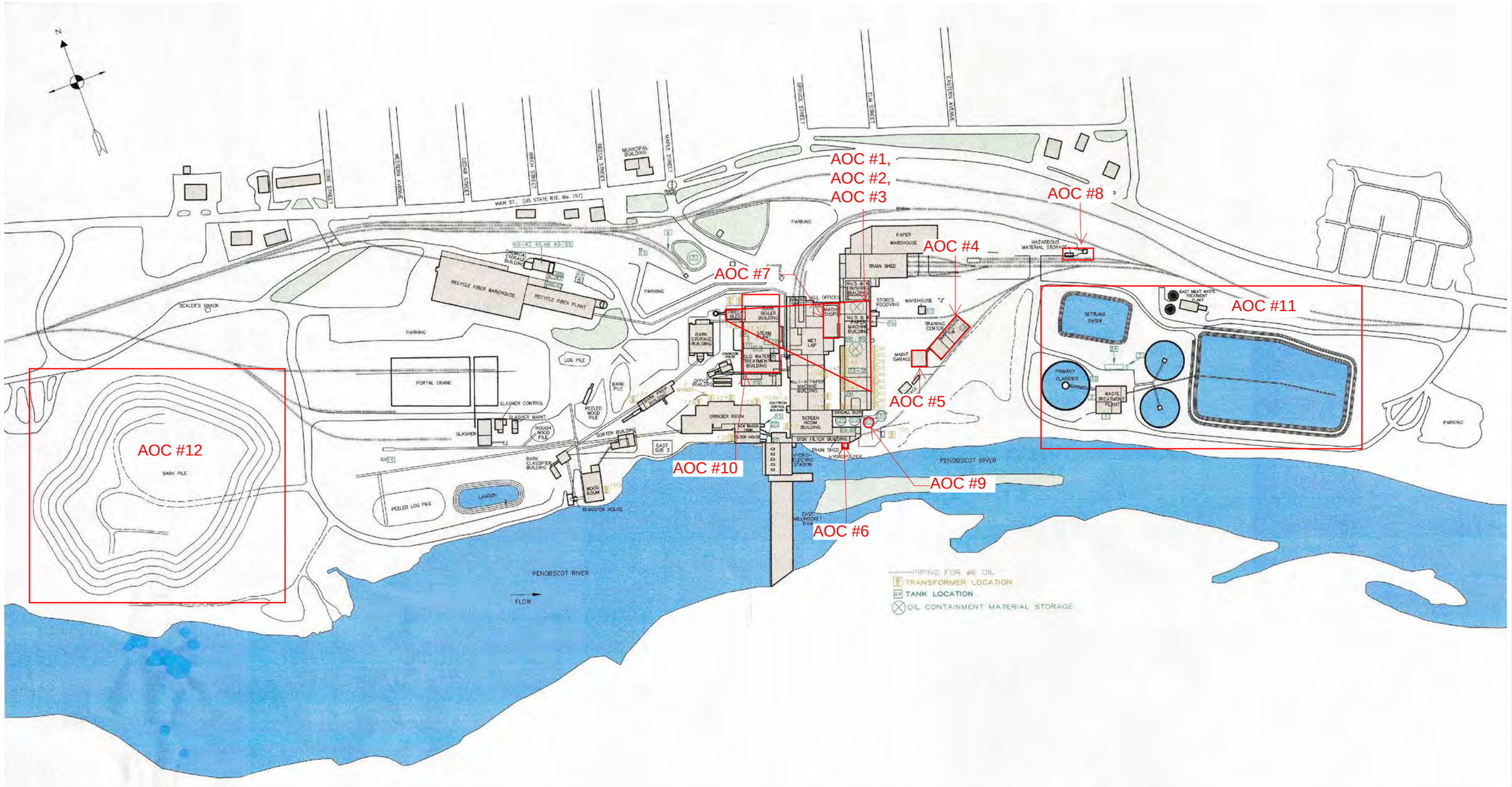
Site Plan
REC & HREC Location

TRC
6 Ashley Drive
Scarborough, ME
04074
(207) 879-1930

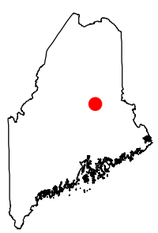
FIGURE
2

DRAWN BY: PMG
CHECKED BY: LML
DATE:
August 2014

FILE: S:\ENV RMD Projects\Maine DEP\208136 (MEDEP - Great Northern Paper #2) (RFB#29)\Phase I ESA\CAD\208136.dwg



Maine



Map Location

LEGEND

AOC

TRC
14 Gabriel Drive
Augusta, ME 04330
207 620-3800

SITE DETAILS PLAN

GREAT NORTHERN PAPER #2
50 MAIN STREET
EAST MILLINOCKET, MAINE

FIGURE 3 | AUGUST 2014

APPENDIX A:
DATABASE RADIUS REPORT

APPENDIX B:
USER QUESTIONNAIRE(S)

TRC

ASTM E 1527-13

USER QUESTIONNAIRE

Site Name/Address: GREAT NORTHERN PAPER #2, 50 MAIN STREET, EAST MILLINOCKET

1. **Environmental cleanup items that are filed or recorded against the site (40 CFR 312.25).** Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?

UNKNOWN

2. **Land use restrictions that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26).** Are you aware of any land use restrictions or deed restrictions that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?

UNKNOWN

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).** As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

UNKNOWN

4. **Relationship of the purchase price to the fair market value of the *property* if it were not contaminated (40 CFR 312.29).** Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

UNKNOWN

5. **Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).** Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as *user*,
   (a) Do you know the past uses of the *property*? If yes, explain.
   (b) Do you know of specific chemicals that are present or once were present at the *property*? If yes, explain.
   (c) Do you know of spills or other chemical releases that have taken place at the *property*? If yes, explain.
   (d) Do you know of any environmental cleanups that have taken place at the *property*? If yes, explain.

A. UNKNOWN. PROPERTY HAS BEEN A PAPER MILL SINCE 1907

B. SITE HAS STORED APPROXIMATELY 600 LBS OF HG STORED ON SITE, VAROUS PETROLEUM PRODUCTS ASSOCIATED WITH UST & AST AROUND THE SITE, SMALL AMOUNT OF ADDITIONAL CHEMICALS FOR LAB LOCATED ON SIT

C. YES, PCB SPILL AND VARIOUS SMALL PETROLEUM SPILLS ON SITE.

D. UNKNOWN

6. **The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).** As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*? If yes, explain.

YES, OBVIOUS SIGNS OF STAINING IN AREAS WHERE PETROLEUM PRODUCTS WERE UTILIZED, AREAS OF PCB CONTAMINATION MARKED ON SITE.

Please provide any information regarding the correct address for the *property* (i.e., maps, plans, or other documentation depicting the *property* location and boundaries) and any other information (i.e. prior reports, waste generation records, construction drawings, etc.) that may be helpful in the completion of this Phase I ESA.

Name/Title: DANIELLE OBERY PROJECT MGR *Signature:* Danielle Obery

Company: DEP *Date:* 7/29/2014

APPENDIX C:
HISTORICAL RESEARCH DOCUMENTATION

APPENDIX D:
PHOTOGRAPH LOG

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

1. View of the Mill from the north.

2. View of the Mill from the north.

3. View of the primary clarifier.

4. View of the secondary clarifier.

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

5. View of the 4000-gal diesel AST in the wood yard.

6. View of the Recycling Plant.

7. View of the wood yard looking south.

8. View of the wood yard looking east (Slasher in distance).

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

9. Staining on the west side of the Slasher.

10. Staining beneath the Slasher crane.

11. Staining beneath the Slasher crane.

12. Staining to the north of the Slasher.

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

13. View of Wood Room.

14. View of Debarking Building.

15. View of the Emera Maine/GNP substation.

16. Unused Hazardous Materials storage buildings.

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

17. Side of Old Water Treatment Plant building with #6 oil staining.

18. Staining observed within the mill structure (typical).

19. Staining/leaking equipment within the mill structure.

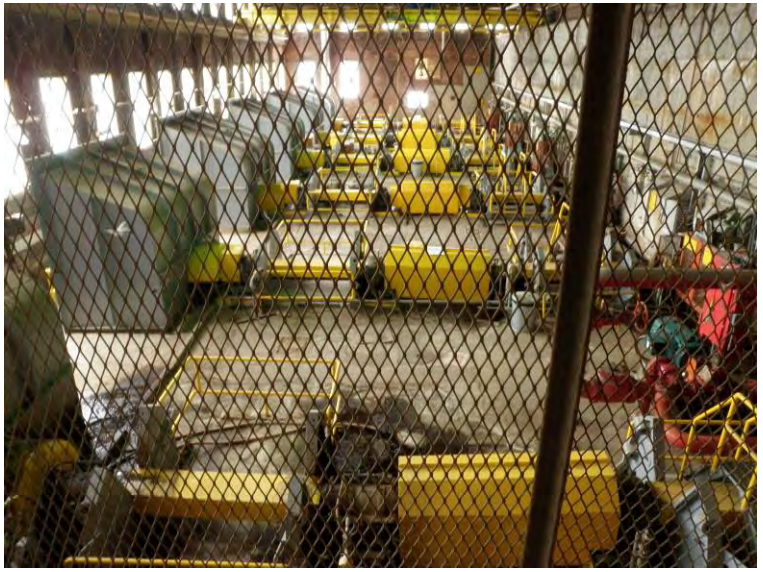
20. Hydraulic oil tank in secondary containment within the mill structure (typical).

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

21. Process chemical tank in secondary containment within the mill structure (typical).

22. Paper Machine Number 6.

23. Area of historical PCB releases (center of the mill structure).



24. Brookfield owned hydroelectric power house.

Phase I ESA Site Reconnaissance Photo Log
Great Northern Paper Mill #2
East Millinocket, Maine

25. Western point of WWTP interceptor drain.

26. Mid-Point of WWTP interceptor drain.

27. #6 oil release from 750,000 AST.

28. #6 oil staining at petroleum offloading area.

APPENDIX E:
OTHER REFERENCE INFORMATION

2013 ANNUAL REPORT OF SAMPLING AND TESTING

POST-REMEDIATION GROUNDWATER

MONITORING PROGRAM

at the
East Millinocket Operations
of
Great Northern Paper Company
East Millinocket, Maine
December 2013

Prepared for

GEORGIA-PACIFIC LLC

by

EARTHCON®

Environmental Challenges
BUSINESS SOLUTIONS ®

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Georgia-Pacific LLC

133 Peachtree Street NE (30303-1847)
P.O. Box 105605
Atlanta, Georgia 30348-5605
(404) 652-4863 (404) 654-4701 fax

December 12, 2013

Ms. Marianne Millette
USEPA, Region 1
5 Post Office Square - Suite 100
Mail Code OES05-4
Boston, MA 02109-3912

Subject: **2013 Annual Report of Sampling and Testing**
Post-Remediation Groundwater Monitoring Program
East Millinocket Operations of Great Northern Paper Company
Georgia-Pacific LLC

Dear Ms. Millette:

Georgia-Pacific LLC is submitting the annual groundwater monitoring report for the groundwater sampling at the East Millinocket Operation of Great Northern Paper Company (formerly Katahdin Paper Company). The sampling and analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan*, in compliance with USEPA Consent Agreement TSCA-I-87-1041 dated September 27, 1991 and the EPA letters, dated September 7, 2006; January 13, 2011; and September 22, 2011.

The enclosed report presents the results of the analytical testing, quality assurance/quality control, and the field sampling information. Polychlorinated biphenyls (PCBs) and chlorinated benzenes were not detected above the reporting limit in any of the groundwater samples.

If you have any questions regarding the report, please contact me at (404) 652-4863.

Sincerely,

Zachary Melda
Environmental Engineer
Environmental Affairs

cc: Pam Green, Maine DEP (w/attachment)
John Civiello, Great Northern Paper Co. (w/attachment)
Sherri Harvey, EarthCon Consultants (w/attachment)

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2013 ANNUAL REPORT OF SAMPLING AND TESTING

POST-REMEDIATION GROUNDWATER

MONITORING PROGRAM

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FIGURE

Figure 1 Potentiometric Surface Map-October 7, 2013

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Table 1 Depth to Groundwater Measurements
Table 2 Field Parameter Measurements
Table 3 Groundwater Analytical Data- October 7, 2013

APPENDICES

Appendix A Regulatory Correspondence
Appendix B Tailwater Rating Curve
Appendix C Groundwater Sampling Logs
Appendix D Laboratory Analytical Reports
Appendix E Historical Groundwater Analytical Data
Appendix F Data Validation Summary

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1.0 INTRODUCTION

This report summarizes the results of the annual groundwater sampling and analysis conducted on October 7, 2013 at the East Millinocket Operations of the Great North Paper Company. The sampling and laboratory analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan* (Monitoring Plan), revised April 1992, and subsequently modified and accepted by the U.S. Environmental Protection Agency (EPA) – Region 1 on June 21, 1993 and the Maine Department of Environmental Protection (MEDEP) on June 30, 1993. The 2013 annual sampling and analyses were also performed in accordance with EPA letters, dated September 7, 2006; January 13, 2011; and September 22, 2011 (see Appendix A).

The groundwater monitoring program was initiated to evaluate the concentrations of polychlorinated biphenyls (PCB) and chlorinated benzenes in groundwater downgradient of three remediated spill sites at the mill. The three sites are referred to as the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site (see Figure 1 for locations).

This is the sixty-second groundwater sampling event conducted since remediation in 1989 and 1990. Prior to 2007 sampling events were completed on a quarterly basis. Seven annual sampling events have been completed since 2007. Twelve monitoring wells (four upgradient and eight downgradient) were included in the original monitoring program conducted from 1993 to 2010. Two upgradient well clusters, consisting of wells 206-A and 206-B and wells 211-A and 211-B, and eight downgradient wells, consisting of the 800-series wells, were sampled in the original monitoring program. The locations of the wells are shown on Figure 1. Logs and construction details of the wells were presented in the Monitoring Plan.

In a letter dated December 21, 2010, Georgia-Pacific LLC (GP) requested to discontinue sampling four wells (206-A, 206-B, 805-D, and 805-S) as PCBs and chlorinated benzenes had not been detected in the wells since monitoring began. EPA and MEDEP approved this request in a letter dated January 13, 2011. Subsequently, upgradient monitoring wells 211-A and 211-B were damaged by heavy machinery and rendered unusable. EPA and MEDEP were contacted to request retaining upgradient well cluster 206-A and 206-B in the monitoring well network and abandoning upgradient well cluster 211-A and 211-B. This modification was approved by EPA and MEDEP in a letter dated September 22, 2011 and the wells were abandoned on November 10, 2011.

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Groundwater sampling was conducted on October 7, 2013. Information presented in this report includes sampling methods, analytical methods, field and laboratory test results, quality control results, qualitative assessment of the raw chromatograms, an updated potentiometric surface map, and pool elevations on the West Branch of the Penobscot River.

2.0 GROUNDWATER ELEVATIONS

Prior to sampling, the depth to groundwater was measured from the top of casing in each monitoring well and the general condition of each well was noted. Groundwater elevations based on the October 7, 2013 water level measurements are summarized in Table 1. The groundwater elevations from the shallow wells were used to prepare the potentiometric surface map (see Figure 1). There are not enough data points to characterize the influence of the dam on the potentiometric surface, so the surface is generalized for this report. The groundwater flow direction is south toward the Penobscot River, which is consistent with the historic groundwater flow direction.

The pool elevation was obtained for the West Branch of the Penobscot River upstream of the dam at the mill. An upstream pool elevation of 336.36 feet was recorded on October 7, 2013 at the Millinocket Dispatchers Station. The downstream pool elevation was estimated to be 262.86 feet, based on the turbine discharge flow of 4,129 cubic feet per second (cfs) and the tailwater rating curve from GNP-ER No. 4-8828 (see Appendix B).

3.0 GROUNDWATER SAMPLING

The groundwater samples collected on October 7, 2013 were submitted to Pace Analytical Services for PCB analysis and Katahdin Analytical Services for chlorinated benzene analysis.

3.1 Preparation for Sampling

Prior to sampling, groundwater was purged from each well using a peristaltic pump and dedicated polyvinyl chloride (PVC) tubing. The amount of purge water pumped was dependent on the well volume and the stabilization of field parameters. The volume was calculated using the following equation:

$$V = \pi r^2 (X-D)$$

where:

V = Volume (cubic feet)

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r = Radius of monitoring well (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

The average rate at which water was pumped from each well was adjusted to approximately 0.5 liters per minute or less. This rate was generally held constant throughout the purging procedures. Purge water was placed in Drum A during the October sampling event. A water sample was collected from Drum A to provide data for drum disposal. The drummed purge water will be disposed in the on-site wastewater treatment system.

Pumping rates were also adjusted to reduce drawdown for each well. Maximum drawdowns were based on the initial depth to groundwater reading and the following equation:

$$d = 0.20(X-D)$$

where:

d = Maximum drawdown (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

During purging and sampling, the depth to groundwater was periodically monitored and compared to the maximum drawdown depth. In addition, a minimum of four conductivity, pH, turbidity, and temperature readings were obtained during purging. When the most sensitive parameter (typically turbidity) stabilized and a volume of water greater than or equivalent to the well casing volume was removed, a groundwater sample was collected from the well. Identification and calibration of field instruments are discussed in Section 5.1 of this report.

These procedures were followed for each well, except for wells 802, 803-S and 803-D, where the drawdown criteria was exceeded as a result of extremely slow rates of recovery. This deviation is not considered to have an adverse impact on the sampling program or water quality. Purging details for each well are presented on the Groundwater Sampling Logs in Appendix C, and the final field parameter measurements are summarized in Table 2.

3.2 Sampling

Upon completion of purging, each well was sampled using the peristaltic pump and dedicated tubing. Groundwater samples were collected in 1-liter amber glass containers. A

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field duplicate sample was collected from monitoring well 804-D during this sampling event. An equipment blank was not collected as dedicated tubing was used to collect samples.

Sample information was entered on adhesive sample identification labels and secured to the jars. The jars were placed in insulated coolers and packed with ice and packing material. The coolers were sealed and shipped to Pace Analytical Services in Greensburg, Pennsylvania and hand delivered to Katahdin Analytical Services in Scarborough, Maine, for testing. Chain-of-Custody records are included in Appendix D.

4.0 ANALYTICAL TESTING AND RESULTS

4.1 Analytical Procedures

The groundwater samples for PCBs collected during the October 7, 2013 sampling event were received and logged by Pace Analytical Services on October 10, 2013. Samples to be analyzed for chlorinated benzenes were submitted to Katahdin Analytical Services to achieve the project-required quantitation limits. The required detection limits were achieved. The PCB samples were analyzed by USEPA Method 8082 and the chlorinated benzene samples were analyzed by method 8270C for the following compounds:

Chlorinated benzenes	PCBs
1,2,3 –trichlorobenzene	Aroclor 1016
1,2,4- trichlorobenzene	Aroclor 1221
1,3,5- trichlorobenzene	Aroclor 1232
1,2,3,4-tetrachlorobenzene	Aroclor 1242
1,2,3,5-tetrachlorobenzene	Aroclor 1248
1,2,4,5-tetrachlorobenzene	Aroclor 1254
Pentachlorobenzene	Aroclor 1260

4.2 Analytical Results

PCBs and chlorinated benzenes were not detected in any of the groundwater samples or the drum sample collected in October 2013. Results of the laboratory testing are presented in the analysis reports in Appendix D and summarized in Table 3. A historical summary of the data from 1993 through present is provided in Appendix E.

PCBs have not been detected in the groundwater since the sampling program was initiated in 1993 with the exceptions of the December 1995 and June 1997 sampling events. The PCB samples were reanalyzed during the December 1995 sampling event due to quality

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control (QC) targets not being met, and PCBs were not detected in the reanalysis. The PCB detections in June 1997 were also associated with QC targets that were not achieved. Subsequent PCB sampling conducted in August 1997 did not indicate the presence of PCBs in groundwater.

Chlorinated benzenes have not been detected in groundwater samples from the site since 2006. Two chlorinated benzenes (1,2,4-trichlorobenzene and 1,3,5-trichlorobenzene) were historically detected in well 804-S. The maximum concentration of 1,2,4-trichlorobenzene detected in well 804-S in October 2013 was below the current US EPA Maximum Contaminant Level (MCL) and Maine Maximum Exposure Guideline (MEG) of 70 ug/L for drinking water. The maximum concentration of 1,3,5-trichlorobenzene detected in well 804-S in October 2013 was also below the current MEG of 40 ug/L for drinking water.

5.0 QUALITY CONTROL

5.1 Field Quality Control

Field quality control samples including one field duplicate designated GWD were collected on October 7, 2013. The target sampling precision goal identified in the Monitoring Plan, revised April 1992, is less than 30 percent and the goal for the field equipment blank is less than 0.5 mg/L. Results of groundwater sample MW-804S and its duplicate, GWD, were below the quantitation limits indicating acceptable sampling precision. Results of the field duplicate sample met the target goals identified for this project. An equipment rinsate blank was not collected during the October 2013 sampling event because dedicated equipment was used to collect the samples.

Calibration details and instrument identification data for the field instruments are presented in the Field Instrument Calibration Daily Operation Logs provided in Appendix C. The laboratory analytical reports including the results for the field QC samples are included in Appendix D.

5.2 Laboratory Quality Control

Laboratory quality control, including an evaluation of the PCB chromatograms, is summarized in the data validation narrative provided as Appendix F. The target laboratory accuracy goal identified in the Monitoring Plan, revised April 1992, is 60 to 120 and the target precision goal is less than 20. Matrix spike and laboratory control sample recovery values were compared to the 60 to 120 percent target to assess accuracy. The relative percent difference (RPD) between matrix duplicate results

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was compared to the 20 percent target to assess precision. Matrix spike and matrix spike duplicate data were not provided for the PCB analyses.

Laboratory control samples were analyzed with the October 2013 chlorinated benzene samples to assess method accuracy. The QC target for accuracy of the matrix spike and the laboratory control samples is 60 to 120 percent. The following table presents a summary of the percent recovery achieved for each analyte:

Analyte	Spike Concentration	LCS Concentration	Percent Recovery
1,2,3-Trichlorobenzene	5	3.26	65
1,2,4-Trichlorobenzene	**5**	**2.97**	**59**
1,3,5-Trichlorobenzene	5	3.11	62
1,2,3,4-Tetrachlorobenzene	5	3.66	73
Pentachlorobenzene	5	3.35	67
1,2,3,5-Tetrachlorobenzene	5	3.88	78
1,2,4,5-Tetrachlorobenzene	5	3.76	75
PCB-1248 (Aroclor 1248)	2.5	2.0	80

The analytes that did not achieve the QC target are in bold.

Because the analytical results for these compounds are consistent with historical data, which are non-detect, the data are not considered to be impacted and are usable as reported. Additional information regarding the accuracy of the data is presented in the data validation summary provided as Appendix F. The matrix spikes and the laboratory control sample results are provided in Appendix D.

6.0 CORRECTIVE ACTION

Corrective actions due to laboratory quality control for data collected during the October 2013 sampling event were not required.

7.0 SITE CLOSURE

The Consent Agreement and Final Order (EPA Docket No. TSCA-I-87-1041) indicates that the parties agree to a "degree of cleanup of PCBs released". The Consent Order allows for elevated concentrations of PCBs and chlorinated benzenes to remain on the Site as long as a groundwater monitoring plan was developed and implemented to monitor the potential

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for off-site migration. The Post-Remediation Groundwater Monitoring Plan, revised in April 1992, was approved by EPA Region 1 and the MEDEP. Groundwater monitoring was conducted on a quarterly basis in accordance with the Monitoring Plan until 2007.

On August 21, 2006, a letter was written to the EPA requesting the cessation of groundwater monitoring at the Site based on detected concentrations of 1,2,4-trichlorobenzene well below the action level for 4.5 years. The EPA responded to this letter on September 7, 2006 stating that they did not agree that the groundwater monitoring could be eliminated but that a reduced monitoring program could be considered. The EPA requested one additional sampling round under the conditions stated in the letter and that after the data had been submitted, the EPA would consult with the MEDEP to make a determination. In a letter dated December 18, 2006, EPA accepted a reduced monitoring program and reduced the sampling frequency from quarterly to annually. EPA further accepted a reduction in the number of wells in a letter dated January 13, 2011 as modified by a letter dated September 22, 2011.

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TABLES

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TABLE 1
DEPTH TO GROUNDWATER MEASUREMENTS
EAST MILLINOCKET MILL

MW No.	Depth to Groundwater (ft)	Top of Casing Elevation (ft)	Groundwater Elevation (ft)
206A	21.45	314.12	292.67
206B	21.52	314.13	292.61
801	9.07	296.30	287.23
802	7.33	296.55	289.22
803S	10.00	284.29	274.29
803D	9.31	284.39	275.08
804S	6.70	297.13	290.43
804D	6.40	297.45	291.05
805S	7.25	298.21	290.96
805D	6.85	297.70	290.85

Water Levels were measured October 7, 2013.

Prepared by: SLS 10/26/2013
Checked by: AGL 11/13/2013

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TABLE 2
FIELD PARAMETER MEASUREMENTS
EAST MILLINOCKET MILL

MW No.	Date	Temperature (°C)	pH	Sepcific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	ORP (mV)	Turbidity (NTU)
206A	10/7/2013	14.20	6.59	748	1.12	0	50.5
206B	10/7/2013	14.81	7.43	588	0.57	-95	63.5
801	10/7/2013	16.71	7.72	452	0.73	-127	4.3
802	10/7/2013	13.96	6.89	447	0.93	-151	35.0
803D	10/7/2013	16.50	8.17	530	1.18	-107	79.2
803S	10/7/2013	15.61	6.84	493	2.08	-107	13.4
804D	10/7/2013	13.82	6.33	1089	1.42	-126	1.4
804S	10/7/2013	12.32	8.31	800	0.67	-117	1.0

Prepared by: SLS 10/25/13
Checked by: AGL 11/26/13

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TABLE 3
GROUNDWATER ANALYTICAL DATA
OCTOBER 7, 2013
EAST MILLINOCKET MILL

Well ID	MEG / MCL	206A	206B	801	802	803S	803D	804S	804D	GWD (804D-Dup)
Date Sampled		Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	---	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,3,5-Tetrachlorobenzene	---	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,4,5-Tetrachlorobenzene	---	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,3,5-Trichlorobenzene	40	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,4-Trichlorobenzene	70	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,3-Trichlorobenzene	---	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Pentachlorobenzene	---	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Aroclor 1260	0.5	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.032	<0.031	<0.032

Dup - indicates field duplicate results

MEG (Maximum Exposure Guidlline for drinking water) / MCL (EPA Maximum Contaminant Level)

J = The analyte was not detected above the reported quantitative limit, which is approximate.

Prepared by: SLS 10/25/2013

Checked by: AGL 12/04/2013

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FIGURE

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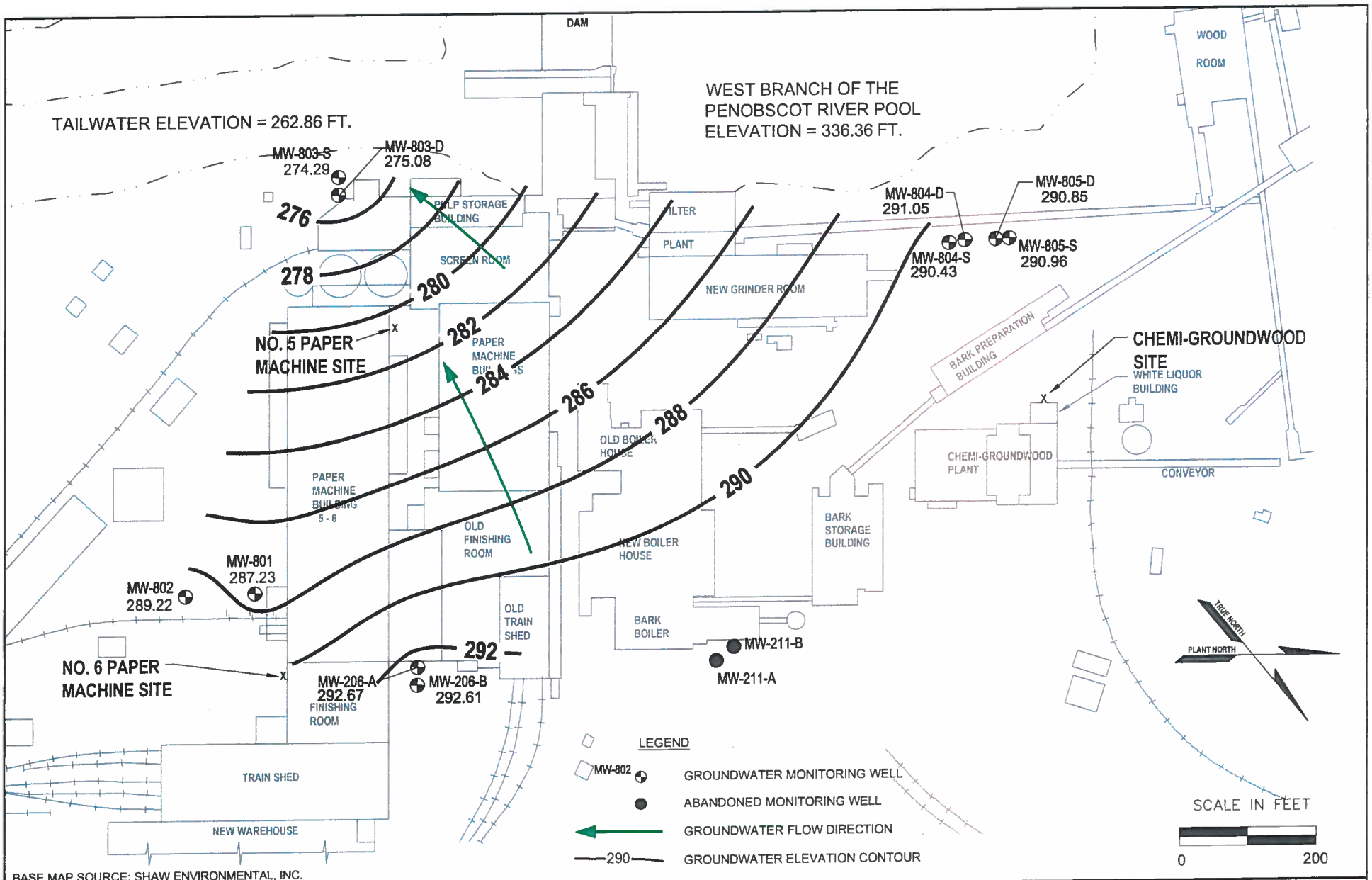

BASE MAP SOURCE: SHAW ENVIRONMENTAL, INC.

GEORGIA-PACIFIC LLC

EAST MILLINOCKET MILL FACILITY
EAST MILLINOCKET, MAINE

PROJECT NO. 02.20090024

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

POTENTIOMETRIC SURFACE MAP
OCTOBER 7, 2013

DRAWN:	CHECKED:	DATE:	FIGURE:
SLS	AGL	12/5/2013	1

FILENAME: 398024 - POT MAP OCT2012.DWG

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APPENDIX A

REGULATORY CORRESPONDENCE

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
1 Congress Street, Suite 1100
BOSTON, MA 02114-2023

September 7, 2006

James Holmes
Hazardous Materials Transportation Manager
Georgia-Pacific Corporation
133 Peachtree Street NE 30303
Atlanta, Georgia 30348-5605

RE: Proposed Cessation of Groundwater Sampling and Report of Sampling and Testing at the Katahdin Paper Mill in East Millinocket, Maine. EPA Docket No. TSCA-I-87-1041.

Dear Mr. Holmes:

We have reviewed the August 21, 2006 letter submitted by Shaw Environmental and Infrastructure (Shaw) on behalf of Georgia-Pacific Corporation (GP), proposing to properly abandon all groundwater monitoring wells at the Katahdin Paper Mill, in East Millinocket Maine (the Site).

The Consent Agreement and Final Order EPA Docket No. TSCA-I-87-1041 (CAFO), indicates the Parties had agreed to a "degree of cleanup of PCBs released". The CAFO allowed for elevated levels of PCBs and Chlorobenzene contamination to remain on the site with the condition that a ground water monitoring plan be developed and implemented to monitor any off-site migration of PCBs or Chlorobenzene. A groundwater monitoring plan (GWMP), revised April 1992 was approved by EPA Region 1 (EPA) and the Maine Department of Environmental Protection Agency (MEDEP). The GWMP allows for GP to submit to EPA and MEDEP a report for review of the Site status with justification for any reduction in "frequency" of sampling.

At this time, and given that high PCB concentrations remain at the Site, EPA does not agree that the groundwater monitoring can be eliminated. However, EPA does agree that a reduced monitoring program can be considered. In order to consider a decrease in monitoring, EPA requests that the following activities be conducted:

1. GP shall conduct 1 additional round of quarterly groundwater monitoring;
2. Groundwater samples shall be analyzed for PCBs using EPA SW-846 Method 8082. All PCB Aroclors shall be included in the analysis;

3. The reporting method detection limit shall be less than or equal to 0.25 parts per billion (e.g. µg/L) for PCBs;
4. The laboratory shall perform a qualitative assessment of the raw chromatograms to determine if there are any unidentified peaks (peaks other than surrogates, internal standards, etc.) eluting within the PCB retention time window; and,
5. Copies of the laboratory results, including the raw chromatograms for the samples and associated standards and quality assurance standards, shall be submitted to both EPA and MEDEP for review.

Upon review of the above information, EPA shall make a determination, in consultation with MEDEP, regarding the appropriate groundwater monitoring frequency.

Should you have any questions on this matter please contact Marianne Milette, Environmental Engineer at (617) 918-1854 or Kimberly Tisa at (617) 918-1527.

Sincerely,

Nancy Barnakian, Manager
Toxics and Pesticides Unit
Office of Environmental Stewardship

cc: Mike Hudson, MEDEP
Brian Tucker, Shaw

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

JAN 13 2011

James Holmes
Hazardous Materials Transportation Manager
Georgia-Pacific Corporation
133 Peachtree Street NE 30303
Atlanta, Georgia 30348-5605

RE: Proposed Reduction in the Number of Wells Included in the Groundwater Monitoring Program at the Katahdin Paper Mill in East Millinocket, Maine (the Site). EPA Docket No. TSCA-I-87-1041.

Dear Mr. Holmes:

We have reviewed the December 21, 2010 letter ("2010 letter") and associated groundwater sampling results submitted by PREMO Group, Inc. ("PREMO") on behalf of Georgia-Pacific, LLC ("GP"). The 2010 letter requests that EPA Region I ("EPA") grant GP's request to reduce the number of wells sampled at the Site under the groundwater monitoring plan being implemented at the Site.

The Consent Agreement and Final Order, EPA Docket No.TSCA-I-87-1041 (CAFO), allowed for elevated levels of PCBs and Chlorobenzene contamination to remain at the Site, with the condition that a groundwater monitoring plan be developed and implemented to monitor for any off-site migration of PCBs or Chlorobenzene. A groundwater monitoring plan ("GWMP"), revised April 1992, was approved by EPA and the Maine Department of Environmental Protection Agency ("MEDEP"). The GWMP allows GP to submit to EPA and the MEDEP a report for review of the Site's status, including a justification for any proposed reduction in the frequency of groundwater sampling.

By letter dated December 18, 2006, EPA accepted GP's proposed reduced monitoring program, with conditions, and agreed to allow the frequency of sampling at the Site to change from quarterly to annually.

The 2010 letter proposes discontinuing sampling in wells 206-A, 206-B, 805-D, and 805-S. PREMO provided data with the 2010 letter showing that PCBs and Chlorobenzene have not been detected in those wells since monitoring began in

1993. In addition, PREMO states in the 2010 letter that the other wells being monitored at the Site will provide sufficient data for purposes of the GWMP.

EPA has conferred with the MEDEP about GP's request and, based upon the information provided in the 2010 letter, EPA accepts PREMO's proposal to discontinue sampling in wells 206-A, 206-B, 805-D, and 805-S at this time. Therefore, future groundwater sampling will only be required from wells 211-A, 211-B, 801, 802, 803-S, 803-D, 804-S, and 804-D at this time. If conditions at the Site change, however, EPA reserves it right to require GP to resume sampling in wells 206-A, 206-B, 805-D, and 805-S.

Should you have any questions on this matter please contact Marianne Milette at (617) 918-1854 or Kimberly Tisa at (617) 918-1527.

Sincerely,

Nancy Barmakian, Manager
Toxics and Pesticides Unit
Office of Environmental Stewardship

cc: Mike Hudson, MEDEP
J. Greg Swearingen, PREMO

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

SEP 2 2 2011

Zachary Melda
Environmental Affairs
Georgia-Pacific, LLC
133 Peachtree Street NE 30303-1847
P.O. Box 105605
Atlanta, Georgia 30348-5605

RE: Proposed Change in the Wells to be Sampled in the Groundwater Monitoring Program at the Katahdin Paper Mill in East Millinocket, Maine (the Site). EPA Docket No. TSCA-I-87-1041.

Dear Mr. Melda:

We have reviewed the September 11, 2011 letter submitted to EPA Region 1 ("EPA") by Georgia-Pacific, LLC ("GP") and the August 29, 2011 e-mail submitted to EPA by GP's consultant EarthCon (collectively referred to as the "2011 GP correspondence"). The 2011 GP correspondence requests that EPA grant GP's request to abandon wells 211-A and 211-B at the Site and to allow GP to sample wells 206-A and 206-B instead. The 2011 GP correspondence indicates that wells 211-A and 211-B have been damaged in the past by heavy machinery and repaired multiple times, and indicates the wells' location is not a safe area for monitoring wells.

The Consent Agreement and Final Order, EPA Docket No.TSCA-I-87-1041 ("CAFO"), allowed for elevated levels of PCBs and Chlorobenzene contamination to remain at the Site, with the condition that a groundwater monitoring plan be developed and implemented to monitor for any off-site migration of PCBs or Chlorobenzene. A groundwater monitoring plan ("GWMP"), revised April 1992, was approved by EPA and the Maine Department of Environmental Protection ("MEDEP"). The GWMP allows GP to submit to EPA and the MEDEP a report for review of the Site's status, including a justification for any proposed reduction in the frequency of groundwater sampling.

By letter dated December 18, 2006, EPA accepted GP's proposed reduced monitoring program, with conditions, and agreed to allow the frequency of sampling at the Site to change from quarterly to annually.

By letter dated January 13, 2011, EPA accepted GP's proposed discontinued sampling in wells 206-A, 206-B, 805-D, and 805-S.

EPA has conferred with the MEDEP about the requests contained within the 2011 GP correspondence and, based upon the information provided and a review of the existing monitoring well data, EPA hereby accepts GP's proposal to discontinue at the Site sampling in wells 211-A and 211-B and to sample wells 206-A and 206-B instead. Therefore, future groundwater sampling will only be required from wells 206-A, 206-B, 801, 802, 803-S, 803-D, 804-S, and 804-D at this time. If conditions at the Site change, however, EPA reserves it right to require GP to resume sampling in wells 211-A, 211-B, 805-D, and 805-S.

Should you have any questions about this matter, please contact Marianne Milette at (617) 918-1854 or Kimberly Tisa at (617) 918-1527.

Sincerely,

Nancy Barmakian, Manager
Toxics and Pesticides Unit
Office of Environmental Stewardship

cc: Becky Blais, MEDEP
J. Greg Swearingen, EarthCon

APPENDIX B

TAILWATER RATING CURVE

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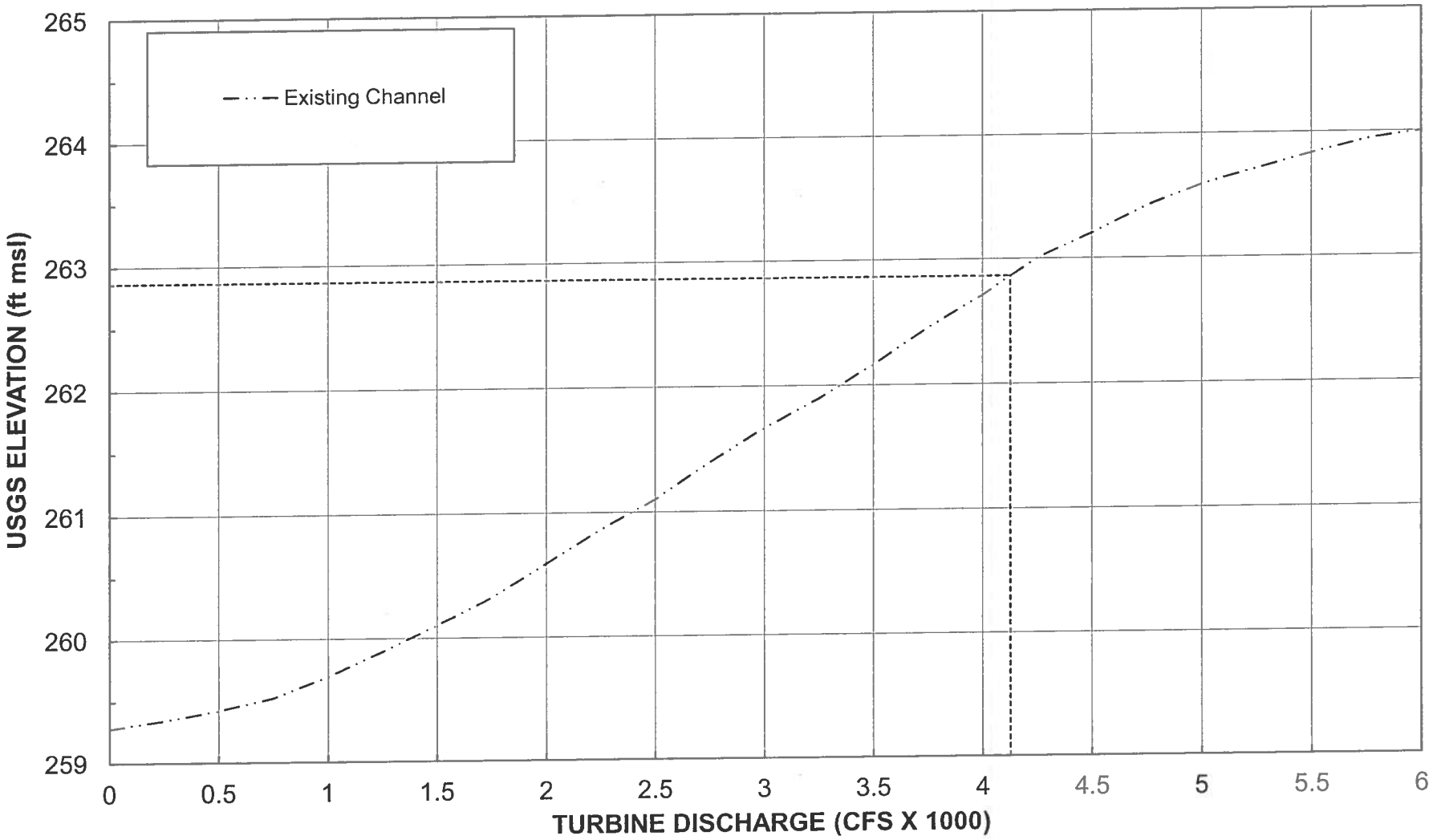
EAST MILLINOCKET TAILWATER RATING CURVE
Determination of Downstream Pool Elevation at East Millinocket Dam, October 7, 2013



Avg. turbine flow for October 7, 2013= 4,129 cfs.
Downstream pool elevation = 262.86 ft msl.

File:H:\Hydro\GNP\10-13 Tail Wtr Curve

Determines downstream pool el. at E. Millinocket Dam from turbine discharge. Linked to Freelance chart. Input elements = red text.

Input Turbine Discharge: 4129
Input Date of Reading: 7-Oct-13

Extrapolated Tail Pool Elevation
262.86

Chart Points

DISCHARGE	1924 Topo	Existing Channel
0	259.28	259.28
0.25	259.32	259.34
0.5	259.39	259.42
0.75	259.48	259.52
1	259.59	259.69
1.25	259.76	259.89
1.5	259.96	260.1
1.75	260.2	260.32
2	260.41	260.59
2.25	260.66	260.86
2.5	260.9	261.1
2.75	261.16	261.39
3	261.41	261.66
3.25	261.63	261.89
3.5	261.88	262.16
3.75	262.11	262.45
4	262.38	262.71
4.25	262.6	263
4.5	262.82	263.2
4.75	263.03	263.42
5	263.2	263.59
5.25	263.35	263.71
5.5	263.48	263.83
5.75	263.55	263.94
6	263.6	264

(cfs x 1000)

4.129

4.00 = Lo TD

4.25 = Hi TD

262.71 = Lo El

263.00 = Hi El

0	262.86
4.129	262.86
4.129	259
4.129	262.86

Table for Extrapolation

Lo TD	Hi TD	Lo El	Hi El
0	0.25	259.28	259.34
0.25	0.5	259.34	259.42
0.5	0.75	259.42	259.52
0.75	1	259.52	259.69
1	1.25	259.69	259.89
1.25	1.5	259.89	260.1
1.5	1.75	260.1	260.32
1.75	2	260.32	260.59
2	2.25	260.59	260.86
2.25	2.5	260.86	261.1
2.5	2.75	261.1	261.39
2.75	3	261.39	261.66
3	3.25	261.66	261.89
3.25	3.5	261.89	262.16
3.5	3.75	262.16	262.45
3.75	4	262.45	262.71
4	4.25	262.71	263
4.25	4.5	263	263.2
4.5	4.75	263.2	263.42
4.75	5	263.42	263.59
5	5.25	263.59	263.71
5.25	5.5	263.71	263.83
5.5	5.75	263.83	263.94
5.75	6	263.94	264
6		264	

Avg. turbine flow for October 7, 2013 = 4129 cfs.
Downstream pool elevation = 262.86 ft msl.
EAST MILLINOCKET TAILWATER RATING CURVE
Determination of Downstream Pool Elevation at
"East Millinocket Dam, "

10/7/2013

APPENDIX C

GROUNDWATER SAMPLING LOGS

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Water Level Observations

Site: Georgia-Pacific, East Millinocket Mill, East Millinocket, Maine

DATE: 10/7/13

FIELD PERSONNEL: Clark Dave Sonny

WATER LEVEL METER: Heron

WELL NO.	TIME OF READING	ELEV. TOP OF CASING	ELEV. GRN. SURFACE (FT-MSL)	WATER DEPTH FROM TOP OF PVC (FT)	TOTAL DEPTH (FT)	WATER ELEV. (FT-MSL)	CONDITION OF WELL
206A	11:05	314.12		21.45	50 59	292.67	Good
206B	11:05	314.13		21.52	27.54	292.61	"
801	13:00	298.30		9.07	20.10	287.23	"
802	13:00	298.55		7.33	22.46	286.22	"
803S	14:40	284.39		10.00	32.00	274.39	"
803D	14:40	284.29		9.31	42.55	274.98	"
804S	0821	297.45		6.70	22.45	290.75	"
804D	0736	297.13		6.40	35.0	290.75	"
805S	0930	298.21		7.25	33.0	290.96	"
805D	0930	297.70	6.85 → ~~6.85~~		448	29.85	"

22.46

7.33

FIELD INSTRUMENT CALIBRATION DAILY OPERATION LOG

Client: Georgia-Pacific

Site: East Millinocket Mill, East Millinocket, Maine

Date/Time: 10/7/13 07:45

Job Number: 02.2009024

Meter Set	Instrument	Model ID Number	Unit ID Number	Standard(s) Used	Standard(s) Check	Calibration or Offset Calculated	Operator Initials
A	pH	QT00454	61728	7.0, 10.0	7.02, 10.04		CLF
	Specific Conductivity			1409	1395		
	Turbidity						
	ORP						
B	pH	QT03405	61341	7.0, 10.0	7.00, 10.02		CLF
	Specific Conductivity			1409	1414		0812
	Turbidity						
	ORP						

Additional Notes: Both meters: Hydrolab Quanta

FLOW CELL METERS

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-804D	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark Sonny Dave	
SAMPLE TIME: 0825	PROJECT # 02.20090024	FIELD CONDITIONS/WEATHER: 50°F Light rain	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	6.40	Purge Start Time:	0746
Annual Inspection Well Depth (feet):	35.0	Total Purge Time:	34
As-Built Well Depth (feet):	34.8	Purge Volume (Liters):	7.5
Casing Volume:	4.7	Purge Rate (mL/min):	220
Elevation Reference Datum:	284.29 TOC		

Water level Recovery time is: very slow slow (moderate) fast

28.6' water in well
Casing Volume = .76gal = 2.9l

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
0747	initial	12.21	10.82	1056	4.17	45	23.3	6.40	
0750	1.25	12.51	9.62	864	1.56	-2	21.0	7.60	
0753	2.0	12.49	9.22	840	1.33	-10	19.7	7.82	
0756	3.0	12.4	8.92	816	1.04	-37	9.1	~~8.72~~ 8.14	
0759	3.5	12.43	8.70	805	0.91	-67	7.6	8.20'	
0802	4.5	12.33	8.47	797	0.75	-91	7.3	8.30'	
0805	5.0	12.39	8.44	797	0.73	-99	5.1	8.33'	
0808	5.5	12.31	8.36	799	0.68	-102	3.8	8.40'	
0811	6.0	12.32	8.34	799	0.68	-110	2.5	8.40'	
0814	6.5	12.34	8.33	799	0.66	-114	1.0	8.41'	
0817	7.0	12.36	8.30	799	0.66	-116	0.9	8.41'	
0820	7.5	12.32	8.31	800	0.67	-117	1.0	8.41'	

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13 08:12
Comments:

Sample Collected: (yes) no	Date/Time Sample Collected:	10-7-13	825
Duplicate Collected: (yes) no	Duplicate Information:	10-7-13	825

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)

Sampler's signature:

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-802	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10-7-13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark, Sonny, Dave	
SAMPLE TIME: 155	PROJECT #: 02.20090024	FIELD CONDITIONS/WEATHER: Rain 50°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	7.33	Purge Start Time:	110
Annual Inspection Well Depth (feet)	22.46	Total Purge Time:	42 (9.5L)
As-Built Well Depth (feet).	22.5	Purge Volume (Liters):	2.46 gal / 9.37L
Casing Volume:	2.5 gal	Purge Rate (mL/min):	226
Elevation Reference Datum:	296.55		

Water level Recovery time is: very slow (slow) moderate fast

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
110	Initial	13.81	6.93	437	2.13	-101	27.7	← 7.33'	
113	0.5	13.86	6.98	429	1.13	-123	24.3	← 8.77'	
116	1.0	13.95	6.99	428	0.97	-124	35.4	← 9.64'	
119	1.5	13.98	6.94	430	0.97	-123	33.0	← 10.98'	
122	2.0	13.97	6.92	433	0.94	-129	35.1	11.40'	
125	2.5	13.98	6.89	433	0.94	-130	35.6	11.43'	
128	3.0	13.98	6.91	434	0.94	-132	36.4	11.57'	
131	3.5	13.98	6.90	435	0.93	-135	36.0	11.64'	
134	4.0	13.96	6.89	438	0.93	-138	33.3	11.68'	
137	5.0	13.95	6.86	439	0.92	-145	32.4	11.77'	
140	6.0	13.94	6.86	442	0.92	-150	34.8	11.89'	
143	7.0	13.93	6.87	444	0.91	-152	35.6	11.91'	
146	8.0	13.94	6.88	445	0.92	-154	35.1	11.93'	
149	9.0	13.95	6.88	446	0.92	-154	35.1	12.00'	
152	9.5	13.96	6.89	447	0.93	-151	35.0	12.02'	

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13
Comments: 08:12

Sample Collected: (yes) no	Date/Time Sample Collected:	10-7-13	155 13:55
Duplicate Collected: yes (no)	Duplicate Information:		
Analytical Methods:	PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)		
Sampler's signature:			

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-801	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark Sonny Dave	
SAMPLE TIME: 14:15	PROJECT # 02.20090024	FIELD CONDITIONS/WEATHER: 50°F Rain	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	9.07	Purge Start Time:	13:11
Annual Inspection Well Depth (feet):	20.10	Total Purge Time:	61
As-Built Well Depth (feet):	20	Purge Volume (Liters):	17
Casing Volume:	1.8	Purge Rate (mL/min):	279
Elevation Reference Datum:	296.30		

Water level Recovery time is: very slow slow (moderate) fast

6.8L = 1 well volume

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
1312	initial	15.86	8.08	486	7.41	37	381	9.24	Light brown
1315	.75	16.27	7.99	471	5.38	39	344	9.37	silty
1318	1.25	16.46	7.84	461	4.13	49	259	9.51	"
1321	2.25	16.57	7.79	458	3.68	53	215	9.62	"
1324	3.0	16.67	7.77	442	3.66	58	185	9.73	"
1327	4.0	16.64	7.75	430	3.91	58	191	9.80	"
1330	5.0	16.69	7.76	423	3.94	48	159	9.90	"
1333	5.9	16.66	7.76	441	3.40	-23	111	10.00	"
1336	7.0	16.69	7.70	453	2.41	-60	63.9	10.14	Less silty
1339	8.0	16.72	7.68	456	2.08	-75	41.3	10.20	"
1342	8.25	16.72	7.68	448	1.74	-82	30.7	10.25	"
1345	9	16.72	7.66	459	1.46	-93	17.9	10.36	"
1348	10	16.69	7.67	449	1.12	-101	12.3	10.47	"
1351	11.0	16.69	7.69	450	1.08	-108	19.5	10.56	"
1354	12	16.71	7.68	451	0.96	-112	14.3	10.64	Clear
1357	12.5	16.68	7.69	451	0.90	-117	9.7	10.70	"
14:00	13	16.70	7.69	451	0.82	-119	7.2	10.80	"
14:03	14	16.71	7.69	462	0.78	-122	5.4	10.85	"
14:06	15	16.74	7.70	452	0.71	-124	4.7	10.95	"
14:09	16	16.75	7.72	454	0.77	-127	4.7	11.00	" No Odor
14:12	17	16.71	7.72	452	0.73	-127	4.3	11.05	"

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo 900-1836
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13
Comments: 07:45

Sample Collected: (yes) no	Date/Time Sample Collected:	10/7/13	14:15
Duplicate Collected: yes (no)	Duplicate Information:		

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)

Sampler's signature:

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-206A	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark Dave Sonny	
SAMPLE TIME: 1215	PROJECT #: 02.20090024	FIELD CONDITIONS/WEATHER: 50° F Rain	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	21.45	Purge Start Time:	11:05
Annual Inspection Well Depth (feet):	50.59	Total Purge Time:	62
As-Built Well Depth (feet):	50.5	Purge Volume (Liters):	20.7
Casing Volume:	4.75	Purge Rate (mL/min):	334
Elevation Reference Datum:	314.12		

Water level Recovery time is: very slow (slow) moderate fast ~~6" = 1 Gal = 3.8 L~~ 4.9 gal = 18.5 L

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
1108	Initial	14.70	7.68	14568	1.78	-63	~~631~~	22.29	
1111	0.5L	13.87	7.40	732	3.71	-35	111	22.37	
1114	1.5	13.98	7.24	731	2.07	-28	103	22.48	
1117	3.0	14.01	7.03	730	1.60	-19	92.9	23.65	
1120	4.5	13.96	6.91	731	1.44	-14	78.1	24.40	
1123	6.0	13.97	6.84	731	1.43	-10	83.2	24.90	
1126	7.5	14.09	6.77	731	1.40	-8	72.5	25.15	
1129	9.0	14.07	6.74	731	1.38	-5	69.8	25.84	
1132	10.5	14.08	6.70	731	1.37	-5	67.7	25.90	
1135	12.0	14.13	6.69	731	1.35	-3	69.6	26.19	
1138	13.5	14.12	6.66	732	1.34	-2	64.0	26.30	
1141	15.0	14.13	6.62	734	1.31	0	56.0	26.60	
1143	16.5	14.08	6.61	739	1.28	1	58.2	26.86	
1146	18.0	14.05	6.62	742	1.22	2	57.2	26.90	
1149	19.5	14.11	6.60	744	1.19	1	53.3	27.10	
1152	20.0	14.17	6.61	744	1.17	0	51.6	27.10	
1155	20.5	14.14	6.61	747	1.15	0	50.9	27.10	
1158	20.7	14.17	6.60	748	1.13	0	49.6	27.50	
1201	20.5	14.19	6.59	747	1.13	0	50.2	27.65	
1204	20.7	14.20	6.59	748	1.12	0	50.5	28.00	
1207	20.7								

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13 08:12
Comments:

Sample Collected: (yes) no	Date/Time Sample Collected:	10-7-13	1215
Duplicate Collected: yes (no)	Duplicate Information:		

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)

Sampler's signature:

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-206B	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 5'	FIELD PERSONNEL/COMPANY: Clark Dave Sonny	
SAMPLE TIME: 11:40	PROJECT # 02.20090024	FIELD CONDITIONS/WEATHER: Rain 48°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	21.52	Purge Start Time:	11:10
Annual Inspection Well Depth (feet):	27.54	Total Purge Time:	27
As-Built Well Depth (feet):	27.5	Purge Volume (Liters):	7.5
Casing Volume:	1.0 gal	Purge Rate (mL/min):	278
Elevation Reference Datum:	314.13		

Water level Recovery time is: very slow slow moderate (fast) ~~1.9 gal = 7.5 l~~ 6"10g = 3.8l

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
11:12	Initial	14.73	7.47	571	0.91	-73	131	21.59	Slightly silty
11:15	1.75	14.76	7.47	573	0.67	-74	124	22.51	"
11:18	2.75	14.87	7.43	587	0.75	-78	106	22.60	"
11:21	3.5	14.79	7.42	583	0.68	-83	72.9	22.65	"
11:24	4.0	14.79	7.42	585	0.65	-86	68.8	22.70	"
11:27	4.5	14.81	7.42	587	0.62	-88	64.9	22.82	Clear
11:30	5.0	14.82	7.42	589	0.59	-91	44.6	22.80	"
11:33	6.0	14.81	7.42	588	0.58	-93	61.5	22.91	"
11:36	6.9	14.82	7.43	588	0.58	-94	61.3	22.96	"
11:39	7.5	14.81	7.43	588	0.57	-95	63.5	23.00	"
									No Odor
									No Sheen

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo 900-1846
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13
Comments: 07:45

Sample Collected: (yes) no	Date/Time Sample Collected: 11:40
Duplicate Collected: yes (no)	Duplicate Information:
Analytical Methods:	PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)
Sampler's signature:	

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-804S	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark Ferd, Sonny Pike	
SAMPLE TIME: 0850	PROJECT # 02.20090024	FIELD CONDITIONS/WEATHER:	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	6.70	Purge Start Time:	0824
Annual Inspection Well Depth (feet):	22.45	Total Purge Time:	24
As-Built Well Depth (feet):	22.5	Purge Volume (Liters):	9.5
Casing Volume:	2.6	Purge Rate (mL/min):	395
Elevation Reference Datum:	297.45		

Water level Recovery time is: very slow slow (moderate) fast 2.6gal = 9.8l

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
0824	initial	13.53	5.79	1100	5.02	-39	4.6	6.70	Clear
0827	1.25	13.72	6.03	1099	3.64	-81	3.9	7.08	No Odor
0830	2.25	13.74	6.09	1096	3.10	-97	1.3	7.10	No Sheen
0833	3.50	13.87	6.29	1091	2.35	-113	0.0	7.12	" ★
0836	4.5	13.83	6.29	1088	1.71	-117	0.2	7.15	"
0839	5.75	13.86	6.30	1088	1.62	-120	1.1	7.15	"
0842	7.0	13.85	6.30	1088	1.44	-123	0.2	7.15	"
0845	8.25	13.81	6.40	1089	1.47	-125	1.3	7.15	"
0848	9.5	13.82	6.33	1089	1.42	-126	1.4	7.15	"

Notes: ★ Pause to change batteries in meter

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo 900-1836
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13 07:45
Comments:

Sample Collected:	(yes) no	Date/Time Sample Collected:	0850
Duplicate Collected:	yes (no)	Duplicate Information:	

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)

Sampler's signature: Clark Fe

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-803S	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10/7/13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Clark, Dave, Sonny	
SAMPLE TIME: 15:40	PROJECT #: 02.20090024	FIELD CONDITIONS/WEATHER: Light rain 50° F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning,Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet):	10:00	Purge Start Time	14:47
Annual Inspection Well Depth (feet):	32	Total Purge Time:	50
As-Built Well Depth (feet)	32.5	Purge Volume (Liters):	15.5
Casing Volume:	3.6	Purge Rate (mL/min):	310
Elevation Reference Datum:	284.39		

Water level Recovery time is: (very slow) slow moderate fast 22' 3.6gal 13.5l

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
14:49	initial	16.01	7.47	485	7.09	-48	356	10.80	rusty brown
14:52	1.0	16.70	7.91	515	1.74	-63	330	12.10	"
14:55	2.0	16.78	8.05	522	1.66	-63	305	14:00	"
14:58	3.0	16.80	8.14	524	1.63	-64	267	15.30	"
15:01	3.5	16.81	8.15	525	1.62	-66	250	16.10	"
15:04	4.5	16.81	8.19	525	1.58	-71	226	16.45	"
15:07	6.0	16.77	8.17	525	1.56	-76	187	17.55	"
15:10	7.0	16.76	8.21	526	1.54	-80	160	18.32	"
15:13	8.25	16.72	8.17	527	1.53	-86	135	19.20	"
15:16	9.5	16.68	8.17	528	1.54	-89	120		Slight
15:19		16.56	8.20	528	1.47	-95	104		Brown
15:22	12	16.52	8.17	528	1.36	-98	95.6	20.05	Stain
15:26		16.53	8.18	528	1.34	-100	87.1	21.45	"
15:28	13	16.52	[illegible]	"	1.31	-101	84.6	21.74	"
15:31	14	16.51	8.17	529	1.27	-103	74.1	22.2	"
15:34	14.75	16.52	8.17	529	1.24	-105	72.5	22.6	"
15:37	15.5	16.50	8.17	530	1.18	-107	79.2	22.8	N.O. N.S.

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo 900-1836
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13
Comments: 07:45

Sample Collected: (yes) no	Date/Time Sample Collected:	10/7/13	15:40
Duplicate Collected: yes (no)	Duplicate Information:		

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobenzene, Pentachlorobenzene)

Sampler's signature:

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FIELD DATA INFORMATION
GROUNDWATER SAMPLING LOG

Well No.: MW-803D	SITE: East Millinocket Mill	LOCATION: East Millinocket, Maine	DATE: 10-7-13
WELL DIAMETER: 2"	SCREEN LENGTH: 10'	FIELD PERSONNEL/COMPANY: Dave Dafoe	
SAMPLE TIME: 3:40	PROJECT # 02.20090024	FIELD CONDITIONS/WEATHER: 50° F Rain	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
Notes:

Equipment Cleaning Procedures

Dedicated Tubing for Peristaltic pump - No Decon. Needed.
Water Probe Decon Method:
- potable water and phosphate-free soap
- distilled water rinse

Depth to Water pre-purge (feet): 9.31
Annual Inspection Well Depth (feet): 42.55
As-Built Well Depth (feet): 42.5
Casing Volume: 5.4 gal
Elevation Reference Datum: 284.29
Water level Recovery time is: (very slow) slow moderate fast 33'

Purge Start Time: 243
Total Purge Time: 53 (21L)
Purge Volume (Liters): 5.4 gals / 20.43L
Purge Rate (mL/min): 396

Casing Volume Calculation: $(\pi r^2 h)(7.48 \text{ gal/ft}^3)$ Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47

TIME 2400 hrs	CUMULATIVE VOLUME (mL)	TEMP (°C)	pH	SPECIFIC CONDUCT. (µs/cm)	DISSOLVED OXYGEN (mg/L)	ORP/Eh (mv)	TURBIDITY (NTU)	DTW (Feet)	Notes (color, odor, sheen)
243	Initial	15.54	7.06	502	2.84	-46	69.0	9.31'	
246	.5	15.54	7.08	500	0.99	-47	11.2	10.61'	
249	1.5	15.64	7.06	501	0.95	-46	11.9	11.24'	
252	3.0	15.67	7.02	499	1.02	-47	13.2	12.61'	
255	4.5	15.67	6.97	497	1.25	-62	14.0	13.77'	
258	5.5	15.65	6.94	497	1.47	-73	14.5	14.10'	
301	6.5	15.70	6.93	495	1.60	-81	15.0	16.00	
304	7.5	15.68	6.91	495	1.75	-88	16.5	17.53'	
307	8.5	15.69	6.89	495	1.82	-93	15.4	18.50'	
310	9.5	15.67	6.88	495	1.96	-98	14.6	19.48'	
313	10.5	15.66	6.88	497	2.00	-101	14.4	20.40'	
316	12.0	15.64	6.87	497	2.01	-103	13.9	21.61	
319	13.5	15.64	6.87	496	2.08	-104	13.6	22.96	
322	15.0	15.65	6.87	495	2.08	-105	13.4	23.79	
325	16.5	15.63	6.85	494	2.06	-106	14.0	24.57	
328	18.0	15.63	6.84	493	2.07	-107	13.8	25.41	
331	19.5	15.62	6.84	493	2.07	-107	13.2	26.44	
334	21.0	15.61	6.84	493	2.06	-107	13.4	26.97	

Notes:

Measurement and Sampling Equipment

EQUIPMENT	Type	Model #
Pump	Peristaltic	Thermo
Water Quality Meter	Multimeter flow-thru	Hydrolab Quanta
Water Probe	Water level meter	Heron

Water Quality Meter Calibration

Date/Time: 10/7/13
Comments: 08:12

Sample Collected: (yes) no	Date/Time Sample Collected:	10-7-13	3:40 3:40
Duplicate Collected: yes (no)	Duplicate Information:	N/A	

Analytical Methods: PCB (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260), Chlorobenzene (1,2,3-trichlorobenzene, 1,2,4-trichlorbenzene, 1,3,5-trichlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,2,3,5-tetrachlorbenzene, 1,2,3,4-tetrachlorobbenzene, Pentachlorobenzene)

Sampler's signature:

APPENDIX D

LABORATORY ANALYTICAL REPORTS

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APPENDIX E

HISTORICAL GROUNDWATER ANALYTICAL DATA

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Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Aug-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93	Sep-93
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Nov-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93	Dec-93
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Mar-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94	Jun-94
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	1.0*	<1.0	<1.0	1.2*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	1.5	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

* = Concentrations of 1,2,3,4-tetrachlorobenzene were deemed unreliable since traces of the compound were detected in all other samples, including the equipment blank and the laboratory method blanks (March 1994).

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Sep-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94	Dec-94
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Mar-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95	Jun-95
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Sep-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95	Dec-95
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Mar-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96	Jun-96
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Sep-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96	Dec-96
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Mar-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97	Jun-97
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.88**	<0.5 / Trace**	2.2**	<0.5	<0.5

** = PCBs were detected in these wells but susequent retesting in August 1997 indicated no PCBs were present in those wells. QC targets for precision and accuracy were not met for June 1997 data which is why the wells were retested in August 1997.

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Aug-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97	Sep-97
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Dec-97	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98	Mar-98
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Jun-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98	Sep-98
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	11	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Dec-98	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99	Mar-99
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13	11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	17	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Jun-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99	Sep-99
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.9	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Dec-99	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00	Mar-00
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.3	3.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	3.7	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Jun-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00	Sep-00
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	LE	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

LE = Laboratory Error that did not appear to impact overall results of the sample, as indicated by the consistency of the quarter results when compared to previous quarters.

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Dec-00	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01	Mar-01
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.6	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	3.5	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Jun-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01	Oct-01
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.6	3.4	<10	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Dec-01	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02	Mar-02
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.1	7.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	10	6.0	<1.0	<1.0	<1.1
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.1	<1.0	<1.0	<1.1	<1.0	<1.1	<1.0	<1.0	<5.1	<5.2	<1.0	<1.0	<1.1
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.55	<0.5	<0.5	<0.55	<0.5	<0.55	<0.5	<0.5	<2.5	<2.6	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Jun-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02	Sep-02
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	3.4	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Dec-02	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03	Mar-03
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.3	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	3.8	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Jun-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03	Sep-03
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.20 J	0.19 J	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	1.8	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

J = Quantitation is approximate due to limitations identified in the quality control review

UJ = Sample-specific detection limit is approximate

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Dec-03	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04	Mar-04
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	1.3	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

J = Quantitation is approximate due to limitations identified in the quality control review

UJ = Sample-specific detection limit is approximate

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Jun-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04	Sep-04
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	2.64 J	2.50 J	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	2.3	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Jun-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06	Sep-06
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4,5-Tetrachlorobenzene	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trichlorobenzene	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.18 J	0.22 J	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	1.1	1.2	<0.25	<0.25	<0.25
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

J = Quantitation is approximate due to limitations identified in the quality control review

UJ = Sample-specific detection limit is approximate

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D
Date Sampled	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-07	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Sep-08	Jan-00
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4,5-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,3-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,3,5-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Pentachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Aroclor 1260	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804S-Rep	804D	805S	805D	206A	206B	211A	211B	801	802	803S	803S-Rep	803D	804S	804D	805S	805D
Date Sampled	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Sep-09	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10	Oct-10
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4,5-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,3,5-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,4-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,3-Trichlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
1,2,3,5-Tetrachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Pentachlorobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Aroclor 1260	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25

Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	206A	206B	211A	211B	801	801-Rep	802	803S	803D	804S	804D	206A	206B	801	802	803S	803D	804S	804D	804S-Rep
Date Sampled	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Nov-11	Oct-12	Oct-12	Oct-12	Oct-12	Oct-12	Oct-12	Oct-12	Oct-12	Oct-12
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene*	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
1,3,5-Trichlorobenzene	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
1,2,4-Trichlorobenzene	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
1,2,3-Trichlorobenzene	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J	<0.5 J
Pentachlorobenzene	<0.5	<0.5	NS	NS	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 J	<0.5	<0.5	<0.5	<0.5 J	<0.5 J
Aroclor 1260	<0.26	<0.26	NS	NS	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.25	<0.26	<0.26	<0.26	<0.26	<0.26

Well ID	206A	206B	211A	211B	801	802	803S	803D	804S	804D	804D-Dup
Date Sampled	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13	Oct-13
Analytes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1,2,3,4-Tetrachlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,3,5-Tetrachlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,4,5-Tetrachlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,3,5-Trichlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,4-Trichlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
1,2,3-Trichlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Pentachlorobenzene	<0.94	<0.94 J	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Aroclor 1260	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.031	<0.032	<0.031	<0.032

NS - Not sampled due to damage from traffic. Well was subsequently abandoned.

* 1,2,3,5 and 1,2,4,5-tetrachloorbenzene co-elute and were reported together beginning in November 2011.

Note that monitoring wells 805S and 805D were not sampled and wells 211-A and 211-B were abandoned in 2011 based on the letter from MDEP dated 1/13/2011.

Rep - indicates field duplicate results

Shaded values represent concentrations above the detection limit.

J = The analyte was not detected above the reported quantitative limit, which is approximate.

Prepared by: SLS 12/5/2013
Checked by: AGL 12/5/2013

APPENDIX F

DATA VALIDATION SUMMARY

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Memorandum

Date:	November 18, 2013 revised December 2, 2013
To:	Alison Levinson
From:	Mary Ann Brookshire
Subject:	Quality Assurance Review
Project:	Georgia-Pacific, East Millinocket, Maine
Samples Collected:	October 7, 2013

1 Introduction

This memorandum presents the modified Level III validation of the water sample analyses listed in Table 1. The analyses were performed by Pace Analytical in Greensburg, Pennsylvania and the Katahdin Analytical Services, Inc in Scarborough, Maine.

Data quality objectives (DQOs), project detection limits, and quality control (QC) sample frequencies are from the *Post-Remediation Groundwater Monitoring Plan* (Stone & Webster, 1992). The criteria used to qualify data are from the *Post-Remediation Groundwater Monitoring Plan*, the *Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA 1999 and 1994), the analytical methods, and the professional judgment of the validation chemist. The following laboratory deliverables were reviewed during the validation process:

- Chain-of-custody (COC) documentation to assess holding times and verify report completeness
- Laboratory quality control (QC) sample results, including method blanks, surrogate spikes, laboratory control sample (LCSs), matrix spike/matrix spike duplicates (MS/MSDs), and laboratory duplicates
- Initial and continuing calibration data
- Analytical results to verify reporting limits
- Qualitative assessment of the sample chromatograms to determine if there are any unidentified peaks eluting within the PCB retention time window
- Field QC samples to assess field blank contamination and field duplicate precision

Table 1—Sample Data Reviewed

Sample ID	Pace Laboratory ID	Katahdin Lab ID	PCBs[a]	Chlorobenzenes[b]
MW-206A	30104755001	SG7768-1	X	X
MW-206B	30104755002	SG7768-2	X	X
MW-801	30104755003	SG7768-3	X	X
MW-802	30104755004	SG7768-4	X	X
MW-803D	30104755005	SG7768-5	X	X
MW-803S	30104755006	SG7768-6	X	X
MW-804D	30104755007	SG7768-7	X	X
MW-804S	30104755008	SG7768-8	X	X
GWD	30104755011	SG7768-11	X	X
Purge Water	30104755012	SG7768-12	X	X

[a] Polychlorinated biphenyls by Method 8082 (USEPA 1996)
[b] Chlorobenzenes by Method 8270C (USEPA 1996)

2 Data Validation

2.1 Custody, Preservation, and Completeness

Sample custody was maintained as required from sample collection to receipt at the laboratory. The samples were received intact and were properly preserved. Sufficient sample was received to perform the required analyses. The reports are complete and contain results for the samples and tests requested on the COC forms.

2.2 Polychlorinated Biphenyls (8082)

2.2.1 Holding Times

There is no holding time specified for polychlorinated biphenyls (PCBs) in SW-846 Chapter 4, Table 4.1. The groundwater samples were analyzed within the Method 8082 recommended holding time of 40 days from extraction. The samples were extracted for PCBs on October 17, 2013 and analyzed on October 21, 2013.

2.2.2 Calibration

2.2.2.1 Initial Calibration

Initial calibrations were performed at the required frequency with the correct number of calibration standards. The percent relative standard deviations (RSD) values were below the Functional Guidelines criteria of less than 20 percent.

2.2.2.2 Continuing Calibration

Continuing calibration standards were performed at the required frequency. The percent difference (D) values were below the Functional Guidelines criteria of less than 15.

2.2.3 Blank Analyses

2.2.3.1 Method Blanks

Method blanks were analyzed at the required frequency. PCBs were not detected in the method blank sample.

2.2.3.2 Equipment Rinsate Blanks

There were no equipment rinsate blanks collected.

2.2.4 Surrogate Analyses

Surrogate compounds were added to each sample, standard and blank. TCMX recoveries in each sample ranged from 42 to 50 percent, which are below the laboratory QC limit of 55 to 99 percent but within the Functional Guidelines criteria of 30 to 150 percent. The associated decachlorobiphenyl (DCBP) recoveries in each sample were within the laboratory QC limits. The associated sample results were not qualified as the DCBP recoveries were acceptable and the TCMX recoveries were within the Functional Guidelines criteria.

2.2.5 Matrix Spike/Matrix Spike Duplicate Analyses

MS/MSD data were not provided for the PCB analyses. Data qualification is not required.

2.2.6 Laboratory Control Sample Analyses

One LCS was analyzed for each matrix and extraction batch. Percent recovery values are within the laboratory QC limits and the project target QC limits of 60 to 120 percent.

2.2.7 Laboratory Reporting Limits

The practical quantitation limits (PQLs) ranged from 0.25 to 0.26 ug/L, which either meet or slightly exceed the project-specified target limit of 0.25 ug/L. The PQL exceedances were due to adjustments based on sample volume.

2.2.8 Field Duplicates

One field duplicate pair (MW-804D/GWD) was collected with the groundwater samples. Sample results were consistent (below the reporting limits) with field duplicate results indicating acceptable precision.

2.2.9 Review of Sample Chromatograms

PCBs were not detected in the East Millinocket samples. A qualitative assessment of the raw chromatograms was performed to determine if there are any unidentified peaks eluting within the PCB retention time windows as requested in the EPA letter dated September 7, 2006. Each sample and the method blank had one or more non-target peaks appearing on the chromatograms with low area counts. A small peak was observed at 1.72 minutes in several sample chromatograms and the method blank chromatogram.

2.2.10 Overall Assessment of Data Usability

The usability of the data is based on the EPA guidance documents noted previously. Upon consideration of the information presented here, the data are acceptable without qualification.

2.3 Chlorobenzene Analyses

2.3.1 Holding Times

The samples were extracted within the required holding time of 14 days from collection and analyzed within 40 days of extraction. The samples for chlorobenzene analyses were extracted on October 11, 2013 and analyzed on October 17, 2013.

2.3.2 Initial and Continuing Calibration

2.3.2.1 Initial Calibration

Initial calibrations were performed at the required frequency with the correct number of calibration standards. The percent RSD values were below the Functional Guidelines criteria of 20 percent and the relative response factors were greater than or equal to 0.05.

2.3.2.2 Continuing Calibration

Continuing calibration standards were performed at the required frequency. The percent D values were below the Functional Guidelines criteria of less than 25 percent.

2.3.3 Blank Analyses

2.3.3.1 Method Blanks

Method blanks were analyzed at the required frequency, and target analytes were not detected above the reporting limits.

2.3.3.2 Rinsate Blanks

There were no equipment rinsate blanks collected.

2.3.4 Surrogate Analyses

Surrogate compounds were added to the samples, blanks, and QC samples as required. The recovery values are within the laboratory QC limits with the following exception.

- The surrogate recovery for 2-methylnaphthalene-d10 in sample MW-206B is 35.6 percent, which is below the laboratory QC limit of 43 to 92 percent. The associated sample results are qualified as estimated detection limit (UJ).

2.3.5 Matrix Spike Analyses

MS samples were not analyzed for this fraction of the SDG. Data qualification is not required.

2.3.6 Laboratory Control Sample Analyses

One LCS and one LCS duplicate were prepared with each extraction batch. The recovery values are within the laboratory QC limits and the project target QC limits of 60 to 120 percent with the following exceptions.

- The LCS/LCS duplicate recovery values for 1,2,4-trichlorobenzene are 59.4 and 58.9 percent, which are below the project target QC limits of 60 to 140 percent. The associated sample results were not qualified as the excursion was slight and the recovery values were within the laboratory QC limits.

2.3.7 Laboratory Reporting Limits

Project specified target detection limits of 1.0 ug/L are met.

2.3.8 Field Duplicates

One field duplicate pair (MW-804D/GWD) was collected with the groundwater samples. Sample results were consistent (below the reporting limits) with field duplicate results indicating acceptable precision.

2.3.9 Overall Assessment of Data Usability

The usability of the data is based on the EPA guidance documents noted previously. Upon consideration of the information presented here, the data are acceptable with qualification.

2.4 Organic Data Qualifiers

The following data validation qualifiers were used in the review of this data set. These qualifiers are from the *Contract Laboratory Program National Functional Guidelines for Organic Data Review* (USEPA 1999).

U The analyte was analyzed for but not detected above the reported sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

R The sample results are rejected due to serious deficiencies in the ability to analyze the samples and meet quality control criteria. The presence or absence of the analyte cannot be verified.

3 References

Stone & Webster. 1992. Post-Remediation Groundwater Monitoring Plan, Great Northern Nakoosa – Georgia Pacific Corporation - The East Millinocket Operation. Prepared for Georgia-Pacific Corporation. Prepared by Stone & Webster Engineering. April 1992.

USEPA. 1996. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) Third Edition, Updates I, II, IIA, IIB, and III. United States Environmental Protection Agency. Office of Solid Waste. December 1996.

USEPA. 2008. Contract Laboratory Program National Functional Guidelines for Organic Data Review. U.S. Environmental Protection Agency Office of Emergency and Remedial Response. EPA540/R-99/008. June 2008.

4 Summary of Qualified Data

Sample ID	Analyte	Qualifier	Reason for Qualification
MW-206B	Chlorobenzenes	UJ	Surrogate recovery < QC limit

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-206A Lab ID: **30104755001** Collected: 10/07/13 12:15 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.077U**	ug/L	0.26	0.077	1	10/17/13 11:00	10/21/13 18:10	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.092U**	ug/L	0.26	0.092	1	10/17/13 11:00	10/21/13 18:10	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.073U**	ug/L	0.26	0.073	1	10/17/13 11:00	10/21/13 18:10	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 18:10	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 18:10	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.037U**	ug/L	0.26	0.037	1	10/17/13 11:00	10/21/13 18:10	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.26	0.031	1	10/17/13 11:00	10/21/13 18:10	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	50	%	51-99		1	10/17/13 11:00	10/21/13 18:10	877-09-8	1c
Decachlorobiphenyl (S)	51	%	30-127		1	10/17/13 11:00	10/21/13 18:10	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-206B **Lab ID: 30104755002** Collected: 10/07/13 11:40 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.077U**	ug/L	0.26	0.077	1	10/17/13 11:00	10/21/13 18:18	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.091U**	ug/L	0.26	0.091	1	10/17/13 11:00	10/21/13 18:18	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.073U**	ug/L	0.26	0.073	1	10/17/13 11:00	10/21/13 18:18	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 18:18	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 18:18	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.037U**	ug/L	0.26	0.037	1	10/17/13 11:00	10/21/13 18:18	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.26	0.031	1	10/17/13 11:00	10/21/13 18:18	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	48	%	51-99		1	10/17/13 11:00	10/21/13 18:18	877-09-8	1c
Decachlorobiphenyl (S)	53	%	30-127		1	10/17/13 11:00	10/21/13 18:18	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-801 **Lab ID: 30104755003** Collected: 10/07/13 14:15 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.076U**	ug/L	0.25	0.076	1	10/17/13 11:00	10/21/13 18:26	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.091U**	ug/L	0.25	0.091	1	10/17/13 11:00	10/21/13 18:26	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.072U**	ug/L	0.25	0.072	1	10/17/13 11:00	10/21/13 18:26	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.032U**	ug/L	0.25	0.032	1	10/17/13 11:00	10/21/13 18:26	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.25	0.024	1	10/17/13 11:00	10/21/13 18:26	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.036U**	ug/L	0.25	0.036	1	10/17/13 11:00	10/21/13 18:26	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.25	0.031	1	10/17/13 11:00	10/21/13 18:26	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	44	%	51-99		1	10/17/13 11:00	10/21/13 18:26	877-09-8	1c
Decachlorobiphenyl (S)	55	%	30-127		1	10/17/13 11:00	10/21/13 18:26	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-802 Lab ID: 30104755004 Collected: 10/07/13 13:55 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.075U**	ug/L	0.25	0.075	1	10/17/13 11:00	10/21/13 18:34	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.090U**	ug/L	0.25	0.090	1	10/17/13 11:00	10/21/13 18:34	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.072U**	ug/L	0.25	0.072	1	10/17/13 11:00	10/21/13 18:34	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.032U**	ug/L	0.25	0.032	1	10/17/13 11:00	10/21/13 18:34	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.023U**	ug/L	0.25	0.023	1	10/17/13 11:00	10/21/13 18:34	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.036U**	ug/L	0.25	0.036	1	10/17/13 11:00	10/21/13 18:34	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.25	0.031	1	10/17/13 11:00	10/21/13 18:34	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	42	%	51-99		1	10/17/13 11:00	10/21/13 18:34	877-09-8	1c
Decachlorobiphenyl (S)	45	%	30-127		1	10/17/13 11:00	10/21/13 18:34	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-803D Lab ID: 30104755005 Collected: 10/07/13 15:40 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.077U**	ug/L	0.26	0.077	1	10/17/13 11:00	10/21/13 18:42	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.092U**	ug/L	0.26	0.092	1	10/17/13 11:00	10/21/13 18:42	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.073U**	ug/L	0.26	0.073	1	10/17/13 11:00	10/21/13 18:42	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 18:42	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 18:42	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.037U**	ug/L	0.26	0.037	1	10/17/13 11:00	10/21/13 18:42	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.26	0.031	1	10/17/13 11:00	10/21/13 18:42	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	45	%	51-99		1	10/17/13 11:00	10/21/13 18:42	877-09-8	1c
Decachlorobiphenyl (S)	52	%	30-127		1	10/17/13 11:00	10/21/13 18:42	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-803S **Lab ID: 30104755006** Collected: 10/07/13 15:40 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.077U**	ug/L	0.26	0.077	1	10/17/13 11:00	10/21/13 18:59	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.091U**	ug/L	0.26	0.091	1	10/17/13 11:00	10/21/13 18:59	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.073U**	ug/L	0.26	0.073	1	10/17/13 11:00	10/21/13 18:59	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 18:59	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 18:59	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.037U**	ug/L	0.26	0.037	1	10/17/13 11:00	10/21/13 18:59	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.26	0.031	1	10/17/13 11:00	10/21/13 18:59	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	44	%	51-99		1	10/17/13 11:00	10/21/13 18:59	877-09-8	1c
Decachlorobiphenyl (S)	44	%	30-127		1	10/17/13 11:00	10/21/13 18:59	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-804D Lab ID: 30104755007 Collected: 10/07/13 08:25 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.076U**	ug/L	0.25	0.076	1	10/17/13 11:00	10/21/13 19:07	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.091U**	ug/L	0.25	0.091	1	10/17/13 11:00	10/21/13 19:07	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.072U**	ug/L	0.25	0.072	1	10/17/13 11:00	10/21/13 19:07	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.032U**	ug/L	0.25	0.032	1	10/17/13 11:00	10/21/13 19:07	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.25	0.024	1	10/17/13 11:00	10/21/13 19:07	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.036U**	ug/L	0.25	0.036	1	10/17/13 11:00	10/21/13 19:07	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.25	0.031	1	10/17/13 11:00	10/21/13 19:07	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	43	%	51-99		1	10/17/13 11:00	10/21/13 19:07	877-09-8	1c
Decachlorobiphenyl (S)	53	%	30-127		1	10/17/13 11:00	10/21/13 19:07	2051-24-3	

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ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: MW-804S Lab ID: **30104755008** Collected: 10/07/13 08:25 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.079U**	ug/L	0.26	0.079	1	10/17/13 11:00	10/21/13 19:15	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.094U**	ug/L	0.26	0.094	1	10/17/13 11:00	10/21/13 19:15	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.075U**	ug/L	0.26	0.075	1	10/17/13 11:00	10/21/13 19:15	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 19:15	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 19:15	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.038U**	ug/L	0.26	0.038	1	10/17/13 11:00	10/21/13 19:15	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.032U**	ug/L	0.26	0.032	1	10/17/13 11:00	10/21/13 19:15	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	50	%	51-99		1	10/17/13 11:00	10/21/13 19:15	877-09-8	1c
Decachlorobiphenyl (S)	42	%	30-127		1	10/17/13 11:00	10/21/13 19:15	2051-24-3	

MAB
12/2/13

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: GWD Lab ID: 30104755011 Collected: 10/07/13 00:01 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.077U**	ug/L	0.26	0.077	1	10/17/13 11:00	10/21/13 22:06	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.092U**	ug/L	0.26	0.092	1	10/17/13 11:00	10/21/13 22:06	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.074U**	ug/L	0.26	0.074	1	10/17/13 11:00	10/21/13 22:06	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.033U**	ug/L	0.26	0.033	1	10/17/13 11:00	10/21/13 22:06	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.26	0.024	1	10/17/13 11:00	10/21/13 22:06	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.037U**	ug/L	0.26	0.037	1	10/17/13 11:00	10/21/13 22:06	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.032U**	ug/L	0.26	0.032	1	10/17/13 11:00	10/21/13 22:06	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	48	%	51-99		1	10/17/13 11:00	10/21/13 22:06	877-09-8	1c
Decachlorobiphenyl (S)	55	%	30-127		1	10/17/13 11:00	10/21/13 22:06	2051-24-3	

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: GP-East Millinocket ME
Pace Project No.: 30104755

Sample: Purge Water Lab ID: **30104755012** Collected: 10/07/13 16:15 Received: 10/09/13 09:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8082 GCS PCB	Analytical Method: EPA 8082 Preparation Method: EPA 3510								
PCB-1016 (Aroclor 1016)	**0.076U**	ug/L	0.25	0.076	1	10/17/13 11:00	10/21/13 22:14	12674-11-2	
PCB-1221 (Aroclor 1221)	**0.091U**	ug/L	0.25	0.091	1	10/17/13 11:00	10/21/13 22:14	11104-28-2	
PCB-1232 (Aroclor 1232)	**0.072U**	ug/L	0.25	0.072	1	10/17/13 11:00	10/21/13 22:14	11141-16-5	
PCB-1242 (Aroclor 1242)	**0.032U**	ug/L	0.25	0.032	1	10/17/13 11:00	10/21/13 22:14	53469-21-9	
PCB-1248 (Aroclor 1248)	**0.024U**	ug/L	0.25	0.024	1	10/17/13 11:00	10/21/13 22:14	12672-29-6	
PCB-1254 (Aroclor 1254)	**0.036U**	ug/L	0.25	0.036	1	10/17/13 11:00	10/21/13 22:14	11097-69-1	
PCB-1260 (Aroclor 1260)	**0.031U**	ug/L	0.25	0.031	1	10/17/13 11:00	10/21/13 22:14	11096-82-5	
Surrogates									
Tetrachloro-m-xylene (S)	47	%	51-99		1	10/17/13 11:00	10/21/13 22:14	877-09-8	1c
Decachlorobiphenyl (S)	47	%	30-127		1	10/17/13 11:00	10/21/13 22:14	2051-24-3	

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-1
Client ID: MW-206A
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0315.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		44.6	%				
Fluorene-D10		48.8	%				
Pyrene-D10		65.8	%				

JVLB
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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-2
Client ID: MW-206B
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0316.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10	*	35.6	%				
Fluorene-D10		42.4	%				
Pyrene-D10		54.0	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-3
Client ID: MW-801
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0317.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		66.1	%				
Fluorene-D10		71.3	%				
Pyrene-D10		77.5	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-4
Client ID: MW-802
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0318.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		53.4	%				
Fluorene-D10		59.8	%				
Pyrene-D10		77.5	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-5
Client ID: MW-803D
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0319.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		59.7	%				
Fluorene-D10		66.2	%				
Pyrene-D10		82.4	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-6
Client ID: MW-803S
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0320.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		54.5	%				
Fluorene-D10		58.2	%				
Pyrene-D10		86.8	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-7
Client ID: MW-804D
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0321.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		60.5	%				
Fluorene-D10		65.1	%				
Pyrene-D10		79.8	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-8
Client ID: MW-804S
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0322.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		65.3	%				
Fluorene-D10		70.0	%				
Pyrene-D10		84.0	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-11
Client ID: GWD
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0325.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		58.8	%				
Fluorene-D10		62.3	%				
Pyrene-D10		72.5	%				

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Report of Analytical Results

Client: EarthCon Consultants, Inc.
Lab ID: SG7768-12
Client ID: PURGE WATER
Project: GP- East Millinocket ME Proj
SDG: SG7768
Lab File ID: N0326.D

Sample Date: 07-OCT-13
Received Date: 08-OCT-13
Extract Date: 11-OCT-13
Extracted By: WAS
Extraction Method: SW846 3510
Lab Prep Batch: WG132240

Analysis Date: 17-OCT-13
Analyst: JCG
Analysis Method: SW846 M8270C
Matrix: AQ
% Solids: NA
Report Date: 12-NOV-13

Compound	Qualifier	Result	Units	Dilution	PQL	ADJ PQL	ADJ MDL
1,2,3-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.18
1,2,4-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,3,5-Trichlorobenzene	U	0.94	ug/L	1	1	0.94	0.17
1,2,3,4-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
Pentachlorobenzene	U	0.94	ug/L	1	1	0.94	0.23
1,2,4,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.24
1,2,3,5-Tetrachlorobenzene	U	0.94	ug/L	1	1	0.94	0.28
2-Methylnaphthalene-D10		58.7	%				
Fluorene-D10		59.1	%				
Pyrene-D10		70.9	%				

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REISSUE

ANNUAL REPORT OF SAMPLING AND TESTING

2010

POST-REMEDIATION GROUNDWATER MONITORING PROGRAM

PCB REMEDIATION PROJECT

at the
East Millinocket Operations
of
Katahdin Paper Company
East Millinocket, Maine

December 2010

Prepared for

GEORGIA-PACIFIC, LLC

by

PREMO GROUP INC.

PREMO® Group Inc

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FIGURES

Figure 1 Water Table Elevation Map

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Appendix B Tailwater Rating Curve
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Appendix D Laboratory Analysis Reports
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1.0 INTRODUCTION

This report summarizes the results of the annual groundwater sampling and analysis conducted on October 7 and 8, 2010 at the East Millinocket Operations of the Katahdin Paper Company. The sampling and laboratory analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan* (Monitoring Plan), revised April 1992, and subsequently modified and accepted by the U.S. Environmental Protection Agency (EPA) – Region 1 on June 21, 1993 and the Maine Department of Environmental Protection (MEDEP) on June 30, 1993. The 2010 annual sampling and analyses were also performed in accordance with the EPA letters dated September 7, 2006 (see Appendix A) and December 18, 2006.

The groundwater monitoring program was initiated to monitor polychlorinated biphenyls (PCB) and chlorobenzene concentrations in groundwater downgradient of three remediated spill sites at the mill. The three sites are referred to as the No. 5 Paper Machine site, the No. 6 Paper Machine site, and the Chemi-Groundwood site (see Figure 1 for locations).

Twelve monitoring wells are sampled on an annual basis. The two upgradient well clusters, installed in the summer of 1989, consist of wells 206-A and 206-B and wells 211-A and 211-B. The eight downgradient wells, installed in the fall of 1991, consist of the 800-series wells. The locations of the wells are shown in Figure 1. Logs and construction details of the wells were presented in the Monitoring Plan.

This is the fifty-ninth groundwater sampling event conducted since remediation in 1989 and 1990. Prior to 2007 sampling events were completed on a quarterly basis. Four annual sampling events have been completed since 2007.

Information presented in this report includes sampling methods, analytical methods, field and laboratory test results, quality control results, qualitative assessment of the raw chromatograms, an updated groundwater contour map, and pool elevations on the West Branch of the Penobscot River.

2.0 GROUNDWATER ELEVATIONS

Prior to sampling, the depth to groundwater was measured from the top of casing in each monitoring well and the general condition of each well was noted. Groundwater elevations based on the October 7, 2010 water level measurements are summarized in Table 1. The groundwater elevations from the shallow wells were used to prepare the groundwater contour map (see Figure 1). The groundwater flow direction is southwest toward the Penobscot River, which is consistent with the historic groundwater flow

direction.

Pool elevations were obtained for the West Branch of the Penobscot River, both upstream and downstream of the dam at the mill. Based on monitoring conducted at the Millinocket Dispatchers Station, an upstream pool elevation of 287.41 feet was recorded on October 8, 2010. The downstream pool elevation was determined to be 263.64 feet, based on the turbine discharge flow of 5,100 cubic feet per second (cfs) and the tailwater rating curve from GNP-ER No. 4-8828 (see Appendix B).

3.0 GROUNDWATER SAMPLING

3.1 Preparation for Sampling

Prior to sampling, groundwater was purged from each well using a peristaltic pump and dedicated polyvinyl chloride (PVC) tubing. The amount of purge water pumped was dependent on the well volume and the stabilization of field parameters. The volume was calculated using the following equation:

$V = \pi r^2(X-D)$

where:

V = Volume (cubic feet)
r = Radius of monitoring well (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

The average rate at which water was pumped from each well was adjusted to approximately 0.5 liters per minute or less. This rate was generally held constant throughout the purging procedures. Purge water was placed in Drums A and B during the October 2010 sampling event. A water sample was collected from each drum to provide data for drum disposal.

Pumping rates were also adjusted to minimize drawdown for each well. Maximum drawdowns were based on the initial depth to groundwater reading and the following equation:

$d = 0.20(X-D)$

where:

d = Maximum drawdown (feet)
X = Total depth of monitoring well (feet)
D = Depth to groundwater (feet)

During purging and sampling, the depth to groundwater was periodically monitored and compared to the maximum drawdown depth. In addition, a minimum of four

conductivity, pH, turbidity, and temperature readings were obtained during purging. When the most sensitive parameter (typically turbidity) stabilized and a volume of water greater than or equivalent to the well casing volume was removed, a groundwater sample was collected from the well.

These procedures were followed for each well, except for wells 206-A, 206-B, 802, 803-S, 803-D, and 805-D, where the drawdown criteria was exceeded. As a result of extremely slow rates of recovery, the water levels in monitoring wells 206-A and 803-D lowered beyond the limit of the peristaltic pump; therefore, three well volumes were removed from each well using a bailer. These deviations are not considered to have adverse impact on the sampling program or water quality. Purging details for each well are presented on the Groundwater Sampling Logs in Appendix C.

Identification and calibration of field instruments are discussed in the Section 5.1 of this report.

3.2 Sampling

Upon completion of purging, each well was sampled using the peristaltic pump and dedicated tubing with the exceptions of wells 206-A and 803-D, which were sampled with a disposable bailer. Groundwater samples were collected in 1-liter amber glass containers. A field duplicate sample and equipment rinsate blank were collected from monitoring well 803-S during this sampling event.

Sample information was entered on adhesive sample identification labels and secured to the jars. The jars were placed in insulated coolers and packed with ice and packing material. The coolers were sealed and shipped to Pace Analytical in Greensburg, Pennsylvania and Northeast Labs (formerly Binax/NEL) in Waterville, Maine, for testing. Chain-of-Custody records are included in Appendix C.

4.0 ANALYTICAL TESTING AND RESULTS

4.1 Analytical Procedures

The groundwater samples collected during the October 7 and 8, 2010 sampling event were received and logged by Pace Analytical Services on October 9, 2010. The samples for chlorobenzene analysis were subcontracted to Northeast Labs to achieve the project-required quantitation limits. The samples were analyzed by USEPA Method 8082 for the following compounds:

Chlorobenzenes	PCBs
1,2,3 –trichlorobenzene	Aroclor 1016
1,2,4- trichlorobenzene	Aroclor 1221
1,3,5- trichlorobenzene	Aroclor 1232
1,2,4,5-tetrachlorobenzene	Aroclor 1242
1,2,3,5-tetrachlorobenzene	Aroclor 1248
1,2,3,4-tetrachlorobenzene	Aroclor 1254
Pentachlorobenzene	Aroclor 1260

4.2 Analytical Results

PCBs and chlorobenzenes were not detected above the quantitation limit in any of the groundwater samples or the drum samples collected in October 2010. Details and results of the laboratory testing are presented in the analysis reports in Appendix D and summarized in Table 2. The drummed purge water was disposed in the on-site wastewater treatment system.

PCBs have not been detected in the sampling events conducted since the program was initiated in 1993 with the exceptions of the December 1995 and June 1997 sampling events. The PCB samples were reanalyzed during the December 1995 sampling round due to quality control (QC) targets not being met, and PCBs were not detected in the reanalysis. The PCB detections in June 1997 were also associated with QC targets that were not achieved. Subsequent PCB sampling conducted in August 1997 did not indicate the presence of PCBs in groundwater.

Although chlorobenzenes have not been detected at the site since 2006, two chlorobenzenes (1,2,4-trichlorobenzene and 1,3,5-trichlorobenzene) have been detected in well 804-S historically. The concentrations of 1,2,4-trichlorobenzene detected in well 804-S were well below the current MCL and Maine Maximum Exposure Guideline (MEG) of 70 ug/L. The concentrations of 1,3,5-trichlorobenzene detected in well 804-S were also below the current MEG of 40 ug/L for drinking water.

5.0 QUALITY CONTROL

5.1 Field Quality Control

Field quality control samples including one field duplicate and one equipment rinsate blank were collected on October 7, 2010. The target sampling precision goal identified in the Monitoring Plan, dated April 1992, is less than 30 percent and the goal for the field equipment blank is less than 0.5 mg/L. Results of field duplicate samples 803-S and GWD 100710 were both below the quantitation limits indicating acceptable sampling precision. The PCB and chlorobenzene results for the equipment

rinsate sample RB 100710 were below the quantitation limits. Results of the field duplicate samples and the equipment blank sample met the target goals identified for this project.

Calibration details and instrument identification data for the field instruments are presented in the Field Instrument Calibration Daily Operation Logs provided in Appendix C. The laboratory analytical reports including the results for the field QC samples are included in Appendix D.

5.2 Laboratory Quality Control

Laboratory quality control, including an evaluation of the PCB chromatograms, is summarized in the data validation narrative provided as Appendix E. The target laboratory accuracy goal identified in the Monitoring Plan, dated April 1992, is 60 to 120 and the target precision goal is less than 20. Matrix spike and laboratory control sample recovery values were compared to the 60 to 120 percent target to assess accuracy. The relative percent difference (RPD) between matrix duplicate results was compared to the 20 percent target to assess precision.

Matrix spike samples and laboratory control samples were analyzed with the October 2010 groundwater samples to assess method accuracy. The average accuracy for the matrix spike and the laboratory control samples are as follows:

Matrix Spike Samples

Compound	Accuracy*
1,2,3- trichlorobenzene	68.08
1,2,4- trichlorobenzene	76.63
1,3,5- trichlorobenzene	71.58
1,2,4,5-tetrachlorobenzene	81.08
1,2,3,5-tetrachlorobenzene	66.93
1,2,3,4-tetrachlorobenzene	76.80
Pentachlorobenzene	92.85
Targets	**60 – 120**

* Average Percent Recovery

Laboratory Control Samples

Compound	Accuracy*
1,2,3- trichlorobenzene	71.28
1,2,4- trichlorobenzene	79.94
1,3,5- trichlorobenzene	75.60

1,2,4,5-tetrachlorobenzene	86.99
1,2,3,5-tetrachlorobenzene	73.21
1,2,3,4-tetrachlorobenzene	82.31
Pentachlorobenzene	99.60
Targets	**60 – 120**

* Average Percent Recovery

The QC target for accuracy of 60 to 120 percent was achieved for each analyte. The calculations for the average percent recoveries for individual analytes are summarized in Table 3 and 4. Additional information regarding the accuracy of the data is presented in the data validation summary provided as Appendix E. The matrix spikes and the laboratory control sample results are presented in Appendix D.

The QC target of 20 for precision was evaluated through laboratory control sample duplicates and matrix duplicate samples. The precision goal was achieved for each analyte except one RPD of 21 for 1,2,3-trichlorobenzene. The data were not impacted as the associated sample results were non-detect as described in the data validation summary provided in Appendix E.

6.0 CORRECTIVE ACTION

Corrective actions due to laboratory quality control for data collected during the October 2010 sampling event were not required.

7.0 SITE CLOSURE

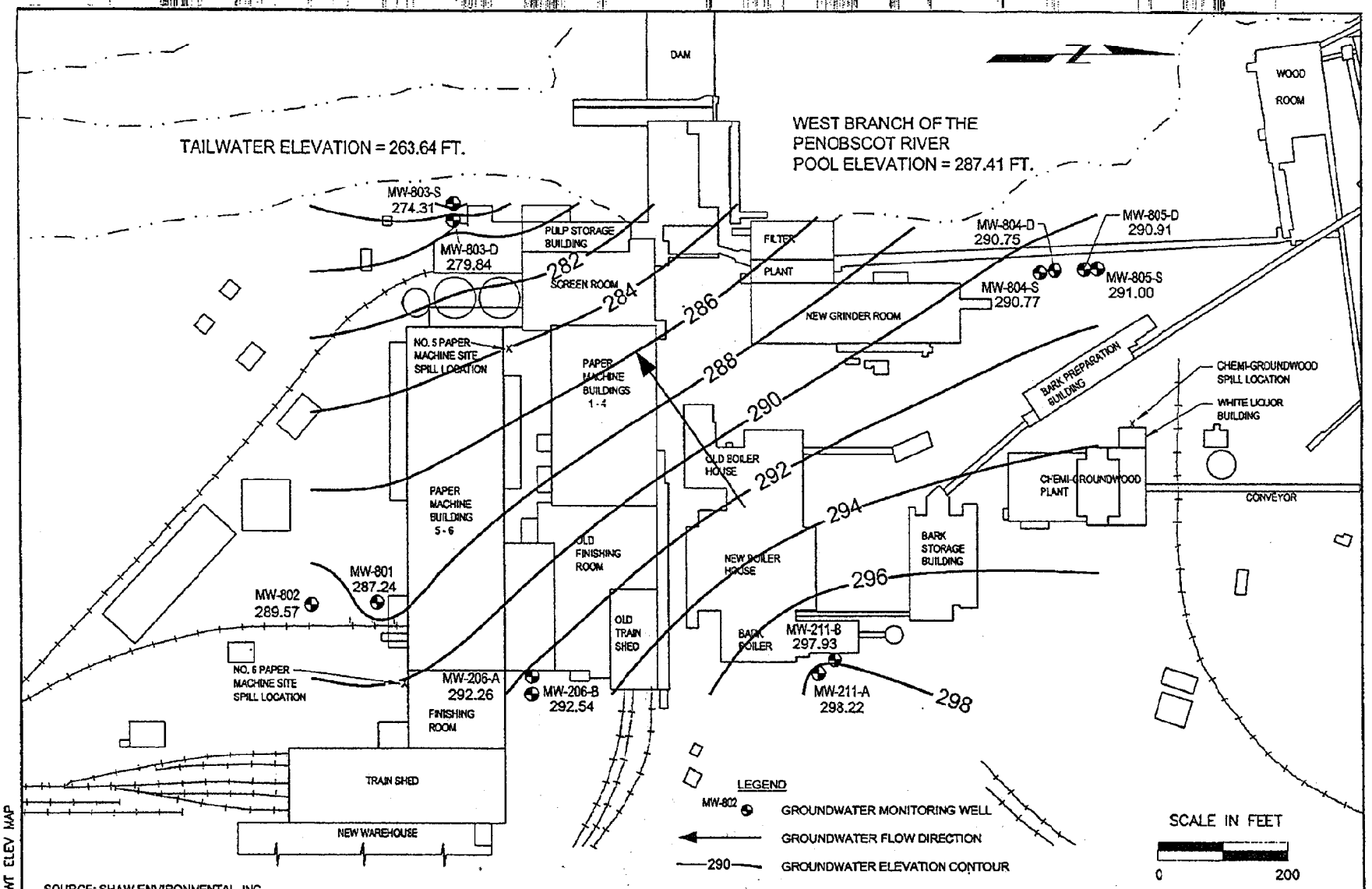
The Consent Agreement and Final Order (EPA Docket No. TSCA-I-87-1041) indicates that the parties agree to a "degree of cleanup of PCBs released". The Consent Order allows for elevated concentrations of PCBs and chlorobenzenes to remain on the Site as long as a groundwater monitoring plan was developed and implemented to monitor the potential for off-site migration. A Groundwater Monitoring Plan, revised April 1992 was approved by EPA Region 1 and the Maine Department of Environmental Protection (MEDEP). Groundwater monitoring was conducted on a quarterly basis in accordance with the Groundwater Monitoring Plan until 2007.

On August 21, 2006, a letter was written to the EPA requesting the cessation of groundwater sampling at the Site based on detected concentrations of 1,2,4-trichlorobenzene well below the action level for 4.5 years. The EPA responded to this letter on September 7, 2006 stating that they did not agree that the groundwater monitoring could be eliminated but that a reduced monitoring program could be considered. The EPA requested one additional sampling round under the conditions stated in the letter and that after the data

had been submitted, the EPA would consult with the MEDEP to make a determination. In a letter dated December 18, 2006, EPA accepted a reduced monitoring program and reduced the sampling frequency from quarterly to annually.

Groundwater monitoring has been conducted at the site since 1993. PCBs and chlorobenzenes have not been detected at the site since March of 2006. Analytical data indicates that historical chlorobenzene detections were below the current regulatory drinking water criteria. Based on the results of the monitoring program to date, Georgia-Pacific and PREMO respectfully request that EPA Region I grant a reduction in the number of monitoring wells included in the monitoring program from twelve to eight wells. We propose that sampling of upgradient monitoring wells 206-A and 206-B be discontinued as concentrations have been non-detect since the monitoring program began in 1993 and upgradient wells 211-A and 211-B provide sufficient upgradient groundwater data for the site. In addition, we propose discontinuing the sampling of monitoring wells 805-D and 805-S. These wells along with wells 804-S and 804-D provide groundwater data downgradient of the Chemi-Groundwood spill site. PCBs and chlorobenzenes have not been detected in wells 805-D or 805-S since monitoring began in 1993 but have historically been detected in groundwater samples from well 804-S. The 805 wells are located in close proximity (approximately 50 feet north) to well cluster 804. Based on the historical groundwater monitoring data and current potentiometric surface map, wells 804-S and 804-D appear to provide better monitoring data than wells 805-S and 805-D. The revised monitoring program would include:

- Monitoring wells 211-A and 211-B to monitor upgradient groundwater concentrations;
- Monitoring wells 801 and 802 to monitor the potential for migration of constituents from the No. 6 Paper Machine Site Spill Location;
- Monitoring wells 803-S and 803-D to monitor the potential for migration of constituents from the No. 5 Paper Machine Site Spill Location;
- Monitoring wells 804-S and 804-D to monitor the potential for migration of constituents from the Chemi-Groundwood Spill Location.



SOURCE: SHAW ENVIRONMENTAL, INC.

FILENAME: 309024 - WT ELEV MAP

GEORGIA-PACIFIC, LLC
EAST MILLINOCKET MILL FACILITY
EAST MILLINOCKET, MAINE

PREMO PROJECT NO. 309024

PREMO Group Inc.
1580 WEST OAK PARKWAY, BLDG 100, SUITE 106
MARIETTA, GEORGIA 30062

WATER TABLE ELEVATION MAP
OCTOBER 2010

DATE: DEC 2010

FIGURE: 1

TABLE 1
DEPTH TO GROUNDWATER MEASUREMENTS
EAST MILLINOCKET MILL

MW No.	Date	Depth to Groundwater (ft)	Top of Standpipe Elevation (ft)	Groundwater Elevation (ft)
206A	October 7, 2010	21.86	314.12	292.26
206B	October 7, 2010	21.59	314.13	292.54
211A	October 7, 2010	8.78	307.00	298.22
211B	October 7, 2010	8.63	306.56	297.93
801	October 7, 2010	9.06	296.30	287.24
802	October 7, 2010	6.98	296.55	289.57
803D	October 7, 2010	4.45	284.29	279.84
803S	October 7, 2010	10.08	284.39	274.31
804D	October 7, 2010	6.38	297.13	290.75
804S	October 7, 2010	6.68	297.45	290.77
805D	October 7, 2010	6.79	297.70	290.91
805S	October 7, 2010	7.21	298.21	291.00

ASTM E 1527 – 05
PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (*the "Brownfields Amendments"*) the *user* must provide the following information (if available) to the *environmental professional*. Failure to provide this information could result in the determination that the *"all appropriate inquiry"* is not complete.

Site Name: Katahdin Paper Mill West and East

Site Address: 1 Katahdin Ave, Millinocket, Maine

50 Main Street, East Millinocket, Maine, and various related parcels in Millinocket and East Millinocket

S. W. Cole Engineering Job No.: 00-1153.1 E

User Name: Cate Street Capital, Inc.

Preparer's Name: Cate Street Capital, Inc.

1. **Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).**

Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state, or local law?

Answer: No

2. **Activity and land use limitations that are in place on the property or that have been filed and recorded in the Registry of Deeds(40 CFR 312.26).**

Are you aware of any activity use limitations (AULs), such as *engineering controls*, land use restrictions, *or institutional controls* that are in place at the site and/or have been filed or recorded in the registry under federal, tribal state or local law?

Answer: No

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**

As the *user* of this environmental site assessment, do you have any specialized knowledge or experience related to the property or the nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by these types of businesses?

Answer: Cate Street Capital has engaged Peter Hanson, who previously managed a paper manufacturing business, to advise it in its acquisition of the properties and to manage its business there.

4. **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).**

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?

Answer: No. The purchase price for the property does not reflect the value of the equipment and fixtures, which could be removed and sold. The purchase price does reflect the fact that environmental liabilities exist on the properties, and that the seller of the properties is not indemnifying the purchaser for these liabilities. Therefore, the potential value of fixtures is netted against the environmental liabilities to determine a fair property value.

5. **Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of a release or threatened releases? For example:

a. Do you know the past uses of the *property*?

Answer: Both locations have been used for pulp and paper manufacturing

b. Do you know of specific chemicals that are present or once were present at the *property*?

Answer: Calcium carbonate, magnesium compounds, sulfur compounds, chlorine compounds, various caustics and acids, oil, diesel, baled kraft pulp and items on list attached, among others. The Millinocket site formerly housed a sulphite pulp mill that used magnesium in its processes and generated red liquor.

c. Do you know of spills or other chemical releases that have taken place at the *property*?

Answer: None that were not identified by the Phase I Site Assessment

d. Do you know of any environmental cleanups that have taken place at the *property*?

Answer: None that were not identified by the Phase I Site Assessment

6. **The degree of obviousness of the presence or the likely presence of contamination at the property, and the ability to detect contamination by the appropriate investigation (40 CFR 312.31).**

As the *user* of the environmental site assessment, based on your knowledge and experience related to the *property* are there any *obvious* indicators that point to the presence or likely presence of contamination at the *property*?

Answer: Oil and chemical storage containers exist on the property. It is likely that oil or chemicals were spilled during delivery or transfer from container to process at some point.

I certify that the above information is true and accurate to the best of my knowledge.

Preparer's Signature:

Cate Street Capital, Inc.

By _____ **Date:** 8/26/2011

ASTM E 1527-05
ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Site Address: East Millinocket Mill Site

Site Description: Pulp / Paper Mill

Owner/Occupant Completing this Questionnaire: John Civiello

Question

1A. Is the *property* used for an industrial use?

(Yes) No Unknown

1B. Is any *adjoining property* used for an industrial use?

Yes (No) Unknown

2A. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?

(Yes) No Unknown

2B. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial purpose?

Yes (No) Unknown

3A. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

3B. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Gasoline Station

Question

4A. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

4B. Did you observe any evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Gasoline Station

5A. Are there *currently* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Paint - 50 gal. in aggregate

(Yes) No Unknown

5B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes No (Unknown)

6A. Are there *currently* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

(Yes) No Unknown

6B. Did you observe evidence or do you have any prior knowledge that have been *previously* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

(Yes) No Unknown

Question

7A. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?

Yes (No) Unknown

7B. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the *property that is of an unknown origin?*

Yes (No) Unknown

8A. Are there *currently* any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal? - 2 Lagoons in wastewater treatment System.

(Yes) No Unknown

8B. Did you observe any evidence or do you have any knowledge that there have been *previously*, any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal? Same

(Yes) No Unknown

9A. Is there *currently* any stained soil on the *property*?

(Yes) No Unknown

9B. Did you observe evidence or do you have any prior knowledge that there has been *previously*, any stained soil on the *property*?

(Yes) No Unknown

10A. Are there *currently* any registered or unregistered storage tanks (above or underground) located on the *property*?

(Yes) No Unknown

10B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any registered or unregistered storage tanks (above or underground) located on the *property*?

(Yes) No Unknown

Question

11A. Are there *currently* any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

(Yes) No Unknown

11B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

(Yes) No Unknown

12A. Is there *currently* evidence of leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

(Yes) No Unknown

12B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

(Yes) No Unknown

13A. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?

No private wells.

Yes (No) Unknown

13B. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?

No private Wells.

Yes (No) Unknown

Question

14. Does the Owner or Occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15A. Has the Owner or Occupant of the property been informed of the *past existence* of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15B. Has the Owner or Occupant of the property been informed of the *current* existence of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15C. Has the Owner or Occupant of the property been informed of the *past* existence of environmental violations with respect to the *property* or any facility located on the property?

(Yes) No Unknown

15D. Has the Owner or Occupant of the property been informed of the *current* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

16. Does the Owner or Occupant of the property have any knowledge of any environmental site assessment of the *property* or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

(Yes) No Unknown

Question

17. Does the Owner or Occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the *property* by any Owner or Occupant of the property?

(Yes) No Unknown

18A. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *storm water* system?

Yes (No) Unknown

18B. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *sanitary sewer* system?

Yes (No) Unknown

19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, (tires) automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*? Tires - aboveground storage

(Yes) No Unknown

20. Is there a transformer, capacitor, or any hydraulic equipment on the *property* for which there are any records indicating the presence of PCBs?

Yes (No) Unknown

Owner/Occupant Comment Section:

_____

_____

_____

_____

_____

Signature of Owner/Occupant:_____Date:_____

ASTM E 1527-05
ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Site Address: Dolby Site (excluding landfill)

Site Description: Forrested land

Owner/Occupant Completing this Questionnaire: John Civiello

Question

1A. Is the *property* used for an industrial use?

Yes (No) Unknown

1B. Is any *adjoining property* used for an industrial use?

(Yes) No Unknown

2A. Did you observe evidence or do you have any prior knowledge that the *property* has been used for an industrial use in the past?

Yes (No) Unknown

2B. Did you observe evidence or do you have any prior knowledge that any *adjoining property* has been used for an industrial purpose?

(Yes) No Unknown

3A. Is the *property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

3B. Is any *adjoining property* used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

(Yes) No Unknown Land fill

Question

4A. Did you observe evidence or do you have any prior knowledge that the *property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)?

Yes (No) Unknown

4B. Did you observe any evidence or do you have any prior knowledge that any *adjoining property* has been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard, or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility (if applicable, identify which)? Land Fill

(Yes) No Unknown

5A. Are there *currently* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes (No) Unknown

5B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any damaged or discarded automotive or industrial batteries, pesticides, paints, or other chemicals in individual containers of >5 gallons in volume or 50 gallons in the aggregate, stored on or used at the *property* or at the facility?

Yes (No) Unknown

6A. Are there *currently* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

Yes (No) Unknown

6B. Did you observe evidence or do you have any prior knowledge that have been *previously* any industrial drums (typically 55 gallon) or sacks of chemicals located on the *property* or at the facility?

Yes (No) Unknown

Question

7A. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the property that originated from a contaminated site?

Yes (No) Unknown

7B. Did you observe evidence or do you have any prior knowledge that fill dirt has been brought onto the *property that is of an unknown origin?*

Yes (No) Unknown

8A. Are there *currently* any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

Yes (No) Unknown

8B. Did you observe any evidence or do you have any knowledge that there have been *previously*, any pits, ponds, or lagoons located on the *property* in connection with waste treatment or waste disposal?

Yes (No) Unknown

9A. Is there *currently* any stained soil on the *property*?

Yes (No) Unknown

9B. Did you observe evidence or do you have any prior knowledge that there has been *previously*, any stained soil on the *property*?

Yes (No) Unknown

10A. Are there *currently* any registered or unregistered storage tanks (above or underground) located on the *property*?

Yes (No) Unknown

10B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any registered or unregistered storage tanks (above or underground) located on the *property*?

Yes (No) Unknown

Question

11A. Are there *currently* any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

Yes (No) Unknown

11B. Did you observe evidence or do you have any prior knowledge that there have been *previously*, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the *property*?

Yes (No) Unknown

12A. Is there *currently* evidence of leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

Yes (No) Unknown

12B. Did you observe evidence or do you have any prior knowledge that there have been *previously* any leaks, spills, or staining by substances other than water, or foul odors, associated with any flooring, drains, walls, ceilings, or exposed grounds on the *property*?

Yes (No) Unknown

13A. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that contaminants have been identified in the well or system that exceed guidelines applicable to the water system?

Yes (No) Unknown

13B. If the *property* is served by a private well or non-public water system, is there evidence or do you have prior knowledge that the well has been designated as contaminated by any government environmental/health agency?

Yes (No) Unknown

Question

14. Does the Owner or Occupant of the property have any knowledge of environmental liens or governmental notification relating to past or recurrent violations of environmental laws with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15A. Has the Owner or Occupant of the property been informed of the *past existence* of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15B. Has the Owner or Occupant of the property been informed of the *current* existence of hazardous substances or petroleum products with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15C. Has the Owner or Occupant of the property been informed of the *past* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

15D. Has the Owner or Occupant of the property been informed of the *current* existence of environmental violations with respect to the *property* or any facility located on the property?

Yes (No) Unknown

16. Does the Owner or Occupant of the property have any knowledge of any environmental site assessment of the *property* or facility that indicated the presence of hazardous substances or petroleum products on, or contamination of, the property or recommended further assessment of the property?

Yes (No) Unknown

Question

17. Does the Owner or Occupant of the property know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any hazardous substance or petroleum products involving the *property* by any Owner or Occupant of the property?

Yes (No) Unknown

18A. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *storm water* system?

Yes (No) Unknown

18B. Does the property discharge waste water (not including sanitary waste or storm water) onto or adjacent to the property and/or into a *sanitary sewer* system?

Yes (No) Unknown

19. Did you observe evidence or do you have any prior knowledge that any hazardous substances or petroleum products, unidentified waste materials, tires, automotive or industrial batteries, or any other waste materials have been dumped above grade, buried and/or burned on the *property*?

Yes (No) Unknown

20. Is there a transformer, capacitor, or any hydraulic equipment on the *property* for which there are any records indicating the presence of PCBs?

Yes (No) Unknown

Owner/Occupant Comment Section:

_____

_____

_____

_____

_____

Signature of Owner/Occupant:_____Date:_____

IE

GREAT NORTHERN NEKOOSA
A WHOLLY OWNED SUBSIDIARY
OF
GEORGIA-PACIFIC CORPORATION

MILLINOCKET, MAINE

CLOSURE REPORT

FOR

THE DOLBY STORAGE FACILITY
AT EAST MILLINOCKET MILL

PREPARED BY

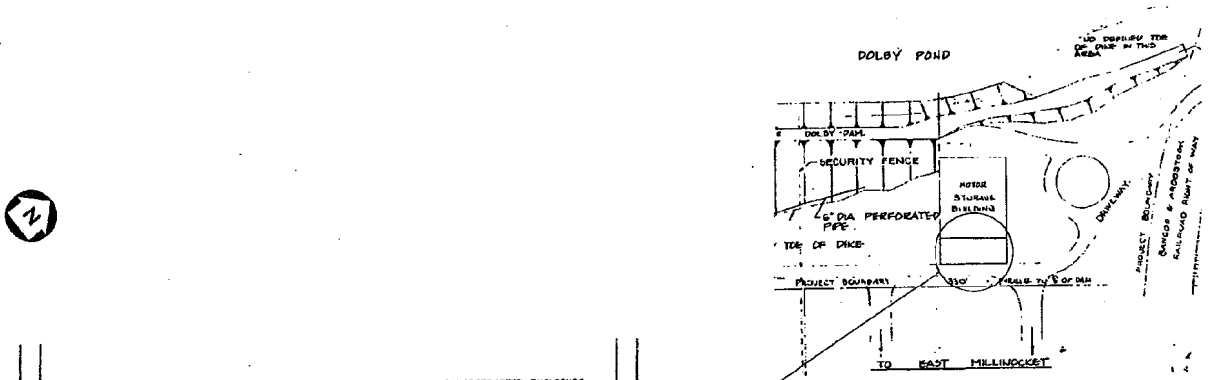
SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

MARCH 1991

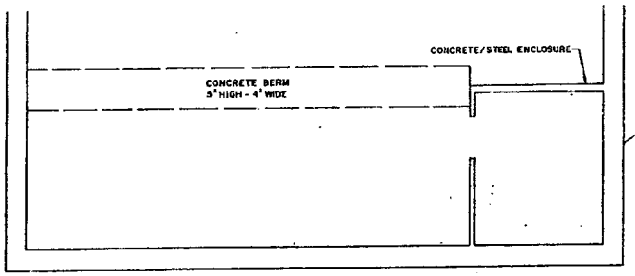
4.0 SUMMARY

The Dolby Storage Facility was closed between October 15 and November 28, 1990. PCB-contaminated concrete and soils were removed from the site and disposed of in an approved disposal facility. Approximately 20 cubic yards of dry clean-up material, including dirt, clothing, concrete and soils were generated as part of the closure activities. In addition, approximately 4.0 55-gallon drums of cleaning liquids were generated as part of the cleaning associated with the closure of the facility. All of these materials have been transported to a licensed hazardous waste disposal facility. GNP is presently using the Dolby Storage Facility as a storage area for electrical motors.

It is the professional engineering opinion of SME that this site has been closed in accordance with the MDEP approved closure plan and the Board of Environmental Protection Order dated July 25, 1990.



LOCATION PLAN



DOLBY STORAGE FACILITY

CLOSURE CERTIFICATION

Great Northern Paper Company operated the Dolby Storage Facility as a hazardous waste storage area under Maine license #1032. Sevee & Maher Engineers, Inc. was responsible for closure activity observation pursuant to its contract with Great Northern Paper Company. Based on the Maine Department of Environmental Protection, and to the professional engineering opinion of Sevee & Maher Engineers, Inc., based on observations and testing, that closure of the Dolby Storage Facility was in accordance with the Maine Department of Environmental Protection approved closure plan and the Board of Environmental Protection Order.

Sevee & Maher Engineers, Inc.
Project Officer:

Date: 12/19/90 Peter M. Maher, P.E.

0 5 10 15 20 FEET

DRAWN BY	REFERENCE DRAWING TITLE	CODE	NO.	DATE	REVISION	BY	CHD	APP'D	JOB No.

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

JOB NO.

DES.	CAP
DFT.	MWH
CHK'D	
APP'D	
ISSUE CODE	
P - PRELIM	B - BID
M - MFG. T.O.	C - CONST
SCALE	

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

DOLBY STORAGE AREA
EAST MILLINOCKET MILL
SURVEY PLOT

JOB NO. 8310
DWG. REG. NO. YB-19352
FILE NO. D-DO-7081.0021

Great Northern Paper
MILLINOCKET, MAINE

CLOSURE REPORT
FOR
THE DRUM STORAGE FACILITY AT EAST MILLINOCKET MILL

PREPARED BY

SEVEE & MAHER ENGINEERS, INC.
CUMBERLAND CENTER, MAINE

DECEMBER 1989

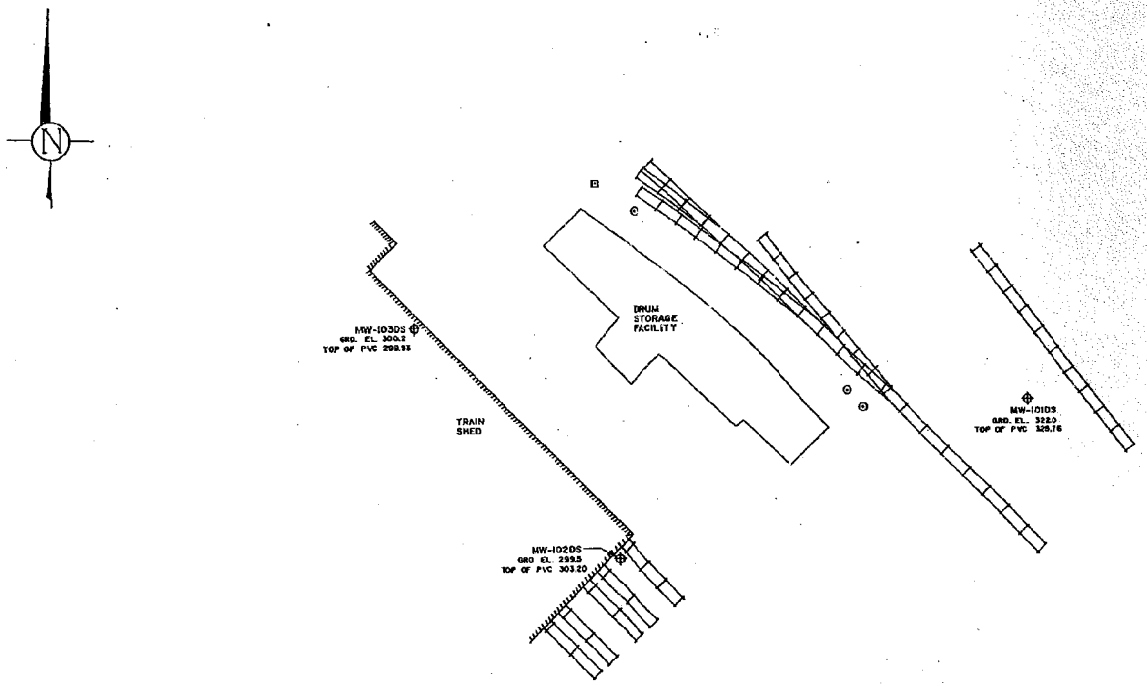
5.0 SUMMARY

The Drum Storage Facility was closed between August 24, 1989 and September 29, 1989. All waste oil contaminated oil was removed from this site and disposed at the CWS landfill in Norridgewock, Maine. Approximately 400 cubic yards of soil was removed to Norridgewock.

The results of composite and discrete sampling of the on-site soils suggests that the excavated soils were contaminated by waste oil. Three monitoring wells were installed at the site to measure volatile organic compounds, total petroleum hydrocarbons and acid/base/neutral extractable organic compounds in the vicinity of the Drum Storage Facility. The first sampling episode conducted in October 1989 has shown that there are no detectable amounts of these compounds in the groundwater downgradient of the Drum Storage Facility.

GNP is presently constructing a new paper warehouse at the location of the Drum Storage Facility. This warehouse and the adjacent paved areas will completely cover the footprint of the Drum Storage Facility and provide a cap over the site. This cap will minimize infiltration which might otherwise enter the site.

It is the professional engineering opinion of SME that the site has been closed in accordance with the DEP approved closure plan and the Board of Environmental Protection Order dated August 23, 1989.



LEGEND

- IRON PIN
- WOODEN STAKE
- MONITORING WELL

CLOSURE CERTIFICATION

Great Northern Paper Company operated the Drum Storage Facility as a hazardous waste storage area under interim license ST-822. Sevee & Maher Engineers, Inc. which was responsible for closure activity supervision pursuant to its contract with Great Northern Paper Company, states to the Maine Department of Environmental Protection, that it is the professional engineering opinion of Sevee & Maher Engineers, based on observations and testing, that closure of the Drum Storage Facility was in accordance with the Maine Department of Environmental Protection approved closure plan and the Board of Environmental Protection Order.

Date: December 14, 1988 Project Officer: Peter M. Maher
Peter M. Maher, P.E.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 INCH = 40 FT.

SEVEE & MAHER ENGINEERS, INC.
CONSULTING ENGINEERS
CUMBERLAND, MAINE

ISSUE CODE
P - PRELIM | B - BIDS
W - WPA E.O. | C - CONST
SCALE AS SHOWN

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

CENTRAL ENGINEERING DEPARTMENT

FIGURE 4
DRUM STORAGE FACILITY
EAST MILLINOCKET MILL
SURVEY PLAT

JOB NO.
ENG. REQ. NO.
FAX NO.

B

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 77 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE. Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1,250.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 16, 1994 Time Of Spill: 0745 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 07 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION

Spill Number B - 77 - 94

Total Product Recovered : 1,250.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : G

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 60.90 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : disposed of by Clean Harbors

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-77-94
02/16/94 07:45

Scott Davis of Clean Harbors Inc. called to request a contaminated debris shipment form for the disposal of #6 oil soaked railroad ballast from a spill that occurred at Great Northern Paper in East Millinocket. It was reported that a valve failed on a tank car spilling anywhere from 1000-1500 gallons onto the railroad bed. Curious as to why the spill wasn't reported by Great Northern I decided to venture up there to investigate.

When I arrived I met with Judy Moore, Environmental Specialist for the mill. She informed me that they didn't think they had to report spills that occurred within secondary containment. I explained to her otherwise and dropped the matter. In any event I was informed that the railroad bed where the tank cars were off-loaded sat within a secondary containment area that was heated with steam to keep the #6 oil flowing in the event of a spill. This containment area is ultimately connected to an oil-water separator. Looking the system over it was clear that the system did it's job.

Altogether about 60 yards of #6 oil soaked ballast was removed by Clean Harbors Inc. and disposed of at Sawyer Environmental in Hampden. The area was then filled with new ballast in preparation for another spill which hopefully will not occur. No resources of the State are believed to be affected from this particular spill.

File No. Spill File

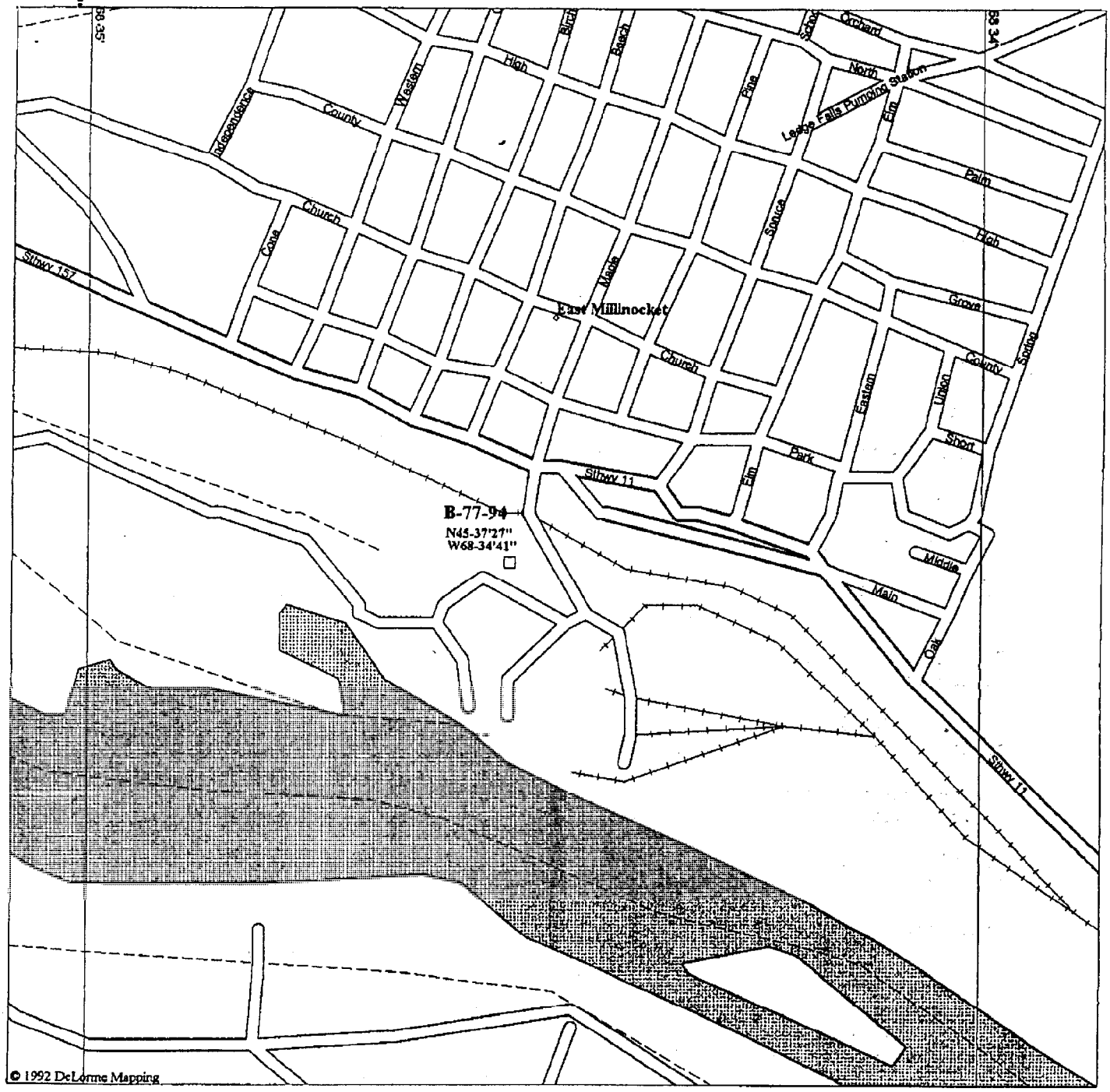
March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Rail Car
Date of spill:	February 16, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 1000 to 1500 gallons of Bunker C oil lost to containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Valve on rail car was broken. Valve was in closed position but leaked when cap was removed. Cap was replaced and leak stopped. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Working with Bangor & Aroostook Railroad concerning tank car maintenance issues.
Phone reported to:	Contacted DEP through Clean Harbors for approval of disposal of cleanup material at Sawyer Environmental.

C. E. Akeley



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:13:18 1994

Date 2/16/94 DEP SPILL # B.77.94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCKET

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP representative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA.

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

.

Solids consist of (check as appropriate)

- ___ sand, gravel or soil
- ___ speedy-dri
- ___ sorbent
- ___ other RR. BALLAST & SNOW (descibe or lists)

Facility is (check One)

- ✓ Landfill
- ___ Land Spreading Site
- ___ Asphalt Plant
- ___ Asphalt Pug Mill
- ___ other _____ (describe)

TW. Varney
Signature- DEP Representative

R. Morrill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 79 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 550.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 15, 1994 Time Of Spill: 1100 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 17 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION **Spill Number B - 79 - 94**

Total Product Recovered : 550.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 15.90 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :burnt in mills boiler

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

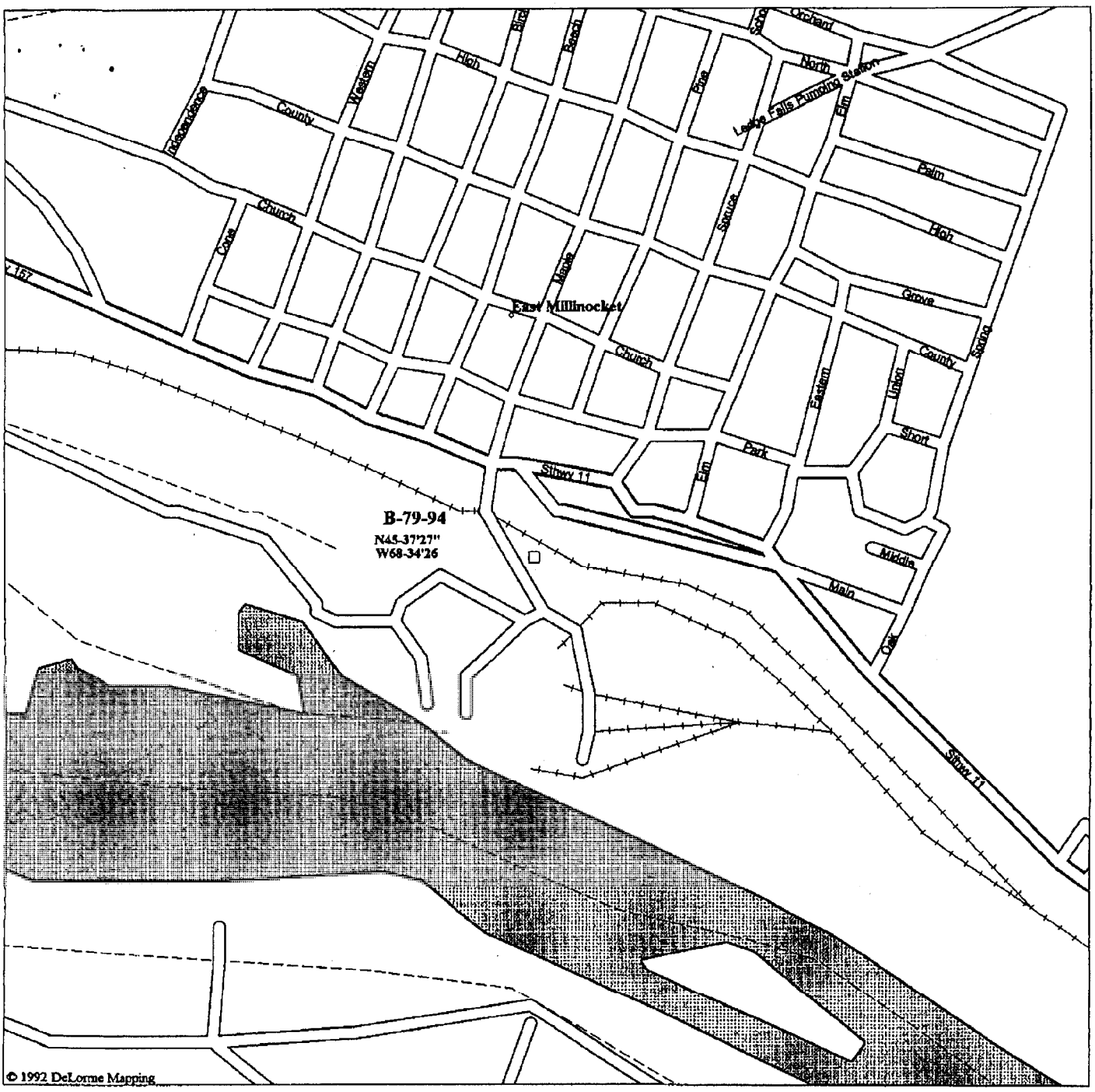
Please, document your information carefully. It may be needed for future reference or legal action.

B-79-94
02/16/94 12:00

Scott Davis of Clean Harbors Inc. of Bangor called to request a shipment form for the disposal of #6 oil contaminated debris resulting from two separate spills at Great Northern Paper in East Millinocket. Mr. Davis was then questioned as to the cause of the spills since neither of them were reported. This call was received by Tom Varney of this office. The first spill was associated with an overfill of a tank truck. The second was associated with a railroad tank car. The latter will be covered in spill report No. B-77-94.

When I arrived I met with Judy Moore, Environmental Specialist for Great Northern. It was explained to me that during the previous evening a worker from Superior Carriers Inc. of Bangor was gravity loading a tank truck when a valve failed overfilling the truck. Approximately 500-600 gallons of #6 fuel oozed into an earthen dike where it hardened in the cold temperatures. Inspection of the area shown that the oil was well contained on top of the snow. It appeared that the oil could easily be scraped up, mixed with wood chips, and burnt in the facilities boiler.

I was also informed that there was a secondary valve that could have been turned off preventing the spill. Why this was not done remains a mystery. In any event the worker from Superior Carriers was fired. No resources of the State were affected in this rather "non-sensitive" area.



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:19:40 1994

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Filling of oil truck
Date of spill:	February 15, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 500 to 600 gallons of Bunker C oil spilled into containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Truck was being filled to transport oil to steam plant. Shutoff switch failed. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Shutoff switch replaced.
Phone reported to:	Contacted DEP through Clean Harbors on Feb. 16 for approval for disposal of cleaned up material at Sawyer Environmental.

C. E. Akeley

Date 2/16/94 DEP SPILL # B.77.94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCKET

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP represenative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

Solids consist of (check as appropriate)

- ___sand, gravel or soil
- ___speedy-dri
- ___sorbent
- ✓other RR. BALLAST & SNOW (descibe or lists)

Facility is (check One)

- ✓Landfill
- ___Land Spreading Site
- ___Asphalt Plant
- ___Asphalt Pug Mill
- ___other _____ (describe)

TW. Varney
Signature- DEP Representative

R. Merrill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/213/91

Subject:
Name (Last, First MI): GEORGIA PACIFIC
Address: ONE KATAHDIN AVE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: B
Amount spilled: 9000.90 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 06
Date of Spill: _____ (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 91/04/15 (yy/mm/dd) Time Reported: 1942 (Military)
Cause: 03 Detection method: 2F
Incident code: AIDL DEP response time involved: 5.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. VARNEY, T.W. TW
2. _____ NFA
3. _____

Person Reporting Incident:
Name (Last, First MI): PETERS, NADIA
Address: GEORGIA PACIFIC Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 9000.90 gals.Y cu. yds.N lbs.N bbls.N
Method: AF Non-recyclable: _____ gals.N bbls.N
Solids: combustible: 20.9 cu. yds.Y tonsN
non-combustible: 30.9 cu.yds.
Recyclable material: 8000.90 gals.Y cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
OIL RECYCLED WOOD CHIPS BURNED SOIL SPRD

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: #6 fuel oil

Georgia-Pacific Corporation
Northern Paper Division
One Katahdin Avenue
Millinocket, Maine 04462-1398
Telephone (207) 723-5131

File No. 608.20

April 29, 1991

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is the written report for the spill from the East Millinocket mill fuel oil unloading system which was discovered April 15, 1991. The spill was reported by phone to you the same day.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. 608.20

April 29, 1991

GEORGIA-PACIFIC, NORTHERN PAPER DIVISION
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket Operation
Source of spill:	Bunker C fuel oil car unloading system
Date of spill:	Discovered April 15, 1991
Time span of spill:	Unknown
Body of water impacted:	None
Volume lost to stream:	Approximately 800 gallons of Bunker C fuel oil lost to ground around unloading area
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable
Visual inspection of the river:	Not applicable
Comments:	Fluid oil and water being pumped up, separated and the oil burned. Salvage wells and excavation, as directed by Tom Varney of Bangor DEP, being used to remediate contaminated soil.
Steps to be taken to prevent reoccurrence:	Damaged line has been replaced. Rest of line to be inspected and replaced if necessary.
Phone reported to:	Tom Varney, DEP Bangor, and National Response Center, Case #68181, by Nadia Peters on 4/15/91

C. E. Akeley

Spill #B/2/3/91

Georgia-Pacific Paper Co.
East Millinocket
April 15, 1991

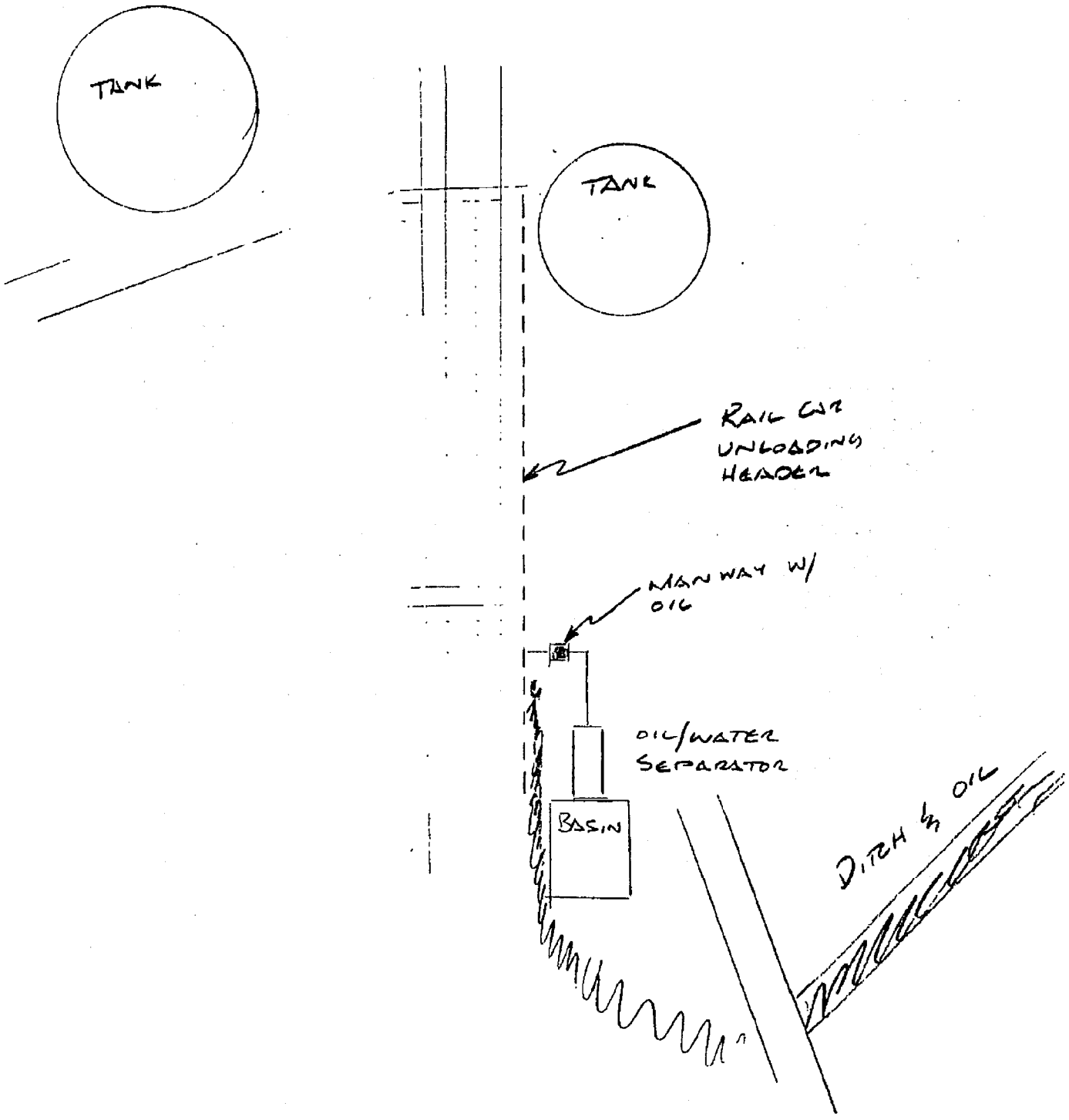
Nadia Peters reported to me the loss of several hundred gallons of #6 oil at the East Millinocket Mill. Investigating on the 16th of April, Ms. Peters and I visited the site, and I observed #6 oil seeping out of the railroad embankment on the town side of the East Millinocket mill. What apparently has happened, is that there is a leak somewhere in the underground line that feeds #6 oil to the two above-ground storage tanks on site. Rail cars loaded with #6 oil are pulled onto a siding, and umbilical cords hooked up to the belly valves of these cars. The cars are steam heated and the #6 oil is drained from the cars through the umbilical cords into an underground header pipe that leads to above-ground storage tanks previously mentioned. Somewhere in that underground header is a leak that apparently has been leaking for sometime; the leak went unnoticed because of snowcover in East Millinocket and because the area in question down over the bank is seldom visited by mill personnel. On the 15th of April the yard crew was cleaning up this area, actually removing an abandoned rail spur, when it was noticed that a ditch adjacent to the rail spur was full of #6 oil. Tracing it back upslope, it was discovered that the oil/water separator downslope of the oil unloading area was full of oil, as was a water basin just below the oil/water separator tank. Further, oil was seeping out of the bank just below the rail line where the #6 cars are unloaded.

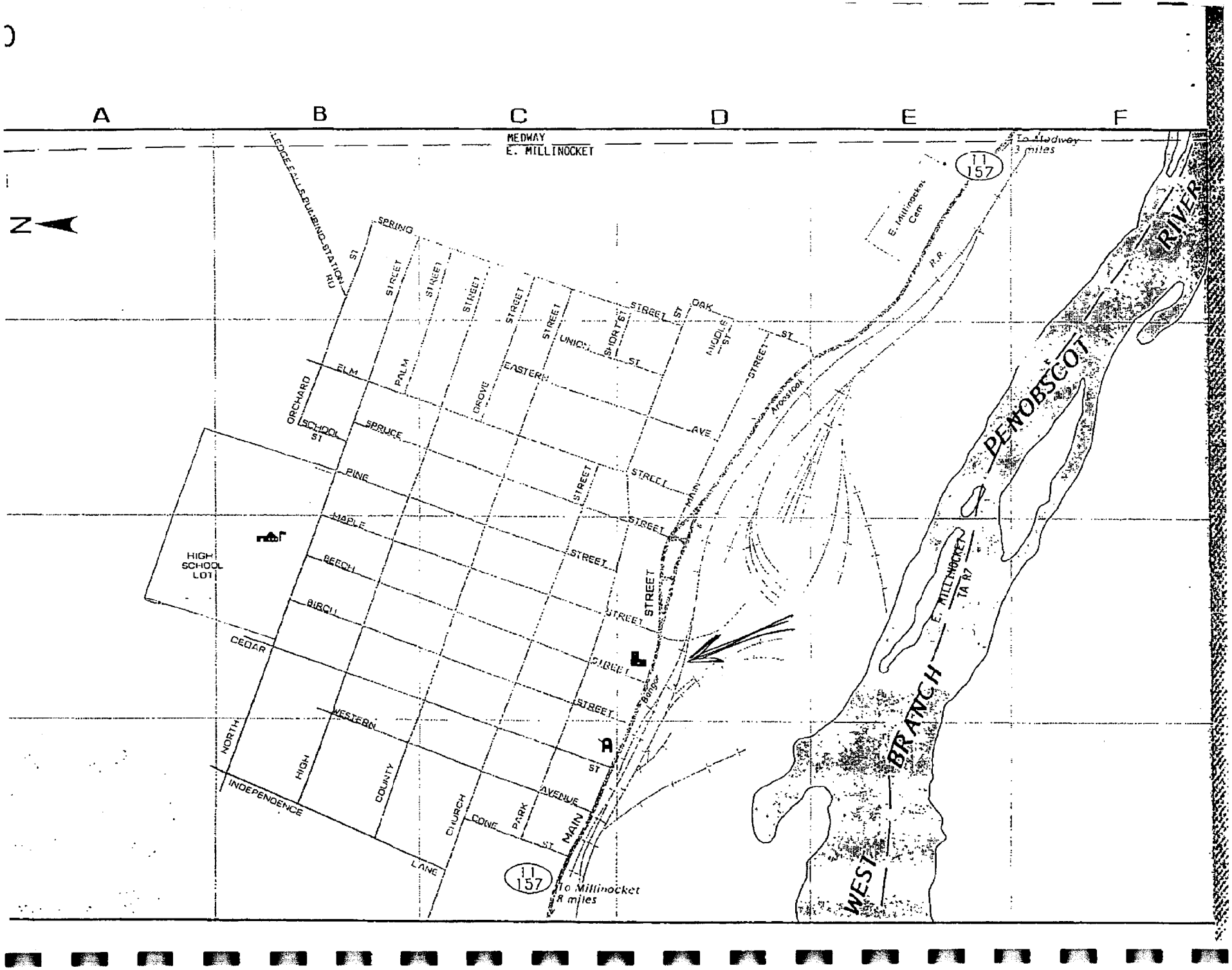
Clean Harbors was summoned by G-P personnel on the evening of the 15th and they recovered from the oil/water separator and water basin, over 8000 gallons of #6 oil, which was taken to the East Millinocket mill to be burned in that mill's boilers. That left a substantial amount of oil still in the basin itself as well as oil in the previously mentioned ditches. On the morning of the 16th, Clean Harbors arrived onsite with a vactor truck and was preparing to recover more oil from the ditches. My suggestion to Nadia Peters, was that when G-P discovers where in the oil header their leak is, that they use their excavation at that point to sink a recovery well, and also to sink another recovery well or two along the right of way for the rail line. That will save digging up and making a large excavation in the rail right of way. When I left the scene, mill engineer Al Davenport, and a crew were pressurizing the underground header with air to try and figure out somehow where the leak might be. It was noticed that their pressurizing of this line forced the oil to flow faster in a manway on the line that feeds the oil/water separator. It is theorized therefore, that the leak in the underground header is somewhere in that vicinity. Once all the free oil that can be collected has been collected by Clean Harbors personnel, the plan in mind is to distribute wood chips in the ditches where the oil

Spill #B/213/91

is laying, use the wood chips to sorb up the free oil then recover the wood chips to be burned in the chip boiler in the East Millinocket mill.

TV/sh
REC: File Report




A
B
C
D
E
F
MEDWAY
E. MILLINOCKET
N
LEDGE FALLS PUMPING STATION RD
SPRING ST
ELM STREET
PALM STREET
GROVE STREET
EASTERN STREET
UNION ST
SHORT ST
OAK ST
MIDDLE ST
MAIN STREET
ORCHARD STREET
SCHOOL ST
SPRUCE STREET
PINE STREET
MAPLE STREET
BEECH STREET
BIRCH STREET
CEDAR STREET
CIRCLE STREET
HIGH SCHOOL LOT
NORTH HIGH STREET
WESTERN AVENUE
COUNTY ROAD
INDEPENDENCE LANE
CHURCH ST
CONE PARK
MAIN STREET
Argyle Brook
E. Millinocket Cem
R.R.
Bridge
11
157
To Medway
3 miles
To Millinocket
8 miles
PENOBSCOT RIVER
WEST BRANCH
E. MILLINOCKET
TA R7

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-483-2003

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT RANDALL
Primary Product: Gasoline Unspecified {20} UNKNOWN
Subject/Owner: GREAT NORTHERN PAPER INC - AKA KATAHDIN PAPER - -

I EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Underground Storage Tank {TU}
Cause: Other - Unknown {18}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Other {I}

Reported Date/Time

09/29/2003 14:30

Subject/Owner (Potential Responsible Party)

Contact: --GREAT NORTHERN PAPER INC - AKA KATAHDIN PAPER
ONE KATAHDIN AVE
MILLINOCKET ME 04462-1398 USA
207-723-5131

Comment: Contaminated soil discovered while installing cathodic protection anodes on underground storage tank.

Reporter

Contact: CARL AKELEY--GREAT NORTHERN PAPER INC
50 MAIN ST
RT 157
EAST MILLINOCKET ME 04430 USA
207-732-2278

Comment:

Other Contact

Contact: DAVID BEAUMENT--BEAUMENT GENERATOR
PO BOX 352
HATHAWAY RD
MEDWAY ME 04460 USA
207-746-5459

Comment: Licensed tank installer.

Primary Responder and Other Employees

ROBERT RANDALL (Primary Responder)

No Further Response Action Expected

II SITE

Location

Location Type: Business - Industrial {ID}
Name: GREAT NORTHERN PAPER
Street Address: RT 157 - 50 MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Underground Tank| Site# 16697

III CLEANUP

Product Reported

Gasoline Unspecified {20}

Products Found/Amount Spilled

Gasoline Unspecified {20}/ UNKNOWN (Primary Product)

Material Recovered

None {NO} - 0 gals. ESTIMATE

Recovery/Treatment Method

None {K}

Cleanup DTREE

Disposal Information

Contaminated soil left in place for the time being, rather than undermine the active tank system.

IV NARRATIVE

This office received a call at 1430 on 9/29/03, from Carl Akeley (Great Northern Paper Company) reporting an oil spill at their facility in East Millinocket. He stated that they were in the process of replacing the anodes on a double walled tank that had been installed at the mill in 1989 and had encountered some gray, what appears to be, gasoline contaminated soil, approximately 6 feet below the surface. There was no indication that the tank was leaking. It was indicated that the soil smells like old gasoline and may possibly be from the previous tanks on site. They were not sure if anyone from DEP had been at the facility in 1989 when the tanks were removed or if any notification had been made about finding contaminated soil at that time. I later checked our records, but did not find any indication of a problem in the files. Arrangements were made to visit the site on the following day.

September 30, 2003 (Tues.): Proceeding to East Millinocket, I met with Mr. Akeley and Dave Beaument (Beaument Generator; Medway) and went over the situation with them. This particular 2000 gallon tank was installed next to their old paint shop in 1989 and is used primarily to fuel company vehicles and equipment. The tank is double walled and has suction piping. According to Mr. Beaument, who is a licensed tank installer, there was no indication that the tank or piping is leaking at this time. Although there was no obvious source for the contamination, it appeared to be from the previous tank installation on site. Rather than dig around the present tank and possibly undermine it, the decision was made to leave the contamination in place for the time being and plan on dealing with it, at some point down the road, when the tank is scheduled for removal. From PID meter readings around the tank, it appears that most of the contamination is contained in the bottom of the excavation under the tank.

REC: File report.

V ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEP

MASTER UNDERGROUND STORAGE TANKS-EASTERN REGION

SORTED BY TOWN

REG #	TANK NO	FACILITY NAME	STREET ADDRESS 1	TOWN	SENS ARE/	STAT	FACILITY I	INSTALLED	VOLUME	PRODUCT	DATE REMOVED
12861	1	MUNICIPAL BUILDING	MAIN ST	EAST MILLINOCKE	N	F	M	10/1/1969	2000	02	
12861	2	MUNICIPAL BUILDING	MAIN ST	EAST MILLINOCKE	N	B	M	7/1/1989	1000	02	
11114	1	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	2	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	3	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	4	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	5	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	F	F	5/1/1974	510	02	
11114	6	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	7	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	8	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	9	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
11114	10	OAK PARK MANOR	RT 157	EAST MILLINOCKE	N	B	F	6/1/1990	550	02	
16697	1	OIL & PAINT SHOP	MAIN ST	EAST MILLINOCKE	N	B	D	12/1/1989	2000	23	
5124	1	OPAL MYRICK SCHOOL	6 BEECH ST	EAST MILLINOCKE	N	F	M	10/1/1969	6000	05	
5124	2	OPAL MYRICK SCHOOL	6 BEECH ST	EAST MILLINOCKE	N	B	M	6/1/1990	6000	05	
9949	1	PARK MANOR APARTMENTS	3 MAPLE ST	EAST MILLINOCKE	Y	F	F	1/1/1979	3000	02	
12862	1	POLICE & FIRE STATION	MAIN ST	EAST MILLINOCKE	N	F	M	10/1/1969	1000	02	
12862	2	POLICE & FIRE STATION	MAIN ST	EAST MILLINOCKE	N	B	M	7/1/1989	1000	02	
8648	1	POWERS, WILLIAM	43 HIGH ST	EAST MILLINOCKE	N	F	E	10/1/1969	550	02	
5123	1	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	F	M	1/1/1957	10000	05	
5123	2	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	F	M	1/1/1983	500	02	
5123	3	SCHENCK HIGH SCHOOL	45 NORTH ST	EAST MILLINOCKE	N	B	M	6/1/1990	10000	05	
1309	1	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	2000	21	
1309	2	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	2000	23	
1309	3	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	F	M	9/1/1971	1000	29	
1309	4	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	B	M	7/1/1989	2000	29	
1309	5	TOWN GARAGE	1 CHURCH ST	EAST MILLINOCKE	N	B	M	7/1/1989	2000	23	
12863	1	TOWN GARAGE	MAIN ST	EAST MILLINOCKE	N	F	M	6/1/1983	500	02	
12863	2	TOWN GARAGE	MAIN ST	EAST MILLINOCKE	N	B	M	7/1/1989	500	02	
6188	1	US POST OFFICE	MAIN & CEDAR	EAST MILLINOCKE	N	F	I	1/1/1974	1000	02	
20170	1	COMBINED FILE	120 HATCHERY RD	EAST ORLAND	Y	X	X	10/1/1969	2000	02	
18853	1	HOWARDS MARKET	RT 1	EAST ORLAND	Y	B	B	6/20/1994	8000	23	
18853	1	HOWARDS MARKET	RT 1	EAST ORLAND	Y	B	B	6/20/1994	4000	28	
4294	1	IRVING WILBUR & SON INC	RT 200	EASTBROOK	Y	F	C	10/1/1969	1000	29	
4294	2	IRVING WILBUR & SON INC	RT 200	EASTBROOK	Y	F	C	10/1/1969	500	29	
2390	1	RMLR	SUGGAR HILL RD	EASTBROOK	N	F	I	1/1/1976	515	23	
16421	1	ARGENTA FACTORY	25 SEA ST	EASTPORT	N	F	D	10/1/1969	2550	12	
18511	1	BANGOR SAVINGS BANK	WATER ST	EASTPORT	N	F	C	10/1/1969	500	02	

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 64 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): KATAHDIN GAS INC.

Address: POB 799 Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5454

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: DAVE'S AUTO REPAIR

Address: MAIN ST Location ID: 19691

Town: EAST MILLINOCKET Zip: 04430

Latitude N: 45 / 37 / 36.00 Longitude W: 68 / 34 / 41.00

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 100.90 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 20 (Table B) Product Actually Found: 20 (Table B)

Date Of Spill: Time Of Spill: (Military)

Date Reported: May. 06, 1994 Time Reported: (Military)

Cause Of Spill: 09 (Table C) Detection Method: 4 J (Table D)

Incident Code: C - SS - S - U (Table E)

DEP response time involved: 18 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : VARNEY, THOMAS

PERSON REPORTING EVENT

Name (Last, First, MI): VARNEY, TOM

Address: ME DEP Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 941-4570

CLEAN-UP INFORMATION **Spill Number B - 64 - 94**

Total Product Recovered : (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : I

Non Recyclable : 50.90 G (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 100.90 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :

OTHER ACTIONS

Expenditure (s) - From Surface Water Fund	N	(Y or N)
From Ground Water Fund	N	(Y or N)
From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected	N	(Y or N)
Enforcement Referral	N	(Y or N)
Insurance Fund Claim	N	(Y or N)
Tech Services Referral	N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status
12869 -	1	4,000	A	8	M	AB
12869 -	2	4,000	A	8	M	AB
12869 -	3	2,000	A	8	M	AB
12869 -	4	2,000	A	8	M	AB

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

Initial Clean-up Actions Agreement

Page _____ of _____

DEPT. OF ENVIRONMENTAL PROTECTION

BUREAU OF HAZARDOUS MATERIAL & SOLID WASTE
RESPONSE SERVICES DIVISION

Facility Name: DAVE'S (FORMERLY JAKE'S) Address: 79 MAIN ST, E. MILLINOCKET

Owner: RALPH BRAGDON

Registration No. 12869 DEP Spill No. B. 64.94

Date: _____

I Thomas W. Vanna have investigated DAVE'S AUTO REPAIR
(signature of DEP Rep) (facility name)

site and find the following clean-up actions necessary before JUNE 1, 1994. (specify an agreed date)

1. REMOVAL OF 3 ABANDONED UNDERGROUND GASOLINE TANKS, AS SPECIFIED IN 38 MRSA SUBCHAPTER II-B AND CHAPTER 691 OF THE ME. D.E.P.'S RULES.

2. REMOVAL AND/OR REMEDIATION OF CONTAMINATED SOIL AND GROUNDWATER, AS DETERMINED BETWEEN D.E.P. PERSONNEL & A MAINE CERTIFIED SITE ASSESSOR.

I understand that compliance with the above does not define the limits of remediation or release the facility owner from responsibility for further remediation.

R.E. Bragdon
OWNER OR REPRESENTATIVE

2/2/94
DATE

White - Licensing & Enforcement Copy; Canary - Investigator's Copy; Pink - Owner's Copy

CLUPAGREE 1/92

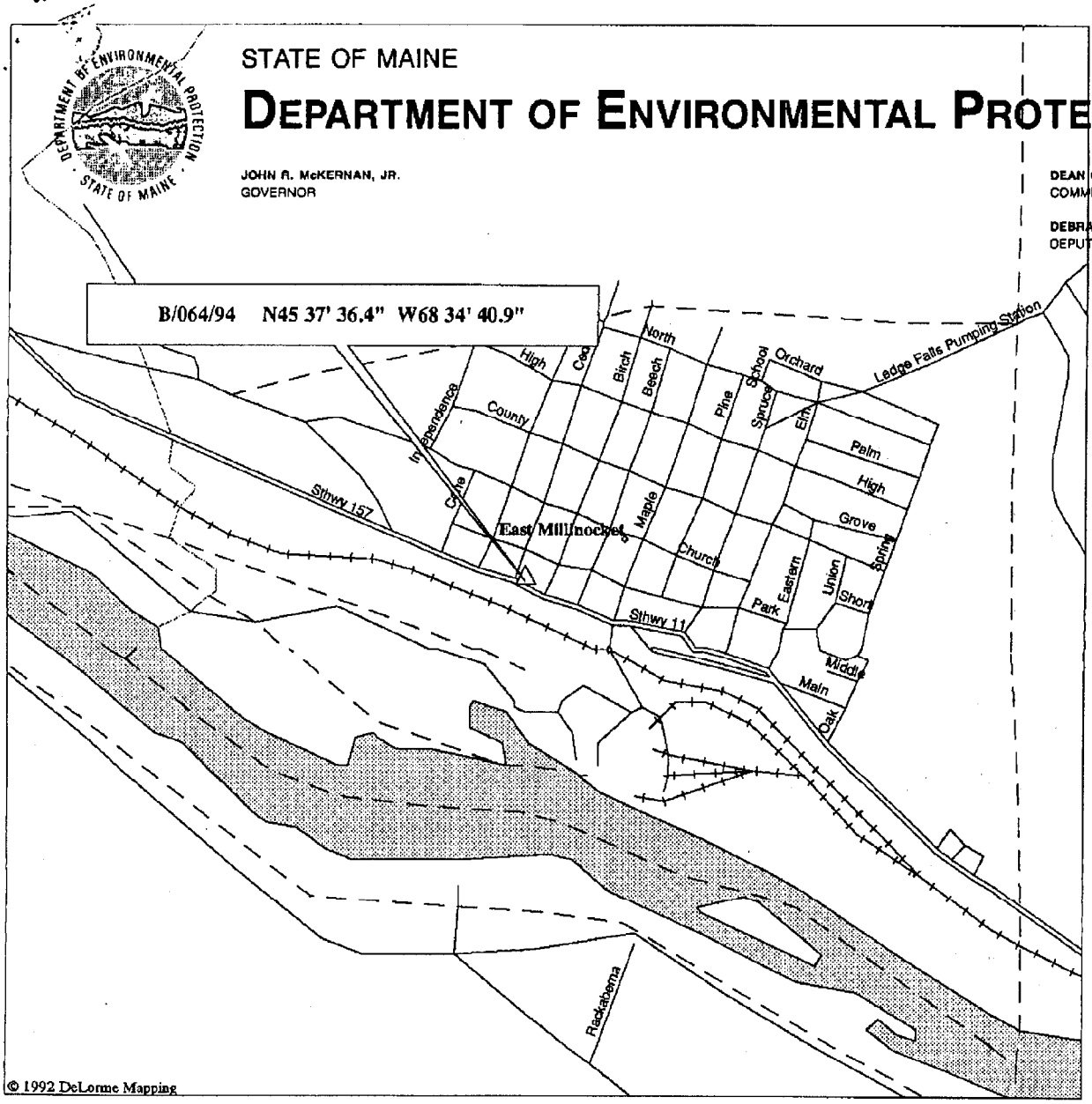
STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN R. McKERNAN, JR.
GOVERNOR

DEAN C. MARRIOTT
COMMISSIONER

DEBRAH RICHARD
DEPUTY COMMISSIONER



LEGEND

- State route
- Small town
- Interstate route
- Boundary
- Road
- State highway
- Railroad
- River
- Powerline
- Open water

Scale 1:15,625 (at center)

1000 Feet

500 Meters

Tank Removal at Dave's Place
Mag 15.00
Tue Aug 23 10:18:09 1994

AUGUSTA
STATE HOUSE STATION 17
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
OFFICE LOCATED AT: RAY BUILDING, HOSPITAL STREET

PORTLAND
312 CANCO ROAD
PORTLAND, ME 04103
(207) 879-6300 FAX: (207) 879-6303

BANGOR
106 HOGAN ROAD
BANGOR, ME 04401
(207) 941-4570 FAX: (207) 941-4584

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, ME 04769
(207) 764-0477 FAX: (207) 764-1507

printed on recycled paper

Abandonment of (an) Underground Tank(s) in Place

J W. Vanier (signed) of the Department of Environmental Protection has determined that the following underground tank(s) at facility

facility name DAVE'S AUTO REPAIR phone # _____

address 79 MAIN ST town E. MILLINOCKET

owner's name RALPH BRAGDON phone # 723 5454

address BOX 799 town MILLINOCKET 04462

reg. # 12869

_____ meets the following condition for abandonment in place — (abandonment in place is permitted by regulation) (check conditions applicable).

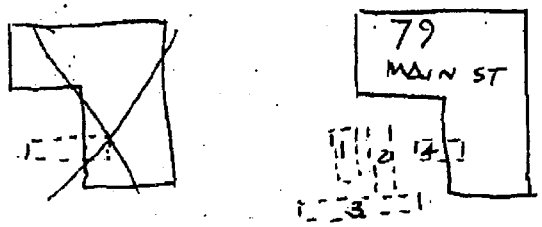
✓ a. Located beneath a building or other permanent structure which cannot be practically replaced;

_____ b. Of a size and type of construction that it cannot be removed;

_____ c. Inaccessible to heavy equipment necessary for removal; or

_____ d. Positioned in such a manner that removal would endanger the structural integrity of nearby tanks.

Describe or diagram location of tank(s) meeting conditions (list tank number(s) as listed on registration certificate).



1, 2, 3 REMOVED. #4 FILLED IN PLACE

_____ conditions above not demonstrated, Board of Environmental Protection variance required or tank must be removed (see notes).

DO NOT PROCEED WITH ABANDONMENT IN PLACE UNTIL AND UNLESS A BOARD VARIANCE IS GRANTED.

Describe or diagram location of tank(s) requiring a variance.

WAIVER FROM THE REQUIREMENT THAT A NOTICE OF ABANDONMENT BY REMOVAL OF AN UNDERGROUND OIL TANK BE FILED THIRTY DAYS PRIOR TO REMOVAL

Due to Exceptional circumstances the Department of Environmental Protection grants a waiver to the thirty day filing period for abandonment by removal of the listed underground tanks, provided that the owner or operator meets the following conditions:

1. A written notice of removal is filed with the Department and the local fire department within one day of receiving this waiver.

2. The Department is kept advised of removal plans and schedule so that a department representative can observe the removal of the tank(s) and the excavation from which the tank(s) was/were removed. B 2477 24

Tank(s) owned by:

Name RALPH BRANDON Phone # 723-5454

Mailing Address _____ Town TIRRWELS

Located at:

Name DAVE'S AUTO REPAIR Phone # _____

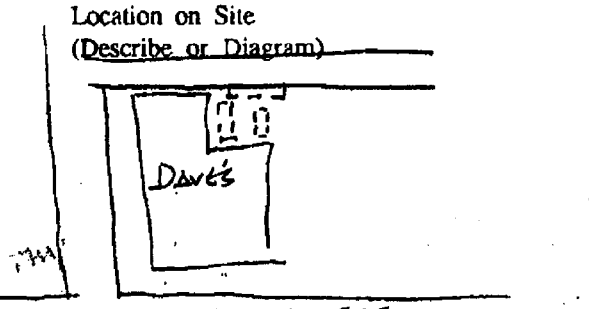
Address 79 MAIN Town E. MILLINOCKET

Reason for Waiver: EXPEDIENCE

List tank(s) below:

Registration #	Size
12869	2K
	4K
	4K

Location on Site (Describe or Diagram)



Planned Date of Removal: 5/6/94

This waiver is granted on (date) 5/6/94 by T.W. VARNEY, a copy of which is presented to DAVE BEAUMONT.

(Name of individual receiving the copy)

White - Enforcement Copy Canary - Investigator's Copy Pink - Tank Owner's Copy

90WAVEF

Initial Clean-up Actions Agreement

DEPT. OF ENVIRONMENTAL PROTECTION

BUREAU OF HAZARDOUS MATERIAL & SOLID WASTE
RESPONSE SERVICES DIVISION

Facility Name: DAVE'S AUTO REPAIR Address: 79 MAIN ST. E. MILLINOCKET

Owner: RALPH BRAGDON

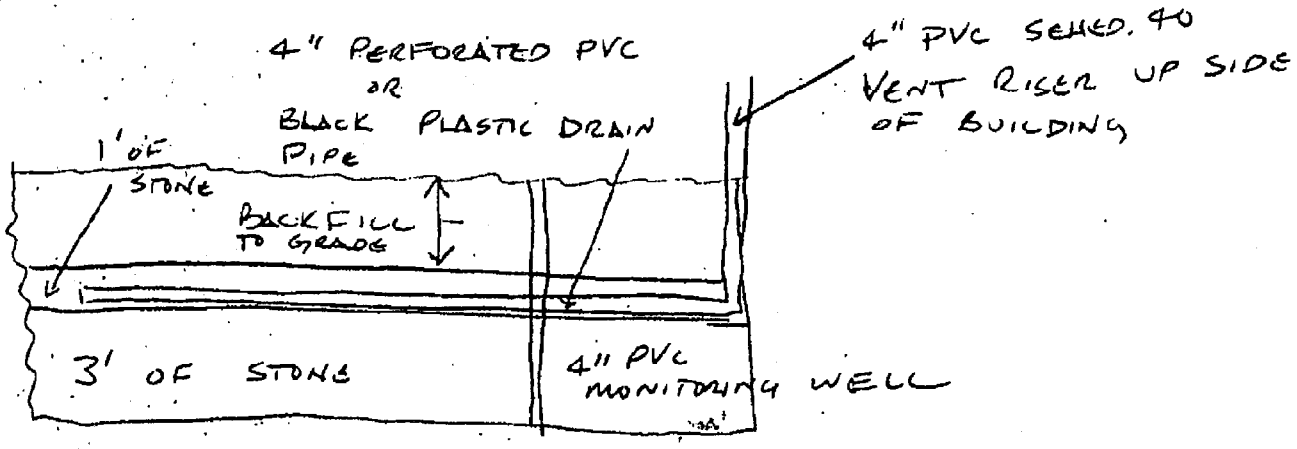
Registration No. 12869 DEP Spill No. B 247 94

Date: 5/6/94

I J.W. Vanier have investigated DAVE'S AUTO REPAIR.
(signature of DEP Rep) (facility name)

site and find the following clean-up actions necessary before 5/9/94. (specify an agreed date).

1. PASSIVE SOIL VENTING SYSTEM & GROUND WATER MONITORING WELL



I understand that compliance with the above does not define the limits of remediation or release the facility owner from responsibility for further remediation.

David J Beaumont 5/6/94
OWNER OR REPRESENTATIVE DATE

White - Licensing & Enforcement Copy; Canary - Investigator's Copy; Pink - Owner's Copy

CLUPAGREE 1/92

MAY 10 1994

Maine Departmental of Environmental Protection
Bureau of Oil & Hazardous Materials Control
State House Station #17, Augusta, Maine 04333
Telephone: 207-289-2651
Attn: Tank Removal Notice

NOTICE OF INTENT
TO ABANDON (REMOVE) AN
UNDERGROUND OIL STORAGE FACILITY

Name of Facility Owner: Kat. Gas Corp.
Mailing Address: P.O. Box 799 Telephone No: 723 5454
City: Mill Lockport State: Me Zip Code: 04462
Contact Person (name, address & telephone no): _____

Name of Facility: Dawes Formerly Jacks Registration No: 0 64 74
Facility Location: Maine St. East Millinocket 12869

1. Identify the tanks at this location which are to be removed:

	Tank Number	Age of Tank (Years)	Tank Size (Gallons)	Type of Product Most Recently Stored
A.	1		4000	Gasoline
B.	2		4000	
C.	3		2000	
D.				

2. Directions to Facility (be specific): Rt 11 Maine St East Millinocket
Tom Varney will have 30 day notice to D.E.P.

3. Is tank(s) used for the storage of Class I liquids (e.g. gasoline, jet fuel)? Yes ___ No ___ (IF YES, REMOVAL OF THE TANK MUST BE UNDER THE DIRECTION OF A CERTIFIED TANK INSTALLER OR PROFESSIONAL FIREFIGHTER.)

4. Name and telephone number of contractor who will do the tank removal: 746-3790 Dick Fisk

Certified Tank Installer Certification Number & Name (if applicable):
Beaumont & Millett

Professional Firefighter Yes ✓ No ___ (Affiliation: _____)

5. Expected date of removal: 5/6/94 Contractor called with Date of Removed on 5/6/94

I hereby provide Notice that I intend to properly abandon the underground oil storage facility as described above.

Date: 5/6/94

R.E. Braydon Pres
Signature of Tank Owner or Operator

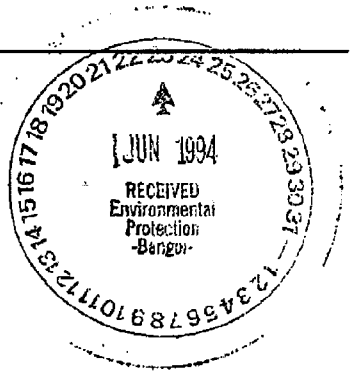
R.E. BRAYDON Pres
Printed Name and Title

THIS FORM MUST BE FILED WITH THE DEPARTMENT AND LOCAL FIRE DEPARTMENT 30 DAYS PRIOR TO REMOVAL - RETURN POSTCARD WHEN TANK(S) HAS BEEN REMOVED.

Mail original and yellow copy to DEP; pink copy to fire dept.; retain gold copy

Millett Associates

Civil/Environmental Engineering



June 22, 1994

UST Program Administrator
Bureau of Oil and Hazardous Materials Control
Maine Department of Environmental Protection
State House Station 17
Augusta, ME 04333

RE: UST Removal Site Assessment: Dave's Auto Repair, 79 Main Street
East Millinocket, Maine

Dear Administrator:

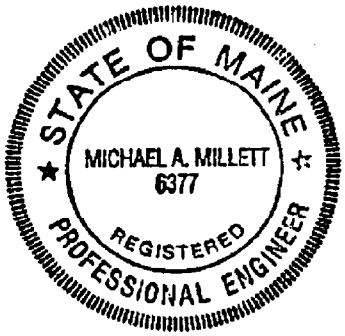
Please find enclosed a site assessment for three gasoline tanks removed at the above mentioned facility. This work was undertaken on May 6th, 1994.

If you have any questions, please feel free to contact me at your convenience.

Sincerely,

Michael A. Millett

Michael A. Millett, P.E.
Millett Associates



MAM/mm 94056
Enc.

cc: Dave Beaumont, Beaumont Generator
Tom Varney, MEDEP Bangor
Judith Doore, Admin. Asst., E. Millinocket

293 Birch Street • Bangor, ME 04401 • (207) 942-6515

UST Site Assessment

for

Dave's Auto Repair
East Millinocket, Maine

Tank Site: 49 Main Street
East Millinocket, Maine

June 1994

Prepared by:
Millett Associates
Bangor, Maine

SITE ASSESSMENT SUMMARY

Summary

Tank Owner: Ralph Bragdon
Millinocket Lake
Millinocket, ME 04462
tel. 723-5454

Operator: Not in Use

Facility Name: Dave's Auto Repair
70 Main Street
East Millinocket, Maine 04430
tel. 746-9220

Tank Registration Number: 12869

Date of Tank Removal: May 6th, 1994

Licensed Installer: Dave Beaumont

Date of Site Assessment: May 6th, 1994

Evidence of Discharge or Leak: Yes

SECTION 1

Detailed Site Data and Results

1.0 Site Assessment Purpose

The purpose of this site assessment is to identify the extent, if any, of discharges or leaks of petroleum product(s) from an underground storage facility at the time of tank removal.

1.1 Facility and Location

The facility for which this site assessment addresses is located in the Town of East Millinocket on Main Street at the intersection with Birch Street Figure 1 is a U.S.G.S. map depicting the site location relative to the East Millinocket area. Figure 2 is a larger scale site map indicating site features. The site is not over a mapped sand and gravel aquifer. The nearest aquifer is located approximately 1.5 miles east of the site. Land use in the area is a combination of commercial and residential. Residential uses with basements are found upgradient of the site. Immediately downgradient of the facility is the Bowater paper mill. The site is bounded by roadways on the south and west, a parking lot to the north, and a commercial building to the east.

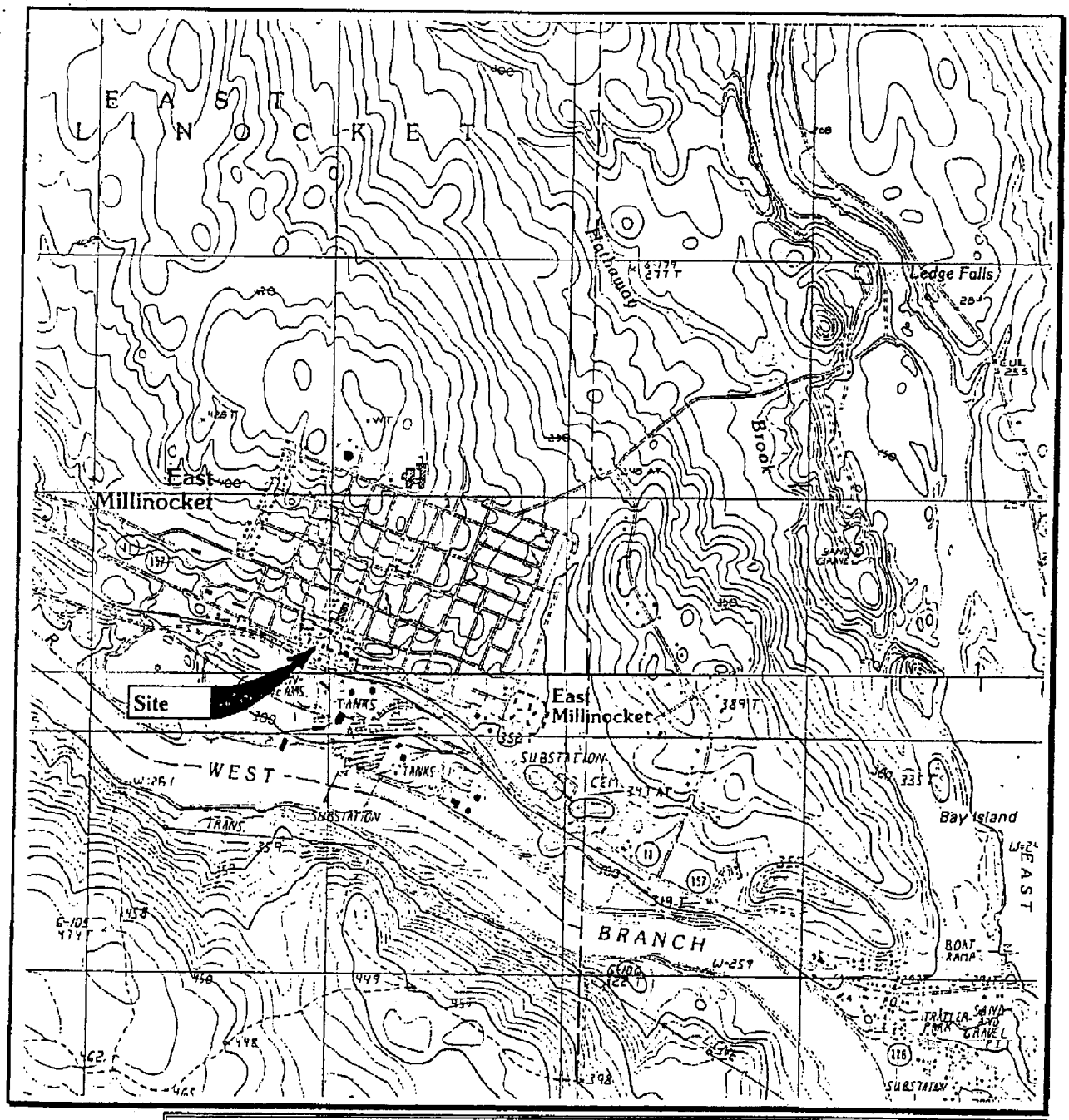
The site is identified on the Town of East Millinocket tax assessment maps as Map 13, Lot 1. The site has three active registered storage tanks for petroleum identified as outlined below in Table 1.

Table 1

Tank Inventory (gallons)

Tank 1	2000 gasoline
Tank 2	4000 gasoline
Tank 3	4000 gasoline

The entire site, as well as the surrounding area, is served by the public water and sewer system. The public water supply is a substantial distance from the site. There are no immediate buildings in the area with a potential for vapor collection. Referencing the definition of a sensitive geologic area, this area does not fit that description.



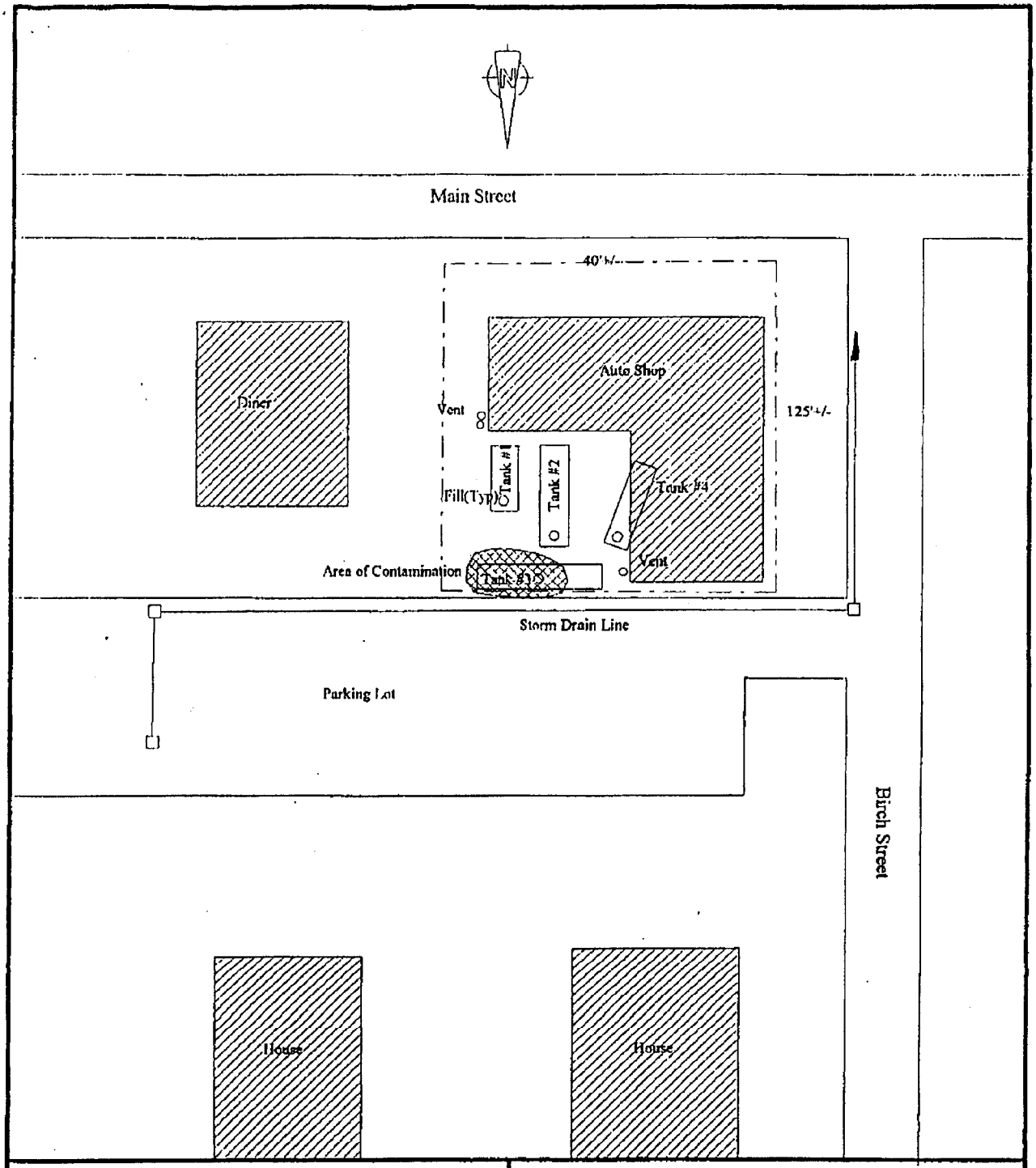
Millett Associates
Civil/Environmental Engineering

293 Birch Street, Bangor, Maine 04401
Phone (207) 942-6515

Figure 1 - U.S.G.S. Map

Dave's Auto Repair
79 Main Street
East Millinocket, Maine

Scale: 1"=2000'
Source: East Millinocket Quadrangle



Millett Associates
Civil/Environmental Engineering

293 Birch Street, Bangor, Maine 04401
Phone (207) 942-6515

Providing Engineering Expertise....
With a Personal Touch.

Figure 2 - Site Plan

Dave's Auto Repair
79 Main Street E. Millinocket
UST Site Assessment

Scale: None
Source: None

1.2 Facility and Site History

The site has been used as a service station since it was built in the early 1950's. Until 5 years ago, the station was active and was operated by Bragdon Petroleum Company. This company is no longer in business as the were bought by Irving Oil a few years ago. This facility has been used as an automotive repair garage since the tanks were taken out of service. Fueling used to occur out near Main Street while the tanks were located in the rear, but the pump and appurtenances have been removed a long time ago.

The tanks removed for this assessment were not the original tanks for the site. These were placed into service somewhere in the late 1970's or early 1980's. It is thought that tank 2 was replaced a leaking tank of similar size. Tank #2 is thought to be the oldest by a few years. None of the tanks contained an unusual amount of water.

1.3 Description of Site Assessment Methods Utilized

A photoinization device (PID) was utilized to determine the hydrocarbon concentration in the tank farm area. This device, a Photovac Microtip MP-1000, is calibrated and checked regularly against 100 parts per million (ppm) isobutylene and zero gas to ensure accuracy. All field analyses were performed using the poly-bag method as outlined in Appendix Q of the Chapter 691 regulations.

The State of Maine Standards for petroleum contamination soil dictate that PID test results 50 ppm and over for heavy type oil facilities and 200 ppm for gasoline facilities require notification to the Department of Environmental Protection within 24 hours. Remediation efforts vary depending on the severity of the contamination and nearby receptors.

1.4 Findings of the Site Assessment

The tank removal began by uncovering the tank tops. Soil from around the fill pipes of the tanks had a benzene equivalent concentration (hereinafter referred to as BEC) as shown in Table 2.

Table 2

Fill Pipe BEC's

Tank 1	7.5 ppm
Tank 2	80 ppm
Tank 3	1200 ppm

Soils around the perimeter of the tanks was predominantly fill material over glacial till. The tanks were bedded in sand or sandy gravel. Native soils in the area are glacial till in nature.

Soil was sampled over the perimeter of the tank#1 beginning at the ground surface. Till was observed at a depth of 4 to 5 feet. Soil sampled over the perimeter of the tank and the full tank depth had a BEC level range of 2 to 10 ppm. Groundwater was encountered at

approximately 8 feet from the surface. After the tank was removed, soil from the tank base had a BEC level of 10 ppm. The tank itself, a single wall welded steel tank, was found to be in fair condition as it was moderately pitted. The tank had the appearance of a used tank, but no protrusions of the surface were noted. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

Tank #2 was removed next. Soil from the south end of the excavation had BEC level of 4 ppm, similar to that of tank #1. Soil remained at low BEC levels (i.e. < 25 ppm) until the northern end of the tank was encountered. At this end, soil, both backfill and bedding, had a BEC level on the order of 1000 ppm. Once the tank was removed, soil under the tank at a depth of 8 feet was found to have a BEC level of 1100 ppm in gray stained gravel and till. Soil remained at that level until a depth of 9.5 feet, where it changed to a brownish colored till material and saturated with water. Contamination levels dropped to 20 ppm in this soil. The tank itself, an asphalt coated single wall welded steel tank, was found to be in good condition with minimal pitting. The tank was very rusted on the upper half. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

Tank #3 was removed last. Soil around the easterly end of the tank at depth of 6 feet had a BEC level of 20 to 10 ppm. The far westerly end similarly had levels of less than 10 ppm. Around the fill pipe and down the sides of the tank, BEC levels remained at 800 to 1000 ppm. Once the tank was removed, soil from the base under the fill pipe was found to have a BEC level of 900 ppm. Further excavation showed levels of 600 to 700 at a depth of 10 feet. The contamination spread to the east end of the excavation where levels were found to be 300 ppm at the tank base. The tank itself, an asphalt coated single wall welded steel tank, was found to be in fair condition with minor to moderate pitting. The tank piping, galvanized threaded steel, was found to be in good condition with no evidence of leaks or loose/broken connections.

An unknown tank was found near the building where it was partially covered by the building. This tank, a welded steel tank, was found to be full of water and no product. Soil from around the fill pipe showed a BEC level of 3 ppm. Soil from near the base of the tank had a BEC level of 5 ppm.

Photos are attached to this report that provide a visual picture of the tank removal and soil conditions.

SECTION 2

Conclusions and Recommendations

2.0 Conclusions

It is apparent that overfills or spillage at the fill did occur at this facility in the past, especially on tank #3. Spilled petroleum migrated down the tank walls and remained at the tank base, which is common with the overfill situation.

It is known by a local contractor that tank #2 was a replacement for a leaking tank back in the late 1970's. The contamination observed at the base of the tank is thought to be that of the former tank leak, and not from the tank removed for this assessment.

The excavation for tank #1 was clean.

The unknown tank by the building was most likely a gasoline tank as it was substantial in size, estimated at 3000 to 4000 gallons. Being under the building, it could not be removed. Instead, the water was removed and the tank will be properly abandoned in place.

A water sample was taken from groundwater in the excavation of tank #3. This sample showed a gasoline level of 11,800 ppb based on MEDEP test 4.2.1. This is above the drinking water standards of 50 ppb. No free product was observed in the excavation.

2.1 Recommendations

Tom Varney of the MEDEP Bangor office was on-site for this removal. The facility is located amidst a basically the commercial area of the community and downgradient of any basements. The entire area is served by public utilities. As such, it is regarded as a non-sensitive area and baseline clean-up standards applied. As much soil as possible was removed from the excavation. Excavation are was limited by the proximity of a municipal parking lot and a storm drain line running at the edge of the lot. Approximately 100 cubic yards of soil was removed for later disposal at a nearby asphalt plant. With remaining contamination levels on the order of 600 to 700 ppm, a passive soil venting system was installed at the site.

The water sample showed groundwater contamination, which was suspected due to the presence of a sheen during excavation. A PVC monitoring well was constructed on the site as it was being backfilled so that future samples of the groundwater could be retrieved.

Since the area is regarded as non-sensitive, remaining contaminated soil is not an environmental concern and should be treated by the venting system. Additional groundwater work is not necessary at this time. Based on the work completed and the non-sensitive nature of the surrounding area, no other remedial work is anticipated for this site.

SECTION 3

Limitations

This report has been prepared for the exclusive use of Dave Beaumont with application to the referenced facility. This report has been prepared to conform with the site assessment requirements of the Regulations for Registration, Installation, Operation, and Closure of Underground Storage Facilities, Chapter 691. The conclusions are based on the scope of work performed and the conditions at the site at the time of the assessment. No other warranty, expressed or implied, is indicated.

The scope of this investigation has been limited to the items specifically discussed in the text of this report. Recommendations contained in this report are based substantially upon information provided by others regarding the site and our findings during the physical site assessment. Should any additional data or information become available, it should be reviewed by Millett Associates and the conclusions and recommendations presented in this report modified.

This report cannot reflect undetected variations which may occur nor can it reflect variations of subsurface conditions (groundwater quality or elevations) over time. Millett Associates has made no attempt to verify the compliance of the past or present owners and/or occupants of the property with local, state, or federal laws.

It must be noted that our findings do not represent scientific certainties and are based on professional judgment. Millett Associates does not represent that the subject site contains no hazardous substances or other latent conditions beyond that detected or observed by Millett Associates during this assessment.

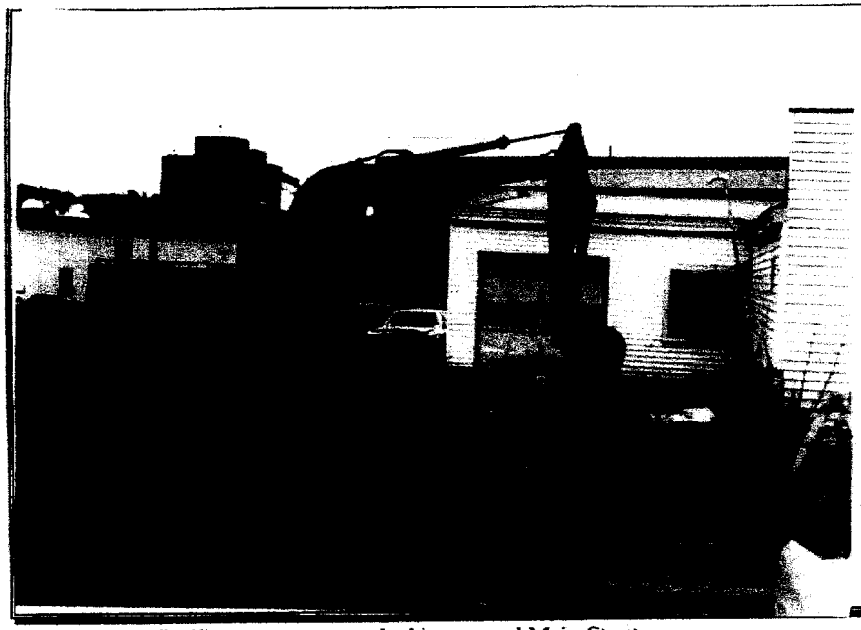


Photo 1: Facility as seen at rear looking toward Main Street.

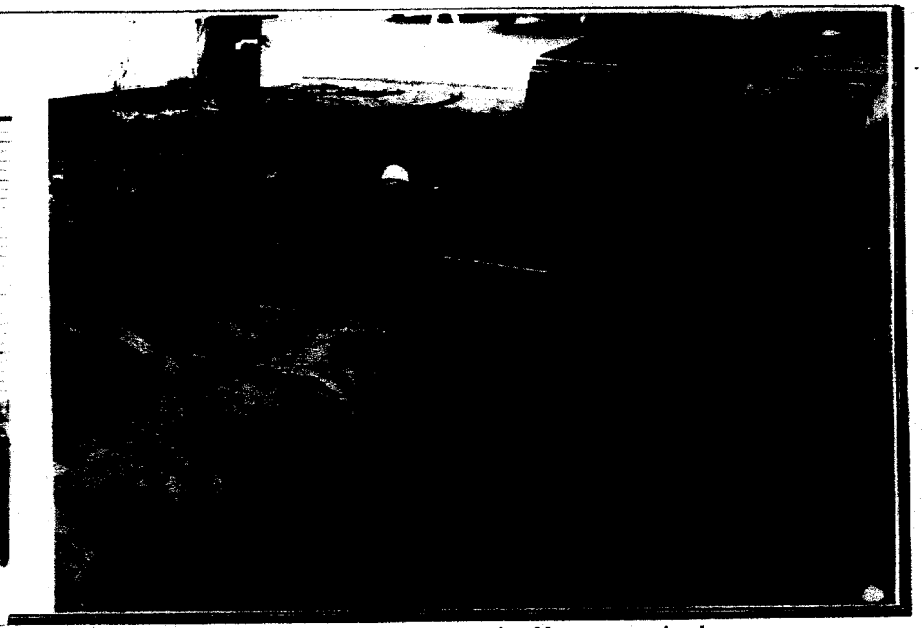


Photo 2: Tanks 3 (foreground) and 4. Note gray stained contaminated soil near fill pipe.

Photo 3: (turn picture vertically) Soil conditions. Note fill material over till.

Photo 4: Tank #1 as removed.

Photo 5: Tank #2 as removed. Note rust on upper half.

Photo 6: Tank #3 as removed.

Photo 7: Unknown tank found near building relative to tank #3.

B-064-94

In the Autumn of 1993, the State Fire Marshal's office had ordered Ralph Bragdon to dismantle two above ground oil storage facilities, one in Millinocket, and the other in East Millinocket. Bragdon hired PDSI of Dover, N.H. to do the work , and by freeze-up, the tanks were cut up and disposed.

Since Bragdon seemed to be in a compliance mode, I thought I'd try to get him to remove the abandoned tanks at Dave's Auto Repair on Main St. in East Millinocket, another of his properties. On February 2, 1994, I tracked him down at his residence and got him to sign an initial clean-up agreement, promising to take the tanks out by June 1.

The removal occurred on May 6, with Dave Beaumont as the licensed installer, and Mike Millett as the site assessor. (See attached site assessment)

Three tanks were removed in all. During the digging a fourth, unknown tank was encountered. Since that tank extended partially under the building, I gave permission to fill it in place.

No extensive contamination was encountered until tank #3 was removed. Soil that could be expeditiously removed was trucked to Tilcon in Medway, to be made into asphalt. Because of groundwater in the hole, and the close proximity of a storm drain line, a passive soil vent system was installed early the following week, by Dave Beaumont.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-402-2006**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT F SHANNON
Primary Product: Diesel {29} - 4 gals. ESTIMATE
Subject/Owner: DEAD RIVER CO - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Underground Storage Tank {TU}
Cause: Mechanical Failure - Piping/Hose {06}

Spill Date/Time

07/14/2006 09:00

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

07/14/2006 09:45

Subject/Owner (Potential Responsible Party)

Contact: --DEAD RIVER CO
55 BROADWAY
BANGOR ME 04402 USA
207-947-8641

Comment:

Reporter

Contact: PAUL BROWN-MANAGER-DEAD RIVER CO
MAIN ST
EAST MILLINOCKET ME 04430 USA
207-723-5151

Comment:

Primary Responder and Other Employees

ROBERT F SHANNON (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type: Terminal - Service Station {SS}
Name: DEAD RIVER OIL CO
Street Address: MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Underground Tank(s) Involved-13355

III. CLEANUP

Product Reported

Diesel {29}

Cleanup DTREE

Products Found/Amount Spilled

Diesel {29}/ - 4 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 30 lbs. ESTIMATE

Recovery/Treatment Method:

Sorbents {C}

Disposal Information

Pine Tree Landfill

IV. NARRATIVE

On 7/14/06, I received report of four gallons of diesel fuel spilled onto the asphalt parking lot of the Dead River fueling station on the Main Road. The spill was caused by the rupture of the fuel supply line from the dispenser to the nozzle. The pump was shut off and the fire department was notified. Upon arriving, the Fire Department applied approximately 30 pounds of speedy dry to the spill area, absorbing the liquid product that did not seep into the asphalt.

The ruptured hose was replaced and all of the speedy dry was bagged for disposal at Pine Tree Landfill. Public water is provided to public.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0420 - 98

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): DEAD RIVER COMPANY

Address: MAIN ST Town: EAST MILLINOCKET

State: ME Zip Code: 04430 Telephone: (207) 746-3819 Ext:

Comments: LOOSE FITTING ON TANK TOP VOIDS PRECISION TEST

LOCATION / FACILITY INFORMATION

Name of Spill Location: DEAD RIVER COMPANY

Address: MAIN ST Location ID: 28980

Minor Civil Division: **EAST MILLINOCKET** Local Name:

Latitude N: 45 37 31 Longitude W: 68 34 32

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 0.00G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 23 (Table B) Product Actually Found: 00 (Table B)

Date Of Spill: Time Of Spill:

Date Reported: June 30, 1998 Time Reported: 2235

Cause: 0[illegible] (Table C) Detection Method: 6 D (Table D)

Incident Code: C - SS - N - U (Table E)

Response Time Involved: 4.2 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **VARNEY, THOMAS** TWV MFM

REPORTING INFORMATION

Name(Last, First, MI): DEAD RIVER COMPANY

Address: MAIN ST Town: EAST MILLINOCKET

State: ME Zip Code: 04430 Telephone: (207) 746-3819 Ext:

Spill Number: B - 0420 - 98

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.00 G Method: K (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: D-Tree Date:

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info:

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

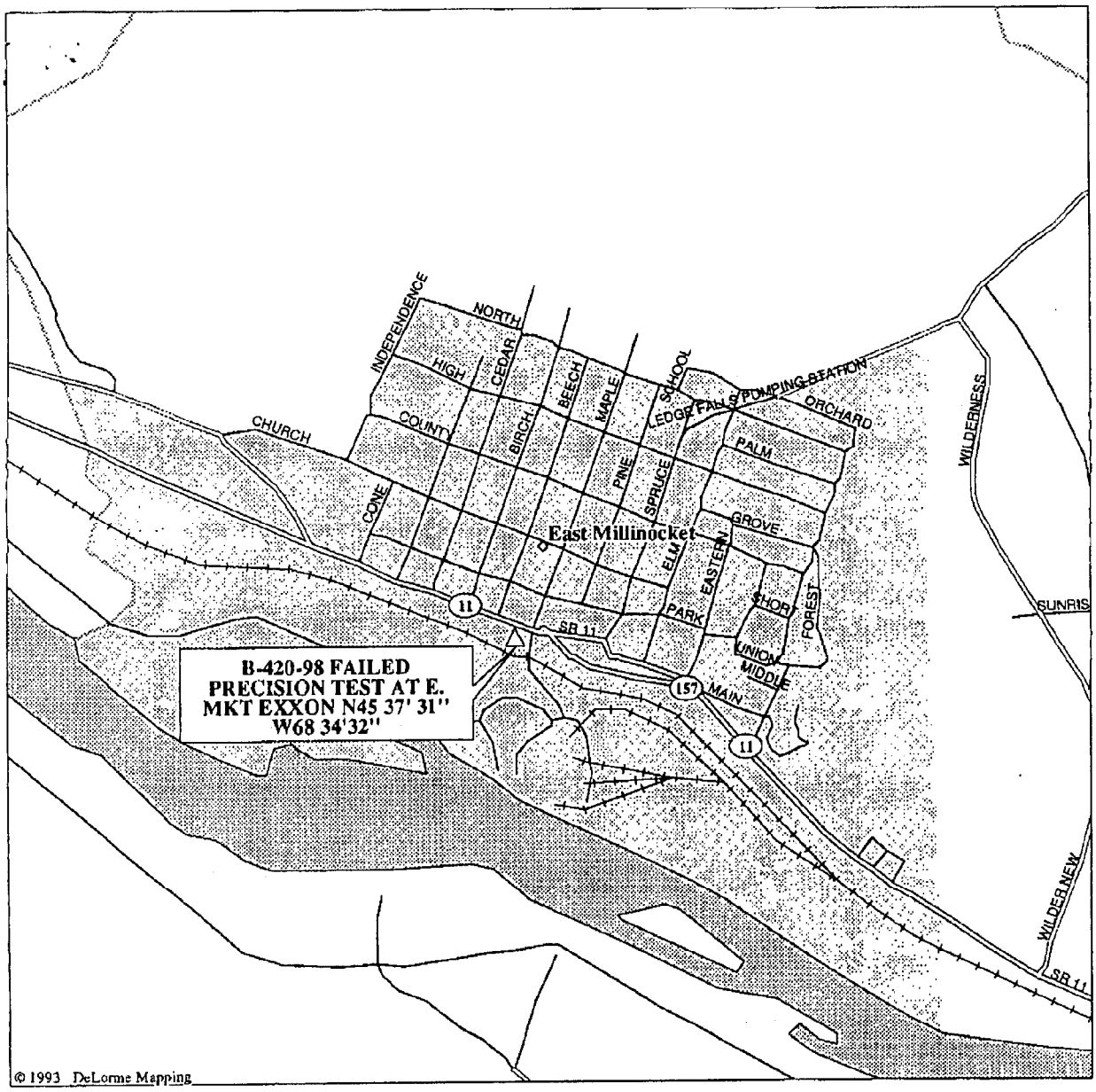
Tank Registration Number: 13355 Number of Tanks Abandoned:

NARRATIVE

Unable to get the tanks to pass the annual SIA at this station, Dead River commissioned TANKNOLOGY to perform a precision test on them. The super tank couldn't pass the precision test, and the technician judged it to be leaking in the upper 25% of the tank. Dead River shut that tank down, and on July 1 I met Alan Ingraham and Warren Overlock on site.

The piping at this station had been replaced the previous winter by G.R. Adams. It was decided among the three of us that Adams would be contacted to test the piping by pressurizing it with helium , then using a meter to detect helium leaking from the pipes.

In fact, the test never occurred, because Adams found a loose fitting,associated with the submersible pump, inside the secondary containment sump atop the tank. That fitting was tightened, of course, and on 7/20, I asked that Dead River conduct another precision test on the tank. (Butch Furrough is of the opinion that the tank is tipped, and although the fittings are tight, still won't pass its SIA.)



LEGEND

- Population Center
- State Route
- Town, Small City
- Street, Road
- Major Street/Road
- State Route
- Railroad
- River
- Open Water
- Utility (powerline)

Scale 1:15,625 (at center)

1000 Feet

500 Meters

Mag 15.00
Wed Jul 08 16:30:12 1998

Map From DeLorme MapExpert
Freeport, ME

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0652 - 97

Report Status: FINAL

SUBJECT/OWNER OR OPERATOR

Name (Last, First, MI): DEAD RIVER OIL CO.

Address: POB 1427 Town: BANGOR

State: ME Zip Code: 04402-1427 Telephone: ( ) - Ext:

Comments: GAS CONTAMINATED SOIL AT GAS STATION

LOCATION/FACILITY INFORMATION

Name of Spill Location: E MILLINOCKET EXXON

Address: MAIN ST Location ID: 28297

Minor Civil Division: **EAST MILLINOCKET** Local Name:

Latitude N: Longitude W:

SPILL/EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 0.99 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 20 (Table B) Product Actually Found: 20 (Table B)

Date Of Spill: Time Of Spill:

Date Reported: November 12, 1997 Time Reported: 1155

Cause: 18 (Table C) Detection Method: 6 H (Table D)

Incident Code: C - SS - L - U (Table E)

Response Time Involved: 6.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **LUCE, DARRYL**

REPORTING INFORMATION

Name(Last, First, MI): FURROUGH, CLYDE-G.R. ADAMS

Address: 1185 HAMMOND ST Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 942-9573 Ext:

Spill Number: B - 0652 - 97

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.99 G Method: G (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: B1 D-Tree Date:

Contaminated Soil: 38.99 Y (Cubic Yards or Tons)

Disposal Info: stock piled under plastic for spring disposal

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number: 13355 Number of Tanks Abandoned:

NARRATIVE

Mr. Furrough called to report contaminated soil found while relocating piping at the E. Millinocket Exxon. This was in an area not presently occupied by piping or tanks so we don't know how the contamination got there. The site is baseline 1, and at the level contaminated, the soil, did not need removal. However, since the new piping could not use the native soil it had to be removed and handled accordingly. Being mid-November, landspreading was not a current option nor was the local batch plant. It was decided to stockpile the dirt at the Dead River bulk plant in Millinocket and dispose of it this spring.

B-652-97

MILLINOCKET

LAND SPREADING AGREEMENT FORM

DARRYL LUCE has inspected the proposed land spreading
(Name of Inspector)

site at DEAD RIVER CO., MILLINOCKET FACILITY, 795 CENTRAL ST
(Location of Site)

in the Town of MILLINOCKET, Maine.
(Name of Town)

The site named above has been found satisfactory for land spreading in accordance with Department Land Spreading Guidelines (attached). Limitations to this agreement are listed below.:

APPROXIMATELY 38 CUBIC YARDS OF GASOLINE CONTAMINATED SOIL

STANDARD GUIDELINES

I, Alan G Ingraham of Dead River Company
(Company Representative) (Company Name)

agree to abide by the attached guidelines and limitations outlined above in spreading oil contaminated soil on the site identified above. I further agree to abide by all Local, State and Federal codes, regulations, and laws. The site will be open to inspection by DEP personnel for the duration of the Land Treatment process. I further acknowledge that my company bears the full responsibility for all operations on and at this site and that my company will notify the town of our operation by sending them the PINK copy of this Agreement Form within seven (7) days.

Alan G Ingraham — Company Representative

10/19/98 — Date signed

White - Company Rep. Canary - DEP Rep. Pink - Town

DARRYL LUCE 941-4625
ME DEP
106 HOGAN RD
BANGOR, ME. 04401

East Mill Underground Storage Tanks

16697*01/24/1990*OIL & PAINT SHOP*MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430* *2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462* *2077235131*1*2000*ACTIVE*ACTIVE* * *12/01/1989*12/01/1989*DOUBLE-WALLED CP STEEL*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*Y*1*UNLEADED GASOLINE*SUCTION*SUCTION*12/01/1989*F/GLASS - PETROLEUM*2000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*12/01/1989*DROP_TUBE*DROP TUBE*06/04/2010*45.62242168*-68.57165467

13518*05/21/1987*E MILLINOCKET MILL STR PLANT* *EAST MILLINOCKET*EAST MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430* *2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462* *2077235131*1*20000*ABANDONED_IN_PLACE*ABANDONED IN PLACE* * *01/01/1986*01/01/1955*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*20000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN PLACE*01/01/1986*UNKNOWN*UNKNOWN* **

13518*05/21/1987*E MILLINOCKET MILL STR PLANT* *EAST MILLINOCKET*EAST MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N* *KATAHDIN PAPER CO LLC*IAN SPENCER*50 MAIN ST*EAST MILLINOCKET*ME*04430* *2077235131*FRASER PAPERS INC* *KATAHDIN AVE*MILLINOCKET*ME*04462* *2077235131*2*20000*ABANDONED_IN_PLACE*ABANDONED IN PLACE* * *01/01/1986*01/01/1955*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*20000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN PLACE*01/01/1986*UNKNOWN*UNKNOWN* **

13057*03/24/1987*E MILLINOCKET WAST TREAT FAC*TREATMENT PLANT RD*EAST MILLINOCKET*EAST MILLINOCKET*2077463376*TOWN "&" SCHOOL*N* *N* *N* *N* *EAST MILLINOCKET TOWN OF* *53 MAIN ST*EAST MILLINOCKET*ME*04430* *2077463376*EAST MILLINOCKET TOWN OF* *53 MAIN ST*EAST MILLINOCKET*ME*04430* *2077463376*1*2000*ABANDONED_IN_PLACE*ABANDONED IN PLACE* * *06/14/2000*08/01/1985*F/GLASS SINGLE-WALLED*MANUAL_GROUNDWATER_SAMPLE*MANUAL GROUNDWATER SAMPLING*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*2000*UNKNOWN*UNKNOWN*BELOWGROUND*ABANDONED_IN_PLACE*ABANDONED IN PLACE*06/14/2000*UNKNOWN*UNKNOWN* *45.62077194*-68.56715405

12859*03/11/1987*EAST MILLINOCKET TREAT PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *Y*NEAR PUBLIC WATER*N* *N* *GREAT
NORTHERN PAPER INC* *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*1*1000*REMOVED*REMOVED* *
*12/01/1991*01/01/1974*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*#2 FUEL OIL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*1000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*12/01/1991*UNKNO
WN*UNKNOWN* **

12859*03/11/1987*EAST MILLINOCKET TREAT PLANT* *EAST MILLINOCKET*EAST
MILLINOCKET*2077235131*INDUSTRIAL*N* *Y*NEAR PUBLIC WATER*N* *N* *GREAT
NORTHERN PAPER INC* *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*2*1000*REMOVED*REMOVED* *
*12/01/1991*01/01/1974*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*DIESEL*UNKNOWN*UNKNOWN*
*GALVANIZED
STEEL*1000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*12/01/1991*UNKNO
WN*UNKNOWN* **

9473*11/06/1986*E MILLINOCKET MAINT GARAGE*EAST MILLINOCKET
MILL*MILLINOCKET*MILLINOCKET*2077235131*INDUSTRIAL*N* *N* *N* *N*
GREAT NORTHERN PAPER INC *ONE KATAHDIN AVE*MILLINOCKET*ME*04462*
*2077235131*GREAT NORTHERN PAPER INC* *ONE KATAHDIN
AVE*MILLINOCKET*ME*04462* *2077235131*1*6000*REMOVED*REMOVED* *
*11/01/1987*01/01/1979*STEEL - BARE OR ASPHALT
COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*N*1*WASTE OIL/USED MOTOR
OIL*UNKNOWN*UNKNOWN* *GALVANIZED
STEEL*6000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*11/01/1987*UNKNO
WN*UNKNOWN* **

East Mill Up-Gradient Abutting USTs

13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*1*10000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*UNLEADED GASOLINE*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBLE DOUBLE-WALLED PIPING*10000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*DROP_TUBE*DROP TUBE*11/24/2010*45.62564123*-68.57684228
13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*2*10000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*PREMIUM UNLEADED*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBLE DOUBLE-WALLED PIPING*10000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*VENT_BALL*VENT BALL*11/24/2010*45.62564123*-68.57684228

13355*05/13/1987*DEAD RIVER OIL CO*64 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*2077463819*RETAIL OIL*N* *N* *N* *N* *DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*DEAD RIVER CO*ANDERSON, LESLIE*PO BOX 17577*PORTLAND*ME*04101* *2077735841*3*4000*ACTIVE*ACTIVE*IN_SERVICE*IN SERVICE*06/01/1984*06/01/1984*F/GLASS SINGLE-WALLED*AUTOMATIC_TANK_GAUGE*AUTOMATIC TANK GAUGE*BELOWGROUND*Y*1*DIESEL*PRESSURIZED*PRESSURIZED*12/15/1997*FLEXIBLE DOUBLE-WALLED PIPING*4000*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*ACTIVE*ACTIVE*12/15/1997*VENT_BALL*VENT BALL*11/24/2010*45.62564123*-68.57684228

19163*09/12/1995*EMERY LEE & SONS INC*RT 157*EAST MILLINOCKET*EAST MILLINOCKET*2077465548*COMMERCIAL*N* *N* *N* *N* *EMERY LEE & SONS* *PO BOX 605*MEDWAY*ME*04460*0390*2077465548*LEE, EMERY J JR* *HCR 69 BOX 739*MEDWAY*ME*04460* *2077465548*1*8000*ACTIVE*ACTIVE* * *07/26/1995*07/26/1995*JACKETED TANK - DOUBLE-WALLED*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC MON*BELOWGROUND*Y*1*DIESEL*SUCTION*SUCTION*07/26/1995*F/GLASS - PETROLEUM*4000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*07/26/1995*DROP_TUBE*DROP TUBE*09/30/2010*45.63224097*-68.59365043

19163*09/12/1995*EMERY LEE & SONS INC*RT 157*EAST MILLINOCKET*EAST MILLINOCKET*2077465548*COMMERCIAL*N* *N* *N* *N* *EMERY LEE & SONS* *PO BOX 605*MEDWAY*ME*04460*0390*2077465548*LEE, EMERY J JR* *HCR 69 BOX 739*MEDWAY*ME*04460* *2077465548*1*8000*ACTIVE*ACTIVE* * *07/26/1995*07/26/1995*JACKETED TANK - DOUBLE-WALLED*SEC_CONT_CONTIN_ELEC_MON*SECONDARY CONTAINMENT / CONT ELEC

MON*BELOWGROUND*Y*2*DIESEL*SUCTION*SUCTION* *F/GLASS -
PETROLEUM*4000*CONFORMING_SUCTION_SYSTEM*CONFORMING SUCTION
SYSTEM*BELOWGROUND*ACTIVE*ACTIVE*07/23/1995*DROP_TUBE*DROP
TUBE*09/30/2010*45.63224097*-68.59365043

East Mill Up-Gradient Non-Abutting Tanks

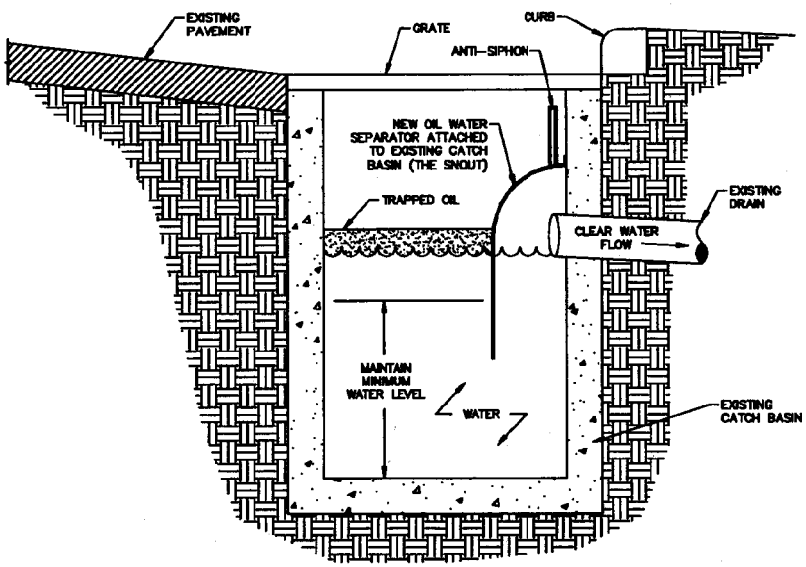
12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *1*2000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*UNLEADED GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*2000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* *45.62619236*-68.57670464

12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *2*4000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*REGULAR GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*4000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* **

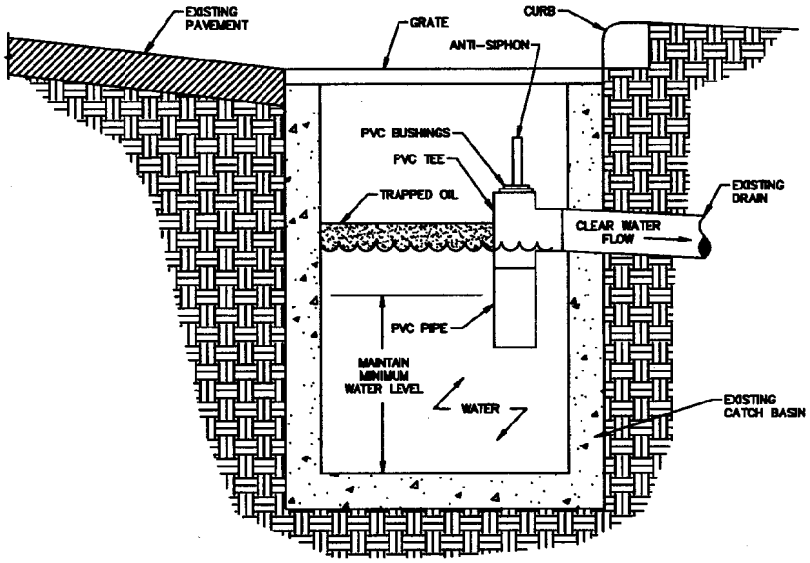
12869*03/12/1987*DAVES AUTO REPAIR*79 MAIN ST*EAST MILLINOCKET*EAST MILLINOCKET*0*RETAIL OIL*N* *N* *N* *N* *KATAHDIN GAS INC* *PO BOX 799*MILLINOCKET*ME*04462* *2077234458*DAVES AUTO REPAIR* *79 MAIN ST*EAST MILLINOCKET*ME*04430* * *3*4000*REMOVED*REMOVED* * *05/01/1994*10/01/1969*STEEL - BARE OR ASPHALT COATED.*UNKNOWN*UNKNOWN*BELOWGROUND*Y*1*UNLEADED GASOLINE*UNKNOWN*UNKNOWN* *GALVANIZED STEEL*4000*UNKNOWN*UNKNOWN*BELOWGROUND*REMOVED*REMOVED*05/01/1994*UNKNOWN*UNKNOWN* **

21344*10/17/2007*DYSARTS - EAST MILLINOCKET*2 INDUSTRIAL DRIVE*EAST MILLINOCKET*EAST MILLINOCKET*2079424878*PRIVATE FUELING *Y*NEAR PRIVATE WATER*N* *N* *N* *DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*1*20000*PLANNED*PLANNED FOR INSTALLATION* * *09/19/2007*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*NONE*NONE*ABOVEGROUND*N*1*DIESEL*SUCTION*SUCTION*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*12000*NONE*NONE*ABOVEGROUND*PLANNED*PLANNED FOR INSTALLATION*09/19/2007*ELECTRONIC*ELECTRONIC* *45.63484936*-68.59786148

21344*10/17/2007*DYSARTS - EAST MILLINOCKET*2 INDUSTRIAL DRIVE*EAST MILLINOCKET*EAST MILLINOCKET*2079424878*PRIVATE FUELING *Y*NEAR PRIVATE WATER*N* *N* *N* *DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*DYSARTS SERVICE INC*WRIGHT, DAVID*PO BOX 1689*BANGOR*ME*04402* *2079424878*1*20000*PLANNED*PLANNED FOR INSTALLATION* * *09/19/2007*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*NONE*NONE*ABOVEGROUND*N*2*DIESEL*SUCTION*SUCTION*09/19/2007*STEEL WITH SECONDARY CONTAINMENT.*8000*NONE*NONE*ABOVEGROUND*PLANNED*PLANNED FOR INSTALLATION*09/19/2007*ELECTRONIC*ELECTRONIC* *45.63484936*-68.59786148



OIL TRAP USING THE SNOUT



OIL TRAP USING PVC

MAINE DEP REMEDIAL SITES LIST

REM00514	MAINE LEATHERS COMPANY	117 VAUGHN ROAD	UNCONTROLLED SITES	45.18282692	-69.21770388	Unknov	Investigation in Progress
REM00514	MAINE LEATHERS COMPANY	117 VAUGHN ROAD	BROWNFIELDS	45.18282692	-69.21770388	Unknov	Investigation in Progress
REM01744	MOOSEHEAD MANUFACTURING	5 EAST MAIN STREET	VRAP	45.18376164	-69.23068783	True	No Further Action
REM01744	MOOSEHEAD MANUFACTURING	5 EAST MAIN STREET	BROWNFIELDS	45.18376164	-69.23068783	True	No Further Action
REM01812	TOWN GRAVEL PIT	GRAVEL PIT ROAD	UNCONTROLLED SITES	45.14880357	-69.24462124	Unknov	Remediation Needed
REM00515	VARNUM CATTLE		UNCONTROLLED SITES	45.18511055	-69.19199767	False	Referred to Other Programs

EAGLE LAKE

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00106	EAGLE LAKE MUNICIPAL LANDFILL	CONVENT RD	LANDFILL CLOSURE	47.04059067	-68.61393358	Unknov	Operation and Maintenance

EAST MACHIAS

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00107	EAST MACHIAS MUNICIPAL LANDFILL	DUMP ROAD	LANDFILL CLOSURE	44.73480344	-67.38137844	True	Operation and Maintenance
REM01935	EMARC	WILLOW STREET	VRAP	44.73525400	-67.39145382	Unknov	In Review
REM01959	G.E. GODING	888 EAST MAIN STREET	VRAP	44.72235788	-67.41544317	Unknov	In Review

EAST MILLINOCKET

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM01575	EAST MILLINOCKET BARK PILE	ROUTE 11/ROUTE 157	VRAP	45.62508828	-68.58562315	True	No Further Action
REM00108	EAST MILLINOCKET MUNICIPAL LANDFILL	CHURCH ST.	LANDFILL CLOSURE	45.63247958	-68.58896049	True	Operation and Maintenance
REM01454	GREAT NORTHERN ASSETS	KATAHDIN AVENUE	VRAP	45.64546788	-68.70757353	True	No Further Action
REM00517	GREAT NORTHERN PAPER MILL #2	MAIN STREET	UNCONTROLLED SITES	45.62231648	-68.57425615	Unknov	Referred to Other Programs

EASTBROOK

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00109	EASTBROOK MUNICIPAL LANDFILL	RT 200/EASTBROOK RD.	LANDFILL CLOSURE	44.64861746	-68.26609030	Unknov	Operation and Maintenance

EASTON

Site	Site Name	Primary Parcel Address	Program	Latitude	Longitude	IC?	Status
REM00110	EASTON MUNICIPAL LANDFILL	HOULTON RD (RT 1A & 165)	LANDFILL CLOSURE	46.65652190	-67.86723193	True	Operation and Maintenance
REM01971	GAGNON PROPERTY	324 STATION ROAD	VRAP	46.66260304	-67.91073633	Unknov	In Review
REM01764	MCLEANS AUTO PARTS	251 & 252 STATION ROAD	VRAP	46.65763576	-67.91098816	False	No Further Action
REM01717	MCPHERSON PROPERTY	369 STATION ROAD	VRAP	46.66368148	-67.91001407	False	No Further Action
REM00518	VAHLSING WAREHOUSE	STATION ROAD	UNCONTROLLED SITES	46.66368868	-67.90507427	False	Investigation Needed

Disclaimer: Despite our efforts to be accurate, this report may contain errors. This report is presented with a good-faith representation that the information provided herein is generally reliable. Data contained in this report does not include all programs within the Department that apply Institutional Controls. Information in this report is not valid for legal purposes. If you need further information, please contact Nick Hodgkins at (207) 287-4854.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
ENVIRONMENTAL SERVICES DIVISION
60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

October 1, 1991

Mr. Raymond H. Tucker
Vice President
Great Northern Nekoosa Corporation
Katahdin Avenue
Millinocket, Maine 04462

Re: Removal Action at Great Northern Sites,
East Millinocket, Maine
EPA Docket No. TSCA-I-89-1041

Dear Mr. Tucker:

This letter regards completion of the removal action referenced in the Consent Agreement and Final Order ("Agreement"), EPA Docket No. TSCA-I-89-1041. The Respondent to the Agreement is Great Northern Nekoosa Corporation ("Respondent"). The removal action was performed at the Great Northern No. 5 Paper Machine Site, No. 6 Paper Machine Site, and the Chemi-Groundwood Site ("Sites"), all of which are located at Great Northern's East Millinocket, Maine facility.

EPA has received the final removal work report ("Report") entitled "Report of PCB Cleanup Activities and Groundwater Monitoring" prepared by Stone & Webster Engineering Corp. and dated March 1991. In accordance with paragraph 23 of the Agreement, EPA conditionally approves the Report. Final approval of the Report is contingent upon receipt by EPA of amendments to the Report that Respondent has agreed to make pursuant to EPA comments.

Based upon currently available information, including representations made in the Report and other deliverables and information submitted by and on behalf of the Respondent, the actions taken at the Sites have reduced the immediate potential for direct contact with contaminated surface and near-surface soils and decreased the potential for migration of contaminants to the West Branch of the Penobscot River. Additionally, based on representations made by or on behalf of Respondent, actions taken with respect to the contaminated brick wall at the No. 5 Paper Machine Site appear to minimize the threat of direct contact with contaminants from that source. Finally, data from the groundwater monitoring network provided to EPA by the Respondent indicates that the Town of East Millinocket is hydraulically upgradient of the contaminant source, indicating that it is unlikely that drinking wells located within the town would be affected by contamination identified at the Sites.

Based upon the above, EPA has concluded that the necessary action has been taken to mitigate the public health hazards and threats and other threats posed by the Site, as set forth in the Action Memorandum dated August 7, 1989.

Please be advised that this determination does not constitute a release from liability, covenant not to sue, or waiver of any claims which EPA may have against the Respondent, other than such liability as is otherwise released in the Agreement.

Sincerely,

Arthur Wing
On-Scene Coordinator

cc: Mary Dever, EPA Enforcement Coordinator - ESD
Kathleen E. Woodward, EPA Assistant Regional Counsel - ORC
Gregory Dain, EPA Assistant Regional Counsel - ORC
Daniel E. Boxer, Esq. - Pierce, Atwood

Georgia-Pacific

Georgia-Pacific LLC
133 Peachtree Street NE (30303-1847)
P.O. Box 105605
Atlanta, Georgia 30348-5605
(404) 652-4863 (404) 654-4701 fax

August 26, 2015

Ms. Marianne Milette
USEPA, Region 1
5 Post Office Square - Suite 100
Mail Code OES05-4
Boston, MA 02109-3912

Subject: **Data Review of the No. 5 Paper Machine Area**
East Millinocket Operations of Great Northern Paper Company
Georgia-Pacific LLC

Dear Ms. Milette:

Georgia-Pacific LLC is pleased to submit this data review of the No. 5 Paper Machine area at the East Millinocket Operation of Great Northern Paper Company (formerly Katahdin Paper Company). This review was performed in response to the April 23, 2015 telephone discussion between Carol Northern and Alison Levinson with EarthCon Consultants, Inc. (EarthCon) and Kim Tisa, Remediation Project Manager with the United States Environmental Protection Agency (EPA) and yourself.

The enclosed review presents a summary of current and historical available data from the No. 5 Paper Machine Site. The purpose of the review was to compile available data to evaluate the presence or absence of PCB concentrations that remain in place at the No. 5 Paper Machine Site, and to prepare recommendations to modify the current groundwater monitoring program, as appropriate.

If you have any questions regarding this review, please contact me at (404) 652-4863.

Sincerely,

Zachary Melda
Environmental Engineer
Environmental Affairs

cc: Pam Green, Maine DEP (w/attachment)
Shawn Doil, Esq., Perkins Thompson (w/attachment)
Sherri Harvey, EarthCon Consultants (w/attachment)

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DATA REVIEW of the No.5 PAPER MACHINE SITE

at the
East Millinocket Operations
of
Great Northern Paper Company
East Millinocket, Maine

Prepared for

GEORGIA-PACIFIC LLC

by

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

August 2015

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4.0 CONCLUSIONS AND RECOMMENDATIONS 6
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FIGURES

Figure 1 Site Location Map
Figure 2 East Millinocket Site Layout
Figure 3 No. 5 Paper Machine Site Area Layout
Figure 4 Waterline Location and Cross Section
Figure 5 Potentiometric Surface Map – October 2014

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1.0 INTRODUCTION

The former East Millinocket Operation of Great Northern Paper Company (Mill #2) is located in East Millinocket, Maine (Figure 1). The Mill has three areas that were identified as former polychlorinated biphenyls (PCB) spill sites: the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site (Figure 2). Georgia-Pacific LLC (GP) currently samples groundwater on an annual basis to monitor the groundwater quality in these three areas. Based on an April 23, 2015 discussion between Marianne Milette and Kim Tisa with Region 1 of the United Stated Environmental Protection Agency (USEPA) and Alison Levinson and Carol Northern with EarthCon Consultants, Inc. (EarthCon), USEPA deemed it appropriate for GP to research and compile available data to evaluate whether PCBs remain in soil in the No. 5 Paper Machine Site at concentrations greater than 100 milligrams per kilogram (mg/kg), and to prepare recommendations to modify the current groundwater monitoring program, as appropriate.

2.0 SPILL HISTORY AND INVESTIGATIONS

The spill at the No. 5 Paper Machine Site occurred on May 14, 1981 as the result of an electrical failure. The lid of transformer T-122 located in the courtyard at the northwest corner of the No. 5 Paper Machine room was lifted on one side, splashing transformer fluid against the building and onto the ground. Based on a review of historic records, the fluid was believed to be Askarel, consisting of Aroclor 1260 (a mixture of PCB congeners) and chlorobenzene solvents. Great Northern Paper Company's (GNP's) best estimate of the spill volume was 150 gallons, based upon discussions with the electricians who refilled the transformer after the spill. There was no soil clean-up performed at that time (Stone and Webster 1988a).

Soil Remediation Activities

On August 28, 1985, as a result of the discovery of PCB contamination near the southeast corner of the No. 6 Paper Machine building, soil samples were collected from excavations for pier footings near the location of transformer T-122, to determine whether PCBs were present. Laboratory analytical results indicated PCB concentrations were less than 50 mg/kg. To confirm these results, three test pits were excavated around transformer T-122 and soil samples were collected and analyzed for PCBs. The analytical results for one of

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the six samples indicated a PCB concentration of 320 mg/kg; the others had PCB concentrations of 8 mg/kg or less (Stone and Webster 1988a).

Additional soil samples were then collected by GNP to determine the extent of PCB impacted soils. The samples were obtained at numerous locations by drilling with a power ice auger to specified depths, sampling the cuttings, excavating to that depth, and repeating the process to the bottom of the auger hole. The locations of the borings are shown on Figure 3.

In November and December 1985, GNP removed PCB impacted soil to depths of approximately 7 to 10 feet near the wall of the No. 5 Paper Machine building, and to lesser depths north of the building (E.C. Jordan, 1986). This excavation removed much of the PCB impacted soils; however, the excavation immediately adjacent to the No. 5 Paper Machine building wall footing was limited to a depth of approximately 7 feet to prevent undermining the wall foundation. The excavation around the foundations for transformers T119 and T122 (Figure 3) was also limited to depths that would not undermine the transformers, which were still in service at the time (Stone and Webster 1988a).

From June 1987 through January 1988, 14 additional soil borings were drilled and six monitoring wells were installed to collect additional soil and groundwater data (Figure 3). Based on this data, a *Remediation Plan for No. 5 Paper Machine Site*, dated July 22, 1988 was prepared and submitted to USEPA. From July 1989 to January 1990, additional excavation/soil remediation activities were performed in accordance with this plan. Laboratory analytical results for samples collected from the surfaces of the excavations confirmed that soils with PCB concentrations in excess of 50 mg/kg had been removed and no additional excavation was necessary (Stone and Webster 1991). However, the *Remediation Plan for No. 5 Paper Machine Site* noted that a small volume of soils containing PCBs were left in place along the wall of the No. 5 Paper Machine building, below the level of the wall foundation, to avoid undermining the building. The two locations, N1001 E1033 and N1001 E1052 are shown on Figure 3. PCB concentrations remaining at these locations are as follows: 85 mg/kg at a depth of 10.78 feet at boring N1001 E1033 and 82 mg/kg at a depth of 10.33 feet at boring N1001 E1052.

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The *Remediation Plan for No. 5 Paper Machine Site* also called for the removal of a section of the water line pipe as shown on Figure 3. This could not be accomplished so instead, the soil surrounding the top of the pipe was excavated and removed to an elevation of 290.3 feet. Post excavation confirmation samples collected from around the pipe Indicated the presence of PCBs (Aroclor-1260) at a concentration of 70 mg/kg and chlorobenzene (1,2,3,4-tetrachlorobenzene) at a concentration of 4.5 mg/kg at sample location 5-1 which is located adjacent to the west side and under the pipe as shown on Figure 3. A cross section illustrating a section of the excavation around the water line and the concentrations of PCBs left in place is shown on Figure 4. Once excavation activities were complete, clean backfill was placed along the pipe and concrete was placed along the west side as well as along the top of the pipe, as shown on Figure 4. Upon completion of the remediation activities, the surface of the No. 5 Paper Machine Site was paved.

Groundwater Monitoring

Table 1 presents a summary of the historical analytical data collected since 1993 for groundwater monitoring wells MW-803S and MW-803D, located down gradient of the No. 5 Paper Machine Site (Figures 2 and 5). With the exception of one detection of 1,2,3,4-tetrachlorobenzene reported in March 1994, which was flagged as suspect due to blank contamination, groundwater samples collected since August 1993 from the wells downgradient of the No. 5 Paper Machine Site have been non detect for both chlorobenzenes and PCBs.

3.0 SUMMARY

GPs review of the available documents associated with the No. 5 Paper Machine Site has indicated there are three locations where PCBs at a concentration greater than 50 mg/kg were left in place. As previously described, a small volume of PCBs remain in place in the soil at two locations along the No. 5 Paper Machine building wall, below the level of the wall foundation. The third location where PCBs greater than 50 mg/kg remain in place is adjacent to the west side and under the waterline pipe that could not be removed without compromising the pipe's integrity. The following table summarizes the locations and approximate elevations of the PCBs that remain in place.

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Location	Approximate Depth (feet, bgs)	Approximate Elevation* (feet)	PCB Concentration (mg/kg)
N1001 E1003	10.8	284.2	85
N1001 E1052	10.3	284.7	82
5-1	NA	290.3	70

bgs=below ground surface

* Approximate elevations estimated by subtracting depth from plant ground surface (295 feet) in the No. 5 Paper Machine Site Area.

The potentiometric surface map from the October 2014 sampling, shown on Figure 5, indicates the groundwater in the No. 5 Paper Machine Site area is at an elevation of approximately 281 feet. Based on historical potentiometric surface maps from 2007 through 2014, the inferred groundwater elevation in the No. 5 Paper Machine Site area ranges from 280 to 284 feet. When comparing the elevation of the PCBs that remain in place to the range of groundwater elevations in the No. 5 Paper Machine Site area, it is apparent that the PCBs that remain are located above the water table.

In accordance with the discussions with USEPA and per 40 CFR Part 761.61(a)(4)(*B*)(*3*), PCBs can remain in place at concentrations greater than 25 mg/kg and less than 100 mg/kg, if left under a cap. The concentrations of PCBs left in place at the No. 5 Paper Machine Site range from 70 to 85 mg/kg. As previously described, the PCBs left in place around the water line were capped with concrete and, once the remediation activities were complete, the No. 5 Paper Machine Site was paved.

The EPA Regional Screening Levels (RSL) for chlorobenzenes, calculated using the more conservative THQ=0.1, results in an industrial soil RSL of 130 mg/kg. As previously discussed, the chlorobenzene concentration remaining at location 5-1 in the No. 5 Paper Machine Site was 4.5 mg/kg, which is well below the industrial RSL.

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4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the review of historical soil and groundwater data presented herein, the following conclusions are made:

- PCBs were left in place at three locations in the No. 5 Paper Machine Site at reported concentrations less than 100 mg/kg;
- One of the three locations where PCBs (and chlorobenzene) were left in place was covered with concrete prior to backfilling the excavation and all three locations were paved after completion of the remedial activities.
- The soils containing PCBs that were left in place are located at depths above the current water table;
- Chlorobenzenes were left in place at one location, at a concentration of 4.5 mg/kg, which is significantly lower than the RSL of 130 mg/kg.

Based on these conclusions, GP recommends the cessation of groundwater monitoring of the two wells (MW-803D and MW-803D) located downgradient of the No. 5 Paper Machine Site. GP recommends that these wells continue to be maintained and used for water level measurements to provide data to prepare future potentiometric surface maps.

5.0 REFERENCES

(Stone and Webster, 1988a): *Data Package for No. 5 Paper Machine.* Stone and Webster Engineering Corporation. April 6, 1988.

(Stone and Webster, 1988b): *Remediation Plan for No. 5 Paper Machine.* Stone and Webster Engineering Corporation. July 22, 1988.

(Stone and Webster, 1991): *Report of PCB Cleanup Activities and Groundwater Monitoring, East Millinocket Mill.* Stone and Webster Engineering Corporation. March 1991.

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TABLE

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Table 1
Summary of Historical Groundwater Analytical Data
East Millinocket Mill

Well ID	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D
Date Sampled	Aug-93	Aug-93	Sep-93	Sep-93	Nov-93	Nov-93	Dec-93	Dec-93	Mar-94	Mar-94	Jun-94	Jun-94	Sep-94	Sep-94	Dec-94	Dec-94	Mar-95	Mar-95	Jun-95	Jun-95	Sep-95	Sep-95	Dec-95	Dec-95	Mar-96	Mar-96	Jun-96	Jun-96	Sep-96	Sep-96	Dec-96	Dec-96
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D
Date Sampled	Mar-97	Mar-97	Jun-97	Jun-97	Aug-97	Aug-97	Sep-97	Sep-97	Dec-97	Dec-97	Mar-98	Mar-98	Jun-98	Jun-98	Sep-98	Sep-98	Dec-98	Dec-98	Mar-99	Mar-99	Jun-99	Jun-99	Sep-99	Sep-99	Dec-99	Dec-99	Mar-00	Mar-00	Jun-00	Jun-00	Sep-00	Sep-00
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D
Date Sampled	Dec-00	Dec-00	Mar-01	Mar-01	Jun-01	Jun-01	Oct-01	Oct-01	Dec-01	Dec-01	Mar-02	Mar-02	Jun-02	Jun-02	Sep-02	Sep-02	Dec-02	Dec-02	Mar-03	Mar-03	Jun-03	Jun-03	Sep-03	Sep-03	Dec-03	Dec-03	Mar-04	Mar-04	Jun-04	Jun-04	Sep-04	Sep-04
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Well ID	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D	803S	803D
Date Sampled	Dec-04	Dec-04	Mar-05	Mar-05	Jun-05	Jun-05	Sep-05	Sep-05	Dec-05	Dec-05	Mar-06	Mar-06	Jun-06	Jun-06	Sep-06	Sep-06	Sep-07	Sep-07	Sep-08	Sep-08	Sep-09	Sep-09	Oct-10	Oct-10	Nov-11	Nov-11	Oct-12	Oct-12	Oct-13	Oct-13	Oct-14	Sep-14
1,2,3,4-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
1,2,4,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
1,3,5-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
1,2,4-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
1,2,3-Trichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
1,2,3,5-Tetrachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 UJ	<1.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5 J	<0.5 J	<0.94	<0.94	<0.94	<0.94
Pentachlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.5	<0.5	<0.94	<0.94	<0.94	<0.94
Aroclor 1260	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.26	<0.26	<0.26	<0.26	<0.031	<0.031	<0.032	<0.032

All concentrations are in ug/L

Shaded values represent concentrations above the detection limit.

* = Concentrations of 1,2,3,4-tetrachlorobenzene were deemed unreliable since traces of the compound were detected in all other samples, including the equipment blank and the laboratory method blanks (March 1994).

** = 1,2,3,5 and 1,2,4,5-tetrachloorbenzene co-elute and were reported together beginning in November 2011 and October 2012.

J = Quantitation is approximate due to limitations identified in the quality control review

UJ = Sample-specific detection limit is approximate

FIGURES

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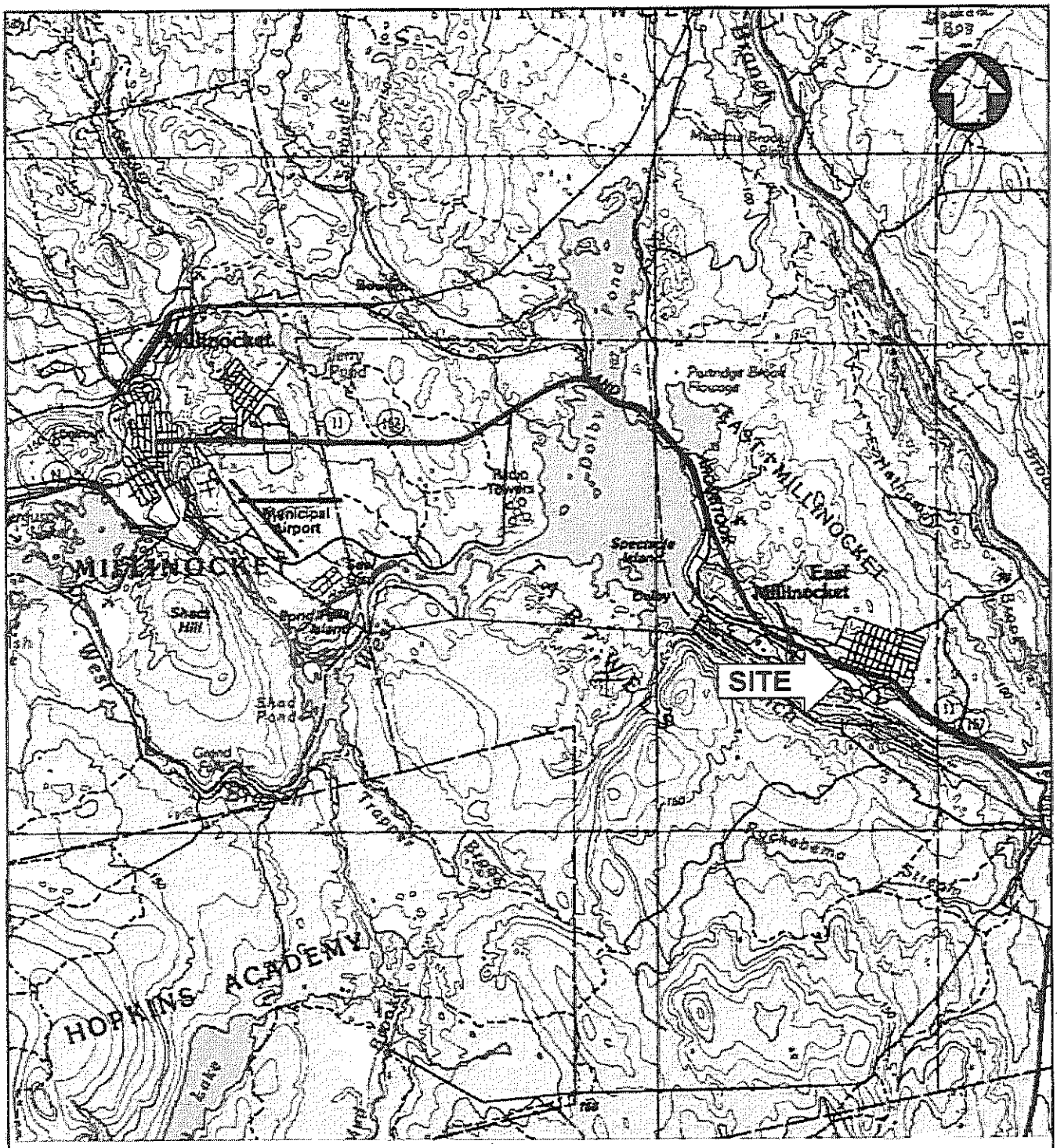

SOURCE: MAP PASS. MAINE, MILLINOCKET, 1992

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EAST MILLINOCKET, MAINE

PROJECT NO. 02.20090024

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SITE LOCATION MAP

DRAWN:	CHECKED:	DATE:	FIGURE:
SSW	AGL	JUNE 2015	1

FILENAME: east millocation.dwg

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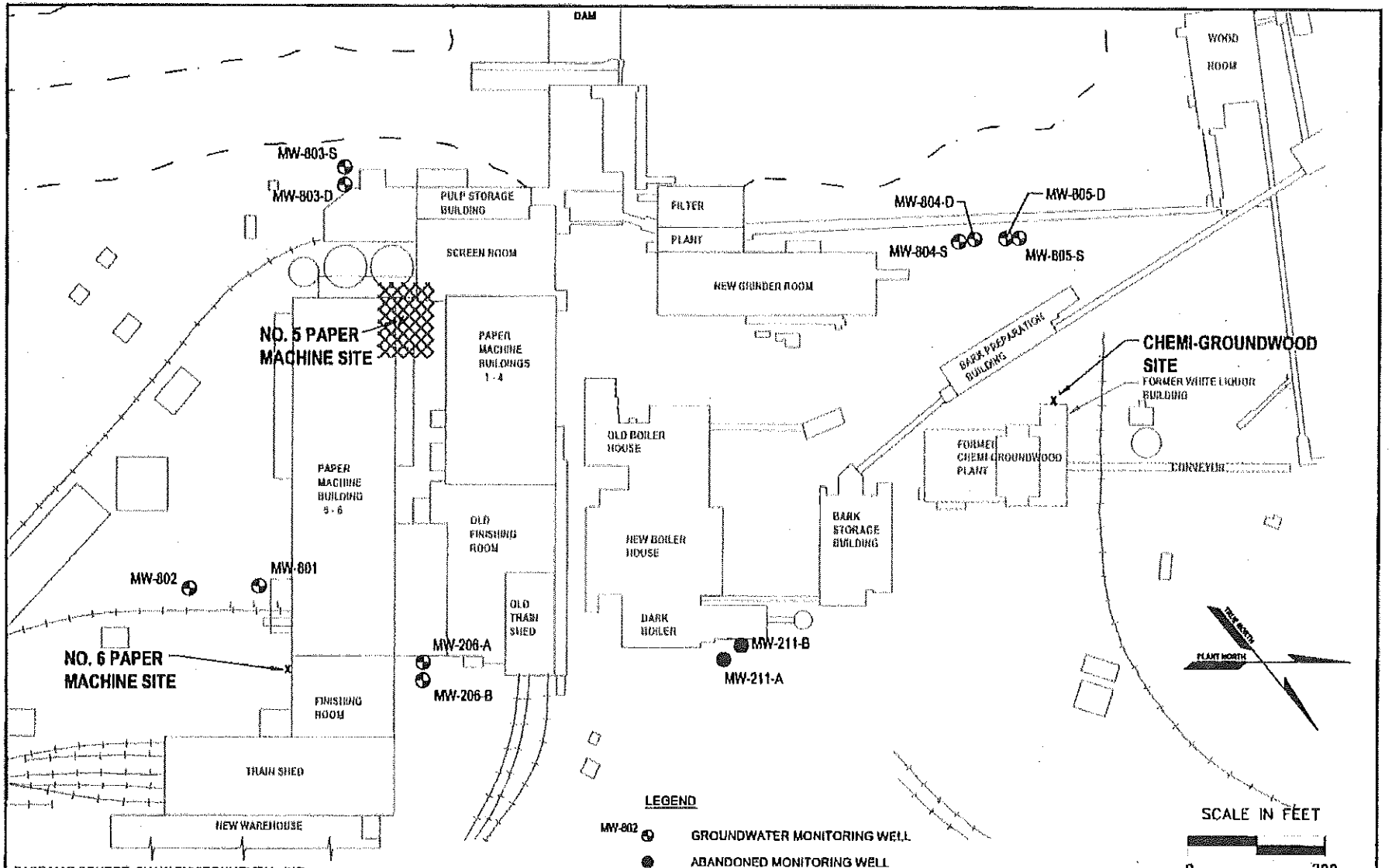

BASE MAP SOURCE: SHAW ENVIRONMENTAL, INC.

FILENAME: 30624 - POT MAP DC720125.DWG

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EAST MILLINOCKET SITE LAYOUT

DRAWN:	CHECKED:	DATE:	FIGURE:
SSW	AGL	JUNE 2015	2

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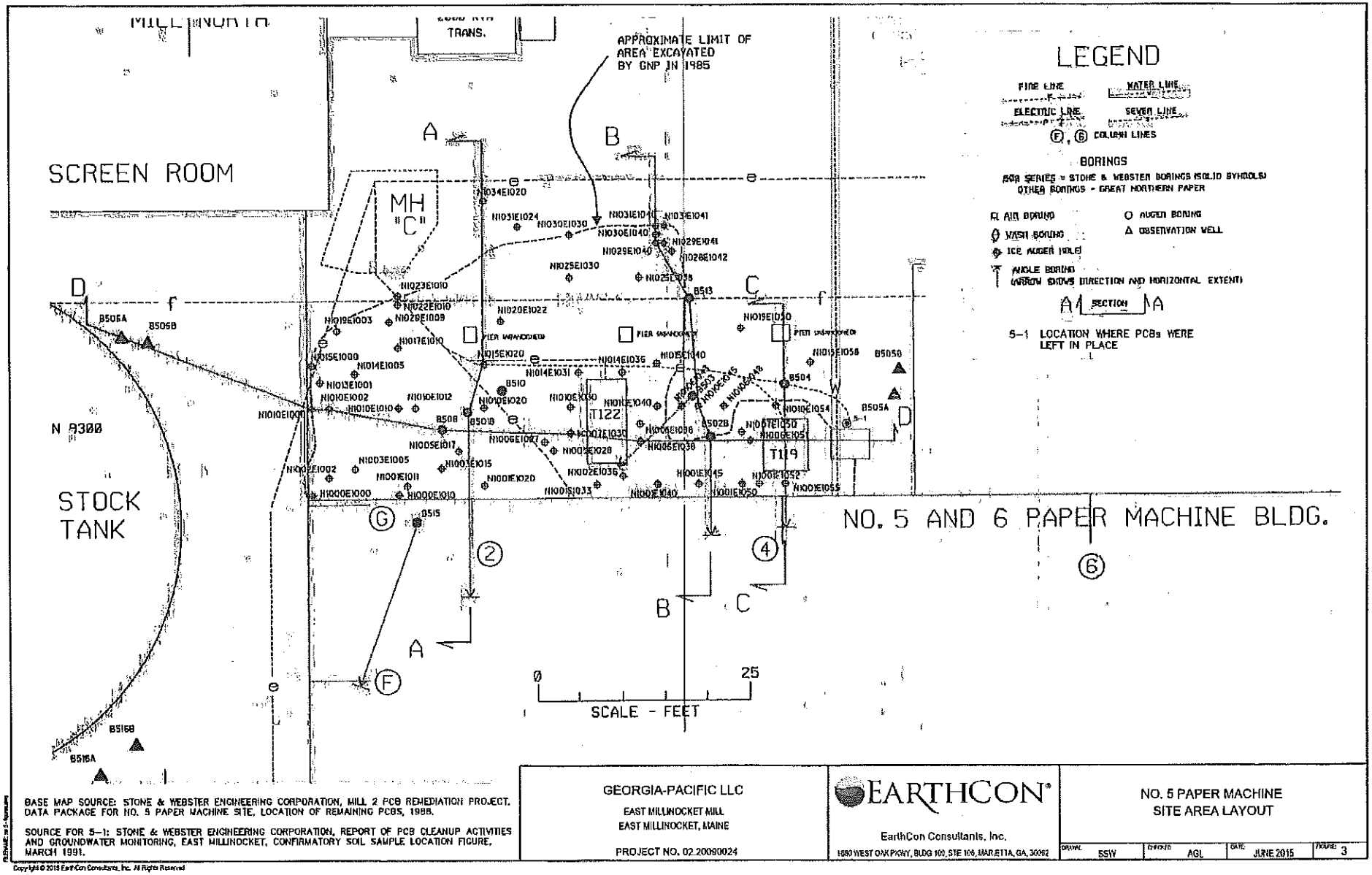

BASE MAP SOURCE: STONE & WEBSTER ENGINEERING CORPORATION, MILL 2 PCB REMEDIATION PROJECT. DATA PACKAGE FOR NO. 5 PAPER MACHINE SITE, LOCATION OF REMAINING PCBS, 1988.

SOURCE FOR 5-1: STONE & WEBSTER ENGINEERING CORPORATION, REPORT OF PCB CLEANUP ACTIVITIES AND GROUNDWATER MONITORING, EAST MILLINOCKET, CONFIRMATORY SOIL SAMPLE LOCATION FIGURE, MARCH 1991.

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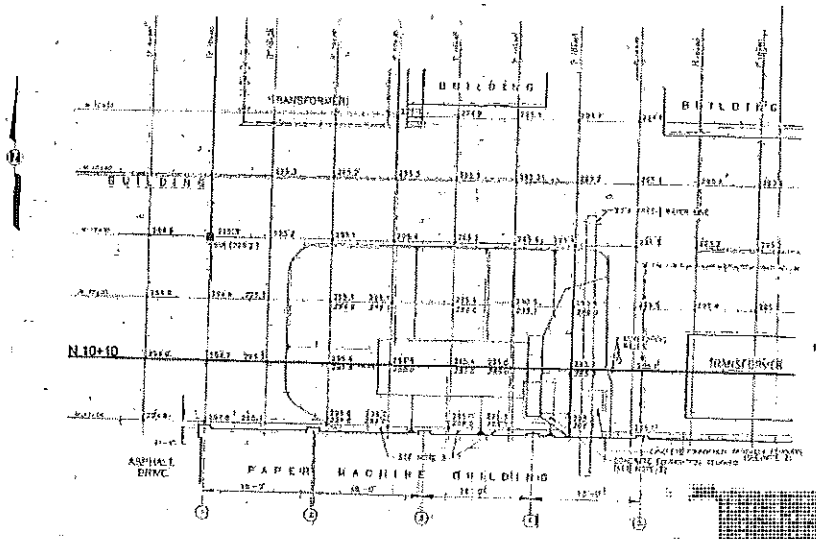
NO. 5 PAPER MACHINE
SITE AREA LAYOUT

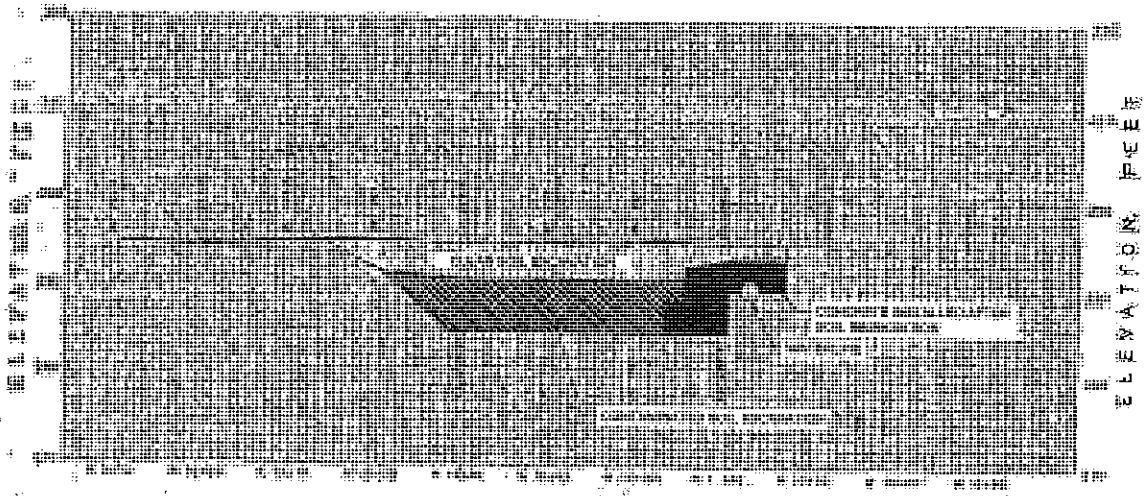
DRAWN	CHECKED	DATE	FIGURE
SSW	AGL	JUNE 2015	3



CLEAN SOIL EXCAVATION

CONTAMINATED SOIL EXCAVATION

CONCRETE INSTALLED AFTER EXCAVATION



SECTION N 10+10

SOURCE: REPORT OF PCB CLEANUP ACTIVITIES AND GROUNDWATER MONITORING, APPENDIX K. MARCH 1991. STONE AND WEBSTER ENGINEERING CORPORATION.

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WATERLINE LOCATION AND CROSS SECTION

DRAWN	CHECKED	DATE	FIGURE
SSW	AGL	JUNE 2015	4

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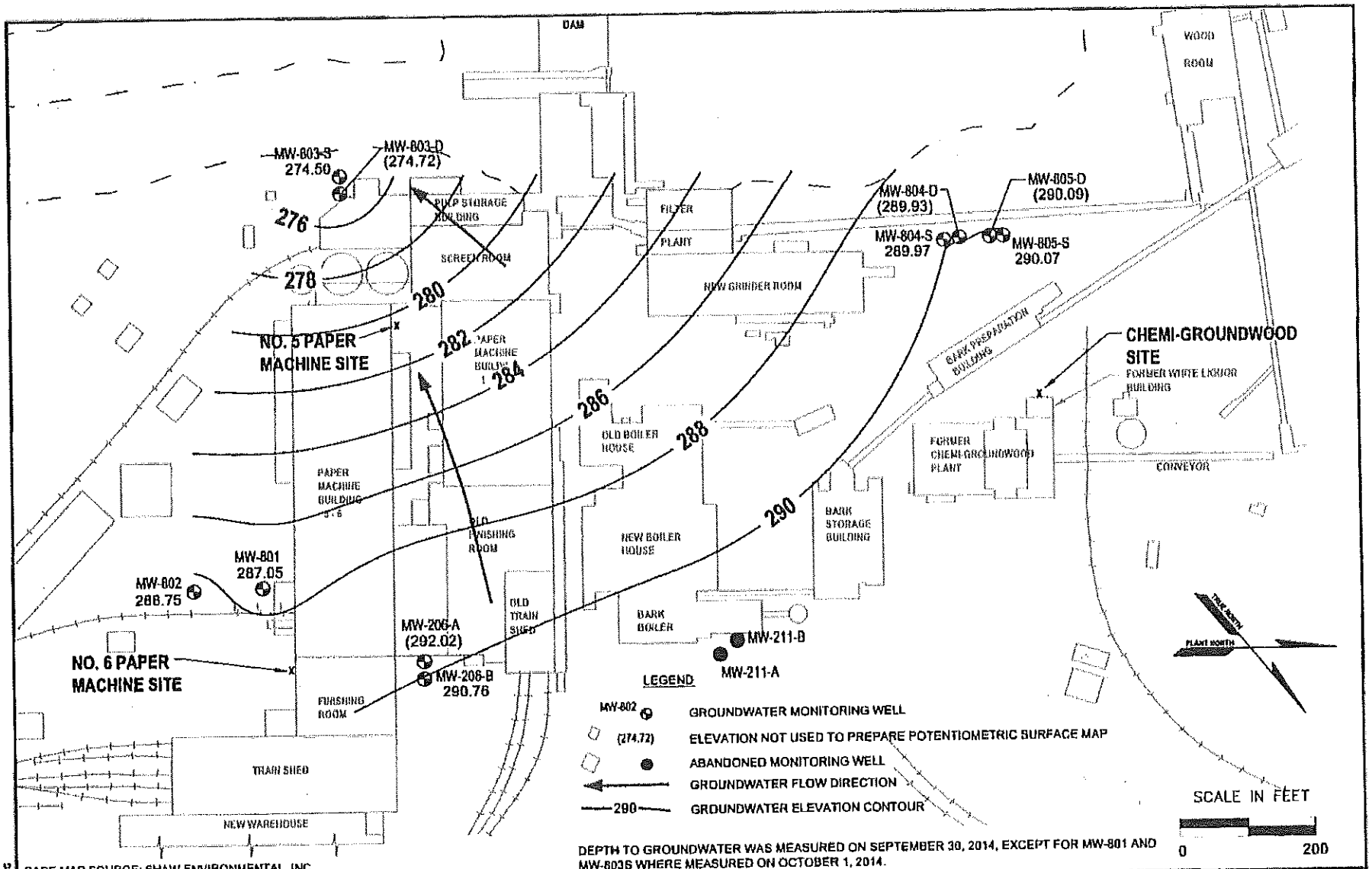

BASE MAP SOURCE: SHAW ENVIRONMENTAL, INC.

DEPTH TO GROUNDWATER WAS MEASURED ON SEPTEMBER 30, 2014, EXCEPT FOR MW-801 AND MW-803S WHERE MEASURED ON OCTOBER 1, 2014.

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POTENTIOMETRIC SURFACE MAP OCTOBER 2014

DRAWN:	CHECKED:	DATE:	FIGURE:
SSW	AGL	JUNE 2015	5

FILENAME: 20024 - POT MAP OCT2014.DWG

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Green, Pamela D

From: Green, Pamela D
Sent: Thursday, August 27, 2015 10:54 AM
To: 'Milette, Marianne'
Subject: RE: Great Northern, East Millinocket

Dear Ms. Milette:

I am writing with regard to the August 26, 2015 "Data Review of the No. 5 Paper Machine Site" (Data Review) for the Great Northern/Georgia Pacific (GN/GP) site in East Millinocket. I am also following up on our discussion earlier this year that discontinuing the groundwater (GW) monitoring program would not be allowed unless PCBs are addressed. It appears that GN/GP proposes to discontinue the GW program at MW-803S and MW-803D based on a review of data. I have the following comments/questions:

1. The Data Review suggests that PCB concentrations at transformers T-119 and T-122 are above the water table but these estimations seem very close (284.2' and 284.7' elevation) to the interpreted GW elevation for that area of 280-284'.
2. Does asphalt serve as a cap? Will GN/GP need to submit an inspection report and schedule to assess continued integrity of the asphalt cap near the transformers and conditions of the concrete cap over the water line?
3. The Data Review reports there have been no PCB detections at MW-803S and MW-803D. These wells appear to be about 200' downgradient of the spill location at No. 5 Paper Machine but I wonder if the complex of buildings might alter the groundwater flow so that these two wells may not capture PCB concentrations. On March 18, 2015 I suggested that GN/GP might want to consider the position of wells to ensure enough data to support completion of the groundwater program, or a cessation of a portion thereof as proposed here. The Data Review does not discuss the position of MW-803S and MW-803D as providing enough or appropriate data for this discussion.
4. If the No. 5 Paper Machine building is demolished in the future, or when the transformers are taken out of service, is there a plan to excavate more soils and investigate closer to or beneath the building?
5. When will EPA make a determination on the proposed recommendations to cease the groundwater monitoring program at MW-803D and MW-803S (typo in the Data Review recommendation)?

I will wait to respond to Georgia Pacific after I receive a response from you to my comments/questions. I will be out of the office all day next week on Tuesday and Wednesday but otherwise available if you want to talk about this by telephone, although an email response will be sufficient.

Sincerely,

Pam Davis Green, Project Manager
Hazardous Waste Licensing Unit
Maine Department of Environmental Protection
207-287-7880

From: Milette, Marianne [mailto:milette.marianne@epa.gov]
Sent: Wednesday, March 18, 2015 8:09 AM
To: Green, Pamela D
Subject: RE: Great Northern, East Millinocket

Thanks for sending this. EPA has no comments.

Please be aware that EPA could not allow for the discontinuation of GW monitoring unless the PCBs remaining at the site are addressed.

From: Green, Pamela D [mailto:Pamela.D.Green@maine.gov]
Sent: Tuesday, March 17, 2015 11:43 AM
To: Milette, Marianne
Subject: Great Northern, East Millinocket

Dear Ms. Milette:

I recently reviewed a copy of the 2014 Annual Report of Sampling and Testing, Post-Remediation Monitoring Program dated December 10, 2014 for the Great Northern Paper Operations in East Millinocket. Attached is a draft letter to Great Northern (Georgia Pacific) for your review. Please let me know if you want to discuss my comments before I send them out to Great Northern.

Sincerely,

Pamela Davis Green, Environmental Specialist III
Division of Oil and Hazardous Waste Facilities Regulation
Bureau of Remediation and Waste Management
Maine Department of Environmental Protection
17 State House Station
Augusta, ME 04333-0017

207-287-7880 phone
207-287-7826 fax
pamela.d.green@maine.gov

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Georgia-Pacific LLC

133 Peachtree Street NE (30303-1847)
P.O. Box 105605
Atlanta, Georgia 30348-5605
(404) 652-4863 (404) 654-4701 fax

December 30, 2015

Ms. Marianne Millette
USEPA, Region 1
5 Post Office Square - Suite 100
Mail Code OES05-4
Boston, MA 02109-3912

Subject: **2015 Annual Report of Sampling and Testing**
Post-Remediation Groundwater Monitoring Program
East Millinocket Operations of Great Northern Paper Company
Georgia-Pacific LLC

Dear Ms. Millette:

Georgia-Pacific LLC (GP) is submitting the annual groundwater monitoring report for the groundwater sampling at the East Millinocket Operation of Great Northern Paper Company (formerly Katahdin Paper Company). The sampling and analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan*, in compliance with USEPA Consent Agreement TSCA-I-87-1041 dated September 27, 1991 and the EPA letters, dated September 7, 2006; January 13, 2011; and September 22, 2011.

The enclosed report presents the results of the analytical testing, quality assurance/quality control, and the field sampling information. Polychlorinated biphenyls (PCBs) and chlorobenzenes were not detected above the reporting limit in any of the groundwater samples.

In a letter dated March 18, 2015, Pamela Davis Green of the Maine Department of Environmental Protection (MEDEP) provided comments to GP's 2014 Annual Report of Sampling and Testing. Provided below are Ms. Green's comments along with GP's responses.

MEDEP Comment #1: Data reports indicate low recovery of the surrogate tetrachloro-m-xylene. Data has been qualified.

GP Response to Comment #1: *Comment noted.*

MEDEP Comment #2: The laboratory is not certified for the following compounds for Method 8270C: 1,2,3-trichlorobenzene; 1,3,5-trichlorobenzene; 1,2,3,4-tetrachlorobenzene. Last year I commented that analysis must be conducted by a laboratory certified by Maine for the method.

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This applies to all analyses by all methods for all samples collected in Maine. Data has been qualified.

GP Response to Comment #2: *Analyses for chlorobenzenes are performed in accordance with GP's 1992 Groundwater Monitoring Plan (GMP) using approved EPA SW-846 certified methods to the required detection limit of 1 ug/L. When practical, GP has used a Maine-certified laboratory to perform the chlorobenzene analyses. However, over the past several years, there were select chlorobenzenes that no laboratory was certified by Maine to analyze. For instance, in September 2014, EarthCon's Stephanie Williams contacted MEDEP's Pamela Green for assistance in identifying a laboratory certified by Maine to analyze 1,2,3,4-tetrachlorobenzene and 1,2,3,5-tetrachlorobenzene as the MEDEP website did not identify a certified laboratory. Ms. Green concurred with this observation and approved the use of Katahdin Laboratory to analyze for chlorobenzenes. In 2015, there were no laboratories certified by Maine to analyze for 1,2,3,4-tetrachlorobenzene. GP has made a reasonable effort to comply with MEDEP's requirement that all analyses by all methods for all samples be conducted by a laboratory certified by the State of Maine for that analysis and will continue to do so. Analyses for chlorobenzenes have been and will continue to be performed using a laboratory that uses EPA SW-846 certified methods to the required detection limits.*

It should be noted that chlorobenzenes have not been detected in groundwater at the East Millinocket Site since September 2006. Prior to 2006, chlorobenzenes were detected in samples collected from one location, well MW-804S, at concentrations below their respective groundwater protection standards. The analytical data indicate that chlorobenzenes are no longer present in groundwater at the Site. GP is proposing the removal of chlorobenzene analyses from the groundwater monitoring program.

MEDEP Comment #3: There was a discrepancy with last year's pool elevation, and this year's report states that readings from that station are no longer available. Please provide an explanation for the lack of data.

GP Response to Comment #3: *With the closure of the plant, the plant contact previously available to provide the pool elevation and flow of the Penobscot River at the East Millinocket dam was no longer available. An alternate contact has since been found and the pool elevation and flow data are now available.*

General Comment: In accordance with TSCA-I-87-1041, Great Northern must implement the approved long-term groundwater monitoring plan which was last revised in April 1992, and is

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approaching its 25-year mark. Since 2006 the groundwater monitoring program has been modified, with approval, to reduce the frequency of sampling from quarterly to annually, discontinue sampling in four wells and adjust sampling due to well damage. At this time the long-term monitoring endpoint is unclear. Great Northern may want to consider the number of wells and well positions in relation to the three downgradient spill sites to ensure that enough data will be available to support completion of the groundwater monitoring program. However, please be aware that EPA informs me that they could not allow for the discontinuation of groundwater monitoring unless the PCBs remaining at the site are addressed.

GP Response to General Comment: *GP is in the process of providing information to EPA to substantiate the request to cease groundwater monitoring at the East Millinocket Site. On August 26, 2015, GP provided EPA and MEDEP with the Data Review of the No. 5 Paper Machine Area, one of three areas at the Site that require groundwater monitoring. It is GP's intention to prepare similar data reviews for the remaining two areas.*

The Data Review, which included an evaluation of historical soil and groundwater data in the No. 5 Paper Machine Area, presented the following conclusions:

- *PCBs were left in place at three locations in the No. 5 Paper Machine Site at reported concentrations less than 100 mg/kg;*
- *One of the three locations where PCBs (and chlorobenzene) were left in place was covered with concrete prior to backfilling the excavation and all three locations were paved after completion of the remedial activities.*
- *The soils containing PCBs that were left in place are located at depths above the current water table;*
- *Chlorobenzenes were left in place at only one location, at a concentration of 4.5 mg/kg, which is significantly lower than the industrial RSL of 130 mg/kg.*

Based on this information, GP recommended cessation of groundwater monitoring of the two wells (MW-803D and MW-803S) located downgradient of the No. 5 Paper Machine Site. GP recommended that these wells continue to be maintained and used for water level measurements to provide data to prepare future potentiometric surface maps.

GP plans to prepare similar data reviews of the remaining two areas. It is our hope that the information provided in the Data Review documents, along with the historic groundwater monitoring data, will provide EPA and MEDEP with sufficient justification to approve cessation of groundwater monitoring at the Site.

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If you have any questions regarding the report, or the response to MEDEP's comments provided above, please contact me at (404) 652-4863.

Sincerely,

Zachary Melda
Environmental Engineer
Environmental Affairs

cc: Pamela Davis Green, Maine DEP (w/ attachment)
Shawn K. Doil, Perkins Thompson (w/ attachment)
Carol Northern, EarthCon Consultants (w/ attachment)

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2015 ANNUAL REPORT OF SAMPLING AND TESTING POST-REMEDIATION GROUNDWATER MONITORING PROGRAM

at the
East Millinocket Operations
of
Great Northern Paper Company
East Millinocket, Maine

Prepared for
GEORGIA-PACIFIC LLC

by

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS ©

December 2015

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Table 3 Groundwater Analytical Data – October 5, 2015
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APPENDICES

Appendix A Tailwater Rating Curve
Appendix B Groundwater Sampling Logs
Appendix C Laboratory Analytical Reports
Appendix D Historical Groundwater Analytical Data
Appendix E Data Validation Summary

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1.0 INTRODUCTION

This report summarizes the results of the annual groundwater sampling and analysis conducted on October 5, 2015 at the East Millinocket Operations of the Great North Paper Company. The sampling and laboratory analyses were performed in accordance with the requirements of the *Post-Remediation Groundwater Monitoring Plan* (Monitoring Plan), revised April 1992, and subsequently modified and accepted by the U.S. Environmental Protection Agency (EPA) – Region 1 on June 21, 1993 and the Maine Department of Environmental Protection (MEDEP) on June 30, 1993. The 2015 annual sampling and analyses were also performed in accordance with EPA letters, dated September 7, 2006; January 13, 2011; and September 22, 2011.

The groundwater monitoring program was initiated to evaluate the concentrations of polychlorinated biphenyls (PCB) and chlorobenzenes in groundwater downgradient of three remediated spill sites at the mill. The three sites are referred to as the No. 5 Paper Machine Site, the No. 6 Paper Machine Site, and the Chemi-Groundwood Site (Figure 1).

This is the sixty-fourth groundwater sampling event conducted since remediation was conducted in 1989 and 1990. Prior to 2007 sampling events were conducted on a quarterly basis. Eight annual sampling events have been conducted since 2007. Twelve monitoring wells (four upgradient and eight downgradient) were included in the original monitoring program conducted from 1993 to 2010. Two upgradient well clusters, consisting of wells 206A and 206B and wells 211A and 211B, and eight downgradient wells, consisting of the 800-series wells, were sampled in the original monitoring program. The locations of the wells are shown on Figure 1. Logs and construction details of the wells were presented in the Monitoring Plan.

In a letter dated December 21, 2010, Georgia-Pacific LLC (GP) requested to discontinue sampling four wells (206-A, 206-B, 805-D, and 805-S) as PCBs and chlorobenzenes had not been detected in the wells since monitoring began. EPA and MEDEP approved this request in a letter dated January 13, 2011. Subsequently, upgradient monitoring wells 211A and 211B were damaged by heavy machinery and rendered unusable. EPA and MEDEP were contacted to request retaining upgradient well cluster 206-A and 206-B in the monitoring well network and abandoning upgradient well cluster 211-A and 211-B. This modification was approved by EPA and MEDEP in a letter dated September 22, 2011 and wells 211A and 211B were abandoned on November 10, 2011.

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Groundwater sampling was conducted on October 5, 2015. Information presented in this report includes sampling methods, analytical methods, field and laboratory test results, quality control results, qualitative assessment of the raw chromatograms, an updated potentiometric surface map and pool elevation on the West Branch of the Penobscot River.

2.0 GROUNDWATER ELEVATIONS

Prior to sampling, the depth to groundwater was measured from the top of casing in each monitoring well and the general condition of each well was noted. Groundwater elevations based on the October 5, 2015 water level measurements are summarized in Table 1. The groundwater elevations from the shallow wells were used to prepare the potentiometric surface map. As shown on Figure 1, the groundwater flow direction is to the south toward the Penobscot River, which is consistent with the historic groundwater flow direction.

The pool elevation was obtained for the West Branch of the Penobscot River upstream of the dam at the mill. An upstream pool elevation of 287.19 feet was recorded on December 3, 2015 at the Millinocket Dispatchers Station. The downstream pool elevation was estimated to be 261.88 feet, based on the turbine discharge flow of 3,238 cubic feet per second (cfs) and the tailwater rating curve from GNP-ER No. 4-8828 (Appendix A).

3.0 GROUNDWATER SAMPLING

The groundwater samples collected on October 5, 2015 were submitted to Pace Analytical Services for PCB analysis and Katahdin Analytical Services for chlorinated benzene analysis.

3.1 Preparation for Sampling

Prior to sampling, groundwater was purged from each well using a peristaltic pump and dedicated polyvinyl chloride (PVC) tubing. The amount of purge water pumped was dependent on the well volume and the stabilization of field parameters. The volume was calculated using the following equation:

$V = \pi r^2(X-D)$ where:

V = Volume (cubic feet)

r = Radius of monitoring well (feet)

X = Total depth of monitoring well (feet)

D = Depth to groundwater (feet)

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The average rate at which water was pumped from each well was adjusted to approximately 0.5 liters per minute or less. This rate was generally held constant throughout the purging procedures.

Pumping rates were also adjusted to reduce drawdown for each well. Maximum drawdowns were based on the initial depth to groundwater reading and the following equation:

$d = 0.20(X-D)$ where:

d = Maximum drawdown (feet)

X = Total depth of monitoring well (feet)

D = Depth to groundwater (feet)

During purging and sampling, the depth to groundwater was periodically monitored and compared to the maximum drawdown depth. In addition, a minimum of four conductivity, pH, turbidity, and temperature readings were obtained during purging. When the most sensitive parameter (typically turbidity) stabilized and a volume of water greater than or equivalent to the well casing volume was removed, a groundwater sample was collected from the well. Identification and calibration of field instruments are discussed in Section 5.1 of this report.

These procedures were followed for each well. Purging details for each well are presented on the Groundwater Sampling Logs in Appendix B, and the final field parameter measurements are summarized in Table 2.

Purge water has historically been placed in the on-site waste water treatment plan (WWTP) for disposal. Due to a recent change in site ownership, the purge water could not be placed in the on-site WWTP; therefore, the purge water was placed in a 55-gallon drum (Drum 1) during the October sampling event. Upon completion of the sampling activities, a water sample was collected from Drum 1 to determine disposal options. The purge water was sampled for PCBs, chlorobenzenes and oil and grease. Results of the analysis were non-detect and GP was granted permission to dispose of the approximately 22 gallons of purge water in the City of East Millinocket's WWTP.

3.2 Sampling

Upon completion of purging, each well was sampled using the peristaltic pump and dedicated tubing. Groundwater samples were collected in 1-liter amber glass containers. A field duplicate

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sample was collected from MW-801 during this sampling event. An equipment blank was not collected as dedicated tubing was used for sampling.

Sample information was entered on adhesive sample identification labels and secured to the sample containers. The containers were placed in insulated coolers and packed with ice and packing material. The coolers were sealed and shipped to Pace Analytical Services in Greensburg, Pennsylvania and hand delivered to Katahdin Analytical Services in Scarborough, Maine. Chain-of-Custody records are provided in Appendix C.

4.0 ANALYTICAL TESTING AND RESULTS

4.1 Analytical Procedures

The groundwater samples for PCBs collected during the October 5, 2015 sampling event were received and logged by Pace Analytical Services on October 9, 2015. Samples to be analyzed for chlorobenzenes were submitted to Katahdin Analytical Services to achieve the project-required quantitation limits. The required detection limits were achieved. The PCB samples were analyzed by USEPA Method 8082 and the chlorinated benzene samples were analyzed by method 8270C for the following compounds:

Chlorobenzenes	PCBs
1,2,3 –trichlorobenzene	Aroclor 1016
1,2,4- trichlorobenzene	Aroclor 1221
1,3,5- trichlorobenzene	Aroclor 1232
1,2,3,4-tetrachlorobenzene	Aroclor 1242
1,2,3,5-tetrachlorobenzene	Aroclor 1248
1,2,4,5-tetrachlorobenzene	Aroclor 1254
Pentachlorobenzene	Aroclor 1260

4.2 Analytical Results

PCBs and chlorobenzenes were not detected in any of the groundwater samples or the purge water sample collected in October 2015. Results of the sample analysis are presented in the laboratory analytical reports included in Appendix C and summarized in Table 3. A historical summary of the data from 1993 through the present is provided in Appendix D.

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PCBs have not been detected in the groundwater since the sampling program was initiated in 1993 with the exceptions of the December 1995 and June 1997 sampling events. The PCB samples were reanalyzed during the December 1995 sampling event due to quality control (QC) targets not being met, and PCBs were not detected in the reanalysis. The PCB detections in June 1997 were also associated with QC targets that were not achieved. Subsequent PCB sampling conducted in August 1997 did not indicate the presence of PCBs in groundwater.

Chlorobenzenes were not detected in the groundwater samples collected in October 2015. Chlorobenzenes have not been detected in groundwater samples collected from the Site since 2006.

5.0 QUALITY CONTROL

5.1 Field Quality Control

Field quality control samples (one field duplicate designated GWD) were collected on October 5, 2015. The target sampling precision goal identified in the Monitoring Plan, revised April 1992, is less than 30 percent and the goal for the field equipment rinsate blank is less than 0.5 mg/L. Results of groundwater sample MW-801 and its duplicate, GWD, were below the quantitation limits indicating acceptable sampling precision. Results of the field duplicate sample met the target goals identified for this project. A field equipment rinsate blank was not collected during the October 2015 sampling event because dedicated equipment was used to collect the samples.

Calibration details and instrument identification data for the field instruments are presented in the Field Instrument Calibration Daily Operation Logs provided in Appendix B. The laboratory analytical reports including the results for the field QC samples are included in Appendix C.

5.2 Laboratory Quality Control

Laboratory quality control, including an evaluation of the PCB chromatograms, is summarized in the data validation narrative provided as Appendix E. The target laboratory accuracy goal identified in the Monitoring Plan, revised April 1992, is 60 to 120 and the target precision goal is less than 20. Matrix spike and laboratory control sample recovery values were compared to the 60 to 120 percent target to assess accuracy. The relative percent difference (RPD) between matrix duplicate results was compared to the 20 percent target to assess precision.

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Laboratory control samples were analyzed with the October 2015 chlorinated benzene and PCB samples to assess method accuracy. The QC target for accuracy of the matrix spike and the laboratory control samples is 60 to 120 percent. Although the recovery value for Aroclor-1232 and 1,2,4,5 tetrachlorobenzene were below the projected target QC limits, the results were not qualified as the excursion was slight and the recovery values were within the laboratory QC limits. Table 4 presents a summary of the percent recovery achieved for each analyte. Because the analytical results for these compounds are consistent with historical data, which are non-detect, the data are not considered to be impacted and are usable as reported.

Additional information regarding the accuracy of the data is presented in the data validation summary provided as Appendix E. The matrix spike and laboratory control sample results are provided in Appendix C.

6.0 CORRECTIVE ACTION

Corrective actions due to laboratory quality control for data collected during the October 2015 sampling event were not required.

7.0 SITE CLOSURE

The Consent Agreement and Final Order (CAFO) (EPA Docket No. TSCA-I-87-1041) indicates that the parties agreed to a "degree of cleanup of PCBs released". The CAFO allows for elevated concentrations of PCBs and chlorobenzenes to remain on the Site as long as a groundwater monitoring plan was developed and implemented to monitor the potential for off-site migration. The Post-Remediation Groundwater Monitoring Plan, revised in April 1992, was approved by EPA Region 1 and the MEDEP. Groundwater monitoring has been conducted at the Site in accordance with the Monitoring Plan and USEPA/MEDEP approved modifications since 1993.

8.0 CONCLUSIONS

Chlorobenzenes have not been detected in groundwater at the East Millinocket Site since September 2006. Prior to 2006, chlorobenzenes were detected in samples collected from one location, well MW-804S, at concentrations below their respective groundwater protection standards. The analytical data indicates that chlorobenzenes are no longer present in groundwater at the Site; therefore, GP is requesting the removal of chlorobenzene analyses from the groundwater monitoring program.

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On August 26, 2015, GP provided EPA and MDEP with the *Data Review of the No. 5 Paper Machine Area*, one of three areas at the Site that require groundwater monitoring. The Data Review, which included an evaluation of historical soil and groundwater data in the No. 5 Paper Machine Area, presented the following conclusions:

- PCBs were left in place at three locations in the No. 5 Paper Machine Site at reported concentrations less than 100 mg/kg;
- One of the three locations where PCBs (and chlorobenzene) were left in place was covered with concrete prior to backfilling the excavation and all three locations were paved after completion of the remedial activities.
- The soils containing PCBs that were left in place are located at depths above the current water table;
- Chlorobenzenes were left in place at only one location, at a concentration of 4.5 mg/kg, which is significantly lower than the industrial RSL of 130 mg/kg.

Based on this information, GP recommends cessation of groundwater monitoring of the two wells (MW-803D and MW-803S) located downgradient of the No. 5 Paper Machine Site. GP also recommends that these wells continue to be maintained and used for water level measurements to provide data to prepare future potentiometric surface maps.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
BOSTON, MA 02109-3912

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

NOV 2 5 2015

Zachary Melda
Environmental Affairs
Georgia-Pacific, LLC
133 Peachtree Street NE 30303-1847
P.O. Box 105605
Atlanta, Georgia 30348-5605

RE: August 2015 Data Review of the No. 5 Paper Machine Site for the Groundwater Monitoring Program at the Great Northern Paper Company (former Katahdin Paper Mill) in East Millinocket, Maine. EPA Docket No. TSCA-I-87-1041.

Dear Mr. Melda:

We have reviewed the August 26, 2015 *Data Review of the No. 5 Paper Machine Area* for the Great Northern Paper Company site in East Millinocket, ME ("August 2015 submittal") submitted to EPA Region 1 ("EPA"). In summary, Georgia-Pacific LLC ("GP") has requested modification to the current groundwater monitoring program ("GWMP"), specifically cessation of groundwater monitoring of wells MW-803S and MW-803D. However, these wells would continue to be maintained and used for water level measurements and to provide data to prepare future potentiometric surface maps.

The Consent Agreement and Final Order, EPA Docket No.TSCA-I-87-1041 ("CAFO"), allowed for elevated levels of PCBs and chlorobenzene contamination to remain at the site, with the condition that a GWMP be developed and implemented to monitor for any off-site migration of PCBs or chlorobenzene. The GWMP allows GP to submit to EPA and the MEDEP a report for review of the site's status, including a justification for any proposed change to the GWMP. The most recent modification to the GWMP was approved by EPA and the Maine Department of Environmental Protection ("MEDEP") in September 2011.

In this August 2015 submittal, GP's justification for cessation of monitoring at these two wells is that no detectable PCBs had been identified in these wells since August 1993 and that the PCB contamination in the soil was "above the groundwater table". EPA's review of the elevation information for the PCB concentrations at transformers T122 and T119 indicates that the estimations (284.2 feet ("ft") and 284.7ft elevations) are very close to the interpreted GW elevation of 280ft to 284ft for that area of the site.

MW-803S and MW-803D are located approximately 200 feet downgradient of the No. 5 Paper Machine area. In its letter to GP dated March 18, 2015, the MEDEP provided comments on the 2014 annual groundwater monitoring report and also suggested that GP consider the position of wells to ensure enough data to support completion of the groundwater program, or a cessation of a portion thereof as proposed here. Based on EPA's discussion with MEDEP, it appears that GP's response to MEDEP comments is outstanding. Further, the August 2015 submittal did not discuss the position of MW-803S and MW-803D as providing enough or appropriate data for this current proposed modification.

EPA has conferred with the MEDEP regarding the proposed modification to the GWMP contained within the August 2015 submittal and, based upon the information provided and a review of the existing monitoring well data, EPA is not in agreement with GP's request to cease groundwater monitoring at MW-803S and MW-803D at this point.

Should you have any questions about this matter, please contact Marianne Milette at (617) 918-1854 or Kimberly Tisa at (617) 918-1527.

Sincerely,

Sharon Hayes, Manager
Toxics and Pesticides Unit
Office of Environmental Stewardship

cc: Pam Green, MEDEP
Alison Levinson, EarthCon
File

Green, Pamela D

From: Green, Pamela D
Sent: Thursday, August 27, 2015 10:05 AM
To: Ladner, Stacy A
Subject: FW: Georgia-Pacific's Data Review of the No. 5 Paper Machine Area, East Millinocket Operations of Great Northern Paper Company
Attachments: No 5 Paper Machine Site Data Review FINAL.pdf

Stacy,

Per discussion with EPA (Marianne Milette and Kim Tisa), Georgia Pacific recommends cessation of GW monitoring at MW-803D and MW-803D (should be MW-803S) downgradient of No. 5 Paper Machine, but maintain the wells to use for water level measurements.

My comments:
The left-in-place PCBs are above the water table but only by 0.2 and 0.7 feet near the transformers and No. 5 Paper Machine building.
Typo on the wells to be removed from the GW program
Soils will need to be excavated if/when No. 5 Paper Machine building is demolished or when T-119 and/or T-122 are taken out of service with additional investigation of soils

Anything else?

Thanks,
Pam

From: Alison Levinson [mailto:alevinson@earthcon.com]
Sent: Wednesday, August 26, 2015 4:11 PM
To: Milette, Marianne
Cc: Zachary A. Melda; Tisa, Kimberly; Green, Pamela D; Shawn Doil; Carol Northern
Subject: Georgia-Pacific's Data Review of the No. 5 Paper Machine Area, East Millinocket Operations of Great Northern Paper Company

Marianne,
We have completed our data review of the No. 5 Paper Machine Area of Georgia-Pacific's East Millinocket Operations of the Great Northern Paper Company site located in East Millinocket, Maine. This review was conducted as a result of the April 23, 2015 telephone conversation between you, Kim Tisa (EPA), Carol Northern (EarthCon) and myself. A pdf of the review is attached and a hard copy has been mailed to your office.

If you have any questions, need additional information, or would like to discuss this data review, please feel free to contact either Carol or me at (770)973-2100.
Thank you,
Alison

Alison Levinson, P.G.
EarthCon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, Georgia, 30062
Office: 770-973-2100 ext. 2856

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STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

March 18, 2015

Michael Hassett, P.E.
Georgia-Pacific LLC
133 Peachtree Street NE
P.O. Box 105605
Atlanta, Georgia 30348-5605

RE: **2014 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program dated December 10, 2014**
East Millinocket Operations of Great Northern Paper Company
Georgia-Pacific

Dear Mr. Hassett:

The Maine Department of Environmental Protection (MEDEP) reviewed the 2014 annual groundwater monitoring report referenced above (2014 Report). The sampling and analyses appear to have been performed in accordance with the Post-Remediation Groundwater Monitoring Plan, EPA Consent Agreement TSCA-I-87-1041, and EPA letters as noted in the 2014 Report.

Last year you responded to my comments on the 2013 annual report, and I want to thank you for addressing those comments so that this year's 2014 Report includes all Aroclor results in summary tables, reports data to the Practical Quantitation Limit, and provides data in an Electronic Data Deliverable format. We had suggested using a no-purge sampling technique which you considered but declined. After reviewing the 2014 Report I offer the following comments:

- Data reports indicate low recovery of the surrogate tetrachloro-m-xylene. Data has been qualified.
- The laboratory is not certified for the following compounds for Method 8270C: 1,2,3-trichlorobenzene; 1,3,5-trichlorobenzene; 1,2,3,4-tetrachlorobenzene). Last year I commented that analysis must be conducted by a laboratory certified by Maine for the method. This applies to all analyses by all methods for all samples collected in Maine. Data has been qualified.
- There was a discrepancy with last year's pool elevation, and this year's report states that readings from that station are no longer available. Please provide an explanation for the lack of data.

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In accordance with TSCA-I-87-1041, Great Northern must implement the approved long-term groundwater monitoring plan which was last revised in April 1992, and is approaching its 25-year mark. Since 2006 the groundwater monitoring program has been modified, with approval, to reduce the frequency of sampling from quarterly to annually, discontinue sampling in four wells, and adjust sampling due to well damage. At this time the long-term monitoring endpoint is unclear. Great Northern may want to consider the number of wells and well positions in relation to the three downgradient spill sites to ensure that enough data will be available to support completion of the groundwater monitoring program. However, please be aware that EPA informs me that they could not allow for the discontinuation of groundwater monitoring unless the PCBs remaining at the site are addressed.

You may contact me by email at Pamela.d.green@maine.gov or by telephone at 207-287-7880 discuss the matter further.

Sincerely,

Pamela Davis Green

Pamela Davis Green, Project Manager
Bureau of Remediation and Waste Management

Pc: Marianne Milette, USEPA
Stacy Ladner, MEDEP
Rob Peale, MEDEP
Zack Melda, GP
Alison Levinson, EarthCon

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April 22, 2015

Ms. Marianne Milette
USEPA, Region 1
5 Post Office Square - Suite 100
Mail Code OES05-4
Boston, MA 02109-3912

Subject: **Post-Remediation Groundwater Monitoring Program**
East Millinocket Operations of Great Northern Paper (Mill 2)
Main Street, East Millinocket, Maine
Georgia-Pacific LLC

Dear Ms. Milette:

EarthCon Consultants, Inc., on behalf of Georgia-Pacific LLC (GP), would like to thank you for working with us to determine the status of the groundwater monitoring program at the East Millinocket Operations of Great Northern Paper Company (Mill 2) Site located on Main Street in East Millinocket, Maine. We thought it might be helpful to provide you with a summary of the information we have been able to compile during our review of available documents and data which, in turn, might help in your review of the site files.

GP has been conducting groundwater monitoring at the East Millinocket Mill 2 Site since 1993, in accordance with the Consent Agreement and Final Order (CAFO) EPA Docket No. TSCA-I-87-1041 dated 1988. The CAFO allowed for elevated levels of PCBs and chlorobenzenes to remain in soil at the site with the condition that a groundwater monitoring plan be developed and implemented, to monitor for the presence of PCBs and chlorobenzenes in groundwater downgradient from the three spill sites that had previously been remediated as part of the Mill 2 Remediation Project. The three sites include the No. 5 Paper Machine site, the No. 6 Paper Machine site, and the Chemi-Groundwood site. The Post-Remediation Groundwater Monitoring Plan (Plan), revised April 1992, which was approved by EPA Region I (EPA) and the Maine Department of Environmental Protection (MEDEP), allowed GP to submit to EPA and MEDEP a report for review of the East Millinocket Mill 2 Site status with justification for any reduction in "frequency" of sampling after a five year period of time.

As documented in the annual groundwater monitoring reports for the East Millinocket Mill 2 Site, low levels of chlorobenzenes were detected in several of the groundwater monitoring

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wells up through 2006. However, since 2006, chlorobenzenes have not been detected in groundwater. Additionally, PCB's have not been detected in groundwater since monitoring began in 1993.

Several requests for cessation of groundwater monitoring at the East Millinocket Mill 2 Site have been made. On August 21, 2006, GP made the first request to EPA. This request was based on the historical results of the extensive groundwater monitoring performed at the East Millinocket Mill 2 Site since 1993. EPA denied this request in a letter dated December 18, 2006. In that letter, EPA cited *"PCB concentrations up to 1,800 ppm, or greater, remain at the Site"* as the rationale for the denial.

On November 25, 2009, GP again made a request to cease groundwater sampling at the East Millinocket Mill 2 Site. In a letter dated December 16, 2009, EPA denied this request stating, *"Given that PCB concentrations up to 1,800 parts per million (ppm) or greater remain at the Site, EPA does not agree that groundwater monitoring can be totally eliminated and the site closed."*

A review of the remediation documents associated with the East Millinocket Mill 2 Site failed to identify the location of the 1,800 ppm PCB concentrations cited in these letters. With your assistance, we obtained a copy of the Great Northern Paper Company, Millinocket, Maine, T-160 PCB Cleanup Remedial Activities Report, dated April 1990. This report documents the presence of PCB concentrations up to 1,800 ppm or greater in soils that EPA cited as the reason groundwater monitoring must continue at the East Millinocket Mill 2 Site. However, the T-160 PCB Cleanup Remedial Activities Report documents PCB cleanup activities associated with the Great Northern Nekoosa Mill 1 Site located on Katahdin Avenue in Millinocket, Maine not the Great Northern Paper Company Mill 2 Site located on Main Street in East Millinocket, Maine. It appears that, at some point in the past, these two sites, which are located in two different towns and over six miles apart, were confused with each other. The 1,800 ppm PCB concentrations cited as rationale for continued groundwater monitoring at the East Millinocket Mill 2 Site are not, in fact, related to our site.

Extensive groundwater monitoring has been conducted at the East Millinocket Mill 2 Site over the past 22 years with non-detect groundwater quality results recorded for the past 9 years. In light of the recent findings which indicate the confusion of the remaining PCB concentrations at the Millinocket Mill 1 Site with the East Millinocket Mill 2 Site, along with the results of the extensive groundwater monitoring data, we believe GP has met the conditions of the CAFO for the East Millinocket Mill 2 Site. Therefore, we request that groundwater monitoring cease and the East Millinocket Mill 2 CAFO be terminated.

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If you have any questions, need additional information or would like to discuss this further, please contact Carol Northern at (770)973-2100.

Sincerely,

Alison Levinson
Senior Geologist

Carol D. Northern
Project Principal

cc: Zachary Melda, Georgia-Pacific
Pam Green, Maine DEP
John Civiello, Great Northern Paper Co.
Sherri Harvey, EarthCon Consultants

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TETRA TECH

TECHNICAL MEMORANDUM

To:	**Jim Holmes, Georgia-Pacific**
From:	Gregory W. Council and Thomas J. Nunno
Date:	June 6, 2018
Subject:	PCB Assessment and Remediation at the East Millinocket Site

1.0 INTRODUCTION

Tetra Tech has reviewed letters from the Maine Department of Environmental Protection (MDEP) and the United States Environmental Protection Agency (USEPA) dated May 10, 2018 and May 16, 2018, respectively, regarding the need for Georgia-Pacific (GP) to conduct additional assessment and remediation of polychlorinated biphenyls (PCBs) at the former Great Northern Paper Mill in East Millinocket, Maine (Mill Site). This Mill Site was the subject of a 1991 Consent Agreement and Final Order (CAFO) between GP's former subsidiary Great Northern Nekoosa Corporation (GNNC) and USEPA which specified certain remediation and monitoring obligations of GNNC under the Comprehensive Environmental Response and Liability Act (CERCLA) and the Toxic Substances Control Act (TSCA).

This memorandum presents the case that GP has met its obligations under CERCLA and TSCA, as specified in the CAFO, and that no additional assessment or remediation should be required of GP.

While GP has expressed a willingness to work with the current owner to manage environmental risk if warranted, that would require specific demolition plans that would include excavation areas/depths, utility management, planned final surface finishes, and other details. Absent such details, potential risks due to proposed future site development cannot be determined. A duly recorded deed restriction prohibits excavation in the area affected by PCB spills, without MDEP permission. However, despite this prohibition against excavation, and although no demolition plan has been provided to Tetra Tech, it is assumed herein that the current owner plans to remove the above-grade structures and building slabs. Importantly, as explained below, such actions would not alter the risks posed by PCBs at the Mill Site.

The basis for the conclusion that no additional assessment or remediation should be required of GP is as follows:

1. The PCB cleanup specified in the CAFO was completed. This cleanup was acknowledged in the CAFO itself as well as in a 2003 letter from MDEP that also prohibited excavation in the PCB cleanup areas without MDEP permission.
2. PCB-contaminated soils that remained at the Mill Site after the cleanup were not at the surface immediately underneath the building floors, but were buried at depths that were not (and are not) easily reached; the cleanup actions involved placing substantial clean backfill and cement above these PCB-containing soils to isolate them from potential contact.

One Monarch Drive, Suite 202 | Littleton, MA 01460
Tel 978.952.0123 tetratech.com

3. The groundwater at the Mill Site is not contaminated with PCBs.
4. There are no significant risks to human health or environment related to remaining PCBs at the Mill Site.
5. There is no benefit gained by removing PCB-contaminated soils buried at the Mill Site for disposal elsewhere.

Details of these points are provided below.

2.0 CAFO CLEANUP COMPLETED

The CAFO identifies the PCB cleanup requirements that GNNC was required to carry out, specifically referencing Remediation Plans, Workplans, and Technical Specifications completed by GNNC and submitted to USEPA and MDEP. These documents, identified in the Definitions section (IV) of the CAFO, described excavation of PCB-contaminated soils at three PCB spill locations called: (1) No. 5 Paper Machine Site, (2) No. 6 Paper Machine Site, and (3) Chemi-Groundwood Site (**Figure 1**). The CAFO defines "Cleanup" as implementation of these Plans in accordance with the Specifications. The Plans define "contaminated" soil as soil containing PCB concentrations greater than 50 mg/kg and "clean" soil as soil containing PCB concentrations of 50 mg/kg or less.[1] The Plans did not, however, indicate that all contaminated soil would be removed; rather, some of this soil was to be left in place by design.

By the time the CAFO was executed by USEPA and GNNC in September 1991, the CAFO-specified cleanup activities had already been completed (under USEPA oversight) and documented in a March 1991 Completion Report (*Report of PCB Cleanup Activities and Groundwater Monitoring*, Stone & Webster Engineering Corporation) that was submitted to USEPA and MDEP. The CAFO uses the past tense in Section VI ("Performance of the Cleanup by Great Northern") to describe the cleanup that GNNC "has performed" in accordance with the Plans and Specifications. In that section, GNNC certifies that its sampling and analysis program "has demonstrated cleanup of the soil to the levels provided for in the Remediation Plans and Technical Specification."

In our review of the file, we could find no indication of any objection on the part of USEPA or MDEP (or any other party) to GNNC's claim that these performance standards, as specified in the CAFO via the referenced Plans and Specifications, had been met.

On April 24, 2003, MDEP issued a Voluntary Response Action Plan "no action assurance letter and certificate of completion" to Katahdin Paper Company, LLC (Katahdin) and Fraser Paper Inc. that covered the PCB spills at the Mill Site. Katahdin owned the Mill Site property after GNNC. This 2003 MDEP letter acknowledges that the CAFO-specified PCB cleanup had been completed and approved by USEPA. This letter also explicitly prohibited Katahdin and Fraser and any future property owner from conducting excavation in the three PCB spill areas, without MDEP permission, as a condition of receiving liability protections.

3.0 REMAINING PCBS NOT IMMEDIATELY BELOW BUILDING SLABS

The recent letters from USEPA and MDEP both point to existing or possible future building demolition activities on the part of the current owner of the Mill Site property as the impetus for additional requirements for PCB assessment and remediation. The MDEP states that "removal of these buildings will make accessible PCB contaminated soil from spills that occurred during Georgia Pacific's ownership and operation of the Site."[2] MDEP goes on to indicate its desire to conduct soil removal "should the contaminated soil become accessible." Similarly, the USEPA letter provides concurrence with MDEP's request for soil assessment and removal because

[1] For consistency with the CAFO, this memorandum also uses 50 mg/kg as the threshold for distinguishing "clean" soil from "contaminated" soil.

[2] Though not directly relevant to the technical arguments made in this memo, it is our understanding that the subject spills actually occurred before GP's ownership and operation of the Mill Site, contrary to this statement.

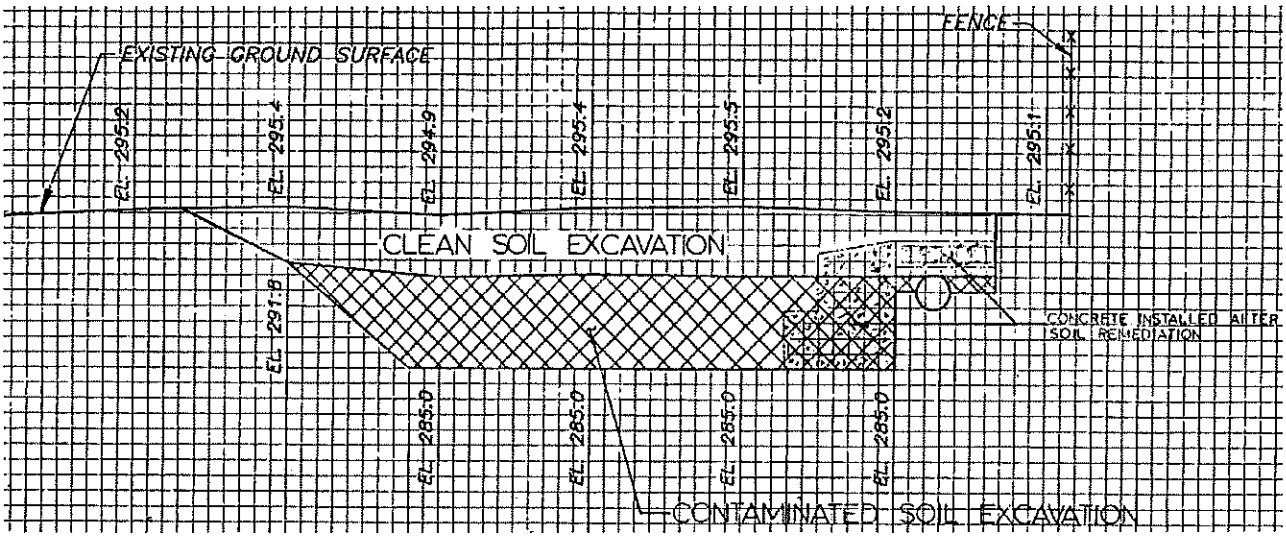
"removal of the buildings alters the risks posed by PCBs on this property because contaminated soils that were once covered become accessible."

The language in these letters suggests a possible inaccuracy in the understanding of the remediation that was conducted by GP in 1989-1991. The letters both suggest that removal of the buildings alone (or including surface slabs) will expose contaminated soil that would have been removed in the prior cleanup had the buildings not been present at that time. While it is true that the earlier cleanup design was constrained by the presence of the buildings and that the presence of the buildings resulted in leaving some contaminated soil in place (by design), it is important to note that these PCB-contaminated soils were not at the surface or immediately below building slabs but were rather at depths of greater than 5 feet in all cases, and greater than 10 feet for over most of the remediation areas. The presence of buildings (and an active water pipe to one of the buildings) prevented the practical removal of these isolated, deep pockets of PCB-containing soils. Following completion of the excavation, fill material (bank run gravel) was placed from finished grade to at least 2 feet below grade (Stone & Webster, 1991). Unless significant excavation is conducted as part of demolition (which has not been suggested and is prohibited without MDEP permission), PCB contaminated soil will not be made accessible.

3.1 No. 5 Paper Machine

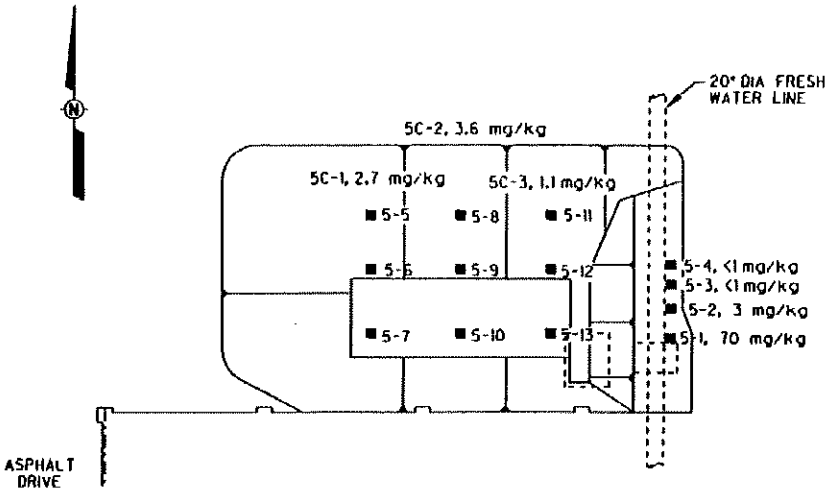
The residual PCBs in soil at the No. 5 Paper Machine Site are not accessible and likely will not be accessible during or following demolition. **Figures 2 and 3** are side views showing the extent of the completed soil excavation. This figure also shows where contaminated soil remains presently based on interpolation of data from (1) pre-excavation soil-boring samples and (2) post-excavation confirmation samples. (On figures 2 through 6, Tetra Tech has shown the pre-excavation samples, some of which show as red or orange or yellow (indicating relatively high levels of PCBs. Although those are depicted on the figures, almost all of them have been removed (as indicated by the grey shading showing the extent of the excavation area) or have been encased in concrete and grout in the few cases where footings or other features prevented excavation.)

The excavation of contaminated soils at the No. 5 Paper Machine Site was to depths of 6 to 10 feet below original ground surface (to the bottom of the water pipe or deeper) as shown in the Completion Report drawings, one of which is presented below.



No. 5 Paper Machine Site, Excavation Cross Section, Source: Stone & Webster, 1991 Appendix K

Confirmation samples from the excavation floor included three composite samples [5C-1 (2.7 mg/kg); 5C-2 (3.6 mg/kg) and 5C-3 (1.1 mg/kg)] and four discrete samples [5-1 (70 mg/kg), 5-2 (3 mg/kg), 5-3 (<1 mg/kg) and 5-4 (<1 mg/kg)].



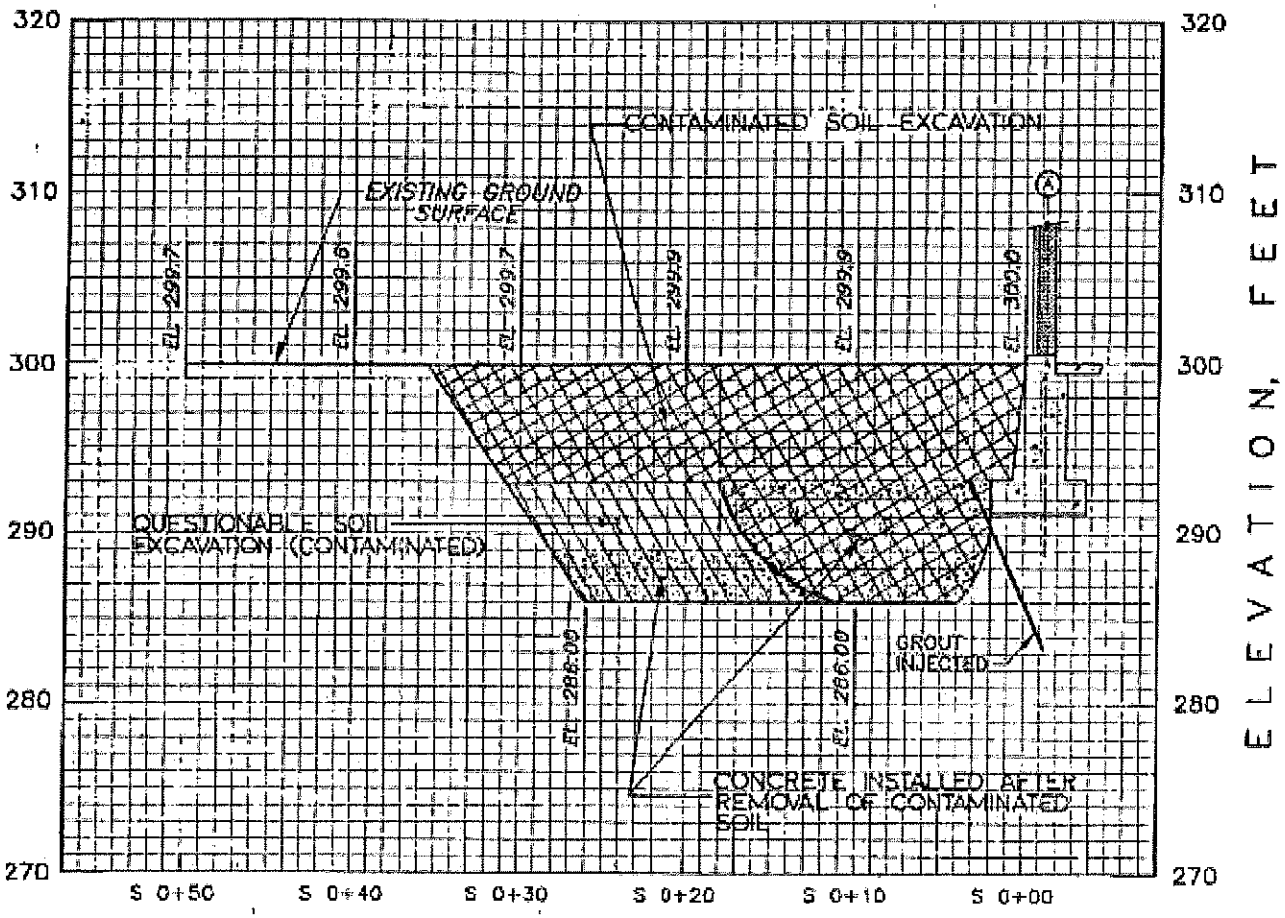
No. 5 Paper Machine Site, Map View of Confirmation Samples, Source: Stone & Webster, 1991 Appendix F

The excavation was backfilled with clean soil (≤ 50 mg/kg PCB) that had been removed from the excavation and with fill material from an offsite source. Also, a concrete barrier greater than 2 feet thick was installed above and around the water pipe and the area was paved. Note that the onsite clean soil was used for the bottom portion of the backfill and offsite borrow was used for the near-surface backfill.

Contaminated soil remaining at the No. 5 Paper Machine Site is over 6 feet deep (except for any portions that were under footings or other obstructing features) in which case they were grouted. A portion of residual contaminated soil is below a 10-foot deep foundation footer that was not reachable with the 1989-1991 excavation, and a portion is below the concrete barrier above and around the underground water pipe. Until and unless this foundation footer and water pipe are removed, there is no risk of direct dermal contact with the remaining contaminated soil.

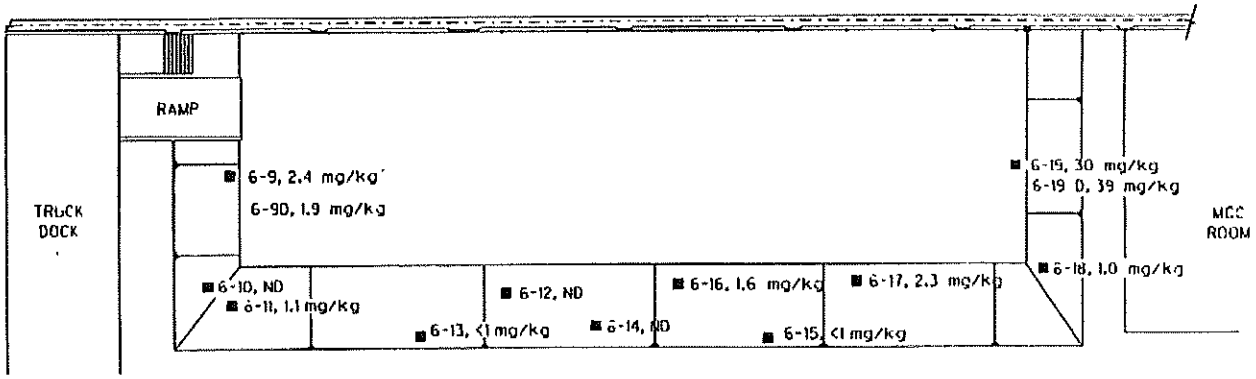
3.2 No. 6 Paper Machine

Similarly, **Figures 4 and 5** show side views for the No. 6 Paper Machine Site identifying where contaminated soils were removed and where contamination remains in place based on pre-excavation and post-excavation sampling. As indicated in this figure and the Completion Report drawing below, soils at this site were excavated to a depth of 14 feet. In addition, a system of concrete panels and grout injection was installed in areas of the excavation to stabilize the No.6 Paper Machine building foundation. This concrete now serves to isolate the remaining contaminated soils at depth.



No. 6 Paper Machine Site, Excavation Cross Section W 0+50, Source: Stone & Webster, 1991 Appendix K

Discrete post-excavation samples were collected at 11 locations as shown in the Completion Report drawing below. All the samples had PCB concentrations below 50 mg/kg, and all but one location were below 3 mg/kg. The only remaining contaminated soil is over 5 feet deep near and in between the foundation footings and beneath the concrete panels that were placed to stabilize the building and served to isolate contamination. These soils would not become accessible unless these foundation footings and concrete panels were excavated.

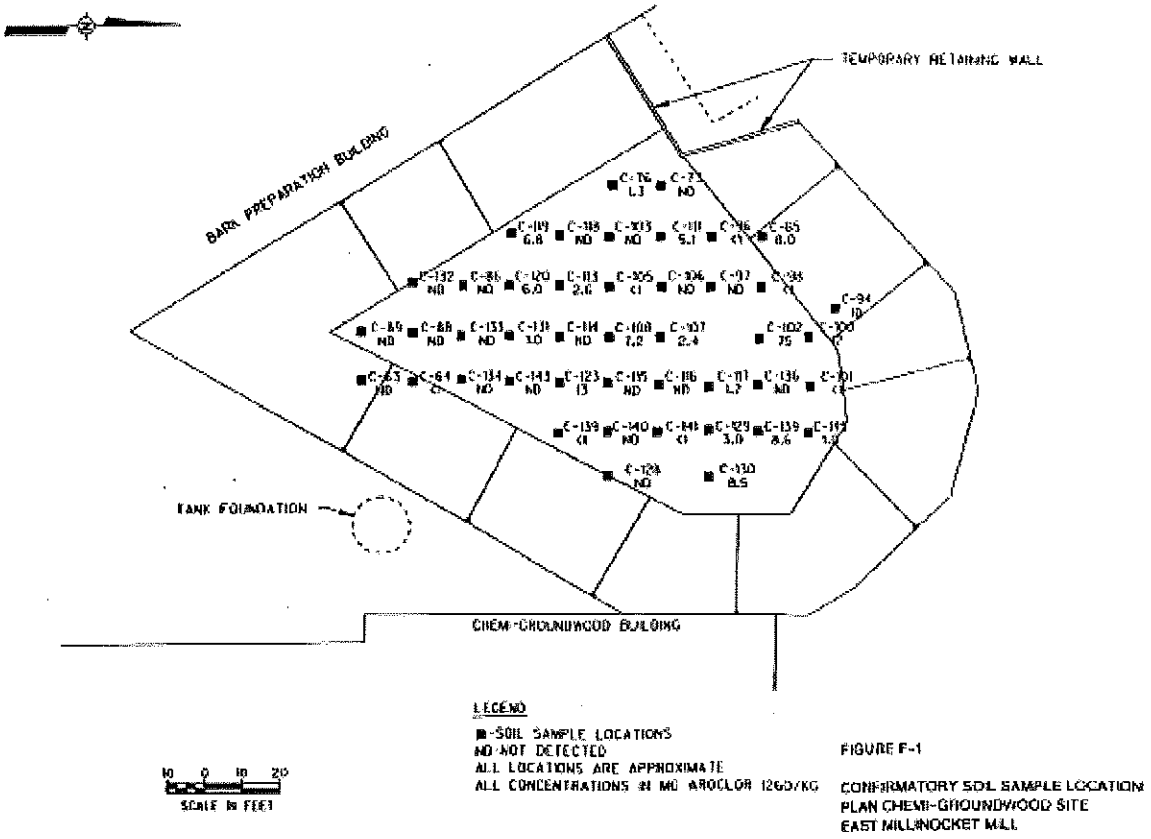


No. 6 Paper Machine Site, Map View of Confirmation Samples, Source: Stone & Webster, 1991 Appendix F

3.3 Chemi-Groundwood

Finally, side views for the Chemi-Groundwood Site are provided in **Figures 6 and 7** indicating the significant extent of excavation performed to remove contaminated soils. Importantly, the White Liquor Building, the apparent spill origin at Chemi-Groundwood, was completely removed, and all soils were excavated in its vicinity. The Chemi-Groundwood excavation was a much deeper excavation than done at the No. 5 and No. 6 Paper Machine Sites. As such, most of the post excavation samples noted in the drawing below were collected at bottom depths ranging from 17 to 20 feet below grade (Completion Report Appendix F- Section W 0+00, and Section W 0+20). As shown in the drawing below, PCBs were not detected (ND) at most of the post excavation samples and all but one of the remaining samples were less than 12 mg/kg. The remaining sample (C-102) had a PCB concentration of 75 mg/kg. In addition, a "thin zone of [contaminated] soil approximately 25 feet long", along the Bark Preparation Building was left in place, as further excavation in this area would have compromised the building.

Stockpiled clean soil was placed at the bottom of the excavation. Fill material (bank run gravel) was placed from finished grade to at least 2 feet below grade. The surface of the site was paved. Given that contaminated soil represented at least 60% of the excavated volume, this would have meant that offsite borrow material would represent at least the top 10 feet of the backfill material at Chemi-Groundwood excavation. Thus, as can be seen from **Figures 6 and 7**, all remaining contaminated soils at this site are well below the floor slab and footings.



Chemi-Groundwood Site, Map View of Confirmation Samples, Source: Stone & Webster, 1991 Appendix F

3.4 Summary of Contaminated Soil Accessibility

Based on the documents reviewed, if the current property owner restarts demolition activities at the Mill Site and proceeds to remove buildings and floor slabs, this will not result in making PCB-contaminated soil accessible.

Only a deep excavation at the spill sites, including removal of foundation footers and protective concrete barriers would make these soils accessible for removal. Such excavation is prohibited by deed restriction, without MDEP permission.

4.0 GROUNDWATER NOT CONTAMINATED

GP has been monitoring groundwater at the Mill Site in accordance with approved monitoring plans for over 25 years since completion of the PCB remediation. With two exceptions – in December 1995 and June 1997 – PCBs have not been detected in groundwater during the 66 monitoring events. As explained in the most recent annual report (EarthCon, 2017) the historical detections of PCBs in groundwater may have been associated with quality control issues: sample reanalysis in 1995 and resampling in 1997 indicated that the groundwater contained no detectable PCBs. The fact that PCBs are not found in groundwater at the Mill Site is not surprising since PCBs are hydrophobic compounds and thus are not typically found in groundwater.

5.0 NO RISKS TO HUMAN HEALTH OR ENVIRONMENT

The 1988 Remediation Plans for the three spill sites included an assessment of exposure pathways and determined that dermal contact or ingestion of soil after remediation would not be complete exposure pathways because the soil would be buried. The worst-case exposure scenario involved groundwater contaminated with PCBs moving into the Penobscot River and then bioaccumulating in fish tissue. The post-remediation assessments of risk did not indicate significant human health risks even from this worst-case exposure scenario.

More importantly, the lack of PCB detections in groundwater indicate that there is an incomplete exposure pathway and therefore no actual risks via groundwater, surface water, and fish ingestion.

Given that remaining PCB-contaminated soils are not near the surface, and that removal of the building floor slabs would not change this fact, there is no complete exposure route for PCBs to reach human or environmental receptors from these soils. The risk assessments provided in the Remediation Plans of 1988 remain valid and, with post-cleanup groundwater monitoring data, show that there are no unacceptable risks associated with PCB contamination at the Mill Site.

6.0 NO BENEFIT TO EXCAVATION OF BURIED PCB-CONTAINING SOILS

Where there is no risk of exposure to contaminated soil and the contaminant in question is immobile, it is reasonable to leave the contaminated soil in place, protected by appropriate engineering and institutional controls. Such an approach is not only customary practice, but also consistent with both CERCLA and TSCA. In this case, the engineering control is clean backfill and subsurface concrete barriers, and the institutional controls include the CAFO-specified deed notice and MDEP-required deed restriction that have been placed on the property.

If USEPA and MDEP were to order a removal of remaining PCB-contaminated soil, this would necessarily involve deep excavation with removal of clean emplaced backfill and concrete barriers to extract the PCB-contaminated soil from the Mill Site and transport to another site (presumably a TSCA landfill), affecting no reduction in overall risks or environmental improvement.

Also, such an action to remove all PCB-contaminated soil (> 50 mg/kg) would not render the Mill Site environmentally free from impacts and ready for clean closure and unrestricted use; therefore, there is no benefit gained in land-use flexibility.

7.0 GP'S REGULATORY OBLIGATIONS MET

GP conducted the Cleanup specified in the CAFO under the oversight of USEPA. As recognized in the Plans and Specifications referenced by the CAFO, the Cleanup necessarily left some PCB contaminated soils in place at depth beneath clean backfill. GP documented its Cleanup in a March 1991 report that was submitted several months before the CAFO was executed.

In addition, in accordance with the CAFO, GP recorded a memorandum in the County Register of Deeds regarding the CAFO and contamination Cleanup, and the deed transferring the property to the current property owner also references the CAFO and the contamination Cleanup. These records effectively communicate the presence of contaminated soil at the site, providing an important institutional control.

Furthermore, a 2003 letter from Maine DEP acknowledged completion of the certified CAFO Cleanup and the then-current owner adopted and recorded an MDEP-approved prohibition on excavation in the three areas of the PCB Cleanups, without DEP permission.

Neither GP nor USEPA contemplated unrestricted use of the Mill Site at the time of remediation, and use restrictions (mill property restricted to industrial use) were endorsed by the MDEP in a 2011 Agreement with Great Northern Paper Company, LLC, which agreement was subsequently recorded and the deed to the current owner is expressly subject to that agreement. With USEPA's consent, a remedy was designed and implemented that was protective of the reasonably foreseeable industrial use, with appropriate engineering and institutional controls to ensure that the remedy remains protective.

If the current (or future) property owner could, with EPA and MDEP and any other legally-required permissions, remove the institutional and engineering controls put in place, they will need to evaluate, and potentially rectify, the ramifications of such actions.

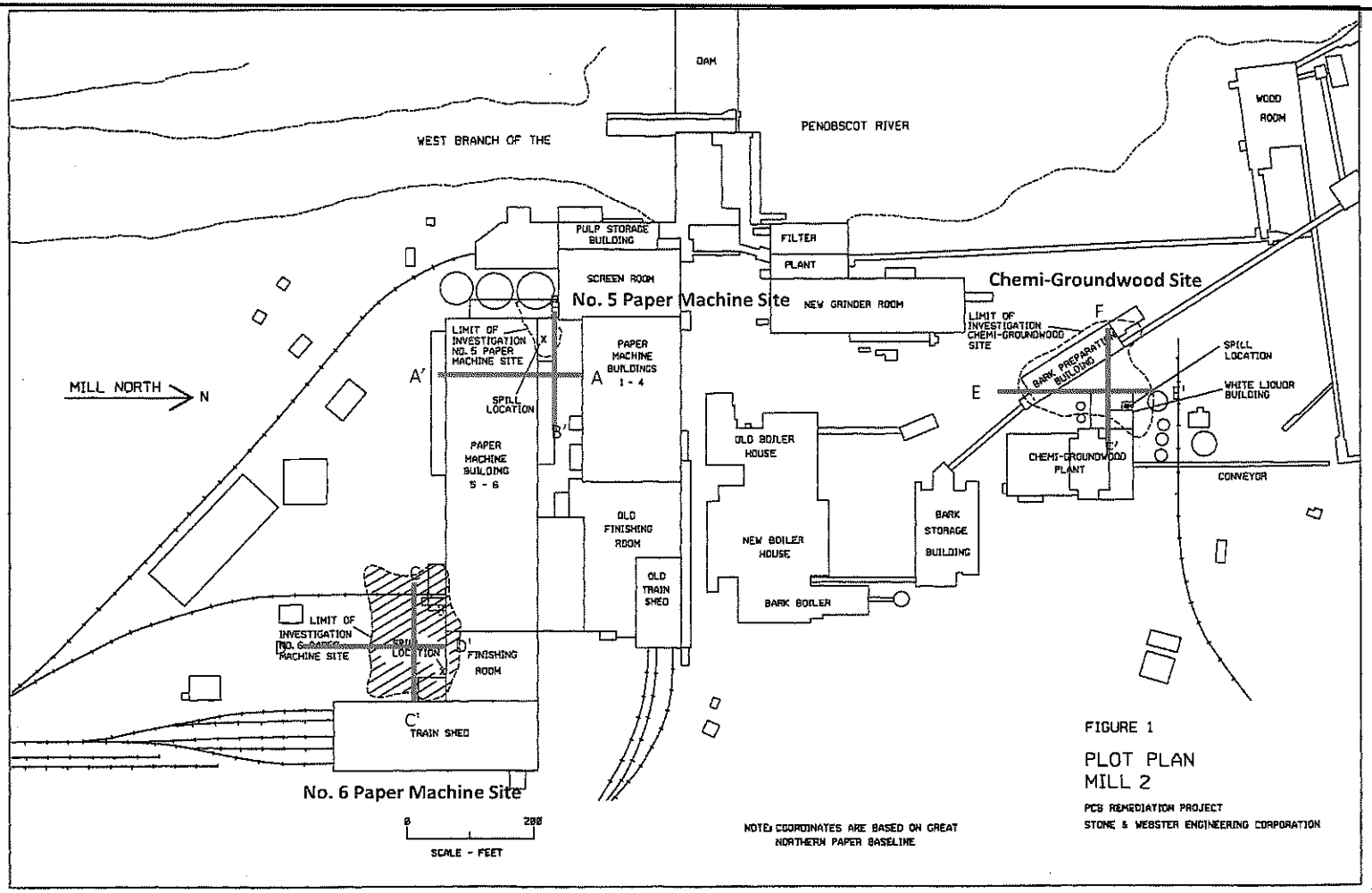


FIGURE 1

PLOT PLAN
MILL 2

PCB REMEDIATION PROJECT
STONE & WEBSTER ENGINEERING CORPORATION

A ——— A' CROSS-SECTION LOCATION

NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 1
MILL SITE
CROSS-SECTION LOCATIONS AND HISTORIC SPILL LOCATIONS

File Path:
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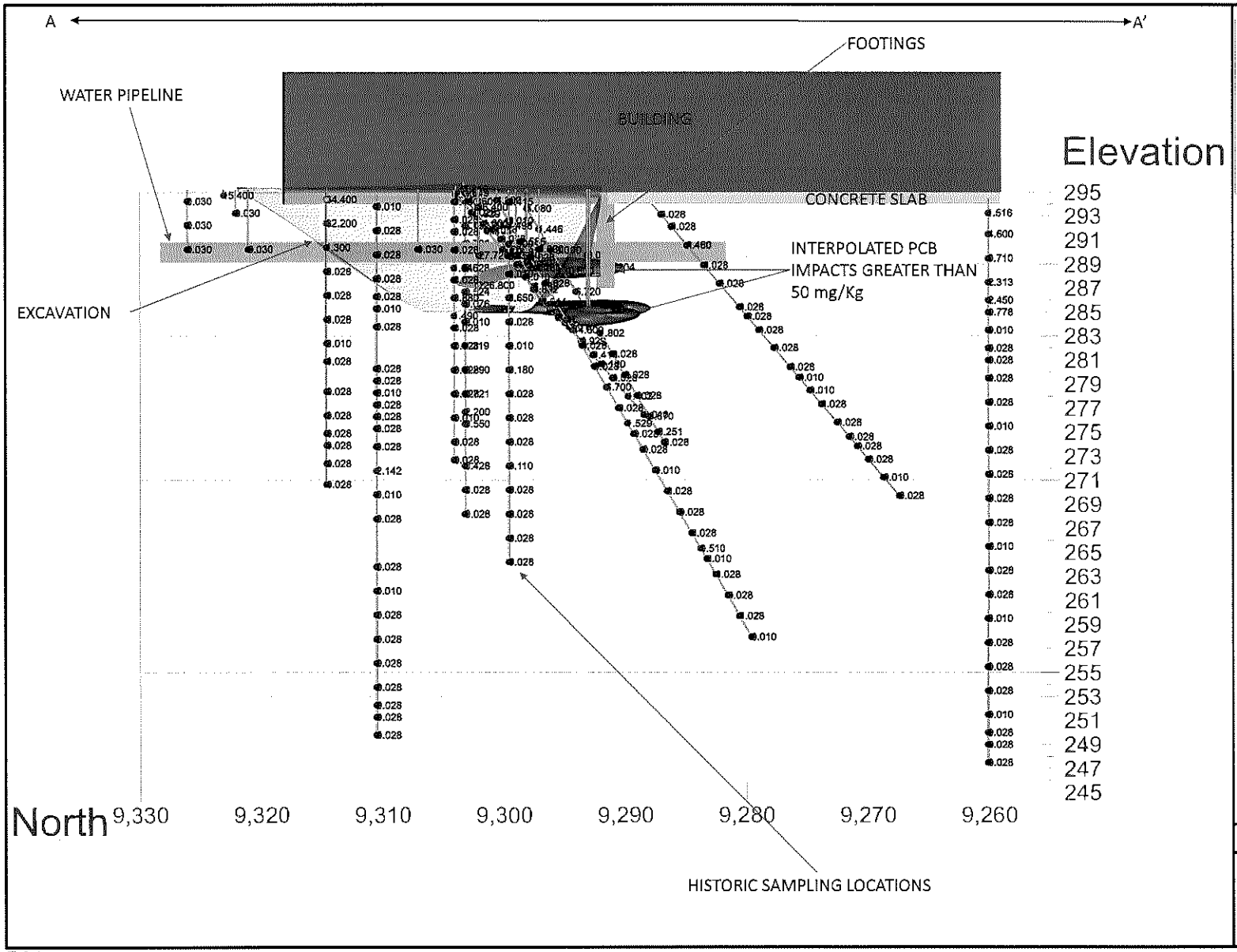

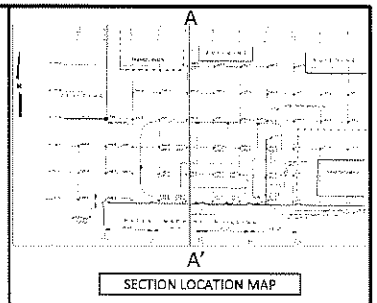

SECTION LOCATION MAP

8080 and Normalized Screening Results

- 36,400 mg/Kg
- 20,000 mg/Kg
- 10,000 mg/Kg
- 5,000 mg/Kg
- 2,000 mg/Kg
- 1,000 mg/Kg
- 500 mg/Kg
- 200 mg/Kg
- 100 mg/Kg
- 50 mg/Kg
- 20 mg/Kg
- 10 mg/Kg
- 5 mg/Kg
- 2 mg/Kg
- 1 mg/Kg
- 0.5 mg/Kg
- 0.2 mg/Kg
- 0.1 mg/Kg
- 0.05 mg/Kg
- 0.02 mg/Kg
- 0.01 mg/Kg

NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 2
NO. 5 PAPER MACHINE SITE
NORTH-SOUTH TRENDING CROSS-SECTION

File Path:
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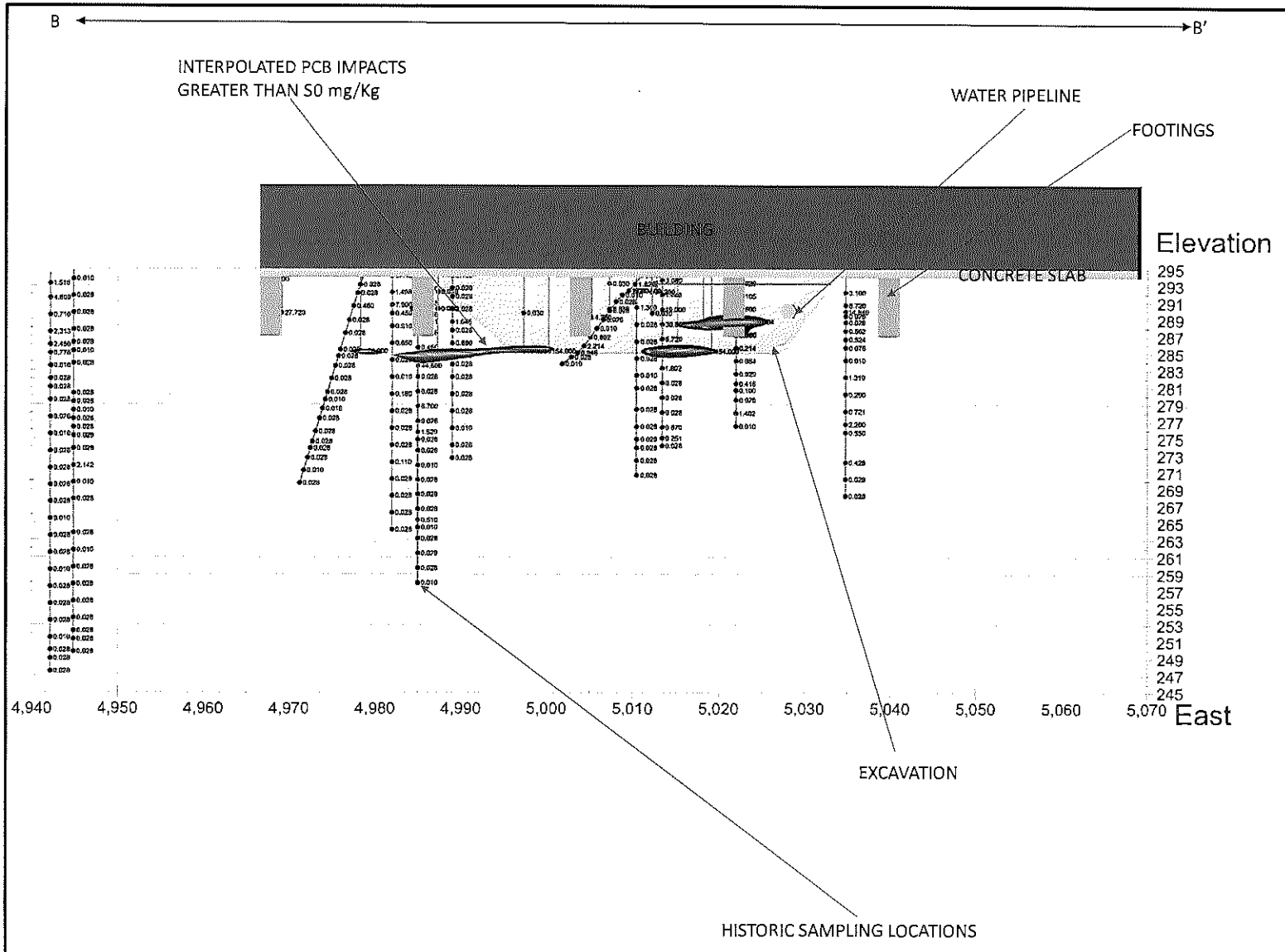

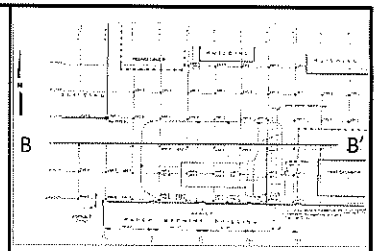

SECTION LOCATION MAP

9080 and Normalized Screening Results

- 36,400 mg/Kg
- 20,000 mg/Kg
- 10,000 mg/Kg
- 5,000 mg/Kg
- 2,000 mg/Kg
- 1,000 mg/Kg
- 500 mg/Kg
- 200 mg/Kg
- 100 mg/Kg
- 50 mg/Kg
- 20 mg/Kg
- 10 mg/Kg
- 5 mg/Kg
- 2 mg/Kg
- 1 mg/Kg
- 0.5 mg/Kg
- 0.2 mg/Kg
- 0.1 mg/Kg
- 0.05 mg/Kg
- 0.02 mg/Kg
- 0.01 mg/Kg

NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 3
NO. 5 PAPER MACHINE SITE
WEST-EAST TRENDING CROSS-SECTION

File Path:
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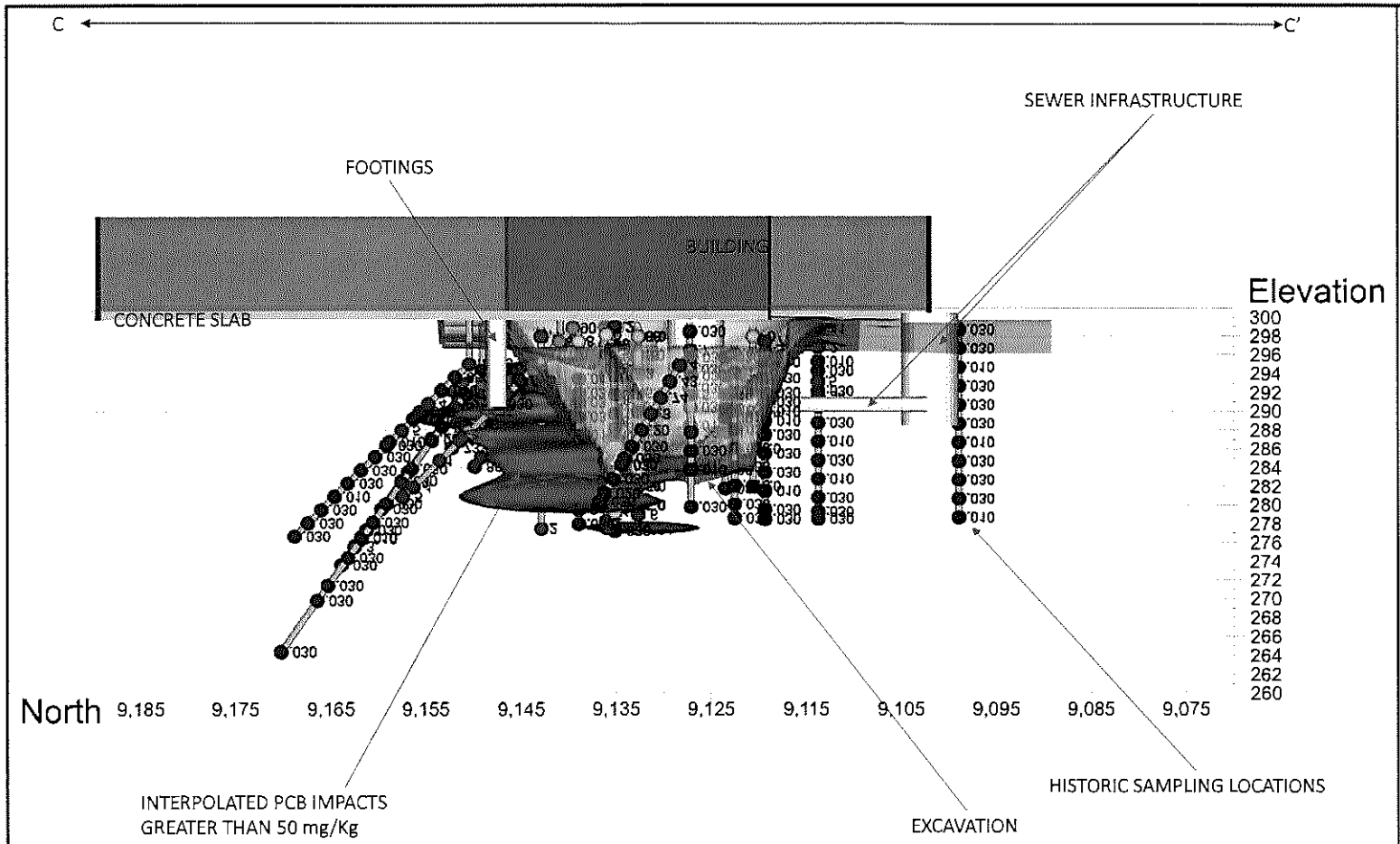

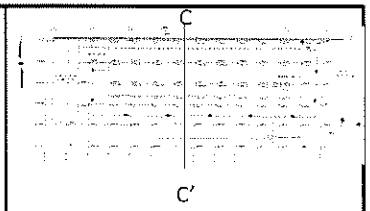

SECTION LOCATION MAP

8080 and Normalized Screening Results

- 25,480 mg/Kg
- 10,000 mg/Kg
- 3,000 mg/Kg
- 1,000 mg/Kg
- 300 mg/Kg
- 100 mg/Kg
- 30 mg/Kg
- 10 mg/Kg
- 3 mg/Kg
- 1 mg/Kg
- 0.3 mg/Kg
- 0.1 mg/Kg
- 0.03 mg/Kg
- 0.01 mg/Kg

NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 4
MILL No. 6
NORTH-SOUTH TRENDING CROSS-SECTION

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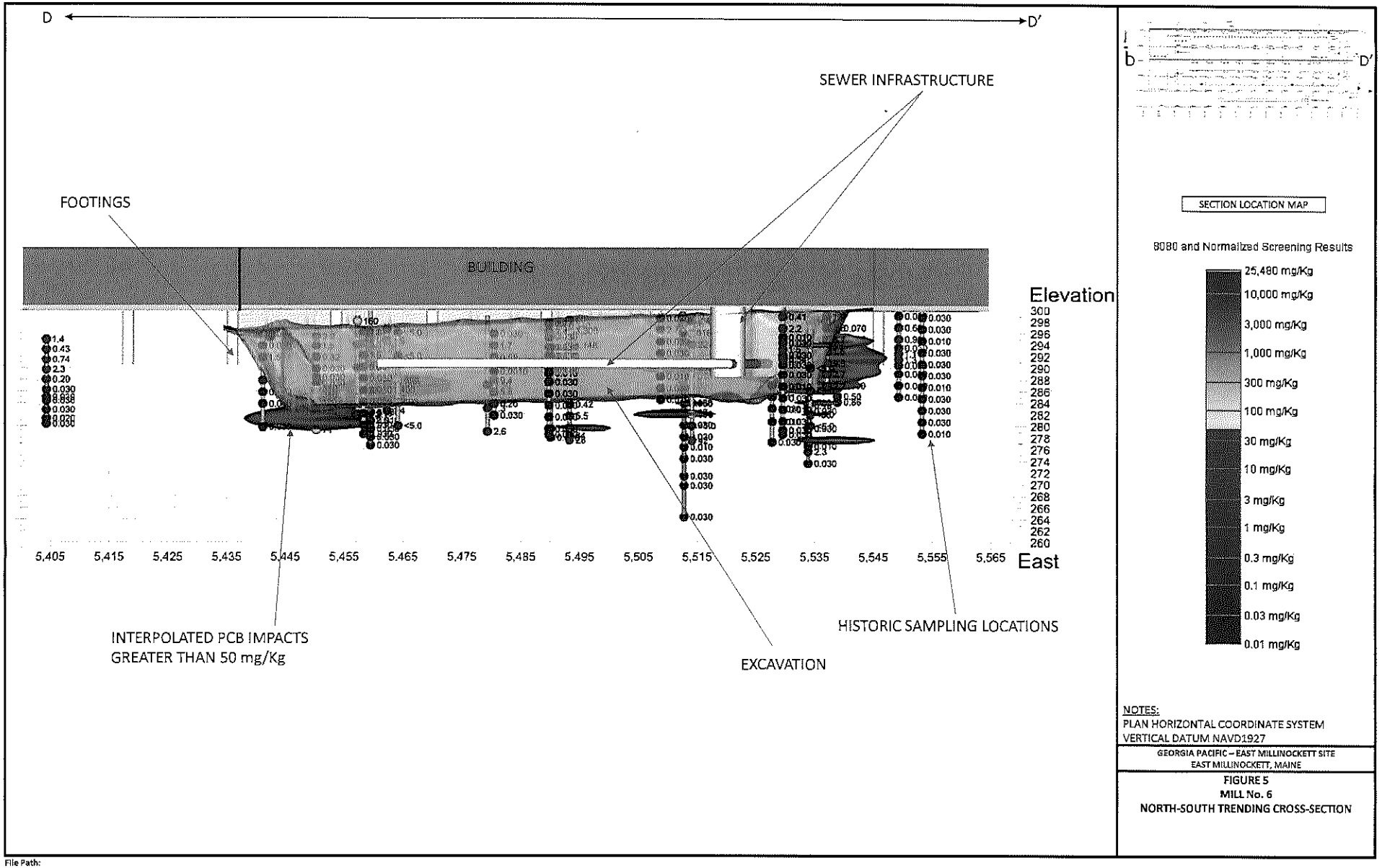

SECTION LOCATION MAP

8080 and Normalized Screening Results

25,480 mg/Kg
10,000 mg/Kg
3,000 mg/Kg
1,000 mg/Kg
300 mg/Kg
100 mg/Kg
30 mg/Kg
10 mg/Kg
3 mg/Kg
1 mg/Kg
0.3 mg/Kg
0.1 mg/Kg
0.03 mg/Kg
0.01 mg/Kg

NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 5
MILL No. 6
NORTH-SOUTH TRENDING CROSS-SECTION

File Path:
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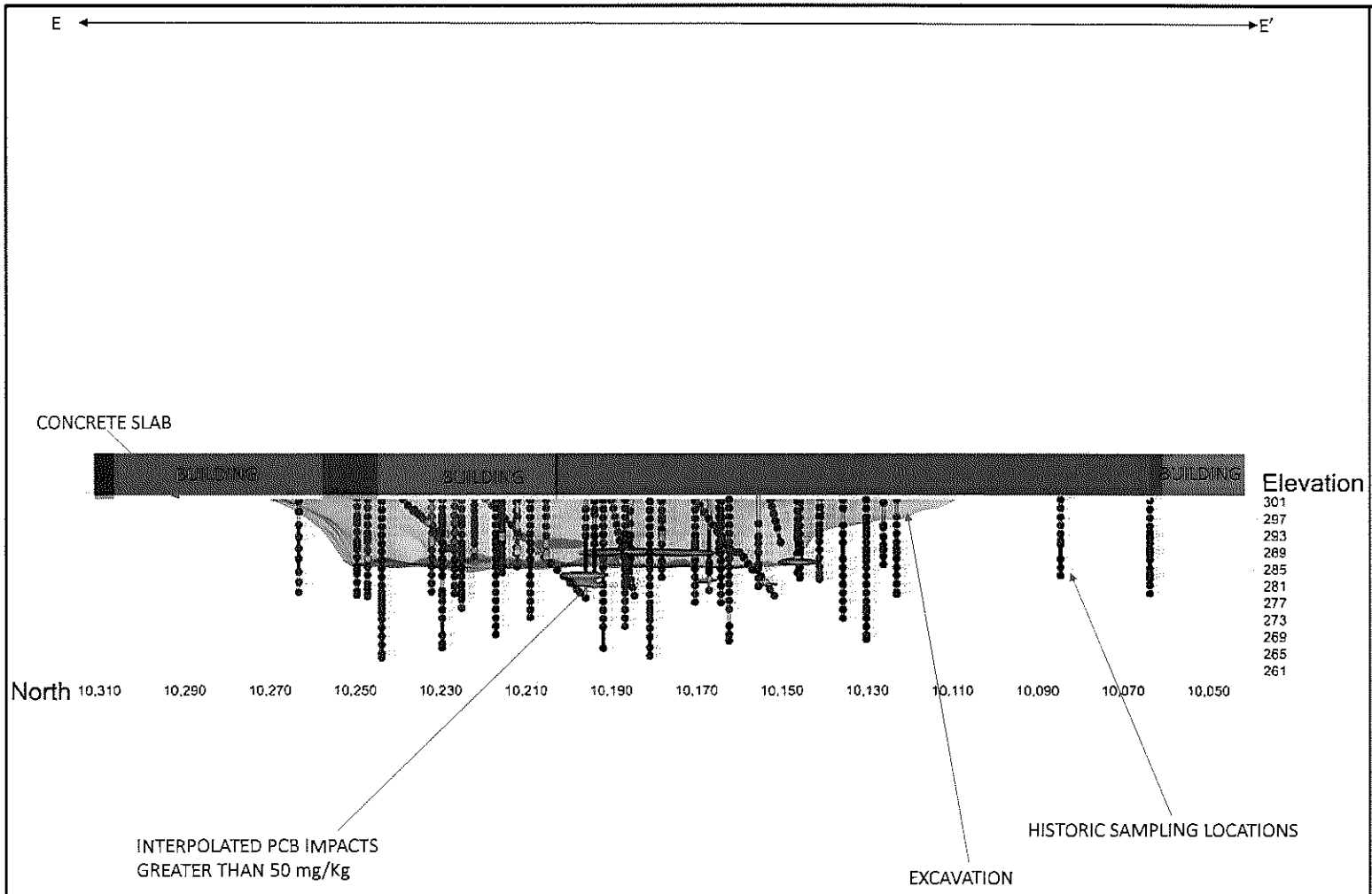
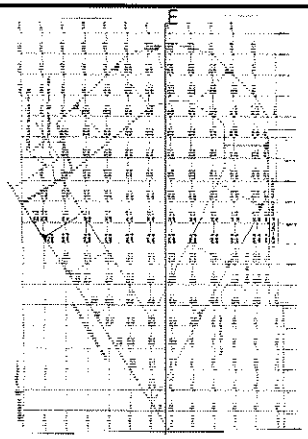
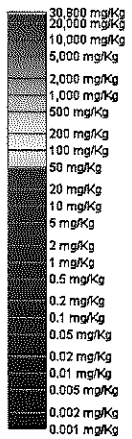




SECTION LOCATION MAP

8080 and Normalized Screening Results



NOTES:

PLAN HORIZONTAL COORDINATE SYSTEM

VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 6
CHEMI GROUNDWOOD
NORTH-SOUTH TRENDING CROSS-SECTION

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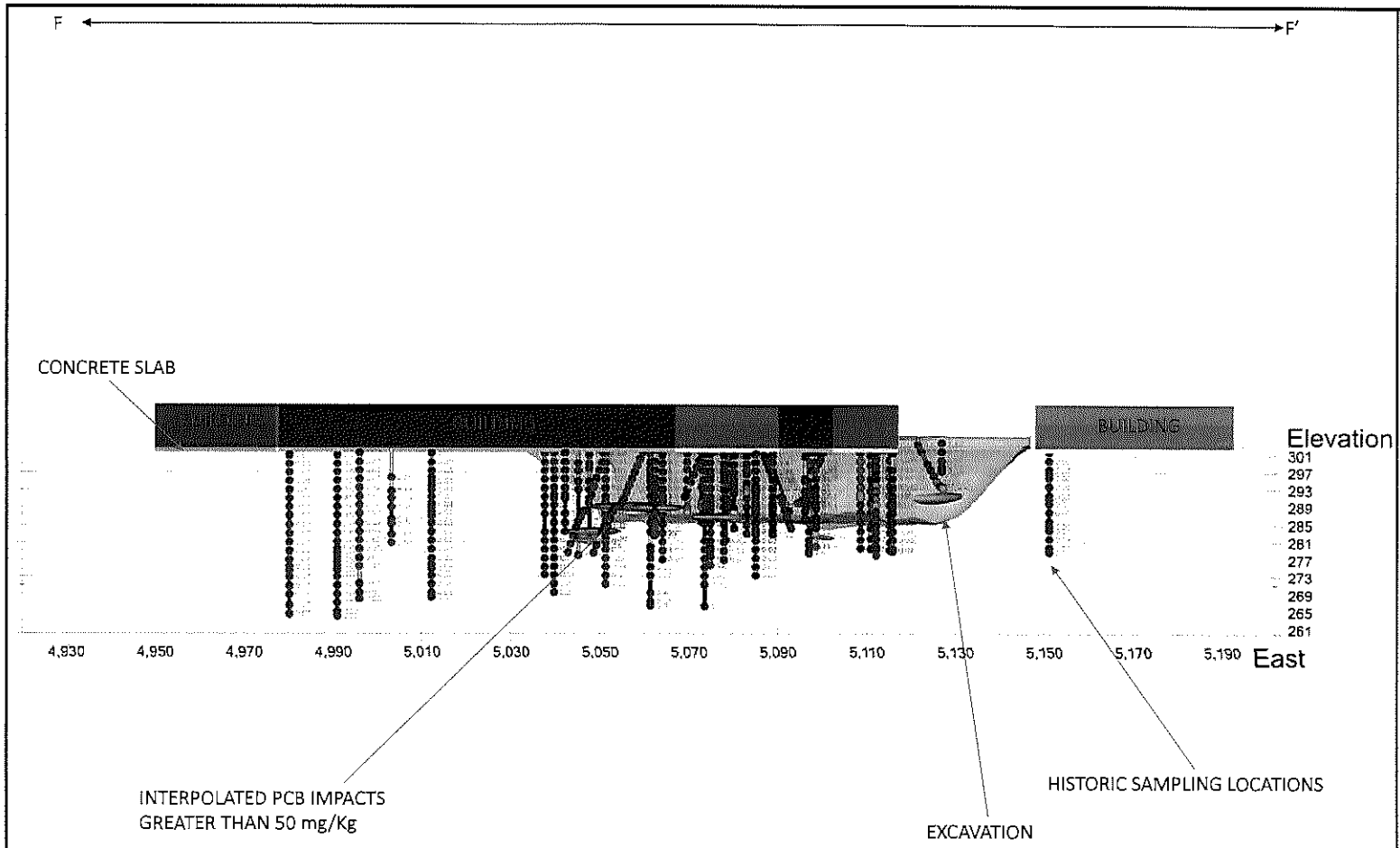

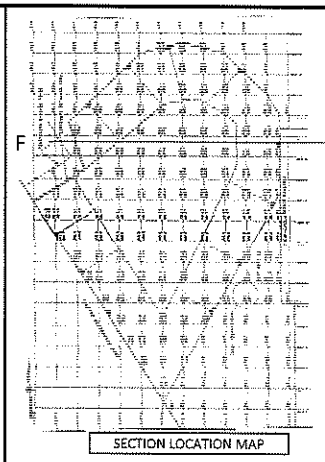

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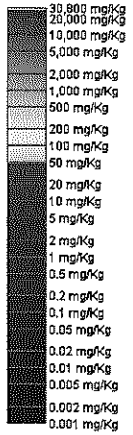


NOTES:
PLAN HORIZONTAL COORDINATE SYSTEM
VERTICAL DATUM NAVD1927

GEORGIA PACIFIC – EAST MILLINOCKETT SITE
EAST MILLINOCKETT, MAINE

FIGURE 7
CHEMI GROUNDWOOD
EAST-WEST TRENDING CROSS-SECTION

File Path:
Data Source:

PETROLEUM STORAGE AND CONTAINMENT

East Millinocket Mill

Location	No. of Tanks	Capacity (gals.)	Type of Product	Date Installed	Containment	Reg. No.	Reference Item No. on Location Maps
WWTP		1,000	Heating Oil EA205	1991	Dbl. Wall, Impact Barrier Sloped to process water treatment	*	87
WWTP		1,000	Diesel EA207	1991	Dbl. Wall, Impact Barrier Sloped to process water treatment	*	88
WWTP		500	Diesel	1995	Dbl. Wall, Impact Barrier Sloped to process water treatment	*	94
Steam Plant		1,000	No. 2 Fuel Oil	1998	Dbl. Wall, inside building	*	105
Steam Plant		20,000	Heating Oil (abandoned)	1955	Tank Policy	**	89
Steam Plant		20,000	Heating Oil (abandoned)	1955	Tank Policy	**	89
Oil Farm		750,000	No. 6 Fuel Oil	1950	Earth Dike Oil/Water Separator	*	61
Oil Farm		2,300,000	No. 6 Fuel Oil	1954	Earth Dike Oil/Water Separator	*	60
Oil Farm		88,000 (per day)	No. 6 Fuel Oil	1950	Earth Dike Oil/Water Separator	*	96
Oil House		2,000	Gasoline	1989	Tank Policy	16697	90
Steam Plan		25,000	No. 6 Fuel Oil	1955	Steel tank encased in reinforced concrete walls. Level indication and alarms.	*	62
Warehouse W		60-70	55 gal. drum oil		In Building	*	97
North of 750,000 gals. No. 6 Fuel Oil		1,000	Oil/Water Separator	1955	Fence, concrete dike	*	91
Woodyard		4,000	Diesel EA204	1980	Dbl. Wall, Impact Barrier Sloped to Dirt Containment	*	93
Landfill		1,000	Diesel	1980	Dbl. Wall, Impact Barrier Sloped to Landfill	*	
Millwide	25	350	Used Oil Tote		In Building	*	
Filter House		1,000	Diesel	1998	In Building	*	106
No. 6 P.M. Basement		275	Kerosene	1980	In Building	*	109
Millwide			Transformer Oil	1980	Concrete Dike	*	74-83

CHEMICAL TANKS

Recycle Fiber Plant

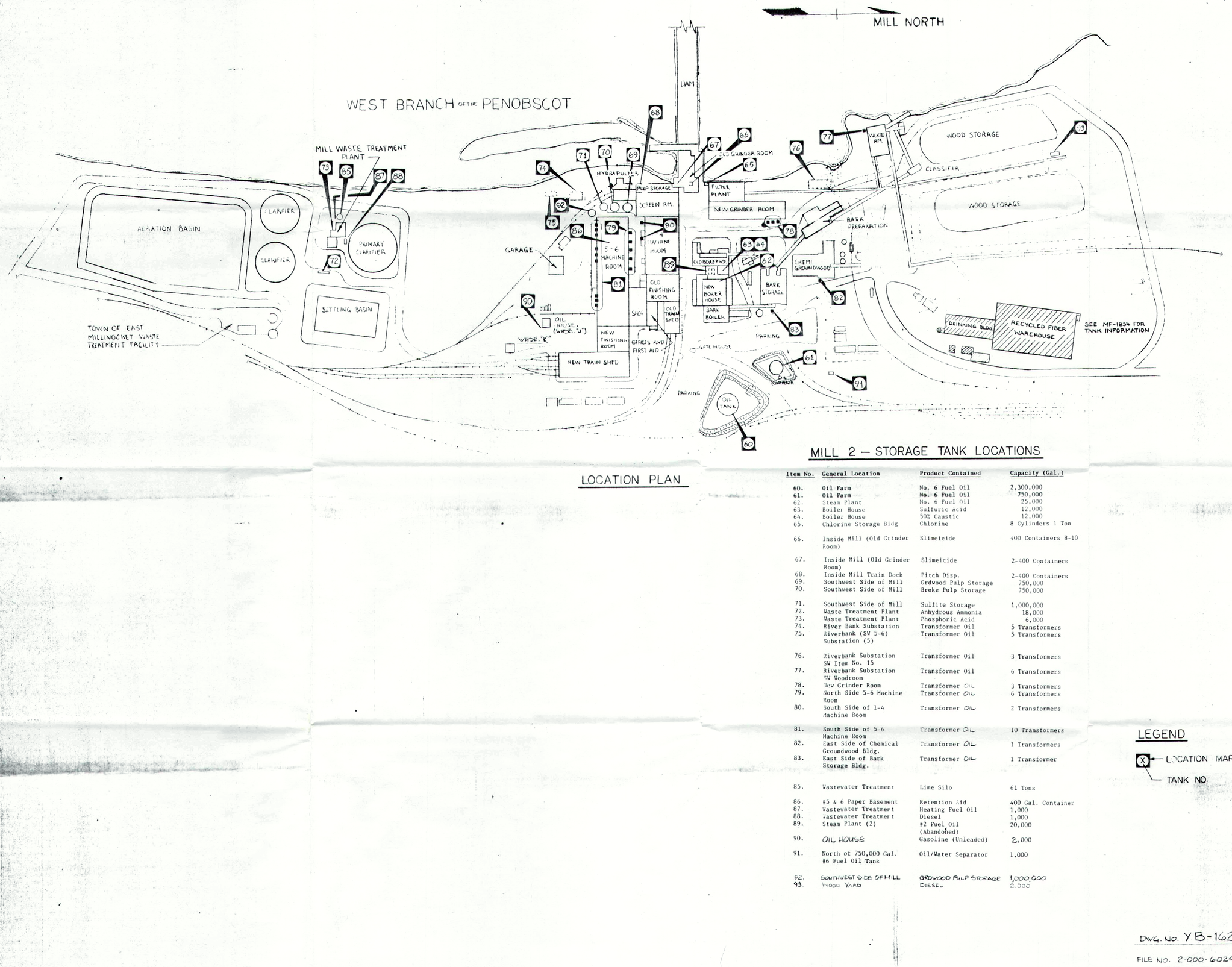
Chemical Name	Capacity (gals.)	Date Installed	Containment	Location No.
Sodium Hydroxide	16,500	1993	Overflow to Process Sewer in Building	101
Sodium Silicate	16,500	1993	Overflow to Process Sewer in Building	99
(DTPA)	5,575	1993	Overflow to Process Sewer in Building	100
Sulfuric Acid	8,200	1993	110% of Tank Vol., Lock Valve to Process Sewer, Concrete Dike	97
Hydrogen Peroxide	(2) 10, 000	1993	110% of Tank Vol., Lock Valve to Process Sewer, Concrete Dike	93
Surfactant (Nalco DI-2843)	8,225	1993	Overflow to Process Sewer in Building	98
Sodium Hydrosulfite	21,000	1993	110% of Tank Vol., Lock Valve to Process Sewer, Concrete Dike	96
Sulfite Dioxide (SO_2)	Empty	1993	110% of Tank Vol., Lock Valve to Process Sewer, Concrete Dike	94
Borol	12,000	1993	110% of Tank Vol., Lock Valve to Process Sewer, Concrete Dike	95
Primary Polymer (Nalco 7593)	6,662	1993	Overflow to Process Sewer in Building, Concrete Dike	106
Primary Polymer Feed Tanks(Nalco 7593) Acid and Alkaline Clarifier	(2) 1,000	1993	Overflow to Process Sewer in Building, Concrete Dike	107 108
Secondary Polymer (Nalco 7524)	7,614	1993	Overflow to Process Sewer in Building, Concrete Dike	102
Sludge Polymer (Nalco 7524)	6,500	1993	Overflow to Process Sewer in Building, Concrete Dike	103
Sludge Polymer Feed Tank (Nalco 7524)	1,500	1993	Overflow to Process Sewer in Building	*
Sodium Bisulfite	6,662	1993	Overflow to Process Sewer in Building	105
Defoamer, (Nalco 7507 Plus)	1,000	1998	Overflow to Process Sewer in Building	*
Talc Slurry	7,500	1999	Overflow to Process Sewer in Building	110
Retention Aid (Nalco 7523(	1,000	2001	Overflow to Process Sewer in Building	*
Retention Aid Feed Tank (Nalco 7523)	500	2000	Overflow to Process Sewer in Building	*

*TANK IS IN PROCESS BUILDING

Pulp and Chemical Storage and Containment

East Millinocket Mill

Location	No. of Tanks	Capacity (gals.)	Type of Product	Date Installed	Containment	Reference Item No. on Location Maps
Boiler House	1	8,600	Sulfuric Acid	1992	Concrete Dike Overflow to process sewer	63
Boiler House	1	12,000	50% Caustic	1957	Concrete Dike Overflow to process sewer	64
Boiler House	1	30,000	Waste Pit	1992	Inside Building Process Sewer	107
Chlorine Storage Bldg	8	1 Ton	C12	1955	Impact Barrier Response Plan	65
Inside Train Dock	2	400	Pitch Dispersent	1987	Inside Building	68
Southside of Mill	2	750,000	Groundwood Pulp	1954	Permanent berm to process sewer at sulfie tank	69
Southside of Mill	1	750,000	Broke Pulp	1954	Permanent berm to process sewer at sulfie tank	70
Southside of Mill	1	1,000,000	Sulfite Pulp	1987	Permanent berm to process sewer at sulfie tank	71
WWTP	1	18,000	Urea	1976	Excess flow valve response plan	72
WWTP	1	6,000	Phosphoric Acid	1976	Concrete Dike	73
Old Grinder Room	2 totes	330	V-Brite	1982	Concrete Dike Overflow to process sewer	66
Hydropulper	1	14,000	Starch	1997	Overflow to process sewer	84
Hydropulper	1	14,000	Nalco 7527	1997	Inside Building	84
WWTP		61 Ton	Lime Silo	1987	Response Plan	85
Southside of Mill	1	1,000,000	Groundwood Pulp Storage	1990	Permanent berm to process sewer	92
WWTP	1	6,000	Ferric Sulfate	1996	Containment 100% of Tank	95
Court Yard	1	4,000	Sodium Bisulfate	1997	Impact barrier overflow to process sewer	98
Nos. 5 and 6 P.M.	1	1,5 00	Day Tank Polymer	1997	Overflow to process sewer	99
Nos. 5 and 6 P.M.	2	3,100	Polymer 7520	1997	Overflow to process sewer	101
Nos. 5 and 6 P.M.	1	1,500	Make Down Polymer	1997	Overflow to process sewer	102
Nos. 5 and 6 P.M.	2	300	Detergent (DuBois)	1997	Overflow to process sewer	104
Nos. 5 and 6 P.M. Basement	2	400	Retention Aid	1990	Inside Building	86
#5&#6 PM Wet End	2 tote	330	Acetic Acid	2000	Overflow to process sewer	103
#5 & #6 PM Wet End	2 totes	330	Phosphric Acid	2000	Overflow to process sewer	103
#5&#6 PM Basement	2 totes	330	Slimicide	1982	Inside Building	66



LOCATION PLAN

MILL 2 — STORAGE TANK LOCATIONS

Item No.	General Location	Product Contained	Capacity (Gal.)
60.	Oil Farm	No. 6 Fuel Oil	2,300,000
61.	Oil Farm	No. 6 Fuel Oil	750,000
62.	Steam Plant	No. 6 Fuel Oil	25,000
63.	Boiler House	Sulfuric Acid	12,000
64.	Boiler House	50% Caustic	12,000
65.	Chlorine Storage Bldg	Chlorine	8 Cylinders 1 Ton
66.	Inside Mill (Old Grinder Room)	Slimeicide	400 Containers 8-10
67.	Inside Mill (Old Grinder Room)	Slimeicide	2-400 Containers
68.	Inside Mill Train Dock	Pitch Disp.	2-400 Containers
69.	Southwest Side of Mill	Grdwood Pulp Storage	750,000
70.	Southwest Side of Mill	Broke Pulp Storage	750,000
71.	Southwest Side of Mill	Sulfite Storage	1,000,000
72.	Waste Treatment Plant	Anhydrous Ammonia	18,000
73.	Waste Treatment Plant	Phosphoric Acid	6,000
74.	River Bank Substation	Transformer Oil	5 Transformers
75.	Riverbank (SW 5-6) Substation (5)	Transformer Oil	5 Transformers
76.	Riverbank Substation SW Item No. 15	Transformer Oil	3 Transformers
77.	Riverbank Substation SW Woodroom	Transformer Oil	6 Transformers
78.	New Grinder Room	Transformer Oil	3 Transformers
79.	North Side 5-6 Machine Room	Transformer Oil	6 Transformers
80.	South Side of 1-4 Machine Room	Transformer Oil	2 Transformers
81.	South Side of 5-6 Machine Room	Transformer Oil	10 Transformers
82.	East Side of Chemical Groundwood Bldg.	Transformer Oil	1 Transformers
83.	East Side of Bark Storage Bldg.	Transformer Oil	1 Transformer
85.	Wastewater Treatment	Lime Silo	61 Tons
86.	#5 & 6 Paper Basement	Retention Aid	400 Gal. Container
87.	Wastewater Treatment	Heating Fuel Oil	1,000
88.	Wastewater Treatment	Diesel	1,000
89.	Steam Plant (2)	#2 Fuel Oil (Abandoned)	20,000
90.	OIL HOUSE	Gasoline (Unleaded)	2,000
91.	North of 750,000 Gal. #6 Fuel Oil Tank	Oil/Water Separator	1,000
92.	SOUTHWEST SIDE OF MILL	GRDWOOD PULP STORAGE	1,000,000
93.	WOOD YARD	DIESEL	2,000

LEGEND

(X) ← LOCATION MARK
TANK NO.

DWG. NO. YB-16271

FILE NO. 2-000-6024
C&D BY: JHA 2.4.89 APP'D BY:
E.R.# 0-8536

☐ PRELIMINARY - NOT FOR CONSTRUCTION
☐ APPROVED FOR CONSTRUCTION
☐ SUPERSEDES ALL PREVIOUS ISSUES

BY _____ DATE _____

REFERENCE DRAWINGS

DWG NO	TITLE	BY
B-1580	EAST MILLINOCKET MILL MILL 2 STORAGE TANK LOCATIONS	JM AYOTTE

REV		ISSUED TO	ISSUED FOR
C	11-1-94	LM	GENERAL REVISION
B	12.9.91	JHA	GENERAL REVISION
0	APRIL 18, 1988	CLIENT	CLIENT'S USE

NO | DATE | BY | REVISIONS | CKD.

THIS DRAWING IS THE PROPERTY OF NEILL AND GUNTER INCORPORATED AND IS TO BE USED ONLY FOR THE SPECIFIC PROJECT IDENTIFIED ON THE DRAWING. NO REVISIONS SHALL BE MADE WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEILL AND GUNTER INCORPORATED.

DESIGNED	DRAWN
CHECKED	DATE 4-5-88
DESIGN / DFTG	SCALE NONE
APPROVED	SPEC
PROJ. ENG	

NG Neill and Gunter
Portland, Maine, U.S.A.

GREAT NORTHERN PAPER
MILLINOCKET, MAINE
CHEMICAL CONTAINMENT SURVEY
EAST MILLINOCKET MILL
CONTAINMENT LOCATIONS

JOB NO. ~~22086~~ DWG NO. ~~C-002~~ REV C

____ ENFORCEMENT ____ REIMBURSEMENT ___ 3rd PARTY CLAIM ___ INS. CLAIM

Oil & Hazardous Materials Report Form
Spill Number: B/027/92

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER
Address: _____ Town: EAST MILLINOCKET
State: ME Zip-code: 04430 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 0.19 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 10
Date of Spill: 92/01/14 (yy/mm/dd) Time of Spill: 0900 (Military)
Date Reported: 92/01/14 (yy/mm/dd) Time Reported: 1114 (Military)
Cause: 18 Detection method: 2I
Incident code: AIDR DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. VARNEY, T.W. TW
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): JUDY MOORE -AS ABOVE
Address: _____ Town: _____
State: __ Zip-code: _____ Telephone: _____

Oil & Hazardous Materials Report Form
Spill Number: B/027/92 (continued)

Clean-up Information:

Total product recovered: _____ gals.N cu. yds.N lbs.N bbls.N
Method: K Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

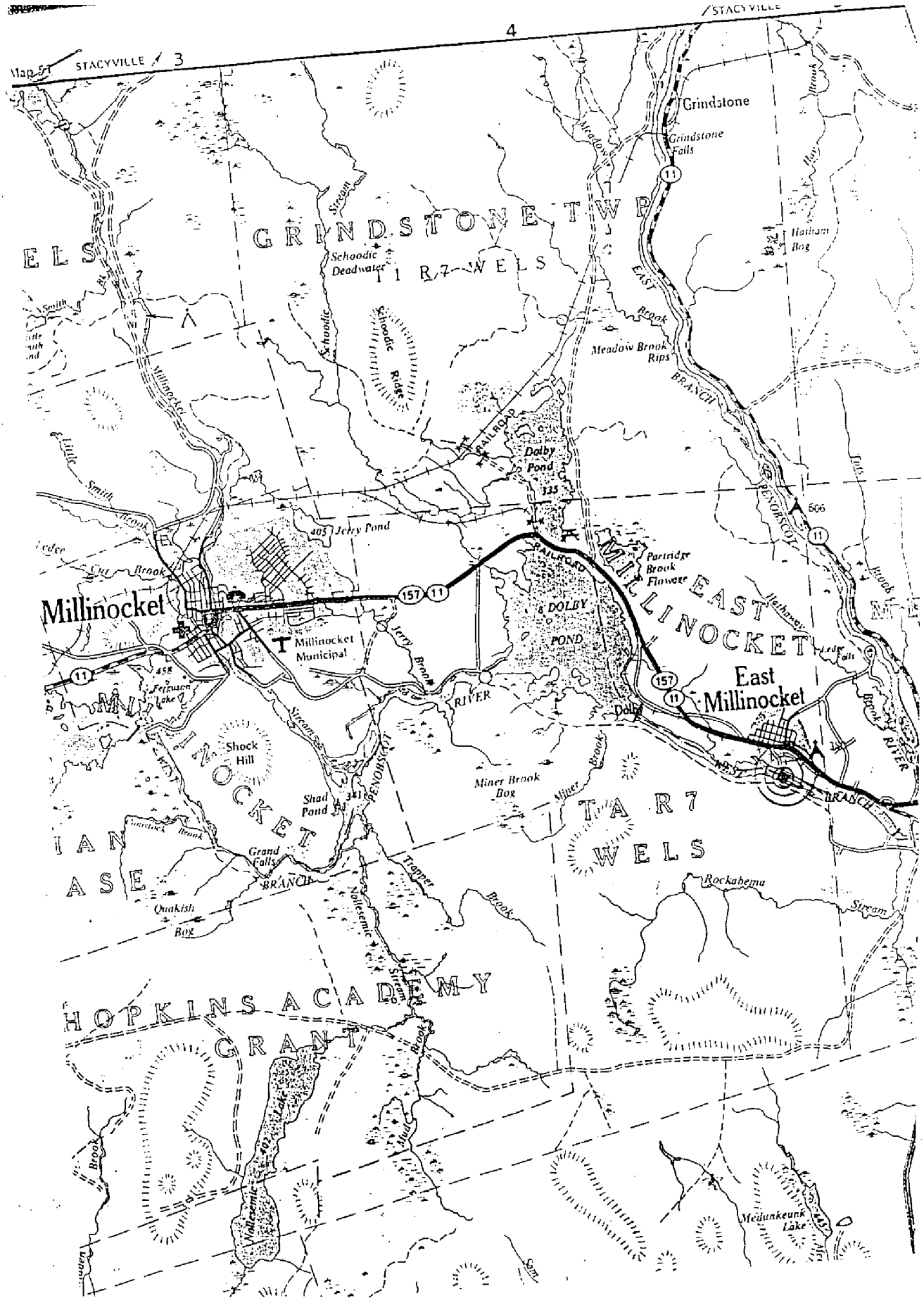
Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME OF CHEMICAL INVOLVED:

Great Northern Paper experienced a small oil spill at the old grinder room on Jan. 14, 1992. A water wheel had been isolated to allow repairs, and, as often happens at old mills, oil appeared from beneath the concrete at the base of the wheel. Assumed to be old lube oil, its origin was unknown.

A small sheen, 15 or 20 minutes, duration, appeared on the west branch. No recovery was attempted.

REC: File Report
TV/mab


Grindstone
Grindstone Falls
GRINDSTONE TWP
T 1 R 7 WELS
Schoodic Deadwater
Schoodic Ridge
Meadow Brook Rips
EAST BRANCH
Hathorn Bog
Dolby Pond
RAILROAD
Jerry Pond
Millinocket
Millinocket Municipal
Partridge Brook Flowage
DOLBY POND
MILLINOCKET
East Millinocket
RIVER
Shock Hill
Shad Pond
Miner Brook Bog
Grand Falls
Quakish Bog
Trapper Brook
Rockabema Stream
T A R 7
WELS
HOPKINS ACADEMY GRANT
Wallesemic Lake
Meadow Brook
Meduncook Lake
PENOBSCOT
157
11

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0028 - 96

Copy: F (Draft, Final)

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Comments: DIELECTRIC OIL SPILL

LOCATION / FACILITY INFORMATION

Name of Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: **EAST MILLINOCKET** Local Name: EAST MILLINOCKET

Latitude **N**: Longitude **W**:

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 5.99 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 87 (Table B) Product Actually Found: 87 (Table B)

Date Of Spill: Time Of Spill:

Date Reported: January 18, 1996 Time Reported: 1516

Cause: 08 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

Response Time Involved: 4.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **WHITTIER JR, ROBERT** bw

REPORTING INFORMATION

Name(Last, First, MI): GREAT NORTHERN PAPER INC./AKELEY, CARL

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0028 - 96

CLEAN-UP INFORMATION

Spilled Product Recovered: 5.00 G Method: G (Table K)

Other Product Recovered: Method: (Table K)

Contaminated Soil: 1.99 Y (Cubic Yards or Tons)

Disposal Info: landfill

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Refferal: N

Insurance Fund Claim: N

Technical Services Refferal: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Removed:

NARRATIVE

Carl Akeley of Great Northern Paper in East Millinocket called to report a small discharge of dielectric oil from a transformer at their faciltiy. Approximately 5 gallons weeped from a fitting at the bottom unit. The material was tested and discovered to be non hazardous. It is estimated that one yard of contamination was taken to an approved landfill. No surface or ground water was affected.

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

Spill File

February 1, 1996

Mr. Robert Whittier
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Bob:

Attached is a written report on the leak from T124 Transformer at our East Operation which was discovered January 18. This is a non-PCB retrofilled unit. I reported the leak to you that day.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

cc: Cynthia Darling - DEP Bangor Office

File No. SPILL FILE

January 29, 1996

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket Operation
Source of spill:	T-124 Transformer, near riverbank between woodroom and new grinder room.
Date of spill:	Oil discovered on snow under transformer January 18.
Time span of spill:	Unknown
Body of water impacted:	None, discovered on snow under transformer. With snow gone, there is also staining present on the ground under the unit.
Volume lost to stream:	Not Applicable. Total volume lost to ground estimated less than five gallons. Amount lost from transformer was not enough to register on guage.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	No impact

Comments:	Oil discovered on snow during preparations for excavation to install grounding mat. Sorbant material placed. Source of oil determined to be weep from transformer. It is suspected the weep was from the point where the pump is mounted to the transformer; however, the weep has stopped and the unit is being monitored to confirm this if it starts again. We suspect ambient temperature changes cause the weep to start and stop.
Steps to be taken to prevent reoccurrence:	Unit being monitored to determine exact source of leak and repair. Oily soil under transformer to be excavated, stockpiled, and tested for PCB to confirm that it is less than 50ppm. Cyndi Darling has stated material may be disposed at Dolby Landfill assuming PCB level is less than 50ppm. Oily snow contained 2.7ppm.
Phone reported to:	Bob Whittier, Bangor DEP, 3:15pm January 18, 1996 by C. E. Akeley

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-35-2013**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: JOHN M SELLECK
Primary Product: Hazardous Chemical - Specified in report {79} - 50 gals. ESTIMATE
Subject/Owner: GREAT NORTHERN PAPER, INCORPORATED - -

I. EVENT

Spill Info

Type: Hazardous Material Incident {H}
Source: Storage Unit - Aboveground Storage Tank {TA}
Cause: Mechanical Failure - Piping/Hose {06}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

01/25/2013 13:15

Subject/Spiller (Potential Responsible Party)

Contact: --GREAT NORTHERN PAPER, INCORPORATED
ONE KATAHDIN AVENUE
MILLINOCKET ME 04462-1398 USA
207-723-5131

Comment:

Reporter

Contact: JOHN CIVIELLO--GREAT NORTHERN PAPER, INCORPORATED
50 MAIN STREET
E. MILLINOCKET ME 04462 USA
207-723-2201

Comment:

Primary Responder and Other Employees

JOHN M SELLECK (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: GREAT NORTHERN PAPER, INCORPORATED
Street Address: 50 MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}
Engineered Containment{E}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

Hazardous Chemical - Specified in report {79}

Cleanup DTREE

Products Found/Amount Spilled

Hazardous Chemical - Specified in report {79}/ - 50 gals. ESTIMATE (Primary Product)

Material Recovered

Unspilled Product {VP} - 5,000 gals. ESTIMATE

Other Material {OM} - 4,500 lbs. ESTIMATE

Recovery/Treatment Method

Pumps {B}
Sorbents {C}

Disposal Information

Clean Harbors Environmental Services disposed of contaminated material.

IV. NARRATIVE

At 1315 hours on 1/25/13, Mr. John Civiello of Great Northern Paper (GNP) reported a 40-50 gallon spill of ferric sulfate at their East Millinocket facility. The leak started sometime in the night. Clean Harbors Environmental Services was called in the morning to assist with transferring the 5000 gallons of product still in the tank and to remove any product which spilled out of the secondary containment. The secondary containment is constructed of fiberglass and envelopes the whole tank. Product could be seen 3 feet high in the secondary containment while Clean Harbors and GNP worked to transfer fluid from the tank to temporary containers. Product was transferred to fifteen totes, each with a capacity of approximately 300 gallons, for a total of approximately 5,000 gallons. Fourteen 55-gallon drums were filled with spilled ferric sulfate, sludge, which was used as a sorbent and diking material, and some soil. Ferric sulfate is a liquid, but in the current temperatures it acts like molasses. Clean Harbors disposed of the waste drums.

The secondary containment was removed exposing the broken pipe. It appeared that water entered through the access door on the top of the secondary containment and froze in the area between the secondary containment and the main tank. This caused the plastic pipe to break which allowed ferric sulfate to leak into the secondary containment. The secondary containment was removed and then the water and ice was removed exposing the broken pipe. The broken piping was fixed. The secondary containment was reinstalled and the access door on the top of the secondary containment was waterproofed. Water will not be allowed to build up inside the secondary containment if water does get inside again. No further action by the Division of Response Services is expected at this time.

V. ATTACHMENTS

Attachment Type	Description	File Name

NRB

OIL SPILL REPORT FORM

Spill Case # B-42 for 1981

Spillor and Location Great Northern Paper Co. --- East Millinocket

Person Reporting Spill Tom Glidden (#723-5131, Ext. 1421) (S)

Amount and Type of Product Approx. 200-300 gal. bunker C

Date and Time of Spill Unknown Reported 5/2/81 --- 1100

Cause of Spill Oil overflowed separator into holding pond at mill. P or A (P)

Total Amount of Oil Recovered Approx. 95% Methods Pumping, sorbents, incineration

Oils - Recycleable 150 gal. Liquids - Non-Recycleable 1000 gal.

Solids - Combustible 25-30 drums Solids - Non-Combustible 0

Weather Conditions Unknown at time of spill.

Water Course Affected Holding pond in mill yard.

Investigator(s) R. Randall n.f.m. Incident Code A LW

REMARKS - RECOMMENDATIONS

This office received a call at 1100 on 5/2/81 from Fred Brann (DEP-Portland Field Office) reporting an oil spill. He stated that Tom Glidden (Great Northern Paper Co., #723-5131, Ext. 1421) had just called the Portland answering service and inquired as to who was on standby in the Bangor area. It was indicated that they were cleaning up an oil spill and needed some disposal information. Mr. Brann informed him that I was on standby.

Mr. Glidden called me at home a few minutes later and stated that they were in the process of cleaning up an oil spill at their mill in East Millinocket. He indicated that bunker C oil had dripped onto their collection pans under the railroad tracks at their tank car unloading rack and had accumulated there over the winter. Due to recent warm weather the oil had begun to move. It would generally be contained and recovered at their oil/water separator. However, since there is a low volume of water flowing through the separator at this time, the oil passed through the separator and into their holding pond. Mill personnel noticed 2-3 inches (several hundred gallons estimated) of oil in the holding pond on Friday (5-1-81) and Maine Coastal Services (#784-2345) was contacted to assist with cleanup. Mr. Glidden stated that the oil had coated the soil and vegetation (cattails, etc.) around the edge of the holding pond and was inquiring if it would be alright for the East Millinocket Fire Department (#746-9951) to burn some of this material on Sunday. Since excavation was impractical in this case and there was a possibility that some of the oil might leach into the river if left on site, it was felt that a control burn would be an acceptable solution. I was informed that none of the oil had reached the river yet; it had all been contained on mill property and was being cleaned

up by the contractor. I inquired if they needed any assistance from DEP, but was informed that they did not.

May 4, 1981
Monday

I called Mr. Glidden on this date and briefly discussed the situation with him. He reported that most of the oil had been cleaned up over the weekend. Some of the oil was pumped into a tank truck from the holding pond, but it was later determined that primarily water had been recovered. A hole was excavated near the site on Saturday and some of the contaminated debris was burned in it. The Fire Department also burned the oil coated grass and soil around the edge of the holding pond. There was some cleanup still remaining to be done, but most of the oil had been recovered by Sunday (5-3-81) PM.

Since this spill was reported and is being cleaned up, I see no call for further State action at this time. This report should be filed for future reference.

Enforcement ____ -- Reimbursement ____

L

12/18 cf

OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number 85-152-185

SUBJECT

Name (Last, First, MI): Great Northern Paper Co
Address: _____ Town: East Millinocket State: __
Zip: ____-____ Telephone Number: (__) - __ - ____ (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: I (Table A)
Amount spilled: 70 (gals, yds3, lbs, or bbls)
Type of spill: 80 (Table B)
Date of spill: 85/3/27 (Yr/Mo/Dy) Time of spill: 2215 (Military)
Date reported: 85/3/27 (Yr/Mo/Dy) Time reported: 2400 (Military)
Cause: A13 (Table C) Detection method: 52 (Table D)
Incident code: A - I (Table E) DEP response time involved: 3.0 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. B. Taylor
2. _____
3. _____

PERSON REPORTING INCIDENT

Name (Last, First, MI): Great Northern Paper Co
Address: _____ Town: East Millinocket State: __
Zip: ____-____ Telephone Number: (__) - __ - ____ (Optional)

CLEAN-UP INFORMATION

Total product recovered: 60 (gals, yds3, lbs, or bbls)
Method: GF (Table K) Non-recyclable: 0 (gals, or bbls)
Solids combustible: 0 (yds3, or tons)
Solids non-combustible 0 yds3
Recyclable material: 60 (gals, yds3, lbs, or bbls)
Number of filters installed: 0 Number of aerators installed: 0
Disposal Information: _____

OTHER ACTIONS

Reimbursement: to SF (surface water) _ (Y or N)
to GF (ground water) _ (Y or N)
to HWF (haz waste) _ (Y or N)
Third party damage claim expected: _ (Y or N)
Enforcement referral: _ (Y or N)

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

ORIGINAL

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: __ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: __ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: __ (Table F) Exposure level : _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: __ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

JW 30 n.f.n. 1R

OIL & HAZARDOUS MATERIAL REPORT FORM

NUMBER: B / 52 / 85

1. Spillor:

a./ Name: Great Northern Paper Co. (Last, First, MI)

b./ Address: _____ (Optional)

c./ Town: East Millinocket

d./ State: ME ; e./ Zip-Code: 04430; f./ Tel. #: 207 - 746 - 9912 (Optional)

2. Spill Information:

a./ Town: East Millinocket; b./ Type: 1 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: 70 (gals., yds^3, or lbs); d./ Hazardous Waste Number: ___

e./ Oil; 81 (Table N); f./ Material State: L (G,L, or S)

g./ Concentration: pure ppm;

h./ Date and Time of Spill: 85/03/27 (yy/mm/dd), 2215 (Military)

i./ Date and Time Reported: 85/03/27 (yy/mm/dd), 2400 (Military)

j./ Cause: A2 (Table A6); k./ Recovered or Treated: 60 (gals,yds^3, or lbs)

l./ Method: c,f (Table A7); m./ Recycleable Material: 60 (gals, yd^3, lbs)

n./ Non-Recycleable Materials: _____ (gals, yds^3, or lbs)

o./ Solids Combustible: _____ cubic yds; p./ Solids Non-Combustible _____ cubic yds; q./ Weather a (Table A8); r./ Disposal Info.: East Millinocket Bark Boiler

3. Other Information:

a./ Investigator: Taylor, Barbara BT (Last, FI, MI); b./ Incident Code: A W (Table W); c./ Surface Water: Y (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 3 (hours)

4. Person Reporting Incident:

a./ Name: Great Northern Paper Co. (Last, FI, MI);

b./ Address: _____ (Optional);

c./ Town: East Millinocket ; d./ State Maine ; e./ Zip: 04430

f./ Telephone #: 207 - 746 - 9912 (Optional)

- OVER -

5. Other Actions:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. Nature of complaint for investigation:

Tubing broke off a hydraulic pump releasing 70 gallons of hydraulic oil into Great Northerns Dolby Dam facility. Only about ten gallons made it to a drain pit which empties into the West Branch of the Penobscot River.

Tom Varney and I were in Millinocket on 3/28 anyway so we visited the spill site too. G.N.P. personnel had placed a sorbent boom around the #5 water wheel where the oil had leaked out.

They cleaned up the 60 gallons of oil inside and mixed it with bark to burn at East Millinocket's bark boiler.

Case closed: File.

OIL
~~HAZARDOUS MATERIAL~~ SPILL
BANGOR REGIONAL OFFICE REPORT

This form should be filled out by the spillor and returned to the Department of Environmental Protection within ten (10) days. Please mail to: Maine D.E.P.; Bureau of Oil & Hazardous Material Control; Division of Field Services; ~~XMXXXXXXXXXXXXXXXX~~; Bangor, Maine 04401.

DATE & TIME OF ~~CHEMICAL~~ OIL DISCHARGE: 3/27/85 10:15 p.m. *106 Hogan Road*

NAME & ADDRESS OF PARTIES INVOLVED: GREAT NORTHERN PAPER, MILLINOCKET/EAST MILLINOCKET, MAINE

EXACT LOCATION OF SPILL: DOLBY DAM - WEST BRANCH PENOBSCOT RIVER

AMOUNT AND TYPE OF ~~CHEMICAL~~ OIL (S) DISCHARGED: APPROXIMATELY 70 GALLONS REGAL N68 HYDRAULIC OIL (~ 10 GALLONS TO RIVER).

COMPLETE DESCRIPTION OF CIRCUMSTANCES CAUSING DISCHARGE: TUBING BROKE OFF HYDRAULIC PUMP THAT CONTROLS THE HEADGATES OF NUMBERS 6 & 7 WATER WHEELS. THE PUMP IS LOCATED TWO (2) FEET FROM THE NUMBER 5 WATER WHEEL DRAIN PIT.

AMOUNT OF ~~CHEMICAL~~ OIL (S) RECOVERED: APPROXIMATELY 60 GALLONS METHOD: SPEEDI DRI

LOCATION AND METHOD OF ~~CHEMICAL~~ OIL/DEBRIS DISPOSAL: MIXED WITH BARK AND BURNED IN EAST MILLINOCKET'S BARK BOILER.

NAME AND ADDRESS OF ANY PERSON, FIRM OR CORPORATION SUFFERING DAMAGES DUE TO THIS DISCHARGE:

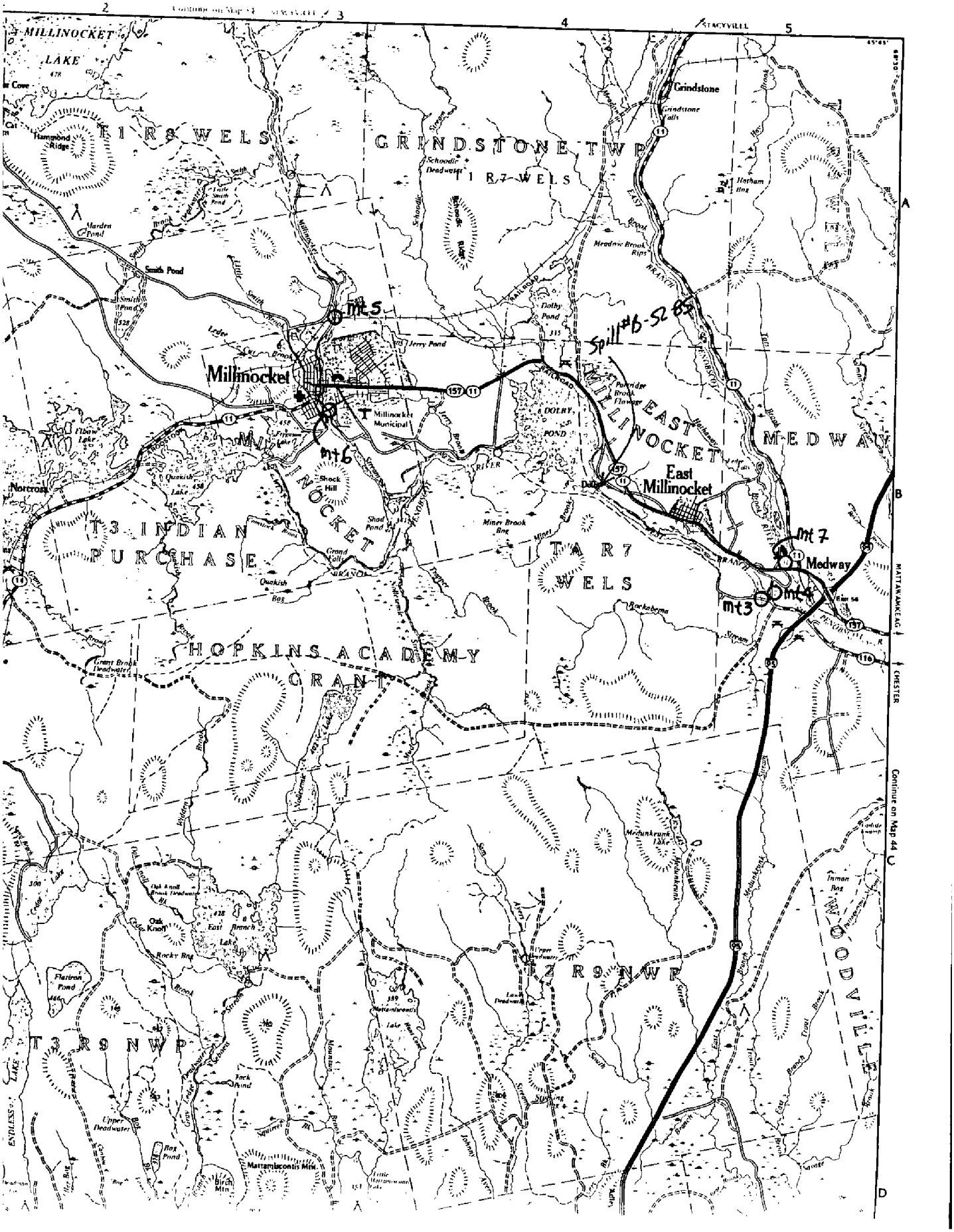
NONE

PROCEDURES, METHOD, AND PRECAUTIONS INSTITUTED TO PREVENT A SIMILAR OCCURRENCE FROM RECURRING:

THE TUBING HAS COMPRESSION FITTINGS WHICH WILL BE CHANGED TO STEEL TUBING WITH FLARE FITTINGS.

ADDITIONAL COMMENTS:

REPORT PREPARED BY: S. Walsh


MILLINOCKET
LAKE
T1 R8 WELS
GRINDSTONE TWP
T1 R7 WELS
Grindstone
Hamond Ridge
Marden Pond
Smith Pond
Little Smith Pond
Schoodic Deadwater
Schoodic Ridge
Meadow Brook Rips
Hatham Hill
Dolby Pond
Jerry Pond
mt5
Spill #6-52 85
Millinocket
Millinocket Municipal
mt6
EAST MILLINOCKET
MEDWAY
East Millinocket
Norcross
Shad Pond
Shock Hill
Miner Brook Bog
T3 INDIAN PURCHASE
T4 R7 WELS
mt7
Medway
mt4
mt3
Quakish Lake
Grand Falls
HOPKINS ACADEMY GRANT
Grant Brook Deadwater
Oak Knoll
East Branch Lake
Flatiron Pond
T3 R9 NWP
T2 R9 NWP
Upper Deadwater
Mattamiscontis Mtn.
Birch Mtn.
Mud Pond
Medunkeunk Lake
Inman Bog
WOODVILLE
MATTAWAMKEAG
CHESTER
Continue on Map 44
2
3
4
5
A
B
C
D

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-56-2011**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ANDREA L LASSELLE
Primary Product: Lube Oil {10} - 1 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER CO LLC - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Equipment - Industrial Machinery {IM}
Cause: Accident - Human Error {17}

Spill Date/Time

02/01/2011 13:20

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

02/01/2011 13:29

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER CO LLC
50 MAIN ST.
EAST MILLINOCKET ME 04430 USA
207-723-5131

Comment:

Reporter

Contact: --KATAHDIN PAPER CO LLC
50 MAIN ST.
EAST MILLINOCKET ME 04430 USA
207-723-5131

Comment:

Primary Responder and Other Employees

ANDREA L LASSELLE (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER CO LLC
Street Address: 50 MAIN ST.
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Interior Surface{S}

Tanks Involved

None

III. CLEANUP

Product Reported

Lube Oil {10}

Cleanup DTREE

Products Found/Amount Spilled

Lube Oil {10}/ - 1 gals. ESTIMATE
Additional Product Description - less than (Primary Product)

Material Recovered

Other Material {OM} - UNKNOWN

Recovery/Treatment Method:

Sorbents {C}

Disposal Information

IV. NARRATIVE

On 2/1/11, Katahdin Paper Co reported a 1 gallon spill of lube oil to concrete floor in the mill. A worker was refilling the lube oil for a bearing on one of the pieces of machinery and accidentally overfilled the reservoir. The oil on the floor was cleaned up with speedi dry and other sorbent material. No further Response action anticipated.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 58 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN

Address: KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: 10 GAL. SULFURIC ACID

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: EAST MILLINOCKET Zip: 04462

Latitude N: 45 / 37 / 27 Longitude W: 68 / 34 / 4

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 10.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 72 (Table B) Product Actually Found: 72 (Table B)

Date Of Spill: Jan. 03, 1994 Time Of Spill: (Military)

Date Reported: Jan. 03, 1994 Time Reported: 1900 (Military)

Cause Of Spill: 06 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - P - (Table E)

DEP response time involved: 3 Wells At Risk: 0 Wells Impacted:

Investigators' names : LECKEY, CLEVE CL

PERSON REPORTING EVENT

Name (Last, First, MI): GREAT NORTHERN/CARL ACKLEY

Address: KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 58 - 94

Total Product Recovered : 9.90 G (Gals, Yds3, Lbs or Bbls)

Method of Recovery : I

Non Recyclable : (Gals or Bbls)

Solids Combustible (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable 9.90 G (Gals, Yds3, Lbs or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : neutralized and flushed to process sewer

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-58-94

On 1-30-94, 1900hr, Carl Ackeley of Great Northern in Millinocket called to report a 10 gallon sulfuric acid release. The release came from acid feed line to their recycling plant. It landed on coated cement where it was neutralized and washed to their process sewer. The acid is used in combination with a polymer to clarify their waste water.

____ ENFORCEMENT ____ REIMBURSEMENT ___ 3rd PARTY CLAIM ___ INS. CLAIM

Oil & Hazardous Materials Report Form
Spill Number: B/070/93

Subject:
Name (Last, First MI): BOWATER-GREAT NORTHERN PAPER
Address: 1 KATAHDIN AVE Town: MILLINOCKET
State: ME Zip-code: 044621398 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 20.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: 93/02/13 (yy/mm/dd) Time of Spill: 0700 (Military)
Date Reported: 93/02/13 (yy/mm/dd) Time Reported: 1249 (Military)
Cause: 06 Detection method: 2I
Incident code: AIDI DEP response time involved: 2.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. MALECK, TOM TLM
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARL - AS ABOVE
Address: _____ Town: _____
State: __ Zip-code: _____ Telephone: _____

Oil & Hazardous Materials Report Form
Spill Number: B/070/93 (continued)

Clean-up Information:

Total product recovered: 2.00 gals.Y cu. yds.N lbs.N bbls.N
Method: C Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME OF CHEMICAL INVOLVED:

Feb. 13, 1993 1249

The State Police dispatcher (866-2121) phoned to report a 20 gallon oil spill at the Great Northern Paper Mill an asked that I contact Carl Ackley (723-8061).

According to Carl Ackley, of Bowater-Great Northern, about 20 gallons of hydraulic oil was released when a hydraulic line blew at the fitting at the Dolby Dam. The hydraulic oil line is utilized in opening the gates at the dam.

The oil (Texaco Rando 68 hydraulic oil) sprayed onto the floor and back wall into the wheel pit. From there the oil entered the trail race and the West Branch of the Penobscot River it is estimated that about 20 gallons of oil made it to the river around 0700 this morning.

Boom was placed at tail race to soak up any oil that was left.

REC: File Report
TM/mab

File No. 608.20

February 23, 1993

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	Dolby Power Station
Source of spill:	Broken fitting on head gate hydraulic system
Date of spill:	February 13, 1993
Time span of spill:	A few minutes around 7:30am
Body of water impacted:	West Branch of Penobscot River
Volume lost to stream:	About 20 gallons of Texaco Rando 68 hydraulic oil
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable
Visual inspection of the river:	Sheen at tailrace of dam
Comments:	Bulk of oil was collected in containment. Oil that reached river sprayed from fitting past the containment structure and ran down a wall to the wheelpit. As much material as possible was soaked up with sorbant. Booms were placed at tailrace to collect remaining material.
Steps to be taken to prevent reoccurrence:	Repairs made to hydraulic fitting.
Phone reported to:	Tom Maleck, Maine DEP, and National Response Center, Report #157953, on 2/13/93

C. E. Akeley

BOWATER INCORPORATED **Interoffice Memo**
GREAT NORTHERN PAPER, INC.

Reference:

Date: 20-Feb-1993 08:45am EDT

To: *CARLTON E. AKELEY

From: DANIEL J. CASSIDY **Copies To:**

Subject: WWTP COSTS

CARL, THE IMPROVEMENTS TO THE WWTP LIFT STATION COSTS ARE AS FOLLOWS:

JOB 22821 BACK-UP POWER (REPLACE ALL CONTROLS RELATED TO THE LIFT STATION AND INSTALL A BATTERY BACK-UP SYSTEM FOR LIFT STATION CONTROLS) COST $88,304.00

JOB 22823 MAIN EFFLUENT PUMP VS DRIVE (REPLACE OLD EDDY CURRENT CLUTCH DRIVE WITH NEW VARIABLE FREQUENCY AC DRIVE) COST $179,788.00

IF YOU NEED ANY FURTHER DETAILS OR EXPLANATIONS, ETC, JUST LET ME KNOW.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 77 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE. Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1,250.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 16, 1994 Time Of Spill: 0745 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 07 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION **Spill Number B - 77 - 94**

Total Product Recovered : 1,250.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : G

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 60.90 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : disposed of by Clean Harbors

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-77-94
02/16/94 07:45

Scott Davis of Clean Harbors Inc. called to request a contaminated debris shipment form for the disposal of #6 oil soaked railroad ballast from a spill that occurred at Great Northern Paper in East Millinocket. It was reported that a valve failed on a tank car spilling anywhere from 1000-1500 gallons onto the railroad bed. Curious as to why the spill wasn't reported by Great Northern I decided to venture up there to investigate.

When I arrived I met with Judy Moore, Environmental Specialist for the mill. She informed me that they didn't think they had to report spills that occurred within secondary containment. I explained to her otherwise and dropped the matter. In any event I was informed that the railroad bed where the tank cars were off-loaded sat within a secondary containment area that was heated with steam to keep the #6 oil flowing in the event of a spill. This containment area is ultimately connected to an oil-water separator. Looking the system over it was clear that the system did it's job.

Altogether about 60 yards of #6 oil soaked ballast was removed by Clean Harbors Inc. and disposed of at Sawyer Environmental in Hampden. The area was then filled with new ballast in preparation for another spill which hopefully will not occur. No resources of the State are believed to be affected from this particular spill.

File No. Spill File

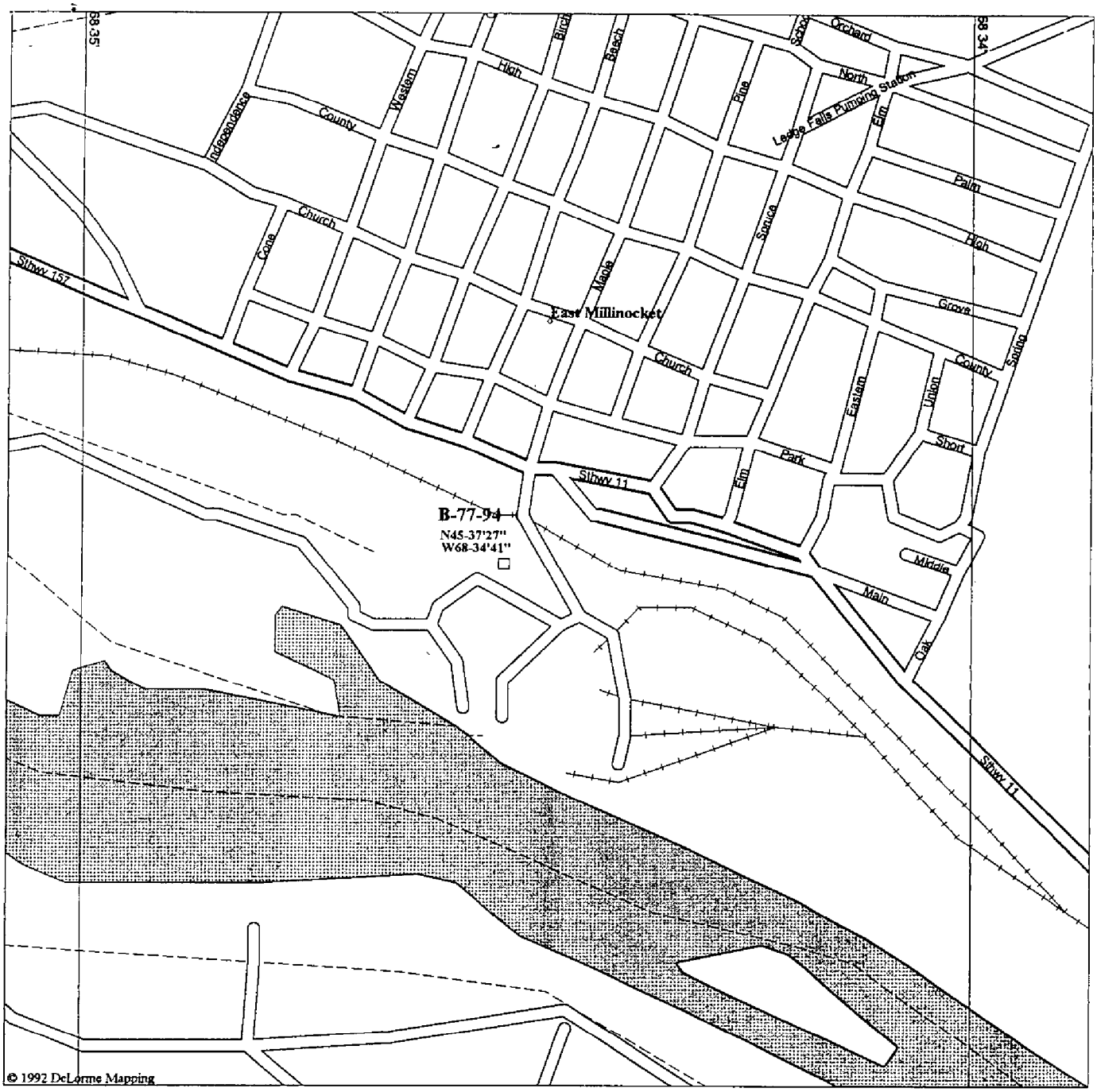
March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Rail Car
Date of spill:	February 16, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 1000 to 1500 gallons of Bunker C oil lost to containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Valve on rail car was broken. Valve was in closed position but leaked when cap was removed. Cap was replaced and leak stopped. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Working with Bangor & Aroostook Railroad concerning tank car maintenance issues.
Phone reported to:	Contacted DEP through Clean Harbors for approval of disposal of cleanup material at Sawyer Environmental.

C. E. Akeley



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:13:18 1994

Date 2/16/94 DEP SPILL # B. 77. 94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCCE

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP represenative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

Solids consist of (check as appropriate)

- ___sand, gravel or soil
- ___speedy-dri
- ___sorbent
- ✓other RR. BALLAST & SNOW (descibe or lists)

Facility is (check One)

- ✓Landfill
- ___Land Spreading Site
- ___Asphalt Plant
- ___Asphalt Pug Mill
- ___other _____ (describe)

TW. Varney
Signature- DEP Representative

R. Manill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 79 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE Town: EAST MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: #6 OIL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 550.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: Feb. 15, 1994 Time Of Spill: 1100 (Military)

Date Reported: Feb. 16, 1994 Time Reported: 1230 (Military)

Cause Of Spill: 17 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): DAVIS, SCOTT (CLEAN HARBORS)

Address: RFD 2 BOX 33 Town: BANGOR

State: ME Zip Code: 04401 Telephone: (207) 848-2800

CLEAN-UP INFORMATION Spill Number B - 79 - 94

Total Product Recovered : 550.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 15.90 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :burnt in mills boiler

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

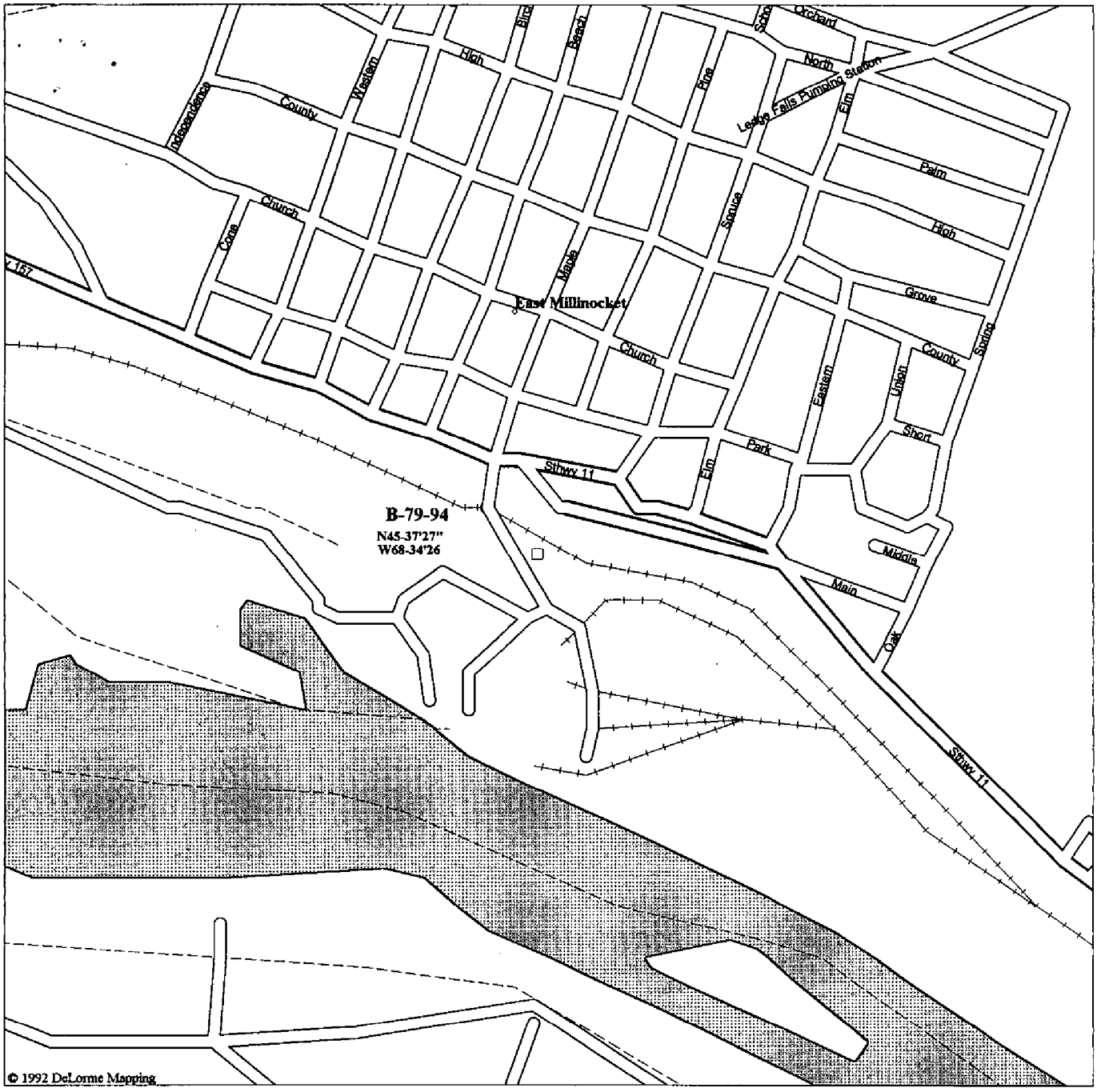
Please, document your information carefully. It may be needed for future reference or legal action.

B-79-94
02/16/94 12:00

Scott Davis of Clean Harbors Inc. of Bangor called to request a shipment form for the disposal of #6 oil contaminated debris resulting from two separate spills at Great Northern Paper in East Millinocket. Mr. Davis was then questioned as to the cause of the spills since neither of them were reported. This call was received by Tom Varney of this office. The first spill was associated with an overfill of a tank truck. The second was associated with a railroad tank car. The latter will be covered in spill report No. B-77-94.

When I arrived I met with Judy Moore, Environmental Specialist for Great Northern. It was explained to me that during the previous evening a worker from Superior Carriers Inc. of Bangor was gravity loading a tank truck when a valve failed overfilling the truck. Approximately 500-600 gallons of #6 fuel oozed into an earthen dike where it hardened in the cold temperatures. Inspection of the area shown that the oil was well contained on top of the snow. It appeared that the oil could easily be scraped up, mixed with wood chips, and burnt in the facilities boiler.

I was also informed that there was a secondary valve that could have been turned off preventing the spill. Why this was not done remains a mystery. In any event the worker from Superior Carriers was fired. No resources of the State were affected in this rather "non-sensitive" area.



LEGEND

- Small town
- Boundary
- Road
- State highway
- Railroad
- Powerline
- Island
- Open water

Scale 1:7,812 (at center)

500 Feet

200 Meters

GNP-Bowater-E. Millinocket
Mag 16.00
Thu Feb 24 11:19:40 1994

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 1, 1994

Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached are written reports for the Bunker C oil spills which occurred at the East Operation oil farm February 15 and 16.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 1, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Oil Farm
Source of spill:	Filling of oil truck
Date of spill:	February 15, 1994
Time span of spill:	A few minutes
Body of water impacted:	None
Volume lost to stream:	None, 500 to 600 gallons of Bunker C oil spilled into containment.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments	Truck was being filled to transport oil to steam plant. Shutoff switch failed. Contracted with Clean Harbors to clean up material.
Steps to be taken to prevent reoccurrence:	Shutoff switch replaced.
Phone reported to:	Contacted DEP through Clean Harbors on Feb. 16 for approval for disposal of cleaned up material at Sawyer Environmental.

C. E. Akeley

Date 2/16/94 DEP SPILL # B.77.94

GENERATOR GREAT NORTHERN / BOWATER EAST MILLINOCKET

TRANSPORTER CLEAN HARBORS

REFERENCE: SHIPMENT OF OIL SPILL DEBRIS

ON 2/16/94 (date) ROBT. WHITTIER JR (DEP representative) OBSERVED THE

clean up of oil spill debris at GNP/BOWATER, EAST MILLINOCKET (location)

which resulted from MALFUNCTIONING VALVE, # 6 OIL (description of incident)

OFFLOADING AREA

This shipment consists of ± 60 (quantity) yards

and/or _____ drums of solid contaminated with

6 OIL (contaminant)

Solids consist of (check as appropriate)

___sand, gravel or soil
___speedy-dri
___sorbent
__X__other RR. BALLAST & SNOW (descibe or lists)

Facility is (check One)

__X__Landfill
___Land Spreading Site
___Asphalt Plant
___Asphalt Pug Mill
___other _____ (describe)

T.W. Varney
Signature- DEP Representative

R. Manill
Signature-Facility Representative

white - DEP Representative
Pink - Generator

Ca
Gc

Post-It™ brand fax transmittal memo 7671 | # of pages > 1

To SCOTT DAVIS	From TOM VARNEY
Co. CLEAN HARBORS	Co. ME DEP
Dept.	Phone # 941 4570
Fax # 848 3164	Fax #

OIL SPILL REPORT FORM

Spill Case # B-82 for 1983

904 PC

Spillor and Location Great Northern Paper Co. --- East Millinocket

Person Reporting Spill Tom Glidden (#723-5131 Ext. 1421)

Amount and Type of Product Minor amount (less than 1 gallon) lube oil

Date and Time of Spill 5/16/83 -- AM Reported 5/16/83 --- 1420

Cause of Spill Bearing let go on water cooling unit. P or A (A)

Total Amount of Oil Recovered Approx. 90% Methods Sorbents

Oils - Recycleable 0 Liquids - Non-Recycleable 0

Solids - Combustible ¼ Drum Solids - Non-Combustible 0

Weather Conditions Clear; warm

Water Course Affected West Branch Penobscot River

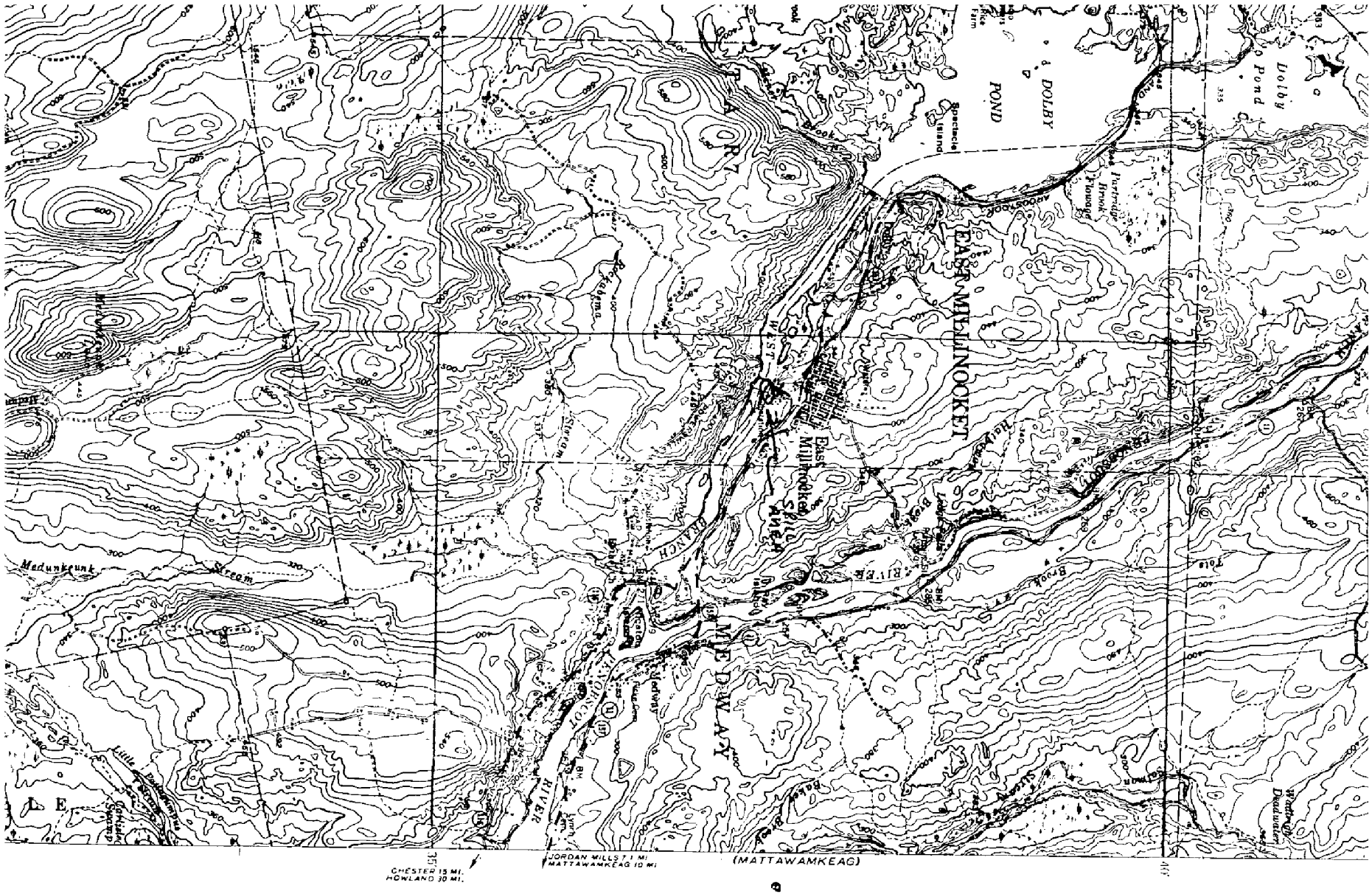
Investigator(s) R. Randall n.f.m. Incident Code A L W

REMARKS - RECOMMENDATIONS

This office received a call at 1420 on 5/16/83 from Tom Glidden (Great Northern Paper Co., #723-5131 Ext. 1421) reporting a minor oil spill at their facility in East Millinocket. He indicated that approximately one quart of lube oil was spilled in the old grinding room when a bearing let go on one of their water cooling units. Some of the oil seeped into the river adjacent to the facility. Sorbent pads were used to cleanup the oil in the grinding room and sorbent boom was installed in the river in an eddy area where the oil was collecting. Officials at the mill then checked downstream for additional signs of oil but nothing was observed. I was informed that the spill was first noticed at 1045.

Since this spill was reported and cleaned up as much as possible, I see no call for further State action at this time. File report.

OCT 17 1995



SPILL CASE # B 82 (1983)
GREAT NORTHERN PAPER CO.
EAST MILLINOCKET, ME.
MINOR SPILL - LUBE OIL

Enforcement___ Reimbursement___

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number B/83/87

SUBJECT

Name (Last, First, MI): Great Northern Paper Co.
Address: Maine Road Town: E. Millinocket State: Me
Zip: 04430- Telephone Number: (207) - 746 - 9912 (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 1 (Table A)
Amount spilled: 1 (gals, yds3, lbs, or bbls)
Type of spill: 84 (Table B)
Date of spill: 87/3/30 (Yr/Mo/Dy) Time of spill: 1200 (Military)
Date reported: 87/3/30 (Yr/Mo/Dy) Time reported: 1823 (Military)
Cause: A7 (Table C) Detection method: S2 (Table D)
Incident code: A-LI (Table E) DEP response time involved: 1 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. Maleck, Tom
2.
3.

PERSON REPORTING INCIDENT

Name (Last, First, MI): Kroeger, Dick
Address: G.N.P. Town: Millinocket State: Me
Zip: 04462- Telephone Number: (207) - 732 - 4279 (Optional)

CLEAN-UP INFORMATION

Total product recovered: 1 (gals, yds3, lbs, or bbls)
Method: C (Table K) Non-recyclable: (gals, or bbls)
Solids combustible: 1/3 (yds3, or tons)
Solids non-combustible yds3
Recyclable material: (gals, yds3, lbs, or bbls)
Number of filters installed: 0 Number of aerators installed: 0
Disposal Information: Pads burned

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

REMARKS/RECOMMENDATIONS/NARRATIVE:

Monday March 30, 1987 --- 1823
I received a phone call from the answering service that Dick Kroeger of G.N.P. in Millinocket phoned to report an oil spill.

I phoned Dick Kroeger (832-4279). According to Mr. Kroeger the power dispatcher reported a small amount of oil, which leaked from the number 6 wheel at Dolby Dam.

The cause appears to have been a blown gasket, which allowed approximately 1 gallon of 60 to 90 weight SAE oil to enter the water in East Millinocket.

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _. (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _. (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _. (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _. (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

According to Dick Kroeger clean up was nearly complete and was aided by wind action which pushed the sheen to the shore where it could be concentrated & picked up using sorbent boom & pads by Great Northern's response team.

REC - file.

Enforcement ___ Reimbursement ___

L

JLN
1-29-87

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number 85/91/85✓

SUBJECT

Name (Last, First, MI): Great Northern Paper Company
Address: East Millinocket Mill Town: East Millinocket State: ME
Zip: 04430-___ Telephone Number: (207) - 723 - 5131 (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 1 (Table A)
Amount spilled: N/A (gals, yds3, lbs, or bbls)
Type of spill: 01 (Table B)
Date of spill: 85/5/17 (Yr/Mo/Dy) Time of spill: 1100 (Military)
Date reported: 85/5/17 (Yr/Mo/Dy) Time reported: 1553 (Military)
Cause: A7 (Table C) Detection method: G6 (Table D)
Incident code: ALG (Table E) DEP response time involved: 9 (Hours)
No. of wells at risk: ___ No. of wells impacted: ___
Investigators' names: 1. Maleck, T.L.
2. ___
3. ___

PERSON REPORTING INCIDENT

Name (Last, First, MI): Welch, Patrick
Address: Great Northern Paper Company Town: Millinocket State: ME
Zip: 04462 Telephone Number: (207) - 723 - 5131 (Optional)

CLEAN-UP INFORMATION

Total product recovered: ___ (gals, yds3, lbs, or bbls)
Method: C (Table K) Non-recyclable: ___ (gals, or bbls)
Solids combustible: ___ (yds3, or tons)
Solids non-combustible ___ yds3
Recyclable material: ___ (gals, yds3, lbs, or bbls)
Number of filters installed: ___ Number of aerators installed: ___
Disposal Information: ___

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/__/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

5

DW JM JW
N.F.M.
GRADING CREDITS?

OIL & HAZARDOUS MATERIAL REPORT FORM

NUMBER: B / 91 / 85

VIO 1 = .75 ✓
(RETURN TO BOB)

1. Spillor:

a./ Name: Great Northern Paper Company (Last, First,

b./ Address: East Millinocket Mill (Optional)

c./ Town: East Millinocket

d./ State: ME; e./ Zip-Code: 04430; f./ Tel. #: 207 - 723 - 5131 (Optional)

2. Spill Information:

a./ Town: East Millinocket; b./ Type: 1 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: _____ (gals., yds^3, or lbs); d./ Hazardous Waste Number: __

e./ Oil; 01 (Table N); f./ Material State: __ (G,L, or S)

g./ Concentration: _____ ppm;

h./ Date and Time of Spill: 85 / 5 / 17 (yy/mm/dd), 1100 (Military)

i./ Date and Time Reported: 85 / 5 / 17 (yy/mm/dd), 1553 (Military)

j./ Cause: A2 (Table A6); k./ Recovered or Treated: _____ (gals,yds^3, or lbs)

l./ Method: C (Table A7); m./ Recycleable Material: _____ (gals, yd^3, lbs)

n./ Non-Recycleable Materials: _____ (gals, yds^3, or lbs)

o./ Solids Combustible: _____ cubic yds; p./ Solids Non-Combustible _____ cubic yds; q./ Weather __ (Table A8); r./ Disposal Info.: _____

3. Other Information:

a./ Investigator: Maleck, T.L. JM (Last, FI, MI); b./ Incident Code: A LW (Table W); c./ Surface Water: Y (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 9 (hours)

4. Person Reporting Incident:

a./ Name: Welch, Patrick (Last, FI, MI);

b./ Address: Great Northern Paper Company (Optional);

c./ Town: Millinocket; d./ State Maine; e./ Zip: 04462

f./ Telephone #: 207 - 723 - 5131 (Optional)

- OVER -

5. Other Actions:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. Nature of complaint for investigation:

Friday May 17, 1985 --- 1553

I received a telephone call from Pat Welch of Great Northern Paper Company in Millinocket. Mr. Welch phoned to report an underground tank leak at the East Millinocket mill. According to Pat Welch (his source of information unknown) oil was noticed in the undertank drain system in the East Millinocket mill yard. The oil ran into a drainage ditch then into the Penobscot River. Mr. Welch said the spill was contained. The tank was emptied and a crew was in the process of removing the 500 gallon or 1000 gallon tank. Booms were placed in the stream to prevent any more oil from entering the river, an under flow dam was also put in place. Mr. Welch said the storage tank was put in about 5 years ago. I asked if they needed anything to contain or clean up the spill. According to Mr. Welch the situation was under control, he said he would contact me if the situation somehow changed.

Monday May 20, 1985

I phoned Mr. Welch for an update on the East Millinocket situation. Mr. Welch said that the rain over the weekend did not release any additional oil into the river via the boomed off ditch. He also said the leak appears to be from the tank's fuel delivery line. Mr. Welch also said the tank is a 12,344 gallon one (not 500-1000) and was put in in 1953 (not 5 years ago). I told Mr. Welch I would be visiting the East Millinocket mill on Tuesday.

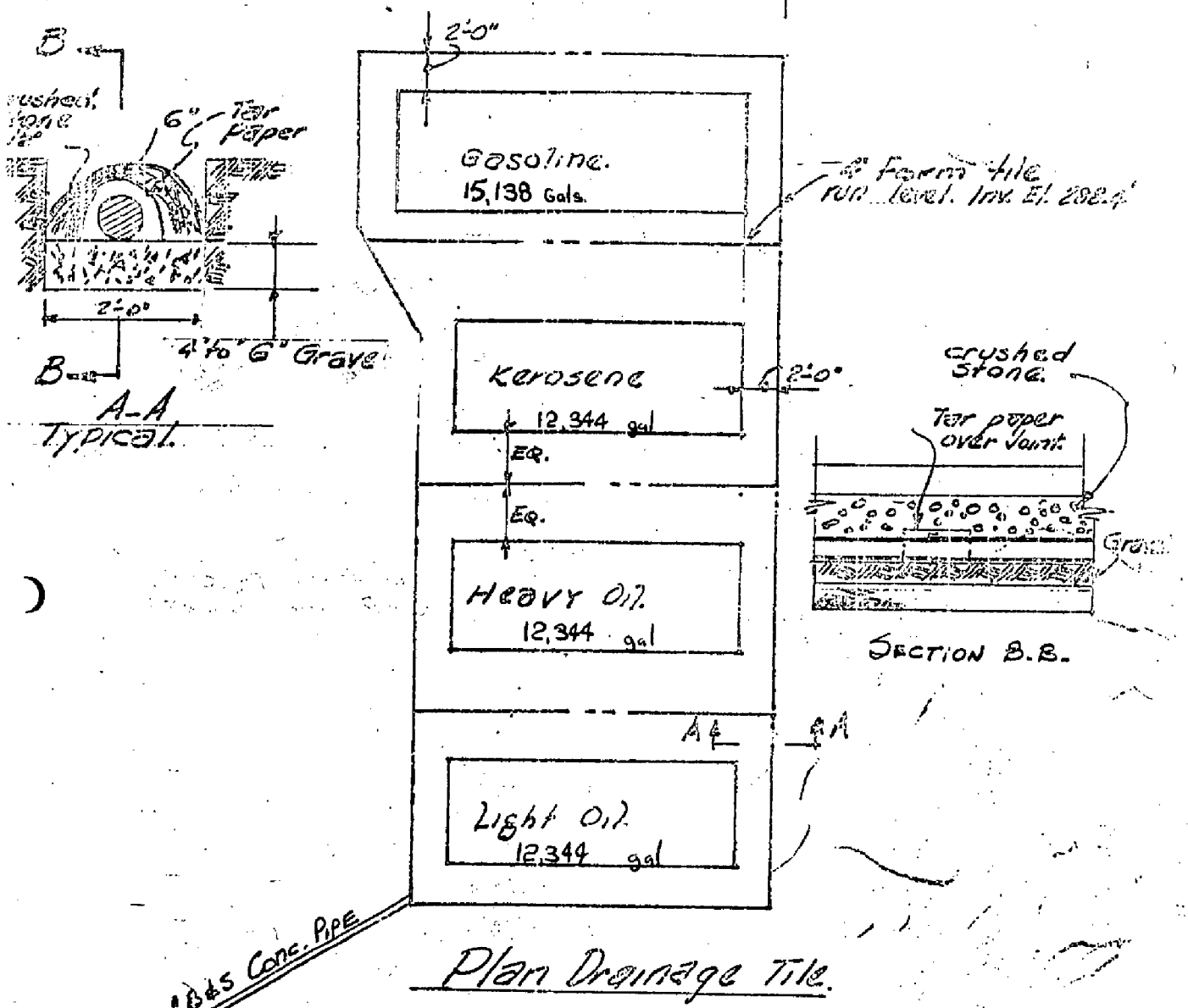
Tuesday May 21, 1985

I visited the mill in East Millinocket observed the drainage ditch that went into the river. It was boomed and had a weir dam across it. There was very little sheen in the ditch and no oil or sheen noted in the river.

Mr. Welch believes the leak is in the delivery line which goes from the #1 fuel oil ("kerosene") tank about 700 feet then into the mills 300 storage tank. He said an attempt was made to pressurize the line for an air test but the line would not hold the air.

I suggested with the age of the tanks that it be tested or discontinued. I gave him the names of tank testers. The tank had 7,100 gallons of #1 in it when I was there. Mr. Welch thought they would discontinue the use of the leaking line which leads into the mill rather than repair it.

B-91-85 UNDERGROUND TANKS AT GREAT NORTHERN'S
EAST MILLINOCKET MILL



G.N.P.Co. East Millinocket Me.
Stone & Webster Engrg. Corp.

Drainage Tile Around Underground Tanks At Near Oil & Paint House

ASK. 1078 Oct. 1940

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 92 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER INC. - BOWATER

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 044621398 Telephone: (207) 723-5131

Comments: 2 GAL. SULFURIC ACID SPIL IN E. MILL. PLANT

LOCATION / FACILITY INFORMATION

Spill Location: RECYCLE FIBER PLANT

Address: RT 11 Location ID: 6421

Town: EAST MILLINOCKET Zip: 04430

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 2.90 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 72 (Table B) Product Actually Found: 72 (Table B)

Date Of Spill: Feb. 22, 1994 Time Of Spill: 2358 (Military)

Date Reported: Feb. 23, 1994 Time Reported: 1450 (Military)

Cause Of Spill: 03 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - P - (Table E)

DEP response time involved: 3 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : LUCE, DARRYL

PERSON REPORTING EVENT

Name (Last, First, MI): GREAT NORTHERN PAPER INC. - BOWATER

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 044621398 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 92 - 94

Total Product Recovered : 2.90 G (Gals, Yds3, Lbs or Bbls)

Method of Recovery : I

Non Recyclable : (Gals or Bbls)

Solids Combustible (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable (Gals, Yds3, Lbs or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : flushed to process sewer after soda ash neutralized

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-92-94

On 2/24/94 Mr. Akeley called to report that on the evening before an estimated 2 gal. of sulfuric acid was spilled inside the recycling mill when a pinhole appeared in a weld in a pipeline. Mill employees treated the acid with soda ash and flushed it to their process sewer. About 15 hours had passed before reporting because the original amount spilled was below the Fed. R.Q., but Mr. Akeley felt that as they had treated it on site with soda ash that it was necessary to make a report. I have attached Mr. Akeley's report.

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

File No. Spill File

March 8, 1994

Darrell Luce
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Darrell:

Attached is the written report for the sulfuric acid spill which occurred at the East Operation on February 24. A letter was also sent to you on this subject March 4; however, the attachment submitted with it was our internal report rather than the formal report we normally submit to the Department. I apologize for any inconvenience.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 4, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation, Recycle Fiber Plant
Source of spill:	Pinhole leak in sulfuric acid line
Date of spill:	February 24, 1994
Time span of spill:	2300 to 2330 hrs
Body of water impacted:	None
Volume lost to stream:	None, about two gallons of sulfuric acid spilled on floor
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Pinhole leak occurred at a weld on an elbow in the acid line to process. Material on floor was neutralized with soda ash for safety of response and operations personnel.
Steps to be taken to prevent reoccurrence:	Line flushed, dried and welded.
Phone reported to:	Darrell Luce, DEP Bangor

C. E. Akeley

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

BOWATER

File No. Spill File

March 4, 1994

Darrell Luce
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Darrell:

Attached is the written report for the sulfuric acid spill which occurred at the East Operation on February 24. The quantity was well below the RQ but was reported to you because response involved emergency treatment.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 4, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Recycle Plant
Source of spill:	Sulfuric acid line to process
Date of spill:	February 24, 1994
Time span of spill:	Approximately 1300 to 1330 hrs
Body of water impacted:	None
Volume lost to stream:	None, about two gallons of sulfuric acid lost on floor.
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable
Visual inspection of the river:	Not applicable
Comments:	Pinhole leak developed in a weld at an elbow in the sulfuric acid line spilling about two gallons of acid on floor in process building. Material was neutralized for safety of personnel as part of response.
Steps to be taken to prevent reoccurrence:	Line has been repaired
Phone reported to:	Darrell Luce, DEP Bangor office

C. E. Akeley

Enforcement ___ Reimbursement

RECEIVED
SEP 25 1992
By ___

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number 8196184

SUBJECT

Name (Last, First, MI): Great Northern Paper Co
Address: ___ Town: East Millinocket State: ___
Zip: ___-___ Telephone Number: (___) - ___ - ___ (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: L (Table A)
Amount spilled: ___ (gals, yds3, lbs, or bbls)
Type of spill: PT (Table B) 80
Date of spill: 84/5/24 (Yr/Mo/Dy) Time of spill: ___ (Military)
Date reported: 84/5/24 (Yr/Mo/Dy) Time reported: 1400 (Military)
Cause: A13 (Table C) Detection method: 52 (Table D)
Incident code: A-I (Table E) DEP response time involved: 1.0 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. J. Ward
2. ___
3. ___

PERSON REPORTING INCIDENT

Name (Last, First, MI): Welch, P
Address: ___ Town: ___ State: ___
Zip: ___-___ Telephone Number: (___) - ___ - ___ (Optional)

CLEAN-UP INFORMATION

Total product recovered: 0 (gals, yds3, lbs, or bbls)
Method: ___ (Table K) Non-recyclable: 0 (gals, or bbls)
Solids combustible: 0 (yds3, or tons)
Solids non-combustible 0 yds3
Recyclable material: 0 (gals, yds3, lbs, or bbls)
Number of filters installed: 0 Number of aerators installed: 0
Disposal Information: ___

OTHER ACTIONS

Reimbursement: to SF (surface water) _ (Y or (N))
to GF (ground water) _ (Y or (N))
to HWF (haz waste) _ (Y or (N))
Third party damage claim expected: _ (Y or (N))
Enforcement referral: _ (Y or (N))

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

OIL & HAZARDOUS MATERIAL REPORT FORM

NUMBER: B / 96 / 84

1. Spillor:

a./ Name: Great Northern Paper Company (Last, First, MI)

b./ Address: _____ (Optional)

c./ Town: East Millinocket

d./ State: ME; e./ Zip-Code: 04430; f./ Tel. #: 207 - 746 - 9912 (Optional)

2. Spill Information:

a./ Town: East Millinocket; b./ Type: 1 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: Unknown (gals., yds^3, or lbs); d./ Hazardous Waste Number: ___

e./ Oil; 10 (Table N); f./ Material State: L (G,L, or S)

g./ Concentration: Pure ppm;

h./ Date and Time of Spill: 84 / 5 / 24 (yy/mm/dd), early AM (Military)

i./ Date and Time Reported: 84 / 5 / 24 (yy/mm/dd), 1400 (Military)

j./ Cause: A7 (Table A6); k./ Recovered or Treated: _____ (gals,yds^3, or lbs)

l./ Method: ___ (Table A7); m./ Recycleable Material: _____ (gals, yd^3, lbs)

n./ Non-Recycleable Materials: _____ (gals, yds^3, or lbs)

o./ Solids Combustible: _____ cubic yds; p./ Solids Non-Combustible _____ cubic yds; q./ Weather __ (Table A8); r./ Disposal Info.: _____

3. Other Information:

a./ Investigator: Ward, J. (Last, FI, MI); b./ Incident Code: A-W (Table W); c./ Surface Water: Y (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 1 (hours)

4. Person Reporting Incident:

a./ Name: Welch, P. (Last, FI, MI);

b./ Address: Great Northern Paper Company (Optional);

c./ Town: Millinocket; d./ State Maine; e./ Zip: 04430

f./ Telephone #: 207 - 746 - 9912 (Optional)

- OVER -

5. Other Actions:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. Nature of complaint for investigation:

Overfilled drip pan at Dolby hydroelectric dam.

7. Remarks/Recommendations/Narrative:

On May 24, 1984 at 1400 hours we received a call from Pat Welch of Great Northern Paper reporting a small oil spill at the Dolby hydro-electric dam in East Millinocket. A drip pan had overflowed and a small but unknown amount of bearing oil had flowed into a drain that emptied into the facility's flywheel area. The pans are checked every one or two days when the semi-automatic dam is inspected. No sheen was visible in the river at 0830 when the spill was noticed.

Enforcement___ Reimbursement___

JLN 1-29-87

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number 8/97/85 ✓

SUBJECT

Name (Last, First, MI): Great Northern Paper Co.
Address: Katahdin Ave. Town: Millinocket State: ME
Zip: 04462- Telephone Number: (207) - 723 - 5131 (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 1 (Table A)
Amount spilled: 55 (gals, yds3, lbs, or bbls)
Type of spill: 86 (Table B)
Date of spill: 85/5/23 (Yr/Mo/Dy) Time of spill: 0300 (Military)
Date reported: 85/5/23 (Yr/Mo/Dy) Time reported: 0420 (Military)
Cause: A3 (Table C) Detection method: 52 (Table D)
Incident code: A L I (Table E) DEP response time involved: 5 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. Randall, R.F.
2.
3.

PERSON REPORTING INCIDENT

Name (Last, First, MI): Krueger, Dick
Address: Great Northern Paper Town: Millinocket State: ME
Zip: 04462 Telephone Number: (207) - 723 - 5131 (Optional)

CLEAN-UP INFORMATION

Total product recovered: _____ (gals, yds3, lbs, or bbls)
Method: C (Table K) Non-recyclable: _____ (gals, or bbls)
Solids combustible: _____ (yds3, or tons)
Solids non-combustible _____ yds3
Recyclable material: _____ (gals, yds3, lbs, or bbls)
Number of filters installed: __ Number of aerators installed: __
Disposal Information: _____

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: _ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: _ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: _ (Table F) Exposure level : _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____

Name of material: _____ UN ID No.: ____

UN chemical class: _ (Table F) Exposure level: _ (Table G)

Protection code: __ (Table H) Health code: _ (Table I)

TRAINING (Table J)

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____ Catagory: ___ Hours: ____

Catagory: ___ Hours: ____

OIL & HAZARDOUS MATERIAL REPORT FORM
NUMBER: B / 97 / 85

1. SPILLOR:

a./ Name: Great Northern Paper Company (Last, First, MI)

b./ Address: Katahdin Avenue (Optional)

c./ Town: Millinocket

d./ State: Me; e./ Zip-Code: 04462; f./ Tel. #: 207 -723 - 5131 (Optional) Ext. 1737

2. SPILL INFORMATION:

a./ Town: E. Millinocket b./ Type: 1 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: 55 (gals., yds^3, or lbs); d./ Oil: 81 (Table N);

e./ Date and Time of Spill: 85 / 5 / 23 (yy/mm/dd), 0300 (Military)

f./ Date and Time Reported: 85 / 5 / 23 (yy/mm/dd), 0420 (Military)

g./ Cause: A2 (Table A6); h./Recovered or Treated: _____ (gals., yds^3, or lbs)

i./ Method: C (Table A7); j./ Recyclable Material: _____ (gals., yds^3, or lbs)

k./ Non-Recyclable Materials: _____ (gals., yds^3, or lbs)

l./ Solids Combustible: _____ cubic yds; m./ Solids Non-Combustible: ____ cubic yds;

n./ Disposal Information: _____

3. OTHER INFORMATION:

a./ Investigator: Randall, R.F. (Last, FI, MI); b./ Incident Code: ALW (Table W); c./ Surface Water: Y (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 5 (hours) f./ Hands On Training Credits: IA(2).5 hr. IB(2).5 hr. VID(1) 1 hr.

4. PERSON REPORTING INCIDENT:

a./ Name: Krueger, Dick (Last, First, MI)

b./ Address: Great Northern Paper Co. (Optional)

c./ Town: Millinocket; d./ State: Me.; e./ Zip-Code: 04462

f./ Tel. #: 207 - 723 - 5131 (Optional) Ext. 1737

5. OTHER ACTIONS:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. **NATURE OF COMPLAINT FOR INVESTIGATION:**

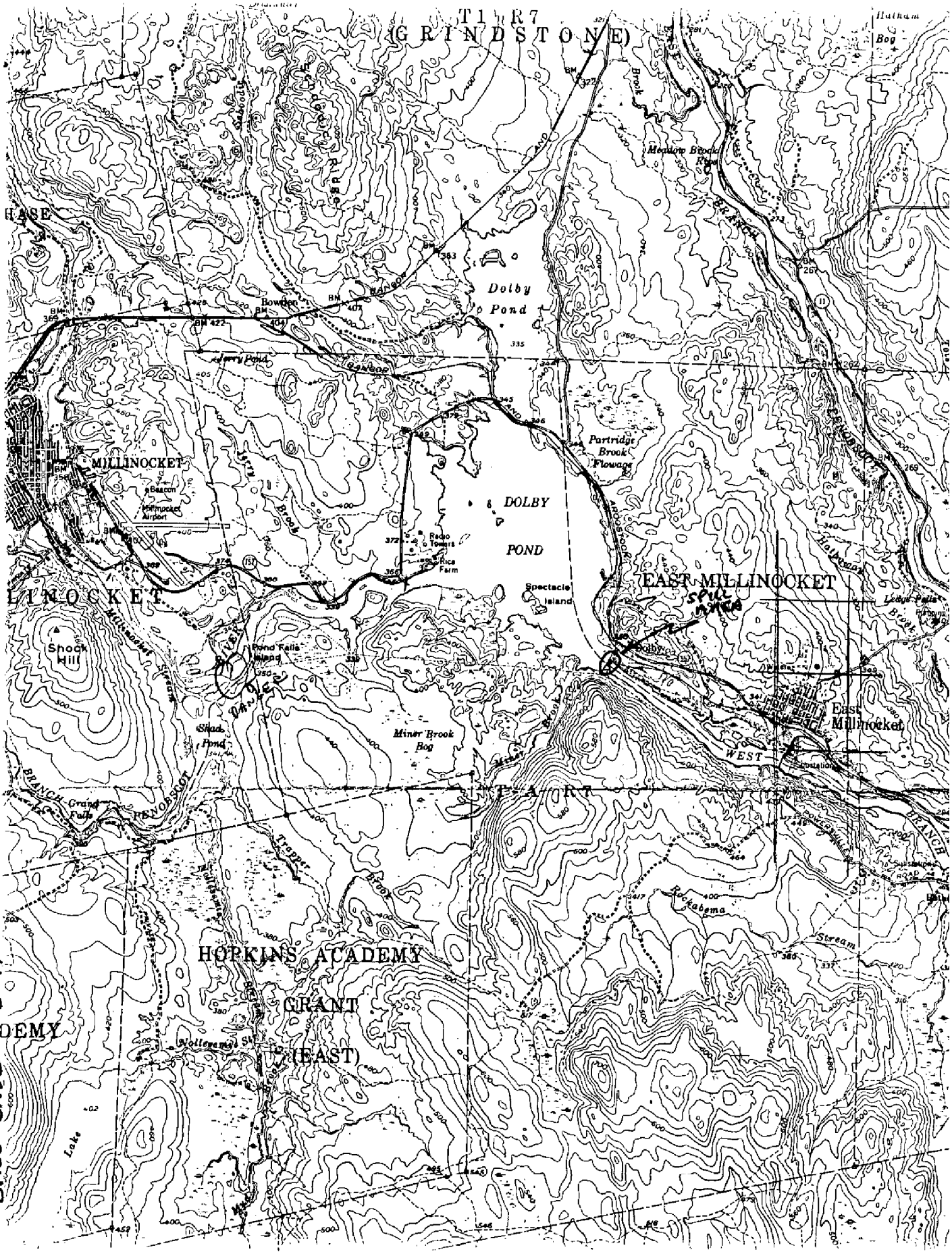
This office received a call at 0420 on 5/23/85 from Perry Cogburn (DEP-Augusta Office) reporting an oil spill. He indicated that Dick Krueger (home #732-4279; office #723-5131 ext. 1737) had just called to report an oil spill by Great Northern Paper Co. at the Dolby dam in East Millinocket. This occurred at approximately 0300.

I called Mr. Krueger and was informed that a low level line (stainless steel tubing) on one of their pumps at the substation let go. A maximum of 100 gallons of hydrolic oil sprayed onto the concrete floor and entered a drain which discharges to the river. It was unknown at this point exactly how much oil had actually been spilled or how much may have reached the river. They would have a better idea as to what was spilled when they fill the hydrolic system and start the pump. In the meantime, the spill team was being called in to put sorbent boom out below the dam. Personnel would check down river at daylight and let me know if any oil is observed.

I was later informed that a sheen was observed below the dam, but most of the oil was being contained with boom. The spill team would be at the dam around noontime to begin cleanup of the material. When the pump was repaired, 55 gallons of hydrolic oil were added to the system. Half of the original oil was contained on the floor and an estimated 25 gallons made it to the river.

Arriving in E. Millinocket around 1230, I went straight to the dam. There was a sheen just below the dam, but this was being contained and absorbed as much as possible by two strings of sorbent boom. Nothing of significance was observed down river. I then talked with the substation operator and was informed that the stainless steel tubing on the pump apparently let go due to pump vibration. This had been repaired with a different fitting. Oil, which sprayed on the floor, was cleaned up with speedi-dry.

REC: Case closed. File report.



SPILL CASE #B-97-85

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 102 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER GREAT NORTHERN PAPER INC.

Mailing Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462-5131 Telephone: (207) 723-5131

Comments: 20 GALLON 93% H2 S04 LEAK DUE TO FAILED FLANGE GASKET

LOCATION / FACILITY INFORMATION

Spill Location: DAM

Address: WEST BRANCH OF PENOBSCOT Location ID: 18861

Minor Civil Division: EAST MILLINOCKET Zip: 04462

Latitude N: 44 / 37 / 15.00 Longitude W: 68 / 34 / 34.00

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 20.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 72 (Table B) Product Actually Found: 72 (Table B)

Date Of Spill: Mar. 08, 1994 Time Of Spill: 0800 (Military)

Date Reported: Mar. 08, 1994 Time Reported: 0947 (Military)

Cause Of Spill: 05 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 7 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : MALECK, TOM

PERSON REPORTING EVENT

Name (Last, First, MI): AKELEY, MR. CARLTON

Address: BOWATER GREAT NORTHERN PAPER Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131

CLEAN-UP INFORMATION **Spill Number B - 102 - 94**

Total Product Recovered : 20.00 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : I

Non Recyclable : 20.00 G (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : sulfuric acid on concrete floor hosed into treatment plant

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-102-94
Millinocket

Tuesday March 8, 1994 0947

Carl Akeley (723-5131) of Bowater Great Northern Paper Inc. phoned to report a 20 gallon sulfuric acid spill. The spill of 93% sulfuric acid occurred at the West Operations steam plant when a flange gasket leaked. The flange gasket and piping is a line from the sulfuric acid truck off loading point to the storage tank.

The acid was spilled onto a concrete floor, from there it was washed into the process sewer. The piping line was repaired and the flange gasket renewed. (See also attached Bowater Great Northern report.)

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

BOWATER

File No. Spill File

March 11, 1994

Tom Maleck
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a written report for the sulfuric acid spill which occurred at the West Operation steam plant on March 8. As I told you at the time, the spill was less than the reportable quantity, but you were notified because response to it involved emergency treatment.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. Spill File

March 11, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	West Operation Steam Plant
Source of spill:	Leaking flange in line from sulfuric acid truck unloading point to storage tank.
Date of spill:	March 8, 1994
Time span of spill:	A few minutes about 8am
Body of water impacted:	None
Volume lost to stream:	None, about twenty gallons of sulfuric acid spilled to floor and from there to process sewer.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Emergency response involved washing floor to process sewer to protect personnel in the area from exposure. Wastewater treatment process has adequate neutralizing capacity to handle the amount of material released.
Steps to be taken to prevent reoccurrence:	Line repaired
Phone reported to:	Tom Maleck, Bangor DEP at 9:45am, March 8.

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-104-2008**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT F SHANNON
Primary Product: Sulfuric Acid {72} - 200 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER CO. LLC - -

I. EVENT

Spill Info

Type: Hazardous Material Incident {H}
Source: Storage Unit - Aboveground Storage Tank {TA}
Cause: Corrosion - Piping {03}

Spill Date/Time

02/24/2008 23:00

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

02/25/2008 08:00

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER CO. LLC
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207 723-2320

Comment:

Reporter

Contact: CARL AKELEY--KATAHDIN PAPER CO. LLC
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207 723-2278

Comment:

Primary Responder and Other Employees

ROBERT F SHANNON (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER CO LLC
Street Address: 50 MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Engineered Containment{E}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

Sulfuric Acid {72}

Cleanup DTREE

Products Found/Amount Spilled

Sulfuric Acid {72}/ - 200 gals. ESTIMATE (Primary Product)

Material Recovered

Spilled Product {SP} - 200 gals. ESTIMATE

Recovery/Treatment Method:

Burning {H}

Disposal Information

Disposal by Katahdin Paper Co. LLC.

IV. NARRATIVE

On 2/25/08, I received report from Carl Akeley of Katahdin Paper of a sulfuric acid leak in their system. The cause was a corrosion hole in the sulfuric acid supply line. Unfortunately the leak was not contained by their secondary containment system, because of a leaking valve. Luckily this second system failure was able to be controlled by treating the sulfuric acid in their waste water treatment plant on site.

The product that was spilled and recovered from their secondary containment system, before going to the waste water treatment plant.

Clean Harbors was called to pump the approximate 2 thousand gallons from the tank, allowing the repairs to be made.

V. ATTACHMENTS

Attachment Type	Description	File Name
Paper Attach	Katahdin Paper Company LLC Spill Report	

B-104-08

Katahdin Paper Company LLC
50 Main Street
East Millinocket, ME 04430-1128

SPILL FILE

March 10, 2008

Bob Shannon
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Bob:

Attached is a report on the spill of sulfuric acid at the Recycle Fiber Plant at East Millinocket, which you investigated on February 25, 2008.

If you have any questions on this, please call me at 723-2278. Thank you.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Environmental Engineer

ENVIRONMENT INCIDENT REPORT AND CRITIQUE

Notification: Agency and Time: Phoned DEP response line at 0755 on February 25, 2008. Received call back from Bob Shannon of DEP Bangor office at 0815.

Reportable Quantity: Yes

Exact Location and Department: Recycle Fiber Plant chemical storage building

Amount and Type of Spill/Exceedance: Spill of approximately 400 gallons of concentrated sulfuric acid

Actions Taken To Contain The Spill/Limit the Exceedance: Contacted Clean Harbors to pump out the tank, which was leaking. Contents were transferred to the boiler water treatment plant, which uses the same material. Valve from containment was closed. This reduced the flow of acid to the wastewater treatment process but did not stop it, since the valve leaked by. Acid was neutralized with caustic soda on its way to the wastewater treatment plant. Residues in the containment were neutralized with soda ash. Treatment was as approved by DEP.

Amount of Oil/Chemical Recovered and Method: Approximately 1,800 gallons of acid was pumped from the leaking tank into a tank truck and transferred for use at the boiler water treatment plant.

Cause and Details of Spill/Exceedance: Line from the acid storage tank to the process developed a leak. Leak was before the first shutoff valve, so it could not be stopped by valving.

Disposal, Location and Method: Acid was neutralized and sent to the facility wastewater treatment plant.

Health Impact: None expected

Environmental Impact: None expected

Measures Taken To Avoid Recurrence: Leaking line has been replaced. Valve from containment has been repaired. Thickness testing has been conducted on the tank and piping. Piping which shows significant thinning is being replaced before the system is put back in service.

Response (Critique) Regulatory Compliance, Efficiency, etc.: Response was effective. Bob Shannon of DEP visited the site on the afternoon of February 25 and concluded the response was in compliance with the requirements of the facility SPCC Plan.

Time Needed for Restoration/Recovery: Leak was stopped within 14 hours of its estimated beginning. Return of the tank and associated systems, including piping and containment valving, to service took approximately a week.

Revealed Deficiencies: Deterioration of piping from acid storage tank and valving for containment

Did the Emergency Plan Anticipate the Incident? Yes

Does the plan have to be modified? No

Report Prepared By: Carl Akeley **Signature:**

Environmental Department Review Date: 2/28/08

Written Reports to the Following (letter, fax, e-mail)
State and Federal Agencies: Bob Shannon, DEP Bangor Office

Mill Manager Millinocket: Serge Sorokin
Sr. V.P. Pulp & Paper Operations: Bill Manzer
Fraser Director Envir. & Safety: Marie Dumontier

___ ENFORCEMENT ____ REIMBURSEMENT ___ 3rd PARTY CLAIM ___ INS. CLAIM

Oil & Hazardous Materials Report Form
Spill Number: 3/124/93

Subject:
Name (Last, First MI): BOWATER-GREAT NORTHERN
Address: DOLBY DAM Town: E. MILLINOCKET
State: ME Zip-code: 04430 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 0.12 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: 93/03/24 (yy/mm/dd) Time of Spill: 0930 (Military)
Date Reported: 93/03/24 (yy/mm/dd) Time Reported: 1218 (Military)
Cause: 17 Detection method: 2I
Incident code: AIDI DEP response time involved: 1.7 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. MALECK, TOM TCM
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): KROEGER, DICK - AS ABOVE
Address: _____ Town: _____
State: __ Zip-code: _____ Telephone: _____

Clean-up Information:

Total product recovered: _____ gals.N cu. yds.N lbs.N bbls.N
Method: C Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME OF CHEMICAL INVOLVED:

B-124-93
East Millinocket

Wednesday March 24, 1993 1218

Dick Kroeger (723-5131) of Bowater-Great Northern Paper Company phoned to report an oil sheen in the West Branch of the Penobscot River at the Dolby Dam. Dick indicated that the sheen was noticed around 1100 near the corner of wing wall.

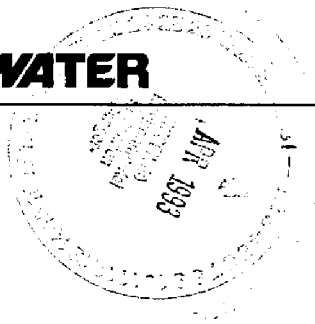
Two hydro-electric power generation units were brought on line around 0915 to 0945. A small amount of hydraulic oil is believed to have been the cause of the sheen in the water. Dick said that the boom should have been put out prior to start up, but apparently was not. In all about one pint of hydraulic oil may have been released into the West Branch. See also Bowater-Great Northern report (attached).

TM/tm

B-124-93

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

BOWATER



File No. 608.20

April 1, 1993

Tom Maleck
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a written report for the March 24 spill from Dolby Station which Dick Kroeger reported to you the same day.

If you have any questions on this matter, give me a call at 723-5131, extension 1278.

Sincerely,

Carlton E. Akeley
Chemical Management Group Leader

File No. 608.20

April 1, 1993

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	Dolby Station
Source of spill:	Material released from #2 & 3 wheelpits on startup.
Date of spill:	March 24, 1993
Time span of spill:	9:30am
Body of water impacted:	West Branch of Penobscot River
Volume lost to stream:	Less than a pint of R&O 38 oil
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable
Visual inspection of the river:	Small sheen
Comments:	#2 & 3 wheels had set idle for about a year. Small amount of oil from unknown sources collected in wheel pits during downtime and released in startup.
Steps to be taken to prevent reoccurrence:	Boom was deployed to contain and collect sheen. Procedures rewritten to include boom deployment on startup of wheels. Investigation ongoing to determine original source of oil.
Phone reported to:	Tom Maleck, Maine DEP, and Petty Officer Yuska, National Response Center, Report #163819.

C. E. Akeley

ENFORCEMENT _____ **REIMBURSEMENT** _____

Oil & Hazardous Materials Report Form
Spill Number: B/145/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: KATAHDIN AVENUE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 5.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 10
Date of Spill: _____ (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 89/04/05 (yy/mm/dd) Time Reported: 1630 (Military)
Cause: 18 Detection method: 2I
Incident code: AIDP DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. WARD, JAKE JW
2. _____
3. _____ N.F.N.

Person Reporting Incident:
Name (Last, First MI): KROEGER, RICHARD
Address: GREAT NORTHERN PAPER Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 0.00 gals.Y cu. yds.N lbs.N bbls.N
Method: K Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/___/___ DATE OF INVESTIGATION ___/___/___

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided _____ Less than 10 days provided
_____ notice waived _____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL CASE B/145/89
Great Northern Paper Company
04/05/89

On April 4, 1989 we received a call from Dick Kroeger of Great Northern reporting a sheen in the Penboscot River behind their mill in Millinocket. The rainbow sheen came from a culvert that drained their woodyard. Due to the rain and snowmelt, the sheen originated from the winter's accumulation of vehicle and wood equipment drippings which were draining from the woodyard.

RECOMMENDATION: File report.

JW/mgb

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 157 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER

Address: 1 KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: DIESEL SPILL

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: ~~EAST MILLINOCKET~~ Zip: 04462

Latitude N: 45 / 37 / 27 Longitude W: 68 / 34 / 4

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 2.90 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 29 (Table B) Product Actually Found: 29 (Table B)

Date Of Spill: Mar. 30, 1994 Time Of Spill: 0130 (Military)

Date Reported: Mar. 30, 1994 Time Reported: 0403 (Military)

Cause Of Spill: 08 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 3 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT RW

PERSON REPORTING EVENT

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER/GREAT NORTHERN PAPER

Address: 1 KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION **Spill Number B - 157 - 94**

Total Product Recovered : 2.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 0.02 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :

OTHER ACTIONS

Expenditure (s) - From Surface Water Fund	N	(Y or N)
From Ground Water Fund	N	(Y or N)
From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected	N	(Y or N)
Enforcement Referral	N	(Y or N)
Insurance Fund Claim	N	(Y or N)
Tech Services Referral	N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-157-94
3/30/94 16:03

Dick Kroeger of Great Northern Paper in Millinocket called to report a small spill at their facility. It was reported that approximately 1-2 gallons of diesel weaped from a union leading from a tank at their wastewater treatment plant. The oil, which was contained entirely on a concrete surface, was easily cleaned up with a couple of pads. No report was needed for this spill.

Enforcement____ Reimbursement____

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number B/163/88

SUBJECT

Name (Last, First, MI): GREAT NORTHERN PAPER CO.
Address: MAIN ROAD Town: EAST MILLINOCKET State: ME
Zip:04430 - Telephone Number: (207) - 746 - 9912 (Optional)

SPILL INFORMATION

Location (Town): EAST MILLINOCKET Spill type: A (Table A)
Amount spilled: 1/8 (gals, ~~yds3, lbs, or bbls~~)
Type of spill: 10 (Table B)
Date of spill: 88/05/04 (Yr/Mo/Dy) Time of spill: 0900 (Military)
Date reported: 88/05/04 (Yr/Mo/Dy) Time reported: 1520 (Military)
Cause: 05 (Table C) Detection method: 2I (Table D)
Incident code: A(ID)I (Table E) DEP response time involved: 1 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. MALECK, TOM TM
2.
3.

M.F.M.

PERSON REPORTING INCIDENT

Name (Last, First, MI): KROEGER, DICK
Address: KATAHDIN AVE Town: MILLINOCKET State ME
Zip: 04462 - Telephone Number: (207) - 723 - 5131 (Optional)

CLEAN-UP INFORMATION

Total product recovered: 0 (gals, yds3, lbs, or bbls)
Method: K (Table K) Non-recyclable: (gals, or bbls)
Solids combustible: (yds3, or tons)
Solids non-combustible yds3
Recyclable material: (gals, yds3, lbs, or bbls)
Number of filters installed: 0 Number of aerators installed: 0
Disposal Information:

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

NAME(S) OF CHEMICAL(S) INVOLVED :

BRIEF REMARKS : (For more detailed Recommendations and Narratives use a separated sheet of paper.)

SEE ATTACHED.

TANK ABANDONMENT INFORMATION

SPILL NUMBER ____/____/_____ DATE OF INVESTIGATION ___/___/___

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided
_____ notice waived
_____ Less than 10 days provided
_____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL NUMBER B/163/88

GREAT NORTHERN PAPER CO.--E.MILLINOCKET

WEDNESDAY, MAY 4, 1988, 1520:

Dick Kroeger (723-5131) of Great Norther Paper Company phoned to report a 1 pint oil spill.

According to Mr. Kroeger, about one pint of Texaco SAE 150 heavy duty gear oil leaked from a bearing seal on a combination grinder generator at the East Millinocket Mill.

The GNP response team could find no sign of the oil or sheen in the river 3 hours after the spill was discovered (spill noticed at 0900).

The pint of oil went into a floor drain at the mill, then into the turbulent river and through Rockabe Dam.

TM/mgb

Enforcement___ Reimbursement___

L 12/15

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number B1167185

SUBJECT

Name (Last, First, MI): Great Northern Paper Co
Address: _____ Town: Millinocket State: __
Zip: ____-____ Telephone Number: (___) - ___ - ____ (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 2 (Table A)
Amount spilled: 0,12 (gals, yds3, lbs, or bbls)
Type of spill: 80 (Table B)
Date of spill: 85/7/8 (Yr/Mo/Dy) Time of spill: ____ (Military)
Date reported: 85/7/8 (Yr/Mo/Dy) Time reported: 1245 (Military)
Cause: AJ (Table C) Detection method: 52 (Table D)
Incident code: A-L (Table E) DEP response time involved: 1.0 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. J. Ward
2. _____
3. _____

PERSON REPORTING INCIDENT

Name (Last, First, MI): Welch, Pat
Address: GNP Town: Millinocket State: __
Zip: ____-____ Telephone Number: (___) - ___ - ____ (Optional)

CLEAN-UP INFORMATION

Total product recovered: _____ (gals, yds3, lbs, or bbls)
Method: ____ (Table K) Non-recyclable: _____ (gals, or bbls)
Solids combustible: _____ (yds3, or tons)
Solids non-combustible _____ yds3
Recyclable material: _____ (gals, yds3, lbs, or bbls)
Number of filters installed: __ Number of aerators installed: __
Disposal Information: _____

OTHER ACTIONS

Reimbursement: to SF (surface water) _ (Y or (N))
to GF (ground water) _ (Y or (N))
to HWF (haz waste) _ (Y or (N))
Third party damage claim expected: _ (Y or (N))
Enforcement referral: _ (Y or (N))

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: __ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

OIL & HAZARDOUS MATERIAL REPORT FORM
NUMBER: B / 167/ 85

1. **SPILLOR:**

a./ Name: Great Northern Paper Company (Last, First, MI)

b./ Address: _____ (Optional)

c./ Town: Millinocket

d./ State: Me; e./ Zip-Code: 04462 f./ Tel. #: 207 - 723 - 5131 (Optional)

2. **SPILL INFORMATION:**

a./ Town: East Millinocket/ Type: 2 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: ½-1 pt transformer oil (gals., yds^3, or lbs); d./ Oil: PCP (Table N);

e./ Date and Time of Spill: 85 / 7 / 8 (yy/mm/dd), early AM (Military)

f./ Date and Time Reported: 85 / 7 / 8 (yy/mm/dd), 1245 (Military)

g./ Cause: A2 (Table A6); h./Recovered or Treated: _____ (gals., yds^3, or lbs)

i./ Method: g (Table A7); j./ Recyclable Material: _____ (gals., yds^3, or lbs)

k./ Non-Recyclable Materials: _____ (gals., yds^3, or lbs)

l./ Solids Combustible: _____ cubic yds; m./ Solids Non-Combustible: ____ cubic yds;

n./ Disposal Information: Dolby Landfill

3. **OTHER INFORMATION:**

a./ Investigator: Ward, J. (Last, FI, MI); b./ Incident Code: A-L (Table W); c./ Surface Water: N (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 1 (hours) f./ Hands On Training Credits: VID(1) 1 ✓

4. **PERSON REPORTING INCIDENT:**

a./ Name: Welch, Pat (Last, First, MI)

b./ Address: GNP (Optional)

c./ Town: Millinocket; d./ State: Me.; e./ Zip-Code: 04462

f./ Tel. #: 207 - 723 - 5131 (Optional)

5. **OTHER ACTIONS:**

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. NATURE OF COMPLAINT FOR INVESTIGATION:

A valve popped of a transformer at East Millinocket mill. One half to one pint of transformer fluid spilled onto ground within a diked area. GNP's records show this transformer oil as containing PCB. Sample was taken and material cleaned up, bagged and brought to Dolby landfill.

REC - file.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 172 - 95

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN - BOWATER

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462-1398 Telephone: (207) 723-5131

Comments: 1/2 GAL. LUBE OIL OFF DOLBY DAM

LOCATION / FACILITY INFORMATION

Spill Location: DOLBY DAM

Address: Location ID: 22437

Town: EAST MILLINOCKET Zip: 04430

Latitude N: 45 / 37 / 56.00 Longitude W: 68 / 36 / 21.00

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 0.10 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 10 (Table B) Product Actually Found: 10 (Table B)

Date Of Spill: Apr. 13, 1995 Time Of Spill: 0700 (Military)

Date Reported: Apr. 13, 1995 Time Reported: 1655 (Military)

Cause Of Spill: 17 (Table C) Detection Method: 2 K (Table D)

Incident Code: A - ID - I - (Table E)

DEP response time involved: 2 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : LUCE, DARRYL

PERSON REPORTING EVENT

Name (Last, First, MI): AKLEY, CARL-GNP

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-8061

CLEAN-UP INFORMATION **Spill Number B - 172 - 95**

Total Product Recovered : (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :return to shop for re use

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use Separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-172-95 Great Northern-Dolby Dam

Carl Ackley, G.N.P., called to report that one quart oil can was found floating in the West Branch of the Penobscot River at Dolby Dam. This is an oiler's can and they suppose that it is connected to on going work at the dam site; but no worker admits to knowing how the can got into the river. In any case there was an eight foot sheen around the can which was still half full. They attempted to recover the sheen with pads which most likely had little effect. I believe that the environmental impact of this spill is minimal.

d.e.l.

SPILL FILE

April 17, 1995

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation
Source of spill:	Small oil can discovered lying on its side on Dolby Dam.
Date of spill:	Discovered April 13, 1995
Time span of spill:	Occurred sometime between the evening of April 12 and the morning of April 13.
Body of water impacted:	West Branch of Penobscot River.
Volume lost to stream:	Less than a quart
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Small sheen in eddy below dam, within containment boom deployed earlier as a protective measure due to test boring being done from top of dam.
Comments:	Contractor crew reported finding can on its side when reporting for work in the morning. Area on dam was immediately cleaned with sorbant. Rain during the night had apparantly washed some of the oil into the contained area below the dam. It is not known who placed the can on the dam or why it was there.
Steps to be taken to prevent reoccurrence:	Employee/contractor training. Additional inspections of oil storage and use areas.

Phone reported to: DEP Bangor office at 4:55pm, April 13 (call back from Darryl Luce approximately 5:45pm) and Ms. Coleman at the National Response Center at 5:00pm (Case #286972) by Carl Akeley.

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 179 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER/GREAT NORTHERN PAPER

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: ~~MILLINOCKET~~ Zip: 04462

Latitude N: 45 / 38 / ~~29~~ 57 Longitude W: 68 / ~~37~~ 42 / 20

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 2.90 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 72 (Table B) Product Actually Found: 72 (Table B)

Date Of Spill: Apr. 08, 1994 Time Of Spill: 1500 (Military)

Date Reported: Apr. 08, 1994 Time Reported: 1620 (Military)

Cause Of Spill: 06 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - I - (Table E)

DEP response time involved: 2 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : VARNEY, THOMAS TNV MFM

PERSON REPORTING EVENT

Name (Last, First, MI): AKELEY, CARL

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 179 - 94

Total Product Recovered : 2.90 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : I

Non Recyclable : 2.90 G (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : neutralized and flushed to process sewer

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

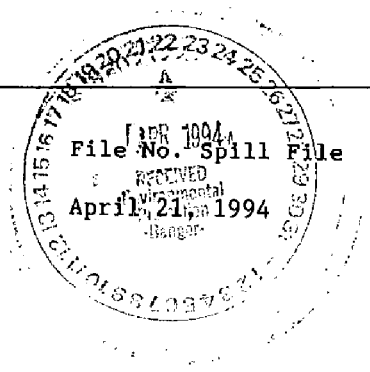
Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated

BOWATER



Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a written report for the sulfuric acid spill which occurred at the East Operation on April 8. The spill was less than the reportable quantity, but you were notified because response to it involved emergency treatment.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

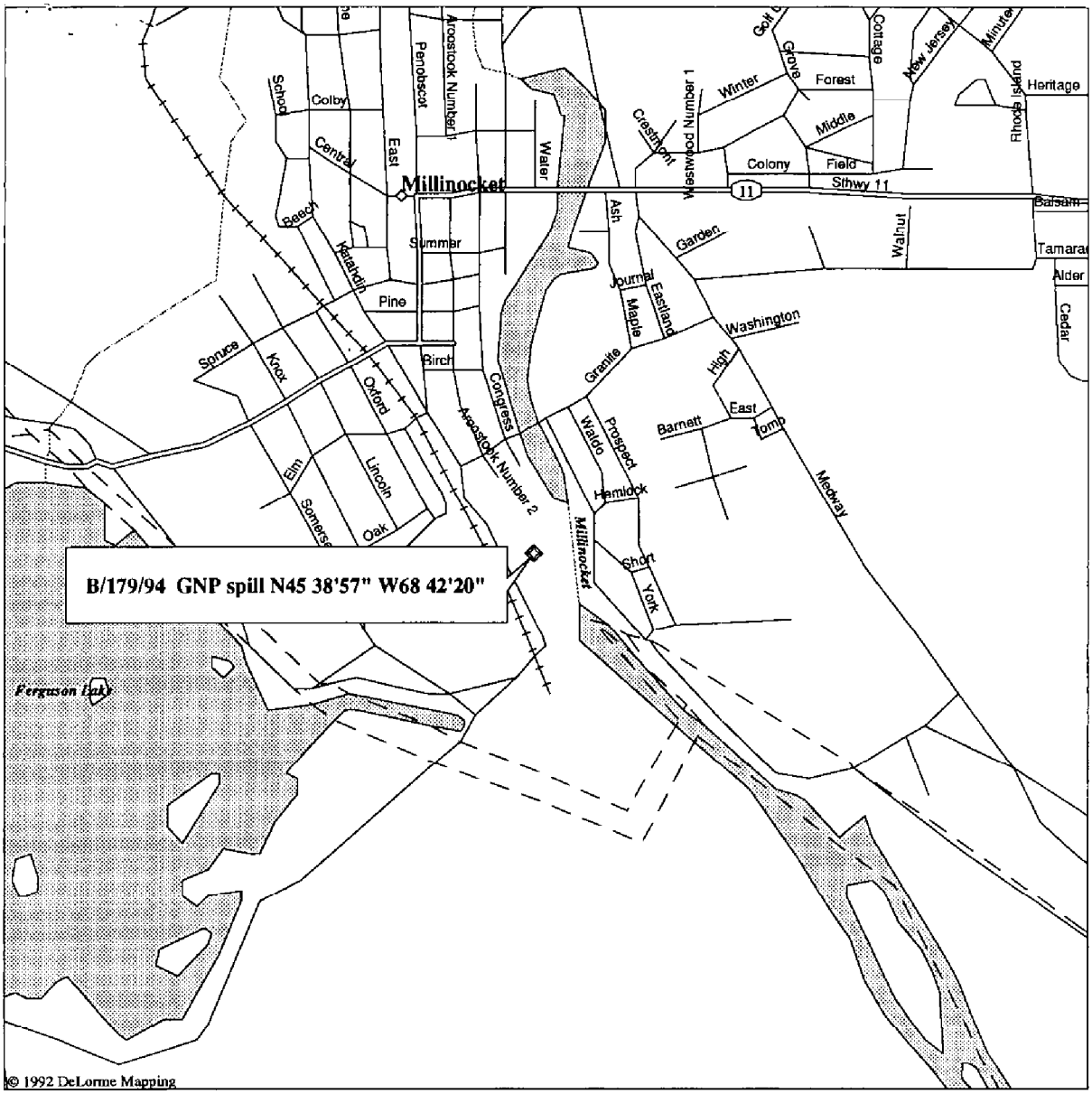
April 21, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Recycle Fiber Plant
Source of spill:	Leak at elbow on sulfuric acid line
Date of spill:	April 8, 1994
Time span of spill:	Not known, discovered at 3 pm
Body of water impacted:	None
Volume lost to stream:	Approximately 3 gallons of concentrated sulfuric acid lost to floor in process building
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	No impact on final effluent pH
Visual inspection of the river:	Not Applicable
Comments:	Acid leaked onto floor and into pulp on the floor. With approval of DEP, material was neutralized with soda ash and washed to sewer.
Steps to be taken to prevent reoccurrence:	Pipe section replaced. Causes and remedies for leak being investigated.
Phone reported to:	Tom Varney, DEP Bangor (through State Police) at 4:30 pm

C. E. Akeley



LEGEND

- Hill
- Boundary
- Road
- State highway
- Railroad
- River
- Powerline
- Island
- Open water

Scale 1:15,625 (at center)

1000 Feet

500 Meters

spill of Sulfuric acid GNP 4/8/94
Mag 15.00
Tue Aug 23 15:38:32 1994

B-179-94

On the afternoon of April 8, Carl Akeley of Great Northern Paper reported the accidental spillage of about two gallons of sulphuric acid to the mill floor. I okayed the flushing of the waste acid to the mill's process sewer.

M.F.M.

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number B/187/88

SUBJECT

Name (Last, First, MI): Great Northern Paper Company
Address: Katahdin Avenue Town: East Millinocket State: Me
Zip:04430- Telephone Number: (207) - 723 - 5131 (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: A (Table A)
Amount spilled: 1 (gals, yds3, lbs, or bbls)
Type of spill: 10 (Table B)
Date of spill: 88/5/17 (Yr/Mo/Dy) Time of spill: 1025 (Military)
Date reported: 88/5/17 (Yr/Mo/Dy) Time reported: 1600 (Military)
Cause: 14 (Table C) Detection method: 2I (Table D)
Incident code: A(ID)I (Table E) DEP response time involved: 3 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. Randall, Robert F. M.F.M.
2.
3.

PERSON REPORTING INCIDENT

Name (Last, First, MI): Kroeger, Dick
Address: Great Northern Paper Co. Town: Millinocket State: Me
Zip:04462- Telephone Number: (207) -723 -5131 (Optional)

CLEAN-UP INFORMATION

Total product recovered: MINOR (gals, yds3, lbs, or bbls)
Method: C (Table K) Non-recyclable: (gals, or bbls)
Solids combustible: MINOR (yds3, or tons)
Solids non-combustible yds3
Recyclable material: (gals, yds3, lbs, or bbls)
Number of filters installed: 0 Number of aerators installed: 0
Disposal Information:

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

NAME(S) OF CHEMICAL(S) INVOLVED :

BRIEF REMARKS : (For more detailed Recommendations and Narratives use a separated sheet of paper.)

TANK ABANDONMENT INFORMATION

SPILL NUMBER ____/____/_____ DATE OF INVESTIGATION __/__/__

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided _____ Less than 10 days provided
_____ notice waived _____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

This office received a call at 1600 on 5/17/88 from Dick Kroeger (Great Northern Paper Company, Millinocket #723-5131) reporting an oil spill. He stated that the treatment plant at their East Millinocket mill was being temporarily by-passed due to a maintenance shut down. They were in the process of cleaning out the rock well (accumulation of rocks, sand, and other debris, etc., which interferes with the efficiency of the plant). Whenever a maintenance shut down and subsequent by-pass is scheduled, they place sorbent boom in the river near shore to control any oily discharge. Around 1025 on this date, a sheen was observed on the river. This was traced back up through the sewer line to an area beneath the #5 and #6 paper machines. It was concluded that the sheen was coming from oily drippings around the paper machines. An estimated one pint to one gallon maximum of lubricating type oil discharged to the river. It was felt that the oil would have been in the form of droplets had it been more than this amount. Some of the sheen was contained by the sorbent boom in the river, but due to the fast currents in the are, some of the oil was swepted under the boom and dispersed down river. The source of the oil was located under the paper room at approximately 1110 and additional sorbent boom was installed in the sewer line. By 1245, only traces of the sheen could be observed in the area. Under normal operating conditions, these drippings would be processed through their treatment plant and would not enter the river. The Water Bureau was also notified of this discharge due to the shut down of the treatment plant.

REC: File report.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-187-2008**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: DARRYL E LUCE
Primary Product: Transformer Oil {87} - 350 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER COMPANY - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Utility - Electrical Transformer {ET}
Cause: Mechanical Failure - Other {23}

Spill Date/Time

04/09/2008 20:00

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

04/10/2008 02:00

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER COMPANY
50 MAIN ST
EAST MILLINOCKET ME 04430 USA
207-723-2278

Comment: Company transformer failed and leaked about 350 gallons of non-PCB oil

Reporter

Contact: BRUCE ALBERT-ENVIRONMENTAL COMPLIANCE OFFIC-KATAHDIN PAPER CO.
50 MAIN ST
EAST MILLINOCKET ME 04430 USA
207-723-2530

Comment:

Primary Responder and Other Employees

DARRYL E LUCE (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER
Street Address: 50 MAIN ST TRANSFORMER T-138
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

None

III. CLEANUP

Product Reported

Transformer Oil {87}

Cleanup DTREE

Products Found/Amount Spilled

Transformer Oil {87}/ - 350 gals. ESTIMATE (Primary Product)

Material Recovered

Contaminated Soil {CS} - 7 cu. yds. ESTIMATE

Mixed Liquid Media {MM} - 250 gals. ESTIMATE

Recovery/Treatment Method

Excavation {G}
Vacuum Trucks {A}
Sorbents {C}

Disposal Information

CS = Katahdin Paper's Dolby Landfill
MM = offsite by Clean Harbors

IV. NARRATIVE

4/10/08 Mr. Albert reported that a transformer had failed at the East Millinocket paper mill and lost approximately 400 gallons (he later corrected this to 350). Apparently mill workmen didn't realize that the liquid in the dike was silicon transformer oil, and released approximately 200 gallons through the dike drain. It was then realized that it was transformer oil and the valve was closed. The liquid outside the dike was covered with sand to both stop the migration of oil and to absorb it. The water and oil still inside the dike was recovered by Clean Harbors and transported off site by them. The outside clean up created approximately seven cubic yards of sand and soil which was deposited in the mill's Dolby landfill.

V. ATTACHMENTS

Attachment Type	Description	File Name
Paper Attach	Katahdin Paper spill report	

B-187-2008

ENVIRONMENT INCIDENT REPORT AND CRITIQUE

Notification: Agency and Time: Maine DEP at 0210 on 4-10-08

Reportable Quantity: 100 gallons of silicone transformer oil

Exact Location and Department: Transformer T-138, which is located on the riverbank behind the sulfite train shed at the East Millinocket Mill.

Amount and Type of Spill/Exceedance: 100 gallons of silicone transformer oil

Actions Taken To Contain The Spill/Limit the Exceedance: Closed drain to the containment dyke. Response contractor cleaned up oil in the dyke. Mill personnel removed soil and oil absorbant material.

Amount of Oil/Chemical Recovered and Method: Clean Harbors removed approximately 255 gallons of an oil, water and debris mixture from the containment dyke. Sand was used to absorb the oil that left the containment dyke.

Cause and Details of Spill/Exceedance: At approximately 2000 on 4-9-08, transformer T-138 failed and caused approximately 350 gallons of silicone transformer oil to be spilled into the containment dyke. When the mill E/I technicians responded to the transformer site, they found the containment dyke full of material. Thinking the material was water and had caused a short in the transformer, they opened the drain for the dyke and started to drain the material. When it was noticed that the material was oil and not water, the containment drain was immediately closed. A representative from the Environmental Department was notified at approximately 0000 on 4-10-08. The E/I technicians that were on site had sand poured onto the spill area.

Disposal, Location and Method: Clean Harbors removed approximately 250 gallons of oil, water and debris from the containment dyke and transported it for disposal. Mill yard personnel removed approximately 7 yards of oil contaminated soil and sand. The sand and soil was taken to Dolby Landfill and disposed. Dolby Landfill is Katahdin Paper Companies licensed landfill. We are licensed to receive 3,000 yds^3 of oil waste at the landfill each year.

Health Impact: None

Environmental Impact: Minimal

Measures Taken To Avoid Recurrence: Enhanced training will be given to mill personnel who could deal with this type of situation.

B-187-2008

Response (Critique) Regulatory Compliance, Efficiency, etc.:

Time Needed for Restoration/Recovery: The transformer was replaced and the mill started back up within 36hrs.

Revealed Deficiencies: Upgraded training required.

Did the Emergency Plan Anticipate the Incident? Yes

Does the plan have to be modified? No

Report Prepared By: Bruce Albert **Signature:**

Environmental Department Review Date: 4/15/08

Written Reports to the Following (letter, fax, e-mail)

State and Federal Agencies: Darryl Luce, Bangor DEP Office

Mill Manager East Millinocket: Serge Sorokin
Sr. V.P. Business Strategy and Projects: Bill Manzer
Fraser Environmental Director: Marie Dumontier
Sr. V.P. Operations and Chief Operating Officer: Jeff Dutton

Enforcement___ Reimbursement___

ILN 1-29-87

OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B/189/85

SUBJECT

Name (Last, First, MI): Great Northern Paper Co.
Address: _____ Town: Millinocket State: me
Zip: 04462-____ Telephone Number: (207 - 723 - 5131 (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 2 (Table A)
Amount spilled: 800 (gals) yds3, lbs, or bbls)
Type of spill: 11 (Table B)
Date of spill: 78 01/13 (Yr/Mo/Dy) Time of spill: ____ (Military)
Date reported: 85/08/29 (Yr/Mo/Dy) Time reported: 0810 (Military)
Cause: All (Table C) Detection method: G6 (Table D)
Incident code: A L (Table E) DEP response time involved: 6 (Hours)
No. of wells at risk: ___ No. of wells impacted: ___
Investigators' names: 1. Varney, T.W.
2. _____
3. _____

PERSON REPORTING INCIDENT

Name (Last, First, MI): Phenicie, D.
Address: GNP Town: Millinocket State: me
Zip: 04462 Telephone Number: (207 - 723 - 5131 (Optional)

CLEAN-UP INFORMATION

Total product recovered: 800 (gals, yds3, lbs, or bbls)
Method: G (Table K) Non-recyclable: 600 (gals, or bbls)
Solids combustible: _____ (yds3, or tons)
Solids non-combustible 5 11 yds3
Recyclable material: _____ (gals, yds3, lbs, or bbls)
Number of filters installed: ___ Number of aerators installed: ___
Disposal Information: CE COS, SC A

OTHER ACTIONS

Reimbursement: to SF (surface water) N (Y or N)
to GF (ground water) N (Y or N)
to HWF (haz waste) N (Y or N)
Third party damage claim expected: N (Y or N)
Enforcement referral: N (Y or N)

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS ORIGINAL

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _ (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: _ (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

M.F.M.

OIL & HAZARDOUS MATERIAL REPORT FORM
NUMBER: B / 189 / 85

1. SPILLOR:

a./ Name: Great Northern Paper Co. (Last, First, MI)

b./ Address: _____ (Optional)

c./ Town: Millinocket

d./ State: Me; e./ Zip-Code: 04462 f./ Tel. #: 207 - 723 - 5130 (Optional)

2. SPILL INFORMATION:

a./ Town: E. Millinocket b./ Type: 2 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: 800 (gals., yds^3, or lbs); d./ Oil: ___ (Table N);

e./ Date and Time of Spill: 78 / 01 / 13 (yy/mm/dd), _____ (Military)

f./ Date and Time Reported: 85 / 08 / 29 (yy/mm/dd), 0810 (Military)

g./ Cause: A5 (Table A6); h./Recovered or Treated: 800 (gals., yds^3, or lbs)

i./ Method: g (Table A7); j./ Recyclable Material: _____ (gals., yds^3, or lbs)

k./ Non-Recyclable Materials: 511 (gals., yds^3, or lbs)

l./ Solids Combustible: _____ cubic yds; m./ Solids Non-Combustible: 511 cubic yds;

n./ Disposal Information: CECOS, SCA

3. OTHER INFORMATION:

a./ Investigator: Varney, T.W. JWV (Last, FI, MI); b./ Incident Code: AL (Table W); c./ Surface Water: N (Y or N); d./ Ground Water ___ (Y or N);

e./ DEP Time Involved: 6 (hours) f./ Hands On Training Credits: IG1 -2 VID1 -2 ✓

4. PERSON REPORTING INCIDENT:

a./ Name: Phenicie, D. (Last, First, MI)

b./ Address: GNP (Optional)

c./ Town: Millinocket; d./ State: Me; e./ Zip-Code: 04462

f./ Tel. #: 207 - 723 - 5131 (Optional)

5. OTHER ACTIONS:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. **NATURE OF COMPLAINT FOR INVESTIGATION:**

The 1985 rebuild of paper machines #5 & 6 at the East Millinocket mill called for laying a new fire line underground. During trench excavation, workers noticed a peculiar odor in the trench; investigation by the mill's encironmental personnel showed the odor to be that associated with PCB contamination.

The source of the contamination was ascribed to an accident that occurred on Jan. 3, 1978. On that date a front end loader struck a drain valve on a transformer outside of the room that houses #6 paper machine. Seven hundred gallons of Askarel drained onto the ground, but was immediately diked and adsorbed with sand. Subsequently, a pit was excavated at the spill site, and 5 or 6 hundred drums of contaminated soil shipped to C.E.C.O.S. in upstate New York. It was thought at the time that the frost in the ground would prevent the PCB from going any deeper than 6'. This was borne out by the relatively (by today's standards) crude analysis tools available then.

In fact, the PCB oil went deeper than 6', following the building foundation into the soft earth under the footings; deepest penetration was eleven feet.

The fire line trenching was shut down and test pits dug to delineate further the vertical and horizontal contamination. It was subsequently decided that a better course would be to initiate drilling on a grid pattern. This was done and pieso-meters set in to establish the direction of ground water movement. In all, 30 borings were done, and reviewed by E.C. Jordan Co., who recommended more borings. This was finally completed in mid-December. The highest concentration of PCB in the soil borings was 1300 ppm.

Ancillary activity included additional borings at the site of a 100 gallon Askarel spill on May 14, 1981, near #5 paper machine. In that incident, a transformer overheated and blew up. Borings showed PCB contamination sufficient to warrent the excavation of 200 yards of fill; some of the excavation had to be done by hand.

By Nov. 20, Jetline had started to ship contaminated soil to Model City, N.Y. via Price Trucking. This operation was mostly wrapped up by December 31. What little remained was put on hold 'til more clement weather.

One hitch in this incident was the exposure of the workers to PCB's and the time lag before GNP did anything about it. I received a couple of call from women whose husbands had been exposed to PCB's; GNP didn't advise the construction workers about the possible health risks even though, they said, GNP knew the workers were being exposed. Another concern was with work clothing, contaminated by PCB's, thrown in with the rest of the household wash. These women were afraid they'd jeopardized the health of the entire family through the washing machine.

During the third week of September, Great Northern procured the services of a Dr. Drill from Philadelphia. His presentation was designed to allay the fears of workers exposed to PCB's in the trench.

The company seems to have done a credible job in this clean-up. Case closed.

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-192-2002

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: BERNARD WARD
Primary Product: Diesel {29} - 1 gals. ESTIMATE
Subject/Owner: GREAT NORTHERN PAPER CARL AKELEY ENVIRONMENTAL COORDINATOR

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Land Transportation - Truck {TR}
Cause: Accident - Transportation {11}

Spill Date/Time

04/01/2002 14:00

Reporter Type/Detection Method

Type: Spiller {2}
Method: Visual Product {L}

Reported Date/Time

04/01/2002 15:00

Subject/Owner (Potential Responsible Party)

Contact: CARL AKELEY-ENVIRONMENTAL COORDINATOR-GREAT NORTHERN PAPER
KATAHDIN AVE.
MILLINOCKET ME 04462 USA
207723-5131
Comment:

Reporter

Contact: CARL AKELEY-ENVIRONMENTAL COORDINATOR-GREAT NORTHERN PAPER
KATAHDIN AVE.
MILLINOCKET ME 04462 USA
207723-5131
Comment:

Primary Responder and Other Employees

BERNARD WARD (Primary Responder)

No Further Response Action Required

II. SITE

Location

Location Type: Transportation - Road {RD}
Name: ROAD SURFACE
Street Address: ROUTE 11
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

None

III. CLEANUP

Product Reported

Diesel {29}

Cleanup DTREE

Products Found/Amount Spilled

Diesel {29}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

None {NO} - 0 gals. ACTUAL

Recovery/Treatment Method

None {K}

Disposal Information

IV. NARRATIVE

On April 1, 2002 at 1500 we received a call from Carl Akeley of Great Northern Paper reporting a less than one gallon leak of diesel fuel from a dump truck. The leak was on the vehicle's fuel injection system and sprayed onto route 11. The truck was going from the East Millinocket mill to the Dolby landfill. The fuel dripped over a two mile section of road and caused no environmental harm.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 195 - 83

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): AMBROSE, JOEL

Mailing Address: 1 ELM ST Town: EAST MILLINOCKET

State: ME Zip: 04430 Telephone: (207) 746-9020

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: AMBROSE RESIDENCE

Address: 1 ELM ST Location ID: 35097

Minor Civil Division: EAST MILLINOCKET Zip: 04430

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 175.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 02 (Table B) Product Actually Found: 02 (Table B)

Date Of Spill: Dec. 14, 1983 Time Of Spill: 1100 (Military)

Date Reported: Dec. 14, 1983 Time Reported: 1200 (Military)

Cause Of Spill: 06 (Table C) Detection Method: 4 F (Table D)

Incident Code: B - SF - L - A (Table E)

DEP response time involved: 1 Wells At Risk: Wells Impacted:

Investigators' names : WARD, BERNARD

PERSON REPORTING EVENT

Name (Last, First, MI): CHIEF EWING

Address: FIRE DEPT Town: EAST MILLINOCKET

State: ME Zip Code: Telephone: ( ) -

CLEAN-UP INFORMATION **Spill Number B - 195 - 83**

Total Product Recovered : 50.00 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 1.00 B (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : Sorbents incinerated at the Great Northern Mill

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

millinocket

OIL SPILL REPORT FORM

Spill Case # B-195 for 1983

Spillor and Location Joel Ambrose 1 Elm St. East Millinocket

Person Reporting Spill Chief Ewing, E. Millinocket Fire Dept.

Amount and Type of Product 175 gal. #2 oil

Date and Time of Spill 12/14/83 --- 1100 Reported 12/14/83 --- 1200

Cause of Spill Feedline broke P or A (A)

Total Amount of Oil Recovered 40-50 gals. Methods Sorbents

Oils - Recycleable 0 Liquids - Non-Recycleable 0

Solids - Combustible 1 drum Solids - Non-Combustible 0

Weather Conditions Not applicable

Water Course Affected None

Investigator(s) J. Ward JW Incident Code B-L

REMARKS - RECOMMENDATIONS

While in Presque Isle on December 14 for a training seminar I was notified of an oil spill at the Joel Ambrose residence in East Millinocket. The East Millinocket Fire Dept. responded and recovered about forty gallons of #2 fuel using sorbents. This material was later incinerated at the Great Northern Mill.

I stopped at the East Millinocket fire department and spoke to Chief Ewing who informed me that the spill occurred in the homeowner's basement and that everyone in the area is on town water. Since no State waters are threatened this case is closed.

REC: file.

2

THIRD CLASS

SYSTEM: 07

NUMBER: B - 83 - 195

STATE of MAINE

Division of Oil Conveyance

Oil Spill Report

1; Spillor:

a./ Name; Ambrose, Joel (Last, First, MI)

b./ Address 1; 1 Elm Street (Optional)

c./ Address 2; _____ (Optional)

d./ Town; East Millinocket

e./ State; ME f./ Zip-Code; 04430 g./ Tel. No.; 207 - 746 - 9020 (Optional)

2; Spill Information:

a./ Town in which Spill occured; East Millinocket

b./ Amount Spilled; 175 Gals. c./ Type Oil; Ø2 (Table N)

d./ Date and Time of Spill; 83 / 12 / 14 (yy/mm/dd) 1100 (Military)

e./ Date and Time Reported; 83 / 12 / 14 (yy/mm/dd) 1200 (Military)

f./ Cause; A2 (Table A6) g./ Accidential or Preventable; (A) (A or P)

h./ Amount Oil Recovered; 50 Gals.

i./ Recovery Methods; c_ , _ , _ , _ , _ (Table A7)

j./ Amount of Recycleable Oil; 0 Gals.

k./ Amount of Non-Recycleable Oil; 0 Gals.

l./ Amount of Solids Combustible: 1 Drums

m./ Amount of Solids Non-Combustible; 0 Cubic Yards

n./ Weather Conditions; U , _ (Table A8) o./ Temperature; _____ ^{0}F (Optional)

3; Other Information:

a./ Investigator; Ward, Bernard (Last, First, MI)

b./ Incident Code; B L (Table W)

c./ Waterway Effected; None

d./ Minor Civil Division Code; 19170 (Table D)

e./ Planning and Development District; 28 (Table E)

f./ River Basin Code; 17 (Table F)

g./ Shellfish Code; _____

Form DEP-246 (80-04)

4; Financial Information:

a./ Clean-Up Cost Expended;

i/ Known Source; $ _____ . ___

ii/ Unknown Source; $ _____ . ___

b./ Clean-Up Cost Recovered: $ _____ . ___

c./ Date of Recovery; __ / __ / __ (yy/mm/dd)

d./ Damages Claimed; $ _____ . ___

e./ Date of Claim; __ / __ / __ (yy/mm/dd)

f./ Damages Awarded; $ _____ . ___

g./ Date of Award; __ / __ / __ (yy/mm/dd)

h./ Cost Pending; $ _____ . ___

i./ Date Billed; __ / __ / __ (yy/mm/dd)

j./ Non-Recoverable Cost; $ _____ . ___

k./ Amount Paid from Fund; $ _____ . ___

****

As this form is updated, please use the color codes established below.

Original Coding (Blue Ink), entered by, _____, date __/__/__ (yy/mm/dd)

1st Update (Red Ink), entered by, _____, date __/__/__ (yy/mm/dd)

Other Updates (Green Ink), entered by, _____, date __/__/__ (yy/mm/dd)

Other Updates (Green Ink), entered by, _____, date __/__/__ (yy/mm/dd)

Other Updates (Green Ink), entered by, _____, date __/__/__ (yy/mm/dd)

Update

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 218 - 90

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER CO.

Mailing Address: KATAHDIN AVE. Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER MILL

Address: Location ID: 10961

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 86 (Table B) Product Actually Found: 86 (Table B)

Date Of Spill: Apr. 27, 1990 Time Of Spill: 1330 (Military)

Date Reported: Apr. 27, 1990 Time Reported: 1447 (Military)

Cause Of Spill: 06 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 3 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : LUCE, DARRYL

PERSON REPORTING EVENT

Name (Last, First, MI): AKELEY, CARL

Address: KATAHDIN AVE. Town: MILLINCOKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION **Spill Number B - 218 - 90**

Total Product Recovered : 0.50 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 0.10 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : INTERNAL MILL DISPOSAL

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim			(Y or N)
Tech Services Referral			(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/218/90

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER CO.
Address: KATAHDIN AVE. Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): MILLINOCKET Spill Type: A
Amount spilled: 1.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: 90/04/27 (yy/mm/dd) Time of Spill: 1330 (Military)
Date Reported: 90/04/27 (yy/mm/dd) Time Reported: 1447 (Military)
Cause: 06 Detection method: 2I
Incident code: AIDL DEP response time involved: 3.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. LUCE, DARRYL
2. _____ M.F.M.
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARL
Address: KATAHDIN AVE. Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Oil & Hazardous Materials Report Form
Spill Number: B/218/90 (continued)

Clean-up Information:

Total product recovered: 0.50 gals.Y cu. yds.N lbs.N bbls.N
Method: C Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 0.1 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
INTERNAL MILL DISPOSAL

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: hydraulic oil

Mr. Akeley called to report that a bearing seal on the #4 generator had leaked an estimated 1 gal. of hydraulic oil onto the floor and an estimated 1/2 gal. had entered the West Branch of Penobscot river via a floor drain. The remaining 1/2 gal. on the floor was sorbed up with speedi-dri. The oil into the river was not recovered.

REC: File Report

B-218-90

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No. 608.20

May 2, 1990

Darryl Luce
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Darryl:

Attached is a summary report for the oil spill at our East Millinocket mill which I reported to you April 27, 1990.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

Millinocket, Maine 04462. (207) 723-5131

File No. 608.20

May 2, 1990

GREAT NORTHERN PAPER
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket mill.
Source of spill:	#4 generator downriver bearing leaked R068 hydraulic oil on floor, to drain, to river.
Date of spill:	April 27, 1990.
Time span of spill:	Unknown, discovered 1330 hours.
Body of water impacted:	Penobscot River, West Branch.
Volume lost to stream:	Approximately one half gallon.
Estimated total suspended solids to the river:	Not Applicable.
Estimated BOD loss to the river:	Not Applicable.
Process water pH lost to the stream:	Not Applicable.
Visual inspection of the river:	Small slick at time leak was discovered.
Comments:	Remaining material on floor contained and absorbed.
Steps to be taken to prevent reoccurrence:	Equipment repaired. Investigating possible containment options.
Phone reported to:	Darryl Luce, DEP, at 1450 and Petty Officer Sandahl, National Response Center (Report #19402), at 1455.

C. E. Akeley

ENFORCEMENT _____ **REIMBURSEMENT** _____

Oil & Hazardous Materials Report Form
Spill Number: 8/222/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: WOOD YARD Town: E. MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 10.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: _____ (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 89/05/08 (yy/mm/dd) Time Reported: 1355 (Military)
Cause: 06 Detection method: 21
Incident code: AIDL DEP response time involved: 2.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. LECKEY, CLEVE C.L. M.C.M.
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): ACKLEY, CARL
Address: GREAT NORTHERN PAPER Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 9.99 gals.Y cu. yds.N lbs.N bbls.N
Method: G Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 2.0 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
2 YD3 SPREAD AT DOBIE LANDFILL

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/___/____ DATE OF INVESTIGATION __/__/__

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided _____ Less than 10 days provided
_____ notice waived _____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL CASE #B/222/89
GREAT NORTHERN PAPER - EAST MILLINOCKET
5-8-89

On the afternoon of 5-8-89, Carl Ackley of Great Northern Paper called to report that a crane had leaked around 10 gallons of hydraulic oil in the wood yard of the East Millinocket mill. They excavated about 2 yds of soil from the area of the spill and spread the material at their Dolie landfill. Carl indicated that they have an oily waste license for a limited amount at this landfill.

CL/sh

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 230 - 95

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER

Address: ON KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462-1398 Telephone: (207) 723-5131

Comments: LEAKING SMALL TANK/DRUM ABOUT 4 GALLONS OF DIESEL SPILLED

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: MILLINOCKET Zip: 04462

Latitude N: 45 / 38 / 57.00 Longitude W: 68 / 42 / 20.00

SPILL / EVENT INFORMATION

Spill Type: B (Table A) Amount Spilled: 4.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 29 (Table B) Product Actually Found: 29 (Table B)

Date Of Spill: Time Of Spill: (Military)

Date Reported: May. 16, 1995 Time Reported: 1544 (Military)

Cause Of Spill: 30 (Table C) Detection Method: 3 I (Table D)

Incident Code: A - ID - P - (Table E)

DEP response time involved: 9 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : MALECK, TOM

PERSON REPORTING EVENT

Name (Last, First, MI): ACKLEY, MR. CARL

Address: BOWATER-GNP ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 230 - 95

Total Product Recovered : 3.80 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : G

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 1.50 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : soil excavated and spread on polyethylene sheeting, on GNP property.

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-230-95
Millinocket Bowater GNP

Tuesday May 16, 1995 *1544*

Carl Ackley (723-2278) of Bowater Great Northern Paper Inc. phoned to report that a drum was found abandoned and leaking on GNP property. The Drum is reported as having a home made dispensing system on it and is believed to have contained diesel fuel. The drum was apparently dumped on the side of the Coal Ash Road, which leads to the waste water treatment plant.

I told Carl that I would be in Millinocket on Wednesday around 1300. He said to make contact with him or Judy Moore.

Wednesday May 17, 1995 *1300*

I pulled into the Millinocket mill parking lot near the Engineering Building when Judy Moore showed up and said follow me. I followed her to the location where the drum had been dumped.

The Drum was of a heavy steel riveted design that was painted green. It was slightly larger than a standard 55 gallon drum probably in the 60 to 75 gallon size. A small back hoe was on scene and about 1.5 cubic yards of lightly diesel contaminated soil was spread on a 6 mil polyethylene tarp.

ORIGINAL

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 241 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER

Mailing Address: KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: DAM

Address: WEST BRANCH OF PENOBSCOT Location ID: 18861

Minor Civil Division: EAST MILLINOCKET Zip: 04462

Latitude N: 44 / 37 / 15.00 Longitude W: 68 / 34 / 34.00

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 60.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 29 (Table B) Product Actually Found: 29 (Table B)

Date Of Spill: Time Of Spill: (Military)

Date Reported: May. 04, 1994 Time Reported: 0047 (Military)

Cause Of Spill: 05 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 3 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : LECKEY, CLEVE

PERSON REPORTING EVENT

Name (Last, First, MI): GREAT NORTHERN PAPER

Address: KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION **Spill Number B - 241 - 94**

Total Product Recovered : 50.00 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : F

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 2.00 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : 2 yds sawdust to on site biomass boiler

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-241-94

On 5-04-94, 0047 hours, Carl Ackeley of Great Northern Paper called to report a 60 gallon diesel spill. The spill came from a damaged cross -over pipe that was on a tractor owned by Z.W. Spack of Guilford. The discharge had gone unnoticed until the unit got to the security gate. Meanwhile it had left a trail of product a half of a mile long. Great Northern personnel had soaked up as much product as they could with sawdust. The sawdust was picked up and burned in their biomass boiler. The trucker took the unit to the scaler shack where he performed a temporary repair on the damaged fuel line. Hopefully, this allowed him to get the unit to a place where a permanent repair could be achieved.

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-241-2003**

Report Status: Final Report

ORIGINAL

MCD Town: EAST MILLINOCKET
Local Name: DOLBY
Primary Responder: CLEVE LECKEY
Primary Product: Lube Oil {10} - 1 gals. ESTIMATE
Subject/Owner: GREAT LAKES HYDRO AMERICA - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Equipment - Industrial Machinery {IM}
Cause: Mechanical Failure - Gasket/Seal {22}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

05/26/2003 11:25

Subject/Owner (Potential Responsible Party)

Contact: --GREAT LAKES HYDRO AMERICA
1024 CENTRAL ST
MILLINOCKET ME 04462 USA
207-723-4341
Comment:

Reporter

Contact: MAX UPTON-MANAGER-GREAT LAKES HYDRO AMERICA
1024 CENTRAL ST
MILLINOCKET ME 04462 USA
207-723-4341
Comment: Turbine seal failed and released lube oil to Penobscot River.

Primary Responder and Other Employees

CLEVE LECKEY (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type: Utility - Power {PW}
Name: DOLBY HYDRO STATION
Street Address:
MCD Town: EAST MILLINOCKET
Local Name: DOLBY
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Inland Surface Water{I}

Tanks Involved

None

III. CLEANUP

Product Reported

Lube Oil {10}

Cleanup DTREE

Products Found/Amount Spilled

Lube Oil {10}/ - 1 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 1 gals. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

Sorbent boom taken by Great Lakes Hydro.

IV. NARRATIVE

On 5/26/03, 1125 hours, Max Upton of Great Lakes Hydro America reported a one gallon lube oil release to the Penobscot River. The packing on one of the turbines failed. The release was secured with sorbent boom.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-252-2008

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: DARRYL E LUCE
Primary Product: #6 Fuel Oil {06} UNKNOWN
Subject/Owner: KATAHDIN PAPER CO - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: No Source Found By Responder {NS}
Cause: Other - Unknown {18}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

05/08/2008 09:45

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER CO
50 MAIN ST
EAST MILLINOCKET ME 04430 USA
207-732-2278

Comment: high water brought #6 oil from old spill to surface

Reporter

Contact: CARL ACKLEY-ENV. COMPLIANCE OFFICER-KATAHDIN PAPER CO
50 MAIN ST
EAST MILLINOCKET ME 04430 USA
207-723-2278

Comment:

Primary Responder and Other Employees

DARRYL E LUCE (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER CO
Street Address: 50 MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Unknown/Unspecified

III. CLEANUP

Product Reported

Unspecified Oil {80}

Cleanup DTREE

Products Found/Amount Spilled

#6 Fuel Oil {06}/ UNKNOWN (Primary Product)

Material Recovered

Other Material {OM} - 100 lbs. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

sorbents were sent to mill's landfill

IV. NARRATIVE

Mr. Ackley reported that during a routine inspection of the mill's property it was noted that about 50 gallons of number six oil had been discovered in a depression below the railroad where six oil is unloaded. This line had leaked some years before and reported to Tom Varney of this office. A recovery well was installed and operated until no more product was recovered. Mr. Ackley believes the new oil is the result of the older oil problem; being that, due to historically high ground water table this spring, some residual oil not collected previously was forced to the surface. Crewmen collected the free product with sorbents and the site watched for further oil. No more was reported. No further Response Services expected.

V. ATTACHMENTS

Attachment Type	Description	File Name

Enforcement___ Reimbursement___

RECEIVED
SEP 25 1992
By _____

OIL & HAZARDOUS MATERIALS REPORT FORM
Spill Number B1259184

SUBJECT

Name (Last, First, MI): Great Northern Paper
Address: _____ Town: East Millinocket State: __
Zip: ____-____ Telephone Number: (___) - ___ - ____ (Optional)

SPILL INFORMATION

Location (Town): East Millinocket Spill type: 2 (Table A)
Amount spilled: 2 (gals, yds3, lbs, or bbls)
Type of spill: 80 (Table B)
Date of spill: 84/11/30 (Yr/Mo/Dy) Time of spill: 0900 (Military)
Date reported: 84/12/2 (Yr/Mo/Dy) Time reported: 1329 (Military)
Cause: 4 13 (Table C) Detection method: 52 (Table D)
Incident code: 4-L (Table E) DEP response time involved: 2.0 (Hours)
No. of wells at risk: 0 No. of wells impacted: 0
Investigators' names: 1. T. Varney
2. _____
3. _____

PERSON REPORTING INCIDENT

Name (Last, First, MI): Welch, P.
Address: _____ Town: Millinocket State: __
Zip: ____-____ Telephone Number: (___) - ___ - ____ (Optional)

CLEAN-UP INFORMATION

Total product recovered: 2 (gals) yds3, lbs, or bbls)
Method: ____ (Table K) Non-recyclable: 0,25 (gals, or (bbls))
Solids combustible: _____ (yds3, or tons)
Solids non-combustible 0,25 yds3
Recyclable material: _____ (gals, yds3, lbs, or bbls)
Number of filters installed: __ Number of aerators installed: __
Disposal Information: _____

OTHER ACTIONS

Reimbursement: to SF (surface water) _ (Y or (N))
to GF (ground water) _ (Y or (N))
to HWF (haz waste) _ (Y or (N))
Third party damage claim expected: _ (Y or (N))
Enforcement referral: _ (Y or (N))

REMARKS/RECOMMENDATIONS/NARRATIVE:

See back for TRAINING & EXPOSURE

EXPOSURE CODES AND TRAINING CREDITS

Spill Number _/___/__

RESPONDER 1 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 2 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 3 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level : _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

RESPONDER 4 (Last, First, MI): _____
Name of material: _____ UN ID No.: ____
UN chemical class: . (Table F) Exposure level: _ (Table G)
Protection code: __ (Table H) Health code: _ (Table I)
TRAINING (Table J)
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____ Catagory: ___ Hours: ____
Catagory: ___ Hours: ____

BS, TM
N.F.R.
JW

OIL & HAZARDOUS MATERIAL REPORT FORM

NUMBER: B / 259 / 84

1. Spillor:

a./ Name: Great Northern Paper Company (Last, First, MI)

b./ Address: _____ (Optional)

c./ Town: East Millinocket

d./ State: ME ; e./ Zip-Code: 04430; f./ Tel. #: 207 -723 - 5131 (Optional)

2. Spill Information:

a./ Town: E. Millinocket ; b./ Type: 2 (1, 2, 3, or 4); (Table OHMS, #2)

c./ Amount Spilled: 2 (gals., yds^3, or lbs); d./ Hazardous Waste Number: M001

e./ Oil; __ (Table N); f./ Material State: L (G,L, or S)

g./ Concentration: 50-500ppm;

h./ Date and Time of Spill: 84/11/30 (yy/mm/dd), 0900 (Military)

i./ Date and Time Reported: 84/12/7 (yy/mm/dd), 1329 (Military)

j./ Cause: A2 (Table A6); k./ Recovered or Treated: 2 (gals,yds^3, or lbs)

l./ Method: ___ (Table A7); m./ Recycleable Material: _____ (gals, yd^3, lbs)

n./ Non-Recycleable Materials: ___ ¼ ___ (gals, yds^3, or lbs)

o./ Solids Combustible: _____ cubic yds; p./ Solids Non-Combustible ¼ cubic yds; q./ Weather __ (Table A8); r./ Disposal Info.: Out of state landfill

3. Other Information:

a./ Investigator: Varney, T.W. JW (Last, FI, MI); b./ Incident Code: A L (Table W); c./ Surface Water: N (Y or N); d./ Ground Water N (Y or N);

e./ DEP Time Involved: 2 (hours)

4. Person Reporting Incident:

a./ Name: Welch, P. (Last, FI, MI);

b./ Address: GNP Co. (Optional);

c./ Town: Millinocket ; d./ State Maine ; e./ Zip: 04462

f./ Telephone #: 207 - 723 - 5131 (Optional)

- OVER -

5. Other Actions:

a./ Reimbursement: to MCPF: N (Y or N); to HWF: N (Y or N); b./ Third Party Damage Claim Expected: N (Y or N); c./ Enforcement Referral: N (Y or N)

6. Nature of complaint for investigation:

Pat Welch called with the above info. A deteriorated gasket on a transformer allowed transformer oil to weep down the side of the 'former.

The leaked oil was contained and cleaned up. The offending transformer was repaired. Stored sorbents will eventually be disposed out of state. Case closed.

HAZARDOUS MATERIAL SPILL
BANGOR REGIONAL OFFICE REPORT

RECEIVED
SEP 25 1992

This form should be filled out by the spillor and returned to the Department of Environmental Protection within ten (10) days. Please mail to: Maine D.E.P.; Bureau of ~~Oil & Hazardous~~ Material Control; Division of Field Services; 31 Central Street; Bangor, Maine 04401.

DATE & TIME OF CHEMICAL DISCHARGE: November 30, 1984 9:00 AM

NAME & ADDRESS OF PARTIES INVOLVED: Great Northern Paper Company
East Millinocket, Maine

EXACT LOCATION OF SPILL: The East Millinocket mill of Great Northern Paper. Behind the old boiler house.

AMOUNT AND TYPE OF CHEMICAL (S) DISCHARGED: 2 gallons of PCB Contaminated (50-500 ppm) Oil.

COMPLETE DESCRIPTION OF CIRCUMSTANCES CAUSING DISCHARGE: Transformer sprung a leak at a gasket.

AMOUNT OF CHEMICAL (S) RECOVERED: All METHOD: Absorption & clean up.

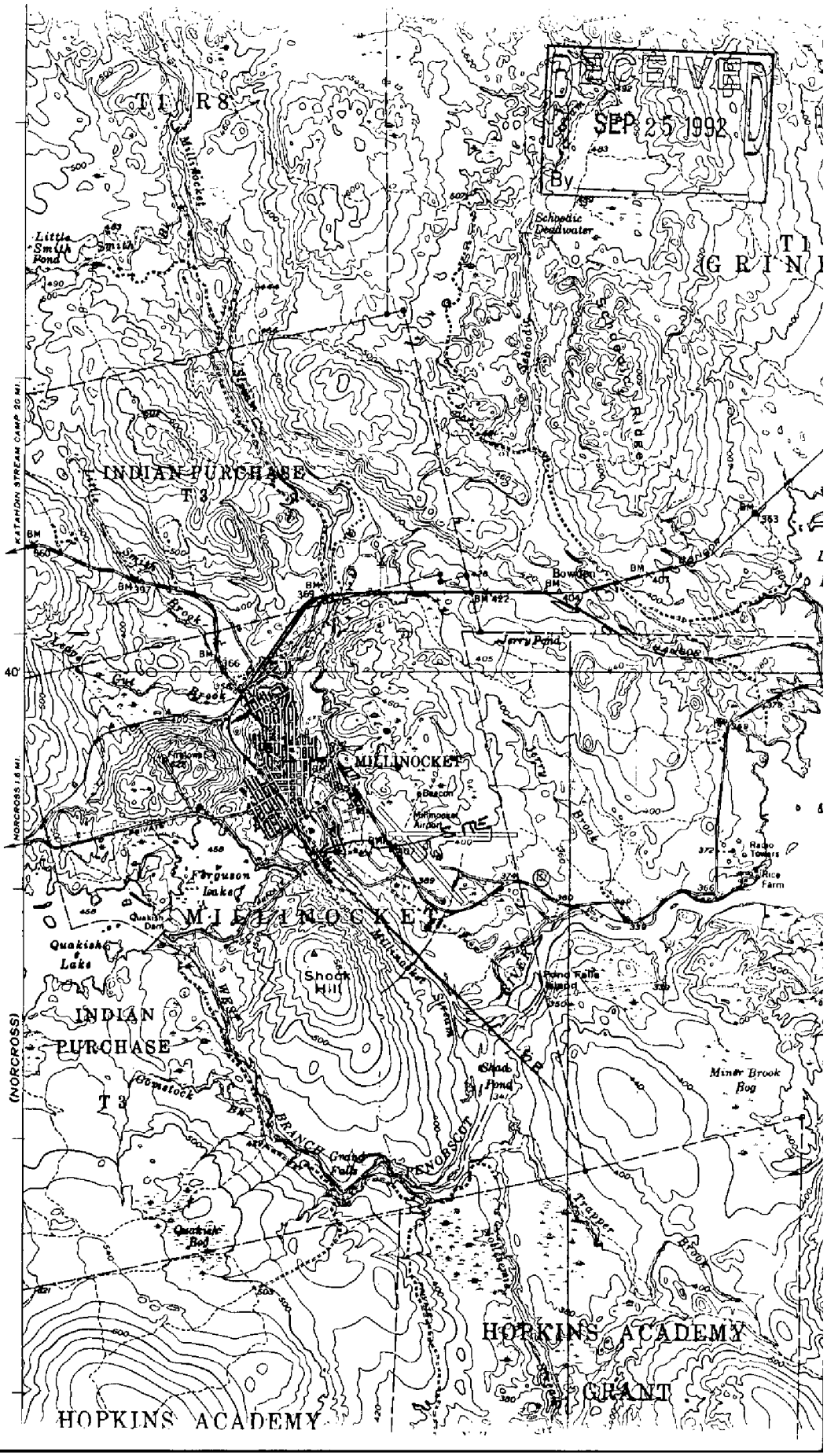
LOCATION AND METHOD OF CHEMICAL/DEBRIS DISPOSAL: Barrels of material will be stored at Dolby Storage area for transport to a licensed disposal site at a later date.

NAME AND ADDRESS OF ANY PERSON, FIRM OR CORPORATION SUFFERING DAMAGES DUE TO THIS DISCHARGE:
- NONE -

PROCEDURES, METHOD, AND PRECAUTIONS INSTITUTED TO PREVENT A SIMILAR OCCURRENCE FROM RECURRING:
Cover bolts, bushing bolts and gaskets will be checked and tightened or replaced as needed.

ADDITIONAL COMMENTS:

REPORT PREPARED BY: G. Hudak.


RECEIVED
SEP 25 1992
By
T 1 R 8
INDIAN PURCHASE
T 3
MILLINOCKET
INDIAN
PURCHASE
T 3
HOPKINS ACADEMY
HOPKINS ACADEMY
GRANT
Millinocket
Little Smith Pond
Smith
Schoodic Deadwater
Schoodic Ridge
Jerry Pond
Jerry Brook
Bowden
Ferguson Lake
Quakish Lake
Quakish Dam
Shook Hill
Penobscot
Penobscot River
Penobscot Falls
Island Falls
Quakish Bog
Minor Brook Bog
Trapper Brook
Gowstock
Gowstock Falls
Radio Towers
Rice Farm
Millinocket Airport
Beacon
BM
KATAHDIN STREAM CAMP 20 MI
NORCROSS 1.6 MI
(NORCROSS)

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/260/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: KATAHDIN AVENUE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 5.90 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 29
Date of Spill: 89/05/20 (yy/mm/dd) Time of Spill: 1130 (Military)
Date Reported: 89/05/20 (yy/mm/dd) Time Reported: 1250 (Military)
Cause: 18 Detection method: 2I
Incident code: AIDP DEP response time involved: 5.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. VARNEY, T.W.
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARLTON
Address: GREAT NORTHERN PAPER Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

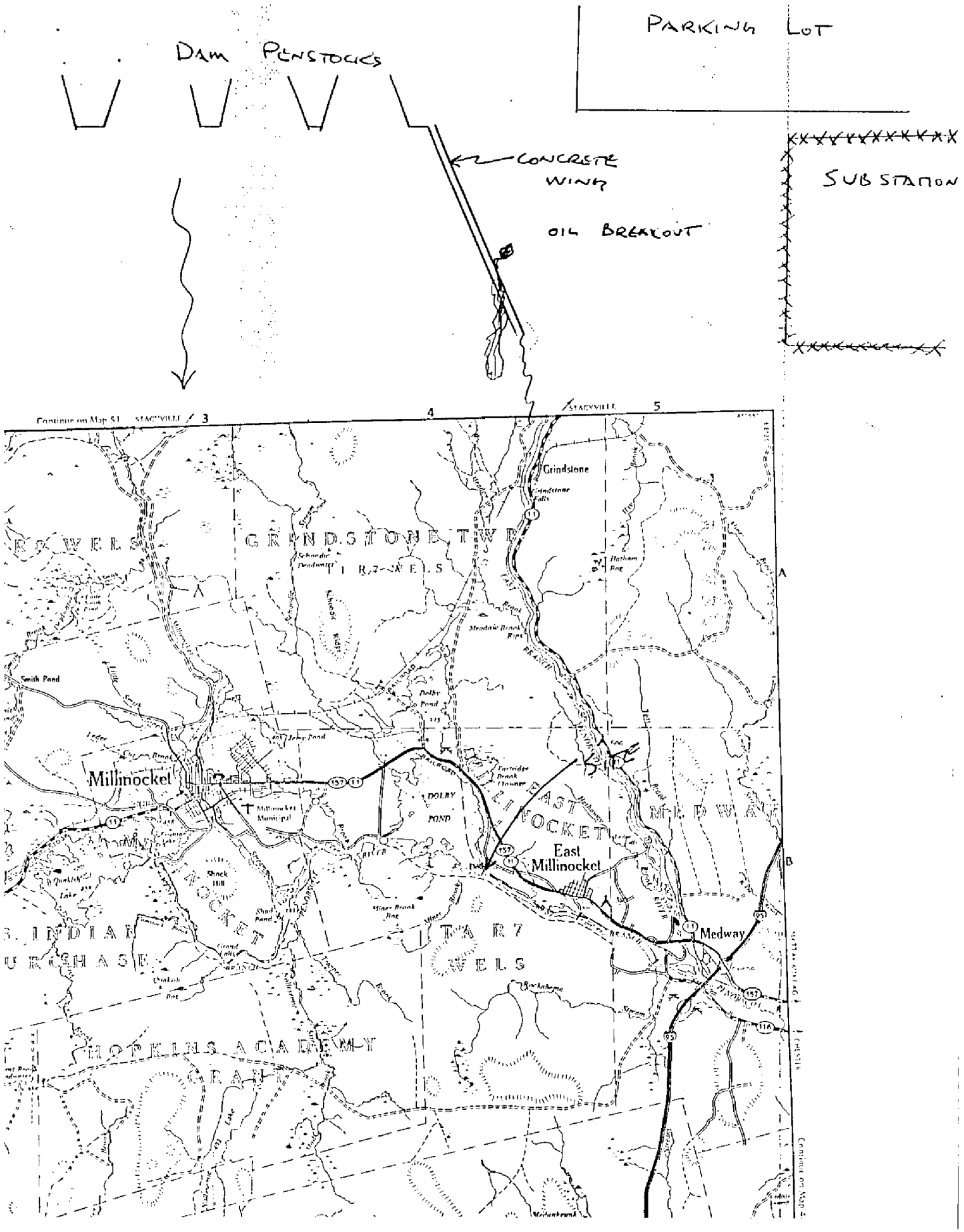
Clean-up Information:

Total product recovered: 2.90 gals.Y cu. yds.N lbs.N bbls.N
Method: C Non-recyclable: _____ gals.N bbls.N
Solids: combustible: 0.3 cu. yds.Y tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: DIESEL


PARKING LOT
DAM PENSTOCKS
CONCRETE WING
OIL BREAKOUT
SUB STATION
Grindstone
Millinocket
East Millinocket
Medway
Smith Pond
DOLBY POND
GRINDSTONE TWP
T1 R7 WELS
T7 R7 WELS
HOPKINS ACADEMY GRANT
Continue on Map 51
Continue on Map 4

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No 608.20

June 15, 1989

Thomas Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

This is to update you on the diesel oil spill at Great Northern's Dolby power station which I reported to you on May 20 and which you investigated in person on May 22. As you requested, a small recovery well was dug at the point where diesel oil had seeped from the ground. Within a day or so, seepage of oil from this spot was completely stopped and has not recurred. No more than a few ounces of oil was collected in the recovery well. Boom material was left in place until this week as a precaution.

I have also attached a copy of our written report on this spill. If you have any questions concerning this, give me a call at 723-5131, ext. 1278.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Analytical Research Group Leader

cc: D. K. Phenicie

File No. 608.20

Date: June 15, 1989

GREAT NORTHERN PAPER
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	Dolby power station, retaining wall on north side of river below dam.
Source of spill:	Diesel oil seeped from ground and into river. Suspected origin, a still unidentified historical spill.
Date of spill:	May 20, 1989
Time span of spill:	Spill discovered approximately 11am. Containment was fully deployed by 1pm. Seepage from ground was nearly stopped by end of day, completely stopped by May 23.
Body of water impacted:	West Branch of Penobscot River
Volume lost to stream:	Estimate less than 10 gallons
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable

Visual inspection of the river:	A slick was evident at the East Millinocket mill dam about 11am. After booms were deployed, no further escape of oil was detected.
Comments:	Small recovery well being left in place.
Steps to be taken to prevent reoccurrence:	Monitor area, especially after rain. Check records and drawings in effort to define source of original spill.
Phone reported to:	Tom Varney of DEP and Mike Bosley of National Response Center.

C. E. Akeley

SPILL # B/260/89
GREAT NORTHERN PAPER - EAST MILLINOCKET
5-20-89

A petroleum sheen, observed on the west branch Penobscot at E. Millinocket, prompted Great Northern to activate their spill team. They discovered the source to be oil leaching out of the bank, running down a retaining wall, and into the river at Dolby Dam.

The spill team boomed the sheen and notified me. Inspecting on May 22, no obvious source of oil could be identified. There were no known abandoned buried tanks in the area, nor any sign of surface spillage or illegal dumping in the storm sewers.

The volume of oil leaching out of the bank had diminished greatly since Saturday. The only explanation was an old spill that may have occurred when the substation was rebuilt in the mid-80's. It was theorized that diesel oil, possibly from the overfill of equipment during fueling, was just now working its way through the substrate.

TV/sh
REC: file

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 276 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER GREAT NORTHERN PAPER

Mailing Address: 1 KATAHDIN Town: MILLINOCKET

State: ME Zip: 04462-1398 Telephone: (207) 723-5131

Comments: 100 GAL HYDRAULIC OIL SPILL IN E. MILLINOCKET WOODYAR

LOCATION / FACILITY INFORMATION

Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: EAST MILLINOCKET Zip:

Latitude N: / / Longitude W: / /

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 100.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 86 (Table B) Product Actually Found: 86 (Table B)

Date Of Spill: May. 11, 1994 Time Of Spill: 1545 (Military)

Date Reported: May. 11, 1994 Time Reported: 1645 (Military)

Cause Of Spill: 06 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 5 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : MALECK, TOM

PERSON REPORTING EVENT

Name (Last, First, MI): BOWATER GREAT NORTHERN PAPER/AKELEY, CARL

Address: 1 KATAHDIN Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 276 - 94

Total Product Recovered : 98.00 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C H

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 2.00 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : spill on wood chips were intended as hog fuel and oiled chips were burned in hog fuel burner

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please. document your information carefully. It may be needed for future reference or legal action.

B-276-94
East Millinocket

Wednesday May 11, 1994 1645

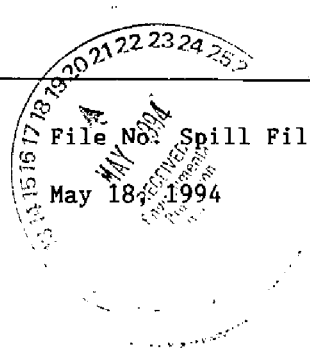
The state police dispatcher (866-2121) phoned to report that Carl Akeley of Bowater / Great Northern Paper Company had phoned to report a 100 gallon hydraulic oil spill.

I phoned Mr. Akeley. According to him, a tanguey, which is a large crane like machine with hydraulic jaws that is used in the wood yard at the East Millinocket Mill, leaked some 100 gallons of hydraulic oil. The oil sprayed out rapidly when a hydraulic hose near a fitting failed. The spill was mostly on wood chips that are feed stock for the hog boilers at the mill. Some sorbent material was used to clean up the liquid oil, while most of the oil sprayed onto wood chips. The wood chips were picked up and used as fuel as originally intended.

B-276-94

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
207/723-5131
Subsidiary of Bowater Incorporated



File No. Spill File

May 18, 1994

Tom Maleck
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a written report on the hydraulic oil spill from the Tanguay at our East Operation woodyard on May 12. The spill was reported to you the same day.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

May 18, 1994

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation Woodyard
Source of spill:	Tanguay unloading wood
Date of spill:	May 12, 1994
Time span of spill:	At 3:45pm
Body of water impacted:	None
Volume lost to stream:	None, about 100 gallons on ground
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Not Applicable
Comments:	Hydraulic hose blew off fitting. Cleaned up with oil sorbant and bark.
Steps to be taken to prevent reoccurrence:	Continue periodic maintenance
Phone reported to:	Tom Maleck, DEP Bangor, 4:50pm May 12

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-291-2009

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: NATHAN THOMPSON
Primary Product: Hydraulic Oil {86} - 50 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Aboveground Storage Tank {TA}
Cause: Overfill {09}

Spill Date/Time

05/25/2009 07:15

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

05/25/2009 08:50

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER
50 MAIN STREET
EAST MILLINOCKET ME 04432 USA
207-723-2530
Comment:

Reporter

Contact: BRUCE ALBERT--KATAHDIN PAPER CO
50 MAIN STREET
EAST MILLINOCKET ME 04432 USA
207-723-2530
Comment:

Primary Responder and Other Employees

NATHAN THOMPSON (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER CO
Street Address: 50 MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

Hydraulic Oil {86}

Products Found/Amount Spilled

Hydraulic Oil {86}/ - 50 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - UNKNOWN

Recovery/Treatment Method

Sorbents {C}
Burning {H}

Cleanup DTREE

Disposal Information

Contaminated wood chips burned at Facilities Boiler.

IV. NARRATIVE

5/25/09 Mr. Albert reported an estimated 50 gallon hydraulic oil release from a 275 gallon day tank, Aboveground Storage Tank (AST). An employee had left the air supply on to the tank's air pump which resulted in the AST overfilling and discharging through the vent pipe and onto a paved surface. Wood chips were deployed onto the spill area and burned in accordance to the facilities licensing agreement with the DEP. The spilled oil was contain to an area and no receptors were impacted. No further action by Response Services expected.

Spill referred to Air Bureau.

V. ATTACHMENTS

Attachment Type	Description	File Name
Electronic Form	Referral to CYNTHIA DARLING	

Spill Number: B-291-2009 Referral Date: 12/18/2009 12:00:00AM

Referral Type:

To: CYNTHIA DARLING

From: NATHAN THOMPSON

Referral:

Refered for licsence review as it related to incident.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0309 - 96

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER CO.

Address: 1 KATAHDIN AVE. Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Comments: ESTIMATED LOSS OF 1 QT. HYDRAULIC OIL AT EAST MILL.

LOCATION / FACILITY INFORMATION

Name of Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: **EAST MILLINOCKET** Local Name: EAST MILLINOCKET

Latitude **N**: 45 37 19 Longitude **W**: 68 34 36

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 0.20G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 86 (Table B) Product Actually Found: 86 (Table B)

Date Of Spill: June 13, 1996 Time Of Spill: 1015

Date Reported: June 13, 1996 Time Reported: 1204

Cause: 06 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - I - (Table E)

Response Time Involved: 0.6 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **VARNEY, THOMAS** TW MFW

REPORTING INFORMATION

Name(Last, First, MI): GREAT NORTHERN PAPER CO.

Address: 1 KATAHDIN AVE. Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0309 - 96

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.10 G Method: C (Table K)

Other Product Recovered: Method: (Table K)

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info:

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

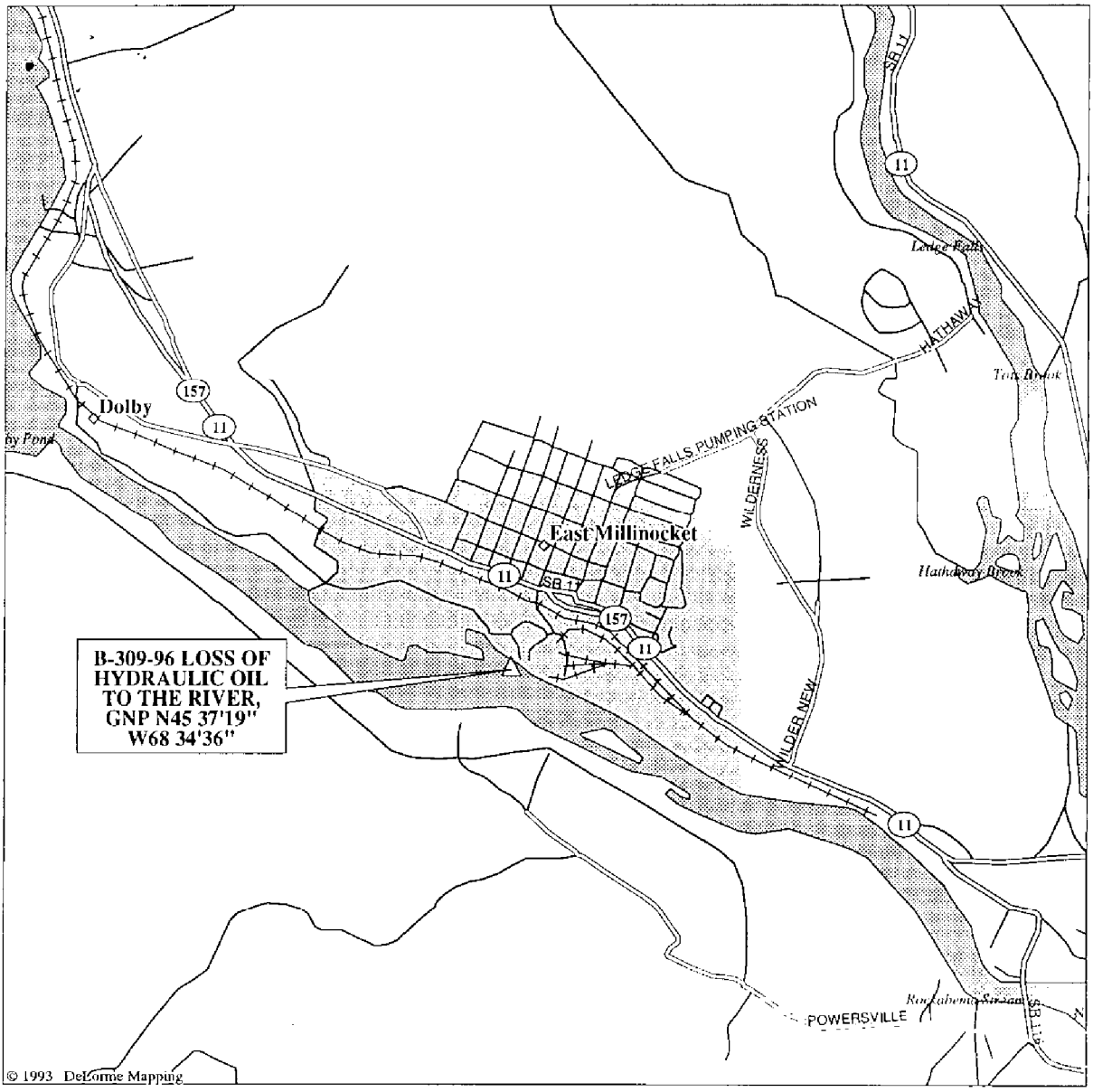
UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Removed:

NARRATIVE

A burst hydraulic hose on log loader resulted in the loss of about 1 quart of hydraulic oil to the Penobscot. GNP personnel deployed sorbents and recovered perhaps 1/2 of what was spilled. See the attached report from GNP.



LEGEND

- Population Center
- State Route
- Town, Small City
- Street, Road
- Major Street/Road
- State Route
- Interstate Highway
- Railroad
- River
- Land Mass
- Open Water
- Utility (powerline)

Scale 1:31,250 (at center)

2000 Feet

1000 Meters

Mag 14.00
Mon Jun 24 14:28:46 1996

Map From Delormes Mapexpert,
Freeport, ME

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

SPILL FILE

June 19, 1996

Mr. Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a report on the oil spill at our East Operation which was reported to you on June 13 by Judy Moore.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE
June 19, 1996

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation
Source of spill:	Tanguay log loader moving wood from riverbank area by filter plant upriver of mill dam.
Date of spill:	June 13, 1996.
Time span of spill:	10:15am.
Body of water impacted:	West Branch of Penobscot.
Volume lost to stream:	Estimate one quart.
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Not applicable.
Visual inspection of the river:	Sheen on river above dam. The following day, a small spotty sheen was observed in an eddy below the dam when a wheel was started.
Comments:	Hydraulic hose failed on Tanguay. Boom and blanket were deployed to contain oil.
Steps to be taken to prevent reoccurrence:	Will no longer use this type equipment to remove wood from this area.
Phone reported to:	Tom Varney, DEP Bangor office, 12:04pm, and Petty Officer Bright, National Response Center, 12:12pm, June 13, 1996 by Judy Moore

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/332/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: KATAHDIN AVENUE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: C
Amount spilled: 0.25 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 71
Date of Spill: 89/06/21 (yy/mm/dd) Time of Spill: 1200 (Military)
Date Reported: 89/06/21 (yy/mm/dd) Time Reported: 1520 (Military)
Cause: 18 Detection method: 21
Incident code: AIDL DEP response time involved: 3.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. RANDALL, ROBERT F.
2. _____
3. _____ M.C.M.

Person Reporting Incident:
Name (Last, First MI): KROEGER, DICK
Address: GREAT NORTHERN PAPER Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 0.25 gals.Y cu. yds.N lbs.N bbls.N
Method: G Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 1.0 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
MATRL MANIFESTED TO HAZ.WASTE DISP.FACIL

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: ASKAREL/PCB's

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/___/___ DATE OF INVESTIGATION ___/___/___

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided
_____ notice waived
_____ Less than 10 days provided
_____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL # B/332/89
GREAT NORTHERN PAPER CO. - EAST MILLINOCKET
6-21-89

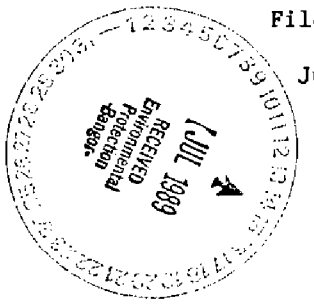
This office received a call at 1520 on 6-21-89 from Dick Kroeger (GNP) reporting a PCB spill. He stated that approximately one pint of ASKARAL had leaked from a sight glass on their T-118 transformer. This occurred in the mill yard at the East Millinocket mill. He was not sure what had caused the problem, but the oil had leaked out onto the control box. It appeared that most of the material was still on the transformer. Some of it had gone onto the ground and left a stain. A bag was installed over the transformer to help contain the leak.

Mr. Kroeger did not know what the concentration of PCB was, but felt that it would be high. The leak was repaired shortly after it was detected. I was informed that personnel would suit up sometime tonight and cleanup the transformer. They would then excavate down about 2 feet beneath the transformer, drum the contaminated material, and manifest it to an approved hazardous waste facility for disposal. He indicated that this transformer is due for removal sometime this fall. The spill was discovered around noontime and reported to Mr. Kroeger at 1300. Initially, he thought the transformer might have been leaking since Monday. There were no drains or State waters involved in this discharge.

RR/sh
REC: file

JUL 14 1989

Great Northern Paper
a company of
Great Northern Nekoosa Corporation



File No. 608.10

July 11, 1989

Robert Randall
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Bob:

Attached are written follow-up reports for two spills of PCB-containing materials at Great Northern facilities during the week of June 19. One is for a spill of oil, which contained trace levels of PCB, from a circuit breaker being transported at the Millinocket mill. The other is for a spill of Askaral fluid from a leaking level gauge on a transformer at the East Millinocket mill. Dick Kroeger reported both spills to you by phone immediately after they occurred.

If you have any further questions on these spills, you may call me at 723-5131, extension 1278.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Analytical Research Group Leader

cc: R. D. Kroeger
D. K. Phenicie

File No. 608.10

Date: July 11, 1989

GREAT NORTHERN PAPER
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	T-118 transformer in courtyard between #4 and #5 paper machines at East Millinocket mill.
Source of spill:	Approximately one quart (based on replacement volume) of Askaral fluid from leaking sight glass on t-118.
Date of spill:	June 21, 1989.
Time span of spill:	Several hours.
Body of water impacted:	None.
Volume lost to stream:	None.
Estimated total suspended solids to the river:	Not applicable.
Estimated BOD loss to the river:	Not applicable.
Process water pH lost to the stream:	Not applicable.
Visual inspection of the river:	Not applicable.
Comments:	Material leaked onto ground under transformer. Excavation and testing being conducted to remove contamination. Excavated material drummed and prepared for disposal within 90 days at approved hazardous waste facility.
Steps to be taken to prevent reoccurrence:	Leak has been repaired. Pcb transformers are being replaced as quickly as possible.
Phone reported to:	Bob Randall, DEP Bangor, on June 21.

C. E. Akeley

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/338/91

Subject:
Name (Last, First MI): GEORGIA PACIFIC PAPER CO., INC
Address: ROUTE 157 Town: EAST MILLINOCKET
State: ME Zip-code: 04430 Telephone: 2077469912

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: C
Amount spilled: 1900.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 72
Date of Spill: 91/06/04 (yy/mm/dd) Time of Spill: 1700 (Military)
Date Reported: 91/06/04 (yy/mm/dd) Time Reported: 2241 (Military)
Cause: 05 Detection method: 2I
Incident code: AIDS DEP response time involved: 12.5 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. MALECK, TOM T.L.M.
2. _____ MFM
3. _____

Person Reporting Incident:
Name (Last, First MI): CRISS, DAVID
Address: GEORGIA PACIFIC Town: EAST MILLINOCKET
State: ME Zip-code: 04330 Telephone: 2077469912

Clean-up Information:

Total product recovered: 12.00 gals.Y cu. yds.N lbs.N bbls.N
Method: IJ Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 12.0 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
41 DRUMS OF DEBRIS DISP. OF CLEAN HARBOR

Other Actions: Approx. 1800 gal. neutralized in process sewer

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: sulfuric acid - 98%

The State Police dispatcher phoned to have me call a Mr. David Criss of Georgia-Pacific Paper Company in E. Millinocket (746-9912 ext. 1329).

When I reached David Criss he explained that sulfuric acid at a 98% concentration had been leaking since about 1700 at an estimated rate of 250 gallons per hour. At 1930 the 6,000 to 6,200 gallon tank was leaking. The leak was located about 1/3 the way up on the fiberglass above ground sulfuric acid horizontal tank.

Much of the acid is entering the process sewer. The process sewer includes a 10,000 gallon primary tank with a 24 hour holding time. The trough and sewer system is being flooded with water. There are 4 people remaining in the steam plant control room with air packs ready. The line flow was increased. This brought the pH to 10.8, the normal pH is 9.1. However, the pH in the flew is 4, the normal is 5.1.

Delta Chemical is enroute with a sulfuric acid tanker to pump out the tank. No attempt was or will be made by the mill's emergency response team to stop the tank leak or patch the tank.

Friday, June 14, 1991 1324

Darryl Luce (DEP Bangor) spoke with Carl Akeley. The sulfuric acid tank is not cleaned out. Carl Akeley also reported that pipes from a U-drain has developed leaks so that there is some sulfuric acid under the steam plant.

Mr. Akeley wanted to know what to do about the sulfuric acid under the steam plan.

Friday, June 14, 1991 1345

I phone Carl Akeley of Georgia-Pacific Paper Company. He informed me that since the sulfuric acid spill, some acid from the U-drain leaked under the steam plant. He said to call Judy Moore 723-5131 as he was going on vacation. I said I would be in E. Millinocket on Monday.

Monday, June 17, 1991

I met with Bob Libby, Sam Houston and Judy Moore at Georgia-Pacific's East Millinocket Mill. Apparently much of the acid spilled ran into the U-shaped ditch into the mill's sewer system. Part of the ditch runs over an abandoned and filled 20,000 gallon #6 oil tank. The acid entered the ground in this area and may have been chased by the water being used.

I took a pH of the standing water in the tough near the manway of this filled 20,000 gallon underground #6 tank. The pH was less than 1. My suggestion was large amount of soda ash and flushing water along with pH monitoring of this activity. Also I suggested a monitoring well, for pH monitoring on the outside of the building wall toward the river. This would have the possibility of detecting and monitoring any pH change that might be heading in the direction of ground water flow.

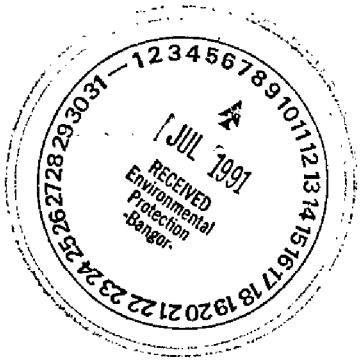
Clean Harbors was on scene completing their cleanup, they had some 41 drums of sulfuric acid spill and clean up debris which is to be manifested out of state for proper disposal.

TM/ak
REC: File Report

B-338-91

Georgia-Pacific Corporation

Northern Paper Division
One Katahdin Avenue
Millinocket, Maine 04462-1398
Telephone (207) 723-5131



File No. 608.10

July 2, 1991

Hazardous Matter
Bureau of Oil and Hazardous Materials Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Sir:

Attached is a written report on a discharge of sulfuric acid at our East Millinocket mill on June 4. It was reported by phone to Tom Maleck in your Bangor office. No personal injuries resulted from the release and no impact has been noted beyond the boundaries of the building in which it occurred.

If you have any questions on this report, you may call me at 723-5131, extension 1278.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

cc: Tom Maleck - DEP Bangor

File No. 608.10

July 2, 1991

GEORGIA-PACIFIC, NORTHERN PAPER DIVISION
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket steam plant
Source of spill:	Water treatment plant sulfuric acid tank leak.
Date of spill:	June 4, 1991
Time span of spill:	Discovered 7pm, stopped 4:30am June 5.
Body of water impacted:	None. Primary impact was to process sewer. Some material also reached ground under building through leaks in piping to sewer.
Volume lost to stream:	None. Approximately 1800 gallons was lost to process sewer.
Estimated total suspended solids to the river:	Not applicable
Estimated BOD loss to the river:	Not applicable
Process water pH lost to the stream:	Average to wastewater treatment was 4.3.
Visual inspection of the river:	No impact
Comments:	Spilled material diverted to process sewer where neutralization capability existed for safety of response and operations personnel. Action approved by DEP's Tom Maleck. Usable product pumped from tank being stored temporarily in tank trailer. Unusable material manifested for disposal off-site. Soda ash being added to neutralize material which leaked from piping to beneath building floor, as directed by Tom Maleck. Monitoring well placed downgradient from steam plant has not shown any impact.

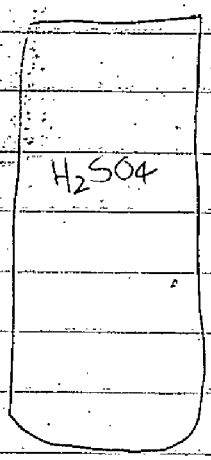
Steps to be taken to prevent reoccurrence: Tank has been cleaned out and inspected. Tank will be repaired for now and replaced next year.

Phone reported to: Tom Maleck of DEP and Petty Officer Moore of the National Response Center (Case #74464) by David Criss.

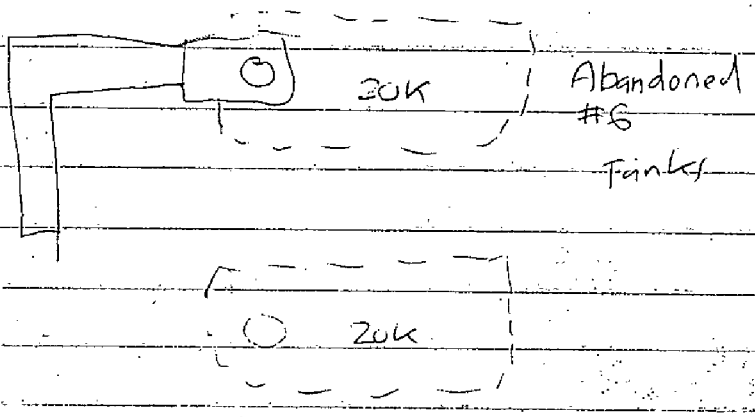
C. E. Akeley

G-P acid Spill

Monday June 17, 1991



Water Treatment
Area



Soda Ash
w/ water Chars.

41 drums debris - Clam Harbor

SEVEE & MAHER ENGINEERS, INC.
Waste Management and Geohydrologic Consultants

September 13, 1991

9146
082701.ltr

Georgia-pacific Corporation
Northern Paper Division
Attn: Mr. Brian Stetson
Staff Engineer
Environmental Affairs Department
Millinocket, Maine 04462

Subject: No. 6 Fuel Oil Investigation - East Millinocket Mill

Dear Brian:

This letter report documents our findings of the investigation to evaluate the horizontal and vertical boundaries of the soil that contains No. 6 fuel oil as a result of the failure of the 12" diameter transport pipe in the rail-car unloading area. Sevee & Maher Engineers, Inc. (SME) conducted a test pit exploration of the area on August 22 and 23, 1991 to define the limits of the soils which contain oil. Mill personnel had identified two areas where the No. 6 fuel oil was breaking out at the ground surface. One site was at the northerly end of the unloading area near the oil separator tank. The other breakouts were at the southerly end of the unloading area in the parking lot.

Test Pits

Georgia-Pacific Corporation (GP) supplied a rubber tired JCB 1550 backhoe to excavate the test pits. The location and depths of excavation of the test pits were determined by SME's field engineer. A total of twenty test pits were excavated. In general, the test pits were excavated to a depth where oil was not encountered, the backhoe reached it's limit of excavation or problems with the excavation such as caving or boulders made further excavation of the test pits impractical. Test pit logs describing the soils encountered have been attached in Appendix I of this report. The location of the test pits are shown on Figure 1, attached to this report.

4 Blanchard Road • P.O. Box 85A • Cumberland Center, ME 04021 • (207) 829-5016 • FAX (207) 829-5692

Oil Impacted Areas

As shown in Figure 1, the apparent limits of soil containing No. 6 fuel oil are minimal. It appears that oil is seeping via two small areas in the vicinity of the fuel oil transport line. The area to the south is larger but may represent other events that occurred undetected in years past. This is evidenced by the fact that the bottom six inches of the maximum twelve inches of soil containing oil in this area is very dense. The dense portion of the oil impacted soil has visual and physical properties that resemble bituminous concrete paving. Another indication that the oil may have been from an earlier time is that the concrete trestles have No. 6 fuel oil on their faces. There appears to be very little or no movement of the No. 6 fuel oil at the periphery of the southerly impacted area. The most southerly area identified was only 2-1/2" thick and was very dense (see Section C-C', Figure 3).

The oil seepage at the northerly end of the site appears to be moving downgradient along the bedding of the 12" CMP drainage pipe that flows to the oil separator. There are two drainage trenches that slope to this area from the north and from the south. Within these drainage trenches are 6" diameter Orangeburg pipe which connect to the 12" CMP (see Figure 3 attached). Above the drainage pipe, are the fuel oil transport lines and steam lines. It is possible that the condensate from the steam lines is hot enough to mobilize the No. 6 fuel oil and allow it to flow either in the drainage pipe or crushed stone bedding. It is also possible that the Orangeburg pipe is not operational after 20 years of service, therefore, most of the condensate and No. 6 fuel oil would travel in the stone bedding. Evidence of this was found in test pit 113 which was excavated in a north-south direction. The north end of the test pit was dry with no observed oil while at the southerly end, near the 12" CMP drainage culvert, the soil was wet and contained No. 6 fuel oil.
During the excavation of test pit 110, many voids were observed in the fill. It may be possible that there are preferential paths through the railroad embankment material that allow the No. 6 fuel oil to migrate from the 12" culvert bedding to the area where it is breaking out at the north end of the oil separator. Cross sections A-A' and B-B', attached in Figure I, show the estimated vertical distribution of oil in the northerly area.

The area between the railroad tracks at the off loading stations and adjacent to the tracks was not investigated. The area between the railroad tracks has live steam lines and transport pipes, and excavation could cause embankment stability problems. Based on discussions with mill personnel, it is likely that a minimal portion of the trench containing the steam lines and transport lines contains No. 6 fuel oil.

Volumes of Oil Impacted Soil

The estimated volume of soil containing No. 6 fuel oil ranges between 2000 and 6500 cy. A range is provided because the extent of contamination in the immediate vicinity of the unloading stations in unknown and the locations of the test pits (see notes; Figure 1) are approximate. Also, since a dynamic condition exists presently, it may be necessary to reevaluate the extent of oil impacted soil if an extended period of time lapses before a remediation program is enacted.

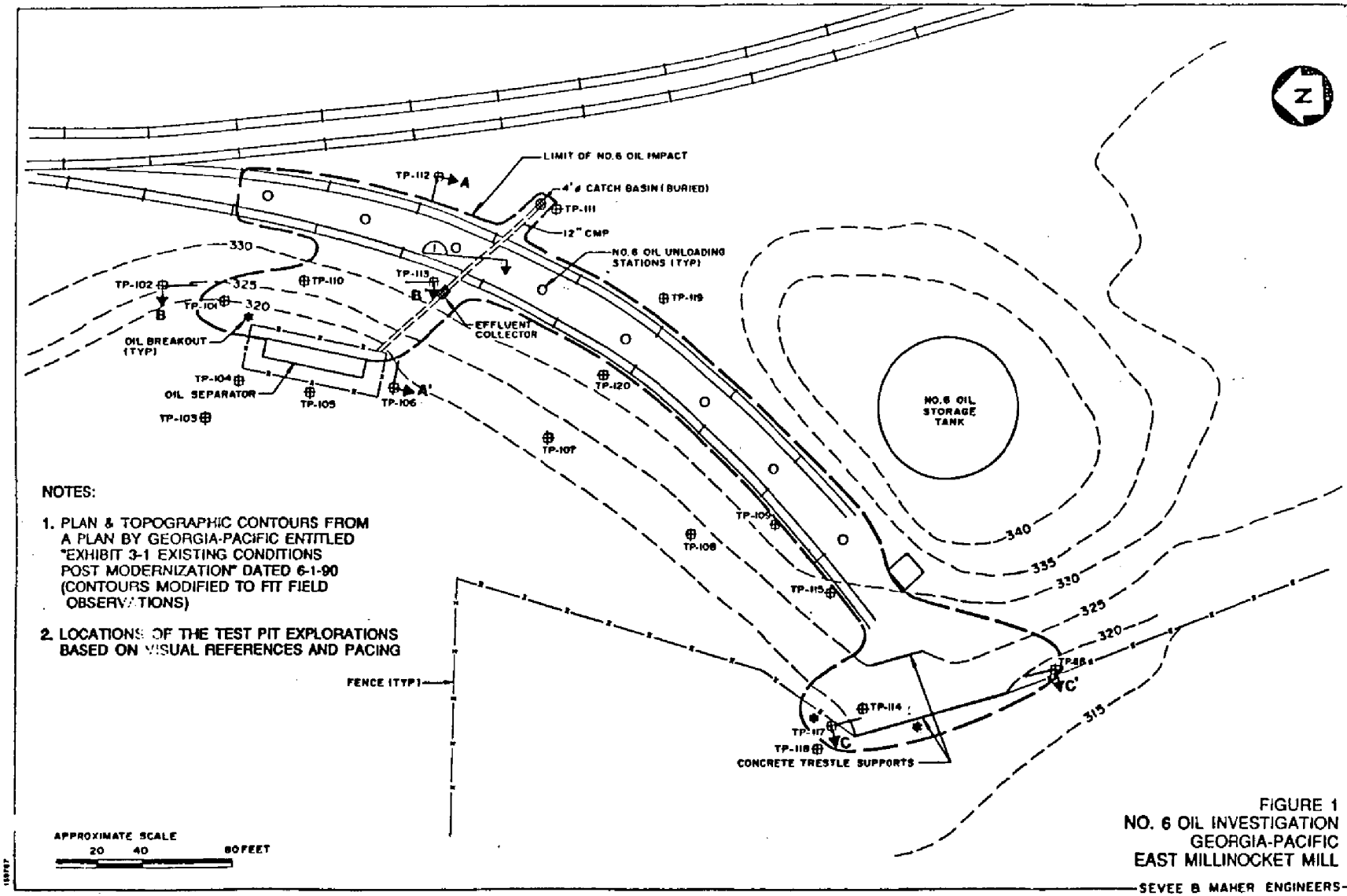
If you have any questions or need additional information, please do not hesitate to call me.

Very truly yours,

SEVEE & MAHER ENGINEERS, INC.

Pat M. Maher for

Kenneth P. Norton, P.E.
Project Engineer



NOTES:

1. PLAN & TOPOGRAPHIC CONTOURS FROM A PLAN BY GEORGIA-PACIFIC ENTITLED "EXHIBIT 3-1 EXISTING CONDITIONS POST MODERNIZATION" DATED 6-1-90 (CONTOURS MODIFIED TO FIT FIELD OBSERVATIONS)
2. LOCATIONS OF THE TEST PIT EXPLORATIONS BASED ON VISUAL REFERENCES AND PACING

FIGURE 1
NO. 6 OIL INVESTIGATION
GEORGIA-PACIFIC
EAST MILLINOCKET MILL

SEVEE & MAHER ENGINEERS

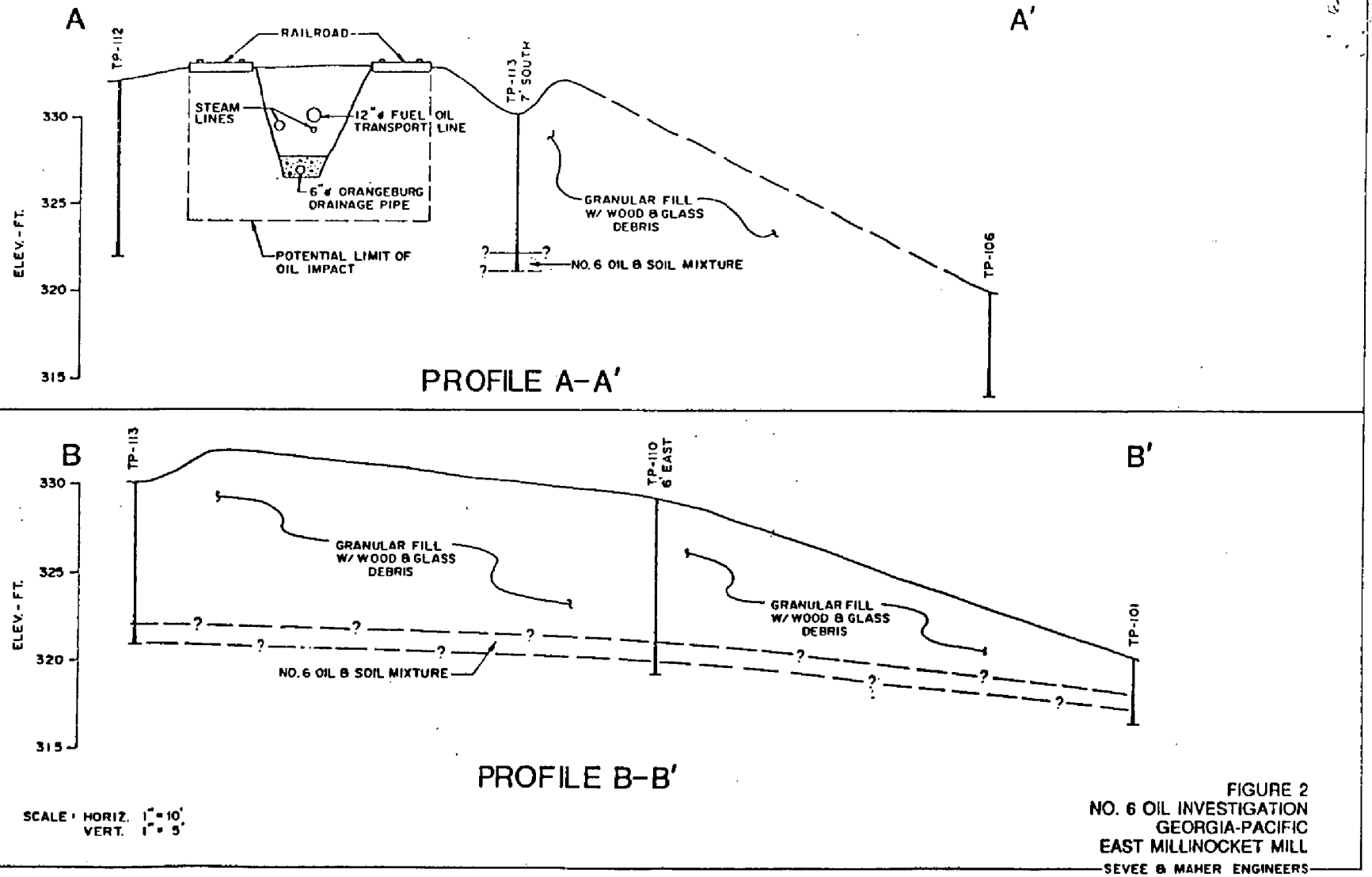
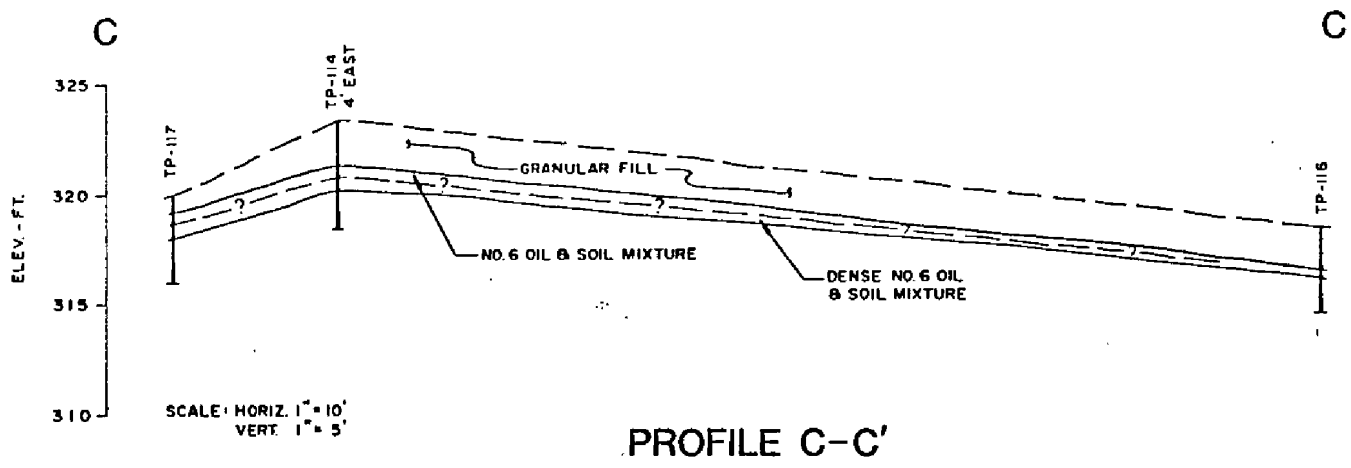
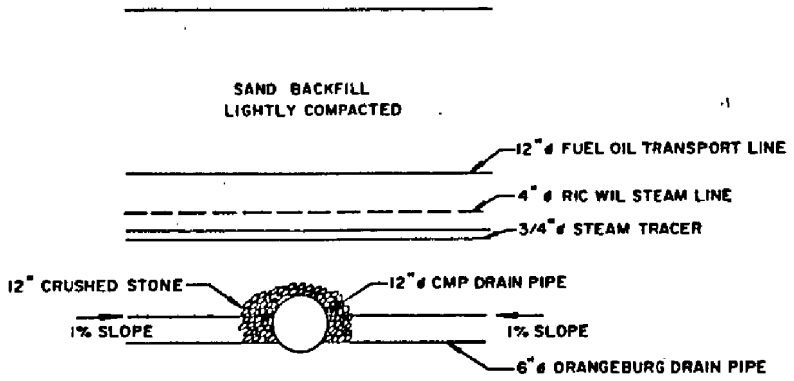


FIGURE 2
NO. 6 OIL INVESTIGATION
GEORGIA-PACIFIC
EAST MILLINOCKET MILL
SEVEE & MAHER ENGINEERS



PROFILE C-C'



SECTION 1
N.T.S.

REFERENCE DRAWING
FUEL OIL UNLOADING SYSTEM
PLAN & DETAILS PB-10152
JOB # 2483 BY GREAT
NORTHERN PAPER COMPANY 9-23-71

FIGURE 3
NO.6 OIL INVESTIGATION
GEORGIA-PACIFIC
EAST MILLINOCKET MILL

SEVEE & MAHER ENGINEERS

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO. 6 OIL INVESTIGATION - GEORGIA-PACIFIC @ E. MILL	SEE PLAN	9141	TP101

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 5'	3.7	08.22.91		SEEPAGE @ 2.0'

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			DARK BROWN GRAVELLY SILTY SAND w/ WOOD & GLASS DEBRIS (FILL)		SOUTH SIDE OF TEST PIT NO. 6 OIL 1.5-2.0; NORTH SIDE NOT IN THIS ZONE
2.0					
2.7			LIGHT BROWN SANDY SILT; MOTTLED w/ NO.6 OIL (FILL)		NO 6 OIL FLOWING w/ SEEPAGE 2.0'
3.7			BROWN SANDY GRAVEL TRACE OF COBBLES AND SILT		
5			B.O.E.		
10					

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO.6 OIL INVESTIGATION - GEORGIA-PACIFIC C E MILL	SEE PLAN	9191	102

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB-1550	3 x 10	9.5'	08.22.91		2.5' SEEPAGE

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			1.0 BROWN SANDY GRAVEL TR SILT (FILL)		
			1.5 DARK BROWN GRAVELLY SILTY SAND (TOPSOIL FILL)		
			2.5 REDDISH BROWN SANDY SILT w/ ROOTS		
5			BROWN GRAVELLY SAND TRACE of COBBLES AND SILT		
			9.5		
10			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

OJECT	LOCATION	JOB NO.	TEST PIT NO.
NO. 6 OIL INVESTIGATION - GEORGIA-PACIFIC C.E. MILL	SEE PLAN	9141	103

ITRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	J.C.B. 1550	3 x 8	7.5'	08·22·91		2.5 SEEPAGE

TH T)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN SANDY GRAVEL TRACE OF		
2.5			SILT (FILL)		
3.5			COAL ASH		
			DECAYED WOOD/BARK		
6.0					
7.5			GRAY SANDY SILT TRACE OF GRAVEL		
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
10.6 OIL INVESTIGATION - GEORGIA PACIFIC @ E. MILL	SEE PLAN	9141	104

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 6	4.5'	08-22-91		SURFACE SEEPAGE

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN SANDY GRAVEL TRACE OF SILT		
2.5					
3.0			COAL ASH		
4.5			GRAY SANDY SILT TRACE OF GRAVEL		
			B.O.E.		

TEST PIT LOG

LOGGED BY: KAN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO. 6 OIL INVESTIGATION - GEORGIA-PACIFIC CO. E. MILL	SEE PLAN	9141	105

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACFIC	JCB 1550	3 x 8	7.0'	08-22-91		2.5 SEEPAGE

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN SANDY GRAVEL TRACE OF SILT (FILL)		
2.5			GRAY SANDY SILT W/ WOOD DEBRIS (FILL)		
4.0			DARK BROWN PEAT W/ DECAYED WOOD & BARK		
6.5			GRAY SANDY SILT TRACE OF GRAVEL		
7.0			B.O.E.		
5					
10					

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
10.6 OIL INVESTIGATION - GEORGIA-PACIFIC @ E. MILL	SEE PLAN	9141	106

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 8	6.0'	08.22.91		2.0' SEEPAGE

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
2.0			BROWN SANDY GRAVEL TRACE OF COBBLES AND SILT (FILL)		
4.0			GRAY SANDY SILT TRACE OF WOOD DEBRIS AND GRAVEL (FILL)		
5.5			DARK BROWN PEAT W/ DECAYED WOOD AND BARK		
6.0			GRAY SANDY SILT TRACE OF GRAVEL		
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

OJECT	LOCATION	JOB NO.	TEST PIT NO.
10.6 OIL INVESTIGATION - GEORGIA-PACIFIC C.E. MILL	SEE PLAN	9141	107

TRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
EORGIA-PACIFIC	JCB 1550	3 X 10	11.0	08-22-91		10.5 SEEPAGE

TH T)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			0.5 BROWN GRAVELLY SAND TRACE OF SILT		
			GRAY SANDY SILT TRACE OF GRAVEL + BRICKS (FILL)		
			4.0		
			4.5 DARK BROWN SANDY SILT		
			BROWN SANDY GRAVEL TRACE OF SILT AND COBBLES		
			11.0		
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO 6 OIL INVESTIGATION - GEORGIA-PACIFIC @ E. MILL	SEE PLAN	9141	108

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 X 10	8.0	08.22.91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			0.5 TOPSOIL		
			BROWN GRAVELLY SAND TRACE OF COBBLES AND SILT		
			8.0		
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
10 6 OIL INVESTIGATION - GEORGIA PACIFIC C E. MILL	SEE PLAN	9141	109

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 6	5.5	08-22-91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN COBBLEY SANDY GRAVEL TRACE OF SILT		
5.5					
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO. 6 OIL INVESTIGATION - GEORGIA-PACIFIC @ E. MILL.	SEE PLAN	9141	110

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	4 x 10.	9	08.22.91		8.5 SEEPAGE

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			DARK BROWN SILTY SAND TRACE OF GRAVEL & SILT		
3.0			BROWN SANDY GRAVEL TRACE OF COBBLES, SILT, WOOD & GLASS DEBRIS		
8.5			W/ NO 6 OIL ON SOIL PARTICLES		2 EXCAVATING ON SLOPE; COULD NOT EXCAVATE BELOW THIS DEPTH
9.0			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO 6 OIL-INVESTIGATION GEORGIA-PACIFIC @ E. MILL.	SEE PLAN	9141	111

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	8 x 8'	3.0	08·23·91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			1.0 BROWN SANDY GRAVEL TRACE OF SILT (FILL)		FILTER FABRIC
			2.0		NO 6 OIL COATED ON AGGREGATES
			3.0		PLASTIC
			3.0. E.		BROWN SANDY GRAVEL TRACE OF SILT
			DOUBLE GRATING		
			1½" CRUSHED STONE		
			CONCRETE CATCH BASIN		
			12" Ø CMP		

TEST PIT LOG

LOGGED BY: KPN

OJECT	LOCATION	JOB NO.	TEST PIT NO.
0.6 OIL INVESTIGATION - GEORGIA-PACIFIC @ E. MILL.	SEE PLAN	9141	112

TRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
EORGIA-PACIFIC	JCB 1550	3 X 10	9.0	08-23-91		NONE OBSERVED

TH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			1.0 BROWN SANDY GRAVEL TRACE OF SILT		
			1.7 ASH (FILL)		
			BROWN SANDY GRAVEL TRACE OF SILT & COBBLES		
			9.0		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
0.6 OIL INVESTIGATION - GEORGIA-PACIFIC E. MILL	SEE PLAN	9141	113

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	4 x 10	9.0	08.23.91		SEEPAGE @ 8'

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN SANDY GRAVEL TRACE OF SILT, COBBLES, WOOD & GLASS DEBRIS (FILL)		
5.0					
7.0			COAL ASH		
8.0			BROWN SANDY GRAVEL TRACE OF SILT & COBBLES		
9.0			W/ NO 6 OIL ON AGGREGATE FACES		
10.0			BROWN SANDY GRAVEL TRACE OF SILT & COBBLES		2 END EXCAVATION WHICH WAS CAVING TOWARD RAILROAD TRACKS
			B.O.E		

TEST PIT LOG

LOGGED BY: KPN

CT	LOCATION	JOB NO.	TEST PIT NO.
106 OIL INVESTIGATION GEORGIA-PACIFIC @ E. MILL	SEE PLAN	9141	114

ACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 7	5	08.23.91		SEEPAGE @ 2.0

SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
		1.0 GRAY SILTY GRAVELLY SAND TRACE OF COBBLES		
		2.0 DARK BROWN SANDY GRAVEL TRACE OF SILT; ASPH	S	
		3.0 NO. 6 OIL MIXED W/ SOIL		2.5-3.0 SOIL & NO 6 OIL HAS DENSIFIED; SEEPAGE ON TOP OF THIS LAYER
		REDDISH BROWN SILTY GRAVELLY SAND		
		5.0 TRACE OF DEBRIS (FILL)		

TEST PIT LOG

LOGGED BY: KPN

	LOCATION	JOB NO.	TEST PIT NO.
OIL INVESTIGATION : GEORGIA-PACIFIC C.E. MILL	SEE PLAN	7141	115

CTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GIA-PACIFIC	JCB 15JO	4 x 12	9.5	08.23.91		NONE OBSERVED

SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
		BROWN COBBLELY SANDY GRAVEL TRACE OF BOULDERS AND SILT		
		9.5		
		B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO 6 OIL INVESTIGATION - GEORGIA-PACIFIC C.E. MILL	SEE PLAN	9142	116

EXCAVATOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	J.C.B. 1550	3 x 5	3.5	08-23-91		SEEPAGE 2.0'

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			1.0 MULCH (WOOD).		
			2.0 BROWN GRAVELLY SAND TRACE OF SILT		2.0 - 2.5 - DENSE NO 6 OIL MIXED W/ SAND & GRAVEL
			3.5 BROWN GRAVELLY SAND TRACE OF SILT		
			B.O.E		

TEST PIT LOG

LOGGED BY: KON

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
NO 6 OIL INVESTIGATION GEORGIA PACIFIC @ E. MILL	SEE PLAN	9141	117

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA PACIFIC	JCB 1550	3 x 10	4-0	08-23-91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			0.33 BITUMINOUS CONCRETE PAVEMENT		
			0.8 BROWN GRAVELLY SAND TRACE OF SILT		
			1.8 SOIL MIXED W/ NO. 6 OIL		1.3-1.8 DENSE SOIL ! NO 6 MIXTURE. GRASS ROOTS AND LEAVES IN THIS LAYER
			4-0 BROWN GRAVELLY SAND TRACE OF SILT		
			B.O.E.		

SEVEN OAKS ENGINEERS

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
060 OIL INVESTIGATION GEORGIA-PACIFIC C.E. MILL	SEE PLAN	9141	118

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 7	5.0	08-23-91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			0.23 BITUMINOUS CONCRETE PAVEMENT		
			BROWN GRAVELLY SAND TRACE OF SILT		
3.0					
			COAL ASH		
5.0					
			B.O.E.		

TEST PIT LOG

LOGGED BY: KPN

PROJECT	LOCATION	JOB NO.	TEST PIT NO.
10.6 OIL INVESTIGATION GEORGIA-PACIFIC CE. HILL	SEE PLAN	9191	119

CONTRACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
GEORGIA-PACIFIC	JCB 1550	3 x 8	6.0	08-23-91		NONE OBSERVED

DEPTH (FT)	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			BROWN SANDY GRAVEL TRACE OF SILT AND COBBLES		
6.0			B.O.C.		

TEST PIT LOG

LOGGED BY: KPN

ECT	LOCATION	JOB NO.	TEST PIT NO.
6 OIL INVESTIGATION GEORGIA-PACIFIC @ E. MILL.	SEE PLAN	9141	17a

RACTOR	EXCAVATION METHOD	SURFACE SIZE (FT)	COMPLETION DEPTH (FT)	DATE	GROUND ELEV. (FT)	GROUND WATER DEPTH (FT)
RGIA-PACIFIC	JCB 1550	3 X 8	6.0	08-23-91		NONE OBSERVED

H	SAMPLE NO.	GRAPHIC LOG	MATERIAL DESCRIPTION AND CLASSIFICATION	WATER DATA	REMARKS, LAB TEST RESULTS, PHOTOGRAPH
			1.5 DARK BROWN SILTY SAND TRACE OF GRAVEL		~1.5-1.7 NO. 6 OIL
			3.0 GRAY SANDY SILT		
			4.0 DARK BROWN SILTY SAND TRACE OF GRAVEL		
			6.0 BROWN SANDY GRAVEL TRACE OF SILT		
			B.O.E.		

SLIDES

FILED SEPARATELY

MAINE DEPARTMENT OF ENVIRONMENT PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-462-2003**

Report Status: Final Report

ORIGINAL

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: DARRYL E LUCE
Primary Product: Hazardous Chemical - specified in report {79} - 330 gals. ACTUAL
Subject/Owner: KATAHDIN PAPER CO LLC - -

I. EVENT

Spill Info

Type: Hazardous Material Incident {H}
Source: Storage Unit - Box or Other General Use Containe
Cause: Accident - Human Error {17}

Spill Date/Time

09/15/2003 (Time Unknown)

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

09/15/2003 11:30

Subject/Owner (Potential Responsible Party)

Contact: --KATAHDIN PAPER CO LLC
50 MAIN ST
EAST MILLINOCKET ME 04430 USA
Comment: workers spilled 330 gal. of sodium hypochlorite, pH 12.5

Reporter

Contact: CARL ACKELEY-ENVIRONMENTAL COORDINATOR-KATAHDIN PAPER CO LLC
50 MAIN ST
EAST MILLINOCKET ME 04430-1128 USA
207-723-8061
Comment:

Primary Responder and Other Employees

DARRYL E LUCE (Primary Responder)

No Further Response Action Expected

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER CO
Street Address: 50 MAIN ST
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Inland Surface Water{I}
Land{L}

Tanks Involved

None

III. CLEANUP

Product Reported

Hazardous Chemical - specified in report {79}

Cleanup DTREE

Products Found/Amount Spilled

Hazardous Chemical - specified in report {79}/ - 330 gals. ACTUAL
Additional Product Description - sodium hypochlorite (Primary Product)

Material Recovered

None {NO} - 0 gals. ACTUAL

Recovery/Treatment Method

Licensed Treatment Facility {L}

Disposal Information

treated on site in waste water treatment plant

IV. NARRATIVE

Mr. Ackeley called to report that sometime the night before, a mill worker had lost a 330-gallon tote of sodium hydroxide off a fork truck while negotiating a ramp within the paper mill. The tote ended up side down over a sewer grate that went directly to their wastewater treatment plant. Recovery was not attempted. Any of the chemical that did not go down the sewer was washed into it. Mr. Ackeley reported that he would make the employees involved aware of the need for immediate reporting.

No further action anticipated.

V. ATTACHMENTS

Attachment Type	Description	File Name
Paper Attach	Katahdin Paper Co. report	

Katahdin Paper Company LLC
50 Main Street
East Millinocket, ME 04430-1128

File No. SPILL FILE

September 22, 2003

Hazardous Matter
Bureau of Hazardous Materials and Solid Waste Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Sir:

Attached is a written report on a discharge of sodium hypochlorite from the East Millinocket mill of Katahdin Paper Company on September 15. The spill was reported to Darryl Luce of your Bangor office. No injuries resulted from the discharge.

Sincerely,

Carlton E. Akeley
Environmental Engineer

cc with attachments:
Darryl Luce - DEP Bangor

File No. SPILL FILE

September 22. 2003

KATAHDIN PAPER COMPANY

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket mill Old Paper Room basement.
Source of spill:	Tote of sodium hypochlorite being transported through area.
Date of spill:	September 15, 2001
Time span of spill:	0600hr, entire quantity lost in a few minutes.
Body of water impacted:	None. Material spilled to process sewer to wastewater treatment plant.
Volume lost to stream:	None lost to natural water body. Total lost from tote was 330 gallons of 12.5% sodium hypochlorite, equivalant to 415 lbs. of active ingredient.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable. pH of material spilled is approximately 13, however, pH of wastewater treatment plant effluent was not affected.
Visual inspection of the river:	No impact.
Comments:	Tote fell off fork truck and split open because operator drove rather than backing down a ramp. Tote ruptured, discharging its contents on the floor and directly into a process sewer at the foot of the ramp.

Steps to be taken to prevent reoccurrence: Operator was disciplined for improperly descending a ramp with a load. The temporary hypochlorite system which makes use of totes is being replaced with a permanent bulk system.

Phone reported to: Darryl Luce of DEP Bangor office notified at 1130 hr by Carl Akeley.

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-493-2007

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: THOMAS H SMITH
Primary Product: #6 Fuel Oil {06} - 20 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Equipment - Industrial Machinery {IM}
Cause: Mechanical Failure - Piping/Hose {06}

Spill Date/Time

09/18/2007 (Time Unknown)

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

09/18/2007 11:30

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER
1 KATAHDIN AVE
MILLINOCKET ME 04462 USA
Comment:

Reporter

Contact: --KATAHDIN PAPER
1 KATAHDIN AVE
MILLINOCKET ME 04462 USA
Comment:

Primary Responder and Other Employees

THOMAS H SMITH (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER
Street Address: 50 MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

#6 Fuel Oil {06}

Cleanup DTREE

Products Found/Amount Spilled

#6 Fuel Oil {06}/ - 20 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 20 gals. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

By Katahdin Paper

IV. NARRATIVE

On September 18, 2007, Katahdin Paper Company reported a #6 fuel oil spill due to piping failure a the East Millinocket mill. Katahdin Paper personnel used sorbent materials to clean up the spilled oil. No further action is expected.

V. ATTACHMENTS

Attachment Type	Description	File Name

ENFORCEMENT _____ REIMBURSEME... _____

Oil & Hazardous Materials Report Form
Spill Number: B/497/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: MAIN ROAD Town: EAST MILLINOCKET
State: ME Zip-code: 04430 Telephone: 2077469912

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 12.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: _____ (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 89/08/24 (yy/mm/dd) Time Reported: 1900 (Military)
Cause: 06 Detection method: 5I
Incident code: AIDL DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. WARD, JAKE JW
2. _____ M.F.M.
3. _____

Person Reporting Incident:
Name (Last, First MI): ANONYMOUS
Address: _____ Town: _____
State: __ Zip-code: _____ Telephone: _____

Clean-up Information:

Total product recovered: 6.00 gals.Y cu. yds.N lbs.N bbls.N
Method: F Non-recyclable: _____ gals.N bbls.N
Solids: combustible: 2.0 cu. yds.Y tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
INCINERATED AT MILL

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/___/____ DATE OF INVESTIGATION __/__/__

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided _____ Less than 10 days provided
_____ notice waived _____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL #B/497/89
GREAT NORTHERN PAPER - EAST MILLINOCKET
8-24-89

I received an anonymous complaint concerning leakage from a couple log slashers at the East Millinocket wood yard. The complainant said the hydraulic lines dripped and sometimes burst spilling a couple of gallons of product in the yard or on wood chips.

I called Great Northern and spoke to Carl Ackeley who said that the lines sometimes broke. I advised him that the problem certainly isn't major but when a line bursts, have men spread wood chips on the oil, pick up the chips and burn them in their biomass burner.

REC: File Report
JW/sh

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0515 - 96

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTERN PAPER

Address: KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Comments: MINOR SHEEN

LOCATION / FACILITY INFORMATION

Name of Spill Location: DAM

Address: WEST BRANCH OF PENOBSCOT Location ID: 18861

Minor Civil Division: **EAST MILLINOCKET** Local Name: EAST MILLINOCKET

Latitude **N**: 44 37 15 Longitude **W**: 68 34 34

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1.99 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 10 (Table B) Product Actually Found: 10 (Table B)

Date Of Spill: September 18, 1996 Time Of Spill:

Date Reported: September 18, 1996 Time Reported: 1610

Cause: 21 (Table C) Detection Method: 2 L (Table D)

Incident Code: A - ID - I - (Table E)

Response Time Involved: 2.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **LUCE, DARRYL**

REPORTING INFORMATION

Name(Last, First, MI): AKELEY, CARL-GREAT NORTHERN PAPER

Address: KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 0A4A462 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0515 - 96

CLEAN-UP INFORMATION

Spilled Product Recovered: Method: K (Table K)

Other Product Recovered: Method: (Table K)

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info:

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Removed:

NARRATIVE

Mr. Akely called to report that a gear reduction unit had leaked some lube oil onto the structure at the East Millinocket mill's dam filter water intake. A small portion made its way to the West Branch of the Penobscot and created a small sheen. Such sheens are generally unrecoverable. As soon as it was noticed the discharge was stopped.

ENFORCEMENT _____ **REIMBURSEMENT** _____

Oil & Hazardous Materials Report Form
Spill Number: B/523/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: _____ Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: _____ gals.N cu. yds.N lbs.N bbls.N
Type of spill: 87
Date of Spill: 89/09/06 (yy/mm/dd) Time of Spill: ____ (Military)
Date Reported: 89/09/06 (yy/mm/dd) Time Reported: 1714 (Military)
Cause: 05 Detection method: 21
Incident code: AIDL DEP response time involved: 2.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. LECKEY, CLEVE
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARLTON
Address: GREAT NORTHERN PAPER Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: _____ gals.N cu. yds.N lbs.N bbls.N
Method: G Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 20.0 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
20 YD3 SOIL SHIPPED TO UTAH AS PCB WASTE

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/___/____ DATE OF INVESTIGATION __/__/__

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided
_____ notice waived
_____ Less than 10 days provided
_____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ___

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

SPILL REPORT #B/523/89
GREAT NORTHERN PAPER CO. - MILLINOCKET
9-6-89

Carlton Ackley followed the initial spill report with a written account of the incident. Basically, a water line used for fire protection ruptured under to floor of their store room in East Millinocket and the water from the ruptured pipe went through soil that had been a PCB oil spill site. O.H. Material, a remediation company from Finely, Ohio was on site and did some field type of analysis which indicated 10-20 ppb in the water, according to Carl in a phone conversation. Although subsequent testing by Northeast indicated PCB concentrations in the PPM range, none of the samples were as much as 25 ppm. From reviewing the attached report form Carlton, I feel that they were very thorough.

CL/sh
REC: File Report

Great Northern Paper
a company of
Great Northern Nekoosa Corporation

File No. 608.10

September 21, 1989

Cleve Leckey
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Cleve:

Attached as you requested are results of analyses conducted in connection with the fireline rupture in our East Millinocket storeroom reported to you on September 6. This rupture caused soil and water containing traces of PCB to be washed into the storeroom. From there, some of the water reached the ground and our process water treatment system.

A map is attached showing soil sample locations. Locations 1 - 4 are silt from the most heavily soiled areas in the storeroom. 5- 8 are from random areas of soil outdoor which were wet by water from the storeroom. Even though all the results for samples 5 - 8 are well below the 25ppm level set forth in EPA's cleanup standard, the top layer of soil in this area was removed for disposal as an added precaution before we received the analytical results. Samples marked W-1 - W-4 are wipe samples from the storeroom floor following our cleanup. The sample locations correspond with soil samples 1 - 4 taken before cleanup. As you can see, results at all locations were below the EPA standard of $10ug/100cm^2$. Results of effluent analysis following the fireline rupture are also attached. As expected, neither the primary nor secondary effluent samples contained detectable levels of PCB.

I have also attached our standard written follow-up spill report form. If you have any questions on this, call me at 723-5131, extension 1278.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Analytical Research Group Leader

File No. 608.10

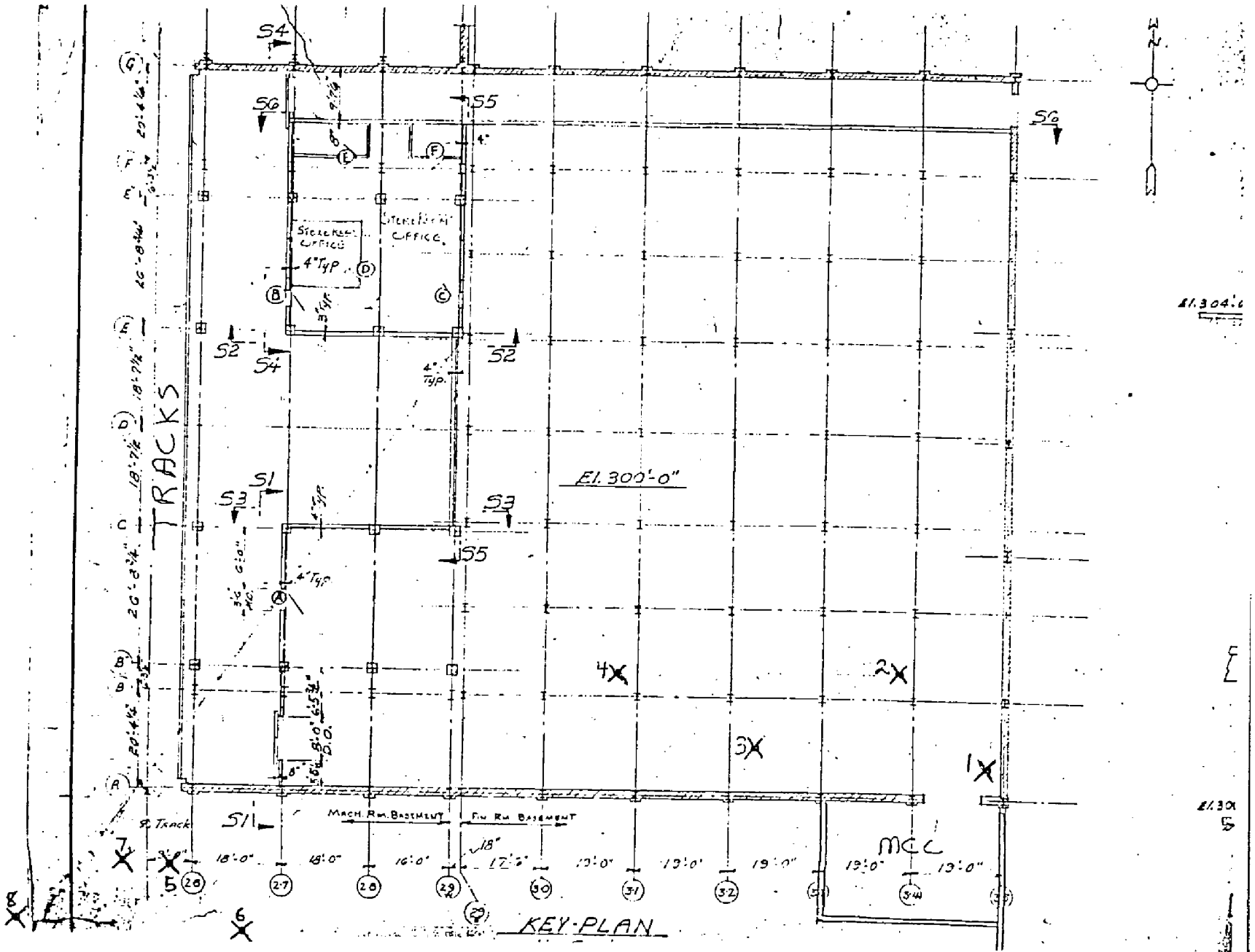
Date: Sept. 21, 1989

GREAT NORTHERN PAPER
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket mill storeroom.
Source of spill:	Fireline rupture adjacent to PCB-containing soil under the storeroom.
Date of spill:	September 6, 1989.
Time span of spill:	15 minutes.
Body of water impacted:	None. Originally suspected a potential impact on West Branch of Penobscot River.
Volume lost to stream:	None detected, at a 1ppb detection limit in mill effluent.
Estimated total suspended solids to the river:	Not applicable.
Estimated BOD loss to the river:	Not applicable.
Process water pH lost to the stream:	Not applicable.
Visual inspection of the river:	Nothing unusual.
Comments:	Soil containing traces of PCB was washed into the storeroom by water from the ruptured fireline. Approximately 20,000 gallons of water containing 19 ppb of PCB was carried to the process water treatment plant. A small amount of water, likely less than 100 gallons reached the ground outside the storeroom. All contamination in and around the storeroom was removed and disposed of as PCB waste.
Steps to be taken to prevent reoccurrence:	Fireline will be abandoned and relocated.
Phone reported to:	Cleve Leckey, DEP

C. E. Akeley



East Millinocket Storeroom

Sample of WATER Laboratory No. _____

Marked AS BELOW Date Received 9/06/89

Received from GREAT NORTHERN PAPER Date Reported 9/08/89

Analyze for AROCLOR 1260

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, ug/L
ML 1022	Water off Storeroom Floor	19
ML 1023	Primary Effluent 9/6/89	< 1

0906 MG-W
QC Batch No.

< = Less than the Method Detection Limit. Sampfle was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 ug/L.

Earl S. Moore

Earl S. Moore, Laboratory Manager

Sample of SWABS Laboratory No. _____

Marked AS BELOW Date Received 9/14/89

Received from GREAT NORTHERN PAPER Date Reported 9/15/89

Analyze for AROCLOR 1260

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, ug/100 cm^2
ML 1064	W-1 STOREROOM	4
ML 1065	W-2 STOREROOM	< 1
ML 1066	W-3 STOREROOM	3
ML 1067	W-4 STOREROOM	< 1

0914-MB-SB
QC Batch No.

< = Less than the Method Detection Limit. Sampfle was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 ug/100 cm^2.

Earl S. Moore

Earl S. Moore, Laboratory Manager

Sample of WATER Laboratory No. _____

Marked PRIMARY EFFLUENT Date Received 9/14/89

Received from GREAT NORTHERN PAPER Date Reported 9/15/89

Analyze for AROCLOR 1260

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #		(AROCLOR 1260) CONCENTRATION, ug/L
ML 1061	5241	9/7/89	< 1
ML 1062	5242	9/8/89	< 1
ML 1063	5243	9/9/89	< 1

0914-MB-W
QC Batch No.

< = Less than the Method Detection Limit. Sampfle was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 ug/L.

Earl S. Moore

Earl S. Moore, Laboratory Manager

Sample of SOIL Laboratory No. _____

Marked AS BELOW Date Received 9/7/89

Received from GREAT NORTHERN PAPER Date Reported 9/8/89

Analyze for AROCLOR 1260

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, mg/Kg
ML 1028	5	2.1
ML 1029	6	1.4
ML 1030	7	1.8
ML 1031	8	1.0

0907-MB-S
QC Batch No.

< = Less than the Method Detection Limit. Sample was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 mg/Kg.

Earl S. Moore

Earl S. Moore, Laboratory Manager

Sample of SOIL Laboratory No. _____

Marked AS BELOW Date Received 9/7/89

Received from GREAT NORTHERN PAPER Date Reported 9/8/89

Analyze for AROCLOR 1260

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, mg/Kg
ML 1028	5	2.1
ML 1029	6	1.4
ML 1030	7	1.8
ML 1031	8	1.0

0907-MB-S
QC Batch No.

< = Less than the Method Detection Limit. Sample was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 mg/Kg.

Earl S. Moore
Earl S. Moore, Laboratory Manager

Sample of SOIL

Marked AS BELOW Laboratory No. _____

Received from GREAT NORTHERN PAPER Date Received 9/7/89

Analyze for AROCLOR 1260 Date Reported 9/8/89

MOBILE LAB RESULTS

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, mg/Kg
ML 1024	1	< 1
ML 1025	2	8.6
ML 1026	3	< 1
ML 1027	4	6.9

0906-MB-S
QC Batch No.

< = Less than the Method Detection Limit. Sample was analyzed for Aroclor 1260 but none was detected equal to or greater than 1 mg/Kg.

Earl S. Moore
Earl S. Moore, Laboratory Manager

Sample of SOIL — Laboratory No. ____

Marked AS BELOW — Date Received 9/8/89

Received from GREAT NORTHERN PAPER — Date Reported 9/21/89

Analyze for AROCLOR 1260 - METHOD 8080

FIXED LAB CONFIRMATION

Certificate of Analysis

NEL ID #	CLIENT ID #	(AROCLOR 1260) CONCENTRATION, mg/Kg Dry Weight
ML 1025	2	9
ML 1027	4	3
ML 1028	5	4

Earl S. Moore

Earl S. Moore, Laboratory Manager

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 524 - 95

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER, INC.

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: OIL SHEEN

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: EAST MILLINOCKET Zip: 04462

Latitude N: 45 / 38 / 57.00 Longitude W: 68 / 42 / 20.00

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 0.9 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 80 (Table B) Product Actually Found: 80 (Table B)

Date Of Spill: Sep. 27, 1995 Time Of Spill: (Military)

Date Reported: Sep. 28, 1995 Time Reported: 1104 (Military)

Cause Of Spill: 18 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - I - (Table E)

DEP response time involved: 4 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): MOORE, JUDY (GNP

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 524 - 95

Total Product Recovered : (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : K

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-524-95
09/28/95 11:04

Judy Moore, Environmental Specialist for Great Northern Paper, called to report the discovery of an oil sheen below the mill dam at the East Millinocket Mill. It was also reported that the source could not be identified. It was assumed that the sheen may have been associated with one of the turbines. In any event I was informed that the situation would be monitored. Less than one pint was believed to spilled.

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

Spill File

October 12, 1995

Mr. Robert Whittier
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Bob:

Attached is a written report on the oil slick discovered at the East Millinocket dam on September 27. Judy Moore reported the slick to you on September 28.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

October 12, 1995

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket Mill
Source of spill:	Discovered below the mill dam. Source not known.
Date of spill:	September 27, 1995
Time span of spill:	Discovered 10:50am
Body of water impacted:	Penobscot River
Volume lost to stream:	Estimate less than a pint
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Small slick just below dam
Comments:	Material was contained and collected with boom.
Steps to be taken to prevent reoccurrence:	Continue to monitor area and attempt to determine source. Continue to comply with facility SPCC Plan.
Phone reported to:	Bob Whittier, Bangor DEP, and Mr. Hudspath, National Response Center, Report #308981, on September 28.

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 534 - 95

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER, INC.

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 723-5131

Comments: OIL SHEEN ON MILLINOCKET STREAM

LOCATION / FACILITY INFORMATION

Spill Location: BOWATER - GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVE. Location ID: 18861

Town: EAST MILLINOCKET Zip: 04462

Latitude N: 45 / 38 / 57.00 Longitude W: 68 / 42 / 20.00

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 0.99 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 10 (Table B) Product Actually Found: 10 (Table B)

Date Of Spill: Oct. 05, 1995 Time Of Spill: (Military)

Date Reported: Oct. 05, 1995 Time Reported: 1045 (Military)

Cause Of Spill: 08 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - I - (Table E)

DEP response time involved: 4 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WHITTIER JR, ROBERT

PERSON REPORTING EVENT

Name (Last, First, MI): GREAT NORTHERN PAPER, INC./MOORE, JUDY

Address: ONE KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131

CLEAN-UP INFORMATION

Spill Number B - 534 - 95

Total Product Recovered : (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : 0.90 Y (Yds3 or Tons)

Solids Non Combustible : Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information :

OTHER ACTIONS

Expenditure (s) - From Surface Water Fund	N	(Y or N)
From Ground Water Fund	N	(Y or N)
From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected	N	(Y or N)
Enforcement Referral	N	(Y or N)
Insurance Fund Claim	N	(Y or N)
Tech Services Referral	N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-534-95
10/05/95 10:45

Judy Moore of Great Northern Paper in Millinocket called to report another oil sheen in the river below the dam.(see B-524-95). This sheen was associated with the shut down of #1 turbine. I was informed that efforts would be made at preventing the situation from happening again. Once again about one pint had been discharged.

File No. SPILL FILE

October 19, 1995

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	Millinocket Mill
Source of spill:	Discovered below the grinder room. Associated with shutdown of #1 turbine in grinder room.
Date of spill:	October 19, 1995
Time span of spill:	Discovered 9:00am
Body of water impacted:	Millinocket Stream
Volume lost to stream:	Estimate less than a pint
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Small slick near outfall
Comments:	Material was contained and collected with boom.
Steps to be taken to prevent reoccurrence:	Continue to monitor area for specific source. Continue to comply with facility SPCC Plan.
Phone reported to:	Bob Whittier, Bangor DEP, and Dan Sammons, National Response Center, Report #309780, on October 5.

C. E. Akeley

BOWATER

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

Spill File

October 19, 1995

Mr. Robert Whittier
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Bob:

Attached is a written report on the oil slick discovered at the Millinocket grinder room on October 5. Judy Moore reported the slick to you that day.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/553/90

Subject:
Name (Last, First MI): GEORGIA PACIFIC CORP.
Address: KATAHDIN AVE. Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 200.00 gals.Y cu. yds.N lbs.N bbl
Type of spill: 06
Date of Spill: 90/09/13 (yy/mm/dd) Time of Spill: 1415 (Military)
Date Reported: 90/09/13 (yy/mm/dd) Time Reported: [illegible] (Military)
Cause: 07 Detection method: 2I
Incident code: AIDL DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. WARD, JAKE
2. _____
3. _____

Person Reporting Incident:
Name (Last, First MI): PETERS, NADIA
Address: GEORGIA PACIFIC CORP Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Oil & Hazardous Materials Report Form
Spill Number: B/553/90 (continued)

Clean-up Information:

Total product recovered: 200.00 gals.Y cu. yds.N lbs.N bbls.N
Method: CF Non-recyclable: _____ gals.N bbls.N
Solids: combustible: 8.0 cu. yds.Y tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
BARK BURNER

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

A float valve stuck on an overfill tank at the East Millinocket mill's stream plant. This malfunction prohibited a warning which signals a full tank which allowed about two hundred gallons of #6 oil to come out the vent onto the tar lot. Workers recovered the oil with bark, wood chips and sorbents. About eight cubic yards of the above materials was burned in the mill's biomass boiler.

JW:ak
REC: File Report

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0568 - 99

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER, INCORPORATED

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

Comments: 200 G. #6 SPILL TO WASTEWATER TREATMENT PLANT.

LOCATION / FACILITY INFORMATION

Name of Spill Location: GREAT NORTHERN PAPER / EAST MILLINOCKET MILL

Address: ROUTE 157, MAIN STREET Location ID: 33213

Minor Civil Division: **EAST MILLINOCKET** Local Name:

Latitude **N:** Longitude **W:**

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 200.00 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 06 (Table B) Product Actually Found: 06 (Table B)

Date Of Spill: September 14, 1999 Time Of Spill: 0730

Date Reported: September 14, 1999 Time Reported: 0950

Cause: 21 (Table C) Detection Method: 2 L (Table D)

Incident Code: A - ID - I - (Table E)

Response Time Involved: 6.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **MALECK, TOM** TM

REPORTING INFORMATION

Name(Last, First, MI): ALLEY, MR. CARL / CHEMICAL MANAGEMENT GROUP LEADER

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

CLEAN-UP INFORMATION

Spilled Product Recovered: 195.00 G Method: A H (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: D-Tree Date:

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info: #6 COLLECTED FROM CLEARIFIER, BY INDUSTRIAL VACUUM, WAS MIXED WITH BARK FOR BURNING AS FUEL IN BARK BOILER.

OTHER ACTIONS

Expenditure(s):		Third Party Damage Claim Expected:	N
From Surface Water Fund:	N	Enforcement Referral:	N
From Ground Water Fund:	N	Insurance Fund Claim:	N
From Hazardous Waste Fund:	N	Technical Services Referral:	N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number: Number of Tanks Abandoned:

NARRATIVE

B-568-99
East Millinocket

Tuesday September 14, 1999 0950

Carl Akeley (723-2278), of Great Northern Paper phoned to report a failure of the oil heater on the Bunker Oil (# 6 Oil) heating plant. The #6 oil leaked into the steam line due to corrosion and went into the mill's sewer and to the wastewater treatment plant. Industrial Vacuum was hired to collect the oil off the primary clarifier. Sorbents were placed at the entrance to the secondary clarifier.

The #6 oil was collected by Industrial Vacuum and was bulked up with bark for use as fuel in the mill's bark boiler. Boom was also deployed at the inlet to the aeration basin. There was no visible impact on the aeration basin, secondary clarifiers, or the river. The steam tube bundle has been isolated for repair.

Great Northern
PAPER, INC.

One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
ISO 9002 Certified

D.E.P. - BANGOR OF
1999 SEP 23 A

SPILL FILE B-568-99

September 21, 1999

Tom Maleck
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a written report on the oil spill to the East Millinocket wastewater treatment plant which occurred September 14. I reported this incident to you by phone the same day.

If you have any questions on this, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

September 21, 1999

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT
ENVIRONMENTAL SPILL REPORT

Location of spill:	Heat exchanger on small (0.7% sulfur) Bunker C oil tank.
Source of spill:	Leak in heat exchanger tube bundle allowed oil into steam. Oil-contaminated condensate automatically dumped to process sewer.
Date of spill:	September 14, 1999.
Time span of spill:	Unknown, possibly a few hours, discovered 7am.
Body of water impacted:	None, contained on primary clarifier.
Volume lost to stream:	None. Estimate 200 gallons lost to wastewater treatment plant.
Estimated total suspended solids to the river:	Not Applicable.
Estimated BOD loss to the river:	Not Applicable.
Process water pH lost to the stream:	Not Applicable.
Visual inspection of the river:	Sheen on primary clarifier. No visible impact on aeration basin, secondary clarifiers or river.
Comments:	Oil collected by industrial vacuum and mixed with bark for burning in bark boiler. Boom deployed at inlet to aeration basin.
Steps to be taken to prevent reoccurrence:	Tube bundle isolated for repair.
Phone reported to:	Tom Maleck, Bangor DEP, by Carl Akeley.

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/614/89

Subject:
Name (Last, First MI): GREAT NORTHERN PAPER COMPANY
Address: KATAHDIN AVENUE Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: A
Amount spilled: 5.00 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 86
Date of Spill: 89/10/13 (yy/mm/dd) Time of Spill: 1000 (Military)
Date Reported: 89/10/13 (yy/mm/dd) Time Reported: 1220 (Military)
Cause: 06 Detection method: 2I
Incident code: AIDL DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. WARD, JAKE JW
2. _____ M.F.M.
3. _____

Person Reporting Incident:
Name (Last, First MI): ARSENAULT, GARY
Address: GREAT NORTHERN PAPER Town: EAST MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077469912

Oil & Hazardous Materials Report Form
Spill Number: B/614/89 (continued)

Clean-up Information:

Total product recovered: 5.00 gals.Y cu. yds.N lbs.N bbls.N
Method: CG Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: 3.0 cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
LANDFARMED

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

A broken hydraulic hose on a piece of equipment in the East Millinocket millyard sprayed about five gallons of hydraulic oil on the ground. Speedi-Dri was spread on the spill and the soil hauled to the Dolby landfill.

REC: File report.

TANK ABANDONMENT INFORMATION

SPILL NUMBER ___/____/_____ DATE OF INVESTIGATION ___/___/___

Facility name _____
Address _____
Phone Number _____
Contractor name _____
Address _____
Phone number _____

_____ 10 day notice provided _____ Less than 10 days provided
_____ notice waived _____ No notice given

*** PLEASE CHECK APPROPRIATE FIELDS ***

Samples taken : SOIL ___ GROUNDWATER ___ TANK CONTENTS ___
PHOTOGRAPHS TAKEN ____

Please number the tanks viewed					
General Tank Information					
UST Reg. #					
Size of Tank					
Tank Construction (Tbl L)					
Tank Age (Tbl M)					
Piping Const. (Tbl L)					
Status (Tbl P)					
Tank Condition					
Holes observed					
More than 10 holes					
Tank not observed					
Pipe Condition					
Piping not to Regulation					
No leaks observed					
Broken fittings					
Leaking fittings					
Corrosion leaks					
Piping removed					
Piping not observed					
Tank Installstion Condition					
Tank on bedrock					
Tank within 3' of bedrock					
Water table seen in hole					
Back filled with sand					
" " w/ crushed stone					
Non standard fill used					
Soil Contamination					
None observed					
Odor only observed					
Soil contaminated					
Free product observed					
Distance to Drinking Water					
Public supply within 1000'					
Nearest private supply within 300' not owned by the tank owner					
Tank Contents					
Reg. gasoline					
Leaded gasoline					
#2 Fuel or Diesel					
#6 oil					
Other					

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/644/91

Subject:
Name (Last, First MI): GEORGIA-PACIFIC CORP.
Address: ONE KATAHDIN AVE. Town: MILLINOCKET
State: ME Zip-code: 04457 Telephone: 2077946721

Spill Information:
Location (Town): [redacted] Spill Type: A
Amount spilled: 0.50 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 10
Date of Spill: 91/10/04 (yy/mm/dd) Time of Spill: _____ (Military)
Date Reported: 91/10/11 (yy/mm/dd) Time Reported: 1015 (Military)
Cause: 17 Detection method: 2I
Incident code: AIDP DEP response time involved: 1.5 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. LECKEY, CLEVE e f
2. _____ nfn
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARLTON
Address: GP CORP Town: MILLINOCKET
State: ME Zip-code: 04457 Telephone: 2077946721

Oil & Hazardous Materials Report Form
Spill Number: B/644/91 (continued)

Clean-up Information:

Total product recovered: _____ gals.N cu. yds.N lbs.N bbls.N
Method: K Non-recyclable: _____ gals.N bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
_____

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED:

On 10/11/91, 1015 hr., Carlton Akeley of Georgia Pacific in Millinocket called to report that they had caused a sheen on the river in East Millinocket. He followed this call in with a written report, which I have included here. The river became impacted because the effluent line from the sewage treatment plant was being by-passed. Concurrently an operator spilled some oil while changing oil on a gear reduction unit and the spill got into a sewer drain.

CL/ak
REC: File Report

B-644-91

File No. 608.20

October 23, 1991

GEORGIA-PACIFIC, NORTHERN PAPER DIVISION
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket
Source of spill:	Kraft hydrapulper
Date of spill:	October 11, 1991
Time span of spill:	Approximately 30 minutes
Body of water impacted:	West Branch of Penobscot River
Volume lost to stream:	About two quarts of lubricating oil
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	Not Applicable
Visual inspection of the river:	Rainbow sheen ten to twenty feet wide noted for one or two hundred yards downstream of outfall
Comments:	Mill was down and effluent being bypassed due to failure of main effluent line to wastewater treatment plant. Employee changed oil on hydrapulper reduction unit and left fill hose hanging full of oil. Hose slipped to floor and oil in it drained to sewer.
Steps to be taken to prevent reoccurrence:	Counseled employee. Modified filling procedure. Mill is now back on line with all process effluent being sent to wastewater treatment plant.
Phone reported to:	National Response Center, Case #91891, and Cleve Leckey, Bangor DEP, on 10/11

C. E. Akeley

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-656-2010

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: DARIAN F HIGGINS
Primary Product: #6 Fuel Oil {06} - 400 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Storage Unit - Aboveground Storage Tank {TA}
Cause: Accident - Human Error {17}

Spill Date/Time

12/08/2010 10:00

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

12/08/2010 11:45

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207-723-2530
Comment:

Reporter

Contact: BRUCE ALBERT--KATAHDIN PAPER
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207-723-2530
Comment:

Primary Responder and Other Employees

DARIAN F HIGGINS (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER
Street Address: 50 MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

#6 Fuel Oil {06}

Cleanup DTREE

Products Found/Amount Spilled

#6 Fuel Oil {06}/ - 400 gals. ESTIMATE (Primary Product)

Material Recovered

Spilled Product {SP} - 300 gals. ESTIMATE

Other Material {OM} - UNKNOWN

Recovery/Treatment Method:

Sorbents {C}
Licensed Treatment Facility {L}

Disposal Information

Contaminated bark burned in mill bark boiler.

IV. NARRATIVE

On December 8, 2010, Bruce Albert of Katahdin Paper called to report a 400 gallon #6 fuel oil spill at their East Millinocket facility. The spill occurred when an electrical malfunction caused the level transmitter on the day tank to fail which started the automatic fill process from the larger outside storage tank. Before Katahdin personnel realized what was happening, the day tank had overflowed by approximately 400 gallons and spill through the overfill pipe onto the ground outside of the building that houses the day tank. Approximately 100 gallons of product made its way to a sewer drain and to the mill's wastewater treatment plant. The remaining product was contained and cleaned up using the mill's bark fuel as a sorbent. Approximately 20 yards of contaminated bark fuel was disposed of in the mill's bark boiler. The mill has a license to burn contaminated fuel. Karen Knuuti of DEP's Solid Waste Division was notified of the bark fuel disposal process and Clarissa Trasko of DEP's Land and Water Bureau was notified of the discharge to the mill's wastewater treatment plant. The electrical malfunction causing the incident was remedied by mill personnel. No further action by Response Services expected.

V. ATTACHMENTS

Attachment Type	Description	File Name
Paper Attach	Katahdin Paper Incident Report	

Attachment to B-656-2010

ENVIRONMENT INCIDENT REPORT AND CRITIQUE

Notification: Agency and Time: Maine DEP at 11:10 on 12-8-10

Reportable Quantity: 10 gallons

Exact Location and Department: Tarred area behind the East Millinocket steam plant between steam plant and bark storage A frame. Some of the spilt oil made it to a mill process sewer drain.

Amount and Type of Spill/Exceedance: 300-400 gallons of #6 fuel oil

Actions Taken To Contain The Spill/Limit the Exceedance: Bark was taken from the mill bark storage area to contain and clean up the oil spill.

Amount of Oil/Chemical Recovered and Method: Approximately 300 gallon of oil were recovered by the bark.

Cause and Details of Spill/Exceedance: The level transmitter on the day tank was wired to a general outlet and overhead light circuit in the steam plant. Technicians working on the steam plant control room A/C unit plugged in a piece of equipment and blew the fuse. The transmitter saw no oil level in the day tank and started the automatic pump down system from the outside storage tank. The pump continued to run until the fuse was replaced and the transmitter shut down the pump for high level. The oil escaped the day tank through the overflow pipe in the tank.

Disposal, Location and Method: The bark containing oil was taken to the mill bark boiler to be burnt. The mill is licensed to burn waste oil in the bark boiler.

Health Impact: None

Environmental Impact: Minimal. The oil spill was contained to a tarred area that was cleaned up with the bark. The treatment plant was notified of the spill and the oil will be removed in the primary clarifier. DEP personnel came to the mill to inspect the clean up and were satisfied with the clean up work.

Measures Taken To Avoid Recurrence: The power supply for the level transmitter is being moved to its own dedicated critical power supply circuit. This will allow the power supply to be backed up an inverter located in the steam plant. An alarm is also being added to the steam plant FOXBORO system to ring in if there is an issue with the level transmitter.

Response (Critique) Regulatory Compliance, Efficiency, etc.:

Time Needed for Restoration/Recovery: 4.0 hours

Revealed Deficiencies:

Did the Emergency Plan Anticipate the Incident? Yes

Does the plan have to be modified? No

Report Prepared By: Bruce Albert Signature:

Environmental Department Review Date: 12/8/10

Written Reports to the Following (letter, fax, e-mail)

State and Federal Agencies: Darian Higgins, ME DEP

General Manager Katahdin Paper Company: Mike Reider

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: B-663-2009

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT F SHANNON
Primary Product: Hydraulic Oil {86} - 30 gals. ESTIMATE
Subject/Owner: KATAHDIN PAPER - -

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Equipment - Heavy Equipment {HQ}
Cause: Mechanical Failure - Piping/Hose {06}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

11/17/2009 14:40

Subject/Spiller (Potential Responsible Party)

Contact: --KATAHDIN PAPER
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207-723-2530

Comment:

Reporter

Contact: BRUCE ALBERT--KATAHDIN PAPER
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207 723-2530

Comment:

Primary Responder and Other Employees

ROBERT F SHANNON (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER
Street Address: 50 MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Land{L}
Inland Surface Water{I}

Tanks Involved

None

III. CLEANUP

Product Reported

Hydraulic Oil {86}

Cleanup DTREE

Products Found/Amount Spilled

Hydraulic Oil {86}/ - 30 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 60 lbs. ESTIMATE

Recovery/Treatment Method

Sorbents {C}

Disposal Information

The sorbents were disposed at their landfill

IV. NARRATIVE

On 11/17/09 I received report of an estimated 30 gallon hydraulic leak from a blown hydraulic line on a loader. The fluid was released into a catch basin where it was recovered using sorbent pads. No further Response action expected.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT

Spill Number: **B-682-2010**

Report Status: Final Report

MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
Primary Responder: ROBERT F SHANNON
Primary Product: Lube Oil {10} - 1,000 gals. ESTIMATE
Subject/Owner: -KATAHDIN PAPER-

I. EVENT

Spill Info

Type: Oil Incident {O}
Source: Equipment - Industrial Machinery {IM}
Cause: Mechanical Failure - Other {23}

Spill Date/Time

Date and Time Unknown

Reporter Type/Detection Method

Type: Subject/Spiller {2}
Method: Visual Product {L}

Reported Date/Time

12/20/2010 09:00

Subject/Spiller (Potential Responsible Party)

Contact: KATAHDIN PAPER--
50 MAIN STREET
EAST MILLINOCKET ME 04430 USA
207 723-2530

Comment:

Reporter

Contact: BRUCE ALBERT--KATAHDIN PAPER
50 MAIN STREET
EAST MILLINCOKET ME 04430 USA
207 723-2530

Comment:

Primary Responder and Other Employees

ROBERT F SHANNON (Primary Responder)

II. SITE

Location

Location Type: Business - Industrial {ID}
Name: KATAHDIN PAPER
Street Address: MAIN STREET
MCD Town: EAST MILLINOCKET
Local Name: EAST MILLINOCKET
State/Province: ME

Spill Point

UTM North
UTM East

Wells and Media Affected

Wells Affected: 0 Wells Impacted / 0 Wells At Risk
Media Affected: Engineered Containment{E}
Inland Surface Water{I}

Tanks Involved

Above Ground Tank(s) Involved-Tank Outside

III. CLEANUP

Product Reported

Lube Oil {10}

Products Found/Amount Spilled

Lube Oil {10}/ - 1,000 gals. ESTIMATE (Primary Product)

Material Recovered

Other Material {OM} - 50 lbs. ESTIMATE

Recovery/Treatment Method:

Sorbents {C}
Licensed Treatment Facility {L}

Cleanup DTREE

Disposal Information

Mill landfill and waset water treatment facility

IV. NARRATIVE

On 12/20/10 I received report of a mishap at the Katahdin paper in East Millinocket. The discharge of approximately 1000 gallons took place. All of the spilled product went to their waste water treatment facility. The following is a comprehensive report from Bruce Albert of the mill on what exactly happened.

Exact Location and Department: Dyer lubrication system located in the Basement of #6 Paper Machine.

Amount and Type of Spill/Exceedance: 1000-1200 gallons of lube oil

Actions Taken To Contain The Spill/Limit the Exceedance: Oil booms were placed on the primary clarifier rake arm and around the inlet to the secondary aeration lagoon.

Amount of Oil/Chemical Recovered and Method: All the oil will be collected by the booms or in the scum collection chest of the primary clarifier.

Cause and Details of Spill/Exceedance: The lubrication oil, for the dryer section of #6 paper machine, is pumped from a storage tank to the machine. Gravity brings the oil back down to a sump in the basement of the paper room. From the sump, the oil is then pumped back to the storage tank. There are two switches in the lube oil sump. One pump comes on when the high level is reached in the sump and the other pump comes on when the high-high level is reached. The first pump is a 60-cycle powered pump and the second pump runs on 40-cycle. After the loss of 40-cycle, the pump needs to be enabled before it will restart. There was a 40-cycle outage on 12/19/10 and the pump was never enabled. The one pump could not control the level in the sump and it overflowed to the sewer.

Disposal, Location and Method: The oil booms will be taken to the mill landfill. Dolby Landfill is licensed to receive oil waste from the mill.

Health Impact: None

Environmental Impact: Minimal. The oil was contained with oil booms and the rest was taken out in the primary clarifier scum chest.

Measures Taken To Avoid Recurrence: Once the high level switch is activated, there was software that alarms on the operators panel if the other pump does not start in 30 minutes. The alarm time is being changed to 20 minutes. The software for the controls was rewritten to allow the 40-cycle powered pump to be able to restart immediately after any power interruption has occurred.

No further action by Response Services expected.

V. ATTACHMENTS

Attachment Type	Description	File Name

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0708 - 96

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

Comments: HYDRADED LIME SPILL AT E. MILLINOCKET MILL INTO W. BRANCH OF PENOBSCOT RIVER

LOCATION / FACILITY INFORMATION

Name of Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: **EAST MILLINOCKET** Local Name: EAST MILLINOCKET

Latitude **N**: 45 37 19 Longitude **W**: 68 34 36

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 9.00 P (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 92 (Table B) Product Actually Found: 92 (Table B)

Date Of Spill: December 06, 1996 Time Of Spill: 750

Date Reported: December 06, 1996 Time Reported: 1047

Cause: 08 (Table C) Detection Method: 2 L (Table D)

Incident Code: A - ID - P - (Table E)

Response Time Involved: 3.5 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **MALECK, TOM**

REPORTING INFORMATION

Name(Last, First, MI): MOORE, MRS. JUDY/BOWATER GNP

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0708 - 96

CLEAN-UP INFORMATION

Spilled Product Recovered: Method: K (Table K)

Other Product Recovered: Method: (Table K)

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info: hydrated lime on the ground was cleaned up

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Removed:

NARRATIVE

12/6/97 @ 1047

I received a call from Judy Moore (723-5131) of Bowater Great Northern Paper, Inc. Judy Moore phoned to report that some hydrated lime blew out of the silo during delivery this morning. The lime when in a slurry has a pH of 10 to 11. She reported that some of the lime made it to the West Branch of the Penobscot River. She estimates that quantity to be less than 10 pounds. This estimate is based on the lime dust on the river bank she could see none of the river.

This release occurred during delivery when heavy winds blew lime dust into the air through the loose cover on the storage silo. The silo cover will be repaired so it seals. The lime on the land was picked up and can be used. That quantity was not reported or known. Attachments.

B-708-96

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

BOWATER

SPILL FILE

December 20, 1996

Mr. Tom Maleck
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a report on the spill of hydrated lime which occurred at Great Northern's East Operation December 6. The spill was reported to you by Judy Moore the same day.

If you have any questions on this matter, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

December 20, 1996

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	Wastewater Treatment Plant, East Operation
Source of spill:	Lime silo.
Date of spill:	December 6, 1996.
Time span of spill:	Throughout unloading, discovered about 8:30am.
Body of water impacted:	West Branch of Penobscot River
Volume lost to stream:	Less than ten pounds.
Estimated total suspended solids to the river:	Less than ten pounds.
Estimated BOD loss to the river:	None
Process water pH lost to the stream:	pH of lime slurry is 10 to 11. Amount lost would have no measurable impact on pH of stream.
Visual inspection of the river:	Dust on river bank. Nothing actually seen in the water.
Comments:	Lime blew out through loose cover on top of silo during delivery. Most fell to the ground and was cleaned up. Some small percentage drifted to the river.
Steps to be taken to prevent reoccurrence:	Cover will be repaired so it seals adequately.
Phone reported to:	Tom Maleck, DEP Bangor, and Petty Officer Flacher of the National Response Center (Case #369605) notified December 6 by Judy Moore.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0718 - 98

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER GREAT NORTHERN PAPER, INC.

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

Comments: 1200 GALLONS OF 98% SULFURIC ACID SPILLED IN PAPER RECYCLING BUILDING.

LOCATION / FACILITY INFORMATION

Name of Spill Location: BOWATER GREAT NORTHERN PAPER, INC.

Address: ROUTE 157 (MAIN STREET) Location ID: 30707

Minor Civil Division: **EAST MILLINOCKET** Local Name:

Latitude **N:** Longitude **W:**

SPILL / EVENT INFORMATION

Spill Type: C (Table A) Amount Spilled: 1,200.00 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 72 (Table B) Product Actually Found: 72 (Table B)

Date Of Spill: November 05, 1998 Time Of Spill: 1200

Date Reported: November 05, 1998 Time Reported: 1346

Cause: 07 (Table C) Detection Method: 2 L (Table D)

Incident Code: A - ID - P - A (Table E)

Response Time Involved: 5.0 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **MALECK, TOM** TM

REPORTING INFORMATION

Name(Last, First, MI): MOORE, MS. JUDY / BOWATER GREAT NORTHERN PAPER INC.

Address: ONE KATAHDIN AVENUE Town: MILLINOCKET

State: ME Zip Code: 04462-1398 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0718 - 98

CLEAN-UP INFORMATION

Spilled Product Recovered: 1,190.00 G Method: I L (Table K)

Other Product Recovered: Method: (Table K)

D-Tree Code: D-Tree Date:

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info: 1,190 G. 98% SULFURIC ACID TO THE MILL'S TREATMENT PLANT, TO BE pH ADJUSTED.

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Abandoned:

NARRATIVE

B-718-98
East Millinocket

Thursday November 5, 1998 1346

Judy Moore (723-2278), phoned to report a spill of 1,200 gallon of 98% sulfuric acid. The acid was released at the paper recycling plant in East Millinocket when a valve malfunctioned. Most all of the acid was contained inside the building inside the secondary containment.

The acid is to be treated with large amounts of soda ash then will be pH adjusted in the treatment works with caustic soda.

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 725 - 94

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): GREAT NORTHERN PAPER

Mailing Address: 1 KATAHDIN AVE Town: MILLINOCKET

State: ME Zip: 04462 Telephone: (207) 732-3311

Comments:

LOCATION / FACILITY INFORMATION

Spill Location: DAM

Address: WEST BRANCH OF PENOBSCOT Location ID: 18861

Minor Civil Division: EAST MILLINOCKET Zip: 04462

Latitude N: 44 / 37 / 15.00 Longitude W: 68 / 34 / 34.00

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 25.00 G (Gals, Yds3, Lbs or Bbls)

Product Reported Spilled: 87 (Table B) Product Actually Found: 87 (Table B)

Date Of Spill: Nov. 15, 1994 Time Of Spill: 1330 (Military)

Date Reported: Nov. 28, 1994 Time Reported: 1030 (Military)

Cause Of Spill: 05 (Table C) Detection Method: 2 I (Table D)

Incident Code: A - ID - L - (Table E)

DEP response time involved: 1 Wells At Risk: 0 Wells Impacted: 0

Investigators' names : WARD, BERNARD

PERSON REPORTING EVENT

Name (Last, First, MI): GREAT NORTHERN PAPER

Address: 1 KATAHDIN AVE Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 732-3311

CLEAN-UP INFORMATION **Spill Number B - 725 - 94**

Total Product Recovered : 25.00 G (Gals, Yds3, Lbs, Tons or Bbls)

Method of Recovery : C

Non Recyclable : (Gals, Tons or Bbls)

Solids Combustible : (Yds3 or Tons)

Solids Non Combustible : 5.00 Yds3

Recyclable : (Gals, Yds3, Lbs, Tons or Bbls)

Number Filters Installed : 0

Number Aerators Installed : 0

Disposal Information : Dolby landfill

OTHER ACTIONS

Expenditure (s) -	From Surface Water Fund	N	(Y or N)
	From Ground Water Fund	N	(Y or N)
	From Haz Waste Fund	N	(Y or N)
Third Party Damage Claim Expected		N	(Y or N)
Enforcement Referral		N	(Y or N)
Insurance Fund Claim		N	(Y or N)
Tech Services Referral		N	(Y or N)

UNDERGROUND TANKS INFORMATION

UNO/UST Site Number	Tank Number	Size Of Tank	Tank Material	Tank Age	Piping Material	Tank Status

Please use separate sheets of paper, as needed, for your detailed Recommendations and Spill Narrative. Remember to include/attach directions to find spill site (with a map if possible), all observations made, clean up actions performed and photos (if taken).

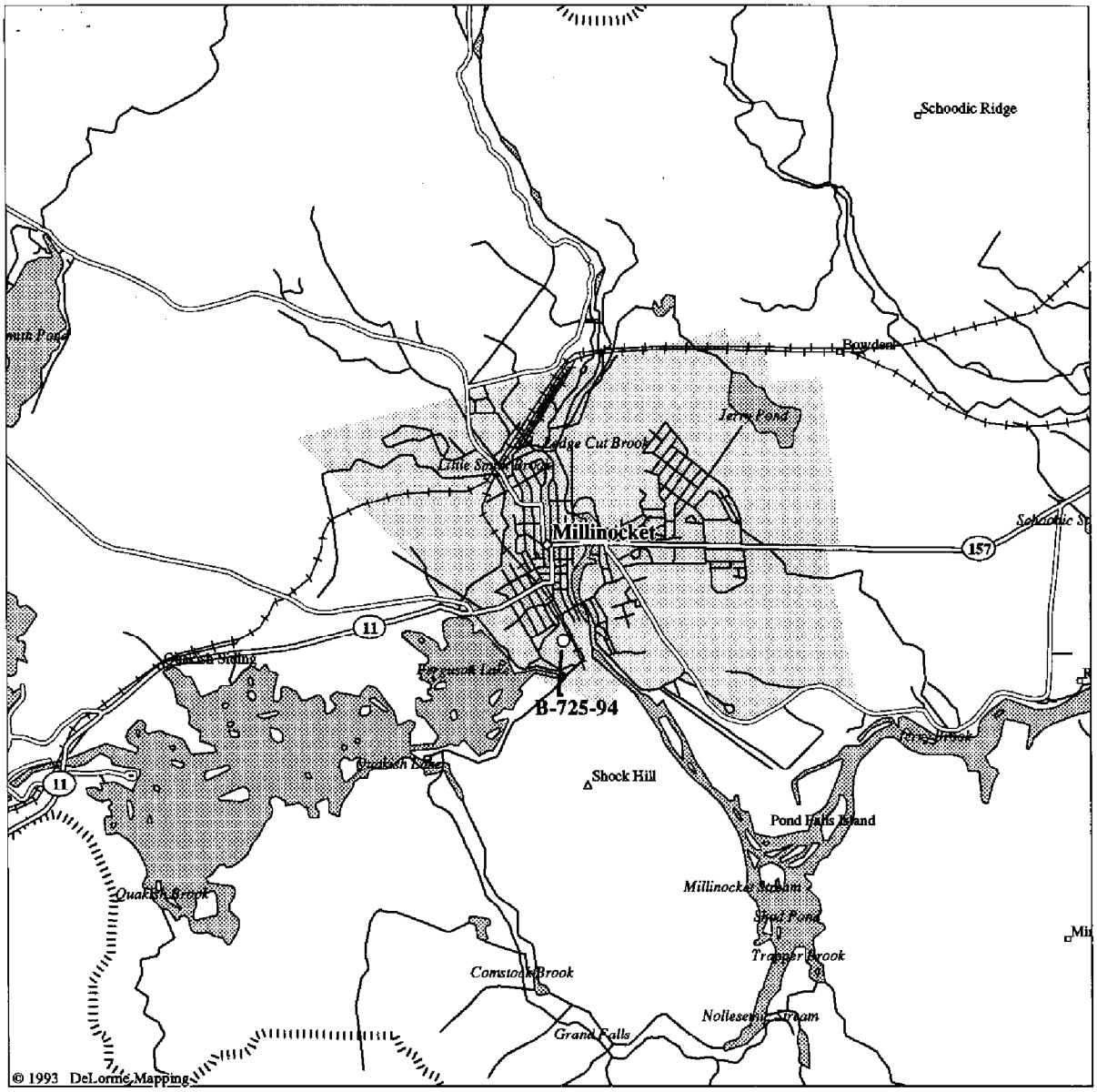
Include known chemical names when report is about Hazardous Materials.

Please, document your information carefully. It may be needed for future reference or legal action.

B-725-94

On November 28, 1994 we received a call from Carl Akely of Great Northern reporting a transformer spill at their Millinocket mill. A transformer caught fire and spilled an unknown amount of <50 ppm PCB oil on the ground. The unit held 25 gallons but an unknown amount burned and the fire itself started from a below normal amount of oil in the unit. Mr. Akley didn't realize he had to report the spill at first but then decided to report it. Workers excavated five yards of .3 ppm PCB contaminated soil and brought it to the Dolby Landfill.

ojw72594/mab



LEGEND

- Population Center
- State Route
- Geo Feature
- Town, Small City
- Hill
- Street, Road
- Major Street/Road
- State Route
- Railroad
- River
- Land Mass
- Open Water
- Contour
- - - - Utility (powerline)

Scale 1:62,500 (at center)

1 Miles

2 KM

B-725-94
Mag 13.00
Tue Nov 29 15:16:45 1994

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL & HAZARDOUS MATERIALS REPORT FORM

Spill Number B - 0742 - 97

Report Status: FINAL

SUBJECT / OWNER OR OPERATOR

Name (Last, First, MI): BOWATER - GREAT NORTHERN PAPER

Address: 1 KATAHDIN AVE. Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Comments: SMALL SHEEN OF UNKNOWN ORIGIN ON THE W. BR. PENOBSCOT

LOCATION / FACILITY INFORMATION

Name of Spill Location: GREAT NORTHERN PAPER INC.

Address: Location ID: 23441

Minor Civil Division: **EAST MILLINOCKET** Local Name: EAST MILLINOCKET

Latitude **N**: 45 37 19 Longitude **W**: 68 34 36

SPILL / EVENT INFORMATION

Spill Type: A (Table A) Amount Spilled: 1.99 G (Gallons, Cubic Yards, Pounds, Barrels)

Product Reported Spilled: 10 (Table B) Product Actually Found: 12 (Table B)

Date Of Spill: July 02, 1997 Time Of Spill: 1500

Date Reported: July 02, 1997 Time Reported: 1530

Cause: 18 (Table C) Detection Method: 2 L (Table D)

Incident Code: A - ID - I - (Table E)

Response Time Involved: 1.1 Wells At Risk: 0 Wells Impacted: 0

Investigator(s) **VARNEY, THOMAS** TW MFM

REPORTING INFORMATION

Name(Last, First, MI): BOWATER - GREAT NORTHERN PAPER

Address: 1 KATAHDIN AVE. Town: MILLINOCKET

State: ME Zip Code: 04462 Telephone: (207) 723-5131 Ext:

Spill Number: B - 0742 - 97

CLEAN-UP INFORMATION

Spilled Product Recovered: 0.00 G Method: K (Table K)

Other Product Recovered: Method: (Table K)

Contaminated Soil: (Cubic Yards or Tons)

Disposal Info:

OTHER ACTIONS

Expenditure(s):

From Surface Water Fund: N

From Ground Water Fund: N

From Hazardous Waste Fund: N

Third Party Damage Claim Expected: N

Enforcement Referral: N

Insurance Fund Claim: N

Technical Services Referral: N

UNDERGROUND TANK(S) INFORMATION

Tank Registration Number:

Number of Tanks Removed:

NARRATIVE

A security guard making his rounds at GNP's East Millinocket mill reported a sheen on the water of the West Branch Penobscot; a search by GNP personnel could not only find no source, but no sheen either,after the original report. According to Carl Akeley's written report, attached, it may have been just wood pitch.

B-742-97

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

BOWATER

SPILL FILE

July 11, 1997

Mr. Tom Varney
Department of Environmental Protection
106 Hogan Road
Bangor, Maine 04401

Dear Tom:

Attached is a report on the oil sheen discovered below Great Northern's East Operation dam on July 2 which I reported to you the same day.

If you have any questions, give me a call at 723-2278.

Sincerely,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

File No. SPILL FILE

July 11, 1997

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Operation.
Source of spill:	Unknown source, sheen noticed on river below East Operation Dam.
Date of spill:	July 2, 1997.
Time span of spill:	Observed for a few minutes approximately 3pm.
Body of water impacted:	West Branch of Penobscot River.
Volume lost to stream:	Estimate less than one gallon.
Estimated total suspended solids to the river:	Not applicable.
Estimated BOD loss to the river:	Not applicable.
Process water pH lost to the stream:	Not applicable.
Visual inspection of the river:	Light silvery sheen a few feet wide, approximately 100 feet long.
Comments:	Security guard discovered sheen during his hourly rounds and contacted operations supervisor. They inspected the hydro station and surrounding area for leaks or spills and found none. On followup observation the sheen was no longer visible. Environmental Department personnel also inspected area and found nothing. Description of the sheen by the security person who found it suggests it could have been wood pitch rather than oil, but no material could be obtained to confirm this.

NATIONAL RESPONSE CENTER - STATE*FAX

** GOVERNMENT USE ONLY ** GOVERNMENT USE ONLY ** GOVERNMENT USE ONLY **
DO NOT RELEASE this information to the public without permission from the National Response Center (G-OFP-2), U.S. Coast Guard Headquarters, Washington DC 20593-0001 (202)267-2675.

From: National Response Center
USCG HQ Washington, D.C.
1-800-424-8802

To:
ME DEP ATTN: MARY JAMES
Incident Report # 393656

INCIDENT DESCRIPTION

*Report taken by LT SANCHEZ at 16:30 on 02-JUL-97
Incident Type: FIXED
Incident Cause: UNKNOWN
Affected Area: PENOBSCOT RIVER
The incident was discovered on 02-JUL-97 at 15:10 local time.
Affected Medium: WATER

SUSPECTED RESPONSIBLE PARTY

Name: CARL AKELEY
Organization: GREAT NORTHERN PAPER
Address: 1 KATAHDIN AVE
MILLINOCKET, ME 04462
Day Phone: (207)7232278
Type of Organization: PRIVATE ENTERPRISE

INCIDENT LOCATION

50 MAIN STREET
EAST MILLINOCKET, ME
County: PENOBSCOT State: ME

RELEASED MATERIAL(S)

CHRIS Code: OLB OIL, MISC: LUBRICATING
Qty Released: 0 UNK(S) Qty in Water: 0 UNK(S)

SOURCE/CAUSE OF INCIDENT

OLD GRINDER ROOM SUSPECTED/CAUSE AND EXACT LOCATION NOT FOUND

DAMAGE

Injuries:	Fatalities:	Evacuations:	Damages:	Air Close:	Road Close:
				N	N

REMEDIAL ACTIONS

SUSPECTED MATERIAL IS BELIEVED TO BE LUBE OIL/CALLER BELIEVES AMOUNT TO BE LESS THAN ONE GALLON

NOTIFICATIONS BY CALLER

EPA: STATE: Y CG: OTHER: DESC: ME DEP

NOTIFICATIONS BY NRC

U.S. EPA I	MR. CONDON	(617)2237265
NOAA 1ST CLASS 88 RPTS FOR ME		(206)5266344
ME DEP ATTN: MARY JAMES		(207)2872651
ME EMGCY MGMT AGCY ATTN: R LEIBOWITZ		(207)2874080

NATIONAL RESPONSE CENTER - STATE*FAX
** GOVERNMENT USE ONLY ** GOVERNMENT USE ONLY ** GOVERNMENT USE ONLY **

ADDITIONAL INFORMATION

SHEEN SIZE: 15 FT X 100 YDS/COLOR: GREY/SILVER/CURRENT: FAST MOVING/
RIVER 100 YRDS WIDE AT RELEASE POINT/WIND: SOUTH AT 5 MPH

*** END INCIDENT REPORT # 393656 ***

VISIT OUR WEB SITE
http://www.dot.gov/dotinfo/uscg/hq/nrc

ENFORCEMENT _____ REIMBURSEMENT _____

Oil & Hazardous Materials Report Form
Spill Number: B/759/91

Subject:
Name (Last, First MI): GEORGIA-PACIFIC CORP.
Address: _____ Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Spill Information:
Location (Town): EAST MILLINOCKET Spill Type: C
Amount spilled: 1000.90 gals.Y cu. yds.N lbs.N bbls.N
Type of spill: 75
Date of Spill: 91/12/10 (yy/mm/dd) Time of Spill: 1300 (Military)
Date Reported: 91/12/10 (yy/mm/dd) Time Reported: 1658 (Military)
Cause: 17 Detection method: 2I
Incident code: AIDL DEP response time involved: 1.0 (hours)
Number of wells at risk: 0 Number of wells impacted: 0
Investigators' names: 1. VARNEY, T.W. TW
2. _____ AFM
3. _____

Person Reporting Incident:
Name (Last, First MI): AKELEY, CARL
Address: GEORGIA-PACIFIC Town: MILLINOCKET
State: ME Zip-code: 04462 Telephone: 2077235131

Clean-up Information:

Total product recovered: 1000.90 gals.Y cu. yds.N lbs.N bbls.N
Method: BI Non-recyclable: 1000.90 gals.Y bbls.N
Solids: combustible: _____ cu. yds.N tonsN
non-combustible: _____ cu.yds.
Recyclable material: _____ gals.N cu. yds.N lbs.N bbls.N
Number of filters installed: 0 Number of aerators installed: 0
Disposal information:
TREATED ON SITE

Other Actions:

Reimbursement: to SF (surface water): N (Y/N)
to GF (ground water): N (Y/N)
to HWF (haz waste): N (Y/N)
Third party damage claim expected: N (Y/N)
Enforcement Referral: N (Y/N)

NAME(S) OF CHEMICAL(S) INVOLVED: Deionizer Backwash Treatment

Georgia-Pacific Corporation, as part of their papermaking process, maintains a large water deionizing facility. It periodically has to be regenerated, so the cation columb is flushed with 6% sulfuric acid solution and the anion columb is backwashed with a 4% caustic solution. The backwash flows into a pit, and is neutralized.

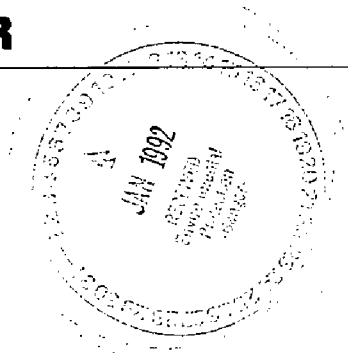
On Dec. 10, an excavation had been dug next to the neutralization pit; the pit was filled with backwash and the chemical started draining into the excavation through a short section of abandoned pipe, broken off during the digging.

An estimated 1000 gallons entered the pit before the broken pipe was capped off. That done, the liquid was pumped back into the neutralization pit, treated and discharged.

REC: File Report
TV/mm

GREAT NORTHERN PAPER, INC.
One Katahdin Avenue
Millinocket, ME 04462-1398
(207) 723-5131
Subsidiary of Bowater Incorporated

BOWATER



File No. 608.10

January 2, 1992

Hazardous Matter
Bureau of Hazardous Materials and Solid Waste Control
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Sir:

Attached is a written report on a discharge of a mixture of sulfuric acid and caustic soda at our East Millinocket operation on December 10. It was reported by phone to Tom Varney of your Bangor office. No personal injuries resulted from the release and no impact has been noted beyond the immediate area in which the discharge occurred.

If you have any questions on this report, you may call me at 723-5131, extension 1278.

Yours truly,

Carlton E. Akeley

Carlton E. Akeley
Chemical Management Group Leader

cc: Tom Varney - DEP Bangor

File No. 608.10

January 2, 1992

GREAT NORTHERN PAPER, INC.
ENVIRONMENTAL AFFAIRS DEPARTMENT

ENVIRONMENTAL SPILL REPORT

Location of spill:	East Millinocket
Source of spill:	Demineralizer regenerant waste pit at steam plant
Date of spill:	December 10, 1991
Time span of spill:	Discovered at 1300 hrs. Returned to waste pit by 1500 hrs
Body of water impacted:	None, spill impacted excavation in ground next to waste pit.
Volume lost to stream:	None, volume in excavation estimated at 1000 gallons.
Estimated total suspended solids to the river:	Not Applicable
Estimated BOD loss to the river:	Not Applicable
Process water pH lost to the stream:	pH in excavation started at 1.93 and increased to 9.5.
Visual inspection of the river:	Not Applicable
Comments:	Demineralizer regenerant waste pit is an enclosed vessel which receives caustic soda and sulfuric acid from demineralizer regeneration. This vessel developed a leak near its top and ran over into an excavation beside it. Material running into excavation was a mixture of caustic and acid in various ratios. When the waste pit level dropped after regeneration was complete, the liquid in the excavation ran back into the waste pit and from there to the process sewer.

Steps to be taken to prevent reoccurrence: Vessel has been bypassed for repair.

Phone reported to: Tom Varney, DEP Bangor, and John Miner, East Millinocket Fire Department.

C. E. Akeley

Bk 14606 Pg72 #28225
09-12-2017 @ 10:05a

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TRUSTEE'S QUITCLAIM DEED

KNOW ALL PERSONS BY THESE PRESENTS that **P.J. PERRINO, JR., ESQ.**, in his capacity as **CHAPTER 7 BANKRUPTCY TRUSTEE** (the "Trustee") for the respective Bankruptcy Estates of **GNP MAINE HOLDINGS, LLC D/B/A GREAT NORTHERN PAPER COMPANY** (Case No. 14-10791) and **GNP EAST, INC.** (Case No. 14-10821) (together, the "Estates"), pending in the United States Bankruptcy Court for the District of Maine, whose mailing address is 128 State Street, PO Box 49, Augusta, ME 04332 (the "Grantor"), for consideration paid, RELEASES to **KATAHDIN KI 50 LLC**, a Maine limited liability company, with a mailing address of 433 Plaza Real Suite 275, Boca Raton, FL 33432 (the "Grantee"), all right, title, and interest of the Estates in and to certain real estate, including all right, title, and interest of the Estates in and to all buildings, fixtures and improvements thereon, in the Town of East Millinocket, County of Penobscot, and State of Maine, which is more particularly described on Exhibit A, attached hereto and made a part hereof (the "Premises"),

EXCEPTING the following:

1. all property heretofore conveyed to HC-50 Main Street, LLC by Trustee's Quitclaim Deed dated December 5, 2014, and recorded in the Penobscot County Registry of Deeds in Book 13719, Page 91; and

2. all property heretofore conveyed to the Town of East Millinocket by Trustee's Quitclaim Deed dated June 18, 2015, and recorded in the Penobscot County Registry of Deeds in Book 13874, Page 231, and subject to all rights and easements set forth therein.

The Premises are conveyed SUBJECT to all easements, covenants, conditions, restrictions, leases, and other encumbrances affecting the Premises, including those set forth on Exhibit A, and are further conveyed SUBJECT to real estate taxes which are not yet due and payable, which, by its acceptance hereof, Grantee assumes and agrees to pay.

This Trustee's Quitclaim Deed is given pursuant to 11 U.S.C. § 363 of the United States Bankruptcy Code and that certain Order Granting Chapter 7 Trustee's Motion to Sell Assets of Debtors' Estate Free and Clear of all Liens, Claims, and Interests (Case Nos. 14-10791 PGC and 14-10821 PGC) filed and entered on September 6, 2017, a true copy of which is attached hereto as Exhibit B.

GRANTEE, BY ITS ACCEPTANCE OF THIS DEED, ACKNOWLEDGES AND AGREES THAT GRANTOR (AND GRANTOR ON BEHALF OF THE ESTATE) IS MAKING NO REPRESENTATIONS OR WARRANTIES CONCERNING THE PREMISES, INCLUDING, WITHOUT LIMITATION, THE ENVIRONMENTAL OR PHYSICAL CONDITION THEREOF, THE COMPLIANCE OF THE PREMISES WITH ANY LAWS, RULES, OR REGULATIONS, INCLUDING, WITHOUT LIMITATION, ENVIRONMENTAL LAWS, RULES OR REGULATIONS, THE SUITABILITY OF THE PREMISES FOR THEIR CURRENT USE OR GRANTEE'S PROPOSED USE, OR THE QUALITY OR CONDITION OF THE TITLE TO THE PREMISES. GRANTEE EXPRESSLY AGREES THAT THE PREMISES ARE BEING SOLD "AS IS," "WHERE IS," WITH ALL FAULTS, AND THAT GRANTEE IS RELYING SOLELY ON ITS OWN OPINIONS AND THE OPINIONS OF GRANTEE'S AGENTS, ATTORNEYS, AND CONSULTANTS AS TO THE PREMISES, THE ENVIRONMENTAL AND PHYSICAL CONDITION THEREOF, THE COMPLIANCE

OF THE PREMISES WITH ANY AND ALL LAWS, RULES AND REGULATIONS, INCLUDING WITHOUT LIMITATION ENVIRONMENTAL LAWS, RULES AND REGULATIONS, THE SUITABILITY OF THE PREMISES FOR THEIR CURRENT USE AND GRANTEE'S PROPOSED USE, AND THE QUALITY AND CONDITION OF THE TITLE TO THE PREMISES

GRANTEE DOES HEREBY FOREVER RELEASE GRANTOR AND THE ESTATES OF AND FROM ANY AND ALL LIABILITIES, CLAIMS, CAUSES OF ACTION, LIABILITY FOR CONTRIBUTION, AND ALL OTHER LIABILITIES ARISING OUT OF THE PREMISES (INCLUDING, WITHOUT LIMITATION, THE EXISTENCE, NOW OR IN THE PAST, OF ANY ABOVEGROUND OIL STORAGE FACILITIES ON THE LAND). GRANTEE SHALL BE RESPONSIBLE FOR SECURING ALL PERMITS, APPROVALS, AND LICENSES NECESSARY FOR GRANTEE'S USE AND/OR OPERATION OF THE PREMISES, BUT GRANTEE ACKNOWLEDGES AND AGREES THAT GRANTEE'S ACQUISITION OF THE PREMISES IS NOT CONTINGENT UPON GRANTEE SECURING THE SAME.

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IN WITNESS WHEREOF, the Grantor has caused this instrument to be executed on this 6 day of September, 2017.

WITNESS:

Print Name: Jeanette Pisel
Jeanette Pisel

P.J. Perrino, Jr., Esq. in his capacity as the Chapter 7 Bankruptcy Trustee of the Estate of GNP Maine Holdings, LLC, d/b/a Great Northern Paper Company, Case No. 14-10791 PGC and the Estate of GNP East, Inc., Case No. 14-10821 PGC

STATE OF MAINE
COUNTY OF Kennebec, SS. September 6, 2017

Personally appeared the above-named P.J. Perrino, Jr., Esq., Chapter 7 Bankruptcy Trustee as aforesaid, and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Before me,

Notary Public
Jeanne T. Gibson
Commission Expires: 11/12/20

SEAL

IN WITNESS WHEREOF, the Grantee has caused this instrument to be executed on this 8 day of September, 2017.

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KATAHDIN KI 50 LLC

By: _____

Name: Jason Inoff

Its: Managing Member

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STATE OF New York
COUNTY OF Nassau, SS.

September 8th, 2017

Personally appeared the above-named Jason Inoff in his/~~her~~ capacity as managing member of **KATAHDIN KI 50 LLC** and acknowledged the foregoing instrument to be his/her free act and deed in his/her said capacity and the free act and deed of said **KATAHDIN KI 50 LLC**.

Before me,

_____
Notary Public

SUSAN P SILVESTRI
Notary Public, State of New York
No. 01SI6135198
Qualified in Suffolk County
Commission Expires Oct. 17, 2017

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EXHIBIT A

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East Millinocket Mill Site and Appurtenant Easements

Acquired by GNP East, Inc. ("GNP East") by deed from Katahdin Paper Company LLC ("KPC") by deed to GNP EAST, INC. dated as of September 28, 2011
Recorded in the Penobscot County Registry of Deeds in Book 12608, Page 59
Recorded in the Piscataquis County Registry of Deeds in Book 2130, Page 178
Recorded in the Somerset County Registry of Deeds in Book 4445, Page 101

Subject to the Permitted encumbrances set forth herein, any and all right, title and interest in and to the land and buildings located in East Millinocket, in Penobscot County, Maine, and land interests and easements in Millinocket, TA R7 WELS, T3 Indian Purchase, T1R8 WELS, T1R9 WELS, T2R9 WELS, T2R10 WELS, T2R11 WELS, T3R10 WELS, T3R11 WELS, T3R12 WELS, T2R12 WELS, T4R11 WELS, T5R11 WELS, T6R11 WELS, T6R12 WELS, Penobscot, Piscataquis and Somerset Counties in Maine, with all appurtenances thereto, along with all other rights and interests described more particularly as follows, *to wit*:

Parcel One - East Millinocket Mill Site, Town of East Millinocket, Penobscot County, Maine

A certain lot or parcel of land with the improvements thereon, situate in the Town of East Millinocket, County of Penobscot, State of Maine, more particularly described as follows:

BEGINNING at an iron rod set at the intersection of the East Millinocket-Medway Town line with the southwesterly line of Bangor & Aroostook Railroad as said railroad is described in a deed recorded in Penobscot County Registry of Deeds, Volume 770, Page 300, which point of intersection is further identified with reference to the Maine State Coordinate System of 1927 (East Zone) as x=483,929.56, y=650,820.53;

Thence, North 58°18'13" West by and along the line of said Railroad, a distance of 708.31 feet to a point of curve;

Thence, northwesterly by and along the line of said Railroad following a curve to the right with a radius of 1,959.58 feet, an arc distance of 817.85 feet to a point of tangency;

Thence, North 34°23'16" West by and along the line of said Railroad, a distance of 267.95 feet to a point of curve;

Thence, northwesterly by and along the line of said Railroad following a curve to the left with a radius of 1,860.58 feet, an arc distance of 698.11 feet to a point of tangency;

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Thence, North 55°53'20" West by and along the line of said Railroad a distance of 672.8 feet to a point of curve;

Thence, westerly by and along the line of said Railroad following a curve to the left with a radius of 905.87 feet, an arc distance of 415.5 feet to a point of tangency;

Thence, North 82°10'20" West by and along the line of said Railroad, a distance of 373.33 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the right with a radius of 1,482.18 feet, an arc distance of 161.60 feet to a point on the easterly line of the rough-parcel of land described in a deed recorded in Penobscot County Registry of Deeds, Volume 770, Page 300;

Thence, South 20°38'40" West, by and along the boundary of said fourth parcel, a distance of 50.82 feet to a point;

Thence, following the southerly boundary of said fourth parcel along a curve to the right with a radius of 1,532.69 feet, an arc distance of 300.00 feet to a point;

Thence, South 25°30'25" West, by and along the boundary of said fourth parcel, a distance of 44.91 feet to a point;

Thence, North 50°51 '05" West, by and along the boundary of said fourth parcel, a distance of 451.0 feet to a point in the southerly line of the Bangor & Aroostook Railroad main line right-of-way;

Thence, North 62°43'20" West by and along the southerly line of said Railroad, a distance of 510.0 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the left with a radius of 1,383.19 feet, an arc distance of 438.52 feet to a point of tangency;

Thence, North 80°53'25" West by and along the southerly line of said railroad, a distance of 1,435.47 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the right with a radius of 1,482.19 feet, an arc distance of 709.41 feet to a point of tangency;

Thence, North 53°27'49" West by and along the line of said Railroad, a distance of 1,381.88 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the left with a radius of 1,860.58 feet, an arc distance of 431.06 feet to a point of tangency;

Thence, North 66°44'20" West by and along the line of said Railroad, a distance of 952.98 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the left with a radius of 1,860.58 feet, an arc distance of 214.42 feet to a point of tangency;

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Thence, North 73°20'35" West, by and along the line of said Railroad, a distance of 565.94 feet to a point of curve;

Thence, by and along the line of said Railroad following a curve to the right with a radius of 1,959.58 feet, an arc distance of 549.96 feet to a point of compound curvature;

Thence, by and along the line of said Railroad following a curve to the right with a radius of 2,914.43 feet, an arc distance of 466.57 feet to an iron rod set on a line which is generally parallel with and 240.0 feet easterly from the westerly-most face of the power house building on the northerly end of Dolby Dam, so-called;

Thence, South 30°00'00" West by and along said line which is generally parallel to said building face, a distance of 525.0 feet to an iron rod set on the northerly bank of the West Branch of the Penobscot River;

Thence, continuing on the same course, South 30°00'00" West, a distance of 175 feet, more or less, to the thread of the West Branch of the Penobscot River as defined by An Act to Incorporate the Town of East Millinocket, Chapter 377, Private and Special Laws of the State of Maine (1907);

Thence, generally southeasterly by and along the thread of said River as defined by the above-referenced Act, a distance of 13,100 feet, more or less, to its intersection with the East Millinocket-Medway Town line;

Thence, North 0°15'34" East by and along said town line, a distance of 354 feet, more or less, to an iron rod set in place of a broken wood post found on said town line on the northerly bank of said River;

Thence, continuing the same course, North 0°15'34" East, by and along said town line, a distance of 813.22 feet to the point of beginning.

For the sole purpose of providing a geometrically precise description and not to be construed as a boundary of the above-described tract, the course and distance between the iron rod set on the northerly bank of the West Branch of Penobscot River on the line which is generally parallel to and 240 feet easterly of the westerly face of the Dolby Dam power house and the iron rod set in place of the broken wood post on the East Millinocket-Medway Town line is South 61°56'27" East, a distance 12,609.00 feet.

Bearings referenced herein are oriented to Grid North, Maine State Coordinate System of 1927, East Zone, as determined by a survey of the within described lot by Plisga & Day, Land Surveyors.

Together with all right, title and interest in and to the abutting streets and ways.

EXCEPTING the real property conveyed by Great Northern Paper, Inc. to GNE, LLC, by deed dated January 31, 2002 and recorded on February 4, 2002 in the Penobscot County Registry of Deeds in Book 8063, Page 98, as affected by Corrective and Confirmatory Deed from Katahdin Paper Company LLC and Katahdin Timberlands LLC and its subsidiary Katahdin Forest Management LLC to Great Lakes Hydro America, LLC, formerly known as GNE, LLC, dated May 24, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1; as amended by that certain Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 34; in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and in the Somerset County Registry of Deeds in Book 4445, Page 84.

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The property is conveyed SUBJECT TO a Consent Agreement and Final Order (the "Consent Agreement") by and between the United States Environmental Protection Agency ("EPA") and Great Northern Nekoosa Corporation ("Great Northern") which was filed with EPA on September 30, 1991. A Memorandum of the Consent Agreement is recorded in the Penobscot County Registry of Deeds in Volume 4948, Page 217.

Grantee is hereby notified that by its acceptance of this deed it hereby covenants and agrees that, in any subsequent deed transferring the above-described property, it will include notice that the property is subject to the Consent Agreement.

Grantee herein by its acceptance of this deed hereby covenants and agrees to provide, and will by the terms of any subsequent deed require any subsequent grantee to provide, notice to EPA and to the Commissioner of the Maine Department of Environmental Protection at least ten (10) days prior to any future excavations in those areas identified as containing polychlorinated biphenyls ("PCBSs") in the Remedial Plans appended to the Consent Agreement, except in the event of an emergency, in which case the grantee agrees to notify EPA and the Maine Department of Environmental Protection within twenty-four (24) hours after commencement of such excavations.

FURTHER EXCEPTING from Parcel One the Leachate Pipeline and the following rights and easements:

Description of the Leachate Pipeline and Easement Area

An existing Leachate Pipeline located in East Millinocket, Penobscot County, Maine, more particularly depicted on survey entitled "Leachate Pipeline Survey, East Millinocket, Maine for Katahdin Paper Company LLC, Volume 8702, Page 146" dated September 16, 2011, by Plisga & Day Land Surveyors, recorded in the Penobscot County Registry of Deeds in Plan Book 2011, Page 77 (the "Boundary Survey"), together with an easement ("Pipeline Easement") over, under, through and above a parcel of land, which easement is sixty-six feet (66') in width, except for those locations where the easement area would include existing buildings, in which case the easement shall be less than sixty-six feet (66') and shall only extend to within six feet (6') of the boundary of any existing building. The centerline of the Pipeline Easement is the centerline of the Leachate Pipeline as shown on the Boundary Survey.

Grantor further excepts and the Pipeline Easement rights granted herein are subject to a perpetual easement appurtenant to remaining lands of grantor to cross and recross with men, vehicles and equipment over and across the Pipeline Easement area for all purposes. The Pipeline Easement is for the benefit of portions of the lands now or formerly of Katahdin Paper Company LLC situated northerly of Route 157 in East Millinocket, as described in the deed of Great Northern Paper, Inc. to Katahdin Paper Company LLC dated April 29, 2003 and recorded in the Penobscot County Registry of Deeds in Book 8702, Page 146, and includes the Dolby Landfill Sites, so-called.

Leachate Pipeline Easement Rights and Responsibilities

A. The right to maintain, repair and replace the existing buried effluent pipeline which runs from the Dolby Landfill Sites, so-called, formerly owned by Katahdin Paper Company, LLC ("Pipeline Easement Holder") through Parcel One described above to the Waste Water Treatment System.

B. The right to flow effluent generated at the Dolby Landfill Sites, so-called, through the existing buried pipeline at such flow rates and pressures as Pipeline Easement Holder may reasonably deem appropriate, taking into consideration the capacity of the pipeline; the easement rights are limited to the right to flow effluent only.

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C. The right to enter onto the easement area with men, machinery and equipment within the narrowest practical confines at any time and from time to time upon reasonable advance written notice to GNP East (except in cases of emergency for which no notice is required) for the purposes of maintaining, repairing and /or replacing said pipeline, provided that, if GNP East's land is disturbed during the exercise of these easement rights, Pipeline Easement Holder shall, as promptly as possible, return the disturbed property to as near to its original condition as is practical.

D. The right to enter the easement area at any time and from time to time, upon reasonable advance written notice to GNP East, with men, machinery and equipment within the narrowest practical confines for the purpose of inspecting and testing the buried pipeline including the right to traverse the pipe within the easement area with probes, cameras, sensors, robotic devices and other types of sensing equipment for the purpose of inspecting, maintaining and repairing the pipeline, provided that, if GNP East's land is disturbed during the exercise of these easement rights, Pipeline Easement Holder shall, as promptly as possible, return the disturbed property to as near to its original condition as is practical;

E. Pipeline Easement Holder shall comply, at Pipeline Easement Holder's expense, with all applicable permits, licenses, laws, regulations, rules and orders with respect to Pipeline Easement Holder's exercise of the easements granted hereunder, and all related equipment, pipeline, materials and improvements constructed or operated by Pipeline Easement Holder hereunder, regardless of when they become effective. Upon written request of GNP East at any time, Pipeline Easement Holder shall provide GNP East with copies of any such permits and licenses within a reasonable time thereafter;

F. Pipeline Easement Holder shall be responsible for any increase in real and personal property taxes assessed against GNP East or Pipeline Easement Holder's property resulting from personal property of Pipeline Easement Holder, or improvements made by Pipeline Easement Holder to GNP East's property;

G. During the term of its operations hereunder, Pipeline Easement Holder shall maintain (a) commercial general liability insurance in an amount not less than $1,000,000.00 for each occurrence, (b) worker's compensation insurance as required by Maine law and employer's liability insurance for a minimum of $1,000,000, and (c) auto liability insurance, including owned, hired and non-owned vehicles, for a minimum of $1,000,000 each occurrence for a combined single limit; provided however, that (i) Pipeline Easement Holder's obligation to maintain and keep in force the insurance required hereunder shall always be subject to the availability of such insurance in the required amounts, (ii) GNP East reserves the right to periodically increase the foregoing amounts of required coverage to reflect industry standards, and (iii) the amount of coverage required hereunder may be met through excess liability insurance so long as the excess liability policies cover the same risks covered by the primary policy and there are no gaps in the amount of the coverage, and the limits of coverage may also be met through umbrella insurance policies so long as the underlying coverages required under the umbrella policies are continuously maintained.

H. In the event this reserved easement is conveyed or assigned to the State of Maine, to the extent allowed by Maine law, the State, as holder of the easement, may self insure against the foregoing commercial liability, workers compensation and automobile liability. Such commercial general liability and auto liability coverage amounts shall be equivalent to the greater of a) the amount of the maximum permitted damage award authorized under M.R.S. tit. 14 section 8105 (1), or any successor statute, or b) $400,000.00. The workers compensation coverage amount shall be at statutory limits. In the event the State, as holder of the easement, elects to self insure, the State shall provide GNP East proof that it is self insured in accordance with Maine law.

I. Pipeline Easement Holder shall maintain its improvements and personal property, including without limitation its pipeline, on the Easement Property in good repair. Pipeline Easement Holder shall at all times keep the Easement Property in safe and clean condition.

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J. In the event of any discharge, contamination or leak from the pipeline, Pipeline Easement Holder shall be responsible for remediation of GNP East's property in accordance with all applicable state and federal laws, rules and regulations and GNP East shall have no responsibility or liability whatsoever in that regard.

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K. Except to the extent arising from the negligence or willful misconduct of GNP East (or GNP East's employees, agents, or independent contractors), Pipeline Easement Holder shall defend, indemnify and hold harmless GNP East from and against any and all losses, liabilities, damages, claims, demands, actions, judgments, fines, penalties, costs (but specifically not including costs of defense, and attorneys' and professionals' fees incurred in defense or incurred in enforcement of this indemnity, and any consequential or incidental damage claims) and expenses arising in connection with: (a) Pipeline Easement Holder's exercise or non-exercise of its rights under this easement, including, but not limited to, the use of the Easement Property by KPC, its employees, agents, and independent contractors, (b) Pipeline Easement Holder's failure to comply with applicable permits, licenses, laws, regulations, rules and orders (including, without limitation, those of any federal or state Environmental Protection Agency or any other federal or state environmental, air, water or land protection agency) relating to Pipeline Easement Holder's use of the Easement, or (c) any lien on any of GNP East's property, including the Easement Property, arising in connection Pipeline Easement Holder's exercise of its rights under this easement. In the event this easement is conveyed or assigned to the State of Maine, this subparagraph shall not apply to the State of Maine as holder of this easement.

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Parcel Two - Southerly side of Route 157

Certain land located on the southerly side of Route 157 in East Millinocket, Penobscot County, Maine, bounded and described as follows:

Bounded northeasterly by Route 157;

Bounded southeasterly by Lot number Six (6) in Block Seven (7), as laid down on a Plan of Land at East Millinocket recorded in the Penobscot County Registry of Deeds in Map File D48 81;

Bounded southwesterly by the northeasterly line of Bangor & Aroostook Railroad as said railroad is described in a deed recorded in Penobscot County Registry of Deeds, Volume 770, Page 300; and

Bounded northwesterly by lot numbered one (1) as shown on a Plan entitled East Millinocket Industrial Park at East Millinocket, in the County of Penobscot, State of Maine, and recorded in the Penobscot County Registry of Deeds on August 31, 1990, Map File D151-90; and containing 19 acres more or less. Together with all right, title and interest in and to the abutting streets and ways, including to the centerline of Route 157.

Parcel Two is conveyed SUBJECT TO the terms of Quitclaim Deed with Covenant and Timber Deed from Katahdin Paper Company, LLC to Katahdin Forest Management LLC ("KFM") dated December 29, 2005 and recorded in the Penobscot County Registry of Deeds in Book 10258, Page 225 (the "Timber Deed"), as affected by KFM's joinder in deed to GNP EAST, INC. dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 59.

Appurtenant Easements – East Millinocket and other municipal divisions, Penobscot County, Piscataquis County and Somerset County, Maine

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Parcel Three – Blanket Cross Easement Agreement

Easements and rights reserved by or granted to GNP in Blanket Cross-Easement Deed and Agreement between GNP and GNE, LLC dated as of January 31, 2002 and recorded in the Penobscot County Registry of Deeds in Book 8064, Page 241.

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Parcel Four – Appurtenant Easement from Town of East Millinocket

Rights and easements set forth in a Right-Of-Way Easement from the Town of East Millinocket to Katahdin Paper Company LLC dated October 4, 2004 and recorded in Penobscot County Registry of Deeds in Book 9573, Page 122.

Parcel Five – East Millinocket Road in Township 1 Range 7 WELS (Grindstone), Penobscot County, Maine

Rights and easements set forth in an Easement Deed and Agreement by and between H. C. Haynes, Inc. and Katahdin Paper Company LLC and Katahdin Forest Management LLC dated November 21, 2006 and recorded in Book 10762, Page 102.

Parcel Six – Telos, Golden Road and Golden Road Extension Easements

All right, title and interest of the Grantor under that certain Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 34 ; in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and in the Somerset County Registry of Deeds in Book 4445, Page 84.

Parcel Seven – Webber Easements

Easements, rights, conditions and restrictions set forth in the Deed, Easement Deed and Agreements exchanged between John M. Webber et al and Great Northern Paper, Inc. dated as of December 27, 2001 and recorded in the Penobscot County Registry of Deeds in Book 8031, Pages 25, 39 and 70.

Parcel Eight - Appurtenant Easements on GNP East Millinocket Reserved Parcels

The following easements for access and utilities and rights located in East Millinocket, Penobscot County, Maine (the "GNP Millinocket Appurtenant Easements", more fully described in Exhibit C of deed from Great Northern Paper, Inc. to Katahdin Paper Company, LLC dated as of April 29, 2003 and recorded in the Penobscot County Registry of Deeds in Book 8702, Page 146 (the "KPC Deed"):

a) Easement E in Reserved Parcel Six (East Millinocket Bark Parcel)
b) Easement F in Reserved Parcel Seven (Old East Millinocket Dump Parcel)

Parcel Nine – Easements Reserved or Referenced in Corrective Deed to GLHA, including the Golden Road, and Telos Road in Piscataquis and Somerset Counties

Those easements, rights and interests reserved by or granted to Katahdin Paper Company LLC, or otherwise set forth or referenced in the Corrective and Confirmatory Deed ("Corrective Deed") from Katahdin Paper Company LLC, Katahdin Timberlands LLC and Katahdin Forest Management LLC to Great Lakes Hydro America, LLC ("GLHA") dated as of May 17, 2004 and recorded in the Penobscot

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County Registry of Deeds in Book 9349, Page 1; in the Piscataquis County Registry of Deeds in Book 1561, Page 10; and in the Somerset County Registry of Deeds in Book 3313, Page 100; as amended by that certain Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 34; in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and in the Somerset County Registry of Deeds in Book 4445, Page 84.

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Parcel Ten – Undivided Ownership, Operation and Maintenance Agreement

Rights and easements set forth in Undivided Ownership, Operation and Maintenance Agreement dated January 31, 2002, a Memorandum of which dated January 31, 2002 is recorded in Penobscot County Registry of Deeds in Book 8065, Page 148, as amended by First Amendment to Undivided Ownership, Operation and Maintenance Agreement, a Memorandum of which is dated as of September 28, 2011 and recorded in said Registry in Book 12608, Page 38.

Parcel Eleven – Golden Road Extension a/k/a Huber Road

Easement Deed from J. M. Huber Corporation to Great Northern Paper, Inc. dated March 16, 1999 and recorded in Penobscot County Registry of Deeds Book 7007, Page 63 (Golden Road Extension).

Parcel Twelve – Madden Road

Those Rights, Easements, Covenants, Agreements and Conditions set forth in the Easement Deed and Agreement to H. C. Haynes, Inc. and Lakeville Shores, Inc. from Katahdin Paper Company LLC dated December 6, 2006 and recorded in Book 10762, Page 92.

Parcel Thirteen – Easements over Lands of Katahdin Paper Company LLC

Easements and rights reserved by or granted to Easement Deed and Agreement from Katahdin Paper Company, LLC to Katahdin Forest Management LLC dated February 7, 2011 and recorded in the Penobscot County Registry of Deeds in Penobscot County Registry of Deeds Book 12404, Page 308.

EXCEPTING from Parcels One through Thirteen above the following real estate, to the extent, if any, included in any of the foregoing parcels located in said East Millinocket:

a) Quitclaim Deed with Covenant from Great Northern Paper, Inc. to GNE, LLC dated January 31, 2002 and recorded in said Registry of Deeds in Book 8063, Page 98 as affected by Corrective and Confirmatory Deed from Katahdin Paper Company LLC and Katahdin Timberlands LLC and its subsidiary Katahdin Forest Management LLC to Great Lakes Hydro America, LLC, formerly known as GNE, LLC, dated May 24, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1; as amended by Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 34; in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and in the Somerset County Registry of Deeds in Book 4445, Page 84.

b) The following properties located in East Millinocket, Penobscot County, Maine (the "GNP East Millinocket Reserved Parcels"), more fully described in Exhibit B of deed from Great Northern Paper, Inc. to Katahdin Paper Company, LLC dated as of April 29, 2003 and recorded in the

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Penobscot County Registry of Deeds in Book 8702, Page 146 (the "KPC Deed"):

i. Property known as the East Millinocket Bark Parcel, more fully described as "Reserved Parcel Six: East Millinocket Bark Parcel" in Exhibit B of the KPC Deed.

ii. Old East Millinocket Dump Parcel, more fully described as "Reserved Parcel Seven: Old East Millinocket Dump Parcel" in Exhibit B of the KPC Deed.

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Parcel Fourteen - Slurry Pipeline Easement

A perpetual non-exclusive easement running with the land described above and appurtenant thereto, fifty feet (50) in width, centered on an existing pipeline located in Millinocket, TA R7 W.E.L.S. and East Millinocket, in Penobscot County, Maine, for the purposes of laying, constructing, maintaining, operating, altering, replacing, repairing, reconstructing, relocating, and removing (i) one or more pipelines with above-grade or below-grade valves, fittings and (ii) pipeline data acquisition equipment, pipeline safety devices, pipeline markers and other appurtenances, as may be convenient or necessary for the transmission or manufacture of pulp for papermaking, over, under, across and upon land now or formerly of Great Northern Paper, Inc., Maine Timberlands Company, Inexcon Maine, LLC, the Cassidy Heirs and the Town of Millinocket and G. Peirce Webber, et al., to and from the East Millinocket and Millinocket paper mills now or formerly of Great Northern Paper, Inc. and all rights appurtenant thereto.

Also all rights, benefits or interests in any existing lease, easement or other documents and other rights relating to the mill pipeline described above, including without limitation rights and easements conveyed or reserved by the following:

a) Rights and easements conveyed by Penobscot County as Grantor by Commissioners County of Penobscot to Great Northern Nekoosa Corporation by document dated January 27, 1981, and recorded in Book 3158, Page 24 of the Penobscot County Registry of Deeds.

b) An easement reserved in Deed from Great Northern Paper, Inc. to Maine Timberlands Company, dated January 5, 2001, and recorded in Book 7580, Page 284 of the Penobscot County Registry of Deeds, as amended by Corrective Quitclaim Release Deed dated September 6, 2001 and recorded in said Registry in Book 7866, Page 143, as amended by Confirmatory Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC as of September 28, 2011 and recorded in Book 12608, Page 31.

c) Rights and easements conveyed by G. Peirce Webber, et al., to Great Northern Paper, Inc. by deed dated October 24, 2001, recorded in Book 7957, Page 339 of the Penobscot County Registry of Deeds.

d) An easement reserved in Deed from Great Northern Paper, Inc. to GNE, LLC dated January 31, 2002, and recorded in Book 8063, Page 98 of the Penobscot County Registry of Deeds as affected by Corrective and Confirmatory Deed from Katahdin Paper Company LLC and Katahdin Timberlands LLC and its subsidiary Katahdin Forest Management LLC to Great Lakes Hydro America, LLC, formerly known as GNE, LLC, dated May 24, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1; as amended by Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 34.

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Also granting the pipeline and any related facilities, structures or equipment together with the foundations and appurtenances thereto.

Parcel Fifteen – Rights to Require Removal of Railroad Rails and Reversion

All rights granted or reserved under the deeds listed below and recorded in the Penobscot County Registry of Deeds, in the Book and Page indicated, to require the removal of rails and compel a reverter of such parcels:

Book 703, Page 151 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated April 9, 1901.
Book 756, Page 141 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated September 11, 1905.
Book 770, Page 299 - Deed from Great Northern Paper Company to Schoodic Stream Railroad Company dated June 20, 1907.
Book 774, Page 332 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated March 17, 1908.
Book 810, Page 310 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated June 30, 1910.
Book 810, Page 443 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated November 11, 1910.
Book 824, Page 243 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated September 6, 1911.
Book 824, Page 335 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated September 29, 1911.
Book 832, Page 242 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated August 9, 1912.
Book 934, Page 93 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated April 12, 1921.
Book 982, Page 219 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated December 29, 1925.
Deed dated September 20, 1929 and recorded in Book 1032, Page 309 of the Penobscot County Registry of Deeds.
Book 1054, Page 172 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated June 18, 1931.
Book 1054, Page 173 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated June 8, 1931.
Book 1054, Page 243 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated June 22, 1931.
Deed dated July 13, 1934 and recorded in Book 1080, Page 471 of the Penobscot County Registry of Deeds.
Book 1103, Page 273 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated November 19, 1935.
Deed dated May 6, 1938 and recorded in Book 1133, Page 165 of the Penobscot County Registry of Deeds.
Deed dated April 29, 1948 and recorded in Book 1283, Page 336 of the Penobscot County Registry of Deeds.
Deed dated April 29, 1948 and recorded in Book 1283, Page 338 of the Penobscot County Registry of Deeds.
Book 1683, Page 25 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated June 25, 1959.

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Book 1683, Page 27 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated June 25, 1959.

Book 1803, Page 392 - Deed from Great Northern Paper Company to Bangor & Aroostook Railroad dated September 26, 1961.

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Parcel Sixteen – East Millinocket Road

Easements and rights reserved by or granted to GNP West pursuant to Easement Agreement from Katahdin Paper Company, LLC dated as of September 28, 2011 and recorded in the Penobscot County Registry of Deeds in Book 12608, Page 81.

Parcels One through Sixteen above are conveyed Subject to Permitted Encumbrances as follows:

1. Rights granted to Pleasant River Lumber Company by Katahdin Paper Company LLC as set forth in the Memorandum of Sale dated April 25, 2011 and recorded in Book 12463, Page 262.
2. The effect of the following easements and conveyances to Bangor Hydro Electric Company recorded in the Penobscot County Registry of Deeds:

   a) Pole line easements described in deed dated December 26, 1968 and recorded in Book 2150, Page 566.(TA R7)

   b) Pole line easements described indeed dated December 30, 1968 and recorded in Book 2150, Page 564.(TA R7)

   c) Pole line easements described in deed dated April 30, 1969 and recorded in Book 2161, Page 364.(TA R7)

   d) Easement for transmission line purposes as described in deed dated April 26, 1979 in Book 2974, Page 238 (see Survey) (Mill, Indian Purchase 3 and TA R7)

   e) Easement for transmission line purposes as described in deed dated March 19, 1993 and recorded in Book 5293, Page 233.(Mill, TA R8 WELS, TA R9 WELS [Long A] and Indian Purchase 4)

   f) Book 5339, Page 233 - Deed from Great Northern Paper, Inc. to Bangor Hydro-Electric. Company dated May 18, 1993.
3. Rights reserved in deed from John Cassidy, et al., to Garret Schenck dated October 24, 1906 and recorded in Book 768, Page 94. (TA R7)
4. The effect of the following easements and conveyances to State of Maine recorded in said Registry of Deeds:

   a) Taking for public highway by State of Maine, State Highway Commission, dated February 15, 1938 in Book 1129, Page 301. (TA R8 WELS, TA R9 WELS, Indian Purchase 4 and Indian Purchase 3)

   b) Easement from Great Northern Paper, Inc. to State of Maine dated May 8, 1992 and recorded in said Registry of Deeds in Book 5068, Page 364. (East Mill)

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5. Terms, conditions, rights, covenants, restrictions, options, reservations, agreements, assignments, easements, flowage rights, impoundments, land, islands, dams and fixtures described in deed from Great Northern Paper, Inc. to GNE, LLC dated January 31, 2002 and recorded in the Penobscot County Registry of Deeds in Book 8063, Page 98; as affected by Corrective and Confirmatory Deed from Katahdin Paper Company LLC and Katahdin Timberlands LLC and its subsidiary Katahdin Forest Management LLC to Great Lakes Hydro America, LLC, formerly known as GNE, LLC, dated May 24, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1; as affected by Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 16, 2011 and recorded in Book 12608, Page 34; recorded in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and recorded in the Somerset County Registry of Deeds in Book 4445, Page 84.

6. Terms and conditions of Blanket Cross-Easement Deed and Agreement between Great Northern Paper, Inc. and GNE, LLC dated January 31, 2002 and recorded in Penobscot County Registry of Deeds in Book 8064, Page 241.

7. Terms, provisions and rights of first refusal described in the Undivided Ownership, Operation and Maintenance Agreement dated January 31, 2002, a Memorandum of which dated January 31, 2002 is recorded in Penobscot County Registry of Deeds in Book 8065, Page 148, as amended by First Amendment to Undivided Ownership, Operation and Maintenance Agreement dated as of September 28, 2011; a Memorandum of which is recorded in said Registry in Book 12608, Page 38.

8. Right to cross and re-cross property as reserved in deed from F. Randall Smith, Trustee, to Samuel S. Dennis et al dated April 8, 1986 and recorded in Book 3849, Page 206. (TA R7)

9. Terms and conditions of Deed, Easement Deed and Agreements exchanged between John M. Webber et al and Great Northern Paper, Inc. dated as of December 27, 2001 and recorded in the Penobscot County Registry of Deeds in Book 8031, Pages 25, 39 and 70; in the Somerset County Registry of Deeds in Book 2897, Pages 266,(the counter part of Page 39 is not recorded in Somerset County) and Page 280, respectively; and in the Piscataquis County Registry of Deeds in Book 1360, Pages 65, 79 and 50, respectively; as affected by assignment of said rights (section 4.10) in deed from Great Northern Paper, Inc. to GNE, LLC dated January 31, 2002 and recorded in the Penobscot County Registry of Deeds in Book 8063, Page 98; in the Somerset County Registry of Deeds in Book 2907, Page 340; and in the Piscataquis County Registry of Deeds in Book 1366, Page 1, respectively; and as further affected by Corrective and Confirmatory Deed from Katahdin Paper Company LLC and Katahdin Timberlands LLC and its subsidiary Katahdin Forest Management LLC to Great Lakes Hydro America, LLC, formerly known as GNE, LLC, dated May 24, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1; in the Somerset County Registry of Deeds in Book 3313, Page 1; in the Piscataquis County Registry of Deeds in Book 1561, Page 10; and in the Southern Aroostook County Registry of Deeds in Book 3975, Page 158, respectively; as amended by Amended and Restated Easement dated February 7, 2011 and recorded in Penobscot Book 12404, Page 314; as further amended by Corrective Release Deed from Katahdin Forest Management LLC to Katahdin Paper Company LLC dated as of September 16, 2011 and recorded in Book 12608, Page 34; recorded in the Piscataquis County Registry of Deeds in Book 2130, Page 161; and recorded in the Somerset County Registry of Deeds in Book 4445, Page 84.

10. Terms and conditions of Easement Deed from J. M. Huber Corporation to Great Northern Paper, Inc. dated March 16, 1999 and recorded in said Registry of Deeds in Book 7007, Page 63 (Golden Road Extension). (Mill, fka T1 R7 WELS)

11. Terms and conditions of Easement Deed from G. Pierce Webber et al to Great Northern Paper, Inc. dated October 24, 2001 and recorded in Book 7957, Page 339. (TA R7)

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12. Rights and easements granted to New England Telephone and Telegraph Company set forth in the instruments recorded in said Registry of Deeds in Book 1426, Page 100 and Book 1586, Page 100. (Indian Township 3, T1 R8 WELS, T1 R9 WELS, Indian Township 4)

13. Rights and easements granted to Bangor-Hydro Electric Company as set forth in the instruments recorded in said Registry of Deeds in Book 1426, Page 110; Book 1586, Page 100; Book 3273, Page 275; Book 3759 Page 131; Book 4802, Page 200; Book 6739, Page 141; Book 7274, Page 190 and Book 5524, Page 27. (Indian Township 3, T1 R8 WELS, T1 R9 WELS, Indian Township 4, Millinocket, TA R7)

14. Rights and easements conveyed to Maine Timberlands Company set forth in the deed from Great Northern Paper, Inc. dated January 5, 2001 and recorded in said Registry of Deeds in Book 7580, Page 284.

15. Declaration of Restrictions set forth in Notice of PCB Sites dated February 20, 2004 and recorded in Book 9232, Page 2. (East Mill)

16. The effect if any of the following deeds to Schoodic Stream Railroad Company and Bangor & Aroostook Railroad Company:

    a) Six rod right-of-way to the Schoodic Stream Railroad Company as reserved in instrument recorded in Book 764, Page 158 of the Penobscot County Registry of Deeds. (TA R7)

    b) Deed from Great Northern Paper Company to Schoodic Stream Railroad Company dated June 20, 1907 in Book 770, Page 299 (conditional deed conveying land 20' wide underlying railroad spurs M. H, K. F, G, and C conveyed for railroad purposes - Parcel No.4 on Valuation Plan V2h/s2). See Note #1 below. (TA R7)

    c) Deed from Great Northern Paper Company to Schoodic Stream Railroad Company dated June 20, 1907 in Book 770, Page 300 (conveying a 6 rod strip of land [45.4 acres] and three smaller parcels of land totaling 6.3 acres - Parcel No.1 on Valuation Plan V2h/s2). (TA R7)

    d) Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated May 17, 1908 in Book 774, Page 332 (conditional deed conveying two strips of land; the first, 13'x450' parcel located near Sulphur & Lime Storage Rooms; and second, 13'x169' parcel located near Grinder Room· both conveyed for railroad purposes - e.g. railroad sidings and spurs - Parcel NO.5 on Valuation Plan V2h/s2). See Note #1 below. (Mill, TA R7)

    e) Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated June 30, 1910 in Book 810, Page 310 (conditional deed conveying 20'x1397' strip of land for railroad purposes- e.g. railroad sidings and spurs). See Note #1 below. (East Mill)

    f) Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated June 8, 1931 in Book 1054, Page 172 (conditional deed conveying 20' wide strip of land for railroad purposes - e.g. railroad sidings and spurs - Parcel No.6 on Valuation Plan V2h/s2). (East Mill) See Note #1 below.

    g) Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated November 19, 1935, in Book 1103, Page 273 (conditional deed conveying two - 20' strips of land underlying spurs Band D for railroad purposes - see Valuation Plan V2h/s2). See Note #1 below. (East Mill)

    h) Deed from Great Northern Paper Company to Bangor & Aroostook Railroad Company dated

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June 25, 1959 in Book 1683, Page 27 (conditional deed conveying 20' wide strips of land underlying railroad spurs O, B, 2, E, V, W, 0, S, R, P, U, K, N, C and track #31 for railroad purposes - Parcel 8 on Valuation Plan V2h/s2); as affected by Conditional Assignment of Rights to Require Removal of Rails and Reversion (section 4.11) as set forth in deed from Great Northern Paper, Inc., et al., to GNE, LLC dated January 31, 2002 and recorded in Penobscot County Registry of Deeds in Book 8063, Page 98. See Note #1 below. (East Mill)

Note #1: Rights of Great Northern Paper under this instrument are affected by Conditional Assignment of Rights to Require Removal of Rails and Reversion (section 4.11) as set forth in deed from Great Northern Paper, Inc., et al., to GNE, LLC dated January 31, 2002 and recorded in Penobscot County Registry of Deeds in Book 8063, Page 98; as affected by the Corrective and Confirmatory Deed dated May 17, 2004 and recorded in said Registry of Deeds in Book 9349, Page 1.

17. Memorandum of Consent Agreement by and between Great Northern Nekoosa Corp. and U.S. Environmental Protection Agency dated November 21, 1991 and recorded in said Registry of Deeds in Book 4948, Page 217 (re: clean up and monitor groundwater at contaminated sites) and covenants and agreements regarding the above referenced Agreement as set forth in the deed from Great Northern Paper, Inc. to Katahdin Paper Company LLC dated April 29, 2003 and recorded in Book 8702, Page 146. (East Mill)

18. Sewage Treatment Agreement by and between Great Northern Nekoosa Corporation and the Town of East Millinocket dated April 12, 1983 and recorded in said Registry of Deeds in Book 3489, Page 74 and related Lease by and between Great Northern Nekoosa Corporation and the Town of East Millinocket dated March 1, 1984 and recorded in said Registry of Deeds in Book 3502, Page 14 and Pipeline and Access Road Easement Agreement by and between Great Northern Nekoosa Corporation and the Town of East Millinocket dated March 1, 1984 and recorded in said Registry of Deeds in Book 3502, Page 32. (East Mill)

19. Rights and easements for poles and overhead wires granted by Great Northern Nekoosa Corporation to the Town of East Millinocket dated May 30, 1984 and recorded in said Registry of Deeds in Book 3532, Page 240. (East Mill)

20. Easement granted by Great Northern Paper Co. to Town of East Millinocket by instrument dated December 7, 1993 and recorded in Book 5514, Page 146 (pedestrian and snowmobile trail 1 0' wide by and along Bangor Hydro easement recorded in Book 2585, Page 111).(East Mill)

21. Land, rights and easements conveyed by Great Northern Nekoosa Corporation to the Town of East Millinocket by instrument dated October 1, 1973 and recorded in Book 2414, Page 90. (East Mill)

22. Department of Environmental Protection – Voluntary Response Action Plan (VRAP)- Great Northern Paper – East Millinocket Mill: dated April 24, 2003 and recorded in said Registry of Deeds in Book 8740, Page 72. (East Millinocket)

23. Rights and easements granted by The Inhabitants of the Town of East Millinocket to Katahdin Paper Company LLC as set forth in the Right-Of-Way Easement Deed dated October 4, 2004 and recorded in said Registry of Deeds in Book 9573, Page 122. (East Millinocket)

24. Rights, Easements, Covenants, Agreements and Conditions set forth in the deed to Katahdin Forest Management LLC from Katahdin Paper Company LLC by deed dated December 29, 2005 and recorded in Book 10258, Page 225.

25. Rights, Easements, Covenants, Agreements and Conditions set forth in the Easement Deed and Agreement to H. C. Haynes, Inc. and Lakeville Shores, Inc. from Katahdin Paper Company LLC dated December 6, 2006 and recorded in Book 10762, Page 92. (T1R7, T3 R7)

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26. Reservations, Conditions, Agreements and Provisions set forth in the Easement Deed and Agreement to Katahdin Paper Company and Katahdin Forest Management LLC from H. C. Haynes, Inc. by deed dated November 21, 2006 and recorded in Book 10762, Page 102. (T1 R7, East Mill)

27. Such state of facts as shown on the plan entitled "Survey Plan of PCB Contamination Sites on Property of Katahdin Paper Company, State Route #11, East Millinocket, Maine", dated January 27, 2004 and recorded in Book 2004, Page 26. (East Mill)

28. Rights and easements granted to the Tri Town Baptist Church by Great Northern Paper, Inc. set forth in the deed dated July 19, 1999 and recorded in said Registry of Deeds on January 26, 2009 in Book 11640, Page 83. (East Mill)

29. State of Maine Department of Environmental Protection Findings of Facts and Orders recorded in said Registry of Deeds:

a) Dated July 24,1974 recorded in Book 2483, Page 297 (Secondary Treatment Plant - #49-1346-19440).

b) Dated August 23, 1989 in Book 4515, Page 362 (Partial Closure Plan for Interim Hazardous Waste Facility & Termination of Interim License #1-023).

c) Dated July 25, 1990 in Book 4704, Page 69 (Partial Closure Plan for Interim Hazardous Waste Facility Interim License #1-023).

d) Dated July 25, 1990 in Book 4704, Page 74 (Partial Closure Plan for Interim Hazardous Waste Facility Interim License #1-023).

e) Dated July 25, 1990 in Book 4704, Page 79 (Partial Closure Plan for Interim Hazardous Waste Facility Interim License #1-023).

f) Dated February 20, 1992 in Book 5020, Page 287 (Millinocket Mill Modernization Project and After-The-Fact Approval of Post 1970 Construction, #L-015115-20-F-C).

g) Order dated April 5, 1994 and recorded in Book 5617, Page 251 (Pulp Mill consolidation).

h) Order dated November 20, 1998 and recorded in said Registry of Deeds in Book 6918, Page 5 (Intermill Tie Line, #L-19635-20-A-N).

i) Order dated June 15, 2000 and recorded in Book 7410, Page 92 (Substation Addition, Paper Mill, #L-15115-20-H-M).

j) Order dated July 20, 2001 and recorded in Book 7853, Page 160 (Sunken Pulpwood Recovery, #L-20479-2B-N).

k) Order dated November 5, 2001 and recorded in said Registry of Deeds in Book 7961, Page 53 (PCC Plant, Containment Modifications, #L-15115-20-J-M).

l) Order dated June 19, 2002 and recorded in Book 8278, Page 196 (Recovery of Sunken Logs, #L-20479-2B-C-M).

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m) Order dated July 28, 2003 and recorded in Book 8905, Page 19 (Storm Drainage, Revision License #L-15115-20-M-M).

30. The following orders issued by State of Maine, Department of Environmental Protection:

a) Order dated October 5, 1990 and recorded in said Registry of Deeds in Book 4743, Page 61 (re: Construction of Concrete Wall, #L-16637-L6-F-N).

b) Order dated December 10, 1990 and recorded in said Registry of Deeds in Book 4766, Page 198 (re: Recycling and Deinking Plant, #L-16637-20-G-N).

c) Order dated September 6, 1989 and recorded in said Registry of Deeds in Book 4526, Page 184 (re: Industrial Expansion, #L-00796-20-C-C).

d) Order dated May 29, 1991 and recorded in said Registry of Deeds in Book 4852, Page 166 (re: Spencer Brook Riprap, #L-16637-20-H-M).

e) Order dated May 28, 1991 and recorded in said Registry of Deeds in Book 4852, Page 183 (re: groundwater monitoring plan at East Millinocket Mill, #L-16637-20-E-C).

f) Order dated February 12, 1992 and recorded in said Registry of Deeds in Book 5006, Page 220 (Effluent Line Change, #L-16637-20-J-M).

g) Order dated January 14, 1992 and recorded in said Registry of Deeds in Book 5002, Page 232 (re: Recycling/Deinking Plant, #L-16637-20-J-M)

h) Order dated February 28, 1992 and recorded in said Registry of Deeds in Book 5020, Page 280 (re: Recycling/Deinking Plant, #L-16637-10-I-M).

i) Condition Compliance dated March 21, 1992 and recorded in said Registry of Deeds in Book 5200, Page 52 (Condition Compliance re: Condition #11, #L-16637-20-K-C).

j) Order dated September 17, 1993 and recorded in said Registry of Deeds in Book 5452, Page 337 (re: Paper Mill Expansion, #L-16637-10-L-M).

k) Order dated January 3, 1994 and recorded in said Registry of Deeds in Book 5538, Page 322 (Biomass Storage Area, #L-00796-20-M-M), as corrected by State of Maine Department of Environmental Protection Site Location of Development Modification Findings of Fact and Order dated January 25, 1994 and recorded in said Registry of Deeds in Book 5558, Page 224.

l) Order dated July 23, 1998 and recorded in said Registry of Deeds in Book 6776, Page 298 (Paper Mill, Electrical Rooms, #L-16637-20-N-M).

m) Order dated May 18, 1973 and recorded in said Registry of Deeds in Book 2427, Page 218 (re: Wastewater Treatment Plant & Sludge Disposal Area #24-0796-19170).

n) Order dated March 26, 1975 and recorded in said Registry of Deeds in Book 2539, Page 246 (Secondary Treatment Plant, #24-0796-19170).

31. Rights and easements granted to the State of Maine by Katahdin Paper Company LLC as described in the Easement Deed dated September 28, 2011 and recorded in said registry of Deeds in Book 12608, Page 105.

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32. Terms and conditions of an easement from Katahdin Paper Company LLC and Katahdin Forest Management LLC to GNP West, Inc. and GNP East, Inc. as described in the Easement Agreement dated September, 2011 and recorded in said Registry of Deeds on September 28, 2011 in Book 12608, Page 81. (East Millinocket Road)

33. Rights and obligations set forth in the License Agreement by and between Katahdin Forest Management, LLC (Licensor) and Katahdin Paper Company, LLC (Licensee) dated February 7, 2011 and recorded in said Registry of Deeds in Book 12404, Page 323; as assigned to GNP West, Inc. and GNP East, Inc. by Katahdin Paper Company LLC, with the consent of Katahdin Forest Management, LLC as set forth in the Assignment dated September 28, 2011 and recorded in said Registry of Deeds in Book 12608, Page 92.

34. Provisions set forth in the Confirmatory Release Deed from Katahdin Forest Management LLC to Katahdin Paper to Katahdin Paper Company LLC dated September 28, 2011 and recorded in said registry of deeds in Book 12608, Page 31.

35. Covenants and agreements described in the deed from Katahdin Paper Company LLC to GNP East, Inc. dated September 16, 2011 and recorded in said Registry of Deeds in Book 12608, Page 59.

36. Terms and provisions set forth in the Agreement Regarding Environmental Matters between State of Maine Department of Environmental Protection and Great Northern Paper Company, LLC dated September 16, 2011 and recorded in said Registry of Deeds in Book 12608, Page 112.

37. Rights of upper and lower riparian owners in and to the waters of the Penobscot River and the natural flow thereof.

EXHIBIT B

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UNITED STATES BANKRUPTCY COURT
DISTRICT OF MAINE

In re:	)	
	)	
GNP MAINE HOLDINGS, LLC, d/b/a GREAT NORTHERN PAPER COMPANY,	)	Chapter 7
	)	Case No. 14-10791 PGC
Debtor,	)	(Jointly Administered)
	)	
In re:	)	
	)	
GNP EAST, INC.,	)	Chapter 7
	)	Case No. 14-10821 PGC
Debtor.	)	

ORDER GRANTING CHAPTER 7 TRUSTEE'S MOTION TO SELL ASSETS OF DEBTORS' ESTATE FREE AND CLEAR OF ALL LIENS, CLAIMS, AND INTERESTS

Upon the Motion filed in these jointly-administered Chapter 7 cases by P.J. Perrino, Jr., Esq., Chapter 7 Trustee (the "Trustee") of the estate of Debtor, GNP Maine Holdings, LLC, d/b/a Great Northern Paper Company ("GNP Holdings") and the estate of Debtor, GNP East, Inc. ("GNP East") (together, "Debtors"), requesting entry of an Order for Authority to Assets of Debtors' Estate Free and Clear of Liens, Claims, and Interests (the "Sale Motion"); and based upon the form of notice of the sale hearing, which sale hearing was held before the Court on September 6, 2017 (the "Sale Hearing"); and due notice of the Sale Motion and relief sought therein and of the Sale Hearing having been given to all parties entitled thereto, as evidenced by the Certificates of Service filed with the Bankruptcy Court; and upon consideration of any objections to the Trustee's Sale Motion, any such objections being overruled for the reasons set forth on the record at the Sale Hearing, and based on the pleadings and arguments of counsel, and good and sufficient cause appearing therefor;

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IT IS HEREBY FOUND AND DETERMINED THAT:

A. The findings and conclusions set forth herein constitute the Bankruptcy Court's findings of fact and conclusions of law pursuant Federal Rule of Civil Procedure 52, made applicable to this proceeding pursuant to Federal Rules of Bankruptcy Procedure 7052 and 9014. To the extent any of the following findings of fact constitute conclusions of law, they are adopted as such. To the extent any of the following conclusions of law constitute findings of fact, they are adopted as such.

B. The Bankruptcy Court has constitutional authority and jurisdiction to hear and determine the Sale Motion pursuant to 28 U.S.C. §§ 1334 and 157. Venue of this case in this district is proper under 28 U.S.C. §§ 1408 and 1409. The statutory and other predicates for the relief sought herein are §§ 105 and 363 of the United States Bankruptcy Code (the "Code"), Federal Rules of Bankruptcy Procedure 2002, 6004, 9013, and 9014, and D. Me. LBR 2002-1, 6004-1, 9013-1, and 9014-1.

C. The Trustee has followed the procedures for giving notice of the Sale Motion and the Sale Hearing in accordance with applicable Rules and law. Proper, timely, and adequate notice of the Sale Motion and the Sale Hearing has been provided in accordance with § 102(1) of the Code and Federal Rules of Bankruptcy Procedure 2002, 6004, and 9014, and no other or further notice of the Sale Motion, the Sale Hearing or the entry of this Sale Order is required.

D. A reasonable opportunity to object or be heard regarding the requested relief has been afforded to all interested persons and entities, and any objections or responses to the Sale Motion being resolved as set forth on the record at the Sale Hearing.

E. The Trustee has demonstrated a sufficient basis and the existence of exigent circumstances requiring him to sell on behalf of the estates the Real Estate (as defined in the

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Motion) under § 363 of the Code, and such actions are appropriate exercises of the Trustee's business judgment. Approval of the Sale Motion and the Agreement entered into by and between the Trustee, on behalf of the estates, to KATAHDIN KI 50 LLC ("Katahdin" or "Buyer"), and the consummation of the transactions contemplated thereby are in the best interests of Debtors' estates.

F. No consents or approvals other than those provided for in the Agreement and the Sale Motion are required for the Trustee to consummate the transactions described in the Agreement.

G. The Trustee has full power and authority to execute the Agreement on behalf of the estates and all other documents contemplated thereby, and the sale of the Real Estate by the Trustee has been duly and validly authorized by the Trustee.

H. Approval of the Agreement and consummation of the sale transactions at issue in the Agreement and the Sale Motion at this time are in the best interests of Debtors' estates and their creditors and other parties-in-interest.

I. The Trustee has demonstrated good and sufficient business justification for the sale of the Real Estate to the Buyer pursuant to § 363(b) of the Code for the reasons set forth in the Sale Motion.

J. Buyer is hereby found to be acting in good faith within the meaning of § 363(m) of the Code in closing the transactions contemplated by the Agreement. The transfer of the Real Estate pursuant to the Agreement (i) are or will be legal, valid and effective transfers of property of Debtors' estates to the Buyer; and (ii) vests or will vest the Buyer with all right, title, and interest of Debtors' and Debtors' estates in and to the Real Estate (as necessary) free and clear of all liens, claims, interests, mortgages, and encumbrances pursuant to § 363(f) of the Code. The

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Bankruptcy Court has jurisdiction to authorize and approve the transfer of all of the Real Estate pursuant to the terms of this Sale Order and the Agreement.

K. The terms and conditions of the Agreement are fair and reasonable.

L. The Agreement was proposed, negotiated, and entered into by the parties without collusion, in good faith, and from arm's length bargaining positions. Neither the Trustee on the one hand, nor the Buyer on the other, have engaged in any conduct that would cause or permit the Agreement to be avoided under § 363(n) of the Bankruptcy Code.

M. The sale must be approved and consummated promptly in order to maximize the value to Debtors' estates and in furtherance of the Trustee's statutory obligations and duties to administer Debtors' estates.

N. The Buyer would not have entered into the Agreement and would not consummate the transactions contemplated thereby, thus adversely affecting the estates and their creditors, if the sale and transfer of the Real Estate to the Buyer were not free and clear of all interests, liens, claims and encumbrances of any kind or nature whatsoever, or if the Buyer would, or in the future could, be liable for any of the interests.

O. The Trustee may sell and transfer the Real Estate free and clear of all interests, liens, claims and encumbrances of any kind or nature because one or more of the standards set forth in 11 U.S.C. § 363(f)(1)-(5) has been satisfied. Those non-debtor parties with liens, claims, or interests in Debtors' Real Estate who did not object to the sale or the Sale Motion are deemed to have consented pursuant to 11 U.S.C. § 363(f)(2), and any and all liens, claims or interests of any and all parties-in-interests in the Real Property shall attach to the proceeds of sale of the Real Property in the same priority, validity, and extent as existed as of the time of the closing of the sale of the Real Property.

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P. The transfers contemplated by the Agreement do not and shall not subject Buyer to any liability for claims against Debtors by reason of such transfers under the laws of the United States, any state, territory or possession thereof.

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Q. The sale of the Real Estate is exempt from any taxes, including, without limitation, any sales, recording, or other transfer taxes or fees otherwise applicable, pursuant to the provisions of the Code.

NOW THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED THAT:

General Provisions

1. The Sale Motion is GRANTED, as further described herein.

2. All objections to the Sale Motion have either been resolved or are overruled.

Approval of the Agreement

3. The Agreement and all of the terms and conditions thereof are hereby approved.

4. The sale to Buyer is approved pursuant to §§ 105 and 363 of the Code, and the Parties are directed and authorized to immediately take such actions as are necessary to consummate and implement the Agreement. The terms and conditions of the Agreement are hereby approved in all respects.

5. Pursuant to § 363(b) of the Code, the Trustee is hereby authorized and empowered to fully perform under, consummate, and implement the Agreement, together with such additional instruments and documents as may be reasonably necessary or desirable to implement the Agreement, and to take all further actions as may reasonably be requested by the Buyer for the purpose of assigning, transferring, granting, conveying and conferring to it, or

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reducing to Buyer's possession the Real Estate, as appropriate, or as may be necessary or appropriate to the performance of the obligations contemplated by the Agreement.

Transfer of Real Estate

6. Pursuant to § 363(f) of the Code, the Real Estate shall be transferred to Buyer and, upon the closing under the Agreement, shall be free and clear of all liens, claims, encumbrances and interests, whether arising prior to or subsequent to the commencement of Debtors' Chapter 7 cases, and whether imposed by agreement, understanding, law, statute, equity or otherwise, with all such liens, claims, encumbrances and interests attaching to the proceeds of sale of the Real Property in the same priority, validity, and extent as existed as of the time of the closing of the sale of the Real Property.

7. All persons or entities holding liens, claims, encumbrances or interests of any kind and nature with respect to the Real Estate are hereby barred from asserting such liens, claims, encumbrances or interests of any kind and nature against Buyer, its successors or assigns, or against the Real Estate.

8. The transfer of the Real Estate to Buyer pursuant to the Agreement shall constitute legal, valid, and effective transfers of the Real Estate (as appropriate), and shall vest Buyer with all right, title, and interest of Debtors and their estates in and to the Real Estate free and clear of all interests, liens, claims and encumbrances of any kind or nature whatsoever.

Additional Provisions

9. On and after the Closing Date, each of Debtors' creditors asserting a lien in any of the Real Estate is authorized and directed to execute such documents and take all other actions as may be necessary to release its liens on or against the Real Estate being transferred pursuant to the Agreement, as such liens may have been recorded or otherwise exist; provided that the failure

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of any such creditors to comply with the provisions of this paragraph shall in no way limit the release, discharge and termination of any such lien against the Real Estate as otherwise provided by this Sale Order.

10. If any person or entity that has filed financing statements, mortgages, mechanic's liens, *lis pendens*, or other documents or agreements evidencing liens and other interests of record against or in the Real Estate shall not have delivered to Buyer prior to the Closing, in proper form for filing and executed by the appropriate parties, termination statements, instruments of satisfactions, releases of all liens and other interests that the person has with respect to the Real Estate, then, subject to the occurrence of the Closing, (a) the parties are hereby authorized to execute and file such statements, instruments, releases and other documents on behalf of such person or entity with respect to the Real Estate; and (b) the parties are hereby authorized to file, register, or otherwise record a certified copy of this Sale Order, which, once filed, registered or otherwise recorded, shall constitute conclusive evidence of the release of all liens and other interests against or in the Real Estate.

11. The provisions of Federal Rules of Bankruptcy Procedure 6004(h) shall not apply to stay consummation of the sale of the Real Property Assets to Buyer, as contemplated in the Sale Motion and approved by this Order, and the Trustee and Buyer are hereby authorized to consummate the transactions contemplated and approved herein immediately upon entry of this Order.

12. As to the Agreement and Real Estate transferred thereby, this Sale Order (a) is and shall be effective as a determination that, on the Closing Date, all liens existing as to the Real Estate prior to the Closing Date have been unconditionally released and discharged; and (b) is and shall be binding upon and govern the acts of all persons or entities including without limitation, all filing agents, filing officers, title agents, title companies, recorders of mortgages, recorders of deeds, taxing authorities, registrars of deeds, registrars of patents, trademarks or

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other intellectual property, administrative agencies, governmental departments, governmental entities, secretaries of state, federal, state, and local officials, and all other persons or entities who may be required by operation of law or contract, to accept, file, register or otherwise record or release any documents or instruments.

13. The Bankruptcy Court retains jurisdiction to (i) enforce and implement the terms and provisions of the Agreement, all amendments thereto, any waivers and consents thereunder, and of each of the agreements executed in connection therewith; (ii) compel delivery of the Real Estate to Buyer; (iii) compel specific performance of the Parties' obligations; (iv) resolve any disputes arising under or related to the Agreement; (v) interpret, implement and enforce the provisions of this Sale Order; and (vi) determine any disputes relating to or concerning the receipt, use, application or retention of the proceeds from the sale of the Real Estate.

14. To the extent that any provision of this Sale Order is inconsistent with the provisions of the Agreement, any prior order, or any pleading with respect to the motions in this case, the terms of this Sale Order control.

15. Buyer is deemed a buyer in good faith of the Real Estate and thus entitled to all of the protections afforded by § 363(m) of the Code.

16. The terms and provisions of the Agreement, together with the terms and provisions of this Sale Order, shall be binding in all respects upon, and shall inure to the benefit of, the Trustee, Debtors' estates, and Debtors' creditors, Buyer and its affiliates, successors and assigns, and any affected third parties and persons or entities asserting a claim against or interest in or lien on Debtors' estates or any of the Real Estate.

17. The Agreement and any related agreements, documents or other instruments may be modified, amended or supplemented by the Parties thereto in accordance with the terms

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thereof without further order of the Bankruptcy Court, provided that any such modification, amendment or supplement is not material.

18. The failure specifically to include any particular provision of the Agreement in this Sale Order shall not diminish or impair the efficacy of such provision.

19. The Parties (or all or some of them, as the case may be) are hereby authorized and directed to take all actions reasonable and necessary to effectuate the terms of the Agreement and the transactions contemplated thereunder and the provisions of this Sale Order, all without the necessity of any further order of the Bankruptcy Court, including but not limited to the Trustee's granting and transferring of any easement(s) to the State, as necessary, to facilitate the sale and transfer of the Real Estate to Buyer.

20. At Closing, the Trustee is directed to and shall sign and execute a Trustee's Quitclaim Deed for the transfer, sale, and conveyance of the Real Estate.

21. The Agreement (as defined in the Sale Motion) and all of the terms and conditions thereof are hereby approved.

22. Notwithstanding the foregoing, nothing in this Sale Order is intended to or shall release, nullify, preclude, enjoin, or prohibit the assertion of any police or regulatory powers by a government unit, or the enforcement of any police or regulatory liability to a government unit, including, without limitation, those police or regulatory powers or liabilities arising under any Federal, State, or municipal laws or ordinances. The State of Maine and/or any such other governmental units, as appropriate, shall be allowed to take administrative actions or file lawsuits in State or Federal Court, as appropriate, against all person or entities that have been, are currently, or are discovered in the future, to be in violation of any Federal, State, or municipal laws or ordinances. The State and/or any other governmental units, as appropriate

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shall be deemed to be allowed: (1) to take any enforcement action as needed; and (2) pursue the individuals or entities who own, control, have owned, or have controlled, the Real Estate being transfer pursuant to the Agreement and the transactions contemplated thereunder and the provisions of this Sale Order.

Dated: September 6, 2017.

/s/ Peter G. Cary
Peter G. Cary, Chief Judge
United States Bankruptcy Court

No Transfer Tax Paid

Susan F. Bulay, Register
Penobscot County, Maine

APPENDIX C

EDR Radius Map with GeoCheck® &
EDR City Directory Abstract

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430

Inquiry Number: 5634384.2s
April 29, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

50 MAIN STREET
EAST MILLINOCKET, ME 04430

COORDINATES

Latitude (North):	45.6251190 - 45° 37' 30.42''
Longitude (West):	68.5742230 - 68° 34' 27.20''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	533191.8
UTM Y (Meters):	5052267.5
Elevation:	348 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6700796 EAST MILLINOCKET, ME
Version Date:	2014
South Map:	6700814 MEDUNKEUNK LAKE, ME
Version Date:	2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150716
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
50 MAIN STREET
EAST MILLINOCKET, ME 04430

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	GREAT NORTHERN PAPER	50 MAIN ST	ME UST		TP
A2	ACM NARM MAINE LLC	50 MAIN ST	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-LQG, PRP,...		TP
A3	EAST MILLINOCKET HYD	50 MAIN STREET	FINDS, ECHO		TP
A4	KATAHDIN PAPER CO LL	50 MAIN ST.	ME SPILLS		TP
A5	E MILLINOCKET HYDRO	50 MAIN ST	ME NPDES		TP
A6	EAST MILLINOCKET	50 MAIN ST	FINDS, ECHO		TP
A7	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST	ME RGA LUST		TP
A8	GREAT NORTHERN PAPER	50 MAIN STREET	ICIS, FINDS, ECHO		TP
A9	GREAT NORTHERN PAPER	50 MAIN STREET	ME SHWS, ME LAST, ME VCP, ME ALLSITES, ME SPILLS,...		TP
A10		50 MAIN ST	ME RGA LF		TP
A11	EAST MILLINOCKET	50 MAIN ST	ME NPDES		TP
A12	ACM NARM MAINE LLC	50 MAIN STREET	ME MANIFEST		TP
A13	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST	ME LUST		TP
A14	BROOKFIELD FACILITY	50 MAIN ST	RCRA-CESQG		TP
A15		50 MAIN ST.	ERNS		TP
A16	BROOKFIELD FACILITY	50 MAIN ST	RCRA-CESQG		TP
A17	KATAHDIN PAPER COMPA	50 MAIN STREET	ME AST, ME TIER 2		TP
A18	KATAHDIN PAPER	50 MAIN ST TRANSFORM	ME SPILLS		TP
A19	GREAT NORTHERN PAPER	50 MAIN ST	NY MANIFEST		TP
A20		50 MAIN STREET	ERNS		TP
A21		50 MAIN STREET	ERNS		TP
B22	E MILLINOCKET EXXON	MAIN ST	ME LUST	Lower	1 ft.
B23	DEAD RIVER COMPANY	MAIN ST	ME LUST	Lower	1 ft.
A24	OAK PARK MANOR	RT 157	ME UST	Lower	1 ft.
A25	PARK MANOR APARTMENT	3 MAPLE ST	ME UST	Lower	1 ft.
A26	BOWATER GREAT NORTHE	ROUTE 157 (MAIN STRE	ME LAST	Higher	14, 0.003, NNE
A27	GREAT NORTHERN PAPER	MAIN STREET	ME AST, MLTS	Higher	14, 0.003, NNE
A28	GREAT NORTHERN PAPER	MAIN STREET	ME SHWS, ME ALLSITES	Higher	14, 0.003, NNE
B29	DEAD RIVER COMPANY	64 MAIN STREET	ME LUST	Lower	22, 0.004, WNW
B30	DEAD RIVER OIL CO	64 MAIN ST	ME LUST, ME UST	Lower	22, 0.004, WNW
B31	DEAD RIVER CO 7051	64 MAIN ST	EDR Hist Auto	Lower	22, 0.004, WNW
A32	HAFFORD RESIDENCE	2 SPRUCE ST	ME LAST	Higher	30, 0.006, East
C33	HOLLIS CAR CARE	36 MAIN ST	ME UST	Higher	51, 0.010, East
A34	EAST MILLINOCKET - M	53 MAIN ST	ME LUST	Higher	52, 0.010, NW
B35	US POST OFFICE	MAIN & CEDAR	ME UST	Lower	57, 0.011, WNW
A36	TOWN GARAGE	MAIN ST	ME UST	Lower	67, 0.013, WNW
A37	MUNICIPAL BUILDING	MAIN ST	ME UST	Lower	67, 0.013, WNW
B38			ME LUST	Lower	69, 0.013, WNW
B39	DAVE'S AUTO REPAIR	MAIN ST	ME LUST	Lower	69, 0.013, WNW

MAPPED SITES SUMMARY

Target Property Address:
50 MAIN STREET
EAST MILLINOCKET, ME 04430

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
D40	POLICE & FIRE STATIO	MAIN ST	ME UST	Lower	92, 0.017, WNW
B41	KATAHDIN CHRISTIAN A	6 BEECH ST	ME UST	Lower	103, 0.020, WNW
B42	SCHOOL UNION 113 - O	6 1/2 BEECH STREET	ME LUST, ME TIER 2	Lower	107, 0.020, WNW
E43	BROOKFIELD - EAST MI	ROUTE 157	ME AST	Lower	133, 0.025, SSW
E44	BRP - EAST MILLINOCK	ROUTE 157	ME AST	Lower	133, 0.025, SSW
E45	BROOKFIELD POWER EAS	ROUTE 157	ME AST	Lower	134, 0.025, SSW
E46	BROOKFIELD RENEWABLE	ROUTE 157	ME AST	Lower	134, 0.025, SSW
E47	BROOKFIELD RENEWABLE	ROUTE 157	ME AST, ME TIER 2	Lower	137, 0.026, SSW
D48	RALPH SPRAGUE RESIDE	1 CONE ST	ME LAST	Lower	150, 0.028, WNW
D49	FRIEL JOHN G E	75-81 MAIN ST	EDR Hist Auto	Lower	160, 0.030, WNW
C50	AMBROSE RESIDENCE	1 ELM ST	ME LAST	Higher	177, 0.034, East
B51			ME LUST	Lower	178, 0.034, WNW
F52	DEAD RIVER COMPANY -	80 MAIN STREET	ME AST	Lower	227, 0.043, WNW
F53	DAVES AUTO REPAIR	79 MAIN ST	ME UST	Lower	259, 0.049, WNW
F54	KEN S AUTO RPR	79 MAIN ST	EDR Hist Auto	Lower	259, 0.049, WNW
F55	FRIEL JOHN G E	81-99 MAIN ST	EDR Hist Auto	Lower	266, 0.050, WNW
G56	MAINE PROPERTY MANAG	17 MAIN STREET	ME LAST	Higher	293, 0.055, ESE
B57	FAIRPOINT COMMUNICAT	8 BIRCH ST	ME UST	Lower	342, 0.065, NW
F58			ME LUST	Lower	363, 0.069, WNW
G59	ROY EPSTEIN RESIDENC	12 MAIN AVE	ME LAST	Higher	377, 0.071, ESE
60	FRIEL JOHN G E	99 MAIN ST	EDR Hist Auto	Lower	414, 0.078, WNW
G61	LAWRENCE BOSS	9 MAINE STREET	ME LAST	Higher	424, 0.080, ESE
H62	CAROLYN STEFENS	24 PARK STREET	ME LAST	Higher	425, 0.080, NNW
B63	JACK WAITE RESIDENCE	40 PARK STREET	ME LAST	Higher	428, 0.081, NW
I64	STANLEY PROPERTY	57 PARK STREET	ME LAST	Higher	467, 0.088, NW
J65	LOUNSBURY'S FOOD CEN	6 MAIN STREET	RCRA NonGen / NLR	Higher	535, 0.101, ESE
66	EAST MILLINOCKET BAR	ROUTE 11/ROUTE 157	ME INST CONTROL, ME VCP, ME ALLSITES	Lower	543, 0.103, West
K67	EAST MILLINOCKET TRE		ME UST	Lower	590, 0.112, SE
K68	E MILLINOCKET WAST T	TREATMENT PLANT RD	ME UST	Lower	590, 0.112, SE
J69	HELEN FEDERICO APTS	3 1/2 MAIN ST	ME LAST	Higher	606, 0.115, ESE
70	EMERY LEE & SONS INC	RT 157	ME UST	Higher	636, 0.120, WNW
L71	SARA MANSO RESIDENCE	25 A ELMS STREET	ME LAST	Higher	723, 0.137, ENE
I72	JOHN FRIEL'S GARAGE	32 WESTERN AVENUE	ME LAST, ME SPILLS	Higher	772, 0.146, NW
H73	EAST MILLINOCKET MUN	BEECH & BIRCH STS	ME UST	Higher	773, 0.146, North
H74	EAST MILLINOCKET PUB	BIRCH ST	ME UST	Higher	773, 0.146, North
K75	TOWN OF EAST MILLINO	WASTEWATER TREATMENT	ME LUST	Lower	787, 0.149, SE
L76	TOWN GARAGE	1 CHURCH ST	ME UST	Higher	798, 0.151, ENE
L77	EAST MILLINOCKET - P	1 CHURCH ST	ME LUST	Higher	798, 0.151, ENE
M78	CARRIE JO BISHOP	3 UNION STREET	ME LAST	Higher	831, 0.157, East

MAPPED SITES SUMMARY

Target Property Address:
50 MAIN STREET
EAST MILLINOCKET, ME 04430

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
I79	EAST MILLINOCKET TRA	44 CHURCH STREET	ME SWRCY	Higher	839, 0.159, NNW
N80	FIRST CONG UNT CHURC	MAPLE ST	ME UST	Higher	887, 0.168, North
M81	JOSH SAVAGE	16 UNION STREET	ME LAST	Higher	903, 0.171, East
M82	FRANCES CLUKEY	20 UNION STREET	ME LAST	Higher	931, 0.176, East
N83	OSNOE RESIDENCE	38 BEECH ST	ME LAST	Higher	1022, 0.194, North
84	DAVE DUPREY RESIDENC	19 HEMLOCK STREET	ME LAST	Higher	1144, 0.217, NW
85	CHURCH PARSONAGE	39 PINE ST	ME LAST	Higher	1151, 0.218, NNE
M86	RONALD CHASSE	18 SPRING STREET	ME LAST	Higher	1212, 0.230, East
O87	EAST MILLINOCKET MUN	CHURCH ST.	ME LCP, ME INST CONTROL, ME ALLSITES, ME DEL SHWS	Higher	1302, 0.247, NW
O88	EAST MILLINOCKET LAN	RTE 11	ME SWF/LF	Higher	1332, 0.252, NW
89	MACLEOD RESIDENCE	54 ELM ST.	ME LAST	Higher	1546, 0.293, NE
90	ERICA LAKEMAN	7 HEMLOCK STREET	ME LAST	Higher	1619, 0.307, NW
91	CRYSTAL BROWN	2 HIGH STREET	ME LAST	Higher	2108, 0.399, ENE
92	WAH COLE	6 NORTH STREET	ME LAST	Higher	2559, 0.485, NE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
GREAT NORTHERN PAPER 50 MAIN ST EAST MILLINOCKET, ME	ME UST Tank Status: ABANDONED_IN_PLACE Tank Status: ACTIVE Tank Status: PLANNED Pipe Status: ABANDONED_IN_PLACE Pipe Status: ACTIVE Pipe Status: PLANNED Facility Id: 13518 Facility Id: 16697	N/A
ACM NARM MAINE LLC 50 MAIN ST EAST MILLINOCKET, ME 04430	SEMS-ARCHIVE Site ID: 0102072 EPA Id: MED001098011 CORRACTS EPA ID:: MED001098011 RCRA-TSDF EPA ID:: MED001098011 RCRA-LQG EPA ID:: MED001098011 PRP PADS EPAID:: MED001098011	MED001098011
EAST MILLINOCKET HYD 50 MAIN STREET MILLINOCKET, ME 04462	FINDS Registry ID:: 110016695940 ECHO Registry ID: 110016695940	N/A
KATAHDIN PAPER CO LL 50 MAIN ST. EAST MILLINOCKET, ME	ME SPILLS Spill Number: B-56-2011	N/A
E MILLINOCKET HYDRO 50 MAIN ST EAST MILLINOCKET, ME	ME NPDES Npdes License: ME0036511	N/A
EAST MILLINOCKET 50 MAIN ST EAST MILLINOCKET, ME 04430	FINDS Registry ID:: 110067239063 ECHO	N/A

EXECUTIVE SUMMARY

	Registry ID: 110067239063	
GREAT NORTHERN PAPER RT 157 - 50 MAIN ST EAST MILLINOCKET, ME	ME RGA LUST	N/A
GREAT NORTHERN PAPER 50 MAIN STREET EAST MILLINOCKET, ME 04430	ICIS FRS ID:: 110000581451 FINDS Registry ID:: 110000581451 ECHO Registry ID: 110000581451	N/A
GREAT NORTHERN PAPER 50 MAIN STREET EAST MILLINOCKET, ME	ME SHWS Facility Id: REM02048 : INVESTIGATION STAGE ME LAST Spill Number: B-35-2013 Spill Number: B-104-2008 Spill Number: B-291-2009 Spill Number: B-493-2007 Spill Number: B-656-2010 ME VCP Facility Status: INVESTIGATION STAGE Facility Id: REM02048 ME ALLSITES Status: INVESTIGATION STAGE Facility ID: REM02048 ME SPILLS Spill Number: B-252-2008 Spill Number: B-173-2009 Spill Number: B-663-2009 Spill Number: B-462-2003 Spill Number: B-77-2005 ME AIRS Facility Id: 00058 Facility Id: 2301900058 ME TIER 2 Facility Id: FATR20135MR1ES0028BW Facility Id: FATR20115MR1ES0028BW Facility Id: FATR20125MR1ES0028BW	N/A
50 MAIN ST 50 MAIN ST EAST MILLINOCKET, ME	ME RGA LF	N/A
EAST MILLINOCKET 50 MAIN ST EAST MILLINOCKET, ME	ME NPDES	N/A

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Npdes License: ME0102881

ACM NARM MAINE LLC 50 MAIN STREET EAST MILLINOCKET, ME 04430	ME MANIFEST	N/A
GREAT NORTHERN PAPER RT 157 - 50 MAIN ST EAST MILLINOCKET, ME	ME LUST Spill Value: Oil Incident Spill Number: B-483-2003	N/A
BROOKFIELD FACILITY 50 MAIN ST EAST MILLINOCKET, ME 04462	RCRA-CESQG EPA ID:: MEX020012031	MEX020012031
50 MAIN ST. 50 MAIN ST. EAST MILLINOCKET, ME	ERNS NRC Report #: 700621	N/A
BROOKFIELD FACILITY 50 MAIN ST EAST MILLINOCKET, ME 04462	RCRA-CESQG EPA ID:: MEX020012036	MEX020012036
KATAHDIN PAPER COMPA 50 MAIN STREET EAST MILLINOCKET, ME	ME AST Database: AST 2, Date of Government Version: 01/02/2019 Database: AST, Date of Government Version: 12/31/2017 Piping Status: PLANNED Tank Status: PLANNED Facility Id: FATR20105MR1ES0028BW Facility Id: FATR20095MR1ES0028BW Facility Id: FATR20085MR1ES0028BW Facility Id: FATR20115MR1ES0028BW Facility Id: FATR20135MR1ES0028BW Registration Number: 16697 ME TIER 2 Facility Id: FATR20052V2HCX002TNV Facility Id: FATR20062V2HCX002TNV Facility Id: FATR20095MR1ES0028BW Facility Id: FATR20105MR1ES0028BW Facility Id: FATR20075MR1ES0028BW **Additional key fields are available in the Map Findings section*	N/A
KATAHDIN PAPER 50 MAIN ST TRANSFORM EAST MILLINOCKET, ME	ME SPILLS Spill Number: B-187-2008	N/A
GREAT NORTHERN PAPER 50 MAIN ST EAST MILLINOCKET, ME 04430	NY MANIFEST	N/A

EXECUTIVE SUMMARY

EPA ID: MED001098011

50 MAIN STREET 50 MAIN STREET EAST MILLINOCKET, ME	ERNS NRC Report #: 393656	N/A
50 MAIN STREET 50 MAIN STREET EAST MILLINOCKET, ME 04462	ERNS NRC Report #: 966257	N/A

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal RCRA generators list

RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

FEMA UST ---- Underground Storage Tank Listing
INDIAN UST ---- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ---- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

ME BROWNFIELDS ---- Remediation Sites List

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ---- Report on the Status of Open Dumps on Indian Lands
ODI ---- Open Dump Inventory
DEBRIS REGION 9 ---- Torres Martinez Reservation Illegal Dump Site Locations
IHS OPEN DUMPS ---- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---- Delisted National Clandestine Laboratory Register
US CDL ---- National Clandestine Laboratory Register
ME PFAS ---- PFAS Contamination Site Location Listing

Local Land Records

ME LIENS ---- Environmental Liens Information Listing
LIENS 2 ---- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
ME SPILLS 90 ---- SPILLS 90 data from FirstSearch
ME SPILLS 80 ---- SPILLS 80 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System

EXECUTIVE SUMMARY

SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
FUELS PROGRAM	EPA Fuels Program Registered Listing
ME DRYCLEANERS	Drycleaner Facilities
ME UIC	Underground Injection Control

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

ME RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

ME SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Protection's Uncontrolled Hazardous Substance Sites Program List of Investigations.

A review of the ME SHWS list, as provided by EDR, and dated 01/14/2019 has revealed that there is 1 ME SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREAT NORTHERN PAPER Facility Id: REM00517 : INVESTIGATION STAGE	***MAIN STREET***	***NNE 0 - 1/8 (0.003 mi.)***	***A28***	***157***

State and tribal landfill and/or solid waste disposal site lists

ME SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the Department of Environmental Protection's Solid Waste Facility List.

A review of the ME SWF/LF list, as provided by EDR, and dated 02/04/2019 has revealed that there is 1 ME SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET LAN	RTE 11	NW 1/4 - 1/2 (0.252 mi.)	O88	272

ME LCP: The Municipal Landfill Closure and Remediation Program was established in 1988 to assist nearly 400 municipalities with the closure of their unlicensed municipal solid waste landfills. Project managers in this program have conducted site investigations and provided technical engineering assistance to aid municipalities in this process. Funding to accomplish this goal was provided by the state utilizing several bonds that supported a 75% state cost sharing reimbursement process.

A review of the ME LCP list, as provided by EDR, and dated 11/14/2011 has revealed that there is 1 ME LCP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET MUN Facility Status: C-94 File #: 5118	***CHURCH ST.***	***NW 1/8 - 1/4 (0.247 mi.)***	***O87***	***271***

State and tribal leaking storage tank lists

ME LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Protection's Hazardous Material and Oil Spill System Database (H.O.S.S.).

A review of the ME LUST list, as provided by EDR, and dated 01/26/2019 has revealed that there are 12 ME LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET - M Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-616-2006	53 MAIN ST	NW 0 - 1/8 (0.010 mi.)	A34	171
EAST MILLINOCKET - P Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-615-2006	1 CHURCH ST	ENE 1/8 - 1/4 (0.151 mi.)	L77	251

Lower Elevation	Address	Direction / Distance	Map ID	Page
E MILLINOCKET EXXON Spill Value: Oil Incident Spill Number: B-652-1997	MAIN ST	0 - 1/8 (0.000 mi.)	B22	141
DEAD RIVER COMPANY Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-420-1998	MAIN ST	0 - 1/8 (0.000 mi.)	B23	143
DEAD RIVER COMPANY Spill Value: Oil Incident Spill Number: B-553-2014	64 MAIN STREET	WNW 0 - 1/8 (0.004 mi.)	B29	157
DEAD RIVER OIL CO Spill Value: Oil Incident Spill Number: B-402-2006	***64 MAIN ST***	***WNW 0 - 1/8 (0.004 mi.)***	***B30***	***160***
Not reported Spill Value: Oil Incident Spill Number: B-38-1987		WNW 0 - 1/8 (0.013 mi.)	B38	177
DAVE'S AUTO REPAIR Spill Value: Oil Incident Spill Number: B-64-1994	MAIN ST	WNW 0 - 1/8 (0.013 mi.)	B39	179
SCHOOL UNION 113 - O Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-612-2006	***6 1/2 BEECH STREET***	***WNW 0 - 1/8 (0.020 mi.)***	***B42***	***191***
Not reported Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-396-1989		WNW 0 - 1/8 (0.034 mi.)	B51	205
Not reported Spill Value: Oil Incident Spill Number: B-548-1989		WNW 0 - 1/8 (0.069 mi.)	F58	214
TOWN OF EAST MILLINO Spill Value: Non-Oil, Non-Hazardous Incident Spill Number: B-321-2000	WASTEWATER TREATMENT	SE 1/8 - 1/4 (0.149 mi.)	K75	245

ME LAST: A listing of leaking aboveground storage tanks.

A review of the ME LAST list, as provided by EDR, and dated 01/26/2019 has revealed that there are 24 ME LAST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BOWATER GREAT NORTHE Spill Number: B-718-1998	ROUTE 157 (MAIN STRE	NNE 0 - 1/8 (0.003 mi.)	A26	151
HAFFORD RESIDENCE Spill Number: B-99-1998	2 SPRUCE ST	E 0 - 1/8 (0.006 mi.)	A32	164
AMBROSE RESIDENCE Spill Number: B-195-1983	1 ELM ST	E 0 - 1/8 (0.034 mi.)	C50	203
MAINE PROPERTY MANAG Spill Number: B-283-2012	17 MAIN STREET	ESE 0 - 1/8 (0.055 mi.)	G56	211
ROY EPSTEIN RESIDENC Spill Number: B-373-2010	12 MAIN AVE	ESE 0 - 1/8 (0.071 mi.)	G59	216
LAWRENCE BOSS Spill Number: B-830-2015	9 MAINE STREET	ESE 0 - 1/8 (0.080 mi.)	G61	219
CAROLYN STEFENS Spill Number: B-408-2012	24 PARK STREET	NNW 0 - 1/8 (0.080 mi.)	H62	221
JACK WAITE RESIDENCE Spill Number: B-143-2008	40 PARK STREET	NW 0 - 1/8 (0.081 mi.)	B63	223
STANLEY PROPERTY Spill Number: B-615-2010	57 PARK STREET	NW 0 - 1/8 (0.088 mi.)	I64	225
HELEN FEDERICO APTS Spill Number: B-258-2001	3 1/2 MAIN ST	ESE 0 - 1/8 (0.115 mi.)	J69	232
SARA MANSO RESIDENCE Spill Number: B-621-2010	25 A ELMS STREET	ENE 1/8 - 1/4 (0.137 mi.)	L71	236
JOHN FRIEL'S GARAGE Spill Number: B-570-2009	***32 WESTERN AVENUE***	***NW 1/8 - 1/4 (0.146 mi.)***	***I72***	***238***
CARRIE JO BISHOP Spill Number: B-630-2012	3 UNION STREET	E 1/8 - 1/4 (0.157 mi.)	M78	254
JOSH SAVAGE Spill Number: B-605-2013	16 UNION STREET	E 1/8 - 1/4 (0.171 mi.)	M81	258
FRANCES CLUKEY Spill Number: B-339-2017	20 UNION STREET	E 1/8 - 1/4 (0.176 mi.)	M82	260
OSNOE RESIDENCE Spill Number: B-91-2001	38 BEECH ST	N 1/8 - 1/4 (0.194 mi.)	N83	262
DAVE DUPREY RESIDENC Spill Number: B-717-2008	19 HEMLOCK STREET	NW 1/8 - 1/4 (0.217 mi.)	84	264
CHURCH PARSONAGE Spill Number: B-591-2002	39 PINE ST	NNE 1/8 - 1/4 (0.218 mi.)	85	266
RONALD CHASSE Spill Number: B-748-2015	18 SPRING STREET	E 1/8 - 1/4 (0.230 mi.)	M86	269
MACLEOD RESIDENCE Spill Number: B-174-2000	54 ELM ST.	NE 1/4 - 1/2 (0.293 mi.)	89	273
ERICA LAKEMAN Spill Number: B-229-2011	7 HEMLOCK STREET	NW 1/4 - 1/2 (0.307 mi.)	90	275
CRYSTAL BROWN	2 HIGH STREET	ENE 1/4 - 1/2 (0.399 mi.)	91	277

Spill Number: B-409-2012				
WAH COLE Spill Number: B-768-2016	6 NORTH STREET	NE 1/4 - 1/2 (0.485 mi.)	92	279

Lower Elevation	Address	Direction / Distance	Map ID	Page
RALPH SPRAGUE RESIDE Spill Number: B-553-2009	1 CONE ST	WNW 0 - 1/8 (0.028 mi.)	D48	201

State and tribal registered storage tank lists

ME UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Protection's Underground Storage Tank Database.

A review of the ME UST list, as provided by EDR, and dated 02/04/2019 has revealed that there are 18 ME UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HOLLIS CAR CARE Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 3029	36 MAIN ST	E 0 - 1/8 (0.010 mi.)	C33	166
EMERY LEE & SONS INC Tank Status: ACTIVE Pipe Status: ACTIVE Facility Id: 19163	RT 157	WNW 0 - 1/8 (0.120 mi.)	70	234
EAST MILLINOCKET MUN Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 15857	BEECH & BIRCH STS	N 1/8 - 1/4 (0.146 mi.)	H73	243
EAST MILLINOCKET PUB Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 438	BIRCH ST	N 1/8 - 1/4 (0.146 mi.)	H74	244
TOWN GARAGE Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 1309	1 CHURCH ST	ENE 1/8 - 1/4 (0.151 mi.)	L76	247
FIRST CONG UNT CHURC Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 17119	MAPLE ST	N 1/8 - 1/4 (0.168 mi.)	N80	257

Lower Elevation	Address	Direction / Distance	Map ID	Page
OAK PARK MANOR Tank Status: REMOVED Tank Status: ACTIVE	RT 157	0 - 1/8 (0.000 mi.)	A24	145

Pipe Status: REMOVED Pipe Status: ACTIVE Facility Id: 11114				
PARK MANOR APARTMENT Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 9949	3 MAPLE ST	0 - 1/8 (0.000 mi.)	A25	150
DEAD RIVER OIL CO Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 13355	***64 MAIN ST***	***WNW 0 - 1/8 (0.004 mi.)***	***B30***	***160***
US POST OFFICE Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 6188	MAIN & CEDAR	WNW 0 - 1/8 (0.011 mi.)	B35	173
TOWN GARAGE Tank Status: COMBINED_FILE Pipe Status: COMBINED_FILE Facility Id: 12863	MAIN ST	WNW 0 - 1/8 (0.013 mi.)	A36	174
MUNICIPAL BUILDING Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 12861	MAIN ST	WNW 0 - 1/8 (0.013 mi.)	A37	176
POLICE & FIRE STATIO Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 12862	MAIN ST	WNW 0 - 1/8 (0.017 mi.)	D40	188
KATAHDIN CHRISTIAN A Tank Status: REMOVED Tank Status: ACTIVE Pipe Status: REMOVED Pipe Status: ACTIVE Facility Id: 5124	6 BEECH ST	WNW 0 - 1/8 (0.020 mi.)	B41	189
DAVES AUTO REPAIR Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 12869	79 MAIN ST	WNW 0 - 1/8 (0.049 mi.)	F53	208
FAIRPOINT COMMUNICAT Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 8388	8 BIRCH ST	NW 0 - 1/8 (0.065 mi.)	B57	213
EAST MILLINOCKET TRE Tank Status: REMOVED Pipe Status: REMOVED Facility Id: 12859		SE 0 - 1/8 (0.112 mi.)	K67	229
E MILLINOCKET WAST T Tank Status: ABANDONED_IN_PLACE Pipe Status: ABANDONED_IN_PLACE Facility Id: 13057	TREATMENT PLANT RD	SE 0 - 1/8 (0.112 mi.)	K68	231

ME AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Protection's Aboveground Storage Tank Database.

A review of the ME AST list, as provided by EDR, has revealed that there are 7 ME AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREAT NORTHERN PAPER	***MAIN STREET***	***NNE 0 - 1/8 (0.003 mi.)***	***A27***	***154***
Database: AST, Date of Government Version: 12/31/2017 Facility Status: OUTSIDE Facility Status: INSIDE				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BROOKFIELD - EAST MI	ROUTE 157	SSW 0 - 1/8 (0.025 mi.)	E43	195
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR20166TM5WS002YMG Facility Id: FATR20176TM5WS002YMG Facility Id: FATR20156TM5WS002YMG				
BRP - EAST MILLINOCK	ROUTE 157	SSW 0 - 1/8 (0.025 mi.)	E44	196
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR20146TM5WS002YMG				
BROOKFIELD POWER EAS	ROUTE 157	SSW 0 - 1/8 (0.025 mi.)	E45	196
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR20106TM5WS002YMG				
BROOKFIELD RENEWABLE	ROUTE 157	SSW 0 - 1/8 (0.025 mi.)	E46	197
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR20136TM5WS002YMG				
BROOKFIELD RENEWABLE	***ROUTE 157***	***SSW 0 - 1/8 (0.026 mi.)***	***E47***	***197***
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR20116TPE5800AZUM Facility Id: FATR20116TM5WS002YMG Facility Id: FATR20126TPE5800AZUM Facility Id: FATR20126TM5WS002YMG Facility Id: FATR20096TM5WS002YMG				
DEAD RIVER COMPANY -	80 MAIN STREET	WNW 0 - 1/8 (0.043 mi.)	F52	207
Database: AST, Date of Government Version: 12/31/2017 Facility Id: FATR2015B64NNW02GH8L				

State and tribal institutional control / engineering control registries

ME INST CONTROL: Sites with Land Use Restrictions in place.

A review of the ME INST CONTROL list, as provided by EDR, and dated 04/16/2018 has revealed that there are 2 ME INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET MUN	***CHURCH ST.***	***NW 1/8 - 1/4 (0.247 mi.)***	***O87***	***271***
Facility Status: REMEDY IN PLACE: CLOSED Facility Id: REM00108				

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET BAR	***ROUTE 11/ROUTE 157***	***W 0 - 1/8 (0.103 mi.)***	***66***	***229***

Facility Status: REMEDY IN PLACE: CLOSED
Facility Id: REM01575

State and tribal voluntary cleanup sites

ME VCP: A list of sites where the necessary investigation and/or remedation activities have been completed to the Department's satisfaction and the applicants to the VRAP have been issued final certification documents. The list does not include those sites that are currently participating in the VRAP but have not yet received certification.

A review of the ME VCP list, as provided by EDR, and dated 01/14/2019 has revealed that there is 1 ME VCP site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET BAR	***ROUTE 11/ROUTE 157***	***W 0 - 1/8 (0.103 mi.)***	***66***	***229***
Facility Status: REMEDY IN PLACE: CLOSED Facility Id: REM01575				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

A listing of municial colletcion sites for electronic waste and mercury-added products.

A review of the ME SWRCY list, as provided by EDR, and dated 12/13/2011 has revealed that there is 1 ME SWRCY site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET TRA	44 CHURCH STREET	NNW 1/8 - 1/4 (0.159 mi.)	I79	256

Local Lists of Hazardous waste / Contaminated Sites

ME ALLSITES: The Sites List Database is the public record of information regarding properties that have been, are now, or are planned to be addressed by the Division of Remediation of the Bureau of Remediation and Waste Management. This database is not intended to be a comprehensive, all-inclusive source of information regarding the properties listed therein.

A review of the ME ALLSITES list, as provided by EDR, and dated 01/14/2019 has revealed that there are 3 ME ALLSITES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
GREAT NORTHERN PAPER Status: INVESTIGATION STAGE Facility ID: REM00517	***MAIN STREET***	***NNE 0 - 1/8 (0.003 mi.)***	***A28***	***157***
EAST MILLINOCKET MUN	***CHURCH ST.***	***NW 1/8 - 1/4 (0.247 mi.)***	***O87***	***271***

Status: REMEDY IN PLACE: CLOSED
Facility ID: REM00108

Lower Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET BAR	***ROUTE 11/ROUTE 157***	***W 0 - 1/8 (0.103 mi.)***	***66***	***229***
Status: REMEDY IN PLACE: CLOSED Facility ID: REM01575				

ME DEL SHWS: Sites are removed from the List once it is determined that they are not "worthy of listing". This term is used as there are a number of reasons to remove a site from the List, including: no file exists, the site was reported as an oil spill, there is no evidence of a hazardous substance release or based on an investigation the site is referred to another program unrelated to hazardous substance or hazardous waste. Sites are removed on a case by case basis. The USP intends this to be an on-going process, as time and resources allow.

A review of the ME DEL SHWS list, as provided by EDR, and dated 01/14/2019 has revealed that there is 1 ME DEL SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
EAST MILLINOCKET MUN	***CHURCH ST.***	***NW 1/8 - 1/4 (0.247 mi.)***	***O87***	***271***
Facility Id: REM00108 Facility Status: Operation and Maintenance				

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LOUNSBURY'S FOOD CEN EPA ID:: MER000505677	6 MAIN STREET	ESE 0 - 1/8 (0.101 mi.)	J65	227

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR

researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 5 EDR Hist Auto sites within approximately 0.125 miles of the target property.

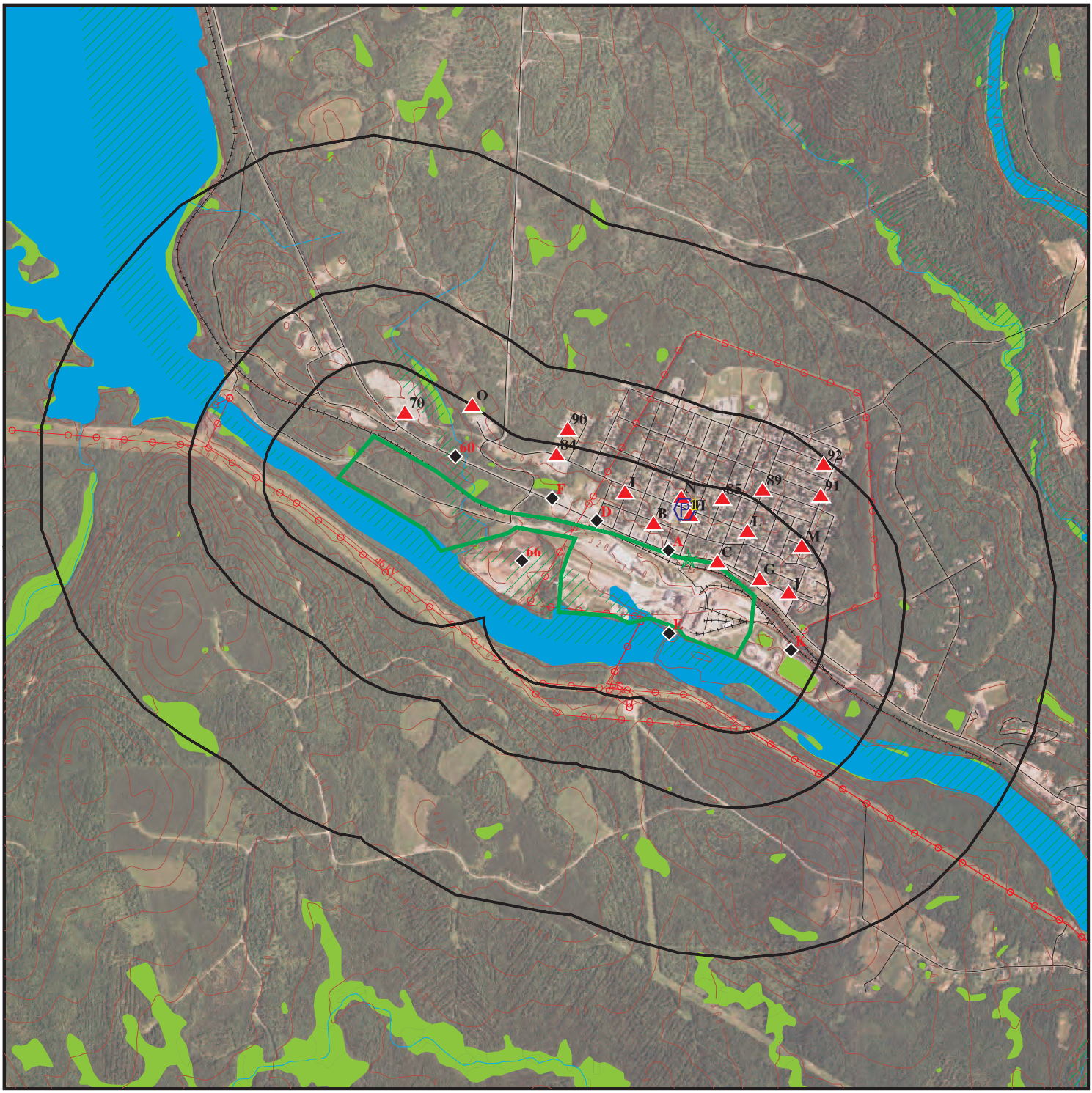
Lower Elevation	Address	Direction / Distance	Map ID	Page
DEAD RIVER CO 7051	64 MAIN ST	WNW 0 - 1/8 (0.004 mi.)	B31	164
FRIEL JOHN G E	75-81 MAIN ST	WNW 0 - 1/8 (0.030 mi.)	D49	203
KEN S AUTO RPR	79 MAIN ST	WNW 0 - 1/8 (0.049 mi.)	F54	210
FRIEL JOHN G E	81-99 MAIN ST	WNW 0 - 1/8 (0.050 mi.)	F55	210
FRIEL JOHN G E	99 MAIN ST	WNW 0 - 1/8 (0.078 mi.)	60	218

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 9 records.

Site Name	Database(s)
HACKMAN CAPITAL, LLC	ME LAST
KATAHDIN PAPER	ME LAST
DEAD RIVER BULK PLANT	ME LAST
COLE, HOA	ME LAST
	ME SWF/LF
EMERY LEE & SONS, INC.	ME LUST
IRVING BIG STOP	ME LUST
EAST MILLINOCKET WATER WORKS	FINDS, ECHO
EAST MILLINOCKET SUB STATION	ME SPILLS

OVERVIEW MAP - 5634384.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	GNP East Millinocket	CLIENT:	Ransom Env. Consultants, Inc.
ADDRESS:	50 Main Street East Millinocket ME 04430	CONTACT:	Sara Roy
LAT/LONG:	45.625119 / 68.574223	INQUIRY #:	5634384.2s
		DATE:	April 29, 2019 8:29 am

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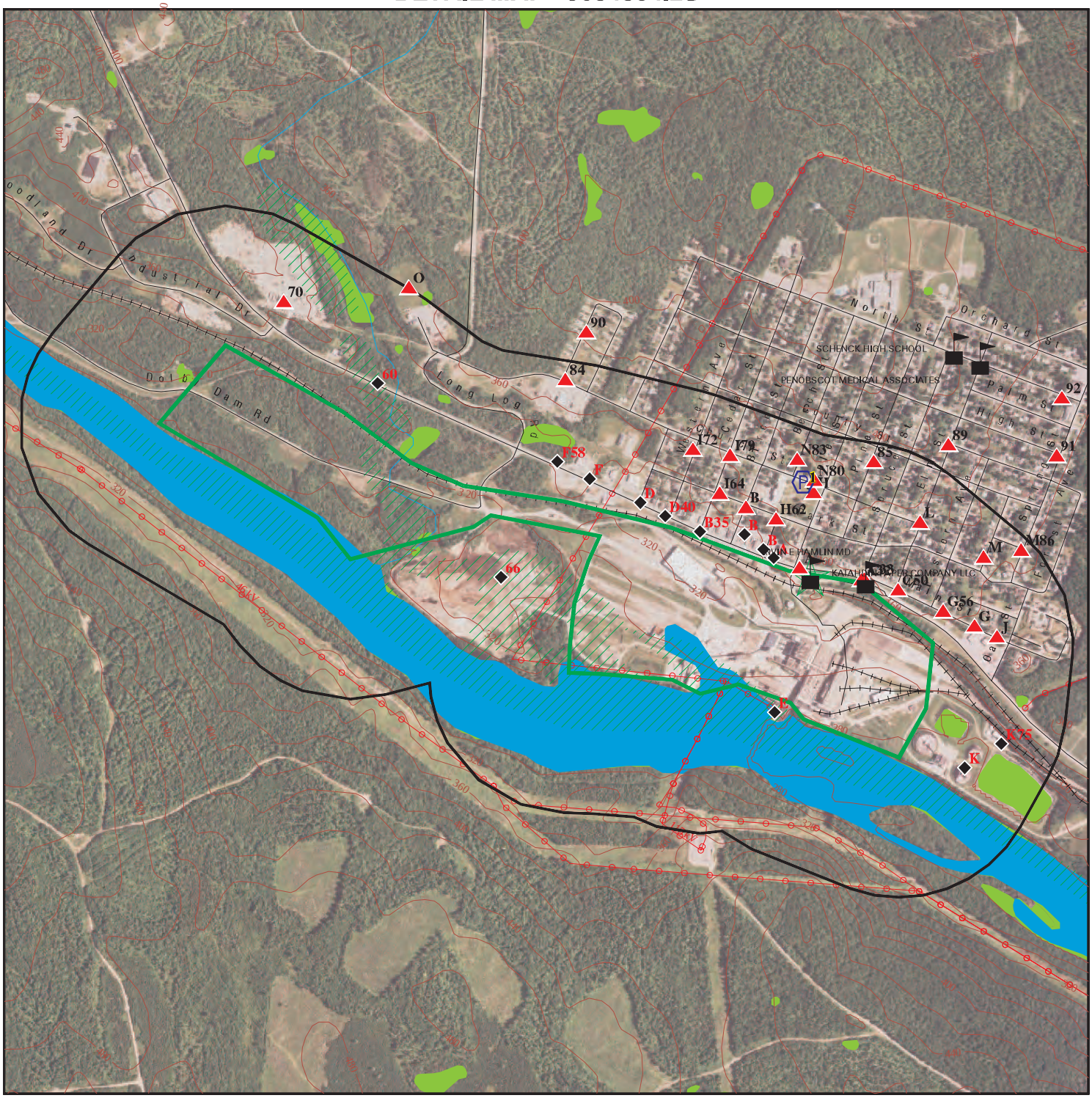
DETAIL MAP - 5634384.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

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ADDRESS:	50 Main Street East Millinocket ME 04430	CONTACT:	Sara Roy
LAT/LONG:	45.625119 / 68.574223	INQUIRY #:	5634384.2s
		DATE:	April 29, 2019 8:30 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500	1	0	0	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000	1	0	0	0	0	NR	1
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500	1	0	0	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250	1	0	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250	2	0	0	NR	NR	NR	2
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP	3	NR	NR	NR	NR	NR	3
State- and tribal - equivalent CERCLIS								
ME SHWS	1.000	1	1	0	0	0	NR	2
State and tribal landfill and/or solid waste disposal site lists								
ME SWF/LF	0.500		0	0	1	NR	NR	1
ME LCP	0.500		0	1	0	NR	NR	1
State and tribal leaking storage tank lists								
ME LUST	0.500	1	10	2	0	NR	NR	13
ME LAST	0.500	1	11	9	4	NR	NR	25
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
ME UST	0.250	1	14	4	NR	NR	NR	19
ME AST	0.250	1	7	0	NR	NR	NR	8
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
ME INST CONTROL	0.500		1	1	0	NR	NR	2
State and tribal voluntary cleanup sites								
ME VCP	0.500	1	1	0	0	NR	NR	2
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
ME BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
ME SWRCY	0.500		0	1	0	NR	NR	1
INDIAN ODI	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
ME ALLSITES	0.500	1	2	1	0	NR	NR	4
ME DEL SHWS	1.000		0	1	0	0	NR	1
US CDL	TP		NR	NR	NR	NR	NR	0
ME PFAS	0.500		0	0	0	NR	NR	0
Local Land Records								
ME LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
ME SPILLS	TP	3	NR	NR	NR	NR	NR	3
ME SPILLS 90	TP		NR	NR	NR	NR	NR	0
ME SPILLS 80	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP	1	NR	NR	NR	NR	NR	1
PADS	TP	1	NR	NR	NR	NR	NR	1
ICIS	TP	1	NR	NR	NR	NR	NR	1
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP	3	NR	NR	NR	NR	NR	3
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP	3	NR	NR	NR	NR	NR	3
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
ME AIRS	TP	1	NR	NR	NR	NR	NR	1
ME DRYCLEANERS	0.250		0	0	NR	NR	NR	0
ME MANIFEST	0.250	1	0	0	NR	NR	NR	1
NY MANIFEST	0.250	1	0	0	NR	NR	NR	1
ME NPDES	TP	2	NR	NR	NR	NR	NR	2
ME TIER 2	TP	2	NR	NR	NR	NR	NR	2
ME UIC	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		5	NR	NR	NR	NR	5
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
ME RGA HWS	TP		NR	NR	NR	NR	NR	0
ME RGA LF	TP	1	NR	NR	NR	NR	NR	1
ME RGA LUST	TP	1	NR	NR	NR	NR	NR	1
- Totals --		37	53	20	5	0	0	115

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **GREAT NORTHERN PAPER CO LLC** **ME UST** **U004183677**
Target **50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 1 of 30 in cluster A

Actual:
348 ft.

UST:

Facility ID:	16697
Facility Location2:	EAST MILLINOCKET
Facility Code:	INDUSTRIAL
Fed Reg Ind:	Yes
Owner Name:	GNP MAINE HOLDINGS LLC
Owner Contact:	Not reported
Owner Delivery Address:	ONE CATE ST, SUITE 100
Owner City/State/Zip:	PORTSMOUTH, NH 03801 7108
Owner Telephone:	6033194400
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	45.62242
Longitude:	-68.57165
Owner/Operator Name:	GNP MAINE HOLDINGS LLC
Owner/Operator Address:	ONE CATE ST, SUITE 100
Owner/Operator City,St,Zip:	PORTSMOUTH, NH 03801
Owner/Operator Phone:	6033194400
Tank Number:	1
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JAN-16
Tank Sub Status:	**NOT_IN_USE**
Tank Sub Status Label:	NOT IN USE
Installation Date:	01-DEC-89
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	DOUBLE-WALLED CP STEEL
Reg Date:	24-JAN-90
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**ACTIVE**
Pipe Status Date:	01-DEC-89
Pipe Date Installed:	12/01/1989
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

GREAT NORTHERN PAPER CO LLC (Continued) **U004183677**

Tank Number:	1
Tank Status:	**ABANDONED_IN_PLACE**
Tank Status Label:	ABANDONED IN PLACE
Tank Status Date:	01-JAN-86
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-55
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	20000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	21-MAY-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**ABANDONED_IN_PLACE**
Pipe Status Date:	01-JAN-86
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	ABANDONED IN PLACE
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**PLANNED**
Tank Status Label:	PLANNED FOR INSTALLATION
Tank Status Date:	19-JUN-13
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	19-JUN-13
Product Type:	DIESEL
Tank Volume in Gallons:	1000
Tank Above/Below:	ABOVEGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	24-JAN-90
Tank Leak Detection Label:	NONE
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**PLANNED**
Pipe Status Date:	19-JUN-13
Pipe Date Installed:	06/19/2013
Pipe Material Label:	STEEL - BARE OR ASPHALT COATED.
Pipe Status Label:	PLANNED FOR INSTALLATION
Pipe Leak Detection:	NONE
Pipe Leak Detection Label:	NONE
Overfill:	LEVEL_GAUGE
Overfill Protection Label:	LEVEL GAUGE

Tank Number:	2
Tank Status:	**ABANDONED_IN_PLACE**
Tank Status Label:	ABANDONED IN PLACE

GREAT NORTHERN PAPER CO LLC (Continued) **U004183677**

Tank Status Date:	01-JAN-86
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-55
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	20000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	21-MAY-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**ABANDONED_IN_PLACE**
Pipe Status Date:	01-JAN-86
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	ABANDONED IN PLACE
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

A2 **ACM NARM MAINE LLC** **SEMS-ARCHIVE** **1000158624**
Target **50 MAIN ST** **CORRACTS** **MED001098011**
Property **EAST MILLINOCKET, ME 04430** **RCRA-TSDF**
RCRA-LQG
Site 2 of 30 in cluster A **PRP**
PADS

Actual:
348 ft.

SEMS Archive:

Site ID:	0102072
EPA ID:	MED001098011
Cong District:	02
FIPS Code:	23019
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Archive Detail:

Region:	01
Site ID:	0102072
EPA ID:	MED001098011
Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	2003-02-28 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	01
Site ID:	0102072
EPA ID:	MED001098011

ACM NARM MAINE LLC (Continued) **1000158624**

Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1991-07-30 04:00:00
Finish Date:	1991-07-30 04:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0102072
EPA ID:	MED001098011
Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1990-04-18 04:00:00
Finish Date:	Not reported
Qual:	V
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0102072
EPA ID:	MED001098011
Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1991-08-07 04:00:00
Finish Date:	1992-09-03 04:00:00
Qual:	L
Current Action Lead:	EPA Perf
Region:	01
Site ID:	0102072
EPA ID:	MED001098011
Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	BB
Action Name:	PRP RV
SEQ:	1
Start Date:	1989-08-22 04:00:00
Finish Date:	1990-03-10 05:00:00
Qual:	C
Current Action Lead:	EPA Ovrsght

ACM NARM MAINE LLC (Continued) **1000158624**

Region:	01
Site ID:	0102072
EPA ID:	MED001098011
Site Name:	GREAT NORTHERN PAPER MILL #2
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	2001-05-12 04:00:00
Finish Date:	2002-07-15 04:00:00
Qual:	N
Current Action Lead:	St Perf

CORRACTS:

EPA ID:	MED001098011
EPA Region:	01
Area Name:	ENTIRE FACILITY
Actual Date:	20001004
Action:	CA210SF - CA Responsibility Referred To A Non-RCRA Federal Authority, Corrective Action at the facility or area referred to CERCLA
NAICS Code(s):	32211 32212 Pulp Mills Paper Mills
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	MED001098011
EPA Region:	01
Area Name:	ENTIRE FACILITY
Actual Date:	19920903
Action:	CA050PA - RFA Completed, Assessment was a PA-Plus
NAICS Code(s):	32211 32212 Pulp Mills Paper Mills
Original schedule date:	Not reported
Schedule end date:	Not reported

EPA ID:	MED001098011
EPA Region:	01
Area Name:	ENTIRE FACILITY
Actual Date:	19920901
Action:	CA075HI - CA Prioritization, Facility or area was assigned a high corrective action priority
NAICS Code(s):	32211 32212 Pulp Mills Paper Mills
Original schedule date:	Not reported
Schedule end date:	Not reported

RCRA-TSDF:

Date form received by agency:	05/09/2016
Facility name:	ACM NARM MAINE LLC
Facility address:	50 MAIN ST

ACM NARM MAINE LLC (Continued) **1000158624**

EAST MILLINOCKET, ME 04430
EPA ID: MED001098011
Mailing address: THIRD AVENUE
27TH FLOOR
NEW YORK, NY 10017
Contact: JASON INOFF
Contact address: THIRD AVENUE 27TH FLOOR
NEW YORK, NY 10017
Contact country: US
Contact telephone: 516-205-5748
Contact email: JINOFF@NAMRM.COM
EPA Region: 01
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: ACM NARM MAINE LLC
Owner/operator address: THIRD AVENUE 27TH FLOOR
NEW YORK, NY 10017
Owner/operator country: US
Owner/operator telephone: 516-205-5748
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 03/05/2016
Owner/Op end date: Not reported

Owner/operator name: ACM NARM MAINE LLC
Owner/operator address: THIRD AVENUE 27TH FLOOR
NEW YORK, NY 10017
Owner/operator country: US
Owner/operator telephone: 516-205-5748
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/05/2016
Owner/Op end date: Not reported

ACM NARM MAINE LLC (Continued) **1000158624**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D011
. Waste name: SILVER

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Historical Generators:
Date form received by agency: 01/09/2013
Site name: GREAT NORTHERN PAPER COMPANY, LLC & GNP EAST, INC. & GNP MAINE HOLDINGS, LCC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 10/11/2011
Site name: GREAT NORTHERN PAPER COMPANY, LLC-EAST MILLINOCKET MILL
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 05/17/2011
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 07/30/2003
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 04/10/2003
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT

ACM NARM MAINE LLC (Continued) **1000158624**

NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 09/01/2000
Site name: GREAT NORTHERN PAPER INC
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 02/17/2000
Site name: GREAT NORTHERN PAPER INC.
Classification: Large Quantity Generator

Date form received by agency: 02/24/1998
Site name: GREAT NORTHERN PAPER INC
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Site name: GREAT NORTHERN PAPER
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Site name: GEORGIA-PACIFIC CORP
Classification: Large Quantity Generator

Date form received by agency: 04/25/1990
Site name: GREAT NORTHERN PAPER EAST MILLINOCKET
Classification: Large Quantity Generator

Date form received by agency: 11/19/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Not a generator, verified

. Waste code: D000
. Waste name: Not Defined

Date form received by agency: 08/18/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Small Quantity Generator

Date form received by agency: 08/18/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Small Quantity Generator

Corrective Action Summary:
Event date: 09/01/1992
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 09/03/1992
Event: RFA COMPLETED-ASSESSMENT WAS A PA-PLUS

Event date: 10/04/2000
Event: REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA

ACM NARM MAINE LLC (Continued) **1000158624**

Facility Has Received Notices of Violations:

Regulation violated:	Not reported
Area of violation:	TSD IS-General
Date violation determined:	04/01/2006
Date achieved compliance:	06/14/2006
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/18/2006
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	TSD - General
Date violation determined:	08/27/1991
Date achieved compliance:	12/17/1991
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	11/14/1991
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	TSD - General
Date violation determined:	07/19/1989
Date achieved compliance:	11/21/1989
Violation lead agency:	State
Enforcement action:	INFORMAL WRITTEN NOTIFICATION
Enforcement action date:	11/07/1989
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	TSD - General
Date violation determined:	05/21/1987
Date achieved compliance:	09/22/1988
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/13/1987
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

ACM NARM MAINE LLC (Continued) **1000158624**

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 08/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 52000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/13/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 08/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 52000
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/01/2006
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: TSD IS-General
Date achieved compliance: 06/14/2006
Evaluation lead agency: State

Evaluation date: 08/27/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 12/17/1991
Evaluation lead agency: State

Evaluation date: 07/19/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

ACM NARM MAINE LLC (Continued) **1000158624**

Area of violation: TSD - General
Date achieved compliance: 11/21/1989
Evaluation lead agency: EPA

Evaluation date: 07/19/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 11/21/1989
Evaluation lead agency: State

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/22/1988
Evaluation lead agency: State

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/22/1988
Evaluation lead agency: EPA

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/22/1988
Evaluation lead agency: EPA

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/22/1988
Evaluation lead agency: State

RCRA-LQG:
Date form received by agency: 05/09/2016
Facility name: ACM NARM MAINE LLC
Facility address: 50 MAIN ST
EAST MILLINOCKET, ME 04430
EPA ID: MED001098011
Mailing address: THIRD AVENUE
27TH FLOOR
NEW YORK, NY 10017
Contact: JASON INOFF
Contact address: THIRD AVENUE 27TH FLOOR
NEW YORK, NY 10017
Contact country: US
Contact telephone: 516-205-5748
Contact email: JINOFF@NAMRM.COM
EPA Region: 01
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any

ACM NARM MAINE LLC (Continued) **1000158624**

residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	ACM NARM MAINE LLC
Owner/operator address:	THIRD AVENUE 27TH FLOOR NEW YORK, NY 10017
Owner/operator country:	US
Owner/operator telephone:	516-205-5748
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	03/05/2016
Owner/Op end date:	Not reported

Owner/operator name:	ACM NARM MAINE LLC
Owner/operator address:	THIRD AVENUE 27TH FLOOR NEW YORK, NY 10017
Owner/operator country:	US
Owner/operator telephone:	516-205-5748
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	03/05/2016
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D001
. Waste name:	IGNITABLE WASTE

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D011
. Waste name: SILVER

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO- (OR) METHYL CHLOROFORM

Historical Generators:
Date form received by agency: 01/09/2013
Site name: GREAT NORTHERN PAPER COMPANY, LLC & GNP EAST, INC. & GNP MAINE HOLDINGS, LCC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL

ACM NARM MAINE LLC (Continued) **1000158624**

ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 10/11/2011
Site name: GREAT NORTHERN PAPER COMPANY, LLC-EAST MILLINOCKET MILL
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR

ACM NARM MAINE LLC (Continued) **1000158624**

MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 05/17/2011
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 07/30/2003
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

ACM NARM MAINE LLC (Continued) **1000158624**

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 04/10/2003
Site name: KATAHDIN PAPER COMPANY LLC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D011
. Waste name: SILVER

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U211
. Waste name: CARBON TETRACHLORIDE (OR) METHANE, TETRACHLORO-

. Waste code: M002
. Waste name: PCB CONTENT OF 50ppm or HIGHER

. Waste code: MA02
. Waste name: MA02

Date form received by agency: 09/01/2000
Site name: GREAT NORTHERN PAPER INC

ACM NARM MAINE LLC (Continued) **1000158624**

Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 02/17/2000
Site name: GREAT NORTHERN PAPER INC.
Classification: Large Quantity Generator

Date form received by agency: 02/24/1998
Site name: GREAT NORTHERN PAPER INC
Classification: Large Quantity Generator

ACM NARM MAINE LLC (Continued) **1000158624**

Date form received by agency: 03/01/1994
Site name: GREAT NORTHERN PAPER
Classification: Large Quantity Generator

Date form received by agency: 02/28/1992
Site name: GEORGIA-PACIFIC CORP
Classification: Large Quantity Generator

Date form received by agency: 04/25/1990
Site name: GREAT NORTHERN PAPER EAST MILLINOCKET
Classification: Large Quantity Generator

Date form received by agency: 11/19/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Not a generator, verified

. Waste code: D000
. Waste name: Not Defined

Date form received by agency: 08/18/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Small Quantity Generator

Date form received by agency: 08/18/1980
Site name: GREAT NORTHERN PAPER INC
Classification: Small Quantity Generator

Corrective Action Summary:
Event date: 09/01/1992
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 09/03/1992
Event: RFA COMPLETED-ASSESSMENT WAS A PA-PLUS

Event date: 10/04/2000
Event: REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD IS-General
Date violation determined: 04/01/2006
Date achieved compliance: 06/14/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/18/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 08/27/1991
Date achieved compliance: 12/17/1991

ACM NARM MAINE LLC (Continued) **1000158624**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 11/14/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 07/19/1989
Date achieved compliance: 11/21/1989
Violation lead agency: State
Enforcement action: INFORMAL WRITTEN NOTIFICATION
Enforcement action date: 11/07/1989
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/13/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 08/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 52000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State

ACM NARM MAINE LLC (Continued) **1000158624**

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/13/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 05/21/1987
Date achieved compliance: 09/22/1988
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 08/22/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 52000
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/01/2006
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: TSD IS-General
Date achieved compliance: 06/14/2006
Evaluation lead agency: State

Evaluation date: 08/27/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 12/17/1991
Evaluation lead agency: State

Evaluation date: 07/19/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 11/21/1989
Evaluation lead agency: EPA

Evaluation date: 07/19/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 11/21/1989
Evaluation lead agency: State

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 09/22/1988
Evaluation lead agency: State

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General

ACM NARM MAINE LLC (Continued) **1000158624**

Date achieved compliance: 09/22/1988
Evaluation lead agency: EPA

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/22/1988
Evaluation lead agency: EPA

Evaluation date: 05/21/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/22/1988
Evaluation lead agency: State

PRP:
PRP Name: GREAT NORTHERN NEKOOSA CORPORATION
GREAT NORTHERN NEKOSSA CORPORATION

PADS:
EPAID: MED001098011
Facility name: GREAT NORTHERN PAPER
Facility Address: MAIN ST
EAST MILLINOCKET, ME 04430
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: GREAT NORTHERN NEKOOSA CORP
Contact title: Not reported
Contact name: JUDITH A MOORE
Contact tel: 207-723-5131
Contact extension: Not reported
Contact Email: Not reported
Mailing address: KATAHDIN AVE
MILLINOCKET, ME 04462
Mailing country: US
Cert. date: 02/16/1990

A3 **EAST MILLINOCKET HYDRO STATION** **FINDS** **1007154518**
Target **50 MAIN STREET** **ECHO** **N/A**
Property **MILLINOCKET, ME 04462**

Site 3 of 30 in cluster A

Actual:
348 ft.

FINDS:

Registry ID: 110016695940

Environmental Interest/Information System
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain

EAST MILLINOCKET HYDRO STATION (Continued) **1007154518**

limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1007154518
Registry ID:	110016695940
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110016695940

A4 Target Property **KATAHDIN PAPER CO LLC** **ME SPILLS** **S113451128**
50 MAIN ST. **N/A**
EAST MILLINOCKET, ME

Site 4 of 30 in cluster A

Actual: 348 ft.

SPILLS:

Event:

Spill Number:	B-56-2011
Inc Tank Code:	N
Inc Tank:	None
Removal Flag:	False
Ust Registered Flag:	True
Ast Inside Flag:	False
Create Date:	02/01/2011
Create By:	EIALASSE
Modify Date:	03/01/2013
Modify By:	EITHSMIT
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	02/01/2011
Actual Spill Date Unknown:	False
Actual Spill Time Unknown:	False
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	IM
Inc Source:	Equipment - Industrial Machinery
Spill Cause Code:	17
Spill Cause:	Accident - Human Error
Material Disposal Info:	Not reported

Change:

Description:	Report Status change from DR to DRV

KATAHDIN PAPER CO LLC (Continued) **S113451128**

Date Change: 01/04/2012
Changed By: EIALASSE

Description: Report Created with Report Status = DR
Date Change: 02/01/2011
Changed By: EIALASSE

Description: Report Status change from DRV to FR
Date Change: 03/01/2013
Changed By: EITHSMIT

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: KATAHDIN PAPER CO LLC
Address: 50 MAIN ST.
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ANDREA L LASSELLE

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 56
Spill Year: 2011
Create Date: 02/01/2011
Created By: EIALASSE
Modify Date: 01/04/2012
Modify By: EIALASSE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 02/01/2011
Log Rep Prod Cd: 10
Log Rep Prod: Lube Oil
Log Emp Name: ANDREA L LASSELLE
Location: 50 Main St.
Log Location Town: EAST MILLINOCKET
Log Tank Involved: None
Notes: less than 1 quart to drain and eventually river. Overfill of lube oil for bearing

KATAHDIN PAPER CO LLC (Continued) **S113451128**

Material Recovered:
- Material Recovered Type: OM
- Material Recovered: Other Material
- Material Amount: Not reported
- Material Units: Not reported
- Material Amt Qualifier: UNKNOWN

Recovery Method: Sorbents

Spill Point:

Product:
- Product Code: Lube Oil
- Product Other: less than
- Product Amt: 1
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

A5 **E MILLINOCKET HYDRO PROJECT** **ME NPDES** **S110121141**
Target **50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 5 of 30 in cluster A

Actual: 348 ft.

NPDES:
- Maine License: 8076
- Category: MINOR
- NPDES ID: ME0036511
- Comments: FORMER GREAT NORTHERN PAPER
- Gps Date: 01/24/2001
- Location Accuracy: WITHIN 1M
- Location Method: GPS MAPPING GRADE
- Source: NORTHERN ECOLOGICAL ASSOCIATES
- Latitude: 45.62146786
- Longitude: -68.575492738

A6 **EAST MILLINOCKET** **FINDS** **1018362890**
Target **50 MAIN ST** **ECHO** **N/A**
Property **EAST MILLINOCKET, ME 04430**

Site 6 of 30 in cluster A

Actual: 348 ft.

FINDS:

Registry ID: 110067239063

Environmental Interest/Information System
US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the

EAST MILLINOCKET (Continued) **1018362890**

discharge does not adversely affect water quality.

ME-EFIS (Maine - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1018362890
Registry ID:	110067239063
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110067239063

A7 **GREAT NORTHERN PAPER** **ME RGA LUST** **S114986262**
Target **RT 157 - 50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 7 of 30 in cluster A

Actual: **348 ft.**

RGA LUST:

2012	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2011	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2010	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2009	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2008	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2007	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2006	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2005	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST
2004	GREAT NORTHERN PAPER	RT 157 - 50 MAIN ST

A8 **GREAT NORTHERN PAPER** **ICIS** **1016072566**
Target **50 MAIN STREET** **FINDS** **N/A**
Property **EAST MILLINOCKET, ME 04430** **ECHO**

Site 8 of 30 in cluster A

Actual: **348 ft.**

ICIS:

Enforcement Action ID:	ME000A0000230190000800100
FRS ID:	110000581451
Action Name:	GREAT NORTHERN PAPER 230190000800100
Facility Name:	GREAT NORTHERN PAPER
Facility Address:	50 MAIN STREET EAST MILLINOCKET, ME 04430
Enforcement Action Type:	Administrative Order
Facility County:	PENOBSCOT
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	SCAAAO
Facility SIC Code:	2621
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.645669
Longitude in Decimal Degrees:	-68.703048
Permit Type Desc:	Not reported

GREAT NORTHERN PAPER (Continued) **1016072566**

Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME000A0000230190000800067
FRS ID: 110000581451
Action Name: GREAT NORTHERN PAPER 230190000800067
Facility Name: GREAT NORTHERN PAPER
Facility Address: 50 MAIN STREET
EAST MILLINOCKET, ME 04430
Enforcement Action Type: Notice of Violation
Facility County: PENOBSCOT
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2621
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 45.645669
Longitude in Decimal Degrees: -68.703048
Permit Type Desc: Not reported
Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME000A0000230190000800033
FRS ID: 110000581451
Action Name: GREAT NORTHERN PAPER 230190000800033
Facility Name: GREAT NORTHERN PAPER
Facility Address: 50 MAIN STREET
EAST MILLINOCKET, ME 04430
Enforcement Action Type: Notice of Violation
Facility County: PENOBSCOT
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2621
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 45.645669
Longitude in Decimal Degrees: -68.703048
Permit Type Desc: Not reported
Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME000A0000230190000800031
FRS ID: 110000581451
Action Name: GREAT NORTHERN PAPER 230190000800031
Facility Name: GREAT NORTHERN PAPER
Facility Address: 50 MAIN STREET
EAST MILLINOCKET, ME 04430
Enforcement Action Type: Notice of Violation
Facility County: PENOBSCOT
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2621
Federal Facility ID: Not reported

GREAT NORTHERN PAPER (Continued) **1016072566**

Latitude in Decimal Degrees: 45.645669
Longitude in Decimal Degrees: -68.703048
Permit Type Desc: Not reported
Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME000A0000230190000800030
FRS ID: 110000581451
Action Name: GREAT NORTHERN PAPER 230190000800030
Facility Name: GREAT NORTHERN PAPER
Facility Address: 50 MAIN STREET
EAST MILLINOCKET, ME 04430
Enforcement Action Type: Notice of Violation
Facility County: PENOBSCOT
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2621
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 45.645669
Longitude in Decimal Degrees: -68.703048
Permit Type Desc: Not reported
Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME000A0000230190000800029
FRS ID: 110000581451
Action Name: GREAT NORTHERN PAPER 230190000800029
Facility Name: GREAT NORTHERN PAPER
Facility Address: 50 MAIN STREET
EAST MILLINOCKET, ME 04430
Enforcement Action Type: Notice of Violation
Facility County: PENOBSCOT
Program System Acronym: AIR
Enforcement Action Forum Desc: Administrative - Informal
EA Type Code: NOV
Facility SIC Code: 2621
Federal Facility ID: Not reported
Latitude in Decimal Degrees: 45.645669
Longitude in Decimal Degrees: -68.703048
Permit Type Desc: Not reported
Program System Acronym: ME0000002301900008
Facility NAICS Code: 999999
Tribal Land Code: Not reported

Enforcement Action ID: ME-N00000102
FRS ID: 110000581451
Action Name: GNP-EAST, INC (Permit ME0000175) Administrative Consent Order
Facility Name: EAST MILLINOCKET TOWN OF
Facility Address: 50 MAIN ST
EAST MILLINOCKET, ME 04430-1128
Enforcement Action Type: State Administrative Order of Consent
Facility County: PENOBSCOT
Program System Acronym: NPDES
Enforcement Action Forum Desc: Administrative - Formal

GREAT NORTHERN PAPER (Continued) **1016072566**

EA Type Code:	STAOCO
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.620306
Longitude in Decimal Degrees:	-68.569722
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	ME0000175
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported
Enforcement Action ID:	01-2005-9056
FRS ID:	110000581451
Action Name:	KATAHDIN PAPER COMPANY
Facility Name:	ACM NARM MAINE LLC - FORMER PAPER MILL
Facility Address:	50 MAIN ST EAST MILLINOCKET, ME 04430
Enforcement Action Type:	EPCRA 325 Action For Penalty
Facility County:	PENOBSCOT
Program System Acronym:	TRIS
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	325
Facility SIC Code:	Not reported
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.62501
Longitude in Decimal Degrees:	-68.57297
Permit Type Desc:	Not reported
Program System Acronym:	04430GRTNRMAINS
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported
Enforcement Action ID:	01-000F000230190000800032
FRS ID:	110000581451
Action Name:	GREAT NORTHERN PAPER 230190000800032
Facility Name:	GREAT NORTHERN PAPER
Facility Address:	50 MAIN STREET EAST MILLINOCKET, ME 04430
Enforcement Action Type:	Notice of Violation
Facility County:	PENOBSCOT
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	2621
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.645669
Longitude in Decimal Degrees:	-68.703048
Permit Type Desc:	Not reported
Program System Acronym:	ME0000002301900008
Facility NAICS Code:	999999
Tribal Land Code:	Not reported
Enforcement Action ID:	01-000F000230190000800003
FRS ID:	110000581451
Action Name:	GREAT NORTHERN PAPER 230190000800003
Facility Name:	GREAT NORTHERN PAPER
Facility Address:	50 MAIN STREET EAST MILLINOCKET, ME 04430
Enforcement Action Type:	Notice of Violation

GREAT NORTHERN PAPER (Continued) **1016072566**

Facility County:	PENOBSCOT
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	2621
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.645669
Longitude in Decimal Degrees:	-68.703048
Permit Type Desc:	Not reported
Program System Acronym:	ME0000002301900008
Facility NAICS Code:	999999
Tribal Land Code:	Not reported

Enforcement Action ID:	01-000F000230190000800002
FRS ID:	110000581451
Action Name:	GREAT NORTHERN PAPER 230190000800002
Facility Name:	GREAT NORTHERN PAPER
Facility Address:	50 MAIN STREET EAST MILLINOCKET, ME 04430
Enforcement Action Type:	Notice of Violation
Facility County:	PENOBSCOT
Program System Acronym:	AIR
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	NOV
Facility SIC Code:	2621
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	45.645669
Longitude in Decimal Degrees:	-68.703048
Permit Type Desc:	Not reported
Program System Acronym:	ME0000002301900008
Facility NAICS Code:	999999
Tribal Land Code:	Not reported

Facility Name:	KATAHDIN PAPER
Address:	50 MAIN STREET
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	KATAHDIN PAPER
Address:	50 MAIN STREET
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	KATAHDIN PAPER
Address:	50 MAIN STREET
Tribal Indicator:	N
Fed Facility:	No
NAIC Code:	Not reported
SIC Code:	Not reported

Facility Name:	KATAHDIN PAPER
Address:	50 MAIN STREET

GREAT NORTHERN PAPER (Continued) **1016072566**

Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N

GREAT NORTHERN PAPER (Continued) **1016072566**

Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

Facility Name: KATAHDIN PAPER
Address: 50 MAIN STREET
Tribal Indicator: N
Fed Facility: No
NAIC Code: Not reported
SIC Code: Not reported

FINDS:

Registry ID: 110000581451

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

US National Pollutant Discharge Elimination System (NPDES) module of the Compliance Information System (ICIS) tracks surface water permits issued under the Clean Water Act. Under NPDES, all facilities that discharge pollutants from any point source into waters of the United States are required to obtain a permit. The permit will likely contain limits on what can be discharged, impose monitoring and reporting requirements, and include other provisions to ensure that the discharge does not adversely affect water quality.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of

GREAT NORTHERN PAPER (Continued) **1016072566**

events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ELECTRIC GENERATOR

AIR MINOR

HAZARDOUS AND CRITERIA AIR POLLUTANT MAJOR

ME-EFIS (Maine - Environmental Facility Information System) integrates information on environmental facilities, permits, violations, enforcement actions, and compliance activities needed to support regulatory requirements and target environmental quality improvements for the water, air, solid waste, and hazardous waste program areas.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

US EPA Risk Management Plan (RMP) database stores the risk management plans reported by companies that handle, manufacture, use, or store certain flammable or toxic substances, as required under section 112(r) of the Clean Air Act (CAA).

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1016072566
Registry ID: 110000581451
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110000581451

A9 **GREAT NORTHERN PAPER - EAST MILLINOCKET MILL** **ME SHWS** **S107695603**
Target **50 MAIN STREET** **ME LAST** **N/A**
Property **EAST MILLINOCKET, ME** **ME VCP**
ME ALLSITES
Site 9 of 30 in cluster A **ME SPILLS**
ME AIRS
Actual: **ME TIER 2**
348 ft.

SHWS:
Facility ID: REM02048
Facility Status: **INVESTIGATION STAGE**

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Program Type: UNCONTROLLED SITES
Lat/Long: 45.62286 / -68.57431
IC: FALSE
Alias: Not reported
Acres: 385
Sub Status: ONGOING
Status Date: 01/01/2015

LAST:

Event:
Spill Number: B-35-2013
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: True
AST inside flag: False
Create Date: 01/28/2013
Create By: EIJSELLE
Modify Date: 09/18/2015
Modify By: 09/18/2015
Report Status Code: FR
Report Status: Final Report
Spill Datetime: Not reported
Spill Date Unknown: True
Spill Time Unknown: True
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False
MCD Value: 19170
Further response action: False
Spill Type Code: H
Spill Type: Hazardous Material Incident
Reporter Type Code: 2
Reporter Type: Subject/Spiller
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: ID
Inc Location: Business - Industrial
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 06
Spill Cause: Mechanical Failure - Piping/Hose
Material Disposal Info: Clean Harbors Environmental Services disposed of contaminated material.

Change:
Description: Report Status change from DRV to DQA
Date Change: 09/16/2015
Changed By: EIJWOODA

Description: Report Status change from DQA to FR
Date Change: 09/18/2015
Changed By: EIRKROUT

Description: Report Created with Report Status = DR
Date Change: 01/28/2013
Changed By: EIJSELLE

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Description: Report Status change from DR to DRV
Date Change: 04/01/2013
Changed By: EIJSELLE

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: GREAT NORTHERN PAPER, INCORPORATED
Address: ONE KATAHDIN AVENUE
City,State: MILLINOCKET,ME
Country: USA
Zipcode: 04462-1398
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: JOHN M SELLECK

Media Affected:
Medium: Engineered Containment

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 35
Spill Year: 2013
Create Date: 01/28/2013
Created By: EIJSELLE
Modify Date: 01/28/2013
Modify By: EIJSELLE
Log Spill Type: Hazardous Material Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 01/25/2013
Log Rep Prod Cd: 79
Log Rep Prod: Hazardous Chemical - Specified in report
Log Emp Name: JOHN M SELLECK
Location: 50 Main Street, E. Millinocket
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Great Northern Paper reported a 40-50 gallon spill of Ferric Sulphate from one of their above ground storage tanks. Clean Harbors assisted in removing the remaining 5,000 gallons of product from the tank into secondary containmnet and removing the spilled product from the ground.

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Material Amount: 4500
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Material Recovered Type: VP
Material Recovered: Unspilled Product
Material Amount: 5000
Material Units: gals.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Recovery Method: Pumps

Product:
Product Code: Hazardous Chemical - Specified in report
Product Other: Not reported
Product Amt: 50
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Event:
Spill Number: B-104-2008
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: True
AST inside flag: False
Create Date: 02/27/2008
Create By: EIRSHANN
Modify Date: 07/07/2010
Modify By: 07/07/2010
Report Status Code: FR
Report Status: Final Report
Spill Datetime: 02/24/2008
Spill Date Unknown: False
Spill Time Unknown: False
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False
MCD Value: 19170
Further response action: False
Spill Type Code: H
Spill Type: Hazardous Material Incident
Reporter Type Code: 2
Reporter Type: Subject/Spiller
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: ID
Inc Location: Business - Industrial
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 03

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Spill Cause: Corrosion - Piping
Material Disposal Info: Disposal by Katahdin Paper Co. LLC.

Change:
Description: Report Status change from DRV to FR
Date Change: 07/07/2010
Changed By: EIESNOOK

Description: Report Created with Report Status = DR
Date Change: 02/27/2008
Changed By: EIRSHANN

Description: Report Status change from DR to DRV
Date Change: 02/27/2008
Changed By: EIRSHANN

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: KATAHDIN PAPER CO. LLC
Address: 50 MAIN STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

File:
Spill Id: B-104-2008
Date Created: 07/08/2010
Created By: IMAGING
Date Modified: 07/08/2010
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 08-JUL-10.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Engineered Containment

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 104
Spill Year: 2008
Create Date: 02/27/2008
Created By: EIRSHANN
Modify Date: 02/27/2008

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Modify By:	EIRSHANN
Log Spill Type:	Hazardous Material Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	02/25/2008
Log Rep Prod Cd:	72
Log Rep Prod:	Sulfuric Acid
Log Emp Name:	ROBERT F SHANNON
Location:	50 Main Street, Katahdin paper.
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Sulfuric acid leak from piping on system.

Material Recovered:

Material Recovered Type:	SP
Material Recovered:	Spilled Product
Material Amount:	200
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Burning

Product:

Product Code:	Sulfuric Acid
Product Other:	Not reported
Product Amt:	200
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

Attachments:

Description:	Katahdin Paper Company LLC Spill Report
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	07/07/2010

Event:

Spill Number:	B-291-2009
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	False
Create Date:	12/18/2009
Create By:	EINTHOMP
Modify Date:	04/09/2012
Modify By:	04/09/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	05/25/2009

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Spill Date Unknown:	False
Spill Time Unknown:	False
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	09
Spill Cause:	Overfill
Material Disposal Info:	Contaminated wood chips burned at Facilities Boiler.

Change:

Description:	Report Created with Report Status = DR
Date Change:	12/18/2009
Changed By:	EINTHOMP
Description:	Report Status change from DR to DRV
Date Change:	12/18/2009
Changed By:	EINTHOMP
Description:	Report Status change from DRV to FR
Date Change:	04/09/2012
Changed By:	EIELEIGH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER
Address:	50 MAIN STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04432
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	NATHAN THOMPSON

Media Affected:

Medium:	Land

Log:

Spill Void Flag:	False

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Spill Office:	Bangor
Spill Off Sequence:	291
Spill Year:	2009
Create Date:	05/26/2009
Created By:	EICLECKE
Modify Date:	12/18/2009
Modify By:	EINTHOMP
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	05/25/2009
Log Rep Prod Cd:	86
Log Rep Prod:	Hydraulic Oil
Log Emp Name:	NATHAN THOMPSON
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Fifty gallons from day tank@ 50 Main Street

Material Recovered:

Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	Not reported
Material Units:	Not reported
Material Amt Qualifier:	UNKNOWN

Spill Point:

Recovery Method:	Burning
Recovery Method:	Sorbents

Product:

Product Code:	Hydraulic Oil
Product Other:	Not reported
Product Amt:	50
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

Attachments:

Description:	Referral to CYNTHIA DARLING
Attach Type:	Electronic Form
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	12/18/2009

Event:

Spill Number:	B-493-2007
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

AST inside flag:	False
Create Date:	10/22/2010
Create By:	EITHSMIT
Modify Date:	01/11/2011
Modify By:	01/11/2011
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	09/18/2007
Spill Date Unknown:	False
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	IM
Inc Source:	Equipment - Industrial Machinery
Spill Cause Code:	06
Spill Cause:	Mechanical Failure - Piping/Hose
Material Disposal Info:	By Katahdin Paper

Change:

Description:	Report Created with Report Status = DR
Date Change:	10/22/2010
Changed By:	EITHSMIT
Description:	Report Status change from DR to DQA
Date Change:	10/22/2010
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	01/11/2011
Changed By:	EIKWALKE

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER
Address:	1 KATAHDIN AVE
City,State:	MILLINOCKET,ME
Country:	USA
Zipcode:	04462
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Name: THOMAS H SMITH

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 493
Spill Year: 2007
Create Date: 09/19/2007
Created By: EICLECKE
Modify Date: 10/22/2010
Modify By: EITHSMIT
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 09/18/2007
Log Rep Prod Cd: 06
Log Rep Prod: #6 Fuel Oil
Log Emp Name: THOMAS H SMITH
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Twenty gallons #6 oil from piping. Katahdin Paper

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 20
Material Units: gals.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #6 Fuel Oil
Product Other: Not reported
Product Amt: 20
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Event:
Spill Number: B-656-2010
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: True
AST inside flag: False
Create Date: 12/13/2010

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Create By:	EIDHIGGI
Modify Date:	09/26/2012
Modify By:	09/26/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	12/08/2010
Spill Date Unknown:	False
Spill Time Unknown:	False
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	17
Spill Cause:	Accident - Human Error
Material Disposal Info:	Contaminated bark burned in mill bark boiler.

Change:

Description:	Report Created with Report Status = DR
Date Change:	12/13/2010
Changed By:	EIDHIGGI
Description:	Report Status change from DR to DRV
Date Change:	12/22/2010
Changed By:	EIDHIGGI
Description:	Report Status change from DRV to DQA
Date Change:	01/10/2011
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	09/26/2012
Changed By:	EIELEIGH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER
Address:	50 MAIN STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Primary Employee:
- Primary Employee: True
- Name: DARIAN F HIGGINS

Media Affected:
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 656
- Spill Year: 2010
- Create Date: 12/13/2010
- Created By: EIDHIGGI
- Modify Date: 12/13/2010
- Modify By: EIDHIGGI
- Log Spill Type: Oil Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 12/08/2010
- Log Rep Prod Cd: 06
- Log Rep Prod: #6 Fuel Oil
- Log Emp Name: DARIAN F HIGGINS
- Location: Katahdin Paper, East Millinocket
- Log Location Town: EAST MILLINOCKET
- Log Tank Involved: Above Ground Tank(s) Involved
- Notes: 400 gallons #6 oil to pavement and wastewater treatment plant

Material Recovered:
- Material Recovered Type: OM
- Material Recovered: Other Material
- Material Amount: Not reported
- Material Units: Not reported
- Material Amt Qualifier: UNKNOWN

- Material Recovered Type: SP
- Material Recovered: Spilled Product
- Material Amount: 300
- Material Units: gals.
- Material Amt Qualifier: ESTIMATE

Spill Point:
- Recovery Method: Licensed Treatment Facility

- Recovery Method: Sorbents

Product:
- Product Code: #6 Fuel Oil
- Product Other: Not reported
- Product Amt: 400
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Attachments:
Description: Katahdin Paper Incident Report
Attach Type: Paper Attach
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 12/22/2010

VCP:
Facility ID: REM02048
Facility status: INVESTIGATION STAGE
Program Type: VRAP
Lat/Long: 45.62286 / -68.57431
Institutional Control?: FALSE
Alias: Not reported
Acres: 385
Sub Status: ONGOING
Status Date: 01/01/2015

ALLSITES:
Status: INVESTIGATION STAGE
Program Type: RCRA
Lat/Long: 45.62286 / -68.57431
Institutional Control?: FALSE
Alias: Not reported
Acres: 385
Sub Status: ONGOING
Status Date: 01/01/2015

Status: INVESTIGATION STAGE
Program Type: VRAP
Lat/Long: 45.62286 / -68.57431
Institutional Control?: FALSE
Alias: Not reported
Acres: 385
Sub Status: ONGOING
Status Date: 01/01/2015

Status: INVESTIGATION STAGE
Program Type: UNCONTROLLED SITES
Lat/Long: 45.62286 / -68.57431
Institutional Control?: FALSE
Alias: Not reported
Acres: 385
Sub Status: ONGOING
Status Date: 01/01/2015

SPILLS:

Event:
Spill Number: B-252-2008
Inc Tank Code: D
Inc Tank: Unknown/Unspecified
Removal Flag: False
Ust Registered Flag: True

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Ast Inside Flag:	False
Create Date:	06/12/2008
Create By:	EIDLUCE
Modify Date:	09/01/2011
Modify By:	EIELEIGH
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Actual Spill Time Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	NS
Inc Source:	No Source Found By Responder
Spill Cause Code:	18
Spill Cause:	Other - Unknown
Material Disposal Info:	sorbents were sent to mill’s landfill

Change:

Description:	Report Status change from DRV to DQA
Date Change:	03/24/2011
Changed By:	EITHSMIT
Description:	Report Created with Report Status = DR
Date Change:	06/12/2008
Changed By:	EIDLUCE
Description:	Report Status change from DR to DRV
Date Change:	02/12/2009
Changed By:	EIDLUCE
Description:	Report Status change from DQA to FR
Date Change:	09/01/2011
Changed By:	EIELEIGH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER CO
Address:	50 MAIN ST
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARRYL E LUCE

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 252
Spill Year: 2008
Create Date: 05/12/2008
Created By: EICLECKE
Modify Date: 05/12/2008
Modify By: EICLECKE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 05/08/2008
Log Rep Prod Cd: 80
Log Rep Prod: Unspecified Oil
Log Emp Name: DARRYL E LUCE
Location: Not reported
Log Location Town: E. MILLINOCKET
Log Tank Involved: Unknown/Unspecified
Notes: Report of oil seeping out around mill (Katahdin Paper) from a historical spill.

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 100
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Recovery Method: Sorbents

Spill Point:

Product:
Product Code: #6 Fuel Oil
Product Other: Not reported
Product Amt: Not reported
Product Amt Unit: Not reported
Product Amt Qualifier: UNKNOWN
Primary Product: True

Event:
Spill Number: B-173-2009
Inc Tank Code: N

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Inc Tank:	None
Removal Flag:	False
Ust Registered Flag:	True
Ast Inside Flag:	False
Create Date:	04/27/2009
Create By:	EIAHEATH
Modify Date:	01/31/2012
Modify By:	EIELEIGH
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	03/26/2009
Actual Spill Date Unknown:	False
Actual Spill Time Unknown:	False
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	TX
Inc Source:	Storage Unit - Box or Other General Use Container
Spill Cause Code:	11
Spill Cause:	Accident - Transportation
Material Disposal Info:	Sawdust used as sorbent, burnt in boiler

Change:

Description:	Report Status change from DRV to FR
Date Change:	01/31/2012
Changed By:	EIELEIGH
Description:	Report Created with Report Status = DR
Date Change:	04/27/2009
Changed By:	EIAHEATH
Description:	Report Status change from DR to DRV
Date Change:	04/27/2009
Changed By:	EIAHEATH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER
Address:	50 MAIN STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Primary Employee:
- Primary Employee: True
- Name: AMANDA HEATH

Media Affected:
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 173
- Spill Year: 2009
- Create Date: 03/30/2009
- Created By: EICLECKE
- Modify Date: 03/30/2009
- Modify By: EICLECKE
- Log Spill Type: Oil Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 03/26/2009
- Log Rep Prod Cd: 81
- Log Rep Prod: Waste Oil/Used Motor Oil
- Log Emp Name: AMANDA HEATH
- Location: Not reported
- Log Location Town: EAST MILLINOCKET
- Log Tank Involved: None
- Notes: Waste Oil to pavement collected with sawdust/bark and burned in boiler. Ian Spencer, Katahdin Paper, 723-2278

Material Recovered:
- Material Recovered Type: OM
- Material Recovered: Other Material
- Material Amount: 5
- Material Units: cu. yds.
- Material Amt Qualifier: ESTIMATE

- Recovery Method: Sorbents

Spill Point:

Product:
- Product Code: Waste Oil/Used Motor Oil
- Product Other: Not reported
- Product Amt: 125
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

Event:
- Spill Number: B-663-2009
- Inc Tank Code: N
- Inc Tank: None
- Removal Flag: False

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Ust Registered Flag:	True
Ast Inside Flag:	False
Create Date:	12/07/2009
Create By:	EIRSHANN
Modify Date:	05/09/2012
Modify By:	EIELEIGH
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Actual Spill Time Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	HQ
Inc Source:	Equipment - Heavy Equipment
Spill Cause Code:	06
Spill Cause:	Mechanical Failure - Piping/Hose
Material Disposal Info:	The sorbents were disposed at their landfill

Change:

Description:	Report Created with Report Status = DR
Date Change:	12/07/2009
Changed By:	EIRSHANN
Description:	Report Status change from DR to DRV
Date Change:	12/07/2009
Changed By:	EIRSHANN
Description:	Report Status change from DRV to FR
Date Change:	05/09/2012
Changed By:	EIELEIGH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER
Address:	50 MAIN STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Primary Employee:
- Primary Employee: True
- Name: ROBERT F SHANNON

Media Affected:
- Medium: Inland Surface Water
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 663
- Spill Year: 2009
- Create Date: 11/23/2009
- Created By: EICLECKE
- Modify Date: 11/23/2009
- Modify By: EICLECKE
- Log Spill Type: Oil Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 11/17/2009
- Log Rep Prod Cd: 86
- Log Rep Prod: Hydraulic Oil
- Log Emp Name: ROBERT F SHANNON
- Location: Not reported
- Log Location Town: EAST MILLINOCKET
- Log Tank Involved: None
- Notes: Report of blown hydraulic line on loader, oil has been padded up. Bruce Albert, Katahdin Paper, 723-253-

Material Recovered:
- Material Recovered Type: OM
- Material Recovered: Other Material
- Material Amount: 60
- Material Units: lbs.
- Material Amt Qualifier: ESTIMATE
- Recovery Method: Sorbents

Spill Point:

Product:
- Product Code: Hydraulic Oil
- Product Other: Not reported
- Product Amt: 30
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

Event:
- Spill Number: B-462-2003
- Inc Tank Code: N

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Inc Tank:	None
Removal Flag:	False
Ust Registered Flag:	False
Ast Inside Flag:	False
Create Date:	09/15/2003
Create By:	EIDLUCE
Modify Date:	02/17/2004
Modify By:	EITGALLA
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	09/15/2003
Actual Spill Date Unknown:	False
Actual Spill Time Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	H
Spill Type:	Hazardous Material Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	TX
Inc Source:	Storage Unit - Box or Other General Use Container
Spill Cause Code:	17
Spill Cause:	Accident - Human Error
Material Disposal Info:	treated on site in waste water treatment plant

Change:

Description:	Report Status change from DR to DRV
Date Change:	12/12/2003
Changed By:	EIDLUCE
Description:	Report Status change from DRV to DQA
Date Change:	12/17/2003
Changed By:	EIBRANDA
Description:	Report Status change from DQA to FR
Date Change:	02/17/2004
Changed By:	EITGALLA
Description:	Report Created with Report Status = DR
Date Change:	09/15/2003
Changed By:	EIDLUCE

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER CO LLC
Address:	50 MAIN ST
City,State:	EAST MILLINOCKET,ME

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	DARRYL E LUCE

File:

Spill Id:	B-462-2003
Date Created:	02/20/2004
Created By:	EIPLAMBE
Date Modified:	02/18/2005
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 18-FEB-05.
Reconcile Date:	02/20/2004
File Reconciled By:	Not reported

Media Affected:

Medium:	Land
Medium:	Inland Surface Water

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	462
Spill Year:	2003
Create Date:	09/15/2003
Created By:	EICLECKE
Modify Date:	09/24/2003
Modify By:	EIBRANDA
Log Spill Type:	Hazardous Material Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	09/15/2003
Log Rep Prod Cd:	79
Log Rep Prod:	Hazardous Chemical - Specified in report
Log Emp Name:	DARRYL E LUCE
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	None
Notes:	Katahdin Paper Company reports spilling tote of 330 gallons of sodium hypochlorite (pH 12.5). Went to process sewer.

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ACTUAL

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Recovery Method: Licensed Treatment Facility

Spill Point:

Product:
Product Code: Hazardous Chemical - Specified in report
Product Other: sodium hypochlorite
Product Amt: 330
Product Amt Unit: gals.
Product Amt Qualifier: ACTUAL
Primary Product: True

Attachments:
Description: Katahdin Paper Co. report
Attach Type: Paper Attach
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 12/12/2003

Event:
Spill Number: B-77-2005
Inc Tank Code: N
Inc Tank: None
Removal Flag: False
Ust Registered Flag: False
Ast Inside Flag: False
Create Date: 01/04/2006
Create By: EIDLUCE
Modify Date: 03/03/2006
Modify By: EITGALLA
Report Status: FR
Report Status: Final Report
Actual Spill Datetime: 12/31/2004
Actual Spill Date Unknown: False
Actual Spill Time Unknown: True
Number Wells At Risk: 0
Number Wells Impacted: 0
Dtree Completed Flag: False
MCD Value: 19170
Further Response Action: False
Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 2
Reporter Type: Subject/Spiller
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: PW
Inc Location: Utility - Power
Inc Source Code: ET
Inc Source: Utility - Electrical Transformer
Spill Cause Code: 08
Spill Cause: Mechanical Failure - Loose Fitting
Material Disposal Info: Pine Tree Landfill, Hampden

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Change:
Description: Report Created with Report Status = DR
Date Change: 01/04/2006
Changed By: EIDLUCE

Description: Report Status change from DR to DRV
Date Change: 01/04/2006
Changed By: EIDLUCE

Description: Report Status change from DRV to DQA
Date Change: 01/05/2006
Changed By: EIBRANDA

Description: Report Status change from DQA to FR
Date Change: 03/03/2006
Changed By: EITGALLA

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: BANGOR HYDRO-ELECTRIC CO
Address: PO BOX 932 21 TELCOM DR
City,State: BANGOR,ME
Country: USA
Zipcode: 04402-0932
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARRYL E LUCE

File:
Spill Id: B-77-2005
Date Created: 03/06/2006
Created By: IMAGING
Date Modified: 03/06/2006
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 06-MAR-06.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Engineered Containment

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 77

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Spill Year:	2005
Create Date:	02/14/2005
Created By:	EICLECKE
Modify Date:	02/17/2005
Modify By:	EIBRANDA
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	02/09/2005
Log Rep Prod Cd:	87
Log Rep Prod:	Transformer Oil
Log Emp Name:	DARRYL E LUCE
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	None
Notes:	Bangor Hydro-Electric Company reported a five gallon non-PCB oil release at substation #3 at Katahdin Paper Mill.

Material Recovered:

Material Recovered Type:	CS
Material Recovered:	Contaminated Soil
Material Amount:	1
Material Units:	cu. yds.
Material Amt Qualifier:	ESTIMATE
Recovery Method:	Excavation

Spill Point:

Product:

Product Code:	Transformer Oil
Product Other:	Not reported
Product Amt:	5
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

Attachments:

Description:	B.H.E.Co report
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	01/04/2006

AIRS:

Facility ID:	00058
Year:	2005
NH3:	27.5300000
CO:	290.029993
NO2:	570.669993
PM10:	2.60999998
PM2.5:	1.53
SO2:	1126.84998

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

VOC:	167.09
VOC1:	162.72
Total Non_Methane Organic:	4.37
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	2621
NAICS:	322121
EDR ID:	2301900058
Lead:	8
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported
Facility ID:	00058
Year:	2006
NH3:	29.2082699
CO:	313.106400
NO2:	572.133500
PM10:	2.47411498
PM2.5:	1.49658200
SO2:	1053.271
VOC:	Not reported
VOC1:	188.9973
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	2621
NAICS:	322121
EDR ID:	2301900058
Lead:	8.25619999
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported
Facility ID:	00058
Year:	2007
NH3:	30.8718
CO:	328.7226
NO2:	596.369500
PM10:	22.0105
PM2.5:	20.5127899
SO2:	1174.818
VOC:	Not reported
VOC1:	223.2328
Total Non_Methane Organic:	Not reported
Mailing Address:	50 MAIN ST
Mailing City,St,Zip:	EAST MILLINOCKET, ME 04430
Lat/Long:	Not reported
SIC:	2621
NAICS:	322121
EDR ID:	2301900058
Lead:	8.77880000
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Facility ID:	00058
Year:	2008
NH3:	26.8927599
CO:	297.140493
NO2:	449.842693
PM10:	18.8564499
PM2.5:	18.09262
SO2:	804.5213
VOC:	Not reported
VOC1:	212.079900
Total Non_Methane Organic:	Not reported
Mailing Address:	50 MAIN ST
Mailing City,St,Zip:	EAST MILLINOCKET, ME 04430
Lat/Long:	Not reported
SIC:	2621
NAICS:	322121
EDR ID:	2301900058
Lead:	7.40569993
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

Facility ID:	00058
Year:	2009
NH3:	24.1756199
CO:	286.270693
NO2:	349.057700
PM10:	17.38664
PM2.5:	17.1029699
SO2:	271.442900
VOC:	Not reported
VOC1:	38.7124298
Total Non_Methane Organic:	Not reported
Mailing Address:	50 MAIN ST
Mailing City,St,Zip:	EAST MILLINOCKET, ME 04430
Lat/Long:	Not reported
SIC:	2621
NAICS:	322121
EDR ID:	2301900058
Lead:	6.21659995
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

Facility ID:	Not reported
Year:	2014
NH3:	Not reported
CO:	Not reported
NO2:	Not reported
PM10:	Not reported
PM2.5:	Not reported
SO2:	Not reported
VOC:	Not reported
VOC1:	Not reported
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Lat/Long:	Not reported
SIC:	Not reported
NAICS:	Not reported
EDR ID:	2301900058
Lead:	Not reported
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported
Facility ID:	2301900058
Year:	2010
NH3:	23.8386022
CO:	286.538951
NO2:	353.373868
PM10:	24.9646000
PM2.5:	21.4942999
SO2:	387.680000
VOC:	Not reported
VOC1:	156.574000
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	Not reported
NAICS:	322121
EDR ID:	2301900058
Lead:	6.59639999
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported
Facility ID:	Not reported
Year:	2012
NH3:	38.2423264
CO:	739.345193
NO2:	363.604906
PM10:	49.3012676
PM2.5:	43.1383519
SO2:	52.0167555
VOC:	Not reported
VOC1:	114.649148
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	Not reported
NAICS:	322121
EDR ID:	2301900058
Lead:	5.92383551
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported
Facility ID:	Not reported
Year:	2011
NH3:	25.2150214
CO:	486.799328

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

NO2:	223.659156
PM10:	32.4366842
PM2.5:	28.3767333
SO2:	48.3695577
VOC:	Not reported
VOC1:	56.3725262
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	Not reported
NAICS:	322121
EDR ID:	2301900058
Lead:	3.90749814
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

Facility ID:	Not reported
Year:	2013
NH3:	35.8400678
CO:	693.588139
NO2:	244.396728
PM10:	46.2910133
PM2.5:	40.5103754
SO2:	35.4460278
VOC:	Not reported
VOC1:	112.147245
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	Not reported
NAICS:	322121
EDR ID:	2301900058
Lead:	5.550179
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

Facility ID:	2301900058
Year:	2014
NH3:	Not reported
CO:	Not reported
NO2:	Not reported
PM10:	Not reported
PM2.5:	Not reported
SO2:	Not reported
VOC:	Not reported
VOC1:	Not reported
Total Non_Methane Organic:	Not reported
Mailing Address:	Not reported
Mailing City,St,Zip:	Not reported
Lat/Long:	Not reported
SIC:	Not reported
NAICS:	Not reported
EDR ID:	2301900058

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Lead:	Not reported
Permit Issued Date:	Not reported
Permit Expiration Date:	Not reported
Facility Category:	Not reported

TIER 2:

Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2013
Submitted By:	Dammon Frecker
Acute/Chronic:	Not reported
Average Amount:	Not reported
Record ID:	Not reported
Facility Router Record ID:	Not reported
Chemical Inventory Record ID:	Not reported
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	Not reported
CI Last Modified:	Not reported
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	2-28-2014
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20135MR1ES0028BW
Failed Validation:	Not reported
Facility Date Modified:	08/26/2014
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	45.62301
Longitude:	-68.57443

Chemical Inv:

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Year:	2013
Acute:	T
Average Amount:	1600000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20136BQNG7008N63
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	68553-00-4
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	BUNKER C OIL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	5879700
Max Amount Container:	5879700
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	7000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20137Q99NG0011PW
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	64-19-7
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	ACETIC ACID, SOLUTION, MORE THAN 80% ACID (incl Yellow 40L Dye)
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	14450
Max Amount Container:	2889
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	10000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20137Q90DB002F6S
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	1310-58-3
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Fire:	Not reported
Gas:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Liquid:	T
Max Amount:	24600
Max Amount Container:	10500
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	33000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20137Q936C00EN14
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	Cationic Polyacrylamide Water/Oil Emulsion - Kemira PROFLOC 2110RS
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	59000
Max Amount Container:	3000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	25524
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MR4JG02BPRK
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	68334-30-5
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	DIESEL FUEL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	42540
Max Amount Container:	28000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	46000
Facility ID:	FATR20135MR1ES0028BW

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chemical Inv Record ID:	CVTR20135MR4UQ02FJRG
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	107-21-1
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	ETHYLENE GLYCOL
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	52000
Max Amount Container:	21000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	12000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR201394RWJT012JJ7
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	FELT CLEANER, CHUTE, WPF-80CN
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	12000
Max Amount Container:	3000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	90000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MR52402JYKQ
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	10028-22-5
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	FERRIC SULFATE - Kemira 125
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	92000
Max Amount Container:	92000
Mixture:	T

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	6170
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MR5A202MTR4
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	8006-61-9
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	GASOLINE
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	12340
Max Amount Container:	12340
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	79300
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR201394RX4K01BNA3
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	Lead
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Max Amount:	79300
Max Amount Container:	2850
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T
Year:	2013
Acute:	T
Average Amount:	17000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR201394RPEX00AATG
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	Lubrication Oil
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	17000
Max Amount Container:	15000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	25000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MR7VX03FTL7
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7775-14-6
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	SODIUM HYDROSULFITE (LIQUID)
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	50000
Max Amount Container:	50000
Mixture:	T
Pressure:	T
Pure:	Not reported
Reactive:	T
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	25000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT5RU001FH1
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	1310-73-2
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	SODIUM HYDROXIDE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	51000
Max Amount Container:	51000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Year:	2013
Acute:	T
Average Amount:	25000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT61C005PB9
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	7681-52-9
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	SODIUM HYPOCHLORITE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	40000
Max Amount Container:	20000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	25000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT6LK00BA31
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	STARCH (LIQUID)
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	50500
Max Amount Container:	2970
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	30000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT6VE00EYCA
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	STARCH (POWDER)
Fire:	Not reported
Gas:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Liquid:	Not reported
Max Amount:	48000
Max Amount Container:	1600
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T
Year:	2013
Acute:	T
Average Amount:	50000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT79100GR02
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	7664-93-9
CIEHS Chemical:	T
Last Modified Date:	08/26/2014
Entered Chemical Name:	SULFURIC ACID
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	65000
Max Amount Container:	46037
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	T
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	550000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR201394RQRC00ERGW
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	Transformer Oil
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	550000
Max Amount Container:	15000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2013
Acute:	T
Average Amount:	130000
Facility ID:	FATR20135MR1ES0028BW

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chemical Inv Record ID:	CVTR20135MT7XP00QAZX
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	57-13-6
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	UREA
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	208940
Max Amount Container:	208940
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2013
Acute:	T
Average Amount:	10000
Facility ID:	FATR20135MR1ES0028BW
Chemical Inv Record ID:	CVTR20135MT83400T11K
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	08/26/2014
Entered Chemical Name:	WOOD DUST
Fire:	T
Gas:	Not reported
Liquid:	Not reported
Max Amount:	100000
Max Amount Container:	100000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	T

Facility Mailing Address:	50 Main Street
Facility Mailing City:	East Millinocket
Facility Mailing State:	ME
Facility Mailing Zip:	04430
Facility Mailing Country:	USA
Report Year:	2011
Submitted By:	Dammon Frecker
Acute/Chronic:	Not reported
Average Amount:	Not reported
Record ID:	Not reported
Facility Router Record ID:	Not reported
Chemical Inventory Record ID:	Not reported
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

CI Last Modified:	Not reported
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	2/28/2012
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20115MR1ES0028BW
Failed Validation:	T
Facility Date Modified:	11/02/2012
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	CE - Center of Facility
Lat/Long Method:	I1 - Interpolation (Map)
Notes:	Not reported
Validation Report:	----------Validation Errors for Chemical: DIESEL FUELState field (Specify other) required for submission.
Latitude:	45.37149
Longitude:	68.341498

Chemical Inv:

Year:	2011
Acute:	Not reported
Average Amount:	28000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR4JG02BPRK
Chronic:	Not reported
Chemical Same as Last Year:	T
CICAS:	68334-30-5
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	DIESEL FUEL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	38775
Max Amount Container:	23400
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Year:	2011
Acute:	T
Average Amount:	46000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR4UQ02FJRG
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	107-21-1
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	ETHYLENE GLYCOL
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	47000
Max Amount Container:	21000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	90000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR52402JYKQ
Chronic:	Not reported
Chemical Same as Last Year:	T
CICAS:	10028-22-5
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	FERRIC SULFATE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	129313
Max Amount Container:	129313
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	Not reported
Average Amount:	7800
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR5A202MTR4
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	8006-61-9
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	GASOLINE
Fire:	T
Gas:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Liquid:	T
Max Amount:	12746
Max Amount Container:	12146
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	Not reported
Average Amount:	7500
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR6CZ02XRBY
Chronic:	Not reported
Chemical Same as Last Year:	T
CICAS:	64742-54-7
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	MINERAL OIL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	10000
Max Amount Container:	10000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	T
Average Amount:	10000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MR7PN03CE0Y
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7775-14-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	SODIUM HYDROSULFITE (POWDER)
Fire:	T
Gas:	Not reported
Liquid:	Not reported
Max Amount:	10000
Max Amount Container:	1000
Mixture:	T
Pressure:	T
Pure:	Not reported
Reactive:	T
Solid:	T
Year:	2011
Acute:	T
Average Amount:	120000
Facility ID:	FATR20115MR1ES0028BW

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chemical Inv Record ID:	CVTR20115MR7VX03FTL7
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7775-14-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	SODIUM HYDROSULFITE (LIQUID)
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	182884
Max Amount Container:	182884
Mixture:	T
Pressure:	T
Pure:	Not reported
Reactive:	T
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	51000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT5RU001FH1
Chronic:	Not reported
Chemical Same as Last Year:	T
CICAS:	1310-73-2
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	SODIUM HYDROXIDE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	71150
Max Amount Container:	71150
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	25000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT61C005PB9
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7681-52-9
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	SODIUM HYPOCHLORITE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	37077
Max Amount Container:	18539
Mixture:	T

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported
Year:	2011
Acute:	Not reported
Average Amount:	25000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT6LK00BA31
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	STARCH (LIQUID)
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	50500
Max Amount Container:	2970
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	Not reported
Average Amount:	30000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT6VE00EYCA
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	STARCH (POWDER)
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Max Amount:	48000
Max Amount Container:	1600
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T
Year:	2011
Acute:	T
Average Amount:	50000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT79100GR02
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7664-93-9

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

CIEHS Chemical:	T
Last Modified Date:	03/01/2012
Entered Chemical Name:	SULFURIC ACID
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	92193
Max Amount Container:	46096
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	24000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT7QU00NDJN
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	14807-96-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	TALC (POWDER)
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Max Amount:	32000
Max Amount Container:	1600
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T

Year:	2011
Acute:	T
Average Amount:	130000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT7XP00QAZX
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	57-13-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	UREA
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	208940
Max Amount Container:	208940
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Year:	2011
Acute:	Not reported
Average Amount:	10000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20115MT83400T11K
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	WOOD DUST
Fire:	T
Gas:	Not reported
Liquid:	Not reported
Max Amount:	100000
Max Amount Container:	Not reported
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	T

Year:	2011
Acute:	Not reported
Average Amount:	1600000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20116BQNG7008N63
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	68553-00-4
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	BUNKER C OIL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	4960000
Max Amount Container:	4800000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	7000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20117Q90DB002F6S
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	1310-58-3
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	ALKALINE CORROSIVE LIQUID
Fire:	Not reported
Gas:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Liquid:	T
Max Amount:	14100
Max Amount Container:	14100
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	T
Average Amount:	45000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20117Q91Y70086JN
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	CATIONIC POLYMER
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	72000
Max Amount Container:	72000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	T
Average Amount:	45000
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20117Q92HJ00BWC9
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	Cationic Polyacrylamide in water-in-oil emulsion
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	53200
Max Amount Container:	53200
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2011
Acute:	T
Average Amount:	11500
Facility ID:	FATR20115MR1ES0028BW

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chemical Inv Record ID:	CVTR20117Q936C00EN14
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	Cationic Polyacrylamide Water/Oil Emulsion
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	23150
Max Amount Container:	2315
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2011
Acute:	T
Average Amount:	9200
Facility ID:	FATR20115MR1ES0028BW
Chemical Inv Record ID:	CVTR20117Q99NG0011PW
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	64-19-7
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2012
Entered Chemical Name:	ACETIC ACID, SOLUTION, MORE THAN 80% ACID
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	28660
Max Amount Container:	2864
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Facility Mailing Address:	50 Main Street
Facility Mailing City:	East Millinocket
Facility Mailing State:	ME
Facility Mailing Zip:	04430
Facility Mailing Country:	USA
Report Year:	2012
Submitted By:	Dammon Frecker
Acute/Chronic:	Not reported
Average Amount:	Not reported
Record ID:	Not reported
Facility Router Record ID:	Not reported
Chemical Inventory Record ID:	Not reported
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

CI Last Modified:	Not reported
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	2/27/2013
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20125MR1ES0028BW
Failed Validation:	Not reported
Facility Date Modified:	08/14/2013
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	CE - Center of Facility
Lat/Long Method:	I1 - Interpolation (Map)
Notes:	Not reported
Validation Report:	Not reported
Latitude:	45.62301
Longitude:	-68.57443

Chemical Inv:

Year:	2012
Acute:	T
Average Amount:	28000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR4JG02BPRK
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	68334-30-5
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	DIESEL FUEL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	38775
Max Amount Container:	23400
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2012

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Acute:	T
Average Amount:	46000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR4UQ02FJRG
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	107-21-1
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	ETHYLENE GLYCOL
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	52000
Max Amount Container:	21000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	90000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR52402JYKQ
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	10028-22-5
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	FERRIC SULFATE - Kemira 125
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	132000
Max Amount Container:	129300
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	9760
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR5A202MTR4
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	8006-61-9
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	GASOLINE
Fire:	T
Gas:	Not reported
Liquid:	T

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Max Amount:	13610
Max Amount Container:	13010
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	10000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR7PN03CE0Y
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7775-14-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	SODIUM HYDROSULFITE (POWDER)
Fire:	T
Gas:	Not reported
Liquid:	Not reported
Max Amount:	10000
Max Amount Container:	1000
Mixture:	T
Pressure:	T
Pure:	Not reported
Reactive:	T
Solid:	T
Year:	2012
Acute:	T
Average Amount:	120000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MR7VX03FTL7
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	7775-14-6
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	SODIUM HYDROSULFITE (LIQUID)
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	182884
Max Amount Container:	182884
Mixture:	T
Pressure:	T
Pure:	Not reported
Reactive:	T
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	51000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT5RU001FH1

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chronic:	T
Chemical Same as Last Year:	T
CICAS:	1310-73-2
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	SODIUM HYDROXIDE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	71150
Max Amount Container:	71150
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	25000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT61C005PB9
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	7681-52-9
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	SODIUM HYPOCHLORITE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	40400
Max Amount Container:	20200
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	25000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT6LK00BA31
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	STARCH (LIQUID)
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	50500
Max Amount Container:	2970
Mixture:	T
Pressure:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	30000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT6VE00EYCA
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	9005-25-8
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	STARCH (POWDER)
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Max Amount:	48000
Max Amount Container:	1600
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T
Year:	2012
Acute:	T
Average Amount:	50000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT79100GR02
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	7664-93-9
CIEHS Chemical:	T
Last Modified Date:	03/01/2013
Entered Chemical Name:	SULFURIC ACID
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	65000
Max Amount Container:	46096
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	T
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	130000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT7XP00QAZX
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	57-13-6
CIEHS Chemical:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Last Modified Date:	03/01/2013
Entered Chemical Name:	UREA
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	208940
Max Amount Container:	208940
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	10000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20125MT83400T11K
Chronic:	T
Chemical Same as Last Year:	T
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	WOOD DUST
Fire:	T
Gas:	Not reported
Liquid:	Not reported
Max Amount:	100000
Max Amount Container:	Not reported
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	T

Year:	2012
Acute:	T
Average Amount:	1600000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20126BQNG7008N63
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	68553-00-4
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	BUNKER C OIL
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	5879700
Max Amount Container:	5879700
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Year:	2012
Acute:	T
Average Amount:	7000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20127Q90DB002F6S
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	1310-58-3
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	14100
Max Amount Container:	14100
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	33000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20127Q936C00EN14
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	Cationic Polyacrylamide Water/Oil Emulsion - Kemira PROFLOC 2110RS
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	53000
Max Amount Container:	6000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	28000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR20127Q99NG0011PW
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	64-19-7
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	ACETIC ACID, SOLUTION, MORE THAN 80% ACID (incl Yellow 40L Dye)
Fire:	T
Gas:	Not reported

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Liquid:	T
Max Amount:	30400
Max Amount Container:	2864
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	60000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294PQXG00J5AM
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	Surfactant - KEMIRA, LIONSURF NR407
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	60000
Max Amount Container:	3500
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	17000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294RPEX00AATG
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	Lubrication Oil
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	17000
Max Amount Container:	15000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	550000
Facility ID:	FATR20125MR1ES0028BW

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Chemical Inv Record ID:	CVTR201294RQRC00ERGW
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	Transformer Oil
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	550000
Max Amount Container:	15000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	Not reported
Average Amount:	55000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294RV8V00KHZJ
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	OPTICAL BRIGHTENER, Kemira BLANKOPHOR DS LIQUID
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	55000
Max Amount Container:	3250
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

Year:	2012
Acute:	T
Average Amount:	12000
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294RWJT012JJ7
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	FELT CLEANER, CHUTE, WPF-80CN
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	12000
Max Amount Container:	3000
Mixture:	T

GREAT NORTHERN PAPER - EAST MILLINOCKET MILL (Continued) **S107695603**

Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	10500
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294RWXE016FQ5
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	CLEAN FELT, CHUTE
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Max Amount:	10500
Max Amount Container:	3500
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Year:	2012
Acute:	T
Average Amount:	79300
Facility ID:	FATR20125MR1ES0028BW
Chemical Inv Record ID:	CVTR201294RX4K01BNA3
Chronic:	T
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	03/01/2013
Entered Chemical Name:	Lead
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Max Amount:	79300
Max Amount Container:	2850
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	T

A10 **ME RGA LF** **S114991305**
Target **50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 10 of 30 in cluster A

Actual: **348 ft.**

RGA LF:

2008	50 MAIN ST
2007	50 MAIN ST
2005	50 MAIN ST

A11 **EAST MILLINOCKET** **ME NPDES** **S122872932**
Target **50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 11 of 30 in cluster A

Actual: **348 ft.**

NPDES:

Maine License:	Not reported
Category:	MAJOR
NPDES ID:	ME0102881
Comments:	Not reported
Gps Date:	Not reported
Location Accuracy:	WITHIN 1M
Location Method:	DIGITIZED
Source:	MDEP GIS UNIT
Latitude:	45.621035873
Longitude:	-68.567409208

Outfall:

NPDES ID:	ME0102881
Facility:	EAST MILLINOCKET
Name:	OUTFALL 001
Id:	Not reported
Class:	Not reported
Category:	MAJOR
Active:	ACTIVE
Town:	Not reported
Waterbody:	Penobscot River
Comments:	Not reported
GPS Date:	Not reported
Location Accuracy:	WITHIN 5M
Location Method:	DIGITIZED
Data Source:	MDEP GIS UNIT
Latitude:	45.61992539
Longitude:	-68.569796376

A12 **ACM NARM MAINE LLC** **ME MANIFEST** **S121891695**
Target **50 MAIN STREET** **N/A**
Property **EAST MILLINOCKET, ME 04430**

Site 12 of 30 in cluster A

Actual: **348 ft.**

MANIFEST:

Year:	2015
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR

ACM NARM MAINE LLC (Continued) **S121891695**

Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	100022894CTN
Manifest Handler Date:	12/08/2015
Transporter Sequence Number:	1
Transporter EPA ID:	MER000504191
Transporter Name:	ENVIRONMENTAL PROJECTS INC
Transporter Date:	12/08/2015
TSD Date:	12/10/2015
TSD EPAID:	RID040098352
TSD Name:	NORTHLAND ENVIRONMENTAL INC
Manifest Item Key:	1
Manifest Item Quantity:	292
Manifest Item Quantity Unit:	P
Manifest Item Container Number:	9
Manifest Item Container Type:	DF
Manifest Item Handling Final:	H141
Waste IDS:	D009
Manifest Item DOT Description:	UN2809, RQ, WASTE MERCURY, 8, PGIII

Year:	2015
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	100022894CTN
Manifest Handler Date:	12/08/2015
Transporter Sequence Number:	2
Transporter EPA ID:	RIR000508457
Transporter Name:	21ST CENTURY ENVIRONMENTAL MGT LLC OF RI
Transporter Date:	12/10/2015
TSD Date:	12/10/2015
TSD EPAID:	RID040098352
TSD Name:	NORTHLAND ENVIRONMENTAL INC
Manifest Item Key:	1
Manifest Item Quantity:	292
Manifest Item Quantity Unit:	P
Manifest Item Container Number:	9
Manifest Item Container Type:	DF
Manifest Item Handling Final:	H141
Waste IDS:	D009
Manifest Item DOT Description:	UN2809, RQ, WASTE MERCURY, 8, PGIII

Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261639FLE
Manifest Handler Date:	05/19/2016

ACM NARM MAINE LLC (Continued) **S121891695**

Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	2
Manifest Item Quantity:	1,375
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	5
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN2801, WASTE DYES, LIQUID, CORROSIVE, N.O.S., (ACETIC ACID) 8, PG II

Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261639FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	1
Manifest Item Quantity:	1,260
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	4
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D001, D002
Manifest Item DOT Description:	UN2789, WASTE ACETIC ACID, GLACIAL, 8, 3, PGII

Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261639FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016

ACM NARM MAINE LLC (Continued) **S121891695**

TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	3
Manifest Item Quantity:	120
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	4
Manifest Item Container Type:	DF
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN2801, WASTE DYES, LIQUID CORROSIVE, N.O.S. 9ACETIC ACID) 8, PG II
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261639FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	4
Manifest Item Quantity:	275
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	1
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN3265, WASTE CORROSIVE LIQUIDS, ACIDIC, ORGANIC (ACETIC ACID), NOS, 8, PGII
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261640FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	1
Manifest Item Quantity:	330

ACM NARM MAINE LLC (Continued) **S121891695**

Manifest Item Quantity Unit:	G
Manifest Item Container Number:	1
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN1819, WASTE SODIUM ALUMINATE SOLUTION, 8, PG II
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261640FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	2
Manifest Item Quantity:	330
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	1
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN1814, WASTE POTASSIUM HYDROXIDE SOLUTION, 8, PGII
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261640FLE
Manifest Handler Date:	05/19/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/19/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	3
Manifest Item Quantity:	330
Manifest Item Quantity Unit:	G
Manifest Item Container Number:	1
Manifest Item Container Type:	TP
Manifest Item Handling Final:	H141
Waste IDS:	D002

ACM NARM MAINE LLC (Continued) **S121891695**

Manifest Item DOT Description:	UN3266, WASTE CORROSIVE LIQUIDS, BASIC, INORGANIC, (POTASSIUM HYDROXIDE), NOS, 8, PGII
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261717FLE
Manifest Handler Date:	05/18/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/18/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	2
Manifest Item Quantity:	375
Manifest Item Quantity Unit:	P
Manifest Item Container Number:	1
Manifest Item Container Type:	DF
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN3267, WASTE CORROSIVE LIQUIDS, BASIC, ORGANIC, NOS, 8, PGII (HYDROXIDE, SURFCTANTS)
Year:	2016
EPAID:	MED001098011
Contact Name:	JASON INOFF
Contact Phone:	5162055748
Mailing Address:	780 THIRD AVENUE, 27TH FLOOR
Mailing City:	NEW YORK
Mailing State:	NY
Mailing Zip:	10017
Manifest Number:	000261717FLE
Manifest Handler Date:	05/18/2016
Transporter Sequence Number:	1
Transporter EPA ID:	MAC300098399
Transporter Name:	NRC EAST ENVIRONMENTAL SERVICES, INC.
Transporter Date:	05/18/2016
TSD Date:	05/20/2016
TSD EPAID:	VTR000517052
TSD Name:	ENPRO SERVICES OF VERMONT INC
Manifest Item Key:	3
Manifest Item Quantity:	315
Manifest Item Quantity Unit:	P
Manifest Item Container Number:	1
Manifest Item Container Type:	DF
Manifest Item Handling Final:	H141
Waste IDS:	D002
Manifest Item DOT Description:	UN3267, WASTE CORROSIVE LIQUIDS, BASIC, ORGANIC, NOS, 8, PGII (AMMONIA SURFACTANTS)

ACM NARM MAINE LLC (Continued) **S121891695**

Click this hyperlink while viewing on your computer to access
16 additional ME_MANIFEST: record(s) in the EDR Site Report.

A13 **GREAT NORTHERN PAPER** **ME LUST** **S106404265**
Target **RT 157 - 50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME**

Site 13 of 30 in cluster A

Actual:
348 ft.

LUST:

Event:

Spill Number:	B-483-2003
Spill Cause:	Other - Unknown
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	10/02/2003
Create By:	EIBRANDA
Modify Date:	03/29/2004
Modify By:	EITGALLA
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Subject/Spiller
Detection Method:	Other
Inc Location:	Business - Industrial
Inc Source:	Storage Unit - Underground Storage Tank
Material Disposal Info:	Contaminated soil left in place for the time being, rather than undermine the active tank system.

Change:

Description:	Report Created with Report Status = DR
Date Change:	10/02/2003
Changed By:	EIBRANDA
Description:	Report Status change from DR to DQA
Date Change:	01/13/2004
Changed By:	EIBRANDA
Description:	Report Status change from DQA to FR
Date Change:	03/29/2004
Changed By:	EITGALLA

Contact:

Contact Type:	Other Contact
Potential RP:	False
Name:	DAVID BEAUMENT
Title:	Not reported
Company:	BEAUMENT GENERATOR
Address:	PO BOX 352 HATHAWAY RD
City,State:	MEDWAY,ME

GREAT NORTHERN PAPER (Continued) **S106404265**

Country: USA
Zipcode: 04460
Phone/Ext: /
Comments: Not reported

Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: GREAT NORTHERN PAPER INC - AKA KATAHDIN PAPER
Address: ONE KATAHDIN AVE
City,State: MILLINOCKET,ME
Country: USA
Zipcode: 04462-1398
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT RANDALL

File:
Spill Id: B-483-2003
Date Created: 03/30/2004
Created By: EIPLAMBE
Date Modified: 02/18/2005
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 18-FEB-05.
Reconcile Date: 03/30/2004
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 483
Spill Year: 2003
Create Date: 10/01/2003
Created By: EIBRANDA
Modify Date: 10/01/2003
Modify By: EIBRANDA
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 09/29/2003
Log Rep Prod Cd: 20
Log Rep Prod: Gasoline Unspecified
Log Emp Name: ROBERT RANDALL
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Underground Tank(s) Involved

GREAT NORTHERN PAPER (Continued) **S106404265**

Notes: Carl Akeley (GNP Co.) called to report gasoline contaminated soil found around one of their underground tanks at the East Millinocket mill. The tank was installed in 1989 and does not appear to be leaking. Source of the oil is unknown.

Material Recovered:
- Material Recovered Type: NO
- Material Recovered: None
- Material Amount: 0
- Material Units: gals.
- Material Amt Qualifier: ESTIMATE

Recovery Method: None

Spill Point:
- Create Date: 9/10/2008
- Created By: EICHALST
- Modify Date: 7/15/2009
- Modify By: EICHALST
- Point Type Code: ASP
- UTM North: 5052186.5599999996
- UTM East: 533392.64000000001
- GPS Unit: TANKS
- GPS Date: Not reported
- GPS Time: Not reported
- GIS Feature Class: Response_Spill_Points
- GIS Object Id: 11548
- GIS Sync Flag: True

Product:
- Product Code: Gasoline Unspecified
- Product Other: Not reported
- Product Amt: Not reported
- Product Amt Unit: Not reported
- Product Amt Qualifier: UNKNOWN
- Primary Product: True

A14 **BROOKFIELD FACILITY - DOLBY** **RCRA-CESQG** **1024886035**
Target **50 MAIN ST** **MEX020012031**
Property **EAST MILLINOCKET, ME 04462**

Site 14 of 30 in cluster A

Actual: 348 ft.

RCRA-CESQG:
- Date form received by agency: 03/20/2019
- Facility name: BROOKFIELD FACILITY - DOLBY
- Facility address: 50 MAIN ST
  EAST MILLINOCKET, ME 04462
- EPA ID: MEX020012031
- Mailing address: MAIN ST
  LEWISTON, ME 04240
- Contact: JASON SEYFRIED
- Contact address: MAIN ST
  LEWISTON, ME 04240
- Contact country: US

BROOKFIELD FACILITY - DOLBY (Continued) **1024886035**

Contact telephone: 207-755-5615
Contact email: JASON.SEYFRIED@BROOKFIELDRENEWABLE.COM
EPA Region: 01
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

A15 **ERNS 2003700621**
Target Property **50 MAIN ST.** **N/A**
EAST MILLINOCKET, ME

Site 15 of 30 in cluster A

Actual: 348 ft.

Incident Commons:
NRC Report #: 700621
Description of Incident: THE MATERIAL SPILLED OUT OF A PAD MOUNTED TRANSFORMER DUE TO A LEAKY VALVE.
Type of Incident: FIXED
Incident Cause: EQUIPMENT FAILURE
Incident Date Time: 2003-09-24 13:00:00
Incident DTG: DISCOVERED
Incident Location: SUB STATION #3
Loaction Address: 50 MAIN ST.
Location Street 1: Not reported
Location Street 2: Not reported
Location Nearest City: EAST MILLINOCKET
Location State: ME

(Continued) **2003700621**

Location County:	PENOBSCOT
Location Zip:	Not reported
Distance From City:	Not reported
Distance Units:	Not reported
Direction From City:	Not reported
Lat Deg:	Not reported
Lat Min:	Not reported
Lat Sec:	Not reported
Lat Quad:	Not reported
Long Deg:	Not reported
Long Min:	Not reported
Long Sec:	Not reported
Long Quad:	Not reported
Location Section:	Not reported
Location Township:	Not reported
Location range:	Not reported
Potential Range:	Not reported

Incidents:

NRC Report #:	700621
Aircraft Type:	Not reported
Aircraft Model:	Not reported
Aircraft ID:	Not reported
Aircraft Fuel Capacity:	Not reported
Aircraft Fuel Capacity Units:	Not reported
Aircraft Fuel on Board:	Not reported
Aircraft Fuel on Board Units:	Not reported
Aircraft Spot Number:	Not reported
Aircraft Hanger:	Not reported
Aircraft Runway Number:	Not reported
Road Mile Marker:	Not reported
Building ID:	Not reported
Type of Fixed Object:	TRANSFORMER
Power Generating Facility:	N
Generating Capacity:	Not reported
Type of Fuel:	Not reported
NPDES:	Not reported
NPDES Compliance:	U
Pipeline Type:	Not reported
DOT Regulated:	U
Pipeline Above Ground:	ABOVE
Exposed Underwater:	N
Pipeline Covered:	U
Railroad Hotline:	Not reported
Grade Crossing:	N
Location Subdivision:	Not reported
Railroad Milepost:	Not reported
Type Vehicle Involved:	Not reported
Crossing Device Type:	Not reported
Device Operational:	Y
DOT Crossing Number:	Not reported
Brake Failure:	N
Description of Tank:	Not reported
Tank Above Ground:	ABOVE
Transportable Container:	U
Tank Regulated:	U
Tank Regulated By:	Not reported
Tank ID:	Not reported

(Continued) **2003700621**

Capacity of Tank:	Not reported
Capacity of Tank Units:	Not reported
Actual Amount:	Not reported
Actual Amount Units:	Not reported
Platform Rig Name:	Not reported
Platform Letter:	Not reported
Location Area ID:	Not reported
Location Block ID:	Not reported
OCSG Number:	Not reported
OCSP Number:	Not reported
State Lease Number:	Not reported
Pier Dock Number:	Not reported
Berth Slip Number:	Not reported
Continuous Release Type:	Not reported
Initial Continuous Release No:	Not reported
Continuous Release Permit:	Not reported
Allision:	N
Type of Structure:	Not reported
Structure Name:	Not reported
Structure Operational:	U
Airbag Deployed:	Not reported
Date Tiem Normal Service:	Not reported
Service Disruption Time:	Not reported
Service Disruption Units:	Not reported
Transit Bus Flag:	Not reported
CR Begin Date:	Not reported
CR End Date:	Not reported
CR Change Date:	Not reported
FBI Contact:	Not reported
FBI Contact Date Time:	Not reported
Sub Part C Testing Req:	XXX
Conductor Testing:	Not reported
Engineer Testing:	Not reported
Trainman Testing:	Not reported
Yard Foreman Testing:	Not reported
RCL Operator Testing:	Not reported
Brakeman Testing:	Not reported
Train Dispatcher Testing:	Not reported
Signalman Testing:	Not reported
Other Employee Testing:	Not reported
Unknown Testing:	Not reported
Passenger Handling:	Not reported
Passenger Route:	XXX
Passenger Delay:	XXX

Incident Details:

NRC Report #:	700621
Fire Involved:	N
Fire Extinguished:	U
Any Evacuations:	N
Number Evacuated:	Not reported
Who Evacuated:	Not reported
Radius of Evacuation:	Not reported
Any Injuries:	N
Number Injured:	Not reported
Number Hospitalized:	Not reported
Any Fatalities:	N

(Continued) **2003700621**

Number Fatalities:	Not reported
Any Damages:	N
Damage Amount:	Not reported
Air Corridor Closed:	N
Air Corridor Desc:	Not reported
Air Closure Time:	Not reported
Waterway Closed:	N
Waterway Desc:	Not reported
Waterway Closure Time:	Not reported
Road Closed:	N
Road Desc:	Not reported
Road Closure Time:	Not reported
Closure Direction:	Not reported
Major Artery:	N
Track Closed:	N
Track Desc:	Not reported
Track Closure Time:	Not reported
Media Interest:	NONE
Medium Desc:	LAND
Additional Medium Info:	GRAVEL
Body of Water:	Not reported
Tributary of:	Not reported
Release Secured:	Y
Estimated Duration of Release:	Not reported
Release rate:	Not reported
Desc Remedial Action:	NONE AT TIME OF CALL, AWAITING A GO AHEAD FROM THE PAPER MILL TO DISPOSE OF THE MATERIAL AT THEIR LANDFILL.
State Agency on Scene:	Not reported
State Agency Report Number:	NO REPORT #
Other Agency Notified:	Not reported
Weather Conditions:	CLEAR
Air Temperature:	Not reported
Wind Speed:	Not reported
Wind Direction:	Not reported
Water Supply Contaminated:	U
Sheen Size:	Not reported
Sheen Color:	Not reported
Direction of Sheen Travel:	Not reported
Sheen Odor Description:	Not reported
Wave Condition:	Not reported
Current Speed:	Not reported
Current Direction:	Not reported
Water Temperature:	Not reported
Track Close Dir:	Not reported
Empl Fatality:	Not reported
Pass Fatality:	Not reported
Community Impact:	N
Wind Speed Unit:	Not reported
Employee Injuries:	Not reported
Passenger Injuries:	Not reported
Occupant Fatality:	Not reported
Current Speed Unit:	Not reported
Road Closure Units:	Not reported
Track CLosure Units:	Not reported
Sheen Size Units:	Not reported
Additional Info:	THE CALLER HAD NO ADDITIONAL INFORMATION.
State Agency Notified:	DEP

(Continued) **2003700621**

Federal Agency Notified:	Not reported
nearest River Mile Marker:	Not reported
Sheen Size Length:	Not reported
Sheen Size Length Units:	Not reported
Sheen Size Width:	Not reported
Sheen Size Width Units:	Not reported
Offshore:	N
Duration Unit:	Not reported
Release Rate Unit:	Not reported
Release Rate Rate:	Not reported
Passengers Transferred:	UNK

Calls:

NRC Report #:	700621
Site ID:	2003700621
Date Time Received:	2003-09-24 14:01:00
Date Time Complete:	2003-09-24 14:04:26
Call Type:	INC
Responsible Company:	GREAT LAKE HYDRO AMERICA
Responsible Org Type:	PRIVATE ENTERPRISE
Responsible City:	MILLINOCKET
Responsible State:	ME
Responsible Zip:	04462
On Behalf:	Y
Source:	TELEPHONE

Material Involved:

NRC Report #:	700621
Chris Code:	OTF
Case Number:	000000-00-0
UN Number:	Not reported
Amount of Material:	1
Unit of Measure:	PINT(S)
Name of Material:	OIL, MISC: TRANSFORMER (NON PCB)
If Reached Water:	NO
Amount in Water:	Not reported
Unit of Measure Reach Water:	Not reported

A16 **BROOKFIELD FACILITY - EAST MILLINOCKET HYDRO** **RCRA-CESQG** **1024886040**
Target **50 MAIN ST** **MEX020012036**
Property **EAST MILLINOCKET, ME 04462**

Site 16 of 30 in cluster A

Actual:
348 ft.

RCRA-CESQG:

Date form received by agency:	03/20/2019
Facility name:	BROOKFIELD FACILITY - EAST MILLINOCKET HYDRO
Facility address:	50 MAIN ST EAST MILLINOCKET, ME 04462
EPA ID:	MEX020012036
Mailing address:	MAIN ST LEWISTON, ME 04240
Contact:	JASON SEYFRIED
Contact address:	MAIN ST LEWISTON, ME 04240
Contact country:	US

BROOKFIELD FACILITY - EAST MILLINOCKET HYDRO (Continued) **1024886040**

Contact telephone: 207-755-5615
Contact email: JASON.SEYFRIED@BROOKFIELDRENEWABLE.COM
EPA Region: 01
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

A17 **KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MIL** **ME AST** **S108053344**
Target **50 MAIN STREET** **ME TIER 2** **N/A**
Property **EAST MILLINOCKET, ME**

Site 17 of 30 in cluster A

Actual:
348 ft.

AST:
Facility ID: FATR20135MR1ES0028BW
Facility Status: Not reported
Facility Phone: Not reported
Facility Dept: Not reported
Record Id: Not reported
CAS Number: Not reported
Submitted By: Dammon Frecker
Max Container is Holding: 550000
Max Amount Container: 15000
Location: Wood Yard
Mail Address: Not reported
Mail City: Not reported
Mail State: Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Mail Zip:	Not reported
Lat/Long:	45.62302 / -68.57445
Chemical Name:	Transformer Oil
Amount:	28400
Amount Unit:	pounds
Type Code:	Above
Pressure Code:	Ambie
Temperature Code:	Ambie
Max Amount Code:	11
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2013
Chemical Name:	GASOLINE
Amount:	6000
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012
Chemical Name:	GASOLINE
Amount:	750000
Amount Unit:	gallons
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012
Chemical Name:	Lead
Amount:	132000
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012
Chemical Name:	Lead
Amount:	15000
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Max Amount Code: 4
Days On Site: 365
CIEHS Chemical: Not reported
Report Year: 2012

Chemical Name: Lead
Amount: 18000
Amount Unit: gallons
Type Code: Above Ground Tank
Pressure Code: Ambient pressure
Temperature Code: Ambient temperature
Max Amount Code: 4
Days On Site: 365
CIEHS Chemical: Not reported
Report Year: 2012

Chemical Name: ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Amount: 18000
Amount Unit: gallons
Type Code: Above Ground Tank
Pressure Code: Ambient pressure
Temperature Code: Ambient temperature
Max Amount Code: 4
Days On Site: 365
CIEHS Chemical: Not reported
Report Year: 2012

Chemical Name: ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Amount: 23400
Amount Unit: pounds
Type Code: Above Ground Tank
Pressure Code: Ambient pressure
Temperature Code: Ambient temperature
Max Amount Code: 4
Days On Site: 365
CIEHS Chemical: Not reported
Report Year: 2012

Chemical Name: ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Amount: 25000
Amount Unit: gallons
Type Code: Above Ground Tank
Pressure Code: Ambient pressure
Temperature Code: Ambient temperature
Max Amount Code: 4
Days On Site: 365
CIEHS Chemical: Not reported
Report Year: 2012

Chemical Name: ALKALINE CORROSIVE LIQUID - CHUTE CLEAN FELT
Amount: 2925
Amount Unit: pounds

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Click this hyperlink while viewing on your computer to access
1325 additional ME_AST: record(s) in the EDR Site Report.

AST 2:

Registration Number:	16697
Facility Location:	EAST MILLINOCKET
Facility Telephone Number:	2077235131
Facility Use Code:	INDUSTRIAL
Owner Name:	GNP MAINE HOLDINGS LLC
Owner Contact:	Not reported
Owner Delivery Address:	ONE CATE ST, SUITE 100
Owner Town:	PORTSMOUTH
Owner State:	NH
Owner Zip:	03801
Owner Zip Plus:	7108
Owner Telephone Number:	6033194400
Operator Name:	GNP MAINE HOLDINGS LLC
Operator Contact:	Not reported
Operator Delivery Address:	ONE CATE ST, SUITE 100
Operator Town:	PORTSMOUTH
Operator State:	NH
Operator Zip:	03801
Operator Zip Plus:	7108
Operator Telephone Number:	6033194400
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Nearby Water Other Owner:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Tank Number:	2
Tank Status:	PLANNED
Tank Status Label:	PLANNED FOR INSTALLATION
Status Date:	06/19/2013
Tank Sub Status:	Not reported
Tank Sub Status Label:	Not reported
Date Installed:	06/19/2013
Tank Type:	ABOVEGROUND
Substance:	DIESEL
Tank Volume Gl:	1000
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Tank Leak Detection:	NONE
Tank Leak Detection Label:	NONE
Chamber Number:	1

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Overfill Protection:	LEVEL_GAUGE
Registration Date:	01/24/1990
Fed Regulated:	No
Chamber Volume Gl:	1000
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Date Piping Installed:	06/19/2013
Piping Type:	ABOVEGROUND
Piping Material:	STEEL - BARE OR ASPHALT COATED.
Piping Status:	PLANNED
Piping Status Date:	06/19/2013
Piping Leak Detection:	NONE
Pipe Leak Detection Label:	NONE
Piping Status Label:	PLANNED FOR INSTALLATION
Overfill Protection Label:	LEVEL GAUGE

TIER 2:

Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	20000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4YAE008S9N
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	14807-96-6
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	TALC
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	40000
Maximum Amount Code:	04
Maximum Amount Container:	40000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	6000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20053K92XZ00XLX3
Chemical Same As Last Year:	T
Chronic:	Not reported
CICAS:	7681-52-9
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	Sodium Hypochlorite
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	12000
Maximum Amount Code:	04
Maximum Amount Container:	12000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	Not reported
Average Amount:	22000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4XPX0011Q0
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	68334-30-5
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	DIESEL FUEL
Fire:	T
Gas:	Not reported
Liquid:	T
Maximum Amount:	44000
Maximum Amount Code:	04
Maximum Amount Container:	20000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Facility Mailing Country:	Not reported
Report Year:	2006
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	Not reported
Average Amount:	Not reported
Record ID:	Not reported
Facility Router Record ID:	Not reported
Chemical Inventory Record ID:	Not reported
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	Not reported
CI Last Modified:	Not reported
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	2/26/2007
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20062V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	4/30/2007
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	45.37149
Longitude:	68.341498
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2009
Submitted By:	Michael Reider / General Manager
Acute/Chronic:	Not reported
Average Amount:	Not reported
Record ID:	Not reported
Facility Router Record ID:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Chemical Inventory Record ID:	Not reported
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	Not reported
CI EHS Chemical:	Not reported
CI Last Modified:	Not reported
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	2/19/2010
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20095MR1ES0028BW
Failed Validation:	Not reported
Facility Date Modified:	3/4/2010
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	CE - Center of Facility
Lat/Long Method:	I1 - Interpolation (Map)
Notes:	Not reported
Validation Report:	This facility passed all validation checks.
Latitude:	45.37149
Longitude:	68.341498
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	7000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20053K935L0106VN
Chemical Same As Last Year:	T
Chronic:	Not reported
CICAS:	1310-58-3
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	Potassium Hydroxide
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	10000
Maximum Amount Code:	04
Maximum Amount Container:	1000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	15000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4U5A01APGR
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	57-13-6
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	UREA
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	30000

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Maximum Amount Code:	04
Maximum Amount Container:	30000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	Not reported
Average Amount:	7800
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4UCD01DU22
Chemical Same As Last Year:	Not reported
Chronic:	T
CICAS:	8006-61-9
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	GASOLINE
Fire:	T
Gas:	Not reported
Liquid:	T
Maximum Amount:	15500
Maximum Amount Code:	04
Maximum Amount Container:	14000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	Not reported
Average Amount:	12000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4ULR01G1H2
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	64742-54-7
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	MINERAL OIL
Fire:	T
Gas:	Not reported
Liquid:	T
Maximum Amount:	16000
Maximum Amount Code:	04
Maximum Amount Container:	16000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	46000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4UVM01LQV8
Chemical Same As Last Year:	Not reported
Chronic:	Not reported
CICAS:	107-21-1
CI EHS Chemical:	Not reported
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	ETHYLENE GLYCOL
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	47000
Maximum Amount Code:	04
Maximum Amount Container:	21000
Mixture:	Not reported
Pressure:	Not reported
Pure:	T
Reactive:	Not reported
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported

KATAHDIN PAPER COMPANY LLC -- EAST MILLINOCKET MILL (Continued) **S108053344**

Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Facility Mailing Address:	Not reported
Facility Mailing City:	Not reported
Facility Mailing State:	Not reported
Facility Mailing Zip:	Not reported
Facility Mailing Country:	Not reported
Report Year:	2005
Submitted By:	Serge Sorokin / Mill Manager
Acute/Chronic:	T
Average Amount:	20000
Record ID:	Not reported
Facility Router Record ID:	FATR20052V2HCX002TNV
Chemical Inventory Record ID:	CVTR20052V4YV700H1Q9
Chemical Same As Last Year:	T
Chronic:	Not reported
CICAS:	7722-84-1
CI EHS Chemical:	T
CI Last Modified:	2/24/2006
MSDS Number For Chemical:	Not reported
CI Notes:	Not reported
Days On Site:	365
Entered Chemical Name:	HYDROGEN PEROXIDE (35% TO 52% BY WEIGHT)
Fire:	Not reported
Gas:	Not reported
Liquid:	T
Maximum Amount:	30000
Maximum Amount Code:	04
Maximum Amount Container:	30000
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	T
Solid:	Not reported
Date Signed:	Not reported
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20052V2HCX002TNV
Failed Validation:	Not reported
Facility Date Modified:	Not reported
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported

A18 **KATAHDIN PAPER** **ME SPILLS** **S110767836**
Target **50 MAIN ST TRANSFORMER T-138** **N/A**
Property **EAST MILLINOCKET, ME**

Site 18 of 30 in cluster A

Actual:
348 ft.

SPILLS:

Event:

Spill Number:	B-187-2008
Inc Tank Code:	N
Inc Tank:	None
Removal Flag:	False
Ust Registered Flag:	True
Ast Inside Flag:	False
Create Date:	04/15/2008
Create By:	EIDLUCE
Modify Date:	02/08/2011
Modify By:	EIELEIGH
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	04/09/2008
Actual Spill Date Unknown:	False
Actual Spill Time Unknown:	False
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	ET
Inc Source:	Utility - Electrical Transformer
Spill Cause Code:	23
Spill Cause:	Mechanical Failure - Other
Material Disposal Info:	CS = Katahdin Paper's Dolby Landfill MM = offsite by Clean Harbors

Change:

Description:	Report Status change from DRV to DQA
Date Change:	01/31/2011
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	02/08/2011
Changed By:	EIELEIGH
Description:	Report Created with Report Status = DR
Date Change:	04/15/2008
Changed By:	EIDLUCE
Description:	Report Status change from DR to DRV
Date Change:	10/16/2008
Changed By:	EIDLUCE

KATAHDIN PAPER (Continued) **S110767836**

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN PAPER COMPANY
Address:	50 MAIN ST
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	DARRYL E LUCE

Media Affected:

Medium:	Land

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	187
Spill Year:	2008
Create Date:	04/14/2008
Created By:	EICLECKE
Modify Date:	10/16/2008
Modify By:	EIDLUCE
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	04/10/2008
Log Rep Prod Cd:	87
Log Rep Prod:	Transformer Oil
Log Emp Name:	DARRYL E LUCE
Location:	Katahdin Paper, 50 Main St., East Millinocket
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	None
Notes:	Transformer spilled 400 gallons. Three hundred went to dike and 100 went to ground outside.

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	250
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE
Material Recovered Type:	CS
Material Recovered:	Contaminated Soil
Material Amount:	7
Material Units:	cu. yds.
Material Amt Qualifier:	ESTIMATE

KATAHDIN PAPER (Continued) **S110767836**

Recovery Method: Sorbents

Recovery Method: Vacuum Trucks

Recovery Method: Excavation

Spill Point:

Product:
Product Code: Transformer Oil
Product Other: Not reported
Product Amt: 350
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Attachments:
Description: Katahdin Paper spill report
Attach Type: Paper Attach
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 10/16/2008

A19 **GREAT NORTHERN PAPER CO.** **NY MANIFEST** **S118086656**
Target **50 MAIN ST** **N/A**
Property **EAST MILLINOCKET, ME 04430**

Site 19 of 30 in cluster A

Actual:
348 ft.

NY MANIFEST:
Country: USA
EPA ID: MED001098011
Facility Status: Not reported
Location Address 1: KATAHDIN AVENUE
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: EAST MILLINOCKET
Location State: ME
Location Zip: 04430
Location Zip 4: Not reported

NY MANIFEST:
EPAID: MED001098011
Mailing Name: GREAT NORTHERN PAPER CO.
Mailing Contact: GREAT NORTHERN PAPER CO.
Mailing Address 1: P.O. BOX 1077
Mailing Address 2: Not reported
Mailing City: EAST MILLINOCKET
Mailing State: ME
Mailing Zip: 04462
Mailing Zip 4: Not reported
Mailing Country: USA
Mailing Phone: 2077235131

GREAT NORTHERN PAPER CO. (Continued) **S118086656**

NY MANIFEST:

Document ID:	NYG0895221
Manifest Status:	K
seq:	Not reported
Year:	1997
Trans1 State ID:	627097ME
Trans2 State ID:	Not reported
Generator Ship Date:	07/02/1997
Trans1 Recv Date:	07/02/1997
Trans2 Recv Date:	/ /
TSD Site Recv Date:	07/16/1997
Part A Recv Date:	07/28/1997
Part B Recv Date:	08/05/1997
Generator EPA ID:	MED001098011
Trans1 EPA ID:	MAD039322250
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD049836679
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	B007 - OTHER MISCELLANEOUS PCB WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	06060
Units:	K - Kilograms (2.2 pounds)
Number of Containers:	001
Container Type:	CM - Metal boxes, cases, roll-offs
Handling Method:	L Landfill.
Specific Gravity:	100

Click this hyperlink while viewing on your computer to access
-1 additional NY MANIFEST: record(s) in the EDR Site Report.

A20 **ERNS 97393656**
Target Property **50 MAIN STREET** **N/A**
EAST MILLINOCKET, ME

Site 20 of 30 in cluster A

Actual: 348 ft.

Incident Commons:

NRC Report #:	393656
Description of Incident:	OLD GRINDER ROOM SUSPECTED/CAUSE AND EXACT LOCATION NOT FOUND
Type of Incident:	FIXED

(Continued) **97393656**

Incident Cause:	UNKNOWN
Incident Date Time:	1997-07-02 15:10:00
Incident DTG:	DISCOVERED
Incident Location:	Not reported
Loaction Address:	50 MAIN STREET
Location Street 1:	Not reported
Location Street 2:	Not reported
Location Nearest City:	EAST MILLINOCKET
Location State:	ME
Location County:	PENOBSCOT
Location Zip:	Not reported
Distance From City:	Not reported
Distance Units:	Not reported
Direction From City:	Not reported
Lat Deg:	Not reported
Lat Min:	Not reported
Lat Sec:	Not reported
Lat Quad:	Not reported
Long Deg:	Not reported
Long Min:	Not reported
Long Sec:	Not reported
Long Quad:	Not reported
Location Section:	Not reported
Location Township:	Not reported
Location range:	Not reported
Potential Range:	Not reported

Incidents:

NRC Report #:	393656
Aircraft Type:	UNKNOWN
Aircraft Model:	Not reported
Aircraft ID:	Not reported
Aircraft Fuel Capacity:	Not reported
Aircraft Fuel Capacity Units:	Not reported
Aircraft Fuel on Board:	Not reported
Aircraft Fuel on Board Units:	Not reported
Aircraft Spot Number:	Not reported
Aircraft Hanger:	Not reported
Aircraft Runway Number:	Not reported
Road Mile Marker:	Not reported
Building ID:	Not reported
Type of Fixed Object:	UNKNOWN
Power Generating Facility:	U
Generating Capacity:	Not reported
Type of Fuel:	Not reported
NPDES:	Not reported
NPDES Compliance:	U
Pipeline Type:	UNKNOWN
DOT Regulated:	U
Pipeline Above Ground:	ABOVE
Exposed Underwater:	U
Pipeline Covered:	U
Railroad Hotline:	N
Grade Crossing:	N
Location Subdivision:	Not reported
Railroad Milepost:	UNKNOWN
Type Vehicle Involved:	UNKNOWN
Crossing Device Type:	Not reported

(Continued) **97393656**

Device Operational:	Y
DOT Crossing Number:	Not reported
Brake Failure:	N
Description of Tank:	Not reported
Tank Above Ground:	ABOVE
Transportable Container:	U
Tank Regulated:	U
Tank Regulated By:	Not reported
Tank ID:	Not reported
Capacity of Tank:	Not reported
Capacity of Tank Units:	Not reported
Actual Amount:	Not reported
Actual Amount Units:	Not reported
Platform Rig Name:	Not reported
Platform Letter:	Not reported
Location Area ID:	Not reported
Location Block ID:	Not reported
OCSG Number:	Not reported
OCSP Number:	Not reported
State Lease Number:	Not reported
Pier Dock Number:	Not reported
Berth Slip Number:	Not reported
Continuous Release Type:	Not reported
Initial Continuous Release No:	Not reported
Continuous Release Permit:	Not reported
Allision:	N
Type of Structure:	Not reported
Structure Name:	Not reported
Structure Operational:	Y
Airbag Deployed:	Not reported
Date Tiem Normal Service:	Not reported
Service Disruption Time:	Not reported
Service Disruption Units:	Not reported
Transit Bus Flag:	Not reported
CR Begin Date:	Not reported
CR End Date:	Not reported
CR Change Date:	Not reported
FBI Contact:	Not reported
FBI Contact Date Time:	Not reported
Sub Part C Testing Req:	XXX
Conductor Testing:	Not reported
Engineer Testing:	Not reported
Trainman Testing:	Not reported
Yard Foreman Testing:	Not reported
RCL Operator Testing:	Not reported
Brakeman Testing:	Not reported
Train Dispatcher Testing:	Not reported
Signalman Testing:	Not reported
Other Employee Testing:	Not reported
Unknown Testing:	Not reported
Passenger Handling:	Not reported
Passenger Route:	XXX
Passenger Delay:	XXX

Incident Details:

NRC Report #:	393656
Fire Involved:	N

(Continued) **97393656**

Fire Extinguished:	U
Any Evacuations:	N
Number Evacuated:	Not reported
Who Evacuated:	Not reported
Radius of Evacuation:	Not reported
Any Injuries:	U
Number Injured:	Not reported
Number Hospitalized:	Not reported
Any Fatalities:	U
Number Fatalities:	Not reported
Any Damages:	N
Damage Amount:	Not reported
Air Corridor Closed:	N
Air Corridor Desc:	Not reported
Air Closure Time:	Not reported
Waterway Closed:	N
Waterway Desc:	Not reported
Waterway Closure Time:	Not reported
Road Closed:	N
Road Desc:	Not reported
Road Closure Time:	Not reported
Closure Direction:	Not reported
Major Artery:	N
Track Closed:	N
Track Desc:	Not reported
Track Closure Time:	Not reported
Media Interest:	Not reported
Medium Desc:	WATER
Additional Medium Info:	PENOBSCOT RIVER
Body of Water:	Not reported
Tributary of:	Not reported
Release Secured:	U
Estimated Duration of Release:	Not reported
Release rate:	Not reported
Desc Remedial Action:	SUSPECTED MATERIAL IS BELIEVED TO BE LUBE OIL/CALLER BELIEVES AMOUNTTO BE LESS THAN ONE GALLON
State Agency on Scene:	Not reported
State Agency Report Number:	Not reported
Other Agency Notified:	Not reported
Weather Conditions:	Not reported
Air Temperature:	Not reported
Wind Speed:	Not reported
Wind Direction:	Not reported
Water Supply Contaminated:	U
Sheen Size:	Not reported
Sheen Color:	Not reported
Direction of Sheen Travel:	Not reported
Sheen Odor Description:	Not reported
Wave Condition:	Not reported
Current Speed:	Not reported
Current Direction:	Not reported
Water Temperature:	Not reported
Track Close Dir:	Not reported
Empl Fatality:	Not reported
Pass Fatality:	Not reported
Community Impact:	N
Wind Speed Unit:	Not reported

(Continued) **97393656**

Employee Injuries:	Not reported
Passenger Injuries:	Not reported
Occupant Fatality:	Not reported
Current Speed Unit:	Not reported
Road Closure Units:	Not reported
Track CLosure Units:	Not reported
Sheen Size Units:	Not reported
Additional Info:	SHEEN SIZE:15 FT X 100 YDS/COLOR: GREY/SILVER/CURRENT: FAST MOVING/RIVER 100 YRDS WIDE AT RELEASE POINT/WIND:SOUTH AT 5 MPH
State Agency Notified:	Not reported
Federal Agency Notified:	Not reported
nearest River Mile Marker:	Not reported
Sheen Size Length:	Not reported
Sheen Size Length Units:	Not reported
Sheen Size Width:	Not reported
Sheen Size Width Units:	Not reported
Offshore:	N
Duration Unit:	Not reported
Release Rate Unit:	Not reported
Release Rate Rate:	Not reported
Passengers Transferred:	UNK

Calls:

NRC Report #:	393656
Site ID:	97393656
Date Time Received:	1997-07-02 16:30:41
Date Time Complete:	1997-07-02 16:37:43
Call Type:	INC
Responsible Company:	GREAT NORTHERN PAPER
Responsible Org Type:	PRIVATE ENTERPRISE
Responsible City:	MILLINOCKET
Responsible State:	ME
Responsible Zip:	04462
On Behalf:	Not reported
Source:	UNAVAILABLE

Material Involved:

NRC Report #:	393656
Chris Code:	OLB
Case Number:	Not reported
UN Number:	Not reported
Amount of Material:	0
Unit of Measure:	UNKNOWN AMOUNT
Name of Material:	OIL, MISC: LUBRICATING
If Reached Water:	YES
Amount in Water:	0
Unit of Measure Reach Water:	UNKNOWN AMOUNT

A21 **ERNS** **2011966257**
Target **50 MAIN STREET** **N/A**
Property **EAST MILLINOCKET, ME 04462**

Site 21 of 30 in cluster A

Actual:
348 ft.

Incident Commons:

NRC Report #:	966257
Description of Incident:	CALLER STATED DUE TO OPERATOR ERROR THERE WAS A SPILL OF LUBRICATING OIL WHILE FILLING A BARRING AT A HYDRO POWER PLANT FACILITY.
Type of Incident:	FIXED
Incident Cause:	OPERATOR ERROR
Incident Date Time:	2011-02-01 13:15:00
Incident DTG:	OCCURRED
Incident Location:	EAST MILLINOCKET HYDRO POWER PLANT
Loaction Address:	50 MAIN STREET
Location Street 1:	Not reported
Location Street 2:	Not reported
Location Nearest City:	EAST MILLINOCKET
Location State:	ME
Location County:	PENOBSCOT
Location Zip:	04462
Distance From City:	Not reported
Distance Units:	Not reported
Direction From City:	Not reported
Lat Deg:	Not reported
Lat Min:	Not reported
Lat Sec:	Not reported
Lat Quad:	Not reported
Long Deg:	Not reported
Long Min:	Not reported
Long Sec:	Not reported
Long Quad:	Not reported
Location Section:	Not reported
Location Township:	Not reported
Location range:	Not reported
Potential Range:	N

Incidents:

NRC Report #:	966257
Aircraft Type:	Not reported
Aircraft Model:	Not reported
Aircraft ID:	Not reported
Aircraft Fuel Capacity:	Not reported
Aircraft Fuel Capacity Units:	Not reported
Aircraft Fuel on Board:	Not reported
Aircraft Fuel on Board Units:	Not reported
Aircraft Spot Number:	Not reported
Aircraft Hanger:	Not reported
Aircraft Runway Number:	Not reported
Road Mile Marker:	Not reported
Building ID:	Not reported
Type of Fixed Object:	POWER PLANT
Power Generating Facility:	N
Generating Capacity:	Not reported
Type of Fuel:	Not reported
NPDES:	Not reported
NPDES Compliance:	U
Pipeline Type:	Not reported
DOT Regulated:	U

(Continued) **2011966257**

Pipeline Above Ground:	ABOVE
Exposed Underwater:	N
Pipeline Covered:	U
Railroad Hotline:	Not reported
Grade Crossing:	U
Location Subdivision:	Not reported
Railroad Milepost:	Not reported
Type Vehicle Involved:	Not reported
Crossing Device Type:	Not reported
Device Operational:	U
DOT Crossing Number:	Not reported
Brake Failure:	U
Description of Tank:	Not reported
Tank Above Ground:	ABOVE
Transportable Container:	U
Tank Regulated:	U
Tank Regulated By:	Not reported
Tank ID:	Not reported
Capacity of Tank:	Not reported
Capacity of Tank Units:	Not reported
Actual Amount:	Not reported
Actual Amount Units:	Not reported
Platform Rig Name:	Not reported
Platform Letter:	Not reported
Location Area ID:	Not reported
Location Block ID:	Not reported
OCSG Number:	Not reported
OCSP Number:	Not reported
State Lease Number:	Not reported
Pier Dock Number:	Not reported
Berth Slip Number:	Not reported
Continuous Release Type:	Not reported
Initial Continuous Release No:	Not reported
Continuous Release Permit:	Not reported
Allision:	U
Type of Structure:	Not reported
Structure Name:	Not reported
Structure Operational:	U
Airbag Deployed:	U
Date Tiem Normal Service:	Not reported
Service Disruption Time:	Not reported
Service Disruption Units:	Not reported
Transit Bus Flag:	Not reported
CR Begin Date:	Not reported
CR End Date:	Not reported
CR Change Date:	Not reported
FBI Contact:	Not reported
FBI Contact Date Time:	Not reported
Sub Part C Testing Req:	XXX
Conductor Testing:	Not reported
Engineer Testing:	Not reported
Trainman Testing:	Not reported
Yard Foreman Testing:	Not reported
RCL Operator Testing:	Not reported
Brakeman Testing:	Not reported
Train Dispatcher Testing:	Not reported
Signalman Testing:	Not reported

(Continued) **2011966257**

Other Employee Testing:	Not reported
Unknown Testing:	Not reported
Passenger Handling:	Not reported
Passenger Route:	XXX
Passenger Delay:	XXX

Incident Details:

NRC Report #:	966257
Fire Involved:	N
Fire Extinguished:	U
Any Evacuations:	N
Number Evacuated:	Not reported
Who Evacuated:	Not reported
Radius of Evacuation:	Not reported
Any Injuries:	N
Number Injured:	Not reported
Number Hospitalized:	Not reported
Any Fatalities:	N
Number Fatalities:	Not reported
Any Damages:	N
Damage Amount:	Not reported
Air Corridor Closed:	N
Air Corridor Desc:	Not reported
Air Closure Time:	Not reported
Waterway Closed:	N
Waterway Desc:	Not reported
Waterway Closure Time:	Not reported
Road Closed:	N
Road Desc:	Not reported
Road Closure Time:	Not reported
Closure Direction:	Not reported
Major Artery:	N
Track Closed:	N
Track Desc:	Not reported
Track Closure Time:	Not reported
Media Interest:	NONE
Medium Desc:	WATER
Additional Medium Info:	WEST BRANCH OF THE PENOBSCOT RIVER
Body of Water:	WEST BRANCH OF THE PENOBSCOT RIVER
Tributary of:	PENOBSCOT RIVER
Release Secured:	Y
Estimated Duration of Release:	Not reported
Release rate:	Not reported
Desc Remedial Action:	CALLER STATED THEY USED ABSORBENTS TO CLEAN UP THE SPILL AND THERE WAS NOTHING DONE FOR THE SPILL IN THE WATER.
State Agency on Scene:	NONE
State Agency Report Number:	NONE
Other Agency Notified:	Not reported
Weather Conditions:	SNOWY
Air Temperature:	20
Wind Speed:	Not reported
Wind Direction:	Not reported
Water Supply Contaminated:	U
Sheen Size:	Not reported
Sheen Color:	Not reported
Direction of Sheen Travel:	Not reported
Sheen Odor Description:	Not reported

(Continued) **2011966257**

Wave Condition:	Not reported
Current Speed:	Not reported
Current Direction:	Not reported
Water Temperature:	Not reported
Track Close Dir:	Not reported
Empl Fatality:	Not reported
Pass Fatality:	Not reported
Community Impact:	Not reported
Wind Speed Unit:	Not reported
Employee Injuries:	Not reported
Passenger Injuries:	Not reported
Occupant Fatality:	Not reported
Current Speed Unit:	Not reported
Road Closure Units:	Not reported
Track CLosure Units:	Not reported
Sheen Size Units:	Not reported
Additional Info:	NO ADDITIONAL INFORMATION.
State Agency Notified:	ME DEP
Federal Agency Notified:	NONE
nearest River Mile Marker:	Not reported
Sheen Size Length:	Not reported
Sheen Size Length Units:	Not reported
Sheen Size Width:	Not reported
Sheen Size Width Units:	Not reported
Offshore:	N
Duration Unit:	Not reported
Release Rate Unit:	Not reported
Release Rate Rate:	Not reported
Passengers Transferred:	NO

Calls:

NRC Report #:	966257
Site ID:	2011966257
Date Time Received:	2011-02-01 13:34:04
Date Time Complete:	2011-02-01 13:44:46
Call Type:	INC
Responsible Company:	BROOKFIELD POWER
Responsible Org Type:	PRIVATE ENTERPRISE
Responsible City:	MILLINOCKET
Responsible State:	ME
Responsible Zip:	04462
On Behalf:	Not reported
Source:	TELEPHONE

Material Involved:

NRC Report #:	966257
Chris Code:	OLB
Case Number:	000000-00-0
UN Number:	Not reported
Amount of Material:	1
Unit of Measure:	QUART(S)
Name of Material:	OIL, MISC: LUBRICATING
If Reached Water:	YES
Amount in Water:	1
Unit of Measure Reach Water:	QUART(S)

B22 **E MILLINOCKET EXXON** **ME LUST** **S106787694**
MAIN ST **N/A**
< 1/8 **EAST MILLINOCKET, ME**
1 ft.

Site 1 of 13 in cluster B

Relative: LUST:
Lower

Actual: Event:
331 ft.

Spill Number:	B-652-1997
Spill Cause:	Other - Unknown
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Contractor/Consultant
Detection Method:	Odor/Vapor/Mist
Inc Location:	Terminal - Service Station
Inc Source:	Not reported
Material Disposal Info:	stock piled under plastic for spring disposal

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	Not reported
Title:	Not reported
Company:	DEAD RIVER OIL CO.
Address:	POB 1427
City,State:	BANGOR,ME
Country:	Not reported
Zipcode:	04402-1427
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	DARRYL LUCE

File:

Spill Id:	B-652-1997
Date Created:	11/02/1999
Created By:	SPILLS

E MILLINOCKET EXXON (Continued) **S106787694**

Date Modified:	03/04/2008
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 04-MAR-08.
Reconcile Date:	Not reported
File Reconciled By:	Not reported

Media Affected:

Medium:	Land

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	652
Spill Year:	1997
Create Date:	12/07/2001
Created By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	11/12/1997
Log Rep Prod Cd:	20
Log Rep Prod:	Gasoline Unspecified
Log Emp Name:	DARRYL LUCE
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	Not reported
Material Units:	gals.
Material Amt Qualifier:	UNKNOWN
Recovery Method:	Excavation

Spill Point:

Create Date:	9/10/2008
Created By:	EICHALST
Modify Date:	7/15/2009
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052542.0999999996
UTM East:	532986.33999999997
GPS Unit:	TANKS
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	10909
GIS Sync Flag:	True

E MILLINOCKET EXXON (Continued) **S106787694**

Product:
- Product Code: Gasoline Unspecified
- Product Other: Not reported
- Product Amt: Not reported
- Product Amt Unit: gals.
- Product Amt Qualifier: UNKNOWN
- Primary Product: False

B23 **DEAD RIVER COMPANY** **ME LUST** **S106796296**
MAIN ST **N/A**
< 1/8 **EAST MILLINOCKET, ME**
1 ft.

Site 2 of 13 in cluster B

Relative: Lower

Actual: 331 ft.

LUST:

Event:
- Spill Number: B-420-1998
- Spill Cause: Other - No Cause
- Spill Type: Non-Oil, Non-Hazardous Incident
- Inc Tank: Underground Tank(s) Involved
- Removal Flag: False
- UST Registered Flag: True
- MCD Value: 19170
- Create Date: 12/07/2001
- Create By: SPILLS
- Modify Date: 12/07/2001
- Modify By: SPILLS
- Report Status: Final Report
- Actual Spill Datetime: Not reported
- Actual Spill Date Unknown: True
- Number Wells At Risk: 0
- Number Wells Impacted: 0
- Dtree Completed Flag: False
- Further Response Action: False
- Reporter Type: Contractor/Consultant
- Detection Method: Tank and/or Piping Testing
- Inc Location: Terminal - Service Station
- Inc Source: Not reported
- Material Disposal Info: Not reported

Change:
- Description: Report Created with Report Status = FR
- Date Change: 12/07/2001
- Changed By: SPILLS

Contact:
- Contact Type: Subject/Spiller
- Potential RP: False
- Name: Not reported
- Title: Not reported
- Company: DEAD RIVER COMPANY
- Address: MAIN ST
- City,State: EAST MILLINOCKET,ME
- Country: Not reported
- Zipcode: 04430
- Phone/Ext: /

DEAD RIVER COMPANY (Continued) **S106796296**

Comments: Not reported

Primary Employee:
Primary Employee: True
Name: THOMAS VARNEY

File:
Spill Id: B-420-1998
Date Created: 11/16/1999
Created By: SPILLS
Date Modified: 12/15/2008
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 15-DEC-08.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: None

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 420
Spill Year: 1998
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Log Spill Type: Non-Oil, Non-Hazardous Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 06/30/1998
Log Rep Prod Cd: 23
Log Rep Prod: Unleaded Gasoline
Log Emp Name: THOMAS VARNEY
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Underground Tank(s) Involved
Notes: Not reported

Material Recovered:
Material Recovered Type: MM
Material Recovered: Mixed Liquid Media
Material Amount: 0
Material Units: gals.
Material Amt Qualifier: ACTUAL

Recovery Method: None

Spill Point:
Create Date: 12/10/2001
Created By: SPILLS

DEAD RIVER COMPANY (Continued) **S106796296**

Modify Date:	9/5/2008
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052502
UTM East:	533087
GPS Unit:	Unknown
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	330
GIS Sync Flag:	True

Product:

Product Code:	None
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ACTUAL
Primary Product:	False

A24 **OAK PARK MANOR** **ME UST** **U000233760**
RT 157 **N/A**
< 1/8 **EAST MILLINOCKET, ME**
1 ft.

Site 22 of 30 in cluster A

Relative: UST:
Lower

Actual:
337 ft.

Facility ID:	11114
Facility Location2:	EAST MILLINOCKET
Facility Code:	MULTIPLE RESIDENCE
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET HOUSING CORP
Owner Contact:	Not reported
Owner Delivery Address:	26 A OAK PARK MANOR
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077469002
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET HOUSING CORP
Owner/Operator Address:	26 A OAK PARK MANOR
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077469002
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-NOV-90

OAK PARK MANOR (Continued) **U000233760**

Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	510
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	14-JAN-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-NOV-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-NOV-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	510
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	14-JAN-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-NOV-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	3
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-NOV-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-74

OAK PARK MANOR (Continued) **U000233760**

Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	510
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	14-JAN-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-NOV-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	4
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-NOV-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	510
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	14-JAN-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-NOV-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	5
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-NOV-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	510
Tank Above/Below:	BELOWGROUND

OAK PARK MANOR (Continued) **U000233760**

Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	14-JAN-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-NOV-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	6
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	550
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	14-JAN-87
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN
Pipe Status:	**ACTIVE**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	06/01/1990
Pipe Material Label:	COPPER
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_WHISTLE
Overfill Protection Label:	VENT WHISTLE

Tank Number:	7
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	550
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	14-JAN-87
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON

OAK PARK MANOR (Continued) **U000233760**

Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN
Pipe Status:	**ACTIVE**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	06/01/1990
Pipe Material Label:	COPPER
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_WHISTLE
Overfill Protection Label:	VENT WHISTLE

Tank Number:	8
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	550
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	14-JAN-87
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN
Pipe Status:	**ACTIVE**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	06/01/1990
Pipe Material Label:	COPPER
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_WHISTLE
Overfill Protection Label:	VENT WHISTLE

Tank Number:	9
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	550
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	14-JAN-87
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN

OAK PARK MANOR (Continued) **U000233760**

Pipe Status:	**ACTIVE**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	06/01/1990
Pipe Material Label:	COPPER
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_WHISTLE
Overfill Protection Label:	VENT WHISTLE

Tank Number:	10
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	550
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	14-JAN-87
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN
Pipe Status:	**ACTIVE**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	06/01/1990
Pipe Material Label:	COPPER
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_WHISTLE
Overfill Protection Label:	VENT WHISTLE

A25 **PARK MANOR APARTMENTS** **ME UST** **U002158454**
3 MAPLE ST **N/A**
< 1/8 **EAST MILLINOCKET, ME**
1 ft.

Site 23 of 30 in cluster A

Relative: UST:
Lower

Actual:
344 ft.

Facility ID:	9949
Facility Location2:	EAST MILLINOCKET
Facility Code:	MULTIPLE RESIDENCE
Fed Reg Ind:	No
Owner Name:	ROSEBUSH, MARK
Owner Contact:	Not reported
Owner Delivery Address:	PO BOX 529
Owner City/State/Zip:	TOWNSEND, MA 01469
Owner Telephone:	5085978909
Operator Contact:	Not reported
On Aquifer:	Yes
On Aquifer Label:	ON AQUIFER
Near Public Water:	Yes
Near Public Water Label:	NEAR PUBLIC WATER

PARK MANOR APARTMENTS (Continued) **U002158454**

Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	45.62635
Longitude:	-68.57358
Owner/Operator Name:	ROSEBUSH, MARK
Owner/Operator Address:	FLAT BACK RD
Owner/Operator City,St,Zip:	FITCHBURG, MA 01420
Owner/Operator Phone:	5085978909
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-SEP-94
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-79
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	3000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	19-NOV-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-SEP-94
Pipe Date Installed:	Not reported
Pipe Material Label:	COPPER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

A26 **BOWATER GREAT NORTHERN PAPER, INC.** **ME LAST** **S105001304**
NNE **ROUTE 157 (MAIN STREET)** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.003 mi.
14 ft. **Site 24 of 30 in cluster A**

Relative: Higher

Actual: 350 ft.

LAST:

Event:

Spill Number:	B-718-1998
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	False
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	12/07/2001
Report Status Code:	FR
Report Status:	Final Report

BOWATER GREAT NORTHERN PAPER, INC. (Continued) **S105001304**

Spill Datetime:	11/05/1998
Spill Date Unknown:	False
Spill Time Unknown:	False
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	H
Spill Type:	Hazardous Material Incident
Reporter Type Code:	2
Reporter Type:	Subject/Spiller
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	ID
Inc Location:	Business - Industrial
Inc Source Code:	Not reported
Inc Source:	Not reported
Spill Cause Code:	07
Spill Cause:	Mechanical Failure - Valve
Material Disposal Info:	1,190 G. 98% SULFURIC ACID TO THE MILL'S TREATMENT PLANT, TO BE pH ADJUSTED.

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	Not reported
Title:	Not reported
Company:	BOWATER GREAT NORTHERN PAPER, INC.
Address:	ONE KATAHDIN AVENUE
City,State:	MILLINOCKET,ME
Country:	Not reported
Zipcode:	04462-1398
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	TOM MALECK

File:

Spill Id:	B-718-1998
Date Created:	05/17/2006
Created By:	IMAGING
Date Modified:	05/17/2006
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 17-MAY-06.
Reconcile Date:	Not reported
File Reconciled By:	Not reported

BOWATER GREAT NORTHERN PAPER, INC. (Continued) **S105001304**

Media Affected:
- Medium: Inland Surface Water
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 718
- Spill Year: 1998
- Create Date: 12/07/2001
- Created By: SPILLS
- Modify Date: 12/07/2001
- Modify By: SPILLS
- Log Spill Type: Hazardous Material Incident
- Log Spill Datetime: 11/05/1998
- Spill Time Unk: False
- Spill Dt Unknown: False
- Log Rep Dt Tm: 11/05/1998
- Log Rep Prod Cd: 72
- Log Rep Prod: Sulfuric Acid
- Log Emp Name: TOM MALECK
- Location: Not reported
- Log Location Town: EAST MILLINOCKET
- Log Tank Involved: Above Ground Tank(s) Involved
- Notes: Not reported

Material Recovered:
- Material Recovered Type: MM
- Material Recovered: Mixed Liquid Media
- Material Amount: 1190
- Material Units: gals.
- Material Amt Qualifier: ACTUAL

Spill Point:
- Recovery Method: Licensed Treatment Facility
- Recovery Method: Treatment in Place

Product:
- Product Code: Sulfuric Acid
- Product Other: Not reported
- Product Amt: 1200
- Product Amt Unit: gals.
- Product Amt Qualifier: ACTUAL
- Primary Product: False

A27 **GREAT NORTHERN PAPER CO.** **ME AST** **1001207932**
NNE **MAIN STREET** **MLTS** **N/A**
< 1/8 **EAST MILLINOCKET, ME 4430**
0.003 mi.
14 ft. **Site 25 of 30 in cluster A**

Relative:
Higher

Actual:
350 ft.

AST:

Facility ID:	Not reported
Facility Status:	OUTSIDE
Facility Phone:	2077232278
Facility Dept:	Not reported
Record Id:	1000001341
CAS Number:	Not reported
Submitted By:	Not reported
Max Container is Holding:	Not reported
Max Amount Container:	Not reported
Location:	Not reported
Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Lat/Long:	Not reported

Chemical Name:	PHOSPHORIC ACID 62%
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	Not reported

Chemical Name:	PHOSPHORIC ACID 62%
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	Not reported

Chemical Name:	SODIUM BOROHYDRIDE
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	2001

GREAT NORTHERN PAPER CO. (Continued) **1001207932**

Chemical Name:	SODIUM BISULFITE
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	2001

Chemical Name:	FUEL OIL, [DIESEL]
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	2001

Chemical Name:	SODIUM HYDROXIDE 50%
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	2001

Chemical Name:	PETROLEUM DISTILLATE
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported
Report Year:	2001

Chemical Name:	FUEL OIL, [DIESEL]
Amount:	Not reported
Amount Unit:	Not reported
Type Code:	Not reported
Pressure Code:	Not reported
Temperature Code:	Not reported
Max Amount Code:	Not reported
Days On Site:	Not reported
CIEHS Chemical:	Not reported

GREAT NORTHERN PAPER CO. (Continued) **1001207932**

Report Year: 2001

Chemical Name: ACETIC ACID 56%
Amount: Not reported
Amount Unit: Not reported
Type Code: Not reported
Pressure Code: Not reported
Temperature Code: Not reported
Max Amount Code: Not reported
Days On Site: Not reported
CIEHS Chemical: Not reported
Report Year: 2001

Chemical Name: ACETIC ACID 56%
Amount: Not reported
Amount Unit: Not reported
Type Code: Not reported
Pressure Code: Not reported
Temperature Code: Not reported
Max Amount Code: Not reported
Days On Site: Not reported
CIEHS Chemical: Not reported
Report Year: 2001

Click this hyperlink while viewing on your computer to access
260 additional ME_AST: record(s) in the EDR Site Report.

MLTS:
License Number: 18-20930-01
First License Date: 10/10/91
License Date: 10/10/91
Lic. Expiration Date: 10/31/96
Contact Name: DOUG FIRLOTTE
Contact Phone: 207-746-9912
Institution Code: 20930
Department/Bldg: Not reported
States Allowing Use: Not reported
Store Material Use: No
Redistribution Use: No
Incinerate Use: No
Burial Use: No
Last Inspection Date: 10/01/91
Next Inspection Date: 10/01/96
Licensee Contact: Not reported
Inspector Name: DOUG FIRLOTTE

A28
NNE
< 1/8
0.003 mi.
14 ft.

GREAT NORTHERN PAPER MILL #2
MAIN STREET
EAST MILLINOCKET, ME

ME SHWS **S106891047**
ME ALLSITES **N/A**

Site 26 of 30 in cluster A

Relative:
Higher

Actual:
350 ft.

SHWS:

Facility ID:	REM00517
Facility Status:	**INVESTIGATION STAGE**
Program Type:	UNCONTROLLED SITES
Lat/Long:	45.62232 / -68.57426
IC:	FALSE
Alias:	Not reported
Acres:	0
Sub Status:	NEED (AWAITING RESOURCES)
Status Date:	08/02/2017

ALLSITES:

Status:	INVESTIGATION STAGE
Program Type:	UNCONTROLLED SITES
Lat/Long:	45.62232 / -68.57426
Institutional Control?:	FALSE
Alias:	Not reported
Acres:	0
Sub Status:	NEED (AWAITING RESOURCES)
Status Date:	08/02/2017

Status:	INVESTIGATION STAGE
Program Type:	RCRA
Lat/Long:	45.62232 / -68.57426
Institutional Control?:	FALSE
Alias:	Not reported
Acres:	0
Sub Status:	NEED (AWAITING RESOURCES)
Status Date:	08/02/2017

B29
WNW
< 1/8
0.004 mi.
22 ft.

DEAD RIVER COMPANY
64 MAIN STREET
EAST MILLINOCKET, ME

ME LUST **S117323493**
N/A

Site 3 of 13 in cluster B

Relative:
Lower

Actual:
333 ft.

LUST:

Event:

Spill Number:	B-553-2014
Spill Cause:	Other - Unknown
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	10/22/2014
Create By:	EITHSMIT
Modify Date:	10/23/2014
Modify By:	EIRKROUT
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0

DEAD RIVER COMPANY (Continued) **S117323493**

Number Wells Impacted: 0
Dtree Completed Flag: False
Further Response Action: False
Reporter Type: DEP Personnel
Detection Method: Site Assessment
Inc Location: Terminal - Service Station
Inc Source: Storage Unit - Underground Storage Tank
Material Disposal Info: Not reported

Change:
Description: Report Status change from DR to DQA
Date Change: 10/23/2014
Changed By: EITHSMIT

Description: Report Created with Report Status = DR
Date Change: 10/22/2014
Changed By: EITHSMIT

Description: Report Status change from DQA to FR
Date Change: 10/23/2014
Changed By: EIRKROUT

Contact:
Contact Type: Other Contact
Potential RP: False
Name: NATE HERSEY
Title: ENVIRONMENTAL TECHNICIAN/CTI
Company: COUNTY ENVIRONMENTAL ENGINEERING, INC.
Address: 924 GRIMES ROAD
City,State: CARIBOU,ME
Country: USA
Zipcode: 04736
Phone/Ext: /
Comments: Not reported

Contact Type: Subject/Spiller
Potential RP: True
Name: Not reported
Title: Not reported
Company: DEAD RIVER COMPANY
Address: 103 SOUTH MAIN STREET
City,State: BREWER,ME
Country: USA
Zipcode: 04412
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: THOMAS H SMITH

Media Affected:
Medium: Land

Log:
Spill Void Flag: False

DEAD RIVER COMPANY (Continued) **S117323493**

Spill Office:	Bangor
Spill Off Sequence:	553
Spill Year:	2014
Create Date:	10/22/2014
Created By:	EITHSMIT
Modify Date:	10/22/2014
Modify By:	EITHSMIT
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	False
Spill Dt Unknown:	False
Log Rep Dt Tm:	10/10/2014
Log Rep Prod Cd:	23
Log Rep Prod:	Unleaded Gasoline
Log Emp Name:	THOMAS H SMITH
Location:	Dead River, 64 Main Street, East Millinocket
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Late report found in UST site assessment.

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ACTUAL
Recovery Method:	Not reported

Spill Point:

Product:

Product Code:	Unleaded Gasoline
Product Other:	Not reported
Product Amt:	Not reported
Product Amt Unit:	Not reported
Product Amt Qualifier:	UNKNOWN
Primary Product:	True

Attachments:

Description:	Underground Storage Tank Site Assessment, County Environmental Engineering, Inc.
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	10/23/2014

B30
WNW
< 1/8
0.004 mi.
22 ft.

DEAD RIVER OIL CO
64 MAIN ST
EAST MILLINOCKET, ME

Site 4 of 13 in cluster B

ME LUST **U000245492**
ME UST **N/A**

Relative: Lower

Actual: 333 ft.

LUST:

Event:

Spill Number:	B-402-2006
Spill Cause:	Mechanical Failure - Piping/Hose
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	11/01/2006
Create By:	EIRSHANN
Modify Date:	02/09/2007
Modify By:	EITGALLA
Report Status:	Final Report
Actual Spill Datetime:	07/14/2006
Actual Spill Date Unknown:	False
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Subject/Spiller
Detection Method:	Visual Product
Inc Location:	Terminal - Service Station
Inc Source:	Storage Unit - Underground Storage Tank
Material Disposal Info:	Pine Tree Landfill

Change:

Description:	Report Created with Report Status = DR
Date Change:	11/01/2006
Changed By:	EIRSHANN
Description:	Report Status change from DR to DRV
Date Change:	11/01/2006
Changed By:	EIRSHANN
Description:	Report Status change from DRV to DQA
Date Change:	11/02/2006
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	02/09/2007
Changed By:	EITGALLA

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	DEAD RIVER CO
Address:	55 BROADWAY
City,State:	BANGOR,ME
Country:	USA
Zipcode:	04402

DEAD RIVER OIL CO (Continued) **U000245492**

Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

File:
Spill Id: B-402-2006
Date Created: 02/12/2007
Created By: IMAGING
Date Modified: 02/12/2007
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 12-FEB-07.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 402
Spill Year: 2006
Create Date: 07/14/2006
Created By: EICLECKE
Modify Date: 11/01/2006
Modify By: EIRSHANN
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 07/14/2006
Log Rep Prod Cd: 29
Log Rep Prod: Diesel
Log Emp Name: ROBERT F SHANNON
Location: Dead River Station Main Road
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: FUEL SUPPLY LINE FROM DIESEL PUMP RUPTURED SPILLING ABOUT 4 GALLONS ONTO ASPHALT. FIRE DEPARTMENT CLEANED IT UP.

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 30
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Recovery Method: Sorbents

Spill Point:

DEAD RIVER OIL CO (Continued) **U000245492**

Create Date:	9/10/2008
Created By:	EICHALST
Modify Date:	7/15/2009
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052542.0999999996
UTM East:	532986.33999999997
GPS Unit:	TANKS
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	11573
GIS Sync Flag:	True

Product:

Product Code:	Diesel
Product Other:	Not reported
Product Amt:	4
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

UST:

Facility ID:	13355
Facility Location2:	EAST MILLINOCKET
Facility Code:	RETAIL OIL
Fed Reg Ind:	Yes
Owner Name:	DEAD RIVER CO
Owner Contact:	MARK ANDERSON
Owner Delivery Address:	82 RUNNING HILL RD SUITE 400
Owner City/State/Zip:	SOUTH PORTLAND, ME 04106 3218
Owner Telephone:	2073585800
Operator Contact:	MARK ANDERSON
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	45.62564
Longitude:	-68.57684
Owner/Operator Name:	DEAD RIVER CO
Owner/Operator Address:	82 RUNNING HILL RD SUITE 400
Owner/Operator City,St,Zip:	SOUTH PORTLAND, ME 04106
Owner/Operator Phone:	2073585800
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	27-AUG-14
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-JUN-84

DEAD RIVER OIL CO (Continued) **U000245492**

Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	10000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS SINGLE-WALLED
Reg Date:	13-MAY-87
Tank Leak Detection Label:	AUTOMATIC TANK GAUGE
Chamber ID:	1
Chamber Pump Type Label:	PRESSURIZED
Chamber Pump Type Desc:	PRESSURIZED
Pipe Status:	**REMOVED**
Pipe Status Date:	27-AUG-14
Pipe Date Installed:	12/15/1997
Pipe Material Label:	FLEXIBLE DOUBLE-WALLED PIPING
Pipe Status Label:	REMOVED
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	27-AUG-14
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-JUN-84
Product Type:	PREMIUM UNLEADED
Tank Volume in Gallons:	10000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS SINGLE-WALLED
Reg Date:	13-MAY-87
Tank Leak Detection Label:	AUTOMATIC TANK GAUGE
Chamber ID:	1
Chamber Pump Type Label:	PRESSURIZED
Chamber Pump Type Desc:	PRESSURIZED
Pipe Status:	**REMOVED**
Pipe Status Date:	27-AUG-14
Pipe Date Installed:	12/15/1997
Pipe Material Label:	FLEXIBLE DOUBLE-WALLED PIPING
Pipe Status Label:	REMOVED
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_BALL
Overfill Protection Label:	VENT BALL

Tank Number:	3
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	27-AUG-14
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-JUN-84
Product Type:	DIESEL
Tank Volume in Gallons:	4000
Tank Above/Below:	BELOWGROUND

DEAD RIVER OIL CO (Continued) **U000245492**

Tank Material:	F/GLASS SINGLE-WALLED
Reg Date:	13-MAY-87
Tank Leak Detection Label:	AUTOMATIC TANK GAUGE
Chamber ID:	1
Chamber Pump Type Label:	PRESSURIZED
Chamber Pump Type Desc:	PRESSURIZED
Pipe Status:	**REMOVED**
Pipe Status Date:	27-AUG-14
Pipe Date Installed:	12/15/1997
Pipe Material Label:	FLEXIBLE DOUBLE-WALLED PIPING
Pipe Status Label:	REMOVED
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	VENT_BALL
Overfill Protection Label:	VENT BALL

B31 **DEAD RIVER CO 7051** **EDR Hist Auto** **1021342513**
WNW **64 MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME 04430**
0.004 mi.
22 ft. **Site 5 of 13 in cluster B**

Relative: EDR Hist Auto
Lower

Actual: **333 ft.**

Year:	Name:	Type:
2000	DEAD RIVER CO 7051	Gasoline Service Stations
2001	DEAD RIVER COMPANY	Gasoline Service Stations

A32 **HAFFORD RESIDENCE** **ME LAST** **S104999581**
East **2 SPRUCE ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.006 mi.
30 ft. **Site 27 of 30 in cluster A**

Relative: LAST:
Higher

Actual: Event:
356 ft.

Spill Number:	B-99-1998
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	False
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	12/07/2001
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False

HAFFORD RESIDENCE (Continued) **S104999581**

Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 6
Reporter Type: Contractor/Consultant
Detection Method Code: N
Detection Method: AST Tank Anomaly
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: Not reported
Inc Source: Not reported
Spill Cause Code: 05
Spill Cause: Accident - Physical Breakage
Material Disposal Info: pads to DEP storage for later incineration

Change:
Description: Report Created with Report Status = FR
Date Change: 12/07/2001
Changed By: SPILLS

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: HERSCHEL HAFFORD
Title: Not reported
Company: Not reported
Address: POB 326
City,State: EAST MILLINOCKET,ME
Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARRYL LUCE

File:
Spill Id: B-99-1998
Date Created: 07/27/1999
Created By: SPILLS
Date Modified: 11/19/2008
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 19-NOV-08.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Groundwater

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor

HAFFORD RESIDENCE (Continued) **S104999581**

Spill Off Sequence:	99
Spill Year:	1998
Create Date:	12/07/2001
Created By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	02/18/1998
Log Rep Prod Cd:	01
Log Rep Prod:	#1 Fuel Oil - Kerosene
Log Emp Name:	DARRYL LUCE
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	2
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Sorbents

Product:

Product Code:	#1 Fuel Oil - Kerosene
Product Other:	Not reported
Product Amt:	125
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

C33 **HOLLIS CAR CARE** **ME UST** **U002165444**
East **36 MAIN ST** **N/A**
< 1/8 **HOLLIS, ME**
0.010 mi.
51 ft. **Site 1 of 2 in cluster C**

Relative:
Higher

Actual:
357 ft.

UST:

Facility ID:	3029
Facility Location2:	HOLLIS CENTER
Facility Code:	RETAIL OIL
Fed Reg Ind:	Yes
Owner Name:	GANNETT, STUART B
Owner Contact:	Not reported
Owner Delivery Address:	48 SALMON FALLS RD
Owner City/State/Zip:	HOLLIS, ME 04042
Owner Telephone:	Not reported
Operator Contact:	Not reported
On Aquifer:	No

HOLLIS CAR CARE (Continued) **U002165444**

On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	Yes
Near Private Water Label:	NEAR PRIVATE WATER
Near Other Water:	Yes
Nearby Water Other Owner Label:	NEARBY WATER OTHER OWNER
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	GANNETT, STUART B
Owner/Operator Address:	48 SALMON FALLS RD
Owner/Operator City,St,Zip:	HOLLIS, ME 04042
Owner/Operator Phone:	Not reported
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUN-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUL-72
Product Type:	PREMIUM UNLEADED
Tank Volume in Gallons:	3000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	28-JUL-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUN-88
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN
Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUN-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-AUG-77
Product Type:	REGULAR GASOLINE
Tank Volume in Gallons:	3000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	28-JUL-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN

HOLLIS CAR CARE (Continued) **U002165444**

Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUN-88
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	3
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUN-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-MAY-82
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	5000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	28-JUL-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUN-88
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	4
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	17-AUG-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-MAY-88
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	6000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS - SEC CONTAIN - PETRO & ALCOHOL
Reg Date:	28-JUL-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	17-AUG-11
Pipe Date Installed:	05/01/1988

HOLLIS CAR CARE (Continued) **U002165444**

Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	5
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	17-AUG-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-MAY-88
Product Type:	DIESEL
Tank Volume in Gallons:	6000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS - SEC CONTAIN - PETRO & ALCOHOL
Reg Date:	28-JUL-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	17-AUG-11
Pipe Date Installed:	05/01/1988
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	6
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	17-AUG-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-MAY-88
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	4000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS - SEC CONTAIN - PETRO & ALCOHOL
Reg Date:	28-JUL-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	17-AUG-11
Pipe Date Installed:	05/01/1988
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM

HOLLIS CAR CARE (Continued) **U002165444**

Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	7
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	17-AUG-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-MAY-88
Product Type:	PREMIUM UNLEADED
Tank Volume in Gallons:	4000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS - SEC CONTAIN - PETRO & ALCOHOL
Reg Date:	28-JUL-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	17-AUG-11
Pipe Date Installed:	05/01/1988
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	8
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUN-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	UNKNOWN SUBSTANCE
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	28-JUL-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUN-88
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

A34 **EAST MILLINOCKET - MUNICIPAL BLDG** **ME LUST** **S108478899**
NW **53 MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.010 mi.
52 ft. **Site 28 of 30 in cluster A**

Relative: Higher

Actual: 350 ft.

LUST:

Event:

Spill Number:	B-616-2006
Spill Cause:	Other - No Cause
Spill Type:	Non-Oil, Non-Hazardous Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	True
UST Registered Flag:	True
MCD Value:	19170
Create Date:	10/11/2006
Create By:	EIRSHANN
Modify Date:	03/28/2007
Modify By:	EITGALLA
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Subject/Spiller
Detection Method:	Tank and/or Piping Removal
Inc Location:	Government - Local
Inc Source:	No Source
Material Disposal Info:	No spill

Change:

Description:	Report Created with Report Status = DR
Date Change:	10/11/2006
Changed By:	EIRSHANN
Description:	Report Status change from DR to DRV
Date Change:	10/11/2006
Changed By:	EIRSHANN
Description:	Report Status change from DRV to DQA
Date Change:	10/13/2006
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	03/28/2007
Changed By:	EITGALLA

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	EAST MILLINOCKET, TOWN OF
Address:	53 MAIN ST
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430

EAST MILLINOCKET - MUNICIPAL BLDG (Continued) **S108478899**

Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

File:
Spill Id: B-616-2006
Date Created: 04/12/2007
Created By: IMAGING
Date Modified: 04/12/2007
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 12-APR-07.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: None

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 616
Spill Year: 2006
Create Date: 10/04/2006
Created By: EICLECKE
Modify Date: 10/11/2006
Modify By: EIRSHANN
Log Spill Type: Non-Oil, Non-Hazardous Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 10/02/2006
Log Rep Prod Cd: 00
Log Rep Prod: None
Log Emp Name: ROBERT F SHANNON
Location: 44 Church Street
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Underground Tank(s) Involved
Notes: UST removal at public works

Material Recovered:
Material Recovered Type: Not reported
Material Recovered: Not reported
Material Amount: Not reported
Material Units: Not reported
Material Amt Qualifier: Not reported

Recovery Method: None

Spill Point:
Create Date: 9/10/2008

EAST MILLINOCKET - MUNICIPAL BLDG (Continued) **S108478899**

Created By:	EICHALST
Modify Date:	7/15/2009
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052559.7699999996
UTM East:	533133.19999999995
GPS Unit:	TANKS
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	11272
GIS Sync Flag:	True

Product:

Product Code:	None
Product Other:	Not reported
Product Amt:	Not reported
Product Amt Unit:	Not reported
Product Amt Qualifier:	Not reported
Primary Product:	True

Attachments:

Description:	30 day tank removal waiver
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	10/11/2006

B35 **US POST OFFICE** **ME UST** **U003097999**
WNW **MAIN & CEDAR** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.011 mi.
57 ft. **Site 6 of 13 in cluster B**

Relative:
Lower

Actual:
331 ft.

UST:

Facility ID:	6188
Facility Location2:	EAST MILLINOCKET
Facility Code:	FEDERAL FACILITY
Fed Reg Ind:	No
Owner Name:	MORGAN, JOHN E
Owner Contact:	Not reported
Owner Delivery Address:	302 LEE BLVD STE 102
Owner City/State/Zip:	LEHIGH ACRES, FL 33936
Owner Telephone:	8133695556
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported

US POST OFFICE (Continued) **U003097999**

Owner/Operator Name:	MORGAN, JOHN E
Owner/Operator Address:	302 LEE BLVD STE 102
Owner/Operator City,St,Zip:	LEHIGH ACRES, FL 33936
Owner/Operator Phone:	8133695556
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	18-SEP-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

A36 **TOWN GARAGE** **ME UST** **U000232507**
WNW **MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.013 mi.
67 ft. **Site 29 of 30 in cluster A**

Relative: **Lower**
Actual: **344 ft.**

UST:

Facility ID:	12863
Facility Location2:	EAST MILLINOCKET
Facility Code:	COMBINED FILE
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported

TOWN GARAGE (Continued) **U000232507**

Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**COMBINED_FILE**
Tank Status Label:	COMBINED FILE
Tank Status Date:	23-SEP-03
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-83
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	500
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**COMBINED_FILE**
Pipe Status Date:	23-SEP-03
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	COMBINED FILE
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**COMBINED_FILE**
Tank Status Label:	COMBINED FILE
Tank Status Date:	23-SEP-03
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUL-89
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	500
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL WITH CATHODIC PROTECTION.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**COMBINED_FILE**
Pipe Status Date:	23-SEP-03
Pipe Date Installed:	07/01/1989
Pipe Material Label:	STEEL WITH CATHODIC PROTECTION.
Pipe Status Label:	COMBINED FILE
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

A37
WNW
< 1/8
0.013 mi.
67 ft.

MUNICIPAL BUILDING
MAIN ST
EAST MILLINOCKET, ME

Site 30 of 30 in cluster A

ME UST **U000231225**
N/A

Relative:
Lower

Actual:
344 ft.

UST:

Facility ID:	12861
Facility Location2:	EAST MILLINOCKET
Facility Code:	TOWN "&" SCHOOL
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

MUNICIPAL BUILDING (Continued) **U000231225**

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	09-OCT-06
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUL-89
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL WITH CATHODIC PROTECTION.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	09-OCT-06
Pipe Date Installed:	07/01/1989
Pipe Material Label:	STEEL WITH CATHODIC PROTECTION.
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

B38 **ME LUST** **S109800947**
WNW **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.013 mi.
69 ft. **Site 7 of 13 in cluster B**

Relative: **Lower**

Actual: **333 ft.**

LUST:

Event:

Spill Number:	B-38-1987
Spill Cause:	Overfill
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	False
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	02/25/1987
Actual Spill Date Unknown:	False
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Public Official
Detection Method:	Other
Inc Location:	Terminal - Service Station
Inc Source:	Not reported
Material Disposal Info:	Not reported

(Continued) **S109800947**

Change:
- Description: Report Created with Report Status = FR
- Date Change: 12/07/2001
- Changed By: SPILLS

Contact:
- Contact Type: Subject/Spiller
- Potential RP: False
- Name: RALPH BRAGDON
- Title: Not reported
- Company: Not reported
- Address: 10 BALSAM DSR
- City,State: MILLINOCKET,ME
- Country: Not reported
- Zipcode: 04462
- Phone/Ext: /
- Comments: Not reported

Primary Employee:
- Primary Employee: True
- Name: THOMAS VARNEY

File:
- Spill Id: B-38-1987
- Date Created: 06/11/2009
- Created By: IMAGING
- Date Modified: 06/11/2009
- Modified By: IMAGING
- File Num Sheets: 0
- Notes: Report scanned into the imaging system on 11-JUN-09.
- Reconcile Date: Not reported
- File Reconciled By: Not reported

Media Affected:
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 38
- Spill Year: 1987
- Create Date: 12/07/2001
- Created By: SPILLS
- Modify Date: 12/07/2001
- Modify By: SPILLS
- Log Spill Type: Oil Incident
- Log Spill Datetime: 02/25/1987
- Spill Time Unk: False
- Spill Dt Unknown: False
- Log Rep Dt Tm: 02/25/1987
- Log Rep Prod Cd: 23
- Log Rep Prod: Unleaded Gasoline
- Log Emp Name: THOMAS VARNEY
- Location: Not reported

(Continued) **S109800947**

Log Location Town: EAST MILLINOCKET
Log Tank Involved: Underground Tank(s) Involved
Notes: Not reported

Material Recovered:
Material Recovered Type: MM
Material Recovered: Mixed Liquid Media
Material Amount: 20
Material Units: gals.
Material Amt Qualifier: ACTUAL

Recovery Method: Sorbents

Recovery Method: Sorbents

Spill Point:

Product:
Product Code: Unleaded Gasoline
Product Other: Not reported
Product Amt: 25
Product Amt Unit: gals.
Product Amt Qualifier: ACTUAL
Primary Product: False

B39 **DAVE'S AUTO REPAIR** **ME LUST** **S106794934**
WNW **MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.013 mi.
69 ft. **Site 8 of 13 in cluster B**

Relative: Lower

Actual: 333 ft.

LUST:

Event:
Spill Number: B-64-1994
Spill Cause: Overfill
Spill Type: Oil Incident
Inc Tank: Underground Tank(s) Involved
Removal Flag: False
UST Registered Flag: True
MCD Value: 19170
Create Date: 12/07/2001
Create By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Report Status: Final Report
Actual Spill Datetime: Not reported
Actual Spill Date Unknown: True
Number Wells At Risk: 0
Number Wells Impacted: 0
Dtree Completed Flag: False
Further Response Action: False
Reporter Type: Public Official
Detection Method: Tank and/or Piping Removal
Inc Location: Terminal - Service Station
Inc Source: Not reported
Material Disposal Info: Not reported

DAVE'S AUTO REPAIR (Continued) **S106794934**

Change:
- Description: Report Created with Report Status = FR
- Date Change: 12/07/2001
- Changed By: SPILLS

Contact:
- Contact Type: Subject/Spiller
- Potential RP: False
- Name: Not reported
- Title: Not reported
- Company: KATAHDIN GAS INC.
- Address: POB 799
- City,State: MILLINOCKET,ME
- Country: Not reported
- Zipcode: 04462
- Phone/Ext: /
- Comments: Not reported

Primary Employee:
- Primary Employee: True
- Name: THOMAS VARNEY

File:
- Spill Id: B-64-1994
- Date Created: 04/02/2007
- Created By: IMAGING
- Date Modified: 04/02/2007
- Modified By: IMAGING
- File Num Sheets: 0
- Notes: Report scanned into the imaging system on 02-APR-07.
- Reconcile Date: Not reported
- File Reconciled By: Not reported

Media Affected:
- Medium: Groundwater
- Medium: Land

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 64
- Spill Year: 1994
- Create Date: 12/07/2001
- Created By: SPILLS
- Modify Date: 12/07/2001
- Modify By: SPILLS
- Log Spill Type: Oil Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 05/06/1994
- Log Rep Prod Cd: 20
- Log Rep Prod: Gasoline Unspecified

DAVE'S AUTO REPAIR (Continued) **S106794934**

Log Emp Name:	THOMAS VARNEY
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	Not reported
Material Recovered:	Not reported
Material Amount:	Not reported
Material Units:	Not reported
Material Amt Qualifier:	Not reported
Recovery Method:	Treatment in Place

Spill Point:

Create Date:	12/10/2001
Created By:	SPILLS
Modify Date:	9/5/2008
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052656
UTM East:	532891
GPS Unit:	Unknown
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	418
GIS Sync Flag:	True

Product:

Product Code:	Gasoline Unspecified
Product Other:	Not reported
Product Amt:	100
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

Event:

Spill Number:	B-64-1994
Spill Cause:	Overfill
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0

DAVE'S AUTO REPAIR (Continued) **S106794934**

Number Wells Impacted: 0
Dtree Completed Flag: False
Further Response Action: False
Reporter Type: Public Official
Detection Method: Tank and/or Piping Removal
Inc Location: Terminal - Service Station
Inc Source: Not reported
Material Disposal Info: Not reported

Change:
Description: Report Created with Report Status = FR
Date Change: 12/07/2001
Changed By: SPILLS

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: Not reported
Title: Not reported
Company: KATAHDIN GAS INC.
Address: POB 799
City,State: MILLINOCKET,ME
Country: Not reported
Zipcode: 04462
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: THOMAS VARNEY

File:
Spill Id: B-64-1994
Date Created: 04/02/2007
Created By: IMAGING
Date Modified: 04/02/2007
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 02-APR-07.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Groundwater

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 64
Spill Year: 1994
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001

DAVE'S AUTO REPAIR (Continued) **S106794934**

Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	05/06/1994
Log Rep Prod Cd:	20
Log Rep Prod:	Gasoline Unspecified
Log Emp Name:	THOMAS VARNEY
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	Not reported
Material Recovered:	Not reported
Material Amount:	Not reported
Material Units:	Not reported
Material Amt Qualifier:	Not reported
Recovery Method:	Treatment in Place

Spill Point:

Create Date:	12/10/2001
Created By:	SPILLS
Modify Date:	9/5/2008
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052656
UTM East:	532891
GPS Unit:	Unknown
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	418
GIS Sync Flag:	True

Product:

Product Code:	Gasoline Unspecified
Product Other:	Not reported
Product Amt:	100
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

Event:

Spill Number:	B-64-1994
Spill Cause:	Overfill
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170

DAVE'S AUTO REPAIR (Continued) **S106794934**

Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Public Official
Detection Method:	Tank and/or Piping Removal
Inc Location:	Terminal - Service Station
Inc Source:	Not reported
Material Disposal Info:	Not reported

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN GAS INC.
Address:	POB 799
City,State:	MILLINOCKET,ME
Country:	Not reported
Zipcode:	04462
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	THOMAS VARNEY

File:

Spill Id:	B-64-1994
Date Created:	04/02/2007
Created By:	IMAGING
Date Modified:	04/02/2007
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 02-APR-07.
Reconcile Date:	Not reported
File Reconciled By:	Not reported

Media Affected:

Medium:	Groundwater
Medium:	Land

DAVE'S AUTO REPAIR (Continued) **S106794934**

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	64
Spill Year:	1994
Create Date:	12/07/2001
Created By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	05/06/1994
Log Rep Prod Cd:	20
Log Rep Prod:	Gasoline Unspecified
Log Emp Name:	THOMAS VARNEY
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	Not reported
Material Recovered:	Not reported
Material Amount:	Not reported
Material Units:	Not reported
Material Amt Qualifier:	Not reported
Recovery Method:	Treatment in Place

Spill Point:

Create Date:	12/10/2001
Created By:	SPILLS
Modify Date:	9/5/2008
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052656
UTM East:	532891
GPS Unit:	Unknown
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	418
GIS Sync Flag:	True

Product:

Product Code:	Gasoline Unspecified
Product Other:	Not reported
Product Amt:	100
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

DAVE'S AUTO REPAIR (Continued) **S106794934**

Event:

Spill Number:	B-64-1994
Spill Cause:	Overfill
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Public Official
Detection Method:	Tank and/or Piping Removal
Inc Location:	Terminal - Service Station
Inc Source:	Not reported
Material Disposal Info:	Not reported

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	Not reported
Title:	Not reported
Company:	KATAHDIN GAS INC.
Address:	POB 799
City,State:	MILLINOCKET,ME
Country:	Not reported
Zipcode:	04462
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	THOMAS VARNEY

File:

Spill Id:	B-64-1994
Date Created:	04/02/2007
Created By:	IMAGING
Date Modified:	04/02/2007
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 02-APR-07.
Reconcile Date:	Not reported

DAVE'S AUTO REPAIR (Continued) **S106794934**

File Reconciled By: Not reported

Media Affected:
Medium: Groundwater

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 64
Spill Year: 1994
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 05/06/1994
Log Rep Prod Cd: 20
Log Rep Prod: Gasoline Unspecified
Log Emp Name: THOMAS VARNEY
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Underground Tank(s) Involved
Notes: Not reported

Material Recovered:
Material Recovered Type: Not reported
Material Recovered: Not reported
Material Amount: Not reported
Material Units: Not reported
Material Amt Qualifier: Not reported

Recovery Method: Treatment in Place

Spill Point:
Create Date: 12/10/2001
Created By: SPILLS
Modify Date: 9/5/2008
Modify By: EICHALST
Point Type Code: ASP
UTM North: 5052656
UTM East: 532891
GPS Unit: Unknown
GPS Date: Not reported
GPS Time: Not reported
GIS Feature Class: Response_Spill_Points
GIS Object Id: 418
GIS Sync Flag: True

Product:
Product Code: Gasoline Unspecified

DAVE'S AUTO REPAIR (Continued) **S106794934**

Product Other:	Not reported
Product Amt:	100
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

D40 **POLICE & FIRE STATION** **ME UST** **U000231860**
WNW **MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.017 mi.
92 ft. **Site 1 of 3 in cluster D**

Relative: **Lower**
Actual: **331 ft.**

UST:

Facility ID:	12862
Facility Location2:	EAST MILLINOCKET
Facility Code:	TOWN "&" SCHOOL
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported

POLICE & FIRE STATION (Continued) **U000231860**

Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	30-MAY-07
Tank Sub Status:	**SA_NOT_REQUIRED**
Tank Sub Status Label:	SA NOT REQUIRED
Installation Date:	01-JUL-89
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL WITH CATHODIC PROTECTION.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	30-MAY-07
Pipe Date Installed:	07/01/1989
Pipe Material Label:	STEEL WITH CATHODIC PROTECTION.
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

B41 **KATAHDIN CHRISTIAN ACADEMY** **ME UST** **U002159820**
WNW **6 BEECH ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.020 mi.
103 ft. **Site 9 of 13 in cluster B**

Relative: UST:
Lower

Actual:
340 ft.

Facility ID:	5124
Facility Location2:	EAST MILLINOCKET
Facility Code:	TOWN "&" SCHOOL
Fed Reg Ind:	No
Owner Name:	KATAHDIN CHRISTIAN ACADEMY
Owner Contact:	HERSCHEL HAFFORD
Owner Delivery Address:	P.O. BOX 375
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2074471603
Operator Contact:	HERSCHEL HAFFORD
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No

KATAHDIN CHRISTIAN ACADEMY (Continued) **U002159820**

Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	KATAHDIN CHRISTIAN ACADEMY
Owner/Operator Address:	P.O. BOX 375
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2074471603
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	#5 FUEL OIL
Tank Volume in Gallons:	6000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	04-SEP-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUN-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN
Tank Number:	2
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	01-JUN-90
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JUN-90
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	6000
Tank Above/Below:	BELOWGROUND
Tank Material:	DOUBLE-WALLED CP STEEL
Reg Date:	04-SEP-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION & RETURN
Chamber Pump Type Desc:	SUCTION & RETURN
Pipe Status:	**ACTIVE**
Pipe Status Date:	31-OCT-06
Pipe Date Installed:	10/19/2006
Pipe Material Label:	FLEXIBLE DOUBLE-WALLED PIPING
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON

KATAHDIN CHRISTIAN ACADEMY (Continued) **U002159820**

Pipe Leak Detection Label: SECONDARY CONTAINMENT / CONT ELEC MON
Overfill: DROP_TUBE
Overfill Protection Label: DROP TUBE

B42 **SCHOOL UNION 113 - OPAL MYRICK ELEMENTARY SCHOOL** **ME LUST** **S108478923**
WNW **6 1/2 BEECH STREET** **ME TIER 2** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.020 mi.
107 ft. **Site 10 of 13 in cluster B**

Relative: Lower

Actual: 340 ft.

LUST:

Event:

Spill Number:	B-612-2006
Spill Cause:	Other - No Cause
Spill Type:	Non-Oil, Non-Hazardous Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	True
UST Registered Flag:	True
MCD Value:	19170
Create Date:	12/12/2006
Create By:	EIRSHANN
Modify Date:	03/28/2007
Modify By:	EITGALLA
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Contractor/Consultant
Detection Method:	Site Assessment
Inc Location:	School - Public
Inc Source:	No Source
Material Disposal Info:	NO SPILL. Pads were used to clean the underground pipes, Clean Harbors disposed of.

Change:

Description:	Report Created with Report Status = DR
Date Change:	12/12/2006
Changed By:	EIRSHANN
Description:	Report Status change from DR to DRV
Date Change:	12/12/2006
Changed By:	EIRSHANN
Description:	Report Status change from DRV to DQA
Date Change:	01/12/2007
Changed By:	EITHSMIT
Description:	Report Status change from DQA to FR
Date Change:	03/28/2007
Changed By:	EITGALLA

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True

SCHOOL UNION 113 - OPAL MYRICK ELEMENTARY SCHOOL (Continued) **S108478923**

Name:	Not reported
Title:	Not reported
Company:	EAST MILLINOCKET, TOWN OF - SCHOOL DEPT
Address:	45 NO ST - SUITE 2
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	ROBERT F SHANNON

File:

Spill Id:	B-612-2006
Date Created:	03/29/2007
Created By:	IMAGING
Date Modified:	03/29/2007
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 29-MAR-07.
Reconcile Date:	Not reported
File Reconciled By:	Not reported

Media Affected:

Medium:	None

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	612
Spill Year:	2006
Create Date:	10/03/2006
Created By:	EICLECKE
Modify Date:	01/09/2007
Modify By:	EITHSMIT
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	10/02/2006
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	ROBERT F SHANNON
Location:	6 1/2 Beech St. E. Millinocket
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Underground piping removal-no spill

Material Recovered:

Material Recovered Type:	Not reported
Material Recovered:	Not reported
Material Amount:	Not reported
Material Units:	Not reported

SCHOOL UNION 113 - OPAL MYRICK ELEMENTARY SCHOOL (Continued) **S108478923**

Material Amt Qualifier: Not reported

Recovery Method: None

Spill Point:
Create Date: 9/10/2008
Created By: EICHALST
Modify Date: 7/15/2009
Modify By: EICHALST
Point Type Code: ASP
UTM North: 5052758.5300000003
UTM East: 533083.85999999999
GPS Unit: TANKS
GPS Date: Not reported
GPS Time: Not reported
GIS Feature Class: Response_Spill_Points
GIS Object Id: 12244
GIS Sync Flag: True

Product:
Product Code: None
Product Other: Not reported
Product Amt: 0
Product Amt Unit: gals.
Product Amt Qualifier: ACTUAL
Primary Product: True

Attachments:
Description: 30 day waiver
Attach Type: Paper Attach
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 12/13/2006

TIER 2:
Facility Mailing Address: 45 NORTH STREET SUITE 2
Facility Mailing City: EAST MILLINOCKET
Facility Mailing State: ME
Facility Mailing Zip: 04430
Facility Mailing Country: USA
Report Year: 2010
Submitted By: QUENTEN CLARK
Acute/Chronic: Not reported
Average Amount: Not reported
Record ID: Not reported
Facility Router Record ID: Not reported
Chemical Inventory Record ID: Not reported
Chemical Same As Last Year: T
Chronic: Not reported
CICAS: Not reported
CI EHS Chemical: Not reported
CI Last Modified: Not reported
MSDS Number For Chemical: Not reported

SCHOOL UNION 113 - OPAL MYRICK ELEMENTARY SCHOOL (Continued) **S108478923**

CI Notes:	Not reported
Days On Site:	Not reported
Entered Chemical Name:	Not reported
Fire:	Not reported
Gas:	Not reported
Liquid:	Not reported
Maximum Amount:	Not reported
Maximum Amount Code:	Not reported
Maximum Amount Container:	Not reported
Mixture:	Not reported
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported
Date Signed:	1/3/2011
Date TierII Received:	Not reported
Facility Dept:	Not reported
Facility ID:	FATR20104S89X400JH0G
Failed Validation:	Not reported
Facility Date Modified:	09/12/2011
Facility Mail Address:	Not reported
Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	Not reported
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Chemical Inv:

Year:	2010
Acute:	T
Average Amount:	29250
Facility ID:	FATR20104S89X400JH0G
Chemical Inv Record ID:	CVTR20104S8A0900T79F
Chronic:	Not reported
Chemical Same as Last Year:	Not reported
CICAS:	Not reported
CIEHS Chemical:	Not reported
Last Modified Date:	01/03/2011
Entered Chemical Name:	FUEL OIL, NO. 5
Fire:	T
Gas:	Not reported
Liquid:	T
Max Amount:	46800
Max Amount Container:	46800
Mixture:	T
Pressure:	Not reported
Pure:	Not reported
Reactive:	Not reported
Solid:	Not reported

E43
SSW
< 1/8
0.025 mi.
133 ft.

BROOKFIELD - EAST MILLINOCKET HYDRO STATION
ROUTE 157
EAST MILLINOCKET, ME 04430

Site 1 of 5 in cluster E

ME AST **A100426486**
N/A

Relative:
Lower

Actual:
285 ft.

AST:

Facility ID:	FATR20176TM5WS002YMG
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Not reported
Record Id:	Not reported
CAS Number:	64742-53-6
Submitted By:	Kevin Bernier, Senior Compliance Specialist
Max Container is Holding:	12852
Max Amount Container:	11088
Location:	East Mill Hydro Substation
Mail Address:	1024 Central Street
Mail City:	Millinocket
Mail State:	ME
Mail Zip:	04432
Lat/Long:	45.62159 / -68.57552

Chemical Name:	Transformer Oil
Amount:	12852
Amount Unit:	pounds
Type Code:	Above ground tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	06
Days On Site:	365
CIEHS Chemical:	No
Report Year:	2017

Chemical Name:	Transformer Oil
Amount:	12852
Amount Unit:	pounds
Type Code:	Above ground tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	06
Days On Site:	365
CIEHS Chemical:	No
Report Year:	2016

Chemical Name:	Transformer Oil
Amount:	49802
Amount Unit:	pounds
Type Code:	Above
Pressure Code:	Ambie
Temperature Code:	Ambie
Max Amount Code:	07
Days On Site:	365
CIEHS Chemical:	No
Report Year:	2015

E44
SSW
< 1/8
0.025 mi.
133 ft.

BRP - EAST MILLINOCKET HYDRO STATION
ROUTE 157
EAST MILLINOCKET, ME 04430

Site 2 of 5 in cluster E

ME AST **A100413047**
N/A

Relative:
Lower

Actual:
285 ft.

AST:

Facility ID:	FATR20146TM5WS002YMG
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Not reported
Record Id:	Not reported
CAS Number:	64742-53-6
Submitted By:	Kevin Bernier, Senior Compliance Specialist
Max Container is Holding:	49802
Max Amount Container:	11166
Location:	East Mill Hydro Substation
Mail Address:	1024 Central Street
Mail City:	Millinocket
Mail State:	ME
Mail Zip:	04432
Lat/Long:	45.62159 / -68.57552
Chemical Name:	Transformer Oil
Amount:	49802
Amount Unit:	pounds
Type Code:	Above
Pressure Code:	Ambie
Temperature Code:	Ambie
Max Amount Code:	7
Days On Site:	365
CIEHS Chemical:	No
Report Year:	2014

E45
SSW
< 1/8
0.025 mi.
134 ft.

BROOKFIELD POWER EAST MILLINOCKET HYDRO
ROUTE 157
EAST MILLINOCKET, ME 04430

Site 3 of 5 in cluster E

ME AST **A100357898**
N/A

Relative:
Lower

Actual:
285 ft.

AST:

Facility ID:	FATR20106TM5WS002YMG
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Not reported
Record Id:	Not reported
CAS Number:	64742-53-6
Submitted By:	Russell Smith, Safety & Environmental Specialist
Max Container is Holding:	49802
Max Amount Container:	11166
Location:	East Mill Hydro Substation
Mail Address:	1024 Central Street
Mail City:	Millinocket
Mail State:	ME
Mail Zip:	04432
Lat/Long:	45.62159 / 68.575527
Chemical Name:	Transformer Oil
Amount:	49802
Amount Unit:	pounds

BROOKFIELD POWER EAST MILLINOCKET HYDRO (Continued) **A100357898**

Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2010

E46 **BROOKFIELD RENEWABLE ENERGY - EAST MILLINOCKET HYD** **ME AST** **A100393605**
SSW **ROUTE 157** **N/A**
< 1/8 **EAST MILLINOCKET, ME 04430**
0.025 mi.
134 ft. **Site 4 of 5 in cluster E**

Relative: **Lower**
Actual: **285 ft.**

AST:

Facility ID:	FATR20136TM5WS002YMG
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Not reported
Record Id:	Not reported
CAS Number:	64742-53-6
Submitted By:	Kevin Bernier, Senior Compliance Specialist
Max Container is Holding:	49802
Max Amount Container:	11166
Location:	East Mill Hydro Substation
Mail Address:	1024 Central Street
Mail City:	Millinocket
Mail State:	ME
Mail Zip:	04432
Lat/Long:	45.62159 / 68.575527
Chemical Name:	Transformer Oil
Amount:	49802
Amount Unit:	pounds
Type Code:	Above
Pressure Code:	Ambie
Temperature Code:	Ambie
Max Amount Code:	07
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2013

E47 **BROOKFIELD RENEWABLE POWER - EAST MILLINOCKET HYDR** **ME AST** **S110476000**
SSW **ROUTE 157** **ME TIER 2** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.026 mi.
137 ft. **Site 5 of 5 in cluster E**

Relative: **Lower**
Actual: **285 ft.**

AST:

Facility ID:	FATR20126TPE5800AZUM
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Not reported
Record Id:	Not reported
CAS Number:	7664-93-9
Submitted By:	Russell Smith, Safety & Environmental Specialist

BROOKFIELD RENEWABLE POWER - EAST MILLINOCKET HYDRO (Continued) **S110476000**

Max Container is Holding:	1153
Max Amount Container:	19
Location:	Dolby Hydro Station
Mail Address:	1024 Central Street
Mail City:	Millinocket
Mail State:	ME
Mail Zip:	04432
Lat/Long:	45.63895 / 68.605647

Chemical Name:	SULFURIC ACID
Amount:	266676
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	3
Days On Site:	365
CIEHS Chemical:	T
Report Year:	2012

Chemical Name:	LUBRICATING OIL
Amount:	266676
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Chemical Name:	LUBRICATING OIL
Amount:	1153
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Chemical Name:	Transformer Oil
Amount:	49802
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

BROOKFIELD RENEWABLE POWER - EAST MILLINOCKET HYDRO (Continued) **S110476000**

Chemical Name:	SULFURIC ACID
Amount:	1153
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	3
Days On Site:	365
CIEHS Chemical:	T
Report Year:	2012

Chemical Name:	LUBRICATING OIL
Amount:	50549
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Chemical Name:	TRANSFORMER OIL
Amount:	50549
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Chemical Name:	TRANSFORMER OIL
Amount:	266676
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported
Report Year:	2012

Chemical Name:	TRANSFORMER OIL
Amount:	1153
Amount Unit:	pounds
Type Code:	Above Ground Tank
Pressure Code:	Ambient pressure
Temperature Code:	Ambient temperature
Max Amount Code:	4
Days On Site:	365
CIEHS Chemical:	Not reported

BROOKFIELD RENEWABLE POWER - EAST MILLINOCKET HYDRO (Continued) **S110476000**

Report Year: 2012

Chemical Name: SULFURIC ACID
Amount: 50549
Amount Unit: pounds
Type Code: Above Ground Tank
Pressure Code: Ambient pressure
Temperature Code: Ambient temperature
Max Amount Code: 3
Days On Site: 365
CIEHS Chemical: T
Report Year: 2012

Click this hyperlink while viewing on your computer to access
11 additional ME_AST: record(s) in the EDR Site Report.

TIER 2:

Facility Mailing Address: 1024 Central Street
Facility Mailing City: Millinocket
Facility Mailing State: ME
Facility Mailing Zip: 04432
Facility Mailing Country: USA
Report Year: 2009
Submitted By: Russell Smith, Safety & Environmental Specialist
Acute/Chronic: Not reported
Average Amount: Not reported
Record ID: Not reported
Facility Router Record ID: Not reported
Chemical Inventory Record ID: Not reported
Chemical Same As Last Year: Not reported
Chronic: Not reported
CICAS: Not reported
CI EHS Chemical: Not reported
CI Last Modified: Not reported
MSDS Number For Chemical: Not reported
CI Notes: Not reported
Days On Site: Not reported
Entered Chemical Name: Not reported
Fire: Not reported
Gas: Not reported
Liquid: Not reported
Maximum Amount: Not reported
Maximum Amount Code: Not reported
Maximum Amount Container: Not reported
Mixture: Not reported
Pressure: Not reported
Pure: Not reported
Reactive: Not reported
Solid: Not reported
Date Signed: 2/10/2010
Date TierII Received: Not reported
Facility Dept: Not reported
Facility ID: FATR20096TM5WS002YMG
Failed Validation: Not reported
Facility Date Modified: 3/4/2010
Facility Mail Address: Not reported

BROOKFIELD RENEWABLE POWER - EAST MILLINOCKET HYDRO (Continued) **S110476000**

Mail City:	Not reported
Mail State:	Not reported
Mail Zip:	Not reported
Mail Country:	Not reported
Lat/Long Location Descr:	CE - Center of Facility
Lat/Long Method:	Not reported
Notes:	Not reported
Validation Report:	This facility passed all validation checks.
Latitude:	45.62158
Longitude:	68.575524

D48 **RALPH SPRAGUE RESIDENCE** **ME LAST** **S111860489**
WNW **1 CONE ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.028 mi.
150 ft. **Site 2 of 3 in cluster D**

Relative: **Lower**

Actual: **328 ft.**

LAST:

Event:

Spill Number:	B-553-2009
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	09/25/2009
Create By:	EIDLUCE
Modify Date:	05/03/2012
Modify By:	05/03/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	09/25/2009
Spill Date Unknown:	False
Spill Time Unknown:	False
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	03
Spill Cause:	Corrosion - Piping
Material Disposal Info:	pad returned to Dead River shop

Change:

Description:	Report Created with Report Status = DR
Date Change:	09/25/2009
Changed By:	EIDLUCE

RALPH SPRAGUE RESIDENCE (Continued) **S111860489**

Description: Report Status change from DR to DRV
Date Change: 09/25/2009
Changed By: EIDLUCE

Description: Report Status change from DRV to FR
Date Change: 05/03/2012
Changed By: EIELEIGH

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: RALPH SPRAGUE
Title: HOME OWNER
Company: Not reported
Address: 1 CONE ST
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARRYL E LUCE

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 553
Spill Year: 2009
Create Date: 09/25/2009
Created By: EIDLUCE
Modify Date: 09/25/2009
Modify By: EIDLUCE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 09/25/2009
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: DARRYL E LUCE
Location: Ralph Sprague, 1 Cone St.
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: copper feed line corroded through losing about a cup

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 1
Material Units: lbs.

RALPH SPRAGUE RESIDENCE (Continued) **S111860489**

Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: .1
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

D49 **FRIEL JOHN G E** **EDR Hist Auto** **1020723314**
WNW **75-81 MAIN ST** **N/A**
< 1/8 **E MILLINOCKET, ME 04430**
0.030 mi.
160 ft. **Site 3 of 3 in cluster D**

Relative: EDR Hist Auto
Lower

Actual:
329 ft.

Year:	Name:	Type:
1976	FRIEL JOHN G E	Gasoline Service Stations
1977	FRIEL JOHN G E	Gasoline Service Stations
1978	FRIEL JOHN G	Gasoline Service Stations

C50 **AMBROSE RESIDENCE** **ME LAST** **S105003503**
East **1 ELM ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.034 mi.
177 ft. **Site 2 of 2 in cluster C**

Relative: LAST:
Higher

Actual: Event:
366 ft.
Spill Number: B-195-1983
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: False
AST inside flag: False
Create Date: 12/07/2001
Create By: SPILLS
Modify Date: 12/07/2001
Modify By: 12/07/2001
Report Status Code: FR
Report Status: Final Report
Spill Datetime: 12/14/1983
Spill Date Unknown: False
Spill Time Unknown: False
Number of wells at risk: Not reported
Number of wells impacted: Not reported
DTREE completed flag: False
MCD Value: 19170
Further response action: False

AMBROSE RESIDENCE (Continued) **S105003503**

Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 4
Reporter Type: Public Official
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: Not reported
Inc Source: Not reported
Spill Cause Code: 06
Spill Cause: Mechanical Failure - Piping/Hose
Material Disposal Info: Sorbents incinerated at the Great Northern Mill

Change:
Description: Report Created with Report Status = FR
Date Change: 12/07/2001
Changed By: SPILLS

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: JOEL AMBROSE
Title: Not reported
Company: Not reported
Address: 1 ELM ST
City,State: EAST MILLINOCKET,ME
Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: BERNARD WARD

File:
Spill Id: B-195-1983
Date Created: 11/28/2000
Created By: SPILLS
Date Modified: 07/09/2010
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 09-JUL-10.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 195
Spill Year: 1983

AMBROSE RESIDENCE (Continued) **S105003503**

Create Date:	12/07/2001
Created By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	12/14/1983
Spill Time Unk:	False
Spill Dt Unknown:	False
Log Rep Dt Tm:	12/14/1983
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	BERNARD WARD
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	50
Material Units:	gals.
Material Amt Qualifier:	ACTUAL

Spill Point:

Recovery Method:	Sorbents

Product:

Product Code:	#2 Fuel Oil
Product Other:	Not reported
Product Amt:	175
Product Amt Unit:	gals.
Product Amt Qualifier:	ACTUAL
Primary Product:	False

B51 **ME LUST** **S109800979**
WNW **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.034 mi.
178 ft. **Site 11 of 13 in cluster B**

Relative: **Lower**

Actual: **337 ft.**

LUST:

Event:

Spill Number:	B-396-1989
Spill Cause:	Other - No Cause
Spill Type:	Non-Oil, Non-Hazardous Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	False
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report

(Continued) **S109800979**

Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Public Official
Detection Method:	Other
Inc Location:	Government, Municipal or Religious Facility
Inc Source:	Not reported
Material Disposal Info:	NO CONTAMINATION

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	Not reported
Title:	Not reported
Company:	EAST MILLINOCKET, TOWN OF
Address:	53 MAIN ST
City,State:	E. MILLINOCKET,ME
Country:	Not reported
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	DARRYL LUCE

File:

Spill Id:	B-396-1989
Date Created:	08/17/1993
Created By:	SPILLS
Date Modified:	05/28/2009
Modified By:	IMAGING
File Num Sheets:	0
Notes:	Report scanned into the imaging system on 28-MAY-09.
Reconcile Date:	Not reported
File Reconciled By:	Not reported

Media Affected:

Medium:	Groundwater

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	396
Spill Year:	1989
Create Date:	12/07/2001
Created By:	SPILLS

(Continued) **S109800979**

Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Non-Oil, Non-Hazardous Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	07/18/1989
Log Rep Prod Cd:	00
Log Rep Prod:	None
Log Emp Name:	DARRYL LUCE
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ACTUAL
Recovery Method:	None

Spill Point:

Product:

Product Code:	None
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ACTUAL
Primary Product:	False

F52 **DEAD RIVER COMPANY - STEARNS ASSISTED LIVING** **ME AST** **A100426575**
WNW **80 MAIN STREET** **N/A**
< 1/8 **MILLINOCKET, ME 04462**
0.043 mi.
227 ft. **Site 1 of 5 in cluster F**

Relative: **Lower**

Actual: **341 ft.**

AST:

Facility ID:	FATR2015B64NNW02GH8L
Facility Status:	Not reported
Facility Phone:	Not reported
Facility Dept:	Customer Operated Metered Tanks
Record Id:	Not reported
CAS Number:	74-98-6
Submitted By:	Mark Anderson, Director of Risk
Max Container is Holding:	10152
Max Amount Container:	10152
Location:	See lat/long coordinates- 3000 gallon tank
Mail Address:	82 Running Hill Road, Suite 400
Mail City:	South Portland
Mail State:	ME
Mail Zip:	04106
Lat/Long:	45.65831 / -68.71192

DEAD RIVER COMPANY - STEARNS ASSISTED LIVING (Continued) **A100426575**

Chemical Name:	PROPANE
Amount:	10152
Amount Unit:	pounds
Type Code:	Above
Pressure Code:	Great
Temperature Code:	Ambie
Max Amount Code:	06
Days On Site:	365
CIEHS Chemical:	No
Report Year:	2015

F53 **DAVES AUTO REPAIR** **ME UST** **U003099356**
WNW **79 MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.049 mi.
259 ft. **Site 2 of 5 in cluster F**

Relative: UST:
Lower

Actual: | | |
|---|---|
339 ft. | Facility ID: 12869 |
| Facility Location2: | EAST MILLINOCKET |
| Facility Code: | RETAIL OIL |
| Fed Reg Ind: | Yes |
| Owner Name: | KATAHDIN GAS INC |
| Owner Contact: | Not reported |
| Owner Delivery Address: | PO BOX 799 |
| Owner City/State/Zip: | MILLINOCKET, ME 04462 |
| Owner Telephone: | 2077234458 |
| Operator Contact: | Not reported |
| On Aquifer: | No |
| On Aquifer Label: | Not reported |
| Near Public Water: | No |
| Near Public Water Label: | Not reported |
| Near Private Water: | No |
| Near Private Water Label: | Not reported |
| Near Other Water: | No |
| Nearby Water Other Owner Label: | Not reported |
| Latitude: | 45.62619 |
| Longitude: | -68.57670 |
| Owner/Operator Name: | DAVES AUTO REPAIR |
| Owner/Operator Address: | 79 MAIN ST |
| Owner/Operator City,St,Zip: | EAST MILLINOCKET, ME 04430 |
| Owner/Operator Phone: | Not reported |
| | |
| Tank Number: | 1 |
| **Tank Status:** | **REMOVED** |
| Tank Status Label: | REMOVED |
| Tank Status Date: | 01-MAY-94 |
| **Tank Sub Status:** | **Not reported** |
| Tank Sub Status Label: | Not reported |
| Installation Date: | 01-OCT-69 |
| Product Type: | UNLEADED GASOLINE |
| Tank Volume in Gallons: | 2000 |
| Tank Above/Below: | BELOWGROUND |
| Tank Material: | STEEL - BARE OR ASPHALT COATED. |
| Reg Date: | 12-MAR-87 |
| Tank Leak Detection Label: | UNKNOWN |
| Chamber ID: | 1 |
| Chamber Pump Type Label: | UNKNOWN |

DAVES AUTO REPAIR (Continued) **U003099356**

Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-MAY-94
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-MAY-94
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	REGULAR GASOLINE
Tank Volume in Gallons:	4000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-MAY-94
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	3
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-MAY-94
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	4000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	12-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-MAY-94

DAVES AUTO REPAIR (Continued) **U003099356**

Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

F54 **KEN S AUTO RPR** **EDR Hist Auto** **1021117567**
WNW **79 MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME 04430**
0.049 mi.
259 ft. **Site 3 of 5 in cluster F**

Relative: EDR Hist Auto
Lower

Actual:
339 ft.

Year:	Name:	Type:
1969	PRATT & JOY OIL CO	Gasoline Service Stations
1970	PRATT & JOY OIL CO	Gasoline Service Stations
1971	PRATT & JOY OIL CO	Gasoline Service Stations
1972	PRATT & JOY OIL CO	Gasoline Service Stations
1991	DAVES AUTO REPAIR	General Automotive Repair Shops
1992	DAVES AUTO REPAIR	General Automotive Repair Shops
1993	DAVES AUTO REPAIR	General Automotive Repair Shops
1994	DAVES AUTO REPAIR	General Automotive Repair Shops
1995	DAVES AUTO REPAIR	General Automotive Repair Shops
1996	DAVES AUTO REPAIR	General Automotive Repair Shops
1997	KEN S AUTO RPR	General Automotive Repair Shops
1997	DAVES AUTO REPAIR	General Automotive Repair Shops
1998	DAVES AUTO REPAIR	General Automotive Repair Shops
1999	DAVES AUTO REPAIR	General Automotive Repair Shops
2002	KEN S AUTO RPR	General Automotive Repair Shops
2003	KEN S AUTO RPR	General Automotive Repair Shops
2004	KEN S AUTO RPR	General Automotive Repair Shops
2005	KEN S AUTO RPR	General Automotive Repair Shops
2006	KEN S AUTO RPR	General Automotive Repair Shops
2007	KEN S AUTO RPR	General Automotive Repair Shops
2008	KEN S AUTO RPR	General Automotive Repair Shops
2009	KEN S AUTO RPR	General Automotive Repair Shops
2010	KEN S AUTO RPR	General Automotive Repair Shops
2011	KEN S AUTO RPR	General Automotive Repair Shops
2012	KEN S AUTO RPR	General Automotive Repair Shops
2013	KEN S AUTO RPR	General Automotive Repair Shops
2014	KEN S AUTO RPR	General Automotive Repair Shops

F55 **FRIEL JOHN G E** **EDR Hist Auto** **1021969665**
WNW **81-99 MAIN ST** **N/A**
< 1/8 **E MILLINOCKET, ME 04430**
0.050 mi.
266 ft. **Site 4 of 5 in cluster F**

Relative: EDR Hist Auto
Lower

Actual:
341 ft.

Year:	Name:	Type:
1973	FRIEL JOHN G E	Gasoline Service Stations
1974	FRIEL JOHN G E	Gasoline Service Stations

G56 **MAINE PROPERTY MANAGEMENT** **ME LAST** **S114130168**
ESE **17 MAIN STREET** **N/A**
< 1/8 **MILLINOCKET, ME**
0.055 mi.
293 ft. **Site 1 of 3 in cluster G**

Relative: Higher

Actual: 362 ft.

LAST:

Event:

Spill Number:	B-283-2012
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	False
Create Date:	06/07/2012
Create By:	EIJSELLE
Modify Date:	10/30/2013
Modify By:	10/30/2013
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19440
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	4
Reporter Type:	Public Official
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	MF
Inc Location:	Residential - Multi Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	06
Spill Cause:	Mechanical Failure - Piping/Hose
Material Disposal Info:	Millinocket Fire department disposed of sorbents

Change:

Description:	Report Status change from DQA to FR
Date Change:	10/30/2013
Changed By:	EIJWOODA
Description:	Report Created with Report Status = DR
Date Change:	06/07/2012
Changed By:	EIJSELLE
Description:	Report Status change from DR to DRV
Date Change:	06/07/2012
Changed By:	EIJSELLE
Description:	Report Status change from DRV to DQA
Date Change:	06/25/2012
Changed By:	EITHSMIT

MAINE PROPERTY MANAGEMENT (Continued) **S114130168**

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	CLARENCE MERCHANT
Title:	Not reported
Company:	MAINE PROPERTY MANAGEMENT
Address:	72 LASKEY LANE
City,State:	HAMPDEN,ME
Country:	USA
Zipcode:	04444
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	JOHN M SELLECK

Media Affected:

Medium:	Land

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	283
Spill Year:	2012
Create Date:	06/07/2012
Created By:	EIJSELLE
Modify Date:	06/07/2012
Modify By:	EIJSELLE
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	06/06/2012
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	JOHN M SELLECK
Location:	17 Main Street
Log Location Town:	EAST MILLLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	During a delivery 1-2 gallons was spilled on the ground under the fill and vent pipe.

Material Recovered:

Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	20
Material Units:	lbs.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Sorbents

MAINE PROPERTY MANAGEMENT (Continued) **S114130168**

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 2
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

B57 **FAIRPOINT COMMUNICATIONS** **ME UST** **U003052780**
NW **8 BIRCH ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.065 mi.
342 ft. **Site 12 of 13 in cluster B**

Relative: UST:
Lower
Actual: Facility ID: 8388
346 ft. Facility Location2: EAST MILLINOCKET
Facility Code: COMMERCIAL
Fed Reg Ind: No
Owner Name: NORTHERN NE TEL OPERATIONS LLC
Owner Contact: ERIC PROULX
Owner Delivery Address: 5 DAVIS FARM ROAD
Owner City/State/Zip: PORTLAND, ME 04103
Owner Telephone: 2075354214
Operator Contact: ERIC PROULX
On Aquifer: No
On Aquifer Label: Not reported
Near Public Water: No
Near Public Water Label: Not reported
Near Private Water: No
Near Private Water Label: Not reported
Near Other Water: No
Nearby Water Other Owner Label: Not reported
Latitude: Not reported
Longitude: Not reported
Owner/Operator Name: NORTHERN NE TEL OPERATIONS LLC
Owner/Operator Address: 5 DAVIS FARM ROAD
Owner/Operator City,St,Zip: PORTLAND, ME 04103
Owner/Operator Phone: 2075354214

Tank Number: 1
Tank Status: **REMOVED**
Tank Status Label: REMOVED
Tank Status Date: 01-AUG-90
Tank Sub Status: **Not reported**
Tank Sub Status Label: Not reported
Installation Date: 01-JAN-53
Product Type: #2 FUEL OIL
Tank Volume in Gallons: 500
Tank Above/Below: BELOWGROUND
Tank Material: STEEL - BARE OR ASPHALT COATED.
Reg Date: 15-OCT-86
Tank Leak Detection Label: UNKNOWN
Chamber ID: 1
Chamber Pump Type Label: UNKNOWN
Chamber Pump Type Desc: UNKNOWN

FAIRPOINT COMMUNICATIONS (Continued) **U003052780**

Pipe Status:	**REMOVED**
Pipe Status Date:	01-AUG-90
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	19-DEC-18
Tank Sub Status:	**SA_RECEIVED_PENDING_REVIEW**
Tank Sub Status Label:	SA RECEIVED PENDING REVIEW
Installation Date:	01-SEP-90
Product Type:	DIESEL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS - SEC CONTAIN - PETRO & ALCOHOL
Reg Date:	15-OCT-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	19-DEC-18
Pipe Date Installed:	11/22/1996
Pipe Material Label:	FLEXIBLE DOUBLE-WALLED PIPING
Pipe Status Label:	REMOVED
Pipe Leak Detection:	SEC_CONT_CONTIN_ELEC_MON
Pipe Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Overfill:	ELECTRONIC
Overfill Protection Label:	ELECTRONIC

F58 **ME LUST** **S109801297**
WNW **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.069 mi.
363 ft. **Site 5 of 5 in cluster F**

Relative: LUST:
Lower

Actual: Event:
339 ft.

Spill Number:	B-548-1989
Spill Cause:	Mechanical Failure - Piping/Hose
Spill Type:	Oil Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	False
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report

(Continued) **S109801297**

Actual Spill Datetime: 09/17/1989
Actual Spill Date Unknown: False
Number Wells At Risk: 0
Number Wells Impacted: 0
Dtree Completed Flag: False
Further Response Action: False
Reporter Type: Subject/Spiller
Detection Method: Other
Inc Location: Government, Municipal or Religious Facility
Inc Source: Not reported
Material Disposal Info: SORBENTS INCINERATED

Change:
Description: Report Created with Report Status = FR
Date Change: 12/07/2001
Changed By: SPILLS

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: Not reported
Title: Not reported
Company: POLICE DEPARTMENT
Address: MAIN STREET
City,State: EAST MILLINOCKET,ME
Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT RANDALL

File:
Spill Id: B-548-1989
Date Created: 08/17/1993
Created By: SPILLS
Date Modified: 06/02/2009
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 02-JUN-09.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 548
Spill Year: 1989
Create Date: 12/07/2001
Created By: SPILLS

(Continued) **S109801297**

Modify Date:	12/07/2001
Modify By:	SPILLS
Log Spill Type:	Oil Incident
Log Spill Datetime:	09/17/1989
Spill Time Unk:	True
Spill Dt Unknown:	False
Log Rep Dt Tm:	09/17/1989
Log Rep Prod Cd:	20
Log Rep Prod:	Gasoline Unspecified
Log Emp Name:	ROBERT RANDALL
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	9
Material Units:	gals.
Material Amt Qualifier:	ACTUAL
Recovery Method:	Sorbents

Spill Point:

Product:

Product Code:	Gasoline Unspecified
Product Other:	Not reported
Product Amt:	10
Product Amt Unit:	gals.
Product Amt Qualifier:	ACTUAL
Primary Product:	False

G59 **ROY EPSTEIN RESIDENCE** **ME LAST** **S111860442**
ESE **12 MAIN AVE** **N/A**
< 1/8 **MILLINOCKET, ME**
0.071 mi.
377 ft. **Site 2 of 3 in cluster G**

Relative:
Higher

Actual:
357 ft.

LAST:

Event:

Spill Number:	B-373-2010
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	07/22/2010
Create By:	EIDHIGGI
Modify Date:	05/24/2012
Modify By:	05/24/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	07/19/2010
Spill Date Unknown:	False

ROY EPSTEIN RESIDENCE (Continued) **S111860442**

Spill Time Unknown: True
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False
MCD Value: 19440
Further response action: False
Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 6
Reporter Type: Contractor/Consultant
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 01
Spill Cause: Corrosion - Tank
Material Disposal Info: Sorbents disposed of through Dead River waste stream.

Change:
Description: Report Created with Report Status = DR
Date Change: 07/22/2010
Changed By: EIDHIGGI

Description: Report Status change from DR to DRV
Date Change: 08/31/2010
Changed By: EIDHIGGI

Description: Report Status change from DRV to FR
Date Change: 05/24/2012
Changed By: EIELEIGH

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: ROY EPSTEIN
Title: Not reported
Company: Not reported
Address: 12 MAINE AVENUE
City,State: MILLINOCKET,ME
Country: USA
Zipcode: 04462
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARIAN F HIGGINS

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor

ROY EPSTEIN RESIDENCE (Continued) **S111860442**

Spill Off Sequence:	373
Spill Year:	2010
Create Date:	07/22/2010
Created By:	EIDHIGGI
Modify Date:	07/22/2010
Modify By:	EIDHIGGI
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	07/19/2010
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	DARIAN F HIGGINS
Location:	12 Main Ave, Millinocket
Log Location Town:	MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Dripping AST in concrete basement

Material Recovered:

Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	10
Material Units:	lbs.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Sorbents

Product:

Product Code:	#2 Fuel Oil
Product Other:	Not reported
Product Amt:	3
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

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60 **FRIEL JOHN G E** **EDR Hist Auto** **1021888282**
WNW **99 MAIN ST** **N/A**
< 1/8 **E MILLINOCKET, ME 04430**
0.078 mi.
414 ft.

Relative: EDR Hist Auto
Lower

Actual: Year: Name: Type:
328 ft. 1972 FRIEL JOHN G E Gasoline Service Stations

G61
ESE
< 1/8
0.080 mi.
424 ft.

LAWRENCE BOSS
9 MAINE STREET
EAST MILLINOCKET, ME

Site 3 of 3 in cluster G

ME LAST **S122245386**
N/A

Relative:
Higher

Actual:
359 ft.

LAST:

Event:

Spill Number:	B-830-2015
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	12/16/2015
Create By:	EIPNICHO
Modify Date:	02/05/2018
Modify By:	02/05/2018
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	12/15/2015
Spill Date Unknown:	False
Spill Time Unknown:	False
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	H
Detection Method:	Odor/Vapor/Mist
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	01
Spill Cause:	Corrosion - Tank
Material Disposal Info:	Dead River Company waste stream

Change:

Description:	Report Status change from DRV to FR
Date Change:	02/05/2018
Changed By:	EIRKROUT
Description:	Report Created with Report Status = DR
Date Change:	12/16/2015
Changed By:	EIPNICHO
Description:	Report Status change from DR to DRV
Date Change:	01/05/2016
Changed By:	EIPNICHO

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	LAWRENCE BOSS

LAWRENCE BOSS (Continued) **S122245386**

Title: Not reported
Company: Not reported
Address: 9 MAIN STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: PAUL R NICHOLS

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 830
Spill Year: 2015
Create Date: 12/16/2015
Created By: EIPNICHO
Modify Date: 12/16/2015
Modify By: EIPNICHO
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 12/15/2015
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: PAUL R NICHOLS
Location: 9 Main st
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: one gallon from leaking tank on cement floor.

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 5
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 1
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE

LAWRENCE BOSS (Continued) **S122245386**

Primary Product: True

H62 **CAROLYN STEFENS** **ME LAST** **S116757729**
NNW **24 PARK STREET** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.080 mi.
425 ft. **Site 1 of 3 in cluster H**

Relative: Higher

Actual: 360 ft.

LAST:

Event:

Spill Number:	B-408-2012
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	08/21/2012
Create By:	EIJSELLE
Modify Date:	07/24/2014
Modify By:	07/24/2014
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	4
Reporter Type:	Public Official
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	01
Spill Cause:	Corrosion - Tank
Material Disposal Info:	Maine Department of Environmental Protection disposed of sorbents

Change:

Description:	Report Status change from DRV to FR
Date Change:	07/24/2014
Changed By:	EIRKROUT
Description:	Report Created with Report Status = DR
Date Change:	08/21/2012
Changed By:	EIJSELLE
Description:	Report Status change from DR to DRV
Date Change:	08/21/2012
Changed By:	EIJSELLE

CAROLYN STEFENS (Continued) **S116757729**

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	CAROLYN STEFENS
Title:	Not reported
Company:	Not reported
Address:	24 PARK STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	JOHN M SELLECK

Media Affected:

Medium:	Interior Surface

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	408
Spill Year:	2012
Create Date:	08/21/2012
Created By:	EIJSELLE
Modify Date:	08/21/2012
Modify By:	EIJSELLE
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	08/09/2012
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	JOHN M SELLECK
Location:	24 Park Street
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	3-5 gallons spilled onto concrete basement floor from corrosion hole in tank.

Material Recovered:

Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	20
Material Units:	lbs.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Sorbents

CAROLYN STEFENS (Continued) **S116757729**

Product:
- Product Code: #2 Fuel Oil
- Product Other: Not reported
- Product Amt: 4
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

B63 **JACK WAITE RESIDENCE** **ME LAST** **S116757694**
NW **40 PARK STREET** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.081 mi.
428 ft. **Site 13 of 13 in cluster B**

Relative: Higher

Actual: 353 ft.

LAST:

Event:
- Spill Number: B-143-2008
- Inc Tank Code: A
- Inc Tank: Above Ground Tank(s) Involved
- Removal Flag: False
- UST registered flag: True
- AST inside flag: True
- Create Date: 03/18/2008
- Create By: EINTHOMP
- Modify Date: 05/05/2014
- Modify By: 05/05/2014
- Report Status Code: FR
- Report Status: Final Report
- Spill Datetime: 03/17/2008
- Spill Date Unknown: False
- Spill Time Unknown: True
- Number of wells at risk: 0
- Number of wells impacted: 0
- DTREE completed flag: False
- MCD Value: 19170
- Further response action: True
- Spill Type Code: O
- Spill Type: Oil Incident
- Reporter Type Code: 2
- Reporter Type: Subject/Spiller
- Detection Method Code: L
- Detection Method: Visual Product
- Inc Location Code: SF
- Inc Location: Residential - Single Family
- Inc Source Code: TA
- Inc Source: Storage Unit - Aboveground Storage Tank
- Spill Cause Code: 06
- Spill Cause: Mechanical Failure - Piping/Hose
- Material Disposal Info: Pine Tree Landfill

Change:
- Description: Report Status change from P to FR
- Date Change: 05/05/2014
- Changed By: EIRKROUT

- Description: Report Status change from DRV to DQA

JACK WAITE RESIDENCE (Continued) **S116757694**

Date Change: 01/31/2011
Changed By: EITHSMIT

Description: Report Created with Report Status = DR
Date Change: 03/18/2008
Changed By: EINTHOMP

Description: Report Status change from DR to DRV
Date Change: 01/02/2009
Changed By: EINTHOMP

Description: Report Status change from DQA to P
Date Change: 08/30/2011
Changed By: EIELEIGH

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: JACK WAITE
Title: PROPERTY OWNER
Company: C/O ALEX & PAM WAITE
Address: 13 PINE STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: NATHAN THOMPSON

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 143
Spill Year: 2008
Create Date: 03/18/2008
Created By: EINTHOMP
Modify Date: 03/18/2008
Modify By: EINTHOMP
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 03/18/2008
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: NATHAN THOMPSON
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved

JACK WAITE RESIDENCE (Continued) **S116757694**

Notes: Not reported

Material Recovered:
Material Recovered Type: CS
Material Recovered: Contaminated Soil
Material Amount: 7
Material Units: tons
Material Amt Qualifier: ACTUAL

Spill Point:
Recovery Method: Excavation

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 100
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Attachments:
Description: Expense Tracking
Attach Type: Electronic Form
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 04/02/2008

I64 **STANLEY PROPERTY** **ME LAST** **S112198264**
NW **57 PARK STREET** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.088 mi.
467 ft. **Site 1 of 3 in cluster I**

Relative: Higher
Actual: 349 ft.

LAST:

Event:
Spill Number: B-615-2010
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: True
AST inside flag: False
Create Date: 11/16/2010
Create By: EIDHIGGI
Modify Date: 09/20/2012
Modify By: 09/20/2012
Report Status Code: FR
Report Status: Final Report
Spill Datetime: Not reported
Spill Date Unknown: True
Spill Time Unknown: True
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False

STANLEY PROPERTY (Continued) **S112198264**

MCD Value: 19170
Further response action: False
Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 3
Reporter Type: Citizen Complaint
Detection Method Code: H
Detection Method: Odor/Vapor/Mist
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 00
Spill Cause: Other - No Cause
Material Disposal Info: none

Change:
Description: Report Created with Report Status = DR
Date Change: 11/16/2010
Changed By: EIDHIGGI

Description: Report Status change from DR to DRV
Date Change: 12/21/2010
Changed By: EIDHIGGI

Description: Report Status change from DRV to FR
Date Change: 09/20/2012
Changed By: EIELEIGH

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: GREG STANLEY
Title: PROPERTY OWNER
Company: Not reported
Address: Not reported
City,State: MEDWAY,ME
Country: USA
Zipcode: 04460
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARIAN F HIGGINS

Media Affected:
Medium: None

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 615
Spill Year: 2010
Create Date: 11/16/2010
Created By: EIDHIGGI

STANLEY PROPERTY (Continued) **S112198264**

Modify Date:	11/16/2010
Modify By:	EIDHIGGI
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	11/16/2010
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	DARIAN F HIGGINS
Location:	57 Park Street
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	report of 10-15 gallons leaking from fuel line in basement

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	None

Product:

Product Code:	#1 Fuel Oil - Kerosene
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

J65 **LOUNSBURY'S FOOD CENTER** **RCRA NonGen / NLR** **1010564448**
ESE **6 MAIN STREET** **MER000505677**
< 1/8 **EAST MILLINOCKET, ME 04430**
0.101 mi.
535 ft. **Site 1 of 2 in cluster J**

Relative: **Higher**

Actual: **353 ft.**

RCRA NonGen / NLR:

Date form received by agency:	06/29/2007
Facility name:	LOUNSBURY'S FOOD CENTER
Facility address:	6 MAIN STREET EAST MILLINOCKET, ME 04430
EPA ID:	MER000505677
Mailing address:	MAIN STREET EAST MILLINOCKET, ME 04430
Contact:	CARL JONES
Contact address:	MAIN STREET EAST MILLINOCKET, ME 04430
Contact country:	US
Contact telephone:	207-746-5019
Contact email:	Not reported
EPA Region:	01
Classification:	Non-Generator

LOUNSBURY'S FOOD CENTER (Continued) **1010564448**

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	JOSEPH LOUNSBURY
Owner/operator address:	MAIN STREET
	EAST MILLINOCKET, ME 04430
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1987
Owner/Op end date:	Not reported

Owner/operator name:	JOSEPH LOUNSBURY
Owner/operator address:	MAIN STREET
	EAST MILLINOCKET, ME 04430
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1987
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Violation Status: No violations found

66
West
< 1/8
0.103 mi.
543 ft.

EAST MILLINOCKET BARK PILE
ROUTE 11/ROUTE 157
EAST MILLINOCKET, ME

ME INST CONTROL **S107026724**
ME VCP **N/A**
ME ALLSITES

Relative:
Lower

Actual:
328 ft.

INST CONTROL:

Facility ID:	REM01575
Facility Status:	REMEDY IN PLACE: CLOSED
Program Type:	VRAP
Lat/Long:	45.62509 / -68.58562
Institutional Control?:	TRUE
Alias:	Not reported
Acres:	22
Sub Status:	UNDERTAKING POST-CLOSURE OBLIGATIONS
Status Date:	06/08/2005

VCP:

Facility ID:	REM01575
Facility status:	REMEDY IN PLACE: CLOSED
Program Type:	VRAP
Lat/Long:	45.62509 / -68.58562
Institutional Control?:	TRUE
Alias:	Not reported
Acres:	22
Sub Status:	UNDERTAKING POST-CLOSURE OBLIGATIONS
Status Date:	06/08/2005

ALLSITES:

Status:	REMEDY IN PLACE: CLOSED
Program Type:	VRAP
Lat/Long:	45.62509 / -68.58562
Institutional Control?:	TRUE
Alias:	Not reported
Acres:	22
Sub Status:	UNDERTAKING POST-CLOSURE OBLIGATIONS
Status Date:	06/08/2005

K67
SE
< 1/8
0.112 mi.
590 ft.

EAST MILLINOCKET TREAT PLANT
EAST MILLINOCKET, ME
Site 1 of 3 in cluster K

ME UST **U003099354**
N/A

Relative:
Lower

Actual:
275 ft.

UST:

Facility ID:	12859
Facility Location2:	EAST MILLINOCKET
Facility Code:	INDUSTRIAL
Fed Reg Ind:	No
Owner Name:	GREAT NORTHERN PAPER INC
Owner Contact:	Not reported
Owner Delivery Address:	ONE KATAHDIN AVE
Owner City/State/Zip:	MILLINOCKET, ME 04462
Owner Telephone:	2077235131
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	Yes
Near Public Water Label:	NEAR PUBLIC WATER

EAST MILLINOCKET TREAT PLANT (Continued) **U003099354**

Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	GREAT NORTHERN PAPER INC
Owner/Operator Address:	ONE KATAHDIN AVE
Owner/Operator City,St,Zip:	MILLINOCKET, ME 04462
Owner/Operator Phone:	2077235131
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-DEC-91
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-74
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	11-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-DEC-91
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN
Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-DEC-91
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-74
Product Type:	DIESEL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	11-MAR-87
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-DEC-91
Pipe Date Installed:	Not reported

EAST MILLINOCKET TREAT PLANT (Continued) **U003099354**

Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

K68 **E MILLINOCKET WAST TREAT FAC** **ME UST** **U003052917**
SE **TREATMENT PLANT RD** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.112 mi.
590 ft. **Site 2 of 3 in cluster K**

Relative: **Lower**
Actual: **275 ft.**

UST:

Facility ID:	13057
Facility Location2:	EAST MILLINOCKET
Facility Code:	TOWN "&" SCHOOL
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	45.62077
Longitude:	-68.56715
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**ABANDONED_IN_PLACE**
Tank Status Label:	ABANDONED IN PLACE
Tank Status Date:	14-JUN-00
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-AUG-85
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	F/GLASS SINGLE-WALLED
Reg Date:	24-MAR-87
Tank Leak Detection Label:	MANUAL GROUNDWATER SAMPLING
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**ABANDONED_IN_PLACE**
Pipe Status Date:	14-JUN-00
Pipe Date Installed:	Not reported

E MILLINOCKET WAST TREAT FAC (Continued) **U003052917**

Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	ABANDONED IN PLACE
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

J69 **HELEN FEDERICO APTS** **ME LAST** **S105795395**
ESE **3 1/2 MAIN ST** **N/A**
< 1/8 **EAST MILLINOCKET, ME**
0.115 mi.
606 ft. **Site 2 of 2 in cluster J**

Relative: Higher

Actual: 352 ft.

LAST:

Event:

Spill Number:	B-258-2001
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	False
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	02/07/2002
Modify By:	02/07/2002
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	4
Reporter Type:	Public Official
Detection Method Code:	H
Detection Method:	Odor/Vapor/Mist
Inc Location Code:	MF
Inc Location:	Residential - Multi Family
Inc Source Code:	Not reported
Inc Source:	Not reported
Spill Cause Code:	05
Spill Cause:	Accident - Physical Breakage
Material Disposal Info:	D.E.P to Auburn Incinerator

Change:

Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Description:	Not reported
Date Change:	02/07/2002
Changed By:	eitgalla

HELEN FEDERICO APTS (Continued) **S105795395**

Description: Not reported
Date Change: 02/07/2002
Changed By: eitgalla

Description: Added TONY CIVIELLO as a contact.
Date Change: 02/07/2002
Changed By: eitgalla

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: HELEN FEDERICO
Title: Not reported
Company: Not reported
Address: 3 1/2 MAIN ST
City,State: EAST MILLINOCKET,ME
Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARRYL LUCE

File:
Spill Id: B-258-2001
Date Created: 10/26/2001
Created By: SPILLS
Date Modified: 02/26/2009
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 26-FEB-09.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Inland Surface Water

Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 258
Spill Year: 2001
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 05/03/2001

HELEN FEDERICO APTS (Continued) **S105795395**

Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: DARRYL LUCE
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Not reported

Material Recovered:
Material Recovered Type: MM
Material Recovered: Mixed Liquid Media
Material Amount: Not reported
Material Units: gals.
Material Amt Qualifier: UNKNOWN

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 150
Product Amt Unit: gals.
Product Amt Qualifier: ACTUAL
Primary Product: False

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70 WNW < 1/8 0.120 mi. 636 ft. **EMERY LEE & SONS INC** **ME UST** **U002252578**
RT 157 **N/A**
EAST MILLINOCKET, ME

Relative: Higher
Actual: 370 ft.

UST:
Facility ID: 19163
Facility Location2: EAST MILLINOCKET
Facility Code: COMMERCIAL
Fed Reg Ind: Yes
Owner Name: EMERY LEE & SONS
Owner Contact: Not reported
Owner Delivery Address: PO BOX 605
Owner City/State/Zip: MEDWAY, ME 04460 0390
Owner Telephone: 2077465548
Operator Contact: Not reported
On Aquifer: No
On Aquifer Label: Not reported
Near Public Water: No
Near Public Water Label: Not reported
Near Private Water: No
Near Private Water Label: Not reported
Near Other Water: No
Nearby Water Other Owner Label: Not reported
Latitude: 45.63224
Longitude: -68.59365
Owner/Operator Name: LEE, EMERY J JR
Owner/Operator Address: HCR 69 BOX 739

EMERY LEE & SONS INC (Continued) **U002252578**

Owner/Operator City,St,Zip:	MEDWAY, ME 04460
Owner/Operator Phone:	2077465548
Tank Number:	1
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	26-JUL-95
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	26-JUL-95
Product Type:	DIESEL
Tank Volume in Gallons:	8000
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	12-SEP-95
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	2
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**ACTIVE**
Pipe Status Date:	23-JUL-95
Pipe Date Installed:	Not reported
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	1
Tank Status:	**ACTIVE**
Tank Status Label:	ACTIVE
Tank Status Date:	26-JUL-95
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	26-JUL-95
Product Type:	DIESEL
Tank Volume in Gallons:	8000
Tank Above/Below:	BELOWGROUND
Tank Material:	JACKETED TANK - DOUBLE-WALLED
Reg Date:	12-SEP-95
Tank Leak Detection Label:	SECONDARY CONTAINMENT / CONT ELEC MON
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**ACTIVE**
Pipe Status Date:	26-JUL-95
Pipe Date Installed:	07/26/1995
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	ACTIVE
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

L71 **SARA MANSO RESIDENCE** **ME LAST** **S112198266**
ENE **25 A ELMS STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.137 mi.
723 ft. **Site 1 of 3 in cluster L**

Relative: **Higher**

Actual: **367 ft.**

LAST:

Event:

Spill Number:	B-621-2010
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	False
Create Date:	12/16/2010
Create By:	EIALASSE
Modify Date:	09/20/2012
Modify By:	09/20/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	4
Reporter Type:	Public Official
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	17
Spill Cause:	Accident - Human Error
Material Disposal Info:	Not reported

Change:

Description:	Report Created with Report Status = DR
Date Change:	12/16/2010
Changed By:	EIALASSE
Description:	Report Status change from DR to DRV
Date Change:	01/10/2011
Changed By:	EIJSELLE
Description:	Report Status change from DRV to FR
Date Change:	09/20/2012
Changed By:	EIELEIGH

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	SARA MANSO

SARA MANSO RESIDENCE (Continued) **S112198266**

Title:	Not reported
Company:	Not reported
Address:	25 A ELMS STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	JOHN M SELLECK

Media Affected:

Medium:	Land

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	621
Spill Year:	2010
Create Date:	12/16/2010
Created By:	EIALASSE
Modify Date:	12/16/2010
Modify By:	EIALASSE
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	11/17/2010
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	JOHN M SELLECK
Location:	25A Elm St.
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	oil in basement, into driveway and drains Sara Manso 731-4166

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Not reported

Product:

Product Code:	#2 Fuel Oil
Product Other:	Not reported
Product Amt:	2
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE

SARA MANSO RESIDENCE (Continued) **S112198266**

Primary Product: True

I72 **JOHN FRIEL'S GARAGE** **ME LAST** **S110475930**
NW **32 WESTERN AVENUE** **ME SPILLS** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.146 mi.
772 ft. **Site 2 of 3 in cluster I**

Relative: Higher

Actual: 353 ft.

LAST:

Event:

Spill Number:	B-570-2009
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	False
Create Date:	10/16/2009
Create By:	EIRSHANN
Modify Date:	02/23/2011
Modify By:	02/23/2011
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	10/06/2009
Spill Date Unknown:	False
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	7
Reporter Type:	Other Involved Party
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	16
Spill Cause:	Accident - Poor Workmanship
Material Disposal Info:	The contaminated material was disposed of at Pine Tree Landfill.

Change:

Description:	Report Created with Report Status = DR
Date Change:	10/16/2009
Changed By:	EIRSHANN
Description:	Report Status change from DR to DRV
Date Change:	10/16/2009
Changed By:	EIRSHANN
Description:	Report Status change from DRV to FR
Date Change:	02/23/2011
Changed By:	EIELEIGH

JOHN FRIEL'S GARAGE (Continued) **S110475930**

Contact:
- Contact Type: Subject/Spiller
- Potential RP: True
- Name: JOHN FRIEL
- Title: HOMEOWNER
- Company: Not reported
- Address: 32 WESTERN AVENUE
- City,State: EAST MILLINOCKET,ME
- Country: USA
- Zipcode: 04430
- Phone/Ext: /
- Comments: Not reported

Primary Employee:
- Primary Employee: True
- Name: ROBERT F SHANNON

Media Affected:
- Medium: Interior Surface

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 570
- Spill Year: 2009
- Create Date: 10/13/2009
- Created By: EICLECKE
- Modify Date: 10/16/2009
- Modify By: EIRSHANN
- Log Spill Type: Oil Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 10/07/2009
- Log Rep Prod Cd: 02
- Log Rep Prod: #2 Fuel Oil
- Log Emp Name: ROBERT F SHANNON
- Location: Not reported
- Log Location Town: EAST MILLINOCKET
- Log Tank Involved: Above Ground Tank(s) Involved
- Notes: 50 gallons from fuel line released to basement 32 Western Avenue

Material Recovered:
- Material Recovered Type: OM
- Material Recovered: Other Material
- Material Amount: 1.03
- Material Units: tons
- Material Amt Qualifier: ACTUAL

Spill Point:
- Recovery Method: Other

Product:
- Product Code: #2 Fuel Oil

JOHN FRIEL'S GARAGE (Continued) **S110475930**

Product Other:	Not reported
Product Amt:	50
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

Attachments:

Description:	Pine Tree Disposal Receipts 10/21/09 2 pages
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	02/23/2011

Description:	Oil Spill Debris Form 10/14/09
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	02/23/2011

Description:	Expense Tracking
Attach Type:	Electronic Form
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	10/16/2009

SPILLS:

Event:

Spill Number:	B-114-2008
Inc Tank Code:	N
Inc Tank:	None
Removal Flag:	False
Ust Registered Flag:	True
Ast Inside Flag:	False
Create Date:	03/06/2008
Create By:	EIRSHANN
Modify Date:	07/07/2010
Modify By:	EIESNOOK
Report Status:	FR
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Actual Spill Time Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
MCD Value:	19170
Further Response Action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	5
Reporter Type:	Anonymous
Detection Method Code:	I

JOHN FRIEL'S GARAGE (Continued) **S110475930**

Detection Method: Other
Inc Location Code: CM
Inc Location: Business - Commercial
Inc Source Code: NS
Inc Source: No Source Found By Responder
Spill Cause Code: 00
Spill Cause: Other - No Cause
Material Disposal Info: None.

Change:
Description: Report Status change from DRV to FR
Date Change: 07/07/2010
Changed By: EIESNOOK

Description: Report Created with Report Status = DR
Date Change: 03/06/2008
Changed By: EIRSHANN

Description: Report Status change from DR to DRV
Date Change: 03/06/2008
Changed By: EIRSHANN

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: JOHN FRIEL
Title: OWNER
Company: FRIEL'S GARAGE
Address: 32 WESTERN AVENUE
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

File:
Spill Id: B-114-2008
Date Created: 07/08/2010
Created By: IMAGING
Date Modified: 07/08/2010
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 08-JUL-10.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: None

Log:
Spill Void Flag: False

JOHN FRIEL'S GARAGE (Continued) **S110475930**

Spill Office:	Bangor
Spill Off Sequence:	114
Spill Year:	2008
Create Date:	03/06/2008
Created By:	EIRSHANN
Modify Date:	03/06/2008
Modify By:	EIRSHANN
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	02/28/2008
Log Rep Prod Cd:	81
Log Rep Prod:	Waste Oil/Used Motor Oil
Log Emp Name:	ROBERT F SHANNON
Location:	32 Western Avenue
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	None
Notes:	Anonymous complaint of waste oil spillage at garage.

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ACTUAL
Recovery Method:	None

Spill Point:

Product:

Product Code:	Waste Oil/Used Motor Oil
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

Attachments:

Description:	Initial Spill Reporting Form
Attach Type:	Paper Attach
File Name:	Not reported
File Code:	Not reported
File Size:	Not reported
File Modify Date:	07/07/2010

H73 **EAST MILLINOCKET MUNICIPALITY** **ME UST** **U000231265**
North **BEECH & BIRCH STS** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.146 mi.
773 ft. **Site 2 of 3 in cluster H**

Relative: **Higher**

Actual: **371 ft.**

UST:

Facility ID:	15857
Facility Location2:	EAST MILLINOCKET
Facility Code:	PUBLIC FACILITY
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	UNKNOWN SUBSTANCE
Tank Volume in Gallons:	300
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	21-JUL-89
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

H74 **EAST MILLINOCKET PUB WORKS** **ME UST** **U003096761**
North **BIRCH ST** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.146 mi.
773 ft. **Site 3 of 3 in cluster H**

Relative: **Higher**

Actual: **371 ft.**

UST:

Facility ID:	438
Facility Location2:	EAST MILLINOCKET
Facility Code:	PUBLIC FACILITY
Fed Reg Ind:	No
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-SEP-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	UNKNOWN SUBSTANCE
Tank Volume in Gallons:	100000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	18-JUL-89
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-SEP-88
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

EAST MILLINOCKET PUB WORKS (Continued) **U003096761**

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-SEP-88
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	UNKNOWN SUBSTANCE
Tank Volume in Gallons:	20000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	18-JUL-89
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-SEP-88
Pipe Date Installed:	Not reported
Pipe Material Label:	OTHER
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

K75 **TOWN OF EAST MILLINOCKET** **ME LUST** **S106793384**
SE **WASTEWATER TREATMENT PLANT** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.149 mi.
787 ft. **Site 3 of 3 in cluster K**

Relative: **Lower**

Actual: **289 ft.**

LUST:

Event:

Spill Number:	B-321-2000
Spill Cause:	Other - No Cause
Spill Type:	Non-Oil, Non-Hazardous Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	False
UST Registered Flag:	True
MCD Value:	19170
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	SPILLS
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0
Number Wells Impacted:	0
Dtree Completed Flag:	False
Further Response Action:	False
Reporter Type:	Contractor/Consultant
Detection Method:	Tank and/or Piping Removal
Inc Location:	Government - Local
Inc Source:	Not reported
Material Disposal Info:	Not reported

TOWN OF EAST MILLINOCKET (Continued) **S106793384**

Change:
- Description: Not reported
- Date Change: 01/24/2002
- Changed By: eitgalla

- Description: Report Created with Report Status = FR
- Date Change: 12/07/2001
- Changed By: SPILLS

Contact:
- Contact Type: Subject/Spiller
- Potential RP: False
- Name: Not reported
- Title: Not reported
- Company: TOWN OF EAST MILLINOCKET
- Address: MAIN STREET
- City,State: EAST MILLINOCKET,ME
- Country: Not reported
- Zipcode: 04430
- Phone/Ext: /
- Comments: Not reported

Primary Employee:
- Primary Employee: True
- Name: ROBERT S WHITTIER JR

File:
- Spill Id: B-321-2000
- Date Created: 02/21/2002
- Created By: EICSTULT
- Date Modified: 01/29/2009
- Modified By: IMAGING
- File Num Sheets: 0
- Notes: Report scanned into the imaging system on 29-JAN-09.
- Reconcile Date: 02/21/2002
- File Reconciled By: Not reported

Media Affected:
- Medium: None

Log:
- Spill Void Flag: False
- Spill Office: Bangor
- Spill Off Sequence: 321
- Spill Year: 2000
- Create Date: 12/07/2001
- Created By: SPILLS
- Modify Date: 06/27/2002
- Modify By: EIBRANDA
- Log Spill Type: Non-Oil, Non-Hazardous Incident
- Log Spill Datetime: Not reported
- Spill Time Unk: True
- Spill Dt Unknown: True
- Log Rep Dt Tm: 06/14/2000

TOWN OF EAST MILLINOCKET (Continued) **S106793384**

Log Rep Prod Cd:	00
Log Rep Prod:	None
Log Emp Name:	ROBERT S WHITTIER JR
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ACTUAL
Recovery Method:	None

Spill Point:

Create Date:	9/10/2008
Created By:	EICHALST
Modify Date:	7/15/2009
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052005.1600000001
UTM East:	533744.48999999999
GPS Unit:	TANKS
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	11125
GIS Sync Flag:	True

Product:

Product Code:	None
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ACTUAL
Primary Product:	False

L76 **TOWN GARAGE** **ME UST** **U003559797**
ENE **1 CHURCH ST** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.151 mi.
798 ft. **Site 2 of 3 in cluster L**

Relative:
Higher

Actual:
369 ft.

UST:

Facility ID:	1309
Facility Location2:	EAST MILLINOCKET
Facility Code:	TOWN "&" SCHOOL
Fed Reg Ind:	Yes
Owner Name:	EAST MILLINOCKET TOWN OF
Owner Contact:	Not reported
Owner Delivery Address:	53 MAIN ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430

TOWN GARAGE (Continued) **U003559797**

Owner Telephone:	2077463376
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner/Operator Name:	EAST MILLINOCKET TOWN OF
Owner/Operator Address:	53 MAIN ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077463376

Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-SEP-71
Product Type:	REGULAR GASOLINE
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	23-JUN-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	2
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-SEP-71
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	23-JUN-86
Tank Leak Detection Label:	UNKNOWN

TOWN GARAGE (Continued) **U003559797**

Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	3
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-JUL-89
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-SEP-71
Product Type:	DIESEL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	23-JUN-86
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-JUL-89
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

Tank Number:	4
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	19-JUL-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-JUL-89
Product Type:	DIESEL
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	DOUBLE-WALLED CP STEEL
Reg Date:	23-JUN-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT /MANUAL MONITOR
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION

TOWN GARAGE (Continued) **U003559797**

Pipe Status:	**REMOVED**
Pipe Status Date:	19-JUL-11
Pipe Date Installed:	06/20/2002
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	5
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	19-JUL-11
Tank Sub Status:	**SA_APPROVED**
Tank Sub Status Label:	SA APPROVED
Installation Date:	01-JUL-89
Product Type:	UNLEADED GASOLINE
Tank Volume in Gallons:	2000
Tank Above/Below:	BELOWGROUND
Tank Material:	DOUBLE-WALLED CP STEEL
Reg Date:	23-JUN-86
Tank Leak Detection Label:	SECONDARY CONTAINMENT /MANUAL MONITOR
Chamber ID:	1
Chamber Pump Type Label:	SUCTION
Chamber Pump Type Desc:	SUCTION
Pipe Status:	**REMOVED**
Pipe Status Date:	19-JUL-11
Pipe Date Installed:	06/20/2002
Pipe Material Label:	F/GLASS - PETROLEUM
Pipe Status Label:	REMOVED
Pipe Leak Detection:	CONFORMING_SUCTION_SYSTEM
Pipe Leak Detection Label:	CONFORMING SUCTION SYSTEM
Overfill:	DROP_TUBE
Overfill Protection Label:	DROP TUBE

Tank Number:	6
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	28-OCT-03
Tank Sub Status:	**SA_NOT_REQUIRED**
Tank Sub Status Label:	SA NOT REQUIRED
Installation Date:	01-OCT-69
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	500
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	23-JUN-86
Tank Leak Detection Label:	NONE
Chamber ID:	1
Chamber Pump Type Label:	NONE
Chamber Pump Type Desc:	NONE
Pipe Status:	**REMOVED**
Pipe Status Date:	23-SEP-03
Pipe Date Installed:	10/01/1969

TOWN GARAGE (Continued) **U003559797**

Pipe Material Label:	BLACK STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	NONE
Pipe Leak Detection Label:	NONE
Overfill:	NONE
Overfill Protection Label:	NONE

Tank Number:	7
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	09-OCT-06
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-OCT-69
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	500
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL WITH CATHODIC PROTECTION.
Reg Date:	23-JUN-86
Tank Leak Detection Label:	SIA STATISTICAL INVENTORY ANALYSIS
Chamber ID:	1
Chamber Pump Type Label:	NONE
Chamber Pump Type Desc:	NONE
Pipe Status:	**REMOVED**
Pipe Status Date:	09-OCT-06
Pipe Date Installed:	10/01/1969
Pipe Material Label:	STEEL WITH CATHODIC PROTECTION.
Pipe Status Label:	REMOVED
Pipe Leak Detection:	NONE
Pipe Leak Detection Label:	NONE
Overfill:	NONE
Overfill Protection Label:	NONE

L77 **EAST MILLINOCKET - PUBLIC WORKS** **ME LUST** **S108478900**
ENE **1 CHURCH ST** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.151 mi.
798 ft. **Site 3 of 3 in cluster L**

Relative:
Higher

Actual:
369 ft.

LUST:

Event:

Spill Number:	B-615-2006
Spill Cause:	Other - No Cause
Spill Type:	Non-Oil, Non-Hazardous Incident
Inc Tank:	Underground Tank(s) Involved
Removal Flag:	True
UST Registered Flag:	True
MCD Value:	19170
Create Date:	10/11/2006
Create By:	EIRSHANN
Modify Date:	03/28/2007
Modify By:	EITGALLA
Report Status:	Final Report
Actual Spill Datetime:	Not reported
Actual Spill Date Unknown:	True
Number Wells At Risk:	0

EAST MILLINOCKET - PUBLIC WORKS (Continued) **S108478900**

Number Wells Impacted: 0
Dtree Completed Flag: False
Further Response Action: False
Reporter Type: Subject/Spiller
Detection Method: Tank and/or Piping Removal
Inc Location: Terminal - Other
Inc Source: No Source
Material Disposal Info: No spill

Change:
Description: Report Created with Report Status = DR
Date Change: 10/11/2006
Changed By: EIRSHANN

Description: Report Status change from DR to DRV
Date Change: 10/11/2006
Changed By: EIRSHANN

Description: Report Status change from DRV to DQA
Date Change: 10/13/2006
Changed By: EITHSMIT

Description: Report Status change from DQA to FR
Date Change: 03/28/2007
Changed By: EITGALLA

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: DANNY VIOLETTE
Title: PUBLIC WORKS DIR
Company: EAST MILLINOCKET, TOWN OF
Address: 44 CHURCH ST
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

File:
Spill Id: B-615-2006
Date Created: 04/12/2007
Created By: IMAGING
Date Modified: 04/12/2007
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 12-APR-07.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: None

EAST MILLINOCKET - PUBLIC WORKS (Continued) **S108478900**

Log:

Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	615
Spill Year:	2006
Create Date:	10/03/2006
Created By:	EICLECKE
Modify Date:	10/11/2006
Modify By:	EIRSHANN
Log Spill Type:	Non-Oil, Non-Hazardous Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	10/02/2006
Log Rep Prod Cd:	00
Log Rep Prod:	None
Log Emp Name:	ROBERT F SHANNON
Location:	53 Main Street
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Underground Tank(s) Involved
Notes:	UST removal-no spill

Material Recovered:

Material Recovered Type:	Not reported
Material Recovered:	Not reported
Material Amount:	Not reported
Material Units:	Not reported
Material Amt Qualifier:	Not reported
Recovery Method:	None

Spill Point:

Create Date:	9/10/2008
Created By:	EICHALST
Modify Date:	7/15/2009
Modify By:	EICHALST
Point Type Code:	ASP
UTM North:	5052992.0099999998
UTM East:	532507.62
GPS Unit:	TANKS
GPS Date:	Not reported
GPS Time:	Not reported
GIS Feature Class:	Response_Spill_Points
GIS Object Id:	13082
GIS Sync Flag:	True

Product:

Product Code:	None
Product Other:	Not reported
Product Amt:	Not reported
Product Amt Unit:	Not reported
Product Amt Qualifier:	Not reported
Primary Product:	True

EAST MILLINOCKET - PUBLIC WORKS (Continued) **S108478900**

Attachments:
- Description: 30 day tank removal waiver
- Attach Type: Paper Attach
- File Name: Not reported
- File Code: Not reported
- File Size: Not reported
- File Modify Date: 10/11/2006

M78 **CARRIE JO BISHOP** **ME LAST** **S116757800**
East **3 UNION STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.157 mi.
831 ft. **Site 1 of 4 in cluster M**

Relative: Higher

Actual: 363 ft.

LAST:

Event:
- Spill Number: B-630-2012
- Inc Tank Code: A
- Inc Tank: Above Ground Tank(s) Involved
- Removal Flag: False
- UST registered flag: True
- AST inside flag: True
- Create Date: 12/11/2012
- Create By: EIALASSE
- Modify Date: 07/03/2014
- Modify By: 07/03/2014
- Report Status Code: FR
- Report Status: Final Report
- Spill Datetime: 12/07/2012
- Spill Date Unknown: False
- Spill Time Unknown: False
- Number of wells at risk: 0
- Number of wells impacted: 0
- DTREE completed flag: False
- MCD Value: 19170
- Further response action: False
- Spill Type Code: O
- Spill Type: Oil Incident
- Reporter Type Code: 7
- Reporter Type: Other Involved Party
- Detection Method Code: L
- Detection Method: Visual Product
- Inc Location Code: SF
- Inc Location: Residential - Single Family
- Inc Source Code: TA
- Inc Source: Storage Unit - Aboveground Storage Tank
- Spill Cause Code: 01
- Spill Cause: Corrosion - Tank
- Material Disposal Info: speedi dri cleaned up by Bradgon Oil Company.

Change:
- Description: Report Status change from DRV to FR
- Date Change: 07/03/2014
- Changed By: EIRKROUT

- Description: Report Created with Report Status = DR

CARRIE JO BISHOP (Continued) **S116757800**

Date Change: 12/11/2012
Changed By: EIALASSE

Description: Report Status change from DR to DRV
Date Change: 12/11/2012
Changed By: EIALASSE

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: CARRIE JO BISHOP
Title: Not reported
Company: Not reported
Address: 3 UNION STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04462
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ANDREA L LASSELLE

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 630
Spill Year: 2012
Create Date: 12/11/2012
Created By: EIALASSE
Modify Date: 12/11/2012
Modify By: EIALASSE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 12/07/2012
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: ANDREA L LASSELLE
Location: 3 Union St.
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Carrie Jo Bishop - 447-2960 Rob Sibley reports a corrosion hole in tank. approximately 1 qt lost - tank replaced by Penquis CAP

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: Not reported
Material Units: Not reported

CARRIE JO BISHOP (Continued) **S116757800**

Material Amt Qualifier: UNKNOWN

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 32
Product Amt Unit: oz.
Product Amt Qualifier: Not reported
Primary Product: True

I79 **EAST MILLINOCKET TRANSFER STATION** **ME SWRCY** **S110534345**
NNW **44 CHURCH STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME 04430**
0.159 mi.
839 ft. **Site 3 of 3 in cluster I**

Relative:
Higher

Actual:
362 ft.

SWRCY:

Municipality:	East Millinocket
Contact Name:	Danny Violette
Contact Phone:	Not reported
Batteries Residents:	Not reported
Batteries Businesses:	Not reported
Cathode Ray Tubes Residents:	Not reported
Cathode Ray Tubes Businesses:	Not reported
Fluorescent Bulbs Residents:	Not reported
Fluorescent Bulbs Businesses:	Not reported
Mercury Thermostats Residents:	Not reported
Mercury Thermostats Businesses:	Not reported
PCB Ballast Residents:	Not reported
PCB Ballast Businesses:	Not reported
Electronic Devises Residents:	Not reported
Electronic Devises Businesses:	Not reported
Vehicle Switches Residents:	Not reported
Vehicle Switches Businesses:	Not reported
Mercury Devices Residents:	Not reported
Mercury Devices Businesses:	Not reported
Universal Wastes Accepted From Notes:	Not reported
Residential Accepting From?:	Not reported
Residential Charge For Service?:	Not reported
Business Accepting From?:	Not reported
Business Charge For Service?:	Not reported
Accepting From/Charge From Service Notes:	Not reported
Permanent Id Number:	Not reported

N80 **FIRST CONG UNT CHURCH CHRIST** **ME UST** **U003100228**
North **MAPLE ST** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.168 mi.
887 ft. **Site 1 of 2 in cluster N**

Relative: **Higher**

Actual: **370 ft.**

UST:

Facility ID:	17119
Facility Location2:	EAST MILLINOCKET
Facility Code:	PUBLIC FACILITY
Fed Reg Ind:	No
Owner Name:	FIRST CONGREGATION CHURCH
Owner Contact:	Not reported
Owner Delivery Address:	MAPLE ST
Owner City/State/Zip:	EAST MILLINOCKET, ME 04430
Owner Telephone:	2077465575
Operator Contact:	Not reported
On Aquifer:	No
On Aquifer Label:	Not reported
Near Public Water:	No
Near Public Water Label:	Not reported
Near Private Water:	No
Near Private Water Label:	Not reported
Near Other Water:	No
Nearby Water Other Owner Label:	Not reported
Latitude:	45.62758
Longitude:	-68.57323
Owner/Operator Name:	FIRST CONGREGATION CHURCH
Owner/Operator Address:	MAPLE ST
Owner/Operator City,St,Zip:	EAST MILLINOCKET, ME 04430
Owner/Operator Phone:	2077465575
Tank Number:	1
Tank Status:	**REMOVED**
Tank Status Label:	REMOVED
Tank Status Date:	01-OCT-94
Tank Sub Status:	**Not reported**
Tank Sub Status Label:	Not reported
Installation Date:	01-JAN-73
Product Type:	#2 FUEL OIL
Tank Volume in Gallons:	1000
Tank Above/Below:	BELOWGROUND
Tank Material:	STEEL - BARE OR ASPHALT COATED.
Reg Date:	03-JUL-90
Tank Leak Detection Label:	UNKNOWN
Chamber ID:	1
Chamber Pump Type Label:	UNKNOWN
Chamber Pump Type Desc:	UNKNOWN
Pipe Status:	**REMOVED**
Pipe Status Date:	01-OCT-94
Pipe Date Installed:	Not reported
Pipe Material Label:	GALVANIZED STEEL
Pipe Status Label:	REMOVED
Pipe Leak Detection:	UNKNOWN
Pipe Leak Detection Label:	UNKNOWN
Overfill:	UNKNOWN
Overfill Protection Label:	UNKNOWN

M81 **JOSH SAVAGE** **ME LAST** **S118561456**
East **16 UNION STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.171 mi.
903 ft. **Site 2 of 4 in cluster M**

Relative: **Higher**

Actual: **365 ft.**

LAST:

Event:

Spill Number:	B-605-2013
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	11/12/2013
Create By:	EIALASSE
Modify Date:	04/13/2016
Modify By:	04/13/2016
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	11/03/2013
Spill Date Unknown:	False
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	05
Spill Cause:	Accident - Physical Breakage
Material Disposal Info:	Pads and speedy dry sorbent materials disposed of by Bragdon Energy.

Change:

Description:	Report Created with Report Status = DR
Date Change:	11/12/2013
Changed By:	EIALASSE
Description:	Report Status change from DR to DRV
Date Change:	01/28/2014
Changed By:	EIALASSE
Description:	Report Status change from DQA to FR
Date Change:	04/13/2016
Changed By:	EIRKROUT
Description:	Report Status change from DRV to DQA
Date Change:	01/26/2016
Changed By:	EISBERNA

JOSH SAVAGE (Continued) **S118561456**

Contact:
Contact Type:	Subject/Spiller
Potential RP:	True
Name:	JOSH SAVAGE
Title:	Not reported
Company:	Not reported
Address:	16 UNION STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:
Primary Employee:	True
Name:	ANDREA L LASSELLE

Media Affected:
Medium:	Interior Surface

Log:
Spill Void Flag:	False
Spill Office:	Bangor
Spill Off Sequence:	605
Spill Year:	2013
Create Date:	11/12/2013
Created By:	EIALASSE
Modify Date:	11/12/2013
Modify By:	EIALASSE
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	False
Spill Dt Unknown:	False
Log Rep Dt Tm:	11/03/2013
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	ANDREA L LASSELLE
Location:	16 Union St.
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	2-5 gallons from a broken fuel line in a basement Josh Savage 746 - 7437

Material Recovered:
Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	30
Material Units:	lbs.
Material Amt Qualifier:	ESTIMATE

Spill Point:
Recovery Method:	Sorbents

JOSH SAVAGE (Continued) **S118561456**

Product:
- Product Code: #2 Fuel Oil
- Product Other: Not reported
- Product Amt: 2
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: True

Attachments:
- Description: Referral to JAMES LAVOIE
- Attach Type: Electronic Form
- File Name: Not reported
- File Code: Not reported
- File Size: Not reported
- File Modify Date: 01/28/2014

M82 **FRANCES CLUKEY** **ME LAST** **S123082164**
East **20 UNION STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.176 mi.
931 ft. **Site 3 of 4 in cluster M**

Relative: Higher

Actual: 366 ft.

LAST:

Event:
- Spill Number: B-339-2017
- Inc Tank Code: A
- Inc Tank: Above Ground Tank(s) Involved
- Removal Flag: False
- UST registered flag: True
- AST inside flag: True
- Create Date: 05/25/2017
- Create By: EIJALLEY
- Modify Date: 08/17/2018
- Modify By: 08/17/2018
- Report Status Code: FR
- Report Status: Final Report
- Spill Datetime: 05/22/2017
- Spill Date Unknown: False
- Spill Time Unknown: False
- Number of wells at risk: 0
- Number of wells impacted: 0
- DTREE completed flag: False
- MCD Value: 19170
- Further response action: False
- Spill Type Code: O
- Spill Type: Oil Incident
- Reporter Type Code: 4
- Reporter Type: Public Official
- Detection Method Code: L
- Detection Method: Visual Product
- Inc Location Code: SF
- Inc Location: Residential - Single Family
- Inc Source Code: TA
- Inc Source: Storage Unit - Aboveground Storage Tank
- Spill Cause Code: 01

FRANCES CLUKEY (Continued) **S123082164**

Spill Cause: Corrosion - Tank
Material Disposal Info: Maine Department of Environmental Protection waste stream

Change:
Description: Report Status change from DR to DQA
Date Change: 07/13/2018
Changed By: EIDHIGGI

Description: Report Status change from DQA to FR
Date Change: 08/17/2018
Changed By: EIRKROUT

Description: Report Created with Report Status = DR
Date Change: 05/25/2017
Changed By: EIJALLEY

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: FRANCES CLUKEY
Title: OWNER
Company: Not reported
Address: 20 UNION STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: DARIAN F HIGGINS

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 339
Spill Year: 2017
Create Date: 05/25/2017
Created By: EIJALLEY
Modify Date: 07/13/2018
Modify By: EIDHIGGI
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 05/22/2017
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: DARIAN F HIGGINS
Location: 20 Union Street
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved

FRANCES CLUKEY (Continued) **S123082164**

Notes: leaking tank, 3 gallons

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 50
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 3
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

N83 **OSNOE RESIDENCE** **ME LAST** **S105111741**
North **38 BEECH ST** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.194 mi.
1022 ft. **Site 2 of 2 in cluster N**

Relative: Higher

Actual: 374 ft.

LAST:

Event:
Spill Number: B-91-2001
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: False
AST inside flag: False
Create Date: 12/07/2001
Create By: SPILLS
Modify Date: 12/07/2001
Modify By: 12/07/2001
Report Status Code: FR
Report Status: Final Report
Spill Datetime: 03/07/2001
Spill Date Unknown: False
Spill Time Unknown: True
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False
MCD Value: 19170
Further response action: False
Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 6
Reporter Type: Contractor/Consultant
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: SF

OSNOE RESIDENCE (Continued) **S105111741**

Inc Location: Residential - Single Family
Inc Source Code: Not reported
Inc Source: Not reported
Spill Cause Code: 08
Spill Cause: Mechanical Failure - Loose Fitting
Material Disposal Info: Incinerated

Change:
Description: Report Created with Report Status = FR
Date Change: 12/07/2001
Changed By: SPILLS

Contact:
Contact Type: Subject/Spiller
Potential RP: False
Name: LULA OSNOE
Title: Not reported
Company: Not reported
Address: 38 BEECH ST
City,State: EAST MILLINOCKET,ME
Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: BERNARD WARD

File:
Spill Id: B-91-2001
Date Created: 04/09/2001
Created By: SPILLS
Date Modified: 02/20/2009
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 20-FEB-09.
Reconcile Date: Not reported
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 91
Spill Year: 2001
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Log Spill Type: Oil Incident
Log Spill Datetime: 03/07/2001
Spill Time Unk: True

OSNOE RESIDENCE (Continued) **S105111741**

Spill Dt Unknown:	False
Log Rep Dt Tm:	03/07/2001
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	BERNARD WARD
Location:	Not reported
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	Not reported

Material Recovered:

Material Recovered Type:	MM
Material Recovered:	Mixed Liquid Media
Material Amount:	8
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Sorbents

Product:

Product Code:	#2 Fuel Oil
Product Other:	Not reported
Product Amt:	8
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	False

84
NW
1/8-1/4
0.217 mi.
1144 ft.

DAVE DUPREY RESIDENCE **ME LAST** **S111435856**
19 HEMLOCK STREET **N/A**
EAST MILLINOCKET, ME

Relative: Higher

Actual: 365 ft.

LAST:

Event:

Spill Number:	B-717-2008
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	False
Create Date:	12/02/2008
Create By:	EIRSHANN
Modify Date:	01/10/2012
Modify By:	01/10/2012
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170

DAVE DUPREY RESIDENCE (Continued) **S111435856**

Further response action: False
Spill Type Code: O
Spill Type: Oil Incident
Reporter Type Code: 4
Reporter Type: Public Official
Detection Method Code: O
Detection Method: Site Assessment
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 00
Spill Cause: Other - No Cause
Material Disposal Info: Not reported

Change:
Description: Report Status change from DRV to FR
Date Change: 01/10/2012
Changed By: EIELEIGH

Description: Report Created with Report Status = DR
Date Change: 12/02/2008
Changed By: EIRSHANN

Description: Report Status change from DR to DRV
Date Change: 12/29/2008
Changed By: EIRSHANN

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: DAVE DUPREY
Title: OWNER
Company: Not reported
Address: 19 HEMLOCK STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: ROBERT F SHANNON

Media Affected:
Medium: None

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 717
Spill Year: 2008
Create Date: 12/02/2008
Created By: EIRSHANN
Modify Date: 12/02/2008

DAVE DUPREY RESIDENCE (Continued) **S111435856**

Modify By:	EIRSHANN
Log Spill Type:	Oil Incident
Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	12/01/2008
Log Rep Prod Cd:	01
Log Rep Prod:	#1 Fuel Oil - Kerosene
Log Emp Name:	ROBERT F SHANNON
Location:	19 Hemlock Street, land lease community across the street from the public works buildings.
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	report from fire chief of an above ground storage tank about to tip over. NO SPILL yet.

Material Recovered:

Material Recovered Type:	NO
Material Recovered:	None
Material Amount:	0
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	None

Product:

Product Code:	#1 Fuel Oil - Kerosene
Product Other:	Not reported
Product Amt:	0
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

85
NNE
1/8-1/4
0.218 mi.
1151 ft.

CHURCH PARSONAGE **ME LAST** **S105794553**
39 PINE ST **N/A**
EAST MILLINOCKET, ME

Relative:
Higher

Actual:
391 ft.

LAST:

Event:

Spill Number:	B-591-2002
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	True
Create Date:	12/05/2002
Create By:	EICLECKE
Modify Date:	03/04/2003
Modify By:	03/04/2003
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported

CHURCH PARSONAGE (Continued) **S105794553**

Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	18
Spill Cause:	Other - Unknown
Material Disposal Info:	by Irving Oil Corp.

Change:

Description:	Report Status change from DQA to FR
Date Change:	02/14/2003
Changed By:	EIDFRITH
Description:	Report Created with Report Status = DR
Date Change:	12/05/2002
Changed By:	EICLECKE
Description:	Report Status change from DR to DRV
Date Change:	12/05/2002
Changed By:	EICLECKE
Description:	minor edit
Date Change:	03/04/2003
Changed By:	eitgalla
Description:	Report Status change from DRV to DQA
Date Change:	12/06/2002
Changed By:	EIBRANDA

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	Not reported
Title:	Not reported
Company:	MILLINOCKET BAPTIST CHURCH
Address:	36 PINE ST
City,State:	MILLINOCKET,ME
Country:	USA
Zipcode:	04462
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True

CHURCH PARSONAGE (Continued) **S105794553**

Name: CLEVE LECKEY

File:
Spill Id: B-591-2002
Date Created: 03/04/2003
Created By: EILMOORE
Date Modified: 05/06/2009
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 06-MAY-09.
Reconcile Date: 03/04/2003
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 591
Spill Year: 2002
Create Date: 11/12/2002
Created By: EIBRANDA
Modify Date: 11/12/2002
Modify By: EIBRANDA
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 11/05/2002
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: CLEVE LECKEY
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: AST leak (about 5 gallons) discovered in basement of burned residence at 36 Pine Street.

Material Recovered:
Material Recovered Type: VP
Material Recovered: Unspilled Product
Material Amount: Not reported
Material Units: Not reported
Material Amt Qualifier: UNKNOWN

Spill Point:
Recovery Method: Pumps

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 5
Product Amt Unit: gals.

CHURCH PARSONAGE (Continued) **S105794553**

Product Amt Qualifier: ESTIMATE
Primary Product: True

M86 **RONALD CHASSE** **ME LAST** **S121464661**
East **18 SPRING STREET** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME**
0.230 mi.
1212 ft. **Site 4 of 4 in cluster M**

Relative: Higher

Actual: 362 ft.

LAST:

Event:

Spill Number:	B-748-2015
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	True
AST inside flag:	True
Create Date:	11/06/2015
Create By:	EIJALLEY
Modify Date:	01/25/2018
Modify By:	01/25/2018
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	11/04/2015
Spill Date Unknown:	False
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	01
Spill Cause:	Corrosion - Tank
Material Disposal Info:	Maine Department of Environmental Protection disposed of sorbents. Non-spilled oil will be reused by owner in new tank.

Change:

Description:	Report Status change from DRV to FR
Date Change:	01/25/2018
Changed By:	EIRKROUT
Description:	Report Created with Report Status = DR
Date Change:	11/06/2015
Changed By:	EIJALLEY
Description:	Report Status change from DR to DRV
Date Change:	03/01/2016

RONALD CHASSE (Continued) **S121464661**

Changed By: EIJSELLE

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: RONALD CHASSE
Title: Not reported
Company: Not reported
Address: 18 SPRING STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: JOHN M SELLECK

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 748
Spill Year: 2015
Create Date: 11/06/2015
Created By: EIJALLEY
Modify Date: 02/26/2016
Modify By: EIJSELLE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 11/04/2015
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: JOHN M SELLECK
Location: 18 Spring Street, East Millinocket
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: corrosion hole in tank - 5-8 gallons onto concrete floor

Material Recovered:
Material Recovered Type: VP
Material Recovered: Unspilled Product
Material Amount: 245
Material Units: gals.
Material Amt Qualifier: ESTIMATE

Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 100
Material Units: lbs.

RONALD CHASSE (Continued) **S121464661**

Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Pumps

Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: 5
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

O87 **EAST MILLINOCKET MUNICIPAL LANDFILL** **ME LCP** **S106674003**
NW **CHURCH ST.** **ME INST CONTROL** **N/A**
1/8-1/4 **EAST MILLINOCKET, ME** **ME ALLSITES**
0.247 mi. **ME DEL SHWS**
1302 ft. **Site 1 of 2 in cluster O**

Relative: Higher
Actual: 359 ft.

LCP:
File #: 5118
Lat./long.: N 45o 37.942' W 068o 35.334'
Tax Map#/lot#: Map 8 Lot 3
Facility Status: C-94
Level: reduced
Last Inspected: 2009
Completed: No
Closure Mech.: 1994 agree.
Inst. Control: Yes
Acres: 2.299
Problems: No
Pop. Served: 2166
Comments: site in good shape
Resp. Authority/Municipality: East Millinocket

INST CONTROL:
Facility ID: REM00108
Facility Status: REMEDY IN PLACE: CLOSED
Program Type: LANDFILL CLOSURE
Lat/Long: 45.63248 / -68.58896
Institutional Control?: TRUE
Alias: Not reported
Acres: 2
Sub Status: UNDERTAKING POST-CLOSURE OBLIGATIONS
Status Date: 07/31/1994

ALLSITES:
Status: REMEDY IN PLACE: CLOSED
Program Type: LANDFILL CLOSURE
Lat/Long: 45.63248 / -68.58896
Institutional Control?: TRUE
Alias: Not reported
Acres: 2

EAST MILLINOCKET MUNICIPAL LANDFILL (Continued) **S106674003**

Sub Status: UNDERTAKING POST-CLOSURE OBLIGATIONS
Status Date: 07/31/1994

DEL HWS:
Facility ID: REM00108
Facility Status: Operation and Maintenance
Program: UNCONTROLLED SITES
IC: True

O88 **EAST MILLINOCKET LANDFILL** **ME SWF/LF** **S110310207**
NW **RTE 11** **N/A**
1/4-1/2 **EAST MILLINOCKET, ME**
0.252 mi.
1332 ft. **Site 2 of 2 in cluster O**

Relative:
Higher

Actual:
359 ft.

SWF/LF:
DEP Number: Not reported
Licensee Name: Not reported
Contact Phone: Not reported
License Number: Not reported
Facility Address: Not reported
Facility Telephone: Not reported
Facility Contact: Not reported
Facility Type Code: Not reported
Facility Types: Not reported
License Effective Date: Not reported
Other Contact Address: Not reported
Current Status: Not reported
Closed: POST-1976
Site Number: 29624
Description: 2.3 ACRE LANDFILL CLOSED IN 1994 AS REQUIRED BY THE MEDEP LANDFILL CLOSURE AND REMEDIATION PROGRAM. THE LANDFILL CLOSURE USED A REDUCED PROCEDURE. THIS GENERALLY CONSISTED OF REGRADING WASTE AND CAPPING WITH 6 INCHES TOPSOIL OVER 18 INCHES 10E-6 CM/S GLACIAL TILL OVER 6 INCHES OF BURROW. SPECIFIC DETAILS FOR CLOSURE OF THIS LANDFILL ARE AVAILABLE THROUGH THE MEDEP FILE ROOM.
Summary: CLOSED IN 1994 AS REQUIRED BY THE MEDEP LANDFILL CLOSURE AND REMEDIATION PROGRAM. 2.3 ACRE LANDFILL. THE LANDFILL CLOSURE USED A REDUCED PROCEDURE. THIS GENERALLY CONSISTED OF REGRADING WASTE AND CAPPING WITH 6 INCHES TOPSOIL OVER 18 INCHES 10E-6 CM/S GLACIAL TILL OVER 6 INCHES OF BURROW. SPECIFIC DETAILS FOR CLOSURE OF THIS LANDFILL ARE AVAILABLE THROUGH THE MEDEP FILE ROOM.SITE IS ALSO THE LOCATION OF THE OLD CONE BURNER. FACILITY HAS NOT OPERATED IN MANY YEARS.
Latitude: 45.63260274
Longitude: -68.5890338

89
NE
1/4-1/2
0.293 mi.
1546 ft.

MACLEOD RESIDENCE
54 ELM ST.
EAST MILLINOCKET, ME

ME LAST **S105110120**
N/A

Relative:
Higher

Actual:
391 ft.

LAST:

Event:

Spill Number:	B-174-2000
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	False
UST registered flag:	False
AST inside flag:	False
Create Date:	12/07/2001
Create By:	SPILLS
Modify Date:	12/07/2001
Modify By:	12/07/2001
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	03/29/2000
Spill Date Unknown:	False
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	Not reported
Inc Source:	Not reported
Spill Cause Code:	05
Spill Cause:	Accident - Physical Breakage
Material Disposal Info:	Incinerated

Change:

Description:	Not reported
Date Change:	01/23/2002
Changed By:	eitgalla
Description:	Report Created with Report Status = FR
Date Change:	12/07/2001
Changed By:	SPILLS

Contact:

Contact Type:	Subject/Spiller
Potential RP:	False
Name:	CYNTHIA MACLEOD
Title:	Not reported
Company:	Not reported
Address:	54 ELM ST.
City,State:	EAST MILLINOCKET,ME

MACLEOD RESIDENCE (Continued) **S105110120**

Country: Not reported
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: BERNARD WARD

File:
Spill Id: B-174-2000
Date Created: 04/17/2002
Created By: EICSTULT
Date Modified: 01/22/2009
Modified By: IMAGING
File Num Sheets: 0
Notes: Report scanned into the imaging system on 22-JAN-09.
Reconcile Date: 04/17/2002
File Reconciled By: Not reported

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 174
Spill Year: 2000
Create Date: 12/07/2001
Created By: SPILLS
Modify Date: 12/07/2001
Modify By: SPILLS
Log Spill Type: Oil Incident
Log Spill Datetime: 03/29/2000
Spill Time Unk: True
Spill Dt Unknown: False
Log Rep Dt Tm: 03/29/2000
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: BERNARD WARD
Location: Not reported
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Not reported

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 5
Material Units: gals.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

MACLEOD RESIDENCE (Continued) **S105110120**

Product:
- Product Code: #2 Fuel Oil
- Product Other: Not reported
- Product Amt: 5
- Product Amt Unit: gals.
- Product Amt Qualifier: ESTIMATE
- Primary Product: False

90
NW
1/4-1/2
0.307 mi.
1619 ft.

ERICA LAKEMAN **ME LAST** **S115778796**
7 HEMLOCK STREET **N/A**
EAST MILLINOCKET, ME

Relative: Higher

Actual: 384 ft.

LAST:

Event:
- Spill Number: B-229-2011
- Inc Tank Code: A
- Inc Tank: Above Ground Tank(s) Involved
- Removal Flag: False
- UST registered flag: True
- AST inside flag: False
- Create Date: 05/04/2011
- Create By: EIJSELLE
- Modify Date: 01/15/2014
- Modify By: 01/15/2014
- Report Status Code: FR
- Report Status: Final Report
- Spill Datetime: Not reported
- Spill Date Unknown: True
- Spill Time Unknown: True
- Number of wells at risk: 0
- Number of wells impacted: 0
- DTREE completed flag: False
- MCD Value: 19170
- Further response action: False
- Spill Type Code: O
- Spill Type: Oil Incident
- Reporter Type Code: 6
- Reporter Type: Contractor/Consultant
- Detection Method Code: L
- Detection Method: Visual Product
- Inc Location Code: SF
- Inc Location: Residential - Single Family
- Inc Source Code: TA
- Inc Source: Storage Unit - Aboveground Storage Tank
- Spill Cause Code: 01
- Spill Cause: Corrosion - Tank
- Material Disposal Info: Contaminated soil hauled by Clean Harbors to Juniper Ridge Landfill

Change:
- Description: Report Status change from DRV to FR
- Date Change: 01/15/2014
- Changed By: EITHSMIT

- Description: Report Created with Report Status = DR

ERICA LAKEMAN (Continued) **S115778796**

Date Change: 05/04/2011
Changed By: EIJSELLE

Description: Report Status change from DR to DRV
Date Change: 05/04/2011
Changed By: EIJSELLE

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: ERICA LAKEMAN
Title: Not reported
Company: Not reported
Address: 7 HEMLOCK STREET PO BOX 374 MEDWAY ME 04460
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: JOHN M SELLECK

Media Affected:
Medium: Land

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 229
Spill Year: 2011
Create Date: 05/04/2011
Created By: EIJSELLE
Modify Date: 05/04/2011
Modify By: EIJSELLE
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: True
Spill Dt Unknown: True
Log Rep Dt Tm: 04/12/2011
Log Rep Prod Cd: 01
Log Rep Prod: #1 Fuel Oil - Kerosene
Log Emp Name: JOHN M SELLECK
Location: 7 Hemlock Street
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: AST leaked 15 gallons under porch of the dwelling.

Material Recovered:
Material Recovered Type: CS
Material Recovered: Contaminated Soil
Material Amount: 5.33
Material Units: tons
Material Amt Qualifier: ACTUAL

ERICA LAKEMAN (Continued) **S115778796**

Spill Point:
Recovery Method: Vacuum Trucks

Product:
Product Code: #1 Fuel Oil - Kerosene
Product Other: Not reported
Product Amt: 15
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Attachments:
Description: Spill Debris
Attach Type: Electronic Form
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 05/04/2011

Description: Expense Tracking
Attach Type: Electronic Form
File Name: Not reported
File Code: Not reported
File Size: Not reported
File Modify Date: 05/04/2011

91
ENE
1/4-1/2
0.399 mi.
2108 ft.

CRYSTAL BROWN
2 HIGH STREET
EAST MILLINOCKET, ME

ME LAST **S116757730**
N/A

Relative: Higher

Actual: 364 ft.

LAST:

Event:
Spill Number: B-409-2012
Inc Tank Code: A
Inc Tank: Above Ground Tank(s) Involved
Removal Flag: False
UST registered flag: True
AST inside flag: True
Create Date: 08/16/2012
Create By: EIJSELLE
Modify Date: 07/24/2014
Modify By: 07/24/2014
Report Status Code: FR
Report Status: Final Report
Spill Datetime: Not reported
Spill Date Unknown: True
Spill Time Unknown: True
Number of wells at risk: 0
Number of wells impacted: 0
DTREE completed flag: False
MCD Value: 19170
Further response action: False
Spill Type Code: O

CRYSTAL BROWN (Continued) **S116757730**

Spill Type: Oil Incident
Reporter Type Code: 4
Reporter Type: Public Official
Detection Method Code: L
Detection Method: Visual Product
Inc Location Code: SF
Inc Location: Residential - Single Family
Inc Source Code: TA
Inc Source: Storage Unit - Aboveground Storage Tank
Spill Cause Code: 01
Spill Cause: Corrosion - Tank
Material Disposal Info: Oil company disposed of pads

Change:
Description: Report Status change from DRV to FR
Date Change: 07/24/2014
Changed By: EIRKROUT

Description: Report Status change from DR to DRV
Date Change: 08/17/2012
Changed By: EIJSELLE

Description: Report Created with Report Status = DR
Date Change: 08/16/2012
Changed By: EIJSELLE

Contact:
Contact Type: Subject/Spiller
Potential RP: True
Name: CRYSTAL BROWN
Title: Not reported
Company: Not reported
Address: 2 HIGH STREET
City,State: EAST MILLINOCKET,ME
Country: USA
Zipcode: 04430
Phone/Ext: /
Comments: Not reported

Primary Employee:
Primary Employee: True
Name: JOHN M SELLECK

Media Affected:
Medium: Interior Surface

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 409
Spill Year: 2012
Create Date: 08/16/2012
Created By: EIJSELLE
Modify Date: 08/16/2012
Modify By: EIJSELLE
Log Spill Type: Oil Incident

CRYSTAL BROWN (Continued) **S116757730**

Log Spill Datetime:	Not reported
Spill Time Unk:	True
Spill Dt Unknown:	True
Log Rep Dt Tm:	08/09/2012
Log Rep Prod Cd:	02
Log Rep Prod:	#2 Fuel Oil
Log Emp Name:	JOHN M SELLECK
Location:	2 High Street, Millinocket
Log Location Town:	EAST MILLINOCKET
Log Tank Involved:	Above Ground Tank(s) Involved
Notes:	A couple cups of oil leaked from an oil tank in basement due to corrosion holes

Material Recovered:

Material Recovered Type:	VP
Material Recovered:	Unspilled Product
Material Amount:	10
Material Units:	gals.
Material Amt Qualifier:	ESTIMATE

Material Recovered Type:	OM
Material Recovered:	Other Material
Material Amount:	5
Material Units:	lbs.
Material Amt Qualifier:	ESTIMATE

Spill Point:

Recovery Method:	Pumps
Recovery Method:	Remove

Product:

Product Code:	#2 Fuel Oil
Product Other:	Not reported
Product Amt:	.2
Product Amt Unit:	gals.
Product Amt Qualifier:	ESTIMATE
Primary Product:	True

92
NE
1/4-1/2
0.485 mi.
2559 ft.

Relative: Higher

Actual: 367 ft.

WAH COLE **ME LAST** **S122245375**
6 NORTH STREET **N/A**
EAST MILLINOCKET, ME

LAST:

Event:

Spill Number:	B-768-2016
Inc Tank Code:	A
Inc Tank:	Above Ground Tank(s) Involved
Removal Flag:	True
UST registered flag:	True
AST inside flag:	False
Create Date:	12/13/2016
Create By:	EIJALLEY

WAH COLE (Continued) **S122245375**

Modify Date:	04/23/2018
Modify By:	04/23/2018
Report Status Code:	FR
Report Status:	Final Report
Spill Datetime:	Not reported
Spill Date Unknown:	True
Spill Time Unknown:	True
Number of wells at risk:	0
Number of wells impacted:	0
DTREE completed flag:	False
MCD Value:	19170
Further response action:	False
Spill Type Code:	O
Spill Type:	Oil Incident
Reporter Type Code:	6
Reporter Type:	Contractor/Consultant
Detection Method Code:	L
Detection Method:	Visual Product
Inc Location Code:	SF
Inc Location:	Residential - Single Family
Inc Source Code:	TA
Inc Source:	Storage Unit - Aboveground Storage Tank
Spill Cause Code:	01
Spill Cause:	Corrosion - Tank
Material Disposal Info:	Dead River Company’s waste stream

Change:

Description:	Report Status change from DR to DQA
Date Change:	04/03/2018
Changed By:	EIRSHANN
Description:	Report Status change from DQA to FR
Date Change:	04/23/2018
Changed By:	EIRKROUT
Description:	Report Created with Report Status = DR
Date Change:	12/13/2016
Changed By:	EIJALLEY

Contact:

Contact Type:	Subject/Spiller
Potential RP:	True
Name:	WAH COLE
Title:	HOMEOWNER
Company:	Not reported
Address:	6 NORTH STREET
City,State:	EAST MILLINOCKET,ME
Country:	USA
Zipcode:	04430
Phone/Ext:	/
Comments:	Not reported

Primary Employee:

Primary Employee:	True
Name:	ROBERT F SHANNON

WAH COLE (Continued) **S122245375**

Media Affected:
Medium: None

Log:
Spill Void Flag: False
Spill Office: Bangor
Spill Off Sequence: 768
Spill Year: 2016
Create Date: 12/13/2016
Created By: EIJALLEY
Modify Date: 12/13/2016
Modify By: EIJALLEY
Log Spill Type: Oil Incident
Log Spill Datetime: Not reported
Spill Time Unk: False
Spill Dt Unknown: False
Log Rep Dt Tm: 12/08/2016
Log Rep Prod Cd: 02
Log Rep Prod: #2 Fuel Oil
Log Emp Name: ROBERT F SHANNON
Location: Krissy Smith Dead River 723-5151
Log Location Town: EAST MILLINOCKET
Log Tank Involved: Above Ground Tank(s) Involved
Notes: Old spill from weeping tank.

Material Recovered:
Material Recovered Type: OM
Material Recovered: Other Material
Material Amount: 1
Material Units: lbs.
Material Amt Qualifier: ESTIMATE

Spill Point:
Recovery Method: Sorbents

Product:
Product Code: #2 Fuel Oil
Product Other: Not reported
Product Amt: .25
Product Amt Unit: gals.
Product Amt Qualifier: ESTIMATE
Primary Product: True

Count: 9 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EAST MILLINOCKET	S118561831	EAST MILLINOCKET SUB STATION	ROUTE 157		ME SPILLS
EAST MILLINOCKET	S121275172	EMERY LEE & SONS, INC.	ROUTE 157		ME LUST
EAST MILLINOCKET	S109590416		FROM SOUTH B,TAKE I-95 NORTH T		ME SWF/LF
EAST MILLINOCKET	1008040001	EAST MILLINOCKET WATER WORKS	MAIN ST	04430	FINDS, ECHO
EAST MILLINOCKET	S121275066	HACKMAN CAPITAL, LLC	MAIN STREET		ME LAST
EAST MILLINOCKET	S112198279	KATAHDIN PAPER	MAIN STREET		ME LAST
MEDWAY	S111860423	DEAD RIVER BULK PLANT	ROUTE 157		ME LAST
MEDWAY	S109802199	IRVING BIG STOP	MAIN STREET		ME LUST
MEDWAY	S104999656	COLE, HOA	POB 27, ROUTE 157		ME LAST

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/04/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 28

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Remediation Sites List

Uncontrolled Sites locations included in the Remediation Sites List.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/16/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 54

Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/04/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

LCP: Municipal Landfill Closure Database

The Municipal Landfill Closure and Remediation Program was established in 1988 to assist nearly 400 municipalities with the closure of their unlicensed municipal solid waste landfills. Project managers in this program have conducted site investigations and provided technical engineering assistance to aid municipalities in this process. Funding to accomplish this goal was provided by the state, utilizing several bonds that supported a 75% state cost sharing reimbursement process.

Date of Government Version: 11/14/2011
Date Data Arrived at EDR: 11/15/2011
Date Made Active in Reports: 11/30/2011
Number of Days to Update: 15

Source: Department of Environmental Protection
Telephone: 207-287-8552
Last EDR Contact: 02/28/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Hazardous Material and Oil Spill System Database (H.O.S.S.)

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 01/26/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

LAST: HOSS Database
A listing of leaking aboveground storage tanks.

Date of Government Version: 01/26/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 40
Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

UST: Underground Storage Tank Database
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 02/04/2019
Date Data Arrived at EDR: 02/13/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 27
Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

AST 2: Registered Petroeum Tanks Database
Aboveground storage tank site locations registered with the Bureau of Remediation and Waste Management.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 01/02/2019
Date Made Active in Reports: 01/14/2019
Number of Days to Update: 12
Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 04/03/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

AST: Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 09/14/2018
Date Made Active in Reports: 10/31/2018
Number of Days to Update: 47
Source: Maine Emergency Management Agency
Telephone: 207-626-4503
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Remediation Sites List

Sites with Institutional Controls in place included in the Remediation Sites List. Institutional Controls are legally enforceable site use restrictions recorded on the property deed and therefore operate in perpetuity regardless of change in site ownership.

Date of Government Version: 04/16/2018
Date Data Arrived at EDR: 04/18/2018
Date Made Active in Reports: 05/24/2018
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Remediation Sites List

Voluntary Response Action Program sites included in the Remediation Sites List. VRAP promotes the investigation, remediation and redevelopment of contaminated properties by offering liability assurances/protections from state enforcement actions for applicants to the program.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/16/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 55

Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Remediation Sites List

Brownfields site locations included in the Remediation Sites List. Brownfields are "Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant".

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/16/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 54

Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/19/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWRCY: Recycling Facilities

A listing of municial colletcion sites for electronic waste and mercury-added products.

Date of Government Version: 12/13/2011
Date Data Arrived at EDR: 12/15/2011
Date Made Active in Reports: 01/23/2012
Number of Days to Update: 39

Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39
Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

ALLSITES: Remediation Sites List
The Sites List Database is the public record of information regarding properties that have been, are now, or are planned to be addressed by the Division of Remediation of the Bureau of Remediation and Waste Management. This database is not intended to be a comprehensive, all-inclusive source of information regarding the properties listed therein.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/16/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 54
Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

DEL HWS: Sites Removed from the Uncontrolled Sites List
Sites are removed from the List once it is determined that they are not "worthy of listing". This term is used as there are a number of reasons to remove a site from the List, including: no file exists, the site was reported as an oil spill, there is no evidence of a hazardous substance release or based on an investigation the site is referred to another program unrelated to hazardous substance or hazardous waste. Sites are removed on a case by case basis. The USP intends this to be an on-going process, as time and resources allow.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/16/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 55
Source: Department of Environmental Protection
Telephone: 207-287-7688
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Semi-Annually

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

PFOS and PFOA stand for perfluorooctane sulfonate and perfluorooctanoic acid, respectively. Both are fluorinated organic chemicals, part of a larger family of compounds referred to as perfluoroalkyl substances (PFASs).

Date of Government Version: 11/30/2018
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 04/15/2019
Number of Days to Update: 52

Source: Department of Environmental Protection
Telephone: 207-287-4305
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

Local Land Records

LIENS: Environmental Liens Information Listing

An Environmental Lien is a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC ? 9607(1) and similar state or local laws. In other words: a lien placed upon a property's title due to an environmental condition

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 31

Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 41

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

SPILLS: Hazardous Material and Oil Spill System Database

The database contains surface, groundwater and hazardous material spills.

Date of Government Version: 01/26/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 03/11/2019
Number of Days to Update: 40

Source: Department of Environmental Protection
Telephone: 207-287-2651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 11/05/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 01/25/2013
Number of Days to Update: 22

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 06/07/2001
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/06/2013
Number of Days to Update: 62

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (888) 372-7341
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 04/03/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 02/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/14/2018
Date Data Arrived at EDR: 10/11/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 57

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/29/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/11/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 38

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/22/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/21/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (617) 918-1111
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/03/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

AIRS: Emissions Inventory Data

Point Source Criteria Pollutant Emissions Inventory data. Criteria air pollutant emissions, expressed in tons, by facility and pollutant.

Date of Government Version: 12/20/2018
Date Data Arrived at EDR: 12/26/2018
Date Made Active in Reports: 01/25/2019
Number of Days to Update: 30

Source: Department of Environmental Protection
Telephone: 207-287-7036
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

DRYCLEANERS: Drycleaner Facilities

A listing of drycleaning facilities that use perchloroethylene.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 56

Source: Department of Environmental Protection
Telephone: 207-287-7030
Last EDR Contact: 01/14/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

MANIFEST: Hazardous Waste Manifest Information Listing

Hazaroudous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 101

Source: Department of Environmental Protection
Telephone: 207-287-7882
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

NPDES: Wastewater Facilities Listing

A listing of wastewater facility locations.

Date of Government Version: 11/25/2018
Date Data Arrived at EDR: 12/21/2018
Date Made Active in Reports: 01/14/2019
Number of Days to Update: 24

Source: Department of Environmental Protection
Telephone: 207-287-3901
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 09/14/2018
Date Made Active in Reports: 10/12/2018
Number of Days to Update: 28

Source: Maine Emergency Management Agency
Telephone: 207-624-4441
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

UIC: Underground Injection Control
An injection well is any bored, drilled or driven shaft, or dug hole whose depth is greater than its largest surface dimension; an improved sinkhole; or a subsurface distribution system used to discharge fluids underground. These wells range from deep, highly technical, and more frequently monitored wells to shallow on-site drainage systems, such as septic systems, cesspools, and storm water drainage wells.

Date of Government Version: 01/03/2019
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 01/14/2019
Number of Days to Update: 11

Source: Department of Environmental Protection
Telephone: 207-791-8110
Last EDR Contact: 01/03/2019
Next Scheduled EDR Contact: 06/02/2104
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Maine.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Maine.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/17/2014
Number of Days to Update: 200

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Maine.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 02/14/2019
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 02/19/2019
Number of Days to Update: 33

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Child Care Listing
Source: Department of Human Services
Telephone: 207-287-5060

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MEGIS
Telephone: 207-287-6144

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

GNP EAST MILLINOCKET
50 MAIN STREET
EAST MILLINOCKET, ME 04430

TARGET PROPERTY COORDINATES

Latitude (North):	45.625119 - 45° 37' 30.43''
Longitude (West):	68.574223 - 68° 34' 27.20''
Universal Tranverse Mercator:	Zone 19
UTM X (Meters):	533191.8
UTM Y (Meters):	5052267.5
Elevation:	348 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6700796 EAST MILLINOCKET, ME
Version Date:	2014
South Map:	6700814 MEDUNKEUNK LAKE, ME
Version Date:	2014

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

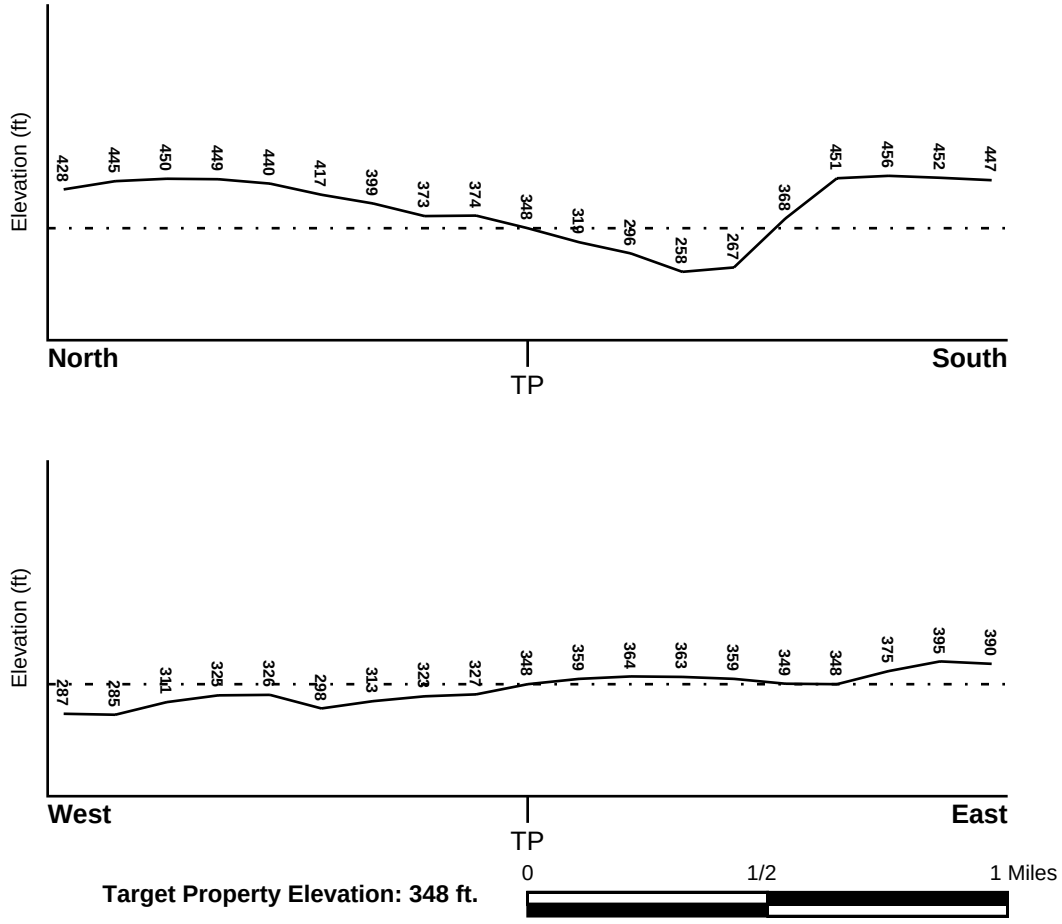
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General SSW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
2301630004B	FEMA Q3 Flood data

Additional Panels in search area:	FEMA Source Type
NO PANEL ID	FEMA Q3 Flood data
2301750005B	FEMA Q3 Flood data
2301630005B	FEMA Q3 Flood data
2301750015B	FEMA Q3 Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
EAST MILLINOCKET	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Silurian
Code:	Se *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Eugeosynclinal Deposit

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	BRAYTON
Soil Surface Texture:	extremely stony - fine sandy loam
Hydrologic Group:	Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
Soil Drainage Class:	Not reported

Hydric Status: Soil meets the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	HIGH
Depth to Bedrock Min:	> 60 inches
Depth to Bedrock Max:	> 60 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	4 inches	extremely stony - fine sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 6.00 Min: 3.60
2	4 inches	23 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 2.00 Min: 0.60	Max: 6.50 Min: 5.10
3	23 inches	65 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 0.60 Min: 0.06	Max: 7.30 Min: 5.60

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: extremely stony - muck
very stony - mucky-peat
very stony - fine sandy loam
very stony - silt loam
extremely bouldery - sandy loam
very stony - sandy loam
sandy loam
gravelly - sandy loam

Surficial Soil Types: extremely stony - muck
very stony - mucky-peat
very stony - fine sandy loam
very stony - silt loam
extremely bouldery - sandy loam
very stony - sandy loam
sandy loam
gravelly - sandy loam

Shallow Soil Types: fine sandy loam
gravelly - sandy loam

Deeper Soil Types: silt loam

silty clay loam
gravelly - fine sandy loam
unweathered bedrock
very gravelly - coarse sand
clay
silty clay
extremely gravelly - coarse sand

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

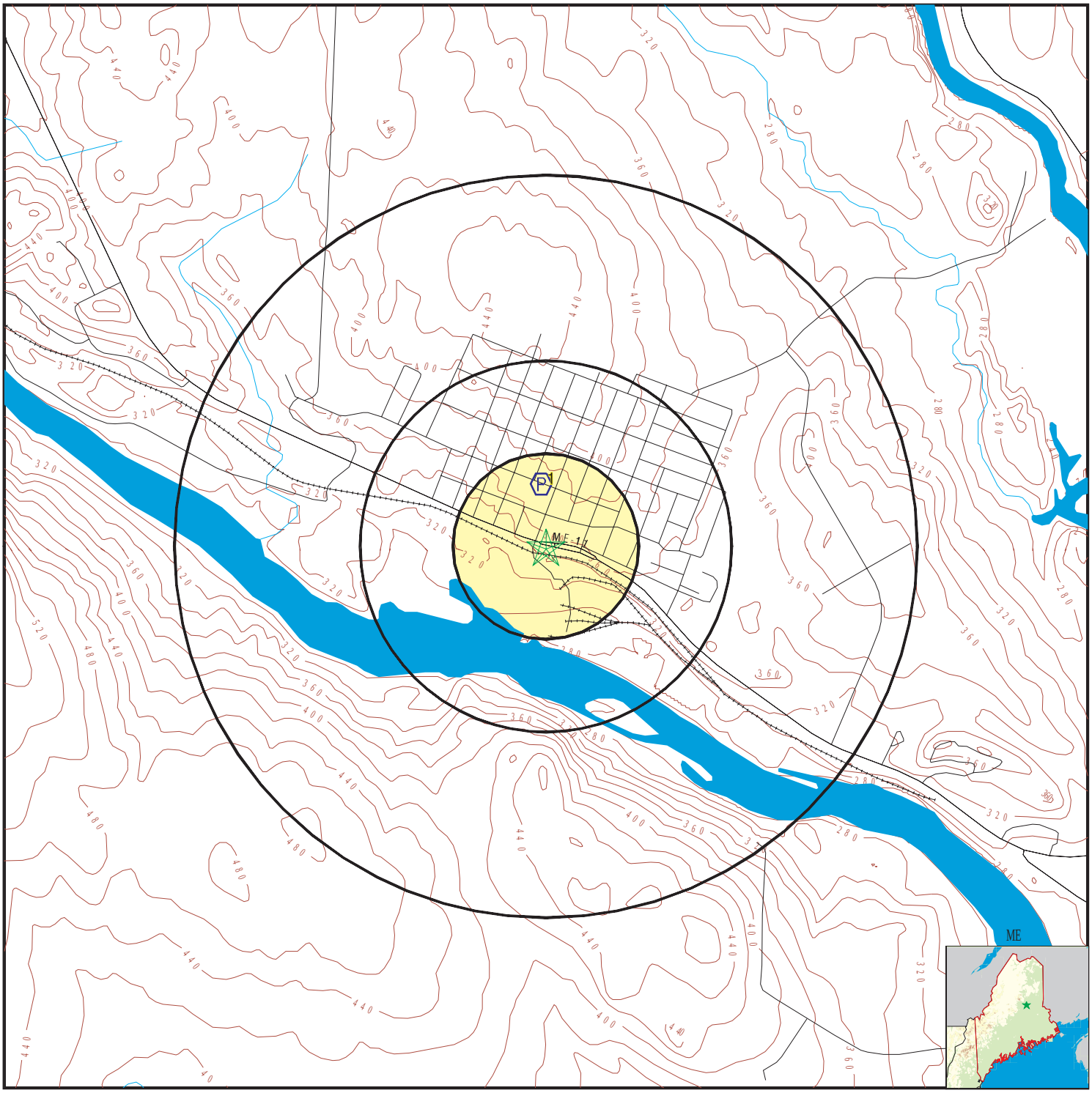
MAP ID	WELL ID	LOCATION FROM TP
1	ME0003449	1/8 - 1/4 Mile North

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

PHYSICAL SETTING SOURCE MAP - 5634384.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location

SITE NAME:	GNP East Millinocket	CLIENT:	Ransom Env. Consultants, Inc.
ADDRESS:	50 Main Street East Millinocket ME 04430	CONTACT:	Sara Roy
LAT/LONG:	45.625119 / 68.574223	INQUIRY #:	5634384.2s
		DATE:	April 29, 2019 8:30 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
1 **North** **1/8 - 1/4 Mile** **Higher**	**FRDS PWS**	**ME0003449**

Epa region:	01	State:	ME
Pwsid:	ME0003449	Pwsname:	NUGENT'S CHAMBERLAIN LAKE CMPS
Cityserved:	Not Reported	Stateserved:	ME
Zipserved:	Not Reported	Fipscounty:	23021
Status:	Closed	Retpopsrvd:	25
Pwssvcconn:	1	Psource longname:	Groundwater
Pwstype:	TNCWS	Owner:	unknown
Contact:	NUGENT'S CHAMBERLAIN LAKE CMPS		
Contactorgname:	Not Reported	Contactphone:	207-0
Contactaddress1:	Not Reported	Contactaddress2:	HCR 76, BOX 632
Contactcity:	GREENVILLE	Contactstate:	ME
Contactzip:	04441	Pwsactivitycode:	I
PWS ID:	ME0003449	PWS type:	System Owner/Responsible Party
PWS name:	BEATRICE P NUGENT	PWS address:	Not Reported
PWS city:	EAST MILLINOCKET	PWS state:	ME
PWS zip:	04430	PWS ID:	ME0003449
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00000025
System name:	NUGENT'S CHAMBERLAIN LAKE CMPS		
System address:	Not Reported	System address:	HCR 76, BOX 632
System city:	GREENVILLE	System state:	ME
System zip:	04441		
County FIPS:	021	City served:	T07 R12 WELS
Population served:	Under 101 Persons	Treatment:	Untreated
Latitude:	453739	Longitude:	0683430

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for PENOBSCOT County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for PENOBSCOT COUNTY, ME

Number of sites tested: 67

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.200 pCi/L	86%	14%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	2.436 pCi/L	81%	19%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: MEGIS
Telephone: 207-287-6144

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Maine Geological Survey Water Well Database
Source: Maine Geological Survey
Telephone: 207-287-3200
Contains over 50,000 located wells is available for download. This file contains information on all wells in the database which could be geographically located. Data points have been located by GPS, by street address locations, and by using tax maps in combination with air photos so location accuracy varies. The database includes coordinates and descriptive information such as well yield, depth, overburden thickness, well use, and well type.

Public Water Supply Wells Database
Source: Department of Human Services, Drinking Water Program
Telephone: 207-287-6196
There are 3 types of public water systems in Maine: Transient Systems; Community Systems and Non-transient Non-community Systems.

OTHER STATE DATABASE INFORMATION

RADON

Maine Radon Test Results
Source: Department of Human Services
Telephone: 207-287-5698
The state of Maine Radiation Control Program's - Radon/Indor Air Quality Section's position on radon map, is that they should be used neither to predict the presence of high nor low values in any given geographic or geologic area. The only conclusion that should be drawn from this data is that radon in omnipresent in the soil gasses in the state of Maine, and therefore all residences and buildings that come in contact with the ground should be tested for radon.

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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GNP East Millinocket
50 Main Street
East Millinocket, ME 04430

Inquiry Number: 5634384.5
April 26, 2019

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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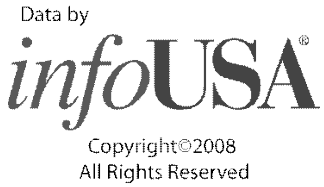

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1987	☑	☐	EDR Digital Archive
1982	☑	☐	EDR Digital Archive
1977	☑	☐	EDR Digital Archive

FINDINGS

TARGET PROPERTY STREET

50 Main Street
East Millinocket, ME 04430

Year	*CD Image*	*Source*
MAIN ST		
2014	pg A1	EDR Digital Archive
2010	pg A2	EDR Digital Archive
2005	pg A3	EDR Digital Archive
2000	pg A4	EDR Digital Archive
1995	pg A5	EDR Digital Archive
1992	pg A6	EDR Digital Archive
1987	pg A7	EDR Digital Archive
1982	pg A8	EDR Digital Archive
1977	pg A9	EDR Digital Archive

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 2014

27	LOVE OF MUSIC STUDIO
	OCCUPANT UNKNOWN,
29	SNOW G BRADLEY
	TANOUS & SNOW ATTORNEY AT LAW
	TANOUS, GREGORY D
33	CAMPBELL, COLLEEN G
35	AUSTIN, CONRAD R
37	OCCUPANT UNKNOWN,
39	TANOUS, GREG
41	CRAM, DANIEL W
43	DOXSEY, GARY S
	MAINECARPENTRY COM
47	LUFKIN, CLYDE M
50	GREAT NORTHERN PAPER CO LLC
	GREAT NORTHERN PAPER INC
	KATAHDIN PAPER ENERGY LLC
53	EAST MILLINOCKET PUBLIC LIB
	EAST MILLINOCKET TOWN OF
59	DAVIS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	PAM & IVYS
64	DEAD RIVER COMPANY
68	LINSCOTT CLINT
81	CASWELL, SAMUAL J
101	COTE, JOEL M
	FEDERICO, RYAN
103	MOORE, MICHAEL

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 2010

21	JOY L AUSTIN
27	POUND, DONNA M
29	RAY PASNEN LLC
	TANOUS & SNOW ATTORNEY AT LAW
33	CAMPBELL, COLLEEN G
35	AUSTIN, CONRAD R
	JOEY AUSTIN CDL
37	MCLAUGHLIN RACHEL A
39	TANOUS, GREG
41	CRAM, DANIEL W
43	DOXSEY, GARY S
	MAINECARPENTRY COM
45	OCCUPANT UNKNOWN,
47	LUFKIN, DREW D
50	KATAHDIN PAPER COMPANY LLC
	SULLIVAN MERRITT
53	EAST MILLINOCKET PUBLIC LIB
	EAST MILLINOCKET TOWN OF
57	GROVES, FEENEY
59	ARCH WIRELESS OPERATING INC
	DAVIS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	BOUCHARD, JONAH
	DIGIOVANNI, KAYLA
	HUTCHINS, JAIME
	PAM & IVYS
63	HAMLET PUB
64	DEAD RIVER COMPANY
65	VAZNIS HEATHER
68	LINSCOTT CLINT
81	ROSS, TRACY
101	FEDERICO, RYAN
103	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 2005

17	CARPET FASHIONS
	LEROY CHARETTE
27	POUND, DONNA M
29	TANOUS & SNOW ATT AT LAW
33	CAMPBELL, COLLEEN G
35	OCCUPANT UNKNOWN,
37	MOUNTAIN WINDS BED & BREAKFAST
39	MINER, JOHN E
41	CRAM, DANIEL W
43	DOXSEY, GARY S
45	GRANT, MICHAEL J
47	LUFKIN, CLYDE
50	KATAHDIN PAPER CO LLC
53	EAST MILLINOCKET TOWN OF
57	GROVES, FEENEY
59	DAVIS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	DINER THE
64	DEAD RIVER COMPANY
68	LINSCOTT CLINT
101	SMITH, REBECCA
103	LYONS, C

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 2000

27	OCCUPANT UNKNOWN,
29	TANOUS & SNOW ATT AT LAW
	TANOUS, GREGORY D
33	CAMPBELL, COLLEEN
35	AUSTIN, JOEY
37	MICHAUD, PAT
	NICHOLSON, J R
39	MINER, JOHN E
41	AUSTIN, MARLENE
43	OCCUPANT UNKNOWN,
44	COUSINS, KARL H
45	GRANT, MICHAEL
49	KATHRYN KLEIN
	VIOLETTE RICHARD D JR
50	GREAT NORTHERN PAPER INC
53	EAST MILLINOCKET TOWN OF
58	B A RAILROAD
59	DAVIS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	BEECH NUT ENTR INC
63	NICHOLSON INSURANCE AGENCY
	NICHOLSON, JEAN T
64	DEAD RIVER CO 7051
67	MAIN STREET FLOWER SHOP
68	LINSCOTT CLINT
103	DENNEY, E

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 1995

29	TANOUS & SNOW ATT AT LAW
47	MOUNT KATAHDIN REALTY
49	VIOLETTE RICHARD D JR
50	GREAT NORTHERN PAPER INC
53	EAST MILLINOCKET TOWN OF
58	KATAHDIN REGIONAL DEVELOPMENT
59	DAVIS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	BEECH NUT ENTR INC
63	NICHOLSON INSURANCE AGENCY
65	MORSES ACCOUNTING SERVICE
68	LINSCOTT AUTO BODY

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 1992

17	BOUCHARD-WYSE FUNERAL HOME
27	PARENT, CHRIS
29	TANOUS & SNOW ATT AT LAW
	TANOUS, GREGORY D
33	CAMPBELL, EUGENE
37	MICHAUD, PAT & GENEVA
	NICHOLSON, J ROBT
41	AUSTIN, MARLENE
	SMITH, GENE H
47	ROGERS, RICHARD
50	GREAT NORTHERN NEKOOSA CORP
53	EAST MILLINOCKET PUBLIC LIB
	TOWN OF E MILLINOCKET
57	GROVES, FEENEY
58	KATAHDIN REGIONAL DEVELOPMENT
59	DAVIS PHARMACY
60	EASTMILL FEDERAL CREDIT UNION
61	BEECH NUT ENTR INC
	BOUCHARD, DORIS M
63	NICHOLSON INSURANCE AGENCY
	NICHOLSON, WM J & JEAN T
65	STYLES UNLIMITED
68	LINSCOTT AUTO BODY
69	NENAS CRAFT HAVEN
81	OSBORNE, SONYA
101	KIMBALL, M
103	MOORE, MICHELLE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 1987

29	TANOUS & BEAUPAIN
53	EAST MILLINOCKET PUB LIBRARY
	TOWN OF E MILLINOCKET
59	BARTLETTS PHARMACY INC
60	EASTMILL FEDERAL CREDIT UNION
61	CURTS PLACE
63	NICHOLSON INS AGCY INC
67	EAST MILLINOCKET TRUSTWORTH

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 1982

59 BARTLETTS PHARMACY INC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

MAIN ST 1977

59 BARTLETTS PHARMACY INC

APPENDIX D

Historical Topographic Maps &
Sanborn® Fire Insurance Maps

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430

Inquiry Number: 5634384.4
April 26, 2019

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/26/19

Site Name:

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.4

Client Name:

Ransom Env. Consultants, Inc.
12 Kent Way
Byfield, MA 01922
Contact: Sara Roy

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Ransom Env. Consultants, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# 171.06116.004

Project: GNP East Millinocket

Coordinates:

Latitude:	45.625119 45° 37' 30" North
Longitude:	-68.574223 -68° 34' 27" West
UTM Zone:	Zone 19 North
UTM X Meters:	533190.83
UTM Y Meters:	5052485.16
Elevation:	347.08' above sea level

Maps Provided:

2014
1988
1951

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2014 Source Sheets

East Millinocket
2014
7.5-minute, 24000

Medunkeunk Lake
2014
7.5-minute, 24000

1988 Source Sheets

East Millinocket
1988
7.5-minute, 24000
Aerial Photo Revised 1984

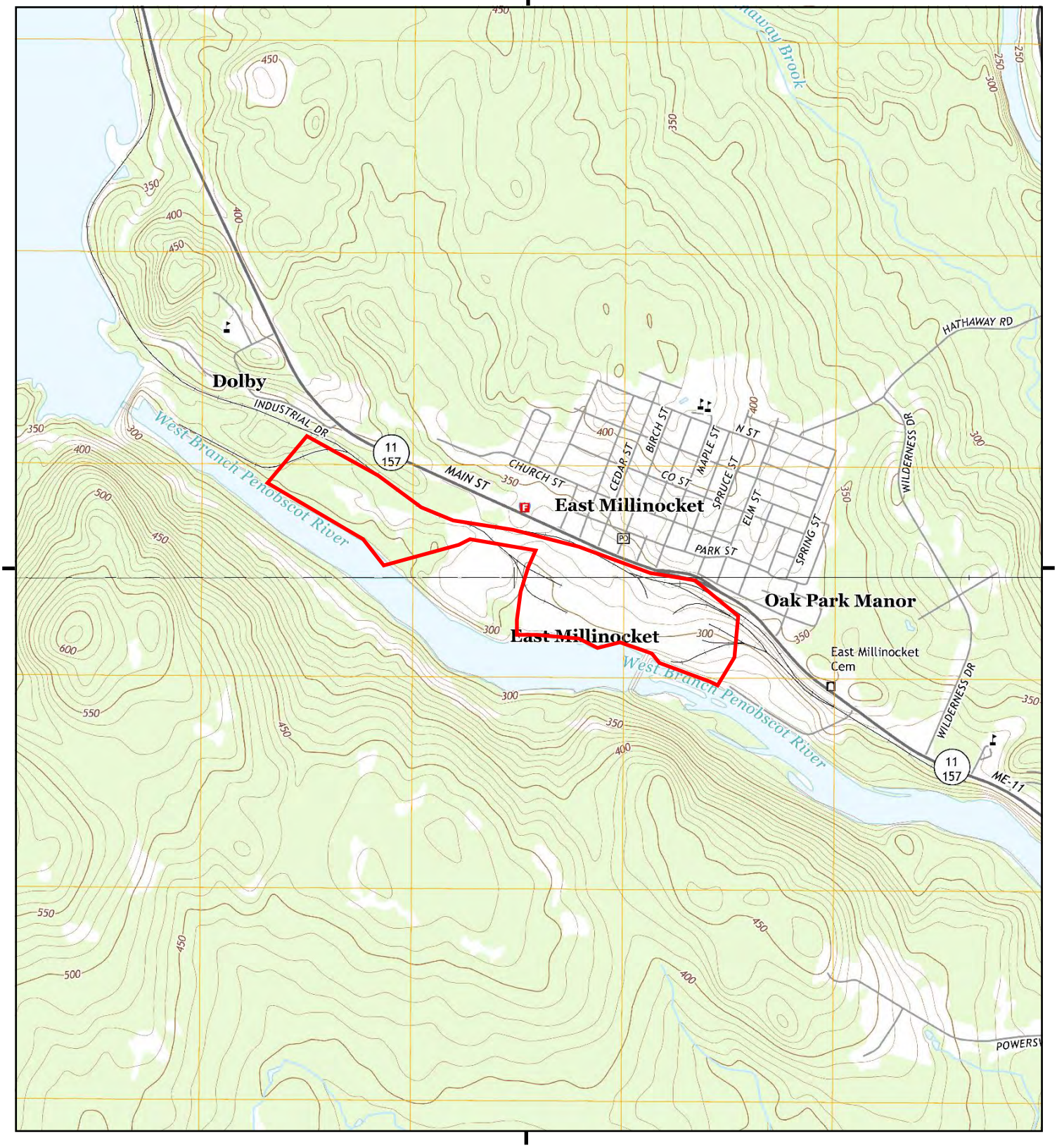
Medunkeunk Lake
1988
7.5-minute, 24000
Aerial Photo Revised 1984

1951 Source Sheets

Millinocket
1951
15-minute, 62500
Aerial Photo Revised 1946

Historical Topo Map

2014



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

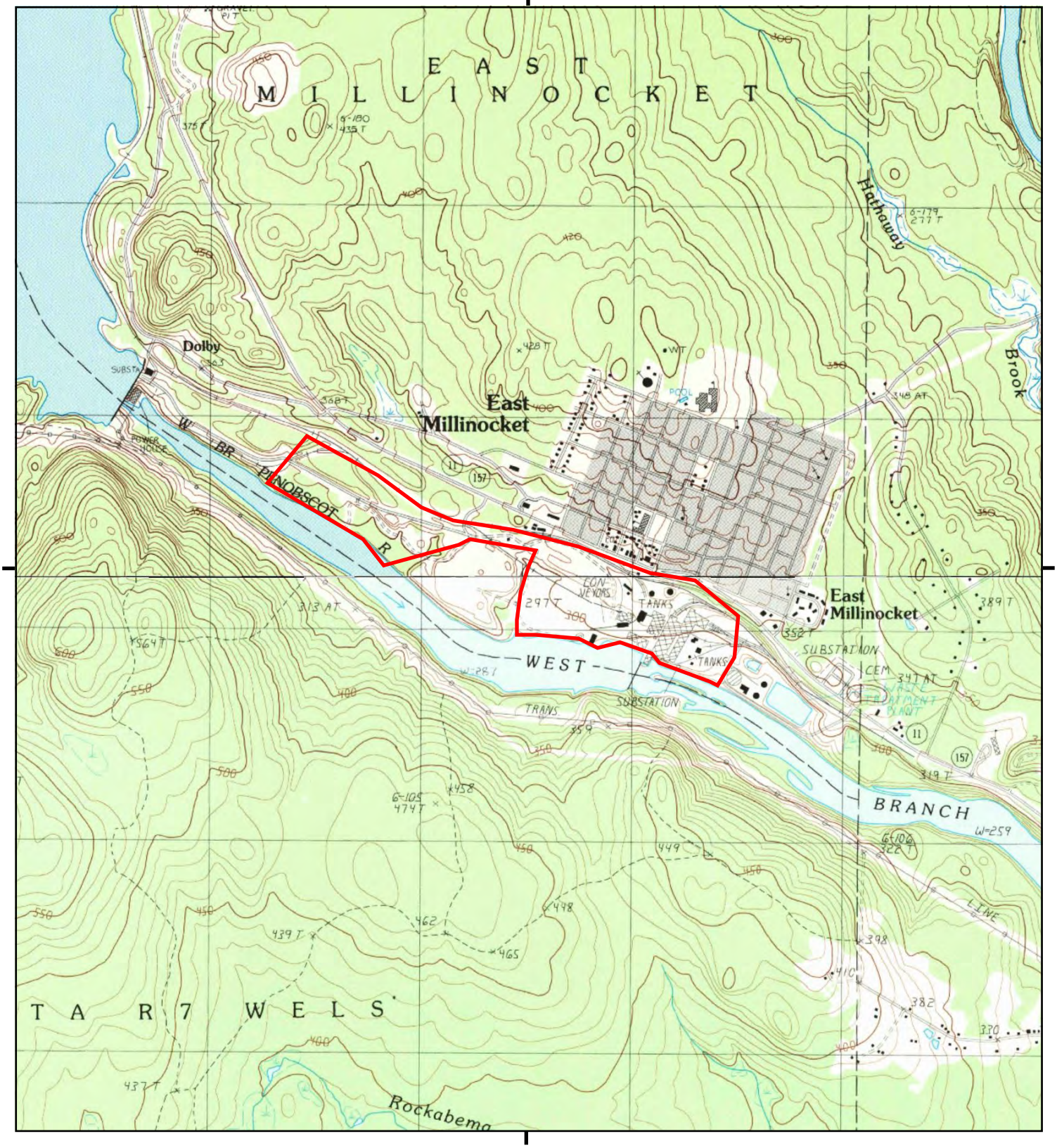
TP, East Millinocket, 2014, 7.5-minute
S, Medunkeunk Lake, 2014, 7.5-minute

SITE NAME: GNP East Millinocket
ADDRESS: 50 Main Street
East Millinocket, ME 04430
CLIENT: Ransom Env. Consultants, Inc.

N

Historical Topo Map

1988



This report includes information from the following map sheet(s).

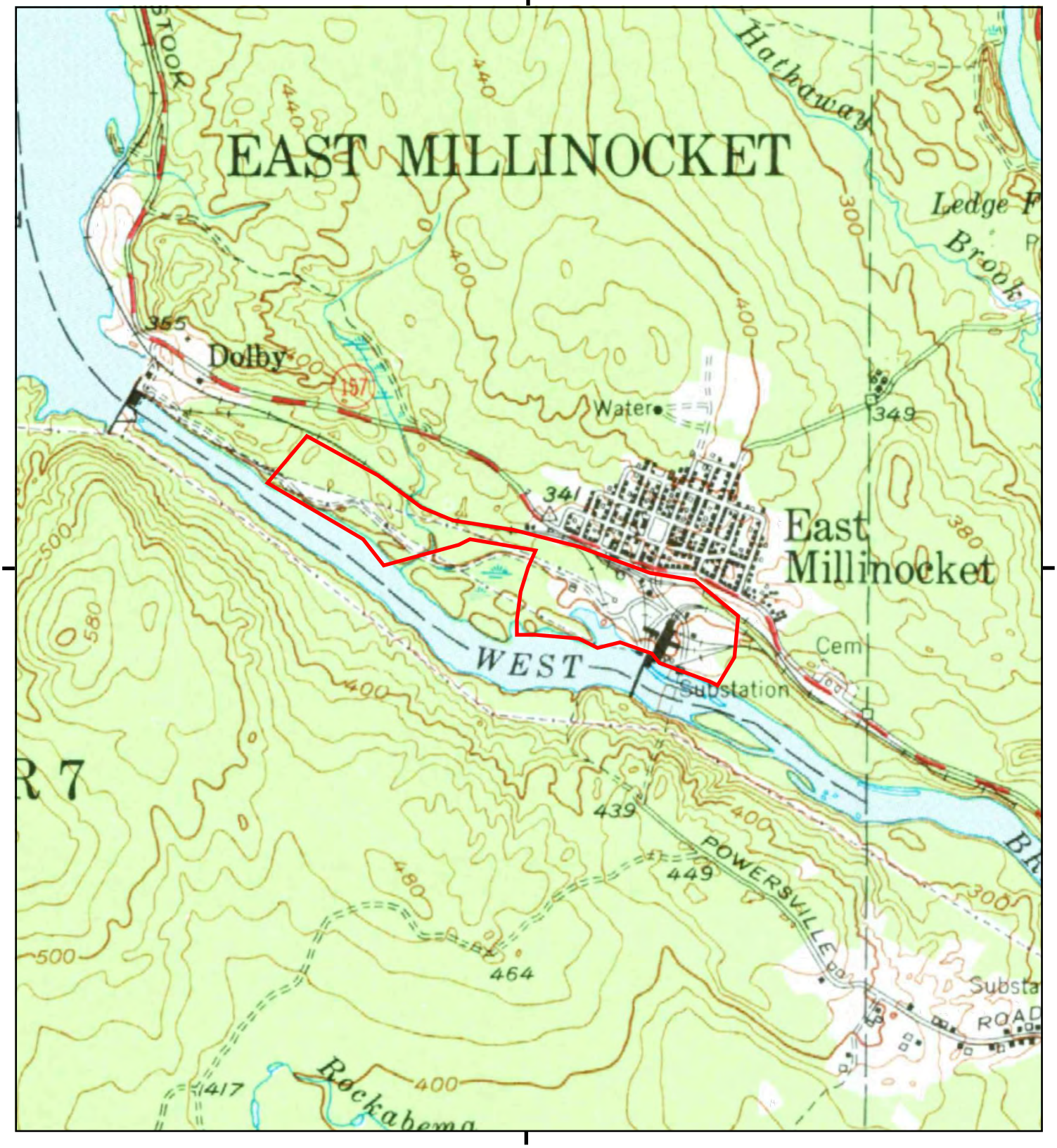
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, East Millinocket, 1988, 7.5-minute
S, Medunkeunk Lake, 1988, 7.5-minute

SITE NAME: GNP East Millinocket
ADDRESS: 50 Main Street
East Millinocket, ME 04430
CLIENT: Ransom Env. Consultants, Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Millinocket, 1951, 15-minute

SITE NAME: GNP East Millinocket
ADDRESS: 50 Main Street
East Millinocket, ME 04430
CLIENT: Ransom Env. Consultants, Inc.

N

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.3

May 13, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/13/19

Site Name:

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.3

Client Name:

Ransom Env. Consultants, Inc.
12 Kent Way
Byfield, MA 01922
Contact: Sara Roy

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Ransom Env. Consultants, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 11A5-4708-9D68

PO # 171.06116.004

Project GNP East Millinocket

Maps Provided:

1954
1943
1927

Sanborn® Library search results

Certification #: 11A5-4708-9D68

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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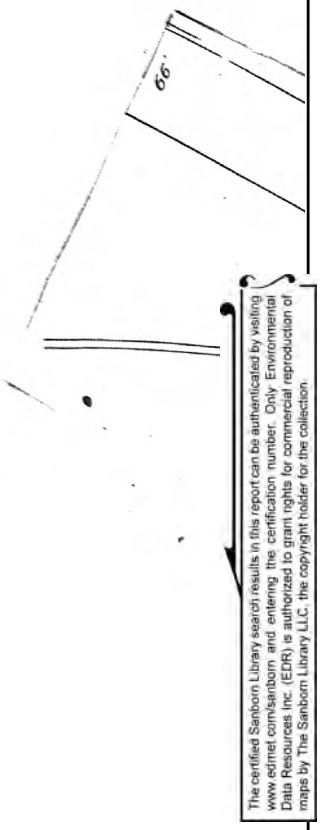
1954 Source Sheets

Volume 1, Sheet 2
1954

1927 Source Sheets

Volume 1, Sheet 2
1927



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Site Name:	GNP East Millinocket
Address:	50 Main Street
City, ST, ZIP:	East Millinocket, ME 04430
Client:	Ransom Env. Consultants, Inc.
EDR Inquiry:	5634384.3
Order Date:	05/13/2019
Certification #	11A5-4708-9D68
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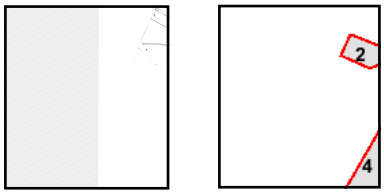

Volume 1, Sheet 2

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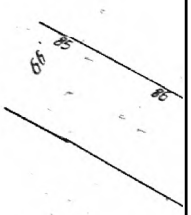

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Client: Ransom Env. Consultants, Inc.
EDR Inquiry: 5634384.3
Order Date: 05/13/2019
Certification #: 11A5-4708-9D68
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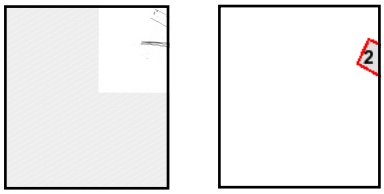

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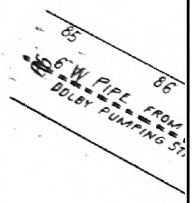

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Client: Ransom Env. Consultants, Inc.
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Order Date: 05/13/2019
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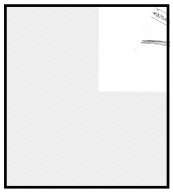

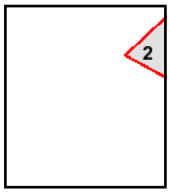

Volume 1, Sheet 2

0 Feet 150 300 600

N

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.3

May 13, 2019

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05/13/19

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50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.3

Client Name:

Ransom Env. Consultants, Inc.
12 Kent Way
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Contact: Sara Roy

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Project GNP East Millinocket

Maps Provided:

1954
1943
1927
1916

Sanborn® Library search results

Certification #: 11A5-4708-9D68

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- ☑ University Publications of America
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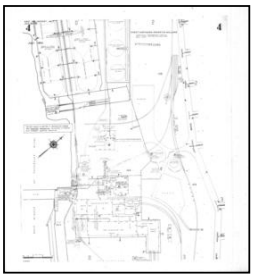
1954 Source Sheets

Volume 1, Sheet 2
1954



Volume 1, Sheet 4
1954

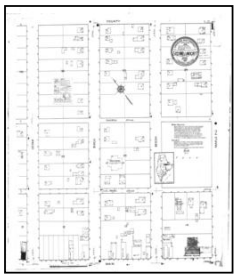
1943 Source Sheets

Volume 1, Sheet 2
1943

1927 Source Sheets

Volume 1, Sheet 2
1927

1916 Source Sheets



Volume 1, Sheet 1
1916

Certified Sanborn® Map

1954

Site Name: GNP East Millinocket
Address: 50 Main Street
City, ST, ZIP: East Millinocket, ME 04430
Client: Ransom Env. Consultants, Inc.
EDR Inquiry: 5634384.3
Order Date: 05/13/2019
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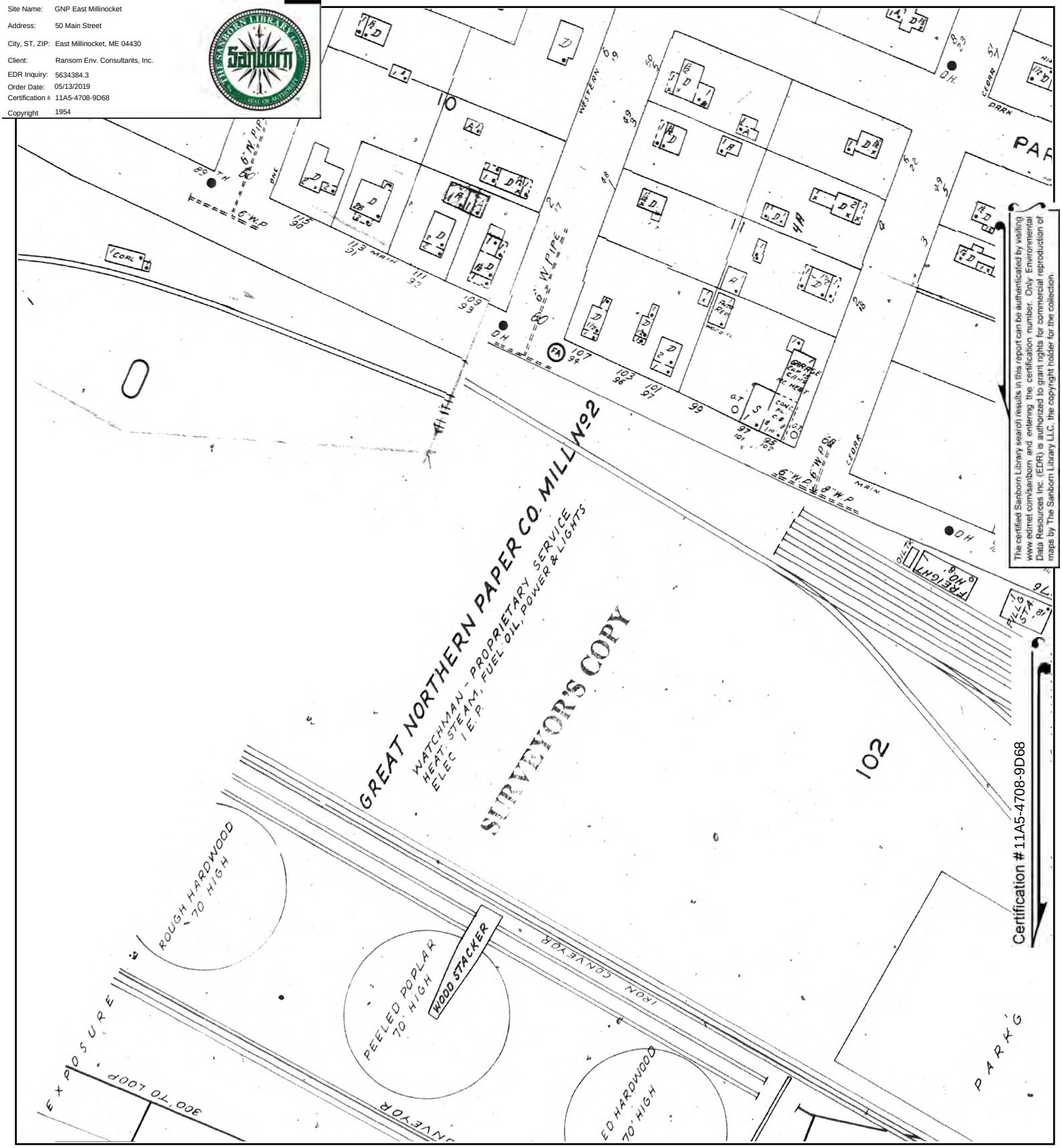

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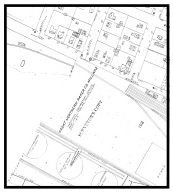

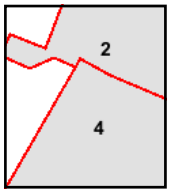

Volume 1, Sheet 4
Volume 1, Sheet 2

0 Feet 150 300 600

N

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1943

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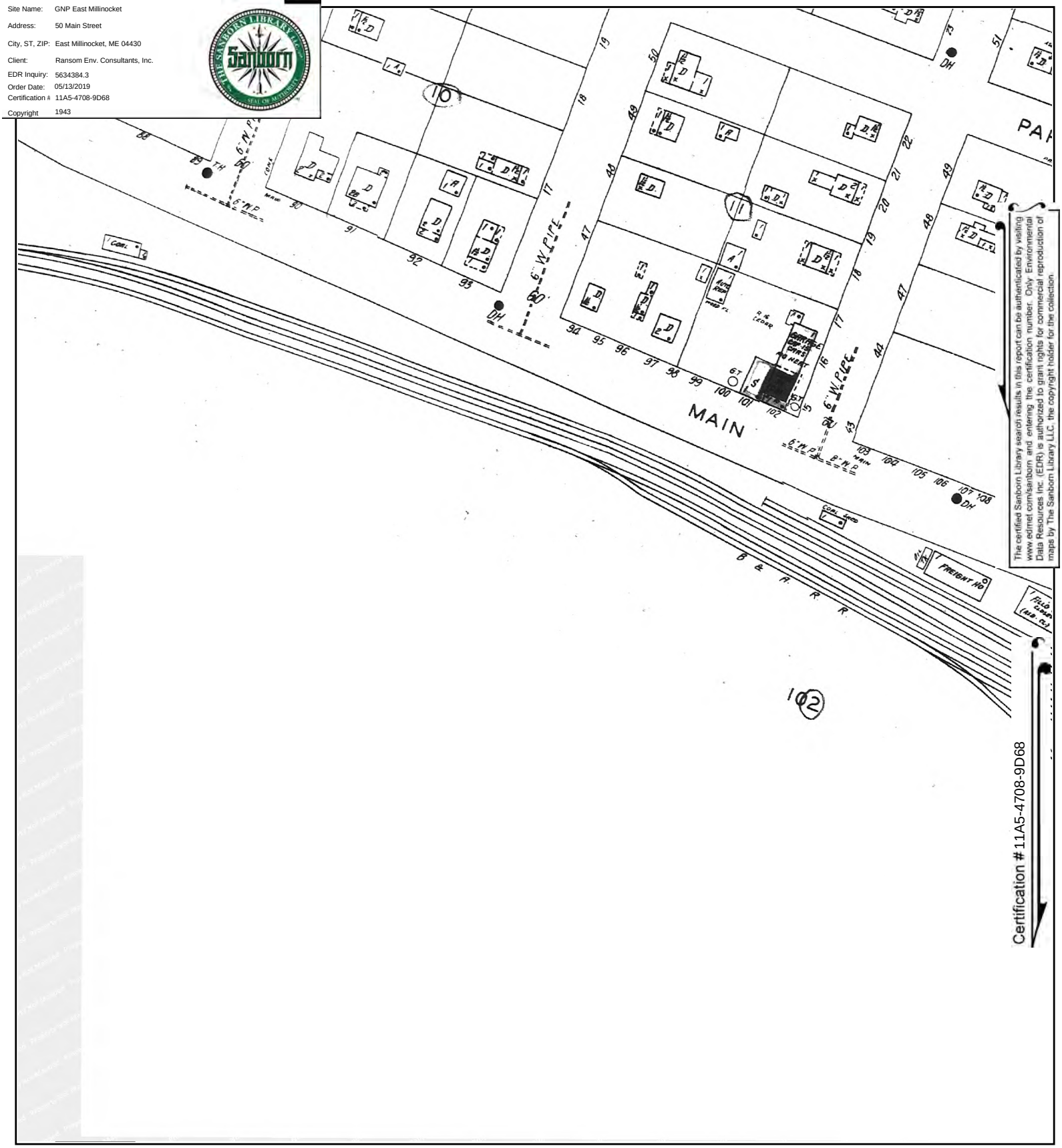

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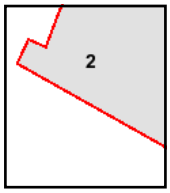

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1927

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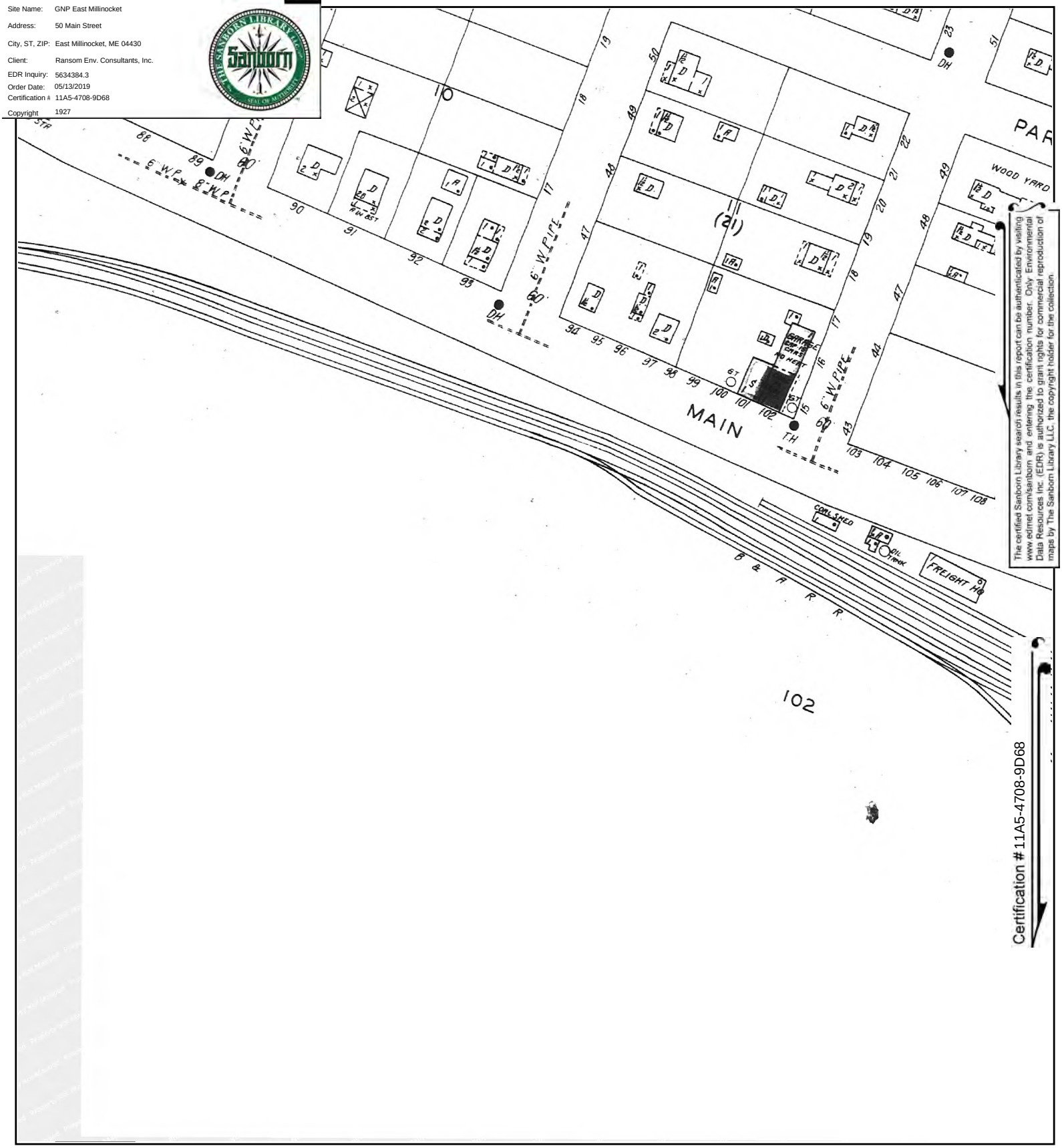
Copyright: 1927



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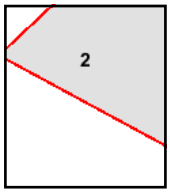

Volume 1, Sheet 2

N

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1916

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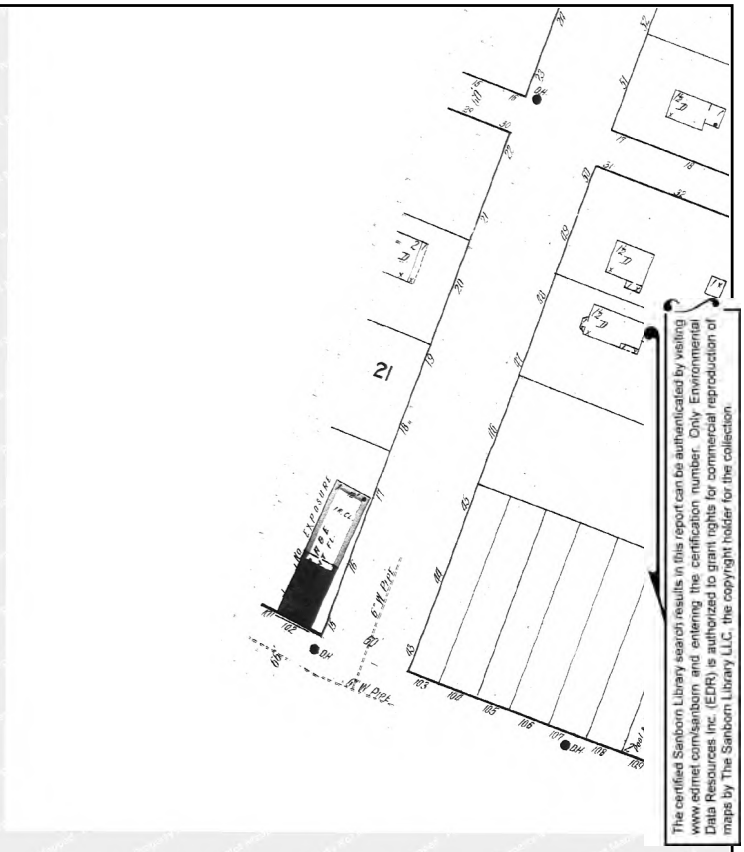
Copyright: 1916



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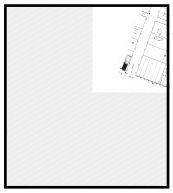

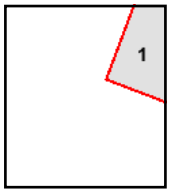

Volume 1, Sheet 1

0 Feet 150 300 600

N

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.3

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05/13/19

Site Name:

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.3

Client Name:

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12 Kent Way
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Contact: Sara Roy

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Certification # 11A5-4708-9D68

PO # 171.06116.004

Project GNP East Millinocket

Maps Provided:

1954

Sanborn® Library search results

Certification #: 11A5-4708-9D68

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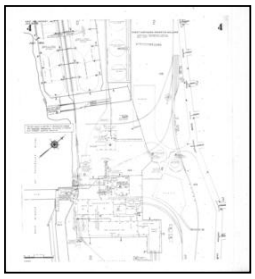
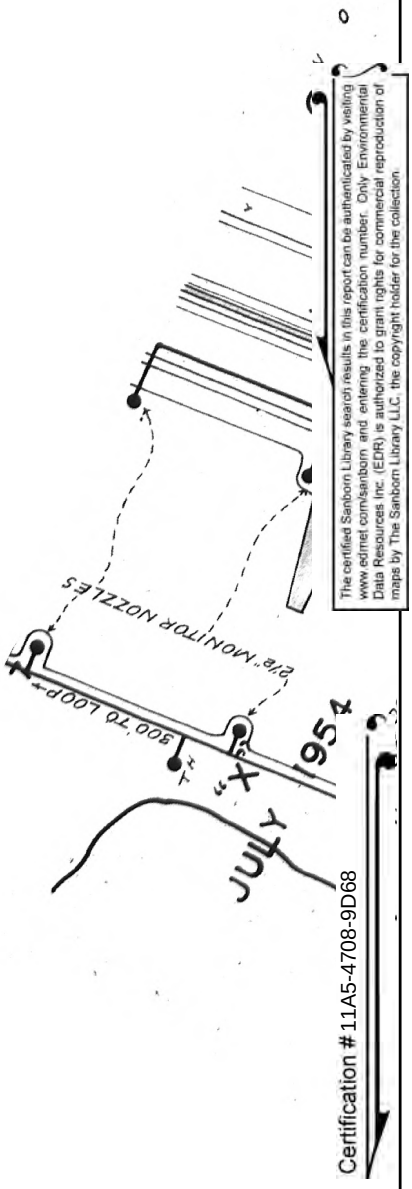


Volume 1, Sheet 4
1954



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City, ST, ZIP:	East Millinocket, ME 04430
Client:	Ransom Env. Consultants, Inc.
EDR Inquiry:	5634384.3
Order Date:	05/13/2019
Certification #	11A5-4708-9D68
Copyright	1954

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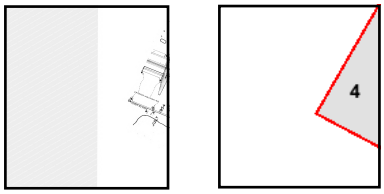

Volume 1, Sheet 4

0 Feet 150 300 600

N

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.3

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Certified Sanborn® Map Report

05/13/19

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PO # 171.06116.004

Project GNP East Millinocket

Maps Provided:

1954

Sanborn® Library search results

Certification #: 11A5-4708-9D68

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- ☑ University Publications of America
- ☑ EDR Private Collection

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Sanborn Sheet Key

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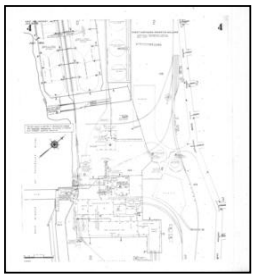
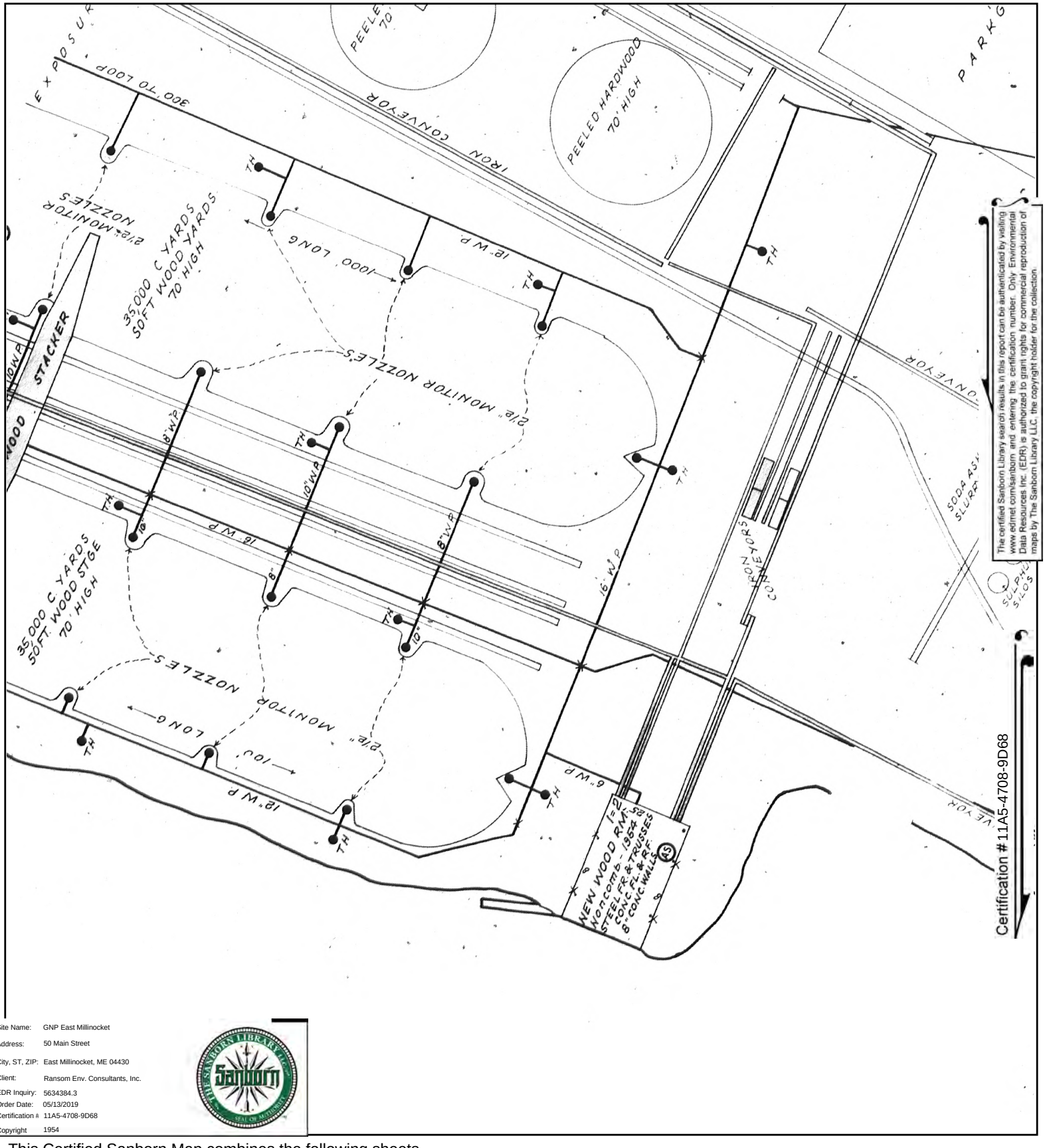
1954 Source Sheets



Volume 1, Sheet 4
1954



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Certification #11A5-4708-9D68

Site Name:	GNP East Millinocket
Address:	50 Main Street
City, ST, ZIP:	East Millinocket, ME 04430
Client:	Ransom Env. Consultants, Inc.
EDR Inquiry:	5634384.3
Order Date:	05/13/2019
Certification #	11A5-4708-9D68
Copyright	1954

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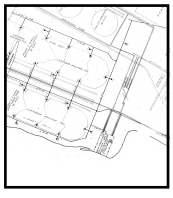

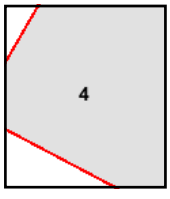

Volume 1, Sheet 4

0 Feet 150 300 600

N

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.3

May 13, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

05/13/19

Site Name:

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.3

Client Name:

Ransom Env. Consultants, Inc.
12 Kent Way
Byfield, MA 01922
Contact: Sara Roy

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Certified Sanborn Results:

Certification # 11A5-4708-9D68

PO # 171.06116.004

Project GNP East Millinocket

Maps Provided:

1954
1943
1927

Sanborn® Library search results

Certification #: 11A5-4708-9D68

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- ☑ Library of Congress
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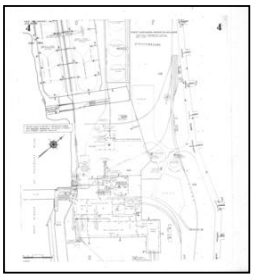
1954 Source Sheets

Volume 1, Sheet 3
1954



Volume 1, Sheet 4
1954

1943 Source Sheets

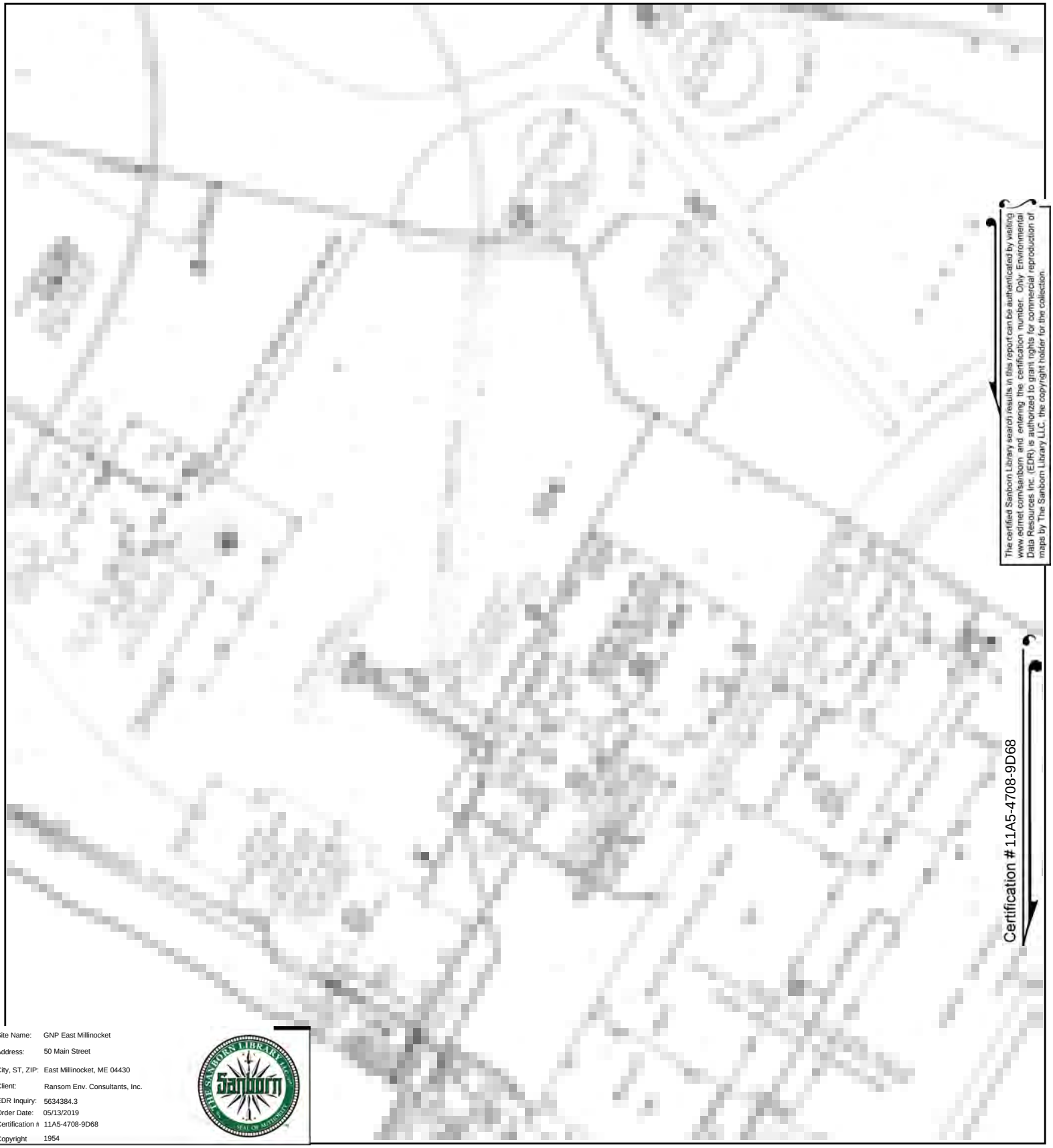
Volume 1, Sheet 2
1943

Volume 1, Sheet 3
1943

1927 Source Sheets

Volume 1, Sheet 2
1927

Volume 1, Sheet 3
1927



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Site Name: GNP East Millinocket
Address: 50 Main Street
City, ST, ZIP: East Millinocket, ME 04430
Client: Ransom Env. Consultants, Inc.
EDR Inquiry: 5634384.3
Order Date: 05/13/2019
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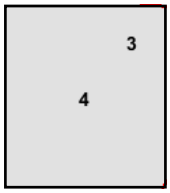

Volume 1, Sheet 4
Volume 1, Sheet 3

0 Feet 150 300 600

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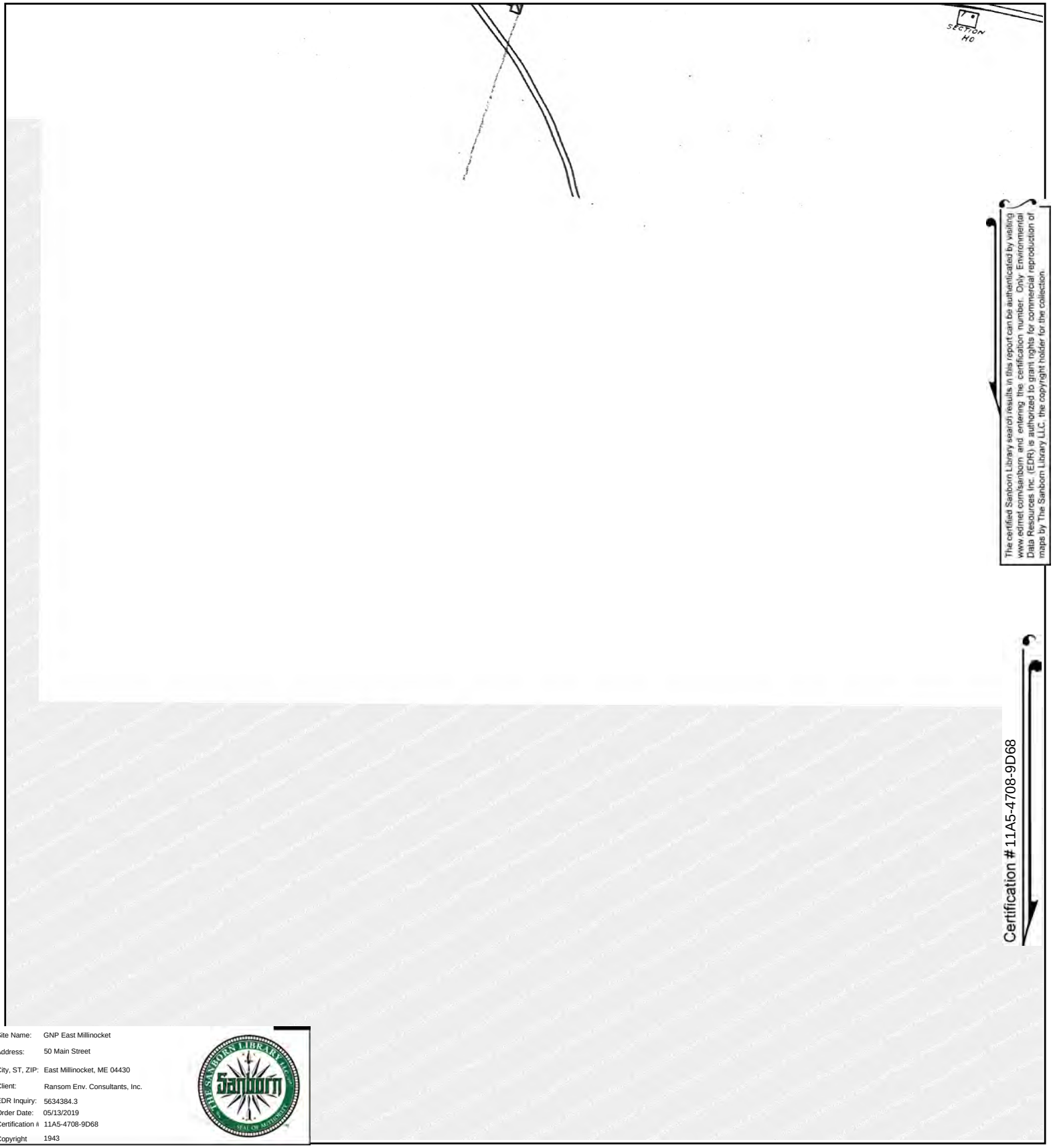

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Certification # 11A5-4708-9D68

Site Name: GNP East Millinocket
Address: 50 Main Street
City, ST, ZIP: East Millinocket, ME 04430
Client: Ransom Env. Consultants, Inc.
EDR Inquiry: 5634384.3
Order Date: 05/13/2019
Certification #: 11A5-4708-9D68
Copyright: 1943

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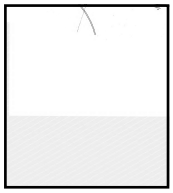

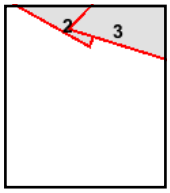

Volume 1, Sheet 3
Volume 1, Sheet 2

0 Feet 150 300 600

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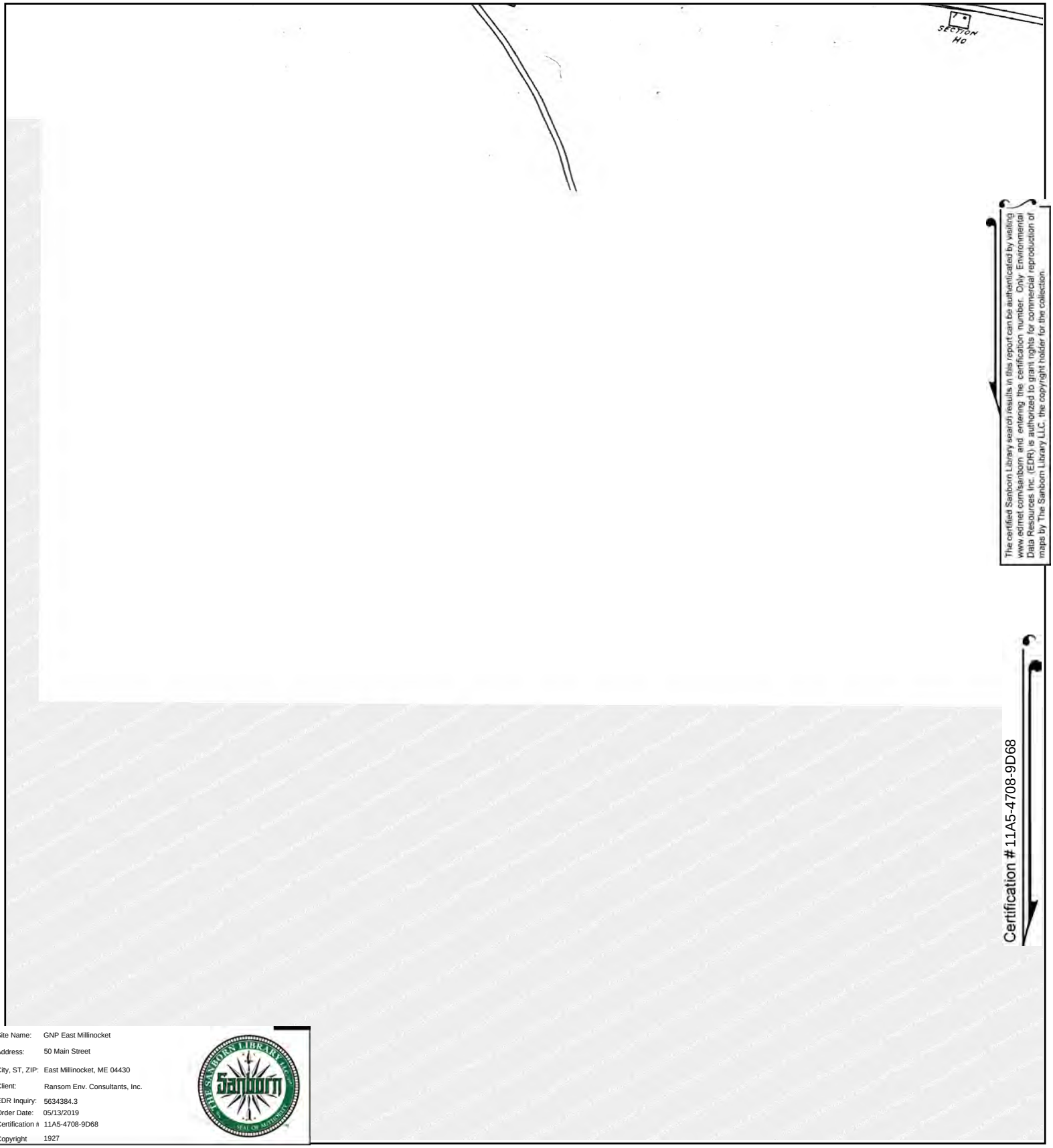

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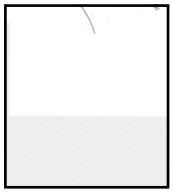

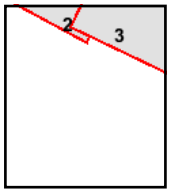

Volume 1, Sheet 3
Volume 1, Sheet 2

0 Feet 150 300 600

N

APPENDIX E

Aerial Photographs

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

GNP East Millinocket

50 Main Street

East Millinocket, ME 04430

Inquiry Number: 5634384.8

April 29, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/29/19

Site Name:

GNP East Millinocket
50 Main Street
East Millinocket, ME 04430
EDR Inquiry # 5634384.8

Client Name:

Ransom Env. Consultants, Inc.
12 Kent Way
Byfield, MA 01922
Contact: Sara Roy

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Search Results:

Year	Scale	Details	Source
2015	1"=1375'	Flight Year: 2015	USDA/NAIP
2011	1"=1375'	Flight Year: 2011	USDA/NAIP
2007	1"=1375'	Flight Year: 2007	USDA/NAIP
1997	1"=1375'	Acquisition Date: May 28, 1997	USGS/DOQQ
1991	1"=1375'	Flight Date: July 12, 1991	USGS
1985	1"=1375'	Flight Date: April 21, 1985	USGS
1975	1"=1375'	Flight Date: October 09, 1975	USGS
1960	1"=1375'	Flight Date: July 01, 1960	USGS
1952	1"=1375'	Flight Date: July 17, 1952	USGS
1947	1"=1375'	Flight Date: May 10, 1947	USGS

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INQUIRY #: 5634384.8
YEAR: 2015
= 1375'
N
EDR

INQUIRY #: 5634384.8
YEAR: 2011
= 1375'
N
EDR

INQUIRY #: 5634384.8
YEAR: 2007
= 1375'
N
EDR

INQUIRY #: 5634384.8
YEAR: 1997
= 1375'
N
EDR

INQUIRY #: 5634384.8

YEAR: 1991

= 1375'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.

INQUIRY #: 5634384.8

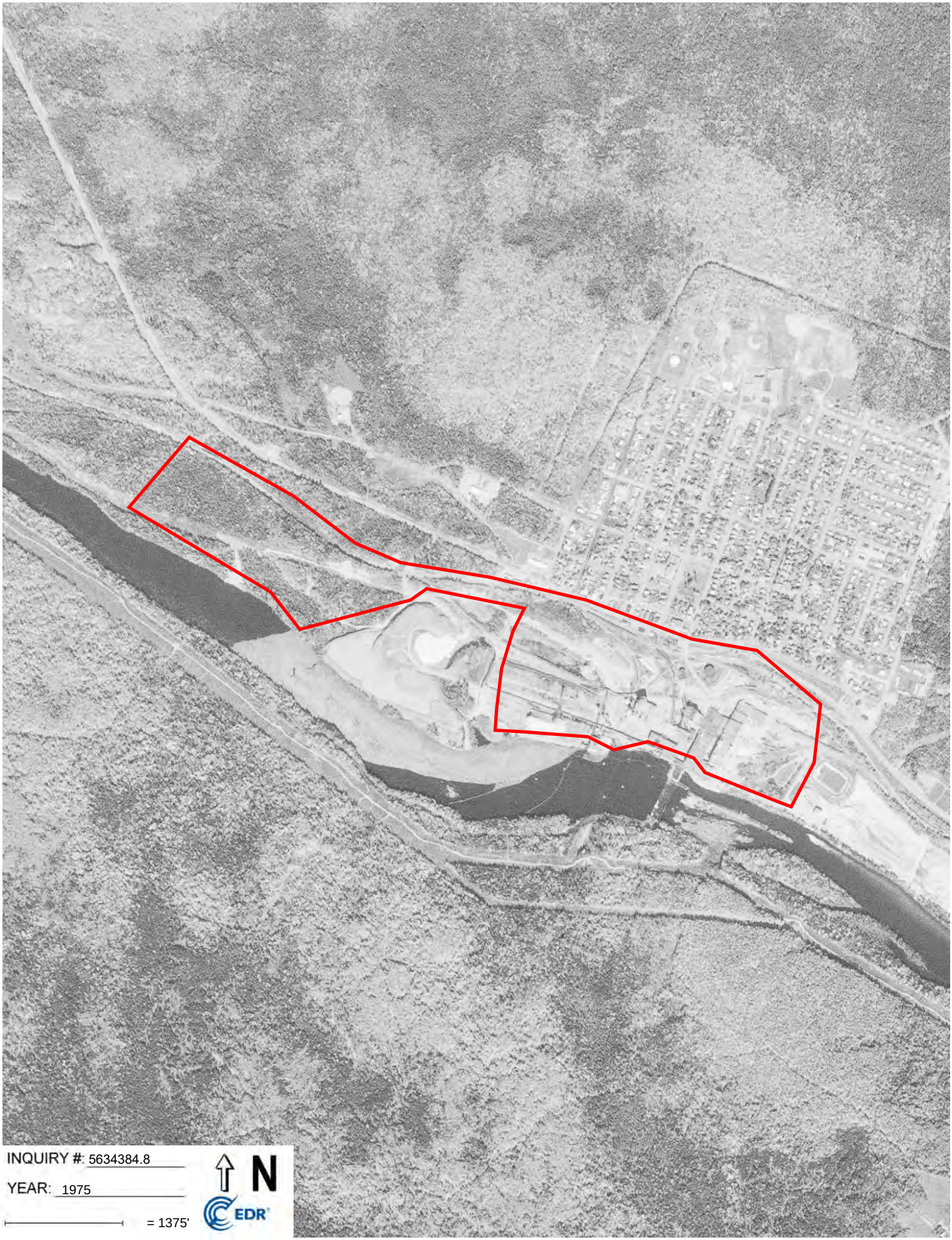
YEAR: 1985

= 1375'

N

EDR

Subject boundary not shown because it exceeds image extent or image is not georeferenced.


INQUIRY #: 5634384.8
YEAR: 1975
= 1375'
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EDR

INQUIRY #: 5634384.8

YEAR: 1960

= 1375'

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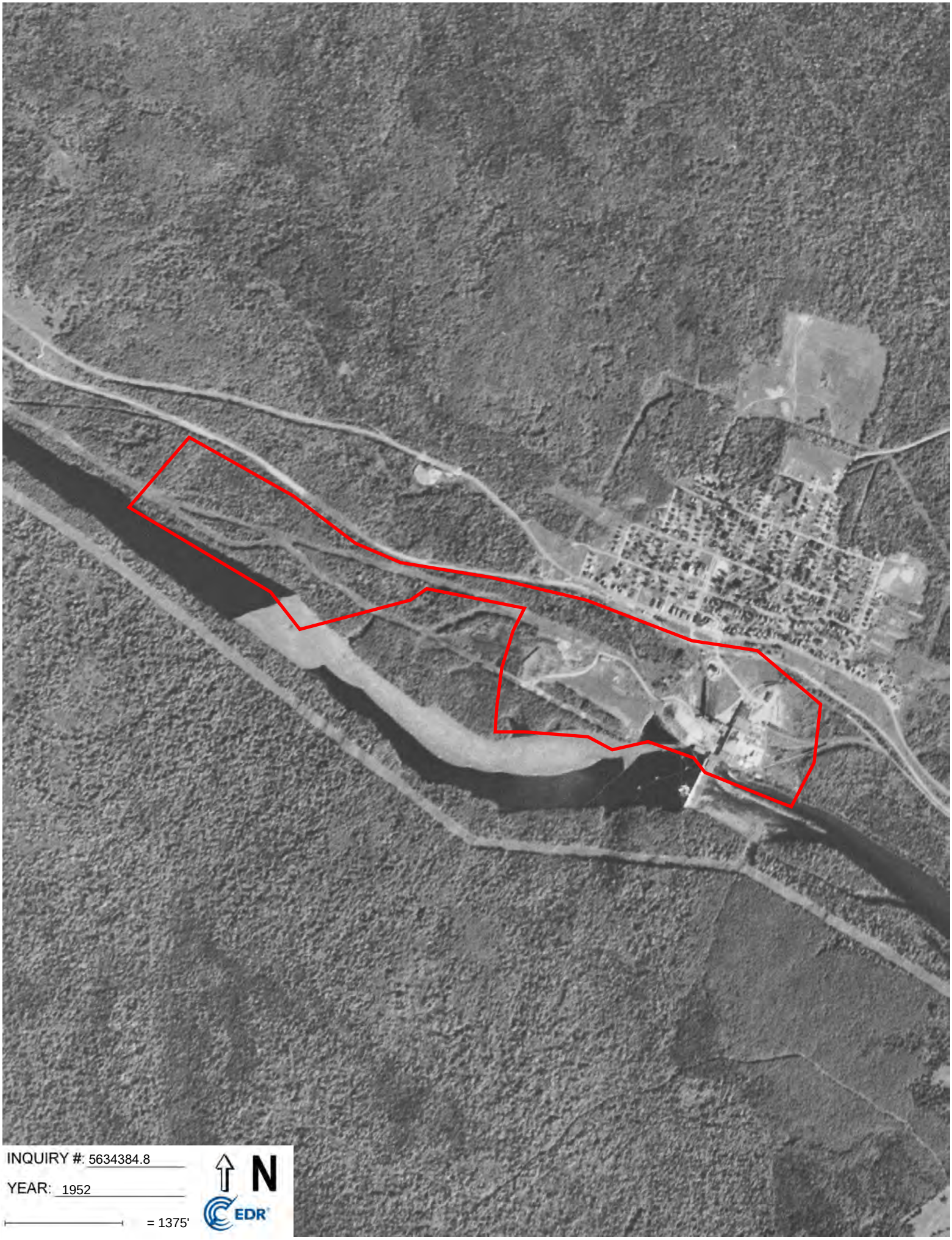
EDR



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YEAR: 1952

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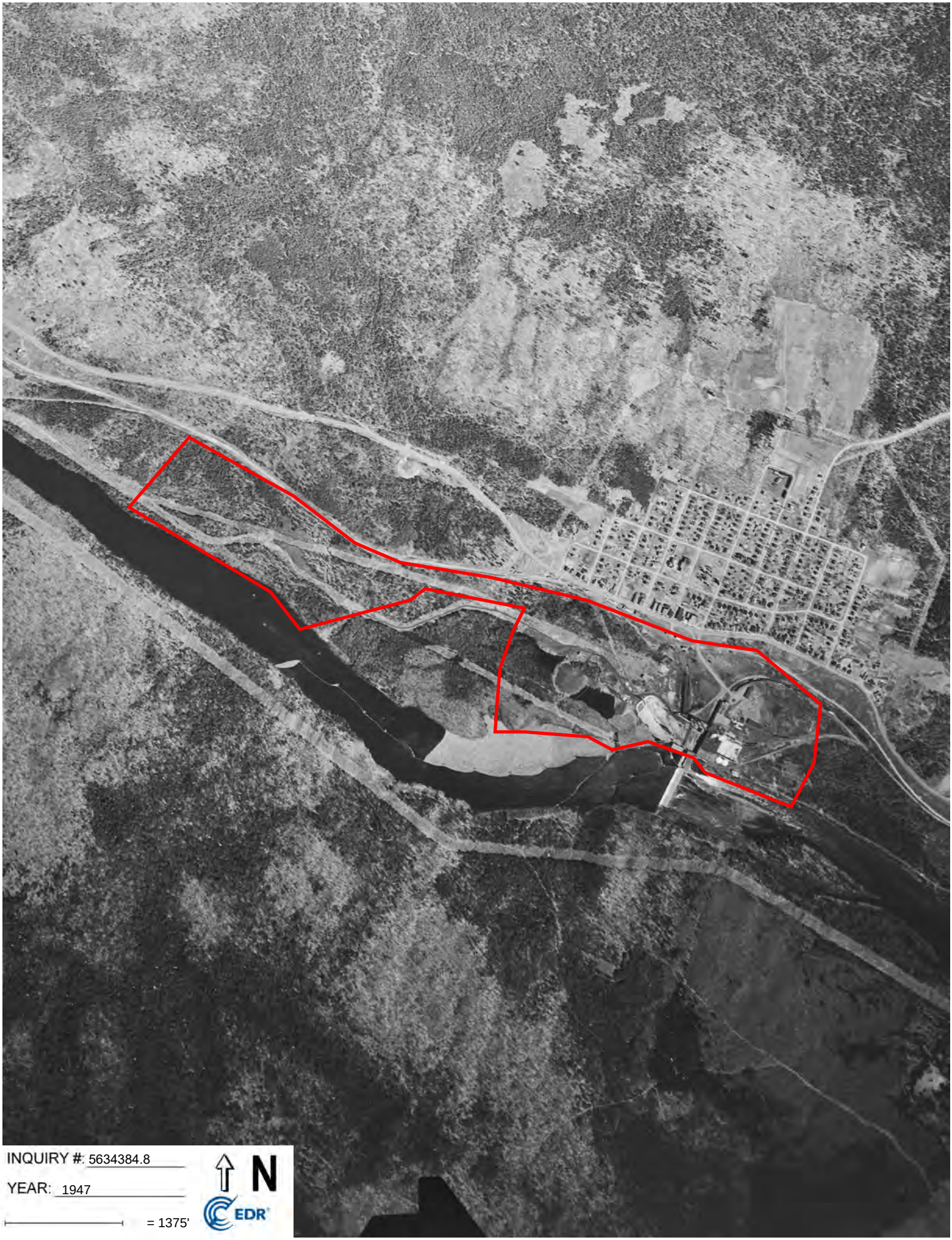
EDR



INQUIRY #: 5634384.8

YEAR: 1947

= 1375'

N

EDR

APPENDIX F

Qualifications

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

RANSOM
Consulting
Engineers
and Scientists

SARA L. Roy
Project Geologist

EDUCATION

M.S. Geological Engineering
Montana Tech, 2014

B.A. Geology
University of Maine Farmington, 2012

PROFESSIONAL REGISTRATIONS

- Geologist in Training
- 40-hour OSHA Hazardous Waste and Emergency Response Training with Annual Refreshers
- 8-Hour OSHA Hazardous Waste and Emergency Response Supervisor Training

PROFESSIONAL AFFILIATIONS

- American Rock Mechanics Association (ARMA)
- Society of Women Engineers (SWE)

GENERAL BACKGROUND

At Ransom, Sara supports multi-disciplinary project teams responsible for conducting and/or participating in environmental and geotechnical studies including Brownfields Programs for municipalities and regional planning commissions in Maine as well as the Maine DEP Brownfields Program. She provides support and oversight for varied and complex environmental and geotechnical investigations as well as design and implementation of site remediation activities. In her career, Sara has developed relationships with clients in many sectors including oil and gas, private sector trusts and developers, and multiple local, state, and federal agencies.

ENVIRONMENTAL DUE-DILIGENCE

Sara has experience conducting and managing Phase I and Phase II environmental site assessments, including historical and regulatory research. Her experience also consists of a variety of environmental sampling, including soil and groundwater sampling, atmospheric sampling, and surveying groundwater elevations.

REMEDIAL ACTIVITIES

Sara has assisted in the oversight of numerous environmental remediation projects, including, but not limited to, chlorinated solvent impacted sites, petroleum impacted sites, former munitions sites, aviation properties, municipal properties, private industrial properties, Sara has also assisted in assessment and community outreach related to facilitating the transfer of military property for private residential development. Sara's remedial experience includes assessment, permitting, remedial technology screening and selection, remedial design and related demolition coordination, remedy implementation and oversite, and US EPA 5-year reviews. Sara has worked on a wide range of projects including private sector cleanups and federally regulated Superfund Sites.

EXPERIENCE

- **Belfast Brownfields, Belfast, Maine.** Assisted in U.S. EPA-funded environmental assessment projects for the City of Belfast. Tasks included conducting Phase I and Phase II Assessments on selected sites. Sites include, but are not limited to, the Belfast Municipal Airport facility and the Waterfall Arts facility.

RANSOM
Consulting
Engineers
and Scientists

ERIKSEN P. PHENIX, C.G.
Project Geologist

EDUCATION

B.S. in Field Ecology and
B.A. in Environmental Science
The Evergreen State College, Washington, 1996

PROFESSIONAL REGISTRATIONS

- Certified Geologist, Maine, 2009
- Licensed Asbestos Inspector, Maine
- 40-hour Occupational Safety and Health Administration (OSHA) Hazardous Waste and Emergency Response Training
- OSHA 8-hour Annual Refresher Training for Hazardous Waste Operations
- American Red Cross First Aid and CPR

PROFESSIONAL AFFILIATIONS

- National Groundwater Association
- Geological Society of Maine

GENERAL BACKGROUND

As a Project Geologist, Erik Phenix has over ten years of experience in the environmental consulting industry. Erik has performed numerous Phase I and Phase II environmental site assessments and remediation activities in both California and New England for a variety of properties including residential, agricultural, commercial, and industrial. Erik is familiar with a variety of subsurface investigation techniques including hollow-stem auger drilling, direct-push drilling, air-rotary drilling, bedrock coring, and cone penetrometer test (CPT) drilling. Throughout his career, Erik has maintained professional relationships with clients including private sector, city, county, and state agencies. Erik has experience in all areas of project design, permitting, coordination, implementation, analysis, reporting, and project management.

RANSOM
Consulting
Engineers
and Scientists

PETER J. SHERR, P.E.
Senior Project Manager
Environmental Engineer

EDUCATION

B.S. in Chemical Engineering
University of Maine, 1990

Graduate Studies in Environmental Engineering
University of Maine, 2001 to Present

PROFESSIONAL REGISTRATIONS

- Professional Engineer, Maine
- Occupational Safety and Health Administration (OSHA) 40-hour Hazwoper, Site Supervisory, and Confined Space Training
- American Red Cross Adult CPR, First Aid, and First Responder

PROFESSIONAL AFFILIATIONS

- American Council of Engineering Companies (ACEC), Maine
- American Academy of Environmental Engineers (AAEE), Intern Environmental Engineer
- Economic Development Council of Maine (EDCM) Member
- Society of American Military Engineers (SAME) Member

GENERAL BACKGROUND

At Ransom, Peter Sherr is primarily responsible for client and project management, business development, staff leadership and mentoring, and technical project assistance and reviews.

Peter brings to Ransom more than 20 years of professional experience in environmental consulting and engineering. He has a strong background and well-developed skills in site assessment, subsurface investigation, remedial design engineering, Brownfields redevelopment, risk characterization, in-plant engineering services, construction services, and environmental regulatory compliance. Peter's project management experience includes client management, proposal writing, budget preparation, project coordination, financial management and tracking systems, and training of environmental staff and clients. He also has in-depth knowledge of state and federal environmental compliance regulations, reporting thresholds, and U.S. Environmental Protection Agency (U.S. EPA) Brownfields programs. During his career, Peter has acquired extensive experience in Brownfields redevelopment including environmental assessment, investigation, remedial planning, and reuse planning and analysis, as well as U.S. EPA Brownfields grant coordination, administration, and planning.

Peter has managed a variety of projects related to the Massachusetts Contingency Plan (MCP) which required an in-depth understanding of state and federal reporting thresholds and cleanup criteria. He has assisted in obtaining regulatory closure for more than 25 MCP-classified sites.

Peter's experience also includes underground storage tank (UST) removals, environmental compliance audits, industrial wastewater characterizations, and preparation of facility waste minimization and hazardous material control documents including Best Management Practice plans, Spill Prevention, Control and Countermeasure (SPCC) plans, chemical inventory reports, and hazardous waste management training programs.

PHASE I ENVIRONMENTAL SITE ASSESSMENT
GREAT NORTHERN PAPER – EAST MILLINOCKET MILL
50 MAIN STREET
EAST MILLINOCKET, MAINE

Prepared for:

Maine Department of Environmental Protection
17 State House Station
Augusta, Maine
(Using U.S. EPA Brownfields Funding
Under MEDEP's Assessment Grant No. BF00A00302)

On Behalf of:

Town of East Millinocket
53 Main Street
East Millinocket, Maine

Prepared by:

Ransom Consulting, LLC
400 Commercial Street, Suite 404
Portland, Maine 04101
(207) 772-2891

Project 171.06116.

February 13, 2020

EXECUTIVE SUMMARY

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting LLC (Ransom) for the former Great Northern Paper (GNP) Mill located at 50 Main Street in the Town of East Millinocket, Maine (the "Site"). This Phase I ESA was performed in accordance with the requirements of ASTM International (ASTM) Designation: E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, which meets the requirements of the United States Environmental Protection Agency (U.S. EPA) All Appropriate Inquiry (AAI), 40 CFR Part 312. The purpose of this Phase I ESA was to document the environmental history of the Site, evaluate the likelihood that a release of hazardous substances and/or petroleum (HSP) has occurred or has the potential to impact the Site, and to provide our professional opinion regarding evidence of *recognized environmental conditions (RECs)* in connection with the Site.

The approximately 250-acre Site, identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, was developed with over 60 buildings (the "Site buildings") and constructed in several phases between 1906 and 1991. The Site buildings included several industrial buildings housing paper mill operations, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Paper mill operations ceased in February 2014 and the Site is currently vacant. However, several buildings have been demolished by the current owners for equipment and building materials reclamation (e.g., scrap steel, wood, and brick). Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping. To facilitate the overall review of the large paper mill site and organization of this report, the property was divided into seven smaller Study Areas, Study Areas 1 through 7, identified as the Western Mill Area, Eastern Mill Area, Maintenance Area, Fuel Storage Area, Wood Lot Area, Recycling Area, and Western Property, respectively.

As part of this assessment of the Site, Environmental Data Resources, Inc. (EDR) and Ransom conducted an environmental database search. Ransom also reviewed the Maine Department of Environmental Protection (MEDEP) online databases. The Site was identified on the MEDEP Sites List, Registered Underground Storage Tanks database (UST), and the Hazardous and Oil Spill database. Historical spills noted at the Site ranged from less than a gallon to several hundred gallons of petroleum products, hydraulic oil, electrical transformer oil, and/or lubricating oil. Other properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon the locations of these properties, which are considered to be downgradient from the Site with respect to the inferred groundwater flow direction(s),or are located at distances that make it unlikely for these properties to have significantly impacted environmental conditions at the Site.

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2019. According to the available information, the Site also came to the attention of the MEDEP and United States Environmental Protection Agency (U.S. EPA), due to three reported historic polychlorinated biphenyl (PCB) spills or releases. The first release was documented in 1970, when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released from this transformer in the years since the initial failure in 1970. A second release occurred in January 1978, when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented in May of 1981 near the Number 5

Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils identified in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The drum storage facility was closed (including excavation of approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and the excavations were backfilled with clean fill material, as further described in a 1991 Report of PCB Cleanup Activities and Groundwater Monitoring, prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA to GNP in September 1991.

Previous environmental investigations conducted across the Site between 1991 and 2002 also identified metals, including arsenic, barium, cadmium, chromium, and lead in soil samples collected near the former maintenance garage. Volatile organic compounds (VOCs) were detected in a soil sample collected near the former paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area, and in a groundwater sample collected near the paint shop.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified several RECs associated with the former industrial operations at the Site including petroleum impacted soil, a stormwater catch basin, which discharges to the nearby river, former petroleum storage tanks, a leachate transfer pipe running beneath the Site, and ongoing groundwater monitoring related to PCBs.

On behalf of MEDEP, TRC Environmental Corporation (TRC) completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed No. 6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. Historical recognized environmental conditions (HRECs) identified by TRC included historical groundwater monitoring for PCBs, historical No. 6 fuel oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's 2014 Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential contaminants of concern (COCs) present at the Site during historic operations.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met its obligations, as

specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property.

During Ransom's Site reconnaissance, the Site buildings were observed to be either demolished or in varying states of disrepair. Snow cover was present on the Site's exterior which limited physical observations of the Site grounds. Ransom was able to view the exterior of the Site during the April 2019 Phase I ESA Site reconnaissance. Site conditions during the January 2020 Site reconnaissance appeared to be similar in that the staining observed in 2019 is likely still present. Key observations made in each of the 7 study areas during the site reconnaissance are described below:

1. Study Area 1 – Western Mill Area: Various containers and buckets of HSP were observed within the Site buildings; drums with unknown quantities of liquid inside were observed in the southwest corner of the oil boiler house; several transformers and one petroleum aboveground storage tank (AST) were observed within the boiler buildings and around the exterior areas of these buildings; and floor drains with significant staining were observed in the Site buildings.

2. Study Area 2 – Eastern Mill Area: The former paper machine buildings have been demolished, but the materials remain on Site; signs were posted prohibiting excavation of soil in the known PCB remediation area; unidentified black staining, appearing to originate on the second floor of the former Number 5 and 6 finishing building, was observed on the exterior of this building and extended to the ground surface; and a drainage pad that drains to the adjoining wastewater treatment plant was observed, which is reportedly used for delivery of leachate from the nearby Dolby Landfill.

3. Study Area 3 – Maintenance Area: Evidence of a gasoline UST, including vent and fill pipes, as well as a dispenser was observed to the east of the paint shop; the maintenance garage has been demolished and building materials appear to have been removed from the Site; the training building was described as a temporary storage location for HSP being consolidated at the Site (unknown for what length of time).

4. Study Area 4 – Fuel Storage Area: One bulk fuel oil 750,000-gallon above ground storage tank (AST) and one approximate 5,000-gallon overflow AST was observed, as well as the location of the previous 1,750,000-gallon fuel oil AST. Significant petroleum staining was observed in the vicinity of the fuel unloading area near the existing 750,000-gallon AST; significant oil staining was also observed in the oil pump house. A former transformer, which appeared to have been burnt and a sign labelling the building as "Foam House" were observed attached to the hydrant house. Several 250-gallon totes were observed with a black liquid inside, suspected to be oil. A concrete retention pond was observed adjacent to the overflow AST. The overflow AST is reportedly used to decant water from No. 6 oil. The water is then drained into the concrete pond which discharges to the wastewater treatment plant located to the east of the Site. Due to the presence of snow cover, the concrete pond could not be observed in its entirety.

5. Study Area 5 – Recycling Area: The fiber recycling plant has recently been demolition; several ASTs were observed in the chemical storage plant, including storage of sulfuric acid and polymers.

6. Study Area 6 – Wood Lot Area: During the April 2019 Site reconnaissance, significant staining, suspected to be hydraulic oil, was observed in the vicinity of the slasher control building; a limited sheen, suspected to be hydraulic oil, was observed on water surface in

the floor drains in the basement of the wood room building; and limited fill debris was observed in the wood lots. While these conditions could not be readily observed during the January 2020 Site reconnaissance, they are expected to still be present at the Site.

7. Study Area 7 – Western Property: Significant solid waste debris was observed along the banks of Spencer Brook, and fill debris and signs of previous burning were observed in the far western clearing of the Site during the April 2019 Site reconnaissance. While these conditions could not be readily observed during the January 2020 Site reconnaissance, they are expected to still be present at the Site.

Ransom has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 and U.S. EPA AAI (40 CFR Part 312) for the Site identified by the Town of East Millinocket Assessor's Office as Lot 10 on Block 1 on Tax Map 2, which corresponds to 50 Main Street, in the Town of East Millinocket, Penobscot County, Maine. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. Based on the information obtained during this Phase I ESA, this assessment has revealed no evidence of *RECs* in connection with the Site, except for the following:

1. Historic paper mill operations occurred at the Site for over a century including the use, handling, and storage of many types of hazardous materials and petroleum products. Several spills have been recorded at the property, but other unknown and/or undocumented releases may also have occurred at the Site, potentially impacting subsurface conditions including soil, soil vapor, and/or groundwater.

2. During a Site reconnaissance visits in April 2019, staining suspected to be hydraulic oil was observed on the ground surface near the slasher control building and oil sheens were observed in the basement of the wood room building and containment area of the former transformer bank. Significant black staining was observed on and around the remaining portions of the former Number 5 and 6 paper machine building, fuel unloading equipment, and inside the oil pump house near the bulk fuel storage tanks. Each of these releases have the potential to impact soil and/or groundwater in the vicinity.

3. A 2,000-gallon gasoline UST, piping, and dispenser exist to the east of the paint shop. Previous investigations have shown impacts to soil and groundwater related to gasoline storage in this area.

4. Containers of various sizes and in various states of disrepair were observed in many of the Site buildings. Additionally, several large ASTs containing process polymers, acids, and chemicals were observed at the Site. The exact volume of chemical product remaining inside the containers could not be determined, but if significant product remains, these containers and ASTs represent a material threat of release, given the current condition of the Site buildings.

In accordance with the 1991 Consent Agreement and Final Order, the historic PCB spills and resulting PCB-contaminated soil and groundwater remaining at depth beneath clean surficial soil cover materials at the Site, constitutes a *Controlled REC (CREC)*. The remediation was completed under the oversight of MEDEP and U.S. EPA with the understanding the Site would continue to be used for industrial purposes. Should the proposed use change and/or the PCB-impacted areas are to be disturbed during future site redevelopment activities, additional assessment may be required. Currently, excavation of soil is prohibited within the PCB spill areas.

Based on the findings of this assessment, it is Ransom's opinion that soil, groundwater, and soil vapor conditions have potentially been impacted by historic paper mill operations at the Site and that additional investigations and response action are warranted and recommended to address the above-stated RECs, further document Site conditions in relation to current regulatory clean up guidelines, and evaluate the suitability of the Site property for potential future redevelopment. It is also Ransom's opinion that additional investigation and/or remediation actions related to the historic PCB spills are not necessary at this time. However, if the Site is to be redeveloped in the future, the redevelopment plans should be evaluated, and additional investigation may be necessary with respect to potential changes in PCB exposure risks and receptors and/or if the covered and contained PCB-impacted areas are to be disturbed in the future.

Specifically, Ransom recommends the following actions to address the identified environmental concerns associated with the Site:

1. Due to the presence of snow cover, Ransom was not able to directly observe the ground surface at the Site during the reconnaissance conducted during the current assessment. As such, Ransom recommends a supplemental Site reconnaissance be conducted following snow melt to visually inspect ground surface conditions for evidence of new or previously unknown releases of HSP.

2. Conduct a Phase II ESA, which would include targeted explorations to evaluate soil, groundwater, and/or soil vapor conditions at the Site in the areas of observed releases mentioned above and within areas of historic paper mill operations. The results of a Phase II ESA will assist in evaluating and documenting current Site conditions and to what extent, if any, the identified *RECs* have adversely impacted environmental conditions at the Site. Additionally, the recommended Phase II investigation will assist in evaluating potential risks to construction workers and potential costs related to managing contaminated soil and/or groundwater or implementing vapor mitigation measures for future building(s) at the Site. Please note that if U.S. EPA Brownfields funding is proposed to be utilized for conducting the recommended Phase II ESA, a Site-Specific Quality Assurance Project Plan (SSQAPP) will also need to be prepared and approved by the U.S. EPA and MEDEP, prior to conducting the Phase II ESA.

3. The 2,000-gallon gasoline UST and any accessible associated buried piping currently in-place at the Site should be removed by a MEDEP-approved contractor with oversight provided by a qualified environmental professional in accordance with the requirements of CMR Chapter 691.

4. Chemical containers and ASTs observed within the Site buildings should be properly consolidated and disposed and/or removed by a MEDEP-approved contractor.

5. In the event that the Site property is redeveloped in the future, an environmental media management plan should be developed to outline the necessary health and safety procedures, and appropriate soil and groundwater management strategies that will be required to protect human health and the environment.

Furthermore, certain ASTM non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk. Ransom completed a supplemental Hazardous Building Materials Inventory (HBMI) for the Site in 2019. The HBMI took place within the bark boiler building, former steam plant, old boiler house, and water treatment plant (Buildings 25, 26, 39

and 40 on Figure 3) and was performed as a supplemental HBMI to the asbestos renovation/demolition impact survey performed by Environmental Management, Inc. of Brunswick Maine in March of 2015.

The HBMI concluded that large quantities of asbestos-containing materials (ACM) still exist within the Site buildings and should be abated and managed appropriately during any future demolition work. Lead-based paint (LBP) coated surfaces were also identified within the Site buildings and if future demolition was to occur, these surfaces coated with LBP should be handled in accordance with all applicable Occupational Safety and Health Administration (OSHA) guidelines. PCBs were not found to be present at concentrations that would be considered "unauthorized use" meaning concentrations greater than 50 parts per million (ppm) PCBs and remedial action regarding the presence of PCBs within building materials at these Site buildings is not required.

Universal waste items including fluorescent bulbs, high-intensity discharge lamps, electronic ballasts, batteries, refrigerants, compressors, and other items that may contain mercury, PCBs, and heavy metals were found to be present within these Site buildings. These universal waste items should be removed from these building for proper off-site disposal prior to any building demolition activities.

Additionally, based on an interview with the former East Millinocket Fire Chief, underground water lines at the mill are made from asbestos cement (or "Transite") piping. When sections of water line were replaced, the old Transite water line was abandoned in place. These water lines are reportedly situated mainly within the wood lot area but may also be preset within other areas of the Site. If Transite piping is encountered during redevelopment activities, it should be handled in accordance with applicable OSHA and MEDEP guidelines.

This summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in decisions made or actions taken based on this information.

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1.0 INTRODUCTION

The following report presents the findings of a Phase I Environmental Site Assessment (ESA) performed by Ransom Consulting LLC (Ransom) for the former Great Northern Paper mill located at 50 Main Street in the Town of East Millinocket, Maine (the "Site"). The Phase I ESA was prepared for the Maine Department of Environmental Protection (MEDEP) on behalf of the Town of East Millinocket, using the United States Environmental Protection Agency (U.S. EPA) Brownfields funding under MEDEP's Brownfields Assessment Grant No. BF00A00302.

Please refer to Figure 1, Site Location Map, to view the general location of the Site on a 7.5-minute topographic quadrangle.

1.1 Purpose

The purpose of this Phase I ESA was to assess the environmental condition of the Site by performing "all appropriate inquiry" into the previous ownership and uses of the Site consistent with good commercial or customary practice, considering commonly known and reasonably ascertainable information. The goal of the assessment was to identify "*recognized environmental conditions" (RECs)* in connection with the Site. The term *RECs* means:

> *The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.*

The term *REC* includes both *controlled RECs (CRECs)* and *historical RECs (HRECs)*, as further defined below:

The term *CRECs* means:

> *A recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.*

The term *HRECs* means:

> *A past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls.*

By performing a Phase I ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §9601) and petroleum products, a user satisfies one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability.

1.2 Scope of Work

This Phase I ESA was performed in general accordance with the requirements of the ASTM International Designation: E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, 2013* (ASTM E1527-13), U.S. EPA All Appropriate Inquiry (AAI), 40 CFR Part 312, and Ransom's contract with MEDEP, dated December 1, 2017, and included the completion of the following tasks:

1. Review municipal records and search state and federal environmental databases for sites or conditions of environmental concern;

2. Review historical land use records to evaluate past use of the Site and adjoining properties;

3. Perform a site reconnaissance to visually and/or physically observe current conditions of the Site and the general land use of surrounding properties; and

4. Conduct interviews with readily available past and present owners, operators, and occupants of the Site.

1.3 Significant Assumptions

No significant assumptions were made during the performance of this Phase I ESA.

1.4 Limitations, Exceptions, Deviations and Data Gaps

Along with the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report is limited by the following:

1. Access Limitations: Due to the poor condition of some of the Site buildings, Ransom was not able to access all interior portions due to the potential of falling objects/debris.

2. Physical Obstructions to Observations: Snow cover limited exterior observations of certain surfaces, including the ground surface, during the Site reconnaissance discussed below.

3. Outstanding Information Requests: None

4. Historical Data Source Failure: None

5. Exceptions: None

6. Deviations: None

7. Data Gaps: None

8. Other: None

The access limitations are not expected to impact the findings and conclusions contained within this report as the inaccessible areas were not expected to have hazardous substances and/or petroleum (HSP)

or other information relative to RECs. The physical obstructions to Site observations are not expected to impact the findings and conclusions contained within this report as the observed Site conditions were very similar to what was observed during Ransom's April 2019 Site reconnaissance.

The findings provided by Ransom in this report are based solely on the information reported in this document. Should additional information become available in the future, this information should be reviewed by Ransom and the findings presented herein may be modified. Information obtained from state and local agencies is not necessarily all-inclusive and files may have been reviewed and purged by officials prior to review by the public.

1.5 Special Terms and Conditions

This Phase I ESA was conducted in accordance with our executed contract with MEDEP, dated December 1, 2017. Authorization was provided in writing by the MEDEP, as described above, and Site access was coordinated through Ms. Margaret (Peggy) Daigle, Chairperson of the Board of Selectmen in the Town of East Millinocket, who provided an explanation of the Site and facilities to be assessed.

1.6 User Reliance

This report was prepared using MEDEP's U.S. EPA Brownfields Assessment Grant funding, and therefore, is a public document. However, the services, findings, and conclusions, noted herein, and associated documents provided to the client by Ransom are solely for the benefit of the MEDEP and the Town of East Millinocket, their affiliates and subsidiaries and their successors, assigns, and grantees. Other than for public informational purposes, reliance or any use of this report by anyone other than MEDEP and the Town of East Millinocket, for whom it was prepared, is prohibited. Reliance or use by any such third party, without explicit authorization, does not make said third party a third-party beneficiary to Ransom's contract with MEDEP. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

2.0 SITE DESCRIPTION

2.1 Location and Legal Description

The Site consists of a single, irregular-shaped parcel of land on the south side of Main Street in the Town of East Millinocket, Penobscot County, Maine. The Site encompasses approximately 250 acres and is identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, which corresponds to a street address of 50 Main Street. The Site location is shown on Figure 1.

2.2 Site and Vicinity Characteristics

The Site is located on the southern side of Main Street along the West Branch of the Penobscot River in East Millinocket. The Site is currently vacant but includes several industrial buildings, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Based on available information, the Site operated as a paper mill prior to February 2014. Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping.

The Site is surrounded by residential and commercial properties to the north, east, and west. The topography in the vicinity of the Site slopes downward to the south and toward the West Branch of the Penobscot River, located along the southern boundary of the Site. The Site and surrounding properties are shown on Figure 2 and Figure 3. A photograph log is included as Appendix A.

2.3 Current Use of the Site

The Site is currently vacant. Several of the existing paper mill buildings have been demolished. For the purpose of this Phase I ESA, the Site was divided into seven Study Areas as described below. Figure 2 shows the seven Study Areas on the Site Plan.

1. Study Area 1 – Western Mill Area: The western portion of the mill buildings includes biomass and petroleum boilers, precipitator, water treatment, electrical maintenance, fire safety building, and an A-frame for biomass storage. Previously demolished portions of this Study Area include almost all of the Grinder Room. Only the southern portion remains due to an existing electrical cable tray which connects the adjoining hydroelectric plant to its substation before the transmission lines cross the river.

2. Study Area 2 – Eastern Mill Area: The eastern portion of the mill buildings includes the mill offices, finishing buildings, train sheds, warehouse space, shipping and receiving, tradesman workspaces (welding, machine shop, and electrical), employee locker rooms, hydropulper, and two storage silos. Previously demolished portions of this Study Area include both paper machine buildings, the grinder roll, the sulphite plant, screen room building and two former storage silos. Much of the debris from these demolition activities remains in place.

3. Study Area 3 – Maintenance Area: This area on the eastern portion of the Site includes the former paint shop (Warehouse J), a vehicle maintenance garage, training center, Warehouse W, a former substation with limited remaining components and the former salvage area. Previously demolished portions of this Study Area include one former vehicle maintenance garage.

4. Study Area 4 – Fuel Storage Area: This area on the northern portion of the Site includes a 750,000-gallon fuel oil aboveground storage tank (AST) and associated heater house, fuel unloading facilities, the hydrant house, the oil pump house, and the security building. A concrete retention pond was observed adjacent to an approximate 5,000-gallon overflow AST. The overflow AST is reportedly used to decant water from No. 6 oil. The water is then drained into the concrete pond which discharges to the wastewater treatment plant located to the east of the Site. Due to the presence of snow cover, the concrete pond could not be observed in its entirety. Previously demolished portions of this Study Area include a 1,700,000-gallon aboveground fuel oil storage tank and associated heater house.

5. Study Area 5 – Recycling Area: This area on the northern portion of the Site includes the recycle fiber warehouse, chemical plant, and the switch house. Previously demolished portions of this Study Area include the flotation cell building extension and portions of the recycle fiber plant.

6. Study Area 6 – Wood Lot Area: This area on the western portion of the Site includes the slasher control building, slasher maintenance building, bark dump building, wood room, bark prep building, and the former wood storage lot. Previously demolished portions of this Study Area include the chemi-groundwood building, sorter building, hopper, bark classifier, transfer house, and associated conveyors.

7. Study Area 7 – Western Property: This area on the far western portion of the Site includes a scale house, a guard shack, additional wood laydown areas, a sluice dump, and former burn area.

2.4 Description of Structures, Roads, Other Improvements on the Site

The Site is improved with approximately 60 buildings (the "Site buildings") and exterior portions of the Site are improved with asphalt-paved parking areas and driveways. The Site buildings appear to have been constructed in multiple phases. The original Site buildings from the early 1900s are typically brick and the more recent structures were generally steel construction.

Utilities

The Site buildings are serviced with municipal water and sanitary sewer services, provided by the Town of East Millinocket. Electricity is available through Brookfield; however, the power has been turned off for an unknown period of time. The Site buildings were heated by various sources including electric heat and/or fuel oil-fired furnace/boilers. Many of the Site buildings were unheated.

2.5 Current Uses of Adjoining Properties

As part of Ransom's reconnaissance, observations were made of adjoining properties from the Site or public right-of-way. Observations included current use of adjoining properties and potential visible evidence of environmental impacts. Properties to the north, east, and west of the Site are used for commercial and residential purposes. The abutting property across the West Branch of the Penobscot River to the South is undeveloped land. The adjoining properties are not anticipated to have impacted the environmental condition of the Site.

3.0 USER-PROVIDED INFORMATION

An ASTM User Questionnaire, completed by Ms. Margaret Daigle, Chairman of the Selectmen for the Town of East Millinocket, is included in Appendix B, as Supplemental Documentation.

3.1 Title Records

No title records in connection with the Site were provided by MEDEP or the Town of East Millinocket.

3.2 Environmental Liens or Activity and Use Limitations (AULs)

No environmental liens in connection with the Site were identified by MEDEP or the Town of East Millinocket. Excavation of soil in known polychlorinated biphenyl (PCB) impacted areas of the Site is listed as an AUL recorded at the Penobscot county Registry of Deeds. More information on the source and extent of the PCB areas is provided in Section 4.3.

3.3 Specialized Knowledge

No specialized knowledge in connection with the Site was provided by the Town of East Millinocket.

3.4 Commonly Known or Reasonably Ascertainable Information

It is Ransom's understanding that MEDEP and the Town of East Millinocket have provided Ransom with commonly known or reasonably ascertainable information pertinent to recognized environmental conditions in connection with the Site.

3.5 Valuation Reduction for Environmental Issues

The Town of East Millinocket did not identify a reduction in the purchase price, as compared to the fair market value, that was due to the Site being impacted by hazardous substances or petroleum products. It was noted that the price is being determined by negotiation without and appraisal.

3.6 Owner, Property Manager, and Occupant Information

The Site property is currently owned by Katahdin KI 50 LLC, with the exception of the following buildings and associated exhaust stacks (refer to Structure Identification Numbers on Figure 3):

- Steam Plant (26)
- Old Water Treatment Building (40)
- Bark Boiler Building (25)
- Precipitator Building (24)
- Bark Storage Building (22)

Ownership of the buildings identified above was transferred to Metro Industrial Wrecking & Environmental Contractors Inc. on September 25, 2019. It is Ransom's understanding that the Katahdin KI 50 LLC and Metro Industrial Wrecking & Environmental Contractors Inc. have provided Ransom with

available information pertinent to recognized environmental conditions in connection with the Site. Previous owners were not available for interview; however, several previous employees were available for interview during Ransom's reconnaissance. Information from these interviews is summarized in Section 6.0 below and included throughout the pertinent sections of this report.

3.7 Reason for Performing Phase I ESA

This Phase I ESA was performed to support the Town of East Millinocket's environmental due diligence of the Site, in anticipation of acquiring the property in order to redevelop the Site.

3.8 Previous Environmental Reports

Several previous environmental reports were provided by the Town of East Millinocket and MEDEP in relation to the Site's previous paper mill operations and environmental assessments. Previous environmental reports provided by the Town of East Millinocket and the MEDEP are summarized in Section 4.3 below.

Ransom completed a Phase I ESA for the Site in July 2019. The Phase I ESA included both interior and exterior observations of the Site, a regulatory file review and interviews with available people who have knowledge of the Site. The Site reconnaissance for the previous Phase I ESA took place in April 2019 and the presence of snow cover was not a limitation as it was during the course of this Phase I ESA. According to the persons interviewed for this assessment, Site conditions have remained the same from the completion of the previous Phase I ESA to the present, and the RECs identified at the Site during the previous Phase I ESA are similar to the RECs identified during this current Phase I ESA. Ransom's 2019 Phase I ESA is provided under a separate cover and is not included as an appendix within this report.

Ransom completed a Hazardous Building Materials Inventory (HBMI) for a portion of the Site in 2019. The 2019 HBMI included the bark boiler building, former steam plant, old boiler house, and water treatment plant (buildings 25, 26, 39 and 40 on Figure 3) and was performed as a supplemental HBMI to the asbestos renovation/demolition impact survey performed by Environmental Management, Inc. of Brunswick Maine in March of 2015. Ransom's HBMI included sampling of building materials for asbestos containing materials (ACM) lead based paint (LBP) coated surfaces, building materials that may contain PCBs and other universal waste. The HBMI concluded that large quantities of ACM exist within the Site buildings that were assessed and should be abated and managed appropriately during any future demolition work. LBP coated surfaces were also identified within the Site buildings and if future demolition was to occur, these surfaces coated with LBP should be handled in accordance with all applicable OSHA guidelines. PCBs were not found to be present at concentrations that would be considered "unauthorized use" meaning concentrations greater than 50 parts per million (ppm) PCBs and remedial action regarding the presence of PCBs within building materials at these Site buildings is not required.

Universal waste items including fluorescent bulbs, high-intensity discharge lamps, electronic ballasts, batteries, refrigerants compressors, and other items that may contain mercury, PCBs, and heavy metals were found to be present within these Site buildings. These universal waste items should be removed from these building for proper off-site disposal prior to any building demolition activities. Ransom's 2019 HBMI report is provided under a separate cover.

4.0 RECORDS REVIEW

4.1 Standard Environmental Record Sources

Ransom contracted Environmental Data Resources, Inc. (EDR) to conduct a search of federal and state databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the federal and state environmental records database listings specified in ASTM E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided in Sections 4.1.1 and 4.1.2, along with an opinion about the significance of the listing to the analysis of RECs in connection with the Site. A copy of the EDR research data and descriptions of the databases is included in Appendix C of this report.

DATABASE RECORD	AMSD (Miles)	Total Sites Found	On Subject Property	On Adjoining Property
Federal National Priorities (NPL) List	1	0	No	No
Federal Delisted NPL List	0.5	0	No	No
Federal Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) List	0.5	0	No	No
Federal comprehensive environmental response – no further action response (CERC-NFRAP) List	0.5	1	**Yes**	No
Federal Resource Conservation and Recovery Act corrective action sites (RCRA CORRACTS) Facilities List	1	1	**Yes**	No
Federal RCRA Non-CORRACTS treatment, storage and disposal (TSD) Facilities List	0.5	1	**Yes**	No
Federal RCRA Generators List	Site and Adjoining	4	**Yes**	**Yes**
Federal Institutional/Engineering Controls Registries	0.5	0	No	No
Federal Emergency Response Notification System (ERNS) List	Site Only	4	**Yes**	---
State-Equivalent NPL List	1	0	No	No
State-Equivalent CERCLIS/State Hazardous Waste Site (SHWS) List or Delisted SHWS	1	2	**Yes**	No
State Landfill and/or Solid Waste Disposal Site List	0.5	1	No	No
State Leaking Aboveground Storage Tank List (LAST)	0.5	25	**Yes**	**Yes**
State Registered Aboveground Storage Tank (AST) List	Site and Adjoining	8	**Yes**	**Yes**

DATABASE RECORD	AMSD (Miles)	Total Sites Found	On Subject Property	On Adjoining Property
State Leaking UST List (LUST)	0.5	13	**Yes**	**Yes**
State Registered underground storage tank (UST) List	Site and Adjoining	6	**Yes**	**Yes**
State Institutional/Engineering Controls Registries	Site Only	0	No	No
State Voluntary Cleanup Sites	0.5	2	**Yes**	**Yes**
State Brownfield Sites	0.5	2	**Yes**	**Yes**

The following presents a discussion of the Site and pertinent surrounding properties identified within the databases outlined above. Discussions have not been included for databases in which no properties were identified, or for properties which were determined not to represent a threat to the environmental condition of the Site, based on their location with respect to the Site, or the significance of the environmental concern represented by the identified property.

4.1.1 Site

The Site, with 25 listed former occupants, was identified in the following environmental databases: UST, CORRACTS, PCB Activity Data System (PADS), RCRA-Large Quantity Generator (RCRA-LQG), RCRA-Very Small Quantity Generator (RCRA-VSQG), RCRA-Treatment, Storage, and Disposal (TSDF), Potentially Responsible Parties (PRP), Superfund Enterprise Management System (SEMS)-ARCHIVE, State Brownfields database, Facility Index System (FINDS), Enforcement and Compliance History Online (ECHO), SPILLS, National Pollutant Discharge Elimination System (NPDES), Integrated Compliance Information System (ICIS), SHWS, LAST, Aerometric Information Retrieval System (AIRS), TIER 2, ALLSITES, Voluntary Cleanup (VCP), Recovered Government Archive (RGA) Solid Waste Facilities (LF), MANIFEST, RGA LUST, ERNS, AST, and Material Licensing Tracking System (MLTS) databases.

These database listings are related to historic paper mill operations conducted at the Site, equipment malfunctions/releases, and environmental response actions and investigations associated with these activities. Previous response actions and investigations are summarized below in Section 4.3.

4.1.2 Discussion of Database Findings

Federal CERC-NFRAP List

The Site was identified as a Federal CERC-NFRAP property based on its listing within the SEMS-ARCHIVE database. This listing is likely related to historic Site operations and generation of hazardous and/or potentially hazardous wastes (discussed further below).

Federal RCRA-CORRACTS List

The Site was identified as a Federal RCRA-CORRACTS property based on corrective action activities related to generation of hazardous and/or potentially hazardous wastes (discussed further in Section 4.3).

Federal RCRA Non-CORRACTS TSD Facilities List

The Site property was identified within the Federal RCRA Non-CORRACTS TSD database in connection with historic generation of various hazardous and/or potentially hazardous wastes including, but not limited to, corrosive and ignitable wastes, various metals, and chlorinated solvents.

Federal RCRA Generator's List

The Site property was identified once within the Federal RCRA-VSQG database and once within the Federal RCRA-LQG database in connection with historic generation of various hazardous and/or potentially hazardous wastes including, but not limited to, corrosive and ignitable wastes, various metals, and chlorinated solvents.

Brookfield Energy adjoins the Site to the south located along the Penobscot River. According to EDR, Brookfield is identified as a RCRA-VSQG. The waste generated was not listed by EDR, however, no violations were found. Additionally, Brookfield Energy is located in a position considered to be downgradient relative to the Site and is not likely to impact environmental conditions at the Site.

Federal ERNS List

The Site property was identified four times within the Federal ERNS database in connection with various releases from electrical transformers. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

State-Equivalent CERCLIS/SHWS

The Site was identified twice as a SHWS in connection with historic operations and releases that have occurred at the Site. Remedial actions and environmental investigations associated with the Site are discussed in Section 4.3 below.

State Landfill and/or Solid Waste Disposal Sites List

One SWF/LF property (East Millinocket Landfill, Route 11) is located within 0.5 mile of the Site. According to EDR, this landfill is also identified by the MEDEP in the Landfill Closure Program (LCP). This landfill is listed as being closed and currently undertaking post-closure obligation. Based on the significant distance between this property and the Site (approximately 1,330 ft), adverse impacts to environmental conditions at the Site from this property are not anticipated.

State LAST Sites

EDR identified the Site property within the State LAST database for Spill Nos. B-718-1998, B-291-2009 and B-35-2013. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

EDR identified adjoining properties to the north at 1 Cone Street, 1 Elm Street and 2 Spruce Street as State LAST sites under MEDEP Spill Nos. B-553-2009, B-195-1983 and B-99-1998, respectively.

1 Cone Street associated with Spill No. B-553-2009 documents a minor leak from a fuel feed line. It was estimated that less than one cup of No. 2 fuel oil was released. The release was addressed with sorbent materials and no further action was warranted.

2 Spruce Street associated with Spill No. B-99-1998 documents the slow release of kerosene from an AST located on the exterior of the residence. A repairman was sent to the residence to repair a leaking feed line when it was noted to have been corroded and released its contents over time. It was estimated that approximately 125 gallons of kerosene were released to the soil below. Kerosene was later noted within the basement sump of the residence, which was subsequently cleaned with sorbent materials. Excavation of the impacted soils was not attempted as it was deemed expensive and not necessary.

1 Elm Street associated with Spill No. B-195-1983 documents the release of approximately 175 gallons of No. 2 fuel oil within the basement of this adjoining residence on December 14, 1983. Approximately 50 gallons of released product were subsequently recovered by the East Millinocket Fire Department; however, the remaining volume of released product was unaccounted for. Based on the town-wide connection to public drinking water, the MEDEP closed this case without further remedial efforts.

These three adjoining LAST sites are not expected to have significantly impacted environmental conditions at the Site given the remedial actions taken, the relatively small quantities of petroleum released and the surficial geology of the area being defined as glacial till (Surficial Geology of the Millinocket, 1º by 2º Quadrangle, Maine; Maine Geological Survey, Department of Conservation, 1987) which would inhibit the migration of petroleum through the overburden soil and groundwater.

EDR identified 20 additional State LAST properties within 0.5 miles of the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they have been properly investigated and/or remediated with prior MEDEP oversight/guidance or are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State AST Sites

EDR identified the Site twice within the State Registered AST database in connection with on-Site storage of various products and chemicals including, but not limited to, gasoline, transformer oil, various fuel oils, and corrosive liquids. Please refer to section 4.3 for a detailed summary of releases from ASTs and other structures located at the Site.

EDR identified six additional State AST properties adjoining to the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State LUST Sites

EDR identified the Site within the LUST database for Spill No. B-483-2003. Please refer to section 4.3 for a detailed summary of spill reports associated with the Site.

EDR identified 12 additional LUST sites within 0.5 mile of the Site; however, these properties are not anticipated to have adversely impacted environmental conditions at the Site, since they have been properly investigated and/or remediated with prior MEDEP oversight/guidance, are associated with clean UST closures, or are located in positions and/or at distances that are unlikely to have adversely impacted the Site.

State Registered UST Sites

EDR identified the Site within the State UST database in connection with on-Site storage of various products including, but not limited to, gasoline and fuel oils.

EDR identified 5 additional properties as State Registered UST sites on the adjoining properties to the north and east. The following table describes the adjoining UST properties in regard to their address and status of the USTs.

Name or Address	UST size & product	Date Installed	Date Removed
East Millinocket Treatment Plant	One 1,000-gallon No. 2 Fuel oil & one 1,000-gallon Diesel	January 1, 1974	December 1, 1991
Municipal Building Main Street	One 2,000-gallon No. 2 Fuel Oil and one 1,000-gallon No. 2 Fuel Oil	October 1, 1969, July 1 1989	July 1, 1989, October 9, 2006
Dead River Co. 64 Main Street	Two 10,000-gallon gasoline and one 4,000-gallon diesel fuel	June 1, 1984	August 27, 2014
US Post Office	One 1,000-gallon No. 2 Fuel Oil	January 1, 1974	July 1, 1989
Police and Fire Station, Main Street.	Two 1,000-gallon No. 2 Fuel oil	October 1, 1969	July 1, 1989

The East Millinocket Treatment Plant is considered to be hydrologically cross gradient relative to the Site and is not anticipated to adversely impact environmental conditions at the Site. The USTs removed from the Dead River Co. property were also identified in the LUST database and any contamination encountered was addressed to the satisfaction of the MEDEP and is therefore not likely to adversely impact environmental conditions at the Site.

The UST removed from the East Millinocket Municipal Building took place in 2006. MEDEP Spill Report B-616-2006 confirms that no contamination was encountered during the removal of this UST and this UST site is not anticipated to have adversely impact environmental conditions at the Site.

The USTs removed from the post office and police/fire station took place over 30 years ago, and given their relatively small storage capacity and the tendency for petroleum constituents to degrade over time (if released at all), these two UST properties are not anticipated to have adversely impacted environmental conditions at the Site.

State Voluntary Cleanup Sites

The Site was identified in the State VCP database in connection with prior remediation conducted at the Site in accordance with the MEDEP's Voluntary Response Action Program (VRAP), the details of which are discussed in section 4.3 of this report.

EDR identified one additional VCP property located immediately south of the Site; however, this property is not anticipated to have adversely impacted the Site, since it is located in a position that is inferred to be hydraulically downgradient from the Site. Remedial actions and environmental investigations associated with this adjoining Site are discussed in Section 4.3 below.

State Brownfield Sites

The Site was identified by EDR as a State Brownfield Site. According to EDR, the Site's status within the brownfield program is listed as "Remediation Stage" with the sub-status listed as "Need (awaiting resources)". Additional information regarding the brownfield investigations that have taken place at the Site are discussed in section 4.3 of this report.

Orphan Sites

EDR orphan site designation indicates insufficient address information for the site to be plotted. Ransom reviewed the 8 Orphan Sites identified by EDR. The Site, identified in two Orphan reports as "Katahdin Paper" and "Hackman Capital, LLC", were identified. Please refer to section 4.3 for a detailed summary of spills reports associated with the Site.

4.2 Additional Environmental Record Sources

4.2.1 State Regulatory Agency File Review

Ransom reviewed the following MEDEP online databases for information pertaining to the Site and/or properties in the vicinity of the Site with known and/or suspected environmental contamination and their potential to adversely impact environmental conditions at the Site.

1. "Division of Remediation Sites List" (MEDEP "Sites List") online database;
2. "Non-Conforming Tanks" online database;
3. "Registered Underground Oil Storage Tanks" online database;
4. "Active and Out of Service Underground Oil Storage Tanks Including Tanks That Have Not Been Properly Abandoned" online database; and
5. "Oil Storage Tank Search & Operator Training" online database;
6. "Hazardous and Oil Spill" online database.

The Site was identified on the MEDEP Sites List, Registered Underground Oil Storage Tanks database, and the Hazardous and Oil Spill database. The adjoining property to the west (East Millinocket Bark Pile) was identified on the MEDEP Sites List and the adjoining property to the south (Dolby Dam) was identified on the Hazardous and Oil Spill database.

The following table summarizes releases documented within the MEDEP's online database that appear to have occurred at the Site.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-189-1985	1/13/1978	Paper Machines No. 5 and No. 6	Mineral Oil Dielectric Fluid (MODF)	700 Gallons	Soil	Excavated/ hauled offsite	Case Closed.
B-42-1981	5/2/1981	Great Northern Paper Mill - Tank Car Unloading Rack	No. 6 Fuel Oil	200-300 Gallons	Holding Pond, Nearby Soil, Nearby Vegetation	Controlled burn	No further action expected.
B-82-1983	5/16/1983	Great Northern Paper Mill - Grinding Room	Lubricant Oil	0.25 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-259-1984	11/30/1984	Behind Old Boiler House	MODF	2 Gallons	None Documented.	Sorbents	Case closed.
B-91-1985	5/17/1985	Mill Yard Drain System	No. 1 Fuel Oil	Un-known	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-167-1985	7/8/1985	Transformer Valve	MODF	0.125 Gallon	Soil within diked area	None listed	MEDEP final status not listed.
B-163-1988	5/4/1988	Grinder Generator	Heavy Duty Gear Oil	0.125 Gallon	Penobscot River	None (oil not found)	MEDEP final status not listed.
B-187-1988	5/17/1988	Paper Machines No. 5 and No. 6	Lubricant Oil	1 Gallon	Penobscot River	None listed	MEDEP final status not listed.
B-145-1989	4/5/1989	Woodyard Culvert	Vehicle/ wood equipment runoff	5 Gallons	Penobscot River	Report filed; no additional action was documented	MEDEP final status not listed.
B-260-1989	5/20/1989	Dolby Power Station	Diesel Fuel	5.9 Gallons	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-322-1989	6/21/1989	Mill Yard - T-118 Transformer	MODF	0.125 Gallon	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-497-1989	8/24/1989	Wood Yard	Hydraulic Oil	12 Gallons	None Documented.	Absorbed with wood chips, subsequentl y burned	Corrective action taken, MEDEP final status not listed

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-523-1989	9/6/1989	Storeroom	PCB Oil	Unspecified	Soil	Excavated/ hauled offsite	Corrective action taken, MEDEP final status not listed.
B-614-1989	10/13/1989	Mill Yard	Hydraulic Oil	5 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-218-1990	2/27/1990	No. 4 Generator	Hydraulic Oil	0.5 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.
B-553-1990	9/13/1990	Steam Plant - Overfill Tank	No. 6 Fuel Oil	200 Gallons	None Documented.	Absorbed with wood chips, subsequentl y burned	Corrective action taken, MEDEP final status not listed
B-338-1991	6/4/1991	Steam Plant & Process Sewer	Sulfuric Acid	1900 Gallons	None Documented.	Neutralized with soda ash, disposed offsite.	Corrective action taken, MEDEP final status not listed
B-644-1991	10/11/1991	Wastewater Treatment Plant	Hydraulic Oil	0.5 Gallon	Penobscot River	None documented	MEDEP final status not listed.
B-759-1991	12/10/1991	Water Deionizing Facility	Sulfuric Acid	1000 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Corrective action taken, MEDEP final status not listed
B-27-1992	1/14/1992	NL	Lubricant Oil	0.19 Gallons	Penobscot River	No recovery attempted	Corrective action taken, MEDEP final status not listed.
B-58-1994	1/3/1994	East Millinocket - Recycling Plant	Sulfuric Acid	10 Gallons	None Documented.	Neutralized/ washed from concrete surface into process sewer	Corrective action taken, MEDEP final status not listed
B-79-1994	2/15/1994	Great Northern Paper Mill - Tank Truck	No. 6 Oil	500-600 Gallons	Snow within Earthen Dike	Mixed with wood chips, burned	Corrective action taken, MEDEP final status not listed.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-77-1994	2/16/1994	Great Northern Paper Mill - Railroad Bed	No. 6 Oil	1000-1500 Gallons	None Documented.	Oil-soaked debris hauled offsite	Corrective action taken, MEDEP final status not listed
B-92-1994	2/22/1994	Recycling Mill Pipeline	Sulfuric Acid	2 Gallons	None Documented.	Soda Ash	Corrective action taken, MEDEP final status not listed
B-102-1994	3/8/1994	West Operations Steam Plant	Sulfuric Acid	20 Gallons	None Documented.	Washed into process sewer	Corrective action taken, MEDEP final status not listed
B-157-1994	3/30/1994	Wastewater Treatment Plant	Diesel fuel	1-2 Gallons	None Documented.	Sorbents	"No report needed"
B-179-1994	4/8/1994	East Operation	Sulfuric Acid	3 Gallons	None Documented.	Neutralized with soda ash, washed to process sewer	Corrective action taken, MEDEP final status not listed
B-241-1994	5/4/1994	Mill Service Road near Dolby Dam	Diesel Fuel	60 Gallons	None Documented.	Absorbed with sawdust, subsequentl y burned	Corrective action taken, MEDEP final status not listed
B-276-1994	5/11/1994	Wood Yard	Hydraulic Oil	98 Gallons	None Documented.	Burned impacted wood chips where spill occurred	Corrective action taken, MEDEP final status not listed
B-725-1994	11/15/1994	Unspecified	MODF	25 Gallons	Soil	Excavated/ hauled offsite	Corrective action taken, MEDEP final status not listed.
B-230-1995	5/16/1995	Coal Ash Road	Diesel Fuel	4 Gallons	Soil	Excavated/ hauled offsite	Corrective action taken, MEDEP final status not listed.
B-28-1996	1/18/1996	1 Katahdin Ave – Transformer No. T124	Dielectric Oil	5.99 Gallons	Soil	Excavated/ hauled offsite	Corrective action taken, MEDEP final status not listed.
B-309-1996	6/13/1996	Filter Plant Riverbank	Hydraulic Oil	0.25 Gallon	Penobscot River	Sorbents	Corrective action taken, MEDEP final status not listed.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-708-1996	12/6/1996	Silo	Hydrated Lime	92 Gallons	Soil & Penobscot River	Excavated/ reused where able	Report final.
B-718-1998	11/5/1998	Unspecified	Sulfuric Acid	1200 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Report final.
B-568-1999	9/14/1999	Bunker Oil Heating Plant	No. 6 Fuel Oil	200 Gallons	None Documented.	Sorbents	Report final.
B-462-1993	9/15/2003	Wastewater Treatment Plant	Sodium Hydroxide	330 Gallons	None Documented.	All of released product washed into process sewer	No further action expected.
B-483-2003	9/29/2003	Old Paint Shop	Gasoline	Unspecified	Soil	Contaminated soil left in place	MEDEP final status not listed.
B-493-2007	9/18/2007	Unspecified	No. 6 Fuel Oil	20 Gallons	None Documented.	Sorbents	No further action expected.
B-104-2008	2/25/2008	Chemical Storage Building	Sulfuric Acid	400 Gallons	None Documented.	Neutralized with soda ash, sent to wastewater treatment plant	Corrective action taken, MEDEP final status not listed
B-187-2008	4/10/2008	Dike Drain near Transformer	MODF	350 Gallons	Soil	Excavated/hauled offsite	Corrective action taken, MEDEP final status not listed.
B-252-2008	5/8/2008	Railroad Loading Area	No. 6 Oil	50 Gallons	Groundwater	Sorbents	No further action expected.
B-222-1989	9/5/2008	Wood Yard	Hydraulic Oil	10 Gallons	Soil	Excavated/ hauled offsite	Corrective action taken, MEDEP final status not listed.
B-291-2009	5/25/2009	275-Gallon Day AST	Hydraulic Oil	50 Gallons	None Documented.	Absorbed with wood chips, subsequently burned	No further action expected.

Spill No.	Spill Date	Location	Material Spilled	Volume Spilled	Environmental Media Affected	Response Effort	MEDEP Status
B-663-2009	11/17/2009	Loader	Hydraulic Oil	30 Gallons	None Documented.	Sorbents	Report final.
B-656-2010	12/8/2010	Day AST	No. 6 Fuel Oil	400 Gallons	None Documented.	Absorbed with wood chips, subsequentl y burned	No further action expected.
B-682-2010	12/20/2010	No. 6 Paper Machine Basement	Lubricant Oil	1000-1200 Gallons	Water within Aeration Lagoon	Sorbents	No further action expected.
B-56-2011	2/1/2011	Unspecified	Lubricant Oil	1 Gallon	None Documented.	Sorbents	No further action expected.
B-35-2013	1/25/2013	Unspecified	Ferric Sulfate	40-50 Gallons	None Documented.	Drummed/h auled offsite	No further action expected.
B-410-2015	6/30/2015	Site Wide	Misc HSP containers (drums, totes, etc.)	Unknown	Soil	Vacuum Trucks	Corrective action taken, MEDEP final status not listed

In addition, 23 releases documented within the MEDEP's database occurred on impervious surfaces (i.e. concrete pads, asphalt pavement, within structures, etc.) or existing piles of wood chips. Releases with no documented impacts to environmental media have been excluded from the summary table. Spill Reports are provided in Appendix B.

Several releases were documented within the MEDEP's online database that appear to have occurred at the Dolby Dam located immediately south of the Site. Releases documented at this property are not anticipated to have adversely impacted the Site, since it is located in a position that is inferred to be hydraulically downgradient from the Site.

In addition to the on-line databases, Ransom personnel conducted a file review of available files in the MEDEP File Room in Augusta, Maine, and interviewed MEDEP Project Managers regarding the Site status. Information available at the MEDEP File Room included numerous reports documenting investigation and response actions associated with the Site's historic use as a paper mill. The findings of these reports and the environmental status of the Site are discussed in Section 4.3 below.

4.2.2 Local Regulatory Agency File Review

Ransom was informed by Ms. Margaret Daigle that the Town of East Millinocket does not maintain records pertaining to the Site. The Site maintained all their records in house. The town of East Millinocket only maintains basic information for tax bill purposes.

Fire Department

On January 23, 2020, Ransom interviewed the current and former East Millinocket Fire Chief, Chief Leslie Brown and Chief Robert Dewitt. The current and former fire chief informed Ransom that the fire department had responded to releases from the chemical building including acids and caustics, these releases were also documented by the MEDEP.

Ransom was also informed that underground water lines at the mill are made from asbestos cement ("Transite") piping. When sections of water line were replaced, the old Transite water line was abandoned in place. These water lines are reportedly situated within the wood lot area but may also be preset within other areas of the Site.

The fire department was not aware of any releases of fuel oil from the two large ASTs within Study Area 4, but did confirm that the foam fire suppression system was regularly tested.

4.3 Previous Investigations/Assessments

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2018. Key documents related to these investigations include the following:

1. Administrative Consent Agreement and Enforcement Order, Hazardous Waste Activities, Great Northern Paper Company, a division of Great Northern Nekoosa Corporation, Millinocket, Penobscot County, Maine, August 22, 1988;

2. Closure Report for the Drum Storage Facility at East Millinocket Mill, Great Northern Paper, Millinocket, Maine, prepared by Sevee & Mahar Engineers, Inc, December 1989;

3. Review Comments and Conditional Approval for the PCB Remediation Project, East Millinocket Mill, prepared by MEDEP, June 14, 1989;

4. Report of PCB Cleanup Activities and Groundwater Monitoring, East Millinocket Mill, prepared by Stone and Webster Engineering Corporation, March 1991;

5. Consent Agreement and Final Order, Great Northern Nekoosa Corporation, EPA Docket No. TSCA-I-87-1041, United States Environmental Protection Agency, September 27, 1991;

6. Environmental Audit of the Georgia-Pacific Property, Millinocket, Maine, prepared by Sirrine Environmental Consultants, December 1991;

7. Phase I Environmental Site Assessment, Great Northern Paper, Inc. Mill Properties, Millinocket and East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc. January 22, 2001;

8. Geology Report for the Mini Site Inspection of the Great Northern Paper Mill No. 2, East Millinocket, Maine, prepared by MEDEP, September 27, 2001;

9. Final Site Inspection Report for Great Northern Paper Mill No. 2, East Millinocket, Maine, prepared by MEDEP, July 18, 2002;

10. Voluntary Response Action Program, Great Northern Paper East Millinocket Mill, No Action Assurance Letter – Certificate of Completion, prepared by MEDEP, April 24, 2003;

11. Phase I Environmental Site Assessment, Katahdin Paper Mill – East, 50 Main Street, East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc., August 26, 2011;

12. Phase I Environmental Site Assessment, Conceptual Site Model, and Data Gap Analysis, Great Northern Paper No. 2, 50 Main Street, East Millinocket, Maine, prepared by TRC Environmental Corporation, September 2014;

13. Data Review of the No. 5 Paper Machine Site at the East Millinocket Operations of Great Northern Paper Company, East Millinocket, Maine, prepared by Earthcon, August 2015;

14. 2015 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program, East Millinocket Operations of Great Northern Paper Company, prepared by Earthcon, December 2015; and

15. PCB Assessment and Remediation at the East Millinocket Site Memo, prepared by Tetra Tech, June 6, 2018.

According to the available information, the Site came to the attention of the MEDEP and U.S. EPA due to three reported historic PCB releases. The first release was documented in 1970 when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released in the years since the initial failure in 1970. A second release occurred in 1978 when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented in May of 1981 near the Number 5 Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The former warehouses and drum storage area were located to the north of the large warehouse in Study Area 2. The drum storage facility was closed (including excavation of approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and backfilled with at least two feet of clean fill material. As further described in the 1991 Report of PCB Cleanup Activities and Groundwater Monitoring prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA in September 1991.

In December1991, Sirrine Environmental Consultants (Sirrine) conducted an Environmental Audit of the Georgia-Pacific properties on behalf of Bowater Incorporated. The environmental audit reviewed existing conditions at the Site and included collection of soil and groundwater samples in various areas across the Site. Sirrine collected soil and groundwater samples from the burn pit in Study Area 7, the paint shop and former maintenance garage in Study Area 3, a former train shed and the bulk fuel off-loading area in Study Area 4, the former drum storage area in Study Area 2, and in the vicinity of the recycle fiber plant in Study Area 5. Metals including arsenic, barium, cadmium, chromium, and lead were detected in soil samples collected near the former maintenance garage. Volatile organic compounds (VOCs) were detected in the soil sample collected near the paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area, and in the groundwater sample collected near the paint shop.

In 2001, S.W. Cole Engineering, Inc. (S.W. Cole) completed a Phase I ESA for the Great Northern Paper, Inc. properties in both Millinocket and East Millinocket, including the Site. S.W. Cole noted the previous cleanups related to PCBs and the former drum storage facility, along with the historic spills and site operations and did not recommend further assessment at the Site, with the exception of the bulk fuel off-loading area, where numerous releases of No. 6 oil have been reported.

At the request of U.S. EPA, MEDEP staff conducted a Final Site Inspection in 2002 to evaluate the existing conditions at the Site and assess the potential threats to human health and the environment. MEDEP summarized the historic soil detections of PCBs, chlorobenzenes, 111-trichloroethane, and petroleum compounds and noted a detection of PCBs in a soil sample collected by MEDEP in the snow dump area of Study Area 7. MEDEP also noted elevated levels of VOCs, PCBs, and dioxins in sediment samples collected in the vicinity of the Site along the West Branch of the Penobscot River.

In April 2003, the MEDEP Voluntary Response Action Program (VRAP) issued a No Action Assurance Letter – Certificate of Completion for portions of the property including the former PCB spills included in the current Site boundaries. Conditions of the No Action Assurance Letter - Certificate of Completion related to the PCB spills included the following:

1. No groundwater extraction wells will be installed as a potable water source in the PCB spill areas;

2. No excavation will be conducted in the area of the PCB spills;

3. Monitoring of the PCB spills will continue as required by EPA;

4. No buildings will be constructed on the PCB spill areas without written approval from MEDEP;

5. A copy of this letter will be filed at the Penobscot County Registry of Deeds;

6. A copy of the recorded documents will be provided to the VRAP Project Manager;

7. A plan showing the PCB spill areas will be recorded at the Penobscot County Registry of Deeds; and

8. The MEDEP and its contractors will be provided access to the Site, as requested, to conduct inspections and/or investigations, as necessary.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified the following RECs associated with the former industrial operations at the Site:

1. Number 6 oil observed on the ground surface in Study Area 4;

2. Gasoline-impacted soil in the vicinity of the existing UST beside the paint shop;

3. A stormwater catch basin in the vicinity of vehicle maintenance and gasoline filling operations which discharges to the nearby river;

4. Ongoing groundwater monitoring related to the PCB spills;

5. A (since removed) 4,000-gallon diesel aboveground storage tank and refueling pump in the wood yard without secondary containment;

6. Off-Site historical releases from leaking underground gasoline storage tanks;

7. A leachate transfer pipe which runs beneath the Site from the off-Site Dolby Landfill to the adjoining wastewater treatment facility; and

8. Former USTs previously removed or abandoned without documentation at the Site.

On behalf of MEDEP, TRC Environmental Corporation (TRC) completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed No. 6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. HRECs identified by TRC included historical groundwater monitoring for PCBS, historical No. 6 oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential contaminant of concern (COCs) present at the Site during historic operations.

In 2015, Georgia-Pacific submitted a Data Review Summary prepared by Earthcon Consultants, Inc. (Earthcon) to compile available data related to PCBs in the vicinity of the Number 5 paper machine and recommend modification to the groundwater monitoring program, which has been ongoing since the early 1990s. Based on the depth at which PCBs were left in place (due to nearby building structural concerns), the detected chlorobenzene concentration, and the groundwater elevation in the immediate vicinity, Earthcon recommended ending groundwater monitoring in the vicinity of the Number 5 paper machine spill. Georgia-Pacific and Earthcon presented these conclusions in the 2015 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program, as well.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or

remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met all of its obligations, as specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property. Tetra Tech noted the following items as the basis for this conclusion:

1. Remediation was completed as specified in the 1991 Consent Agreement and Final Order and was acknowledged by MEDEP in the 2003 No Action Assurance Letter – Certificate of Completion;

2. PCB-contaminated soils remaining at the Site are buried at depths not easily reached and are covered by clean backfill and/or cement to isolate them from potential contact;

3. Site groundwater monitoring results do not indicate PCB impacted groundwater exists at the Site;

4. No significant exposure risks to human health and the environment related to PCBs exist at the Site; and

5. No benefit is gained by excavating PCB-contaminated soils buried at the Site for transport and disposal elsewhere.

Copies of the relevant reports are included in Appendix B.

4.4 Physical Setting

4.4.1 Topography

The topography of the Site and regional topography slopes downward to the south, towards the West Branch of the Penobscot River. Based on the East Millinocket, Maine USGS Quadrangle, the general elevation of the Site ranges from approximately 340 to 280 feet above mean sea level, as referenced to the National Geodetic Vertical Datum (NGVD).

4.4.2 Geology

According to the 1987 *Surficial Geology of the Millinocket, 1° by 2° Quadrangle, Maine*, surficial soils at the Site are identified as till (t). These soils consist of sand and gravel deposited by glacial meltwater. According to the *Geology Report for the Mini Site Inspection of the Great Northern Paper Mill No. 2, East Millinocket*, Maine prepared by MEDEP staff, surficial deposits at the Site consist of stream alluvium deposits and ribbed moraine deposits consisting of a heterogenous mixture of sand, gravel, and silt.

According to the 1981 *Reconnaissance Bedrock Geology of the Millinocket Quadrangle, Maine,* bedrock at the Site is identified as the Slate Member of the Allsbury Formation (Sas), which consists of thin bedded, quartzofeldspathic graywacke interbedded with pyritic slate or phyllite.

4.4.3 Surface Water Bodies/Floodplains

The closest water bodies are Spencer Brook which crosses the Site and the West Branch of the Penobscot River, which is located along the southern boundary of the Site. Based on the

Penobscot County, Maine, National Flood Insurance Program Map (Community Panel Number 2301630004B) portions of the Site along Spencer Brook are within the 100-year flood zone.

4.4.4 Hydrogeology

Based on field observations and Site topography and descriptions in previous reports, the localized groundwater flow at Site has been shown to be to the southeast towards the downstream directions of the West Branch of the Penobscot River. Shallow groundwater flow may also be influenced by heterogeneous subsurface soil strata, and/or other subsurface structures, which may act as preferred pathways of flow.

4.5 Historical Use Information for the Site

The history of the Site was researched to ascertain past use from the present back to the property's first developed use, or back to 1940, whichever was earlier. Reasonably ascertainable historical information sources researched in this assessment allowed uses of the Site to be traced from the present back to 1906, at which time the Site appears to have been undeveloped. The following standard historical sources were reviewed by Ransom:

1. Information provided by Town of East Millinocket officials and municipal offices;
2. Interviews with previous employees;
3. Historical City Directories, provided by EDR, dated 1977 to 2014 (Appendix C);
4. Sanborn Fire Insurance Maps, provided by EDR, dated 1916 to 1954 (Appendix D);
5. Historical topographic maps, provided by EDR, dated 1951, 1988 and 2014 (Appendix D);
6. Aerial photographs, provided by EDR, dated 1947 to 2015 (Appendix E);

The following table presents a summary of the historical use of the Site over time.

Year(s)	Property Use and Observed Details	Reference Source
circa 2014 to Present	Paper mill operations ceased. Demolition of paper machine buildings, slasher, portion of grinder, several smaller maintenance buildings and recycle fiber plant.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1997 to circa 2014	Continued paper mill operations.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1991 to circa 1997	Expansion of paper mill operations (predominantly around 1991) including construction of A-frame for biomass storage, biomass boiler, fiber recycling warehouse, fiber recycling plant, and the paper warehouse.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos

Year(s)	Property Use and Observed Details	Reference Source
circa 1952 to circa 1991	Expansion of paper mill operations including construction of grinder, slasher, steam plant, paper machines 5 and 6, train shed, several mill buildings and largely expanded log yard.	Municipal Offices, Interviews with Former Employees Sanborn Maps, Aerial Photos
circa 1947 to circa 1952	Continued paper mill operations, additional clearing on the western portion of the Site.	Municipal Offices, Sanborn Maps, Aerial Photos
circa 1906 to circa 1947	Paper mill operation including paper machine 1-4 building, finishing building, log yards, 2 storage silos, railroad tracks.	Sanborn Maps, Aerial Photos
Prior to 1906	Undeveloped Land	Historic Documents, Municipal offices.

4.6 Historical Use Information for Adjoining Properties

Historical uses of the adjoining properties to the Site are presented in the table below and were identified in the standard historical sources listed above during the course of researching the Site.

Year(s)	Property Use and Observed Details	Reference Source
North		
Circa 1906 to Present	Town of East Millinocket. Commercial and municipal properties including autobody shop, drugstore, general store, and town office, beyond which are residential properties.	Municipal Offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps.
Prior to circa 1906	Undeveloped Land	Historical Documents
West		
Circa 1960 to Present	Bark pile disposal area.	Municipal Offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps.
Circa 1906 to circa 1960	Undeveloped Land	Sanborn Maps, Aerial Photos, Topo Maps.
East		
circa 1975 to Present	Wastewater treatment plant for the paper mill and town of East Millinocket	Municipal offices, Interviews, Sanborn Maps, Aerial Photos, Topo Maps
Circa 1906 to circa 1975	Undeveloped Land	Sanborn Maps, Aerial Photos, Topo Maps.
South		
Circa 1906 to present	Hydroelectric Dam and West Branch of Penobscot River	Sanborn Maps, Aerial Photos, Topo Maps
Prior to 1906	Undeveloped Land	Sanborn Maps

4.7 Chain of Title

According to the Town of East Millinocket, the Site is currently owned by Katahdin KI 50 LLC (Book 14606, Page 72). The following chain of title information was identified at the Penobscot County Registry of Deeds.

Owner	Date	Book	Page
Katahdin KI 50 LLC	9/12/2017	14606	72
HC-50 Main Street, LLC	6/19/2015	13906	24
GNP East, Inc	9/28/2011	12608	59
Katahdin Paper Company LLC	4/29/2003	8702	146
Great Northern Paper, Inc.	12/30/1991	4966	114
Great Northern Nekoosa Corporation	Circa 1970	---	---

Prior deed information included in Book 12608, Page 59 indicates that this Site parcel was acquired by GNP East, Inc from Katahdin Paper Company LLC as a portion of multiple parcels of land. For this reason, prior ownership research and uses were deemed not "reasonably ascertainable" per ASTM E 1527–13 section 3.2.77 (including not obtainable from the source within reasonable time and costs constraints) and sections 8.1.4 and 8.3.2. No environmental liens regarding this Site property were noted in the title records provided during our online research at the Penobscot County Registry of Deeds. Activity and Use Limitations were noted in the title records restricting excavation of soil within the designated PCB areas without prior notification to the U.S. EPA and MEDEP.

5.0 SITE RECONNAISSANCE

On January 15, 2020, Ransom conducted a reconnaissance of the Site. Mr. Morris Daigle, former Great Northern Paper employee, provided an explanation of the Site and facilities to be assessed. A photograph log is included in Appendix A.

5.1 Methodology and Limiting Conditions

The Site reconnaissance included observations of the property grounds for evidence of releases, or potential releases of hazardous substances and/or petroleum (HSP), or a material threat of releases of HSP. Weather conditions at the time of the reconnaissance consisted of variable cloud cover with temperatures around 25˚ Fahrenheit. Much of the interior first floor of the Steam Plant and Boiler buildings was covered in ice and snow from the leaking roofs. Exterior portions of the Site were blanked with snow making direct observations of the Site ground infeasible. However, overall Site conditions during the reconnaissance appeared to be similar to what was observed during Ransom's 2019 Site reconnaissance. According to Mr. Daigle, who was present for Ransom's 2019 Site reconnaissance, overall Site conditions had not changed.

5.2 General Site Setting

The Site is an industrial Site located in a mixed commercial and residential area of East Millinocket. The Site consists of several large brick and/or steel buildings, two storage silos, an aboveground bulk fuel storage tank, multiple smaller outbuildings and storage buildings, parking areas, driveways/roads, a former salvage area, and a large open space previously used as a wood lot. Please refer to Figure 2 and Figure 3 for Site location details and Appendix A for a photograph log of Ransom's Site observations. For the purpose of this Phase I ESA, the Site was divided into seven Study Areas as described below. Figure 2 shows the seven Study Areas on the Site Plan. Observations made in each Study Area during Ransom's Site reconnaissance are described in the following sections.

5.2.1 Hazardous Substances and Petroleum Products

Several large capacity tanks (greater than 500 gallons) of various hazardous materials used for fiber recycling including sulfuric acid, sodium silicate, non-surfactant material, secondary polymers, and sludge polymers were observed in the chemical storage plant. One approximately 1,000-gallon sulfuric acid AST was observed in the old water treatment plant building. The majority of these ASTs appeared to be empty and situated within secondary containment.

Numerous containers of various substances were observed throughout the Site buildings. The containers were generally observed to be a volume of 1 gallon or less and were predominantly found in the vicinity of the laboratories in the steam plant and old water treatment building. The containers were not properly stored and were generally not in good condition.

The hydrant house in Study Area 4 (Fuel Storage Area) was also labelled the "Foam House" as it was once the control/storage building for the fire-protection foam system installed around the large ASTs.

5.2.2 Storage Tanks

Underground Storage Tanks

Ransom observed evidence of vent/fill pipes and an existing gasoline dispenser in the vicinity of the previously identified UST to the east of the former paint shop in Study Area 3 during our reconnaissance. Please also refer to Section 4.3 for additional details regarding information previously identified in relation to this UST.

Aboveground Storage Tanks

Within Study Area 1, several ASTs were observed. One approximately 6,000-gallon fuel oil AST was observed in the vicinity of the biomass boiler. Due to a layer of snow and ice beneath the tanks, it was difficult to determine if staining was present on the concrete floor beneath the AST. A faint petroleum odor was noted in the vicinity of this AST at the time of the reconnaissance. One approximately 3,000-gallon diesel AST was observed in a secondary containment structure attached to the remaining portion of the grinder building. De-minimis staining was observed beneath the AST and a faint petroleum odor was noted in the vicinity of this AST at the time of the reconnaissance.

In Study Area 4, the 750,000-gallon out-of-service fuel oil AST and approximate 5,000-gallon overflow AST remain on Site; Ransom also observed the former location of the 1,700,000-gallon former fuel oil AST in this Study Area, as well. Staining and oil splatter was observed on steel I-beams and associated product lines coming from the larger 750,000-gallon AST. Staining on the surface below was not observable due to the presence of snow, staining was noted during the April 2019 Site reconnaissance.

5.2.3 Odors

Petroleum odors were noted within the vicinity of the fuel oil ASTs within Study Areas 1 and 4 as described above. A chemical odor synonymous with acidic and caustic substances was noted within the chemical storage plant within Study Area 5. The odor of hydraulic fluid was noted on the interior and exterior of the slasher house and slasher deck within Study Area 6. Similar to what was observed during the April 2019 Site reconnaissance, the hydraulic equipment associated with the former slasher had been removed in carless manner and the hydraulic fluid associated with this equipment was noted to be on the floors, walls and ground surface on the interior and exterior surface.

5.2.4 Pools of Liquid

A layer of hydraulic oil (less than 6 inches deep) was observed within the secondary containment of the hydraulic equipment within the slasher house and slasher deck within Study Area 6. Standing water and/or ice was observed in many areas on the concrete slab foundations of the Site buildings, a slight sheen was noted in areas of hydraulic equipment or containers of HSP such as drums.

5.2.5 Drums

Ransom observed several drums at the Site during our reconnaissance. Most of the drums were being used for trash storage and did not contain HSP. Three, 55-gallon streel drums within the A-frame building were observed to contain lubricating oil. Staining was noted on the ground below these drums. One drum, containing an unknown viscous liquid was observed within the recycle fiber warehouse. Staining was not noted in the vicinity of this drum. Two drums in the southwest corner of the old boiler house were marked "check for PCBs" with no other indicator of contents or volume inside.

5.2.6 Unidentified Substance Containers

Several unidentified substance containers were identified throughout the Site including the 55-gallon drum within the recycle fiber warehouse as described above, chemical storage totes in the Fuel Storage Area (Study Area 4) containing what appears to be oil drained from equipment or other supply lines. Trash cans containing what appeared to be oil were observed in the old boiler house building, one trash can appeared to have leaked or spilled some of its contents onto the nearby floor. In addition, several small volume (less than 1-gallon) oil and chemical containers were observed in buildings throughout the Site.

5.2.7 Polychlorinated Biphenyls

Transformers

The Site has a known history of transformers releasing mineral oil dielectric fluid (MODF) at the Site. The details of these releases are discussed in section 4.3 of this report and the areas of these PCB releases are depicted in Figure 3. Electrical equipment, including large transformers, was observed in several locations within Study Areas 1 and 3 during our reconnaissance, particularly to the north of the biomass boiler building, west of the steam plant, on the second floor of the steam plant, and next to the Weldon building on the southern portion of Study Area 3. Pole mounted transformers were observed on Site, and one transformer was observed mounted to the side of the hydrant house in Study Area 4. Only the hydrant house transformer showed signs of damage indicative of a potential historic release.

Other

Potentially PCB-containing fluorescent light ballasts were observed within the recycle fiber warehouse (Study Area 5) and the No. 1-4 finishing building (Study Area 2) stockpiled for off-Site disposal.

5.3 Interior Observations

5.3.1 Heating/Cooling

The Site buildings were not heated at the time of the Site reconnaissance. The Site buildings which were previously heated appeared to have previously been heated by electrical or oil-fired heat. The larger boiler buildings did not have a system for heating the building, but rather relied on the secondary heat from the operating boilers to heat the building.

5.3.2 Stains or Corrosion

Several obvious stains, due to HSP, were observed during Ransom's reconnaissance in the Site buildings. Ransom observed extensive staining in the vicinity of the larger AST between the old water treatment plant and old boiler house within Study Area 1, on the exterior of the remaining portion of the Number 5 and 6 paper machine building in Study Area 2, within the oil pump house building in Study Area 4, and in the vicinity of the hydraulic lines at the slasher house and slasher deck in Study Area 6.

5.3.3 Drains and Sumps

Floor drains and sumps were observed in all Site buildings. Floor drains within the Site buildings reportedly carry collected liquids and sediments to the wastewater treatment plant adjacent to the Site. Within the wood room in Study Area 6 (Wood Lot Area), a sheen of suspected hydraulic oil was previously observed on the water surface in the vicinity of the basement floor drains. These areas were observed to be frozen during the current reconnaissance.

5.3.4 Other Hazardous Building Materials

As discussed in section 3.8 of this report, Ransom completed a supplemental HBMI for the Site in 2019. The HBMI was limited to the bark boiler building, former steam plant, old boiler house, and water treatment plant (buildings 25, 26, 39 and 40 on Figure 3) and was performed as a supplemental HBMI to the asbestos renovation/demolition impact survey performed by Environmental Management, Inc. of Brunswick Maine in March of 2015.

The HBMI concluded that large quantities of ACM exist within the Site buildings assessed, and should be abated and managed appropriately during any future demolition work. LBP coated surfaces were also identified within the Site buildings and if future demolition was to occur, these surfaces coated with LBP should be handled in accordance with all applicable OSHA guidelines. PCBs were not found to be present at concentrations that would be considered "unauthorized use" meaning concentrations greater than 50 parts per million (ppm) PCBs and remedial action regarding the presence of PCBs within building materials at these Site buildings is not required.

Universal waste items including fluorescent bulbs, high-intensity discharge lamps, electronic ballasts, batteries, refrigerants compressors, and other items that may contain mercury, PCBs, and heavy metals were found to be present within these Site buildings. These universal waste items should be removed from these building for proper off-site disposal prior to any building demolition activities.

The Site conditions during the 2019 HBMI were similar to the conditions observed on January 15, 2020 and the other hazardous building materials described are still present at the Site.

5.4 Exterior Observations

5.4.1 Pits, Ponds or Lagoons

A concrete retention pond was observed adjacent to the overflow AST in Study Area 4. The overflow AST is reportedly used to decant water from No. 6 oil. The water is then drained into the concrete pond which discharges to the wastewater treatment plant located to the east of the Site. Due to the presence of snow cover, the concrete pond could not be observed in its entirety.

5.4.2 Stained Soil or Pavement

Due to the presence of snow cover, stained soil or pavement could not be observed during the current reconnaissance. Conditions during this Site reconnaissance appeared to be similar to what was observed in April 2019. As such, the stained soil and pavement at the Site is considered to remain and consists of stained soil in Study Area 4 (Fuel Storage Area) in the vicinity of the fuel unloading equipment. Significant black staining was previously observed on the ground surfaces in this area. Additionally, stained soil was observed in the immediate vicinity of the hydraulic lines associated with the slasher deck and slasher house in Study Area 6. Based on the remaining equipment in the slasher control building, the staining observed on the wood chip covered ground surface is suspected to be hydraulic oil. A sheen from suspected transformer oil was previously observed within the containment area of the former transformer bank in Study Area 3 (Maintenance Area).

5.4.3 Stressed Vegetation

Ransom did not observe stressed vegetation, indicative of an HSP release, at the Site, during our reconnaissance.

5.4.4 Solid Waste

Paper waste, trash, and building demolition debris were observed throughout the Site buildings. Information regarding prior waste disposal practices was not available.

5.4.5 Wastewater

The Site building is reportedly connected to the municipal sewer system. No strong, pungent, or noxious odors, indicative of a release of HSP, was noted in connection with drains or sinks inside the building during our reconnaissance.

5.4.6 Wells

As previously discussed, municipal water is currently available to the Site. Ransom observed groundwater monitoring wells at the Site related to the ongoing monitoring for PCBs. The locations of these wells are depicted on Figure 3.

5.4.7 Septic Systems

Neither septic systems nor cesspools were observed on the Site during the site reconnaissance.

5.4.8 Drains

Ransom observed several surface water drains (i.e., catch basins) at the Site. Catch basins at the Site reportedly drain to the adjoining river.

6.0 INTERVIEWS

Ransom interviewed the following entities/individuals in an effort to obtain information indicating potential *RECs* in connection with the Site.

6.1 Past and Present Site Owners

Representatives of Katahdin KI 50 LLC provided existing environmental reports for the Site.

6.2 Site Manager

No Site managers were present or available for interviews during the course of this Phase I ESA.

Mr. John Chaisson, a former Site Manager, was interviewed during the 2019 Phase I ESA. Information provided by Mr. Chaisson has been included in applicable sections of this report.

6.3 Site Occupants

The Site is currently vacant. Therefore, no Site occupants were interviewed during this Phase I ESA.

6.4 Fire Department

On January 23, 2020, Ransom interviewed the current and former East Millinocket Fire Chief, Chief Leslie Brown and Chief Robert Dewitt. The current and former fire chief informed Ransom that the fire department had responded to releases from the chemical building including acids and caustics. These releases were also documented by the MEDEP and are summarized in Section 4.2.1 above.

Ransom was also informed that underground water lines at the mill are made from asbestos Transite piping. When sections of water line were replaced, the old Transite water line was abandoned in place. These water lines are reportedly situated within the wood lot area but may also be preset within other areas of the Site.

The fire department was not aware of any releases of fuel oil from the two large ASTs within Study Area 4 but did confirm that the foam fire suppression system was regularly tested.

6.5 MEDEP

Ransom interviewed Mr. Christopher Redmond, Project Manager for the MEDEP's Brownfield Program. According to Mr. Redmond, no additional information had become available to the MEDEP since the time of Ransom's 2019 Phase I ESA.

6.6 Local Government Officials

Ransom interviewed Mrs. Margaret (Peggy) Daigle, Chairperson of the Board of Selectmen for East Millinocket. Information provide by Mrs. Daigle has been included throughout pertinent sections of this report.

6.7 Other

Mr. Morris Daigle, who was employed at the East Millinocket Mill for over 45 years was interviewed during the course of this Phase I ESA. Information provided by Mr. Morris has been included throughout pertinent sections of this report.

7.0 EVALUATION

7.1 Findings

The approximately 250-acre Site, identified on the Town of East Millinocket Assessor's Tax Map 2, as Lot 10 on Block 1, was developed with over 60 buildings (the "Site buildings") and constructed in several phases between 1906 and 1991. The Site buildings included several industrial buildings housing paper mill operations, smaller maintenance buildings, office buildings, warehouse buildings, train sheds, aboveground bulk fuel oil storage tanks, and former wood laydown areas associated with the former paper mill operations. Paper mill operations ceased in February 2014 and the Site is currently vacant. However, several buildings have been demolished by the current owners for equipment and building materials reclamation (e.g., scrap steel, wood, and brick). Remaining portions of the Site include paved driveways, overgrown vegetation, and limited landscaping. To facilitate the overall review of the large paper mill site and organization of this report, the property was divided into seven smaller Study Areas, Study Areas 1 through 7, identified as the Western Mill Area, Eastern Mill Area, Maintenance Area, Fuel Storage Area, Wood Lot Area, Recycling Area, and Western Property, respectively.

As part of this assessment of the Site, Environmental Data Resources, Inc. (EDR) and Ransom conducted an environmental database search. Ransom also reviewed the MEDEP online databases. The Site was identified on the MEDEP Sites List, Registered UST database, and the Hazardous and Oil Spill database. Historical spills noted at the Site ranged from less than a gallon to several hundred gallons of petroleum products, hydraulic oil, electrical transformer oil, and/or lubricating oil. Other properties identified on federal and state environmental databases within a one-mile radius of the Site are not anticipated to have impacted environmental conditions at the Site. This conclusion is based upon the locations of these properties, which are considered to be downgradient from the Site with respect to the inferred groundwater flow direction(s),or are located at distances that make it unlikely for these properties to have significantly impacted environmental conditions at the Site.

Numerous environmental reports were identified in the MEDEP files documenting previous response and investigation activities conducted at the Site from 1983 to 2019. According to the available information, the Site also came to the attention of the MEDEP and U.S. EPA, due to three reported historic PCB spills or releases. The first release was documented in 1970, when a transformer in the former chemi-groundwood building (Study Area 4) failed and 100 gallons of coolant fluid was released. Because the transformer was not in use at the time, the leak was never properly addressed. In 1981, it was further discovered that approximately 890 gallons had been released from this transformer in the years since the initial failure in 1970. A second release occurred in January 1978, when a snowplow accidentally struck a transformer, causing 600 gallons of PCB-containing fluid to be released. Sand was subsequently spread over the spill area at the time of the release, but the spill materials were not cleaned up until spring. The third release of approximately 150 gallons of PCB containing fluid was documented in May of 1981 near the Number 5 Paper Machine. Soil sampling subsequently conducted in 1985 showed PCB-impacted soils identified in each of the three identified spill areas.

In August of 1988, the Great Northern Paper Company entered into an agreement with the State of Maine, via Administrative Consent Agreement and Enforcement Order, regarding several hazardous waste storage violations and the previously identified PCB contamination in soil. The hazardous waste storage violations were related to storage practices, containment, record keeping, and training of personnel at the former drum storage area at the Site. The drum storage facility was closed (including excavation of approximately 400 cubic yards of soil) in 1989 by Great Northern Paper and a closure report was submitted to MEDEP, which documents those hazardous waste closure activities.

PCB-impacted soil was excavated in the vicinity of the Number 5 and Number 6 paper machines and beneath the former chemi-groundwood building and the excavations were backfilled with clean fill material, as further described in a 1991 Report of PCB Cleanup Activities and Groundwater Monitoring, prepared by Stone and Webster Engineering Corporation under the oversight of MEDEP and U.S. EPA. Requirements for cleanup and ongoing liability for PCB contamination in these areas of the Site were outlined in a Consent Agreement and Final Order issued by U.S. EPA to GNP in September 1991.

Previous environmental investigations conducted across the Site between 1991 and 2002 also identified metals, including arsenic, barium, cadmium, chromium, and lead in soil samples collected near the former maintenance garage. VOCs were detected in a soil sample collected near the former paint shop. Total petroleum hydrocarbons were detected in soil samples collected from the burn pit area and the bulk fuel off-loading area, and in a groundwater, sample collected near the paint shop.

In 2011, S.W. Cole conducted a Phase I ESA on behalf of Cate Street Capital, Inc. Upon evaluation of available information, S.W. Cole identified several RECs associated with the former industrial operations at the Site including petroleum impacted soil, a stormwater catch basin, which discharges to the nearby river, former petroleum storage tanks, a leachate transfer pipe running beneath the Site, and ongoing groundwater monitoring related to PCBs.

On behalf of MEDEP, TRC completed a Phase I ESA, Conceptual Site Model, and Data Gap Analysis for the Site in 2014. Similar to the previous findings, RECs identified by TRC included historical industrial Site operations, the existing gasoline UST at the Site, observed No. 6 oil releases in Study Area 4 (Fuel Unloading Area), observed hydraulic oil staining on the ground surface in the vicinity of the slasher control building, and the undocumented UST closures. Historical recognized environmental conditions (HRECs) identified by TRC included historical groundwater monitoring for PCBs, historical No. 6 fuel oil releases in Study Area 4, and historic off-Site releases of petroleum products.

TRC's 2014 Conceptual Site Model identified potential human receptors as current and future industrial workers, surrounding residents, and trespassers and potential environmental receptors as the Penobscot River, groundwater (as a discharge to a surface water body), and wildlife including aquatic species in the vicinity of the Site. Data gaps identified by TRC included the limited analytical and spatial scope for historic sampling at the Site related to the broad range of potential contaminants of concern (COCs) present at the Site during historic operations.

In June 2018, Tetra Tech (on behalf of Georgia-Pacific) prepared a technical memorandum summarizing PCB Assessment and Remediation at the East Millinocket Site. This summary was prompted by correspondence with MEDEP and U.S. EPA regarding the need for additional assessment and/or remediation of PCBs at the Site. Tetra Tech concluded that Georgia-Pacific had met its obligations, as specified under the 1991 Consent Agreement and Final Order, and that additional assessment and/or remediation was unnecessary as the Site was expected to remain an industrial property.

During Ransom's Site reconnaissance, the Site buildings were observed to be either demolished or in varying states of disrepair. Snow cover was present on the Site's exterior which limited physical observations of the Site grounds. Ransom was able to view the exterior of the Site during the April 2019 Phase I ESA Site reconnaissance. Site conditions during the January 2020 Site reconnaissance appeared to be similar in that the staining observed in 2019 is likely still present. Key observations made in each of the 7 study areas during the site reconnaissance are described below:

1. Study Area 1 – Western Mill Area: Various containers and buckets of HSP were observed within the Site buildings; drums with unknown quantities of liquid inside were observed in the southwest corner of the oil boiler house; several transformers and one petroleum aboveground storage tank (AST) were observed within the boiler buildings and around the exterior areas of these buildings; and floor drains with significant staining were observed in the Site buildings.

2. Study Area 2 – Eastern Mill Area: The former paper machine buildings have been demolished, but the materials remain on Site; signs were posted prohibiting excavation of soil in the known PCB remediation area; unidentified black staining, appearing to originate on the second floor of the former Number 5 and 6 finishing building, was observed on the exterior of this building and extended to the ground surface; and a drainage pad that drains to the adjoining wastewater treatment plant was observed, which is reportedly used for delivery of leachate from the nearby Dolby Landfill.

3. Study Area 3 – Maintenance Area: Evidence of a gasoline UST, including vent and fill pipes, as well as a dispenser was observed to the east of the paint shop; the maintenance garage has been demolished and building materials appear to have been removed from the Site; the training building was described as a temporary storage location for HSP being consolidated at the Site (unknown for what length of time).

4. Study Area 4 – Fuel Storage Area: One bulk fuel oil 750,000-gallon AST and one approximate 5,000-gallon overflow AST was observed, as well as the location of the previous 1,750,000-gallon fuel oil AST. Significant petroleum staining was observed in the vicinity of the fuel unloading area near the existing 750,000-gallon AST; significant oil staining was also observed in the oil pump house. A former transformer, which appeared to have been burnt and a sign labelling the building as "Foam House" were observed attached to the hydrant house. Several 250-gallon totes were observed with a black liquid inside, suspected to be oil. A concrete retention pond was observed adjacent to the overflow AST. The overflow AST is reportedly used to decant water from No. 6 oil. The water is then drained into the concrete pond which discharges to the wastewater treatment plant located to the east of the Site. Due to the presence of snow cover, the concrete pond could not be observed in its entirety.

5. Study Area 5 – Recycling Area: The fiber recycling plant has recently been demolition; several ASTs were observed in the chemical storage plant, including storage of sulfuric acid and polymers.

6. Study Area 6 – Wood Lot Area: During the April 2019 Site reconnaissance, significant staining, suspected to be hydraulic oil, was observed in the vicinity of the slasher control building; a limited sheen, suspected to be hydraulic oil, was observed on water surface in the floor drains in the basement of the wood room building; and limited fill debris was observed in the wood lots. While these conditions could not be readily observed during the January 2020 Site reconnaissance, they are expected to still be present at the Site.

7. Study Area 7 – Western Property: Significant solid waste debris was observed along the banks of Spencer Brook, and fill debris and signs of previous burning were observed in the far western clearing of the Site during the April 2019 Site reconnaissance. While

these conditions could not be readily observed during the January 2020 Site reconnaissance, they are expected to still be present at the Site.

7.2 Conclusions

Ransom has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard Practice E 1527-13 and U.S. EPA AAI (40 CFR Part 312) for the Site identified by the Town of East Millinocket Assessor's Office as Lot 10 on Block 1 on Tax Map 2, which corresponds to 50 Main Street, in the Town of East Millinocket, Penobscot County, Maine. Any exceptions to, or deletions from, this practice are described in Section 1.4 of this report. Based on the information obtained during this Phase I ESA, this assessment has revealed no evidence of *RECs* in connection with the Site, except for the following:

1. Historic paper mill operations occurred at the Site for over a century including the use, handling, and storage of many types of hazardous materials and petroleum products. Several spills have been recorded at the property, but other unknown and/or undocumented releases may also have occurred at the Site, potentially impacting subsurface conditions including soil, soil vapor, and/or groundwater.

2. During a Site reconnaissance visits in April 2019, staining suspected to be hydraulic oil was observed on the ground surface near the slasher control building and oil sheens were observed in the basement of the wood room building and containment area of the former transformer bank. Significant black staining was observed on and around the remaining portions of the former Number 5 and 6 paper machine building, fuel unloading equipment, and inside the oil pump house near the bulk fuel storage tanks. Each of these releases have the potential to impact soil and/or groundwater in the vicinity.

3. A 2,000-gallon gasoline UST, piping, and dispenser exist to the east of the paint shop. Previous investigations have shown impacts to soil and groundwater related to gasoline storage in this area.

4. Containers of various sizes and in various states of disrepair were observed in many of the Site buildings. Additionally, several large ASTs containing process polymers, acids, and chemicals were observed at the Site. The exact volume of chemical product remaining inside the containers could not be determined, but if significant product remains, these containers and ASTs represent a material threat of release, given the current condition of the Site buildings.

In accordance with the 1991 Consent Agreement and Final Order, the historic PCB spills and resulting PCB-contaminated soil and groundwater remaining at depth beneath clean surficial soil cover materials at the Site, constitutes a *CREC*. The remediation was completed under the oversight of MEDEP and U.S. EPA with the understanding the Site would continue to be used for industrial purposes. Should the proposed use change and/or the PCB-impacted areas are to be disturbed during future site redevelopment activities, additional assessment may be required. Currently, excavation of soil is prohibited within the PCB spill areas.

7.3 Opinions

Based on the findings of this assessment, it is Ransom's opinion that soil, groundwater, and soil vapor conditions have potentially been impacted by historic paper mill operations at the Site and that additional investigations and response action are warranted and recommended to address the above-stated RECs, further document Site conditions in relation to current regulatory clean up guidelines, and evaluate the suitability of the Site property for potential future redevelopment. It is also Ransom's opinion that additional investigation and/or remediation actions related to the historic PCB spills are not necessary at this time. However, if the Site is to be redeveloped in the future, the redevelopment plans should be evaluated, and additional investigation may be necessary with respect to potential changes in PCB exposure risks and receptors and/or if the covered and contained PCB-impacted areas are to be disturbed in the future.

8.0 RECOMMENDATIONS

Based on the information obtained during this assessment, it is apparent that soil, groundwater, and potentially soil vapor conditions have been adversely impacted by historic paper mill operations at the Site. Ransom recommends the following actions to address the remaining environmental concerns associated with the Site, and to protect human health and the environment:

1. Due to the presence of snow cover, Ransom was not able to directly observe the ground surface at the Site during the reconnaissance conducted during the current assessment. As such, Ransom recommends a supplemental Site reconnaissance be conducted following snow melt to visually inspect ground surface conditions for evidence of new or previously unknown releases of HSP.

2. Conduct a Phase II ESA, which would include targeted explorations to evaluate soil, groundwater, and/or soil vapor conditions at the Site in the areas of observed releases mentioned above and within areas of historic paper mill operations. The results of a Phase II ESA will assist in evaluating and documenting current Site conditions and to what extent, if any, the identified *RECs* have adversely impacted environmental conditions at the Site. Additionally, the recommended Phase II investigation will assist in evaluating potential risks to construction workers and potential costs related to managing contaminated soil and/or groundwater or implementing vapor mitigation measures for future building(s) at the Site. Please note that if U.S. EPA Brownfields funding is proposed to be utilized for conducting the recommended Phase II ESA, a Site-Specific Quality Assurance Project Plan (SSQAPP) will also need to be prepared and approved by the U.S. EPA and MEDEP, prior to conducting the Phase II ESA.

3. The 2,000-gallon gasoline UST and any accessible associated buried piping currently in-place at the Site should be removed by a MEDEP-approved contractor with oversight provided by a qualified environmental professional in accordance with the requirements of CMR Chapter 691.

4. Chemical containers and ASTs observed within the Site buildings should be properly consolidated and disposed and/or removed by a MEDEP-approved contractor.

5. In the event that the Site property is redeveloped in the future, an environmental media management plan should be developed to outline the necessary health and safety procedures, and appropriate soil and groundwater management strategies that will be required to protect human health and the environment.

Furthermore, certain ASTM non-scope considerations were also reviewed and identified in connection with the Site that represent potential business environmental risk. Ransom completed a supplemental HBMI for the Site in 2019. The HBMI took place within the bark boiler building, former steam plant, old boiler house, and water treatment plant (Buildings 25, 26, 39 and 40 on Figure 3) and was performed as a supplemental HBMI to the asbestos renovation/demolition impact survey performed by Environmental Management, Inc. of Brunswick Maine in March of 2015.

The HBMI concluded that large quantities of ACM still exist within the Site buildings and should be abated and managed appropriately during any future demolition work. LBP coated surfaces were also identified within the Site buildings and if future demolition was to occur, these surfaces coated with LBP

should be handled in accordance with all applicable OSHA guidelines. PCBs were not found to be present at concentrations that would be considered "unauthorized use" meaning concentrations greater than 50 parts per million (ppm) PCBs and remedial action regarding the presence of PCBs within building materials at these Site buildings is not required.

Universal waste items including fluorescent bulbs, high-intensity discharge lamps, electronic ballasts, batteries, refrigerants, compressors, and other items that may contain mercury, PCBs, and heavy metals were found to be present within these Site buildings. These universal waste items should be removed from these building for proper off-site disposal prior to any building demolition activities.

Additionally, based on an interview with the former East Millinocket Fire Chief, underground water lines at the mill are made from asbestos cement (or "Transite") piping. When sections of water line were replaced, the old Transite water line was abandoned in place. These water lines are reportedly situated mainly within the wood lot area but may also be preset within other areas of the Site. If Transite piping is encountered during redevelopment activities, it should be handled in accordance with applicable OSHA and MEDEP guidelines.

9.0 ADDITIONAL SERVICES AND NON-SCOPE CONSIDERATIONS

9.1 Additional Services

No additional services beyond the standard scope of services prescribed by ASTM E 1527-13 were requested by MEDEP or the Town East of Millinocket.

9.2 Non-Scope Considerations

The following environmental issues are outside the scope (non-scope considerations) of the standard practice defined by ASTM E 1527-13. This Phase I ESA does not identify or evaluate these non-scope considerations:

1. Asbestos-containing building materials;
2. PCBs in building materials
3. Radon;
4. Lead-based paint;
5. Lead in drinking water;
6. Wetlands;
7. Regulatory compliance;
8. Cultural and historical resources;
9. Industrial hygiene;
10. Health and safety;
11. Ecological resources;
12. Endangered species;
13. Indoor air quality;
14. High-voltage power lines;
15. Biological agents; and
16. Mold.
17. Emerging contaminants

10.0 REFERENCES

1. ASTM E 1527-13
2. Town of East Millinocket Municipal Offices
3. Oil Storage Tank Search & Operator Training Online Service
4. MEDEP Online Fortis Portal Records Review for Spill Files
5. Environmental Data Resources (EDR) Radius Map Report with GeoCheck, Aerial Photograph Report, Historical Topographic Map Report, City Directory Abstract, and Sanborn® Fire Insurance Map Report, April 2019.
6. EDR Radius Map Report, January 2020.
7. Surficial Geology of the Millinocket, 1º by 2º Quadrangle, Maine; Maine Geological Survey, Department of Conservation, 1987.
8. Reconnaissance Bedrock Geology of the Millinocket Quadrangle, Maine; Maine Geological Survey, Department of Conservation, 1981.
9. Interviews with Site owners, previous Site employees, previous Site managers and municipal employees.
10. Administrative Consent Agreement and Enforcement Order, Hazardous Waste Activities, Great Northern Paper Company, a division of Great Northern Nekoosa Corporation, Millinocket, Penobscot County, Maine, August 22, 1988;
11. Closure Report for the Drum Storage Facility at East Millinocket Mill, Great Northern Paper, Millinocket, Maine, prepared by Sevee & Mahar Engineers, Inc, December 1989;
12. Review Comments and Conditional Approval for the PCB Remediation Project, East Millinocket Mill, prepared by MEDEP, June 14, 1989;
13. Report of PCB Cleanup Activities and Groundwater Monitoring, East Millinocket Mill, prepared by Stone and Webster Engineering Corporation, March 1991;
14. Consent Agreement and Final Order, Great Northern Nekoosa Corporation, EPA Docket No. TSCA-I-87-1041, United States Environmental Protection Agency, September 27, 1991;
15. Environmental Audit of the Georgia-Pacific Property, Millinocket, Maine, prepared by Sirrine Environmental Consultants, December 1991;
16. Phase I Environmental Site Assessment, Great Northern Paper, Inc. Mill Properties, Millinocket and East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc. January 22, 2001;

17. Geology Report for the Mini Site Inspection of the Great Northern Paper Mill No. 2, East Millinocket, Maine, prepared by MEDEP, September 27, 2001;

18. Final Site Inspection Report for Great Northern Paper Mill No. 2, East Millinocket, Maine, prepared by MEDEP, July 18, 2002;

19. Voluntary Response Action Program, Great Northern Paper East Millinocket Mill, No Action Assurance Letter – Certificate of Completion, prepared by MEDEP, April 24, 2003;

20. Phase I Environmental Site Assessment, Katahdin Paper Mill – East, 50 Main Street, East Millinocket, Maine, prepared by S.W. Cole Engineering, Inc., August 26, 2011;

21. Phase I Environmental Site Assessment, Conceptual Site Model, and Data Gap Analysis, Great Northern Paper No. 2, 50 Main Street, East Millinocket, Maine, prepared by TRC Environmental Corporation, September 2014;

22. Data Review of the No. 5 Paper Machine Site at the East Millinocket Operations of Great Northern Paper Company, East Millinocket, Maine, prepared by Earthcon, August 2015;

23. 2015 Annual Report of Sampling and Testing, Post-Remediation Groundwater Monitoring Program, East Millinocket Operations of Great Northern Paper Company, prepared by Earthcon, December 2015; and

24. PCB Assessment and Remediation at the East Millinocket Site Memo, prepared by Tetra Tech, June 6, 2018.

25. Phase I Environmental Site Assessment, Great Northern Paper – East Millinocket Mill, 50 Main Street, East Millinocket, Maine, prepared by Ransom Consulting, LLC, July 11, 2019.

26. Hazardous Building Materials Inventory, Steam Plant, Bark Boiler, Old Boiler House, and Water Treatment Building, Great Northern Paper East Mill, East Millinocket, Maine, prepared by Ransom Consulting, LLC, July 12, 2019.

11.0 SIGNATURE(S) OF ENVIRONMENTAL PROFESSIONAL(S)

Primary Assessor and Report Author

This Phase I ESA was conducted in accordance with the requirements of ASTM International E 1527-13 by the undersigned. Any work completed on this Phase I ESA by an individual who is not considered an environmental professional was completed under the supervision or responsible charge of the environmental professional(s) listed below.

_____
Christopher M. Veazie
Project Geologist / Primary Author

Environmental Professionals

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in §312.10 of 40 CFR Part 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Site. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

_____
Eriksen Phenix, C.G.
Project Manager

_____
Peter J. Sherr, P.E.
Principal / Senior Project Manager

APPENDIX A

Photograph Log

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

APPENDIX B

Supplemental Documentation

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

APPENDIX C

EDR Radius Map Report &
EDR City Directory Abstract

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

APPENDIX D

Historical Topographic Maps &
Sanborn® Fire Insurance Maps

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

APPENDIX E

Aerial Photographs

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

APPENDIX F

Qualifications

Phase I Environmental Site Assessment
Great Northern Paper – East Millinocket Mill
50 Main Street
East Millinocket, Maine

Attachment B
Technical Specifications

PART 1 – GENERAL

1.01 SUMMARY

A. The Contractor shall comply with all requirements of the Contract Documents. No work under this Section shall be performed without the presence of the Engineer.

B. The tank systems (i.e., No. 6 fuel oil and petroleum-related systems, etc.), contents, aboveground and belowground piping and appurtenances are to be removed and properly disposed of in their entirety, unless otherwise specified, in accordance with this Section and the Contract Documents.

C. The Contractor shall excavate, cut, remove, cap, and dispose of all underground piping as specified on demolition plans, the 750,000-gallon AST, 5,000-gallon overflow AST, concrete secondary containment structure, containment sumps, other AST appurtenances, rail car fuel unloading drip pans, and any soils saturated with oil, in accordance with this Section and the Contract Documents.

D. The Contractor shall assume that the tank systems contain 70,000 gallons of #6 fuel oil, and that the contents are in a highly viscous or solid state. In addition, the tank systems contain scaling, sludge and tank bottoms that must be removed, managed and disposed.

E. The Contractor shall assume that an additional 10,000 gallons of #6 fuel oil currently held in the concrete vault/AST (i.e., day tank) located in the existing former Biomass Building on site shall be removed and disposed of. No additional cleaning, tank removal, or demolition is required for the removal of fuel in this location.

F. The Contractor shall assume that the overflow AST and concrete secondary containment structure contain approximately 5,000 gallons of fluid containing water and #6 fuel oil.

G. The work under this section will take place alongside the general demolition and the excavation of soils incidental to the removal of the tank and associated structures. Refer to Sections 02300 (Earthwork) and 02060 (Demolition) for specifics. The actual extent of soil required to be removed beneath the tanks shall be determined by the Engineer in consultation with regulatory authorities. The Contractor shall assume a minimum estimated volume of 885 cubic yards of petroleum saturated soil required for off-site disposal. The Contractor is responsible for accounting for the time, expense, and effort associated with supporting this process and satisfying all related regulatory requirements.

H. Aboveground includes all items which are not buried underground or below concrete. All items exposed in tunnels, pits, sumps, vaults, etc. are aboveground for the purposes of this Contract. Appurtenances include any equipment, component, etc. connected to any part of a tank system, pump or piping, and any equipment, component, etc. which was in contact with, contained, measured, or conveyed any product.

I. Related Sections include the following:

1. Section 02060 – Demolition
2. Section 02300 – Earthwork

1.02 SCOPE OF WORK

The Contractor shall clean, remove, and dispose of the tank systems, including associated aboveground piping and appurtenances, in accordance with all applicable laws and regulations and the requirements of this Section and the Contract Documents. The Contractor shall also excavate, remove, and dispose of specified underground piping and appurtenances. Refer to Table 1 attached at the end of this Section for a list of known features associated with the AST and fuel oil. The Contractor shall remove and dispose of all waste, material, and liquid encountered during the Work in accordance with all applicable laws and regulations and the requirements of this Section and the Contract Documents.

Major elements of the Work include, but are not limited to, the following:

A. The Contractor shall submit the Tank Closure Plan specified in this Section. The plan shall be written to meet all the requirements of the Contract Documents. The plan must be submitted to and approved by the Engineer prior to start of on-site work of this Section. No claims of delay will be permitted due to the Contractor's failure to obtain approval of the plans by the Engineer.

B. The Contractor shall provide proper notification to all state and local agencies [i.e., the Maine Department of Environmental Protection (MDEP) and the Town of East Millinocket]. The Contractor shall obtain all necessary permits and approvals, and furnish all labor, materials, equipment, insurance, and incidentals required for the proper removal and disposal of the contents of the tank systems, cleaning, and removal of the tanks, and associated electrical, structural, process piping and equipment and appurtenances including, but not limited to, foundations, secondary containment structures, pumps, fill and vent lines, supply and return lines, manways, heating coils and heat exchangers, steel cylinders, gauges, etc. to complete the Work as specified herein. The Contractor shall arrange for any required inspections by MDEP (as applicable), and schedule inspections at times that are convenient for the Engineer. The Engineer must be notified prior to all notifications to government authorities and must be present for all inspections.

C. The Contractor shall pay all fees for licenses, insurance, permits, registration and approvals.

D. The Contractor shall perform all torching/cutting operations in accordance with the references in this Section as well as the requirements of the Occupational Safety and Health Administration (OSHA), the Health and Safety Plan (HASP), and all applicable laws and regulations.

E. It is anticipated that the Work will be performed using the existing accesses to the tank systems; however, the Contractor is responsible for creating alternate access for cleaning and closure if existing access is not sufficient.

F. The Contractor shall remove, characterize and properly dispose of all contents of the tank systems, underground and aboveground piping, and appurtenances: including, but not limited to, liquids, oil, sludge, scaling, tank bottoms, and wastewater generated during cleaning.

G. All wastes shall be transported under bills of lading or manifests approved and signed by the Owner. Hazardous wastes (if applicable) must be transported under a manifest, consistent with State of Maine regulations. The transporter of any potential hazardous waste generated by the Work of this Section must be a valid Transporter of Hazardous Waste in the State of Maine.

H. The Contractor shall clean and remove the tank systems and all associated aboveground piping and appurtenances. Underground piping shall be removed entirely, unless otherwise specified in the Contract Drawings, as part of the Work.

I. The Contractor shall assume that asbestos-containing materials (ACM) and lead-based paint (LBP) will be encountered during demolition. Asbestos-containing materials are assumed to be found within the existing buildings set for demolition and piping on site. The contractor shall assume that any paint encountered may be lead-based paint. The Contractor shall price accordingly for demolition involving these materials and take any and all safety precautions regarding them into account prior to and during the Work.

J. The Contractor shall be responsible for the safety of its operation, and for any damage that may result from the Contractor's work. Erect and properly maintain at all times, as required by the conditions and progress of the Work, proper safeguards for the protection of workers and the public and post danger warnings as required by law or otherwise required by the Contract Documents against hazards created by the Contractor's operation. Furnish, install and remove after completion of the work, signs, lights, barricades, fencing and other equipment for the safe execution of the Work.

K. The health and safety of the Contractor's employees shall be the sole responsibility of the Contractor during performance of the Work. All work must be completed in accordance with applicable federal, state, and local agency requirements and regulations.

L. After acceptance of the work by the Engineer, the Contractor shall fill all tank excavations to contract grade with fill as defined in Section 02300 (Earthwork). The Contractor shall restore any improvements (e.g., sidewalks, fencing, streetlights, landscaping, etc.) to remain which are damaged or removed during the Work.

1.03 ESTIMATED QUANTITIES

The Contractor shall include the costs for the following:

A. Cleaning and removal of all tank systems, fuel unloading drip pans, and all aboveground and underground piping and appurtenances associated with the tank systems.

B. Cutting and capping all underground piping to remain in place.

C. Characterization, removal, transportation and disposal of the contents of the tank systems (e.g., petroleum, contaminated water and sludge) including the 750,000-gallon AST, 5,000-gallon overflow AST, 10,000-gallon concrete vault/AST in the Biomass Building, and associated piping and appurtenances in accordance with the requirements of this Section and all applicable laws and regulations. For the purpose of the bid the Contractor shall assume that the combined volume in the tank systems and concrete vault is 85,000 gallons in aggregate of liquids, oil, oil-water mixtures, sludges and tank bottoms that must be removed, managed, and disposed. The stated volume does not include waste generated by the Work (e.g., wash water).

D. Testing, removal, transportation and disposal of all sludges, solids (e.g., scrapings), wash and rinse waters generated by the Work.

E. Testing, excavation, removal, transportation and disposal of any contaminated soils excavated incidental to the tank and appurtenance removal. The actual extent of soil required to be removed beneath the tank and appurtenances shall be determined by the Field Engineer in consultation with regulatory authorities. The Contractor shall assume a minimum estimated volume of 885 cubic yards (or 1,327.50 tons assuming 1.5 tons per cubic yard) of petroleum-saturated soil will be required for off-site disposal. The Contractor is responsible for accounting for the time, expense, and effort associated with supporting this process and satisfying all related regulatory requirements.

F. During removal of the tank system and appurtenances, unknown petroleum-contaminated material may be encountered. The Contractor shall assume that removal of minimal additional petroleum-contaminated material will be required. Removal, disposal, and remediation of contaminated soils and materials will be limited only to what is necessary for and incidental to the removal of the tank and appurtenances. Refer to Section 02300 (Earthwork) for specifics.

G. Any tree/vegetation clearing and removal incidental to and necessary for adequate access to site features. Vegetation clearing or removal shall be strictly limited to what is necessary to complete the Work.

H. Safety provisions and precautions necessary when encountering asbestos containing materials and lead based paint.

I. Removal, transportation, and disposal of all hazardous materials (as applicable).

J. All other work specified in this Section and in the Contract Documents.

1.04 QUALIFICATIONS

A. Contractor selection: Contractor selected to perform the work specified in the Contract Documents shall meet the following requirements.

Person, or persons, corporation, or proprietorship competent and experienced to perform work involving tank closure and the handling, disposal, transportation, and abatement of petroleum-contaminated material, regulated material, and/or hazardous waste. For the purposes of this Contract, the approved Contractor shall possess the following:

1. If applicable, a valid Chapter 853 waste transporter license to transport hazardous waste in the State of Maine.
2. Agreements with facilities to accept for disposal all waste generated by the Work of this Section.
3. Documentation that verifies adequate training of Contractor employees.
4. Proper equipment to execute the Work defined in this Contract.
5. Labor and materials to execute the Work under this Contract.
6. Experience directly related to the Work described in this Contract.

B. All laboratory analyses for disposal characterization of all materials shall be performed by an MDEP approved laboratory.

1.05 REFERENCE STANDARDS

A. The Contractor shall comply with all applicable federal, state, and local laws, regulations, standards, and codes, including, but not limited to, those listed below. The following are applicable references and regulations, incorporated herein by reference:

1. National Fire Protection Association (NFPA) Standard 327: Cleaning and Safeguarding Small Tanks and Containers
2. American Petroleum Institute (API), Bulletin No. 1604, Recommended Practice for Abandonment and Removal of Used Underground Storage Tanks
3. API, Bulletin No. 2015, Cleaning Petroleum Storage Tanks
4. API, RP 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents
5. API, RP 1604, Closure of Underground Petroleum Storage Tanks
6. API, Std 2015, Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning

7. American Society for Testing and Materials (ASTM), ASTM D 5088, Decontamination of Field Equipment Used at Non-radioactive Waste Sites
8. United States Environmental Protection Agency (USEPA), 40 CFR 280, Underground Storage Tanks: Technical Requirements Final Rule
9. United States (US) Department of Labor (DOL), Occupational Safety and Health Administration (OSHA), 29 CFR 1910, Occupational Safety and Health Standards
10. USEPA, Office of Emergency and Remedial Response, Standard Operating Safety Guides, PB92-983414
11. US DOL, OSHA 29 CFR 1910.146, Permit-Required Confined Spaces
12. US DOL, OSHA 29 CFR 1926 Safety and Health Regulations for Construction
13. Maine Department of Labor

1.06 SUBMITTALS

A. Pre-Construction Submittal

1. The Contractor shall submit to the Engineer a detailed Tank Closure Plan for review a minimum of fifteen (15) business days prior to the start of the Work of this Section. Contractor is required to obtain approval from the Engineer of the Tank Closure Plan prior to start of the Work of this Section. No claims of delay will be permitted due to the Contractor's failure to obtain approval from the Engineer of the Tank Closure Plan. The Tank Closure Plan must include, at a minimum, the following:
    a. Provide the name and address of the licensed transporters and disposal/recycling facility(ies) that will accept the tank systems contents and all other wastes to be removed from the Jobsite by the Contractor. Also submit written confirmation that these facilities will accept the waste/materials throughout the duration of the Contract. The Contractor is encouraged to recycle materials where feasible.
    b. Submit all pertinent information relating to the transport of materials specified herein, such as proof of permit, license or authorization to transport waste in the state of Maine.
    c. Obtain and submit all local, state, and federal permits and approvals required for the transport and disposal of all waste resulting from the performance of the Work of this Section.
    d. Description of approach for support of excavations and procedures for removing underground piping and all associated appurtenances.
    e. Spill prevention and response procedures.

f. Before transport to the disposal facility(ies), the Contractor is responsible for collection and analysis of disposal characterization samples in accordance with the approved and permitted disposal facility requirements. Disposal facility requirements shall be documented and submitted with the Tank Closure Plan. Requirements may include but are not limited to: number of samples, types of analyses, and methods of sampling.

g. The Contractor shall identify how the sample chain-of-custody will be maintained and recorded.

h. The Contractor shall describe how the Quality Assurance/Quality Control (QA/QC) of the Tank Closure Plan will be maintained and how it will be subject to audit by the Owner, the Engineer, and the Contractor.

i. Safety Data Sheets for any products proposed for use on site.

j. Documentation of qualifications requirements specified in Article 1.04 of this Section.

B. During Construction Submittals

1. Daily receipts and monthly tracking spreadsheet for regulated materials.

2. Monthly receipts and tracking spreadsheet for non-regulated waste and materials.

C. Post-Construction Submittals

Submit all documents identified in Article 3.07 of this Section, within twenty-one (21) calendar days after completion of the on-site work of this Section.

1.07 NOTIFICATION

A. The Contractor and/or the Owner shall notify MDEP prior to commencement of any tank removal work, obtain all required permits and approvals, and complete any and all required pre-construction meetings and site inspections. The Contractor shall notify the aforementioned parties in writing on prescribed forms approved and signed by the Owner.

B. The Contractor shall notify all utilities prior to the Work and arrange for mark-outs of underground utilities in accordance with all applicable local, state and federal regulations. The Contractor is solely responsible for identifying utilities which will be adjacent to and in the locations of the Work.

1.08 EXISTING CONDITIONS

A. The Contractor may visit the project site prior to bidding. The Contractor shall notify the Owner and Engineer prior to visiting the site. The Contractor shall document all conditions that exist prior to commencement of the Work.

B. The Contractor is advised that existing subsurface conditions may not be clearly known and that he shall proceed with caution and extreme care in all phases of the Work.

C. Existing conditions are reflected to the best of the Owner's knowledge. Should conditions be encountered which are not as indicated, modifications to the Work shall be made as required at no additional expense to the Owner.

1.09 CORRECTION OF DAMAGE TO PROPERTY

A. Contractor is responsible for site security during business and non-business hours and shall consider any damage to the property not identified in the pre-job damage survey as having resulted from execution of this Contract and will correct at no additional expense to the Owner.

B. If the Contractor damages a utility, the Contractor shall repair all damage at no expense to the Owner. All damage shall be immediately reported to the Engineer.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.01 GENERAL

A. The Contractor shall have available at all times on site a site-specific Health and Safety Plan (HASP), prepared in accordance with the referenced OSHA standards and any additional safety requirements set forth by relevant specification sections. A Health Safety Officer (HSO) shall be identified in the HASP and shall be present at all times during the Work. The HSO shall test work areas for the presence of explosive, oxygen rich, oxygen deficient, and/or asphyxiating (i.e., confined space entry) conditions using portable combustible gas indicators (CGIs), photoionization detectors (PIDs) and percent oxygen indicators in accordance with the HASP. The HSO shall continuously monitor the atmosphere of the work site for the presence of dust and organic vapors. Flammable or combustible vapors are likely to be present in the work area. The concentration of vapors in the tank, the excavation, or the work area may reach flammable (explosive) range before venting is completed and a safe atmosphere is

reached. Therefore, precautions must be taken to: (a) eliminate all potential sources of ignition from the area (for example, smoking materials, open flame and spark-producing equipment, non-explosion-proof electrical and internal combustion equipment), (b) prevent the discharge of static electricity during venting of flammable vapors, (c) prevent the accumulation of vapors at ground level, and (d) use only intrinsically safe communication equipment in the construction zone. Refer to API Publication 2015 and Recommended Practice 2003 for general precautionary measures to follow during the vapor-freeing procedure. The Contractor shall implement preventive measures, if dust or organic vapors are produced during the performance of the Work. The Contractor shall properly calibrate, thoroughly check and maintain all instrumentation (CGIs, PIDs, and percent oxygen indicators) according to the manufacturers' instructions. Persons responsible for testing must be completely familiar with the use of the instrument and the interpretation of the instruments' readings. The above description is not a comprehensive description of potential hazards and required precautions.

B. The Contractor shall protect the work area with warning tape and install visible barricades around the work area to assure unauthorized personnel and other trades do not enter the work zone. Protection shall be maintained throughout the work of this Section.

C. The Contractor shall verify that all appropriate utilities are disconnected, locked out, and tagged prior to starting work on or near that utility.

D. The Contractor shall perform all site preparation, restoration, security and control including but not limited to temporary fencing, lighting, backfilling and shoring to protect adjacent structures, workers and the public. Maintain safe sidewall slopes or provide adequate shoring. Excavation shoring shall meet all applicable OSHA requirements (29 CFR 1926) and the requirements in Section 02300 (Earthwork).

E. The Contractor shall segregate non-hazardous excavated material and hazardous waste as directed by the Engineer.

F. The Contractor shall, as necessary, deploy sorbent pads, pillows, booms and blankets to contain liquids, and prevent surface water contamination, and migration of liquids from the work area into any drains, sumps, and the environment.

G. Contractor shall provide a surface impoundment area for on-site storage of petroleum-contaminated material as follows:

1. Construct a nominal curb of wood (12" high) or hay bales around the perimeter of the impoundment area.

2. Place 6-mil polyethylene sheet barrier to cover the impoundment area without seams. Secure polyethylene sheet to the perimeter curb.
3. Completely cover impounded stockpiled soils and materials with a heavy-duty tarp manufactured specifically for the intended purpose or 6-mil polyethylene sheeting and with sand bags.
4. When stored within the same impoundment area, soils and drums shall be separated from each other by an impervious barrier.
5. Remove daily, test, containerize, and properly transport and dispose off-site of all liquids, including stormwater, which collects in impoundment area, in accordance with applicable laws and regulations.

H. Dust and organic vapor shall be continuously monitored by the Contractor during all field work associated with this Section and corrective action shall be implemented by the Contractor in accordance with applicable regulations.

I. The Contractor shall make provisions for leaving the excavation(s) safely open for inspection as directed by the Engineer.

J. The Contractor shall obtain approval from the Engineer to proceed at all stages of the project as identified in the Project Specifications. The Contractor shall use an approved biodegradable cleaning solution (Contractor to submit descriptive manufacturer's literature, and Safety Data Sheets (SDS) sheets to the Engineer and obtain approval for the cleaning solution in advance - note that solutions containing chlorinated solvents or volatile organic compounds are not acceptable) and clean the interior and exterior surfaces of tank systems, piping, and appurtenances to remove all residual material and soil from the surfaces.

K. Cleaning of removed materials shall be done in an area specifically set up by the Contractor for that purpose, curbed, and lined with 6-mil polyethylene sheeting, to contain the used cleaning solution, including any overspray, and any contaminated debris removed during the cleaning process. The Contractor shall obtain the Engineer's approval prior to implementing the cleaning process.

L. Used cleaning solution and contaminated materials generated during the cleaning process shall be collected and containerized by the Contractor and disposed by the Contractor at an approved disposal facility. Prior to transportation for disposal, drums shall be labeled and stored as specified. All cleaning related materials and operations, and disposal of used cleaning solution and associated contaminated debris, shall be provided and performed at no additional cost to the Owner.

M. The Contractor shall provide the Engineer with a communication record that includes the name(s), phone number(s) and copies of correspondence with any MDEP and other

officials that were contacted or who visited the Jobsite. Contractor shall not communicate with government officials without explicit authorization of the Engineer in each instance.

3.02 PRE-CLOSURE ACTIVITIES

A. Sample and characterize the contents in the tanks in accordance with the approved disposal facility requirements. To avoid the staging of waste at the Jobsite, it is required that disposal facility samples be collected and analyzed prior to the cleaning of the tank systems.

B. The Contractor shall remove drop tubes and check valves from the tanks, if present. The Contractor shall drain and flush with water all piping and appurtenances back into the tanks.

C. The Contractor shall remove the entire contents from the tank systems, piping and appurtenances (e.g., petroleum, liquids, sludge, etc.) and convey it via a temporary closed system directly into a vacuum truck or into USDOT approved drums or containers. After filling the drums or containers, seal closed, identify contents and store in an area approved by the Engineer for no more than 10 calendar days.

1. Drums or containers (if used) shall be labeled as follows:
    a. Specific work site (e.g., Former Great Northern Paper Mill)
    b. Drum (container) number (in increasing sequence as filled)
    c. Contents (e.g., rinse water from tank systems cleaning)
    d. Date filled

2. The Contractor shall maintain a written inventory of drums and containers.

D. Contractor shall disconnect, clean, and remove all aboveground piping and appurtenances.

E. Dewater excavations as specified in Section 02300 (Earthwork).

3.03 TANK AND PIPING REMOVAL

A. The tank systems, aboveground and underground piping, and appurtenances shall be completely and entirely removed in accordance with all applicable local, state, and federal laws and regulations. Completely remove all aboveground support (e.g., cradles, stilts, saddles, racks, etc.), piping (e.g. fill, supply, vent, gauge, suction, return, etc.), and appurtenances (e.g., pumps, valves, monitoring devices, conduit, wire, etc.), anchoring devices.

B. The Contractor shall remove cover (e.g., steel plates, landscaping, pavement, etc.) materials to perform cleaning and removal in accordance with the requirements of this Section and Section 02300 (Earthwork) and the requirements of the Contract Documents.

C. The Contractor shall purge the tanks of vapors and oxygen through displacement by appropriate methods recognized by a national standards issuing organization (i.e., American Petroleum Institute or National Fire Protection Association).

D. The Contractor shall gain access to the interior of the tank through the chosen method (e.g., a cold cut with a pneumatic rivet-buster, or equivalent). In addition to other appropriate precautions any cuts shall be wetted with water to reduce the potential for sparks. The Contractor shall perform all torching/cutting operations in accordance with the references listed in this Section as well as OSHA and the HASP.

E. The Contractor shall plan accordingly for and control the release and migration of vapors and dust during activities. Comply with the provisions of the HASP and the other safety procedures, as applicable.

F. The Contractor shall clean the inside of the tank systems and associated piping and appurtenances in accordance with API Publication 2015 using high-pressure water rinse. Use as little water as possible for proper cleaning. Remove and containerize wash water, solids, liquids, and debris. After filling containers, seal the containers closed, mark and placard contents on the containers and place the containers in the impoundment area. The tanks, piping and appurtenances will be clean when all material has been removed.

G. The Contractor shall provide a gas free certificate for all tank systems and associated piping and appurtenances.

H. The Contractor shall clean and remove all tank systems, piping, and appurtenances associated with the aboveground tank systems, including, but not limited to, supply piping, return piping, petrometer, gauges, pumps, heat piping, remote fill piping, vent piping, vent risers, monitoring systems, probes, conduit, and wiring.

I. Tank, piping, and appurtenances shall be inspected for signs of corrosion, cracks, structural damage, or leakage. Tank inspections shall be documented in writing and by photographs, with particular emphasis on any evidence of corrosion, cracks, structural damage, or leakage. Submit photographs and documentation to the Engineer.

3.04 SAMPLING

A. The Contractor shall collect and analyze post-excavation soil and/or water samples after excavation of any petroleum-contaminated material. Post-excavation sampling will be required in accordance with MDEP protocols to be determined in the field by MDEP and/or the Engineer. The results of the post-excavation sampling shall be submitted to

the Engineer. The Contractor shall maintain excavations open for safe inspection until the Engineer authorizes closure of the excavation. All open excavations shall be properly barricaded in accordance with applicable regulations. No claims of delay will be permitted for maintaining excavation open until the Engineer's requirements are met. Prior to backfilling the excavation, the Engineer shall be notified and shall be given a minimum of two (2) working days' notice following receipt of post-excavation sampling results to inspect the excavation. Backfilling may only commence after authorization from the Engineer.

3.05 DISPOSAL OF CONTAMINATED MATERIALS

A. Characterize, remove, transport and dispose of tank and, as applicable, piping, pumps, and other appurtenances (e.g., anchoring straps, level monitoring and control equipment, transmitters, indicators, conduit, wiring, pump and equipment pads and supports) associated with the tank systems. The Contractor shall provide the Engineer with certification that all items removed were properly disposed at an approved and permitted disposal facility.

B. The waste generated as a result of the Work shall be sampled, analyzed and classified by the Contractor in accordance with the approved disposal facilities' requirements. Whenever possible, waste generated by the Work of this Section shall be characterized prior to loading so that staging trucks and containers at the Jobsite is not required. The Contractor shall provide the Engineer with two (2) copies of the analytical results and obtain approval of the proposed disposal facility prior to transporting to the approved disposal facility. Once classified and accepted by the approved facility in accordance with all federal, state and local laws and regulations, the Contractor shall provide the Engineer with two (2) copies of all waste manifests. The Contractor shall obtain all permits and approvals necessary to conform to laws and regulations. The Contractor shall identify, in writing, the facility(ies) at which all material will be disposed. After disposal the Contractor shall provide a certificate of disposal to the Engineer within 30 days of off-site shipment.

3.06 DECONTAMINATION OF EQUIPMENT AND MATERIALS

A. All decontamination procedures for equipment and materials shall conform to the requirements of applicable USEPA and MDEP regulations.

B. All recoverable equipment and materials, which have been in contact with petroleum shall be decontaminated prior to removal from the Jobsite. As used herein "recoverable" shall mean all items which are non-absorptive in nature and which can successfully be decontaminated. All items for which decontamination is difficult or uncertain shall be considered non-recoverable, as determined by the Engineer.

C. Construct a nominal curb and provide6-mil polyethylene sheeting of appropriate size under items being decontaminated to catch and hold rinse fluids and protect adjacent grade area. This barrier membrane and the rinse fluids shall be considered non-recoverable.

D. Decontaminate recoverable Contractor owned equipment and materials with pressurized steam. Do not utilize any detergent agents.

E. Deposit non-liquid non-recoverable materials into USDOT containers.

F. Mark and placard containerized materials and place in the Engineer-approved impoundment area. The waste shall be sampled, analyzed and classified by the Contractor in accordance with the approved disposal facilities' requirements. Once classified and accepted by the approved facility[ies] in accordance with all federal, state, and local laws and regulations, the Contractor shall provide the Engineer with two (2) copies of all manifests.

G. After filling drums and containers, store in approved area for no more than ten (10) calendar days.

3.07 CLOSE-OUT

A. At the direction of the Engineer and if applicable, the Contractor shall place backfill in excavation and compact in accordance with Section 02300 (Earthwork). Backfill material shall be as defined in Section 02300 (Earthwork). Documentation that the material is environmentally clean shall be provided by the Contractor prior to delivery to the Jobsite.

B. The Contractor shall restore to pre-existing or specified conditions, as directed by the Engineer, all areas which were damaged or removed during the work of this Section.

C. Upon completion of all work of this Section, the Contractor shall provide to the Engineer all documentation necessary to prepare a written Closure Report acceptable to MDEP. The documentation, provided by the Contractor, shall include, but not necessarily limited to:

1. Copies of waste bills of lading and manifests
2. Waste profiles
3. Daily logs
4. Description of tank contents and volume
5. Observed conditions of tank and piping
6. Sample results
7. Photographs

8. Truck weigh tickets
9. Disposal facility receipts
10. Description of tank dismantling and cleaning procedures
11. Copies of any communications with and submittals to regulatory agencies
12. Accurately record actual locations of capped utilities, subsurface obstructions, and other items pertinent to future development.

This documentation shall be submitted to the Engineer no later than 21 calendar days from completion of the on-site work of this Section.

D. Contractor shall acquire all permits and shall complete all manifests for signature by the Owner. The Contractor shall return all completed manifests to the Engineer.

3.08 PAYMENT

A. All labor, materials, incidentals and equipment shall be furnished and installed by the Contractor, and all waste shall be properly characterized and disposed of by the Contractor, for the Work under this Section and is included in the bid for this Contract. No additional payment shall be made to the Contractor for the Work specified in this Section.

B. In the event that the contents of the tank systems exceed 85,000 gallons in aggregate, the Contractor shall notify the Engineer. The Contractor shall proceed with the additional work only at the written direction of the Engineer.

C. Payment for the transportation and disposal of additional product, material and/or liquids described in Section 3.08(B) above shall be contingent upon the Engineer's receipt of manifests, original shipping documents (e.g., manifests and bills of lading), and original invoices.

END OF SECTION
*****

LIST OF SUBMITTALS

The Contractor shall provide the submittals listed below and in this Section.

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
Pre-Construction		
1. Tank Closure Plan		
2. Contractor Qualifications		
3. Copies of MDEP notifications		
4. SDSs for Cleaning Solutions		
During Construction		
1. Daily and Monthly Disposal Facility Receipts with tracking spreadsheets		
Post-Construction		
1. Waste Disposal and Project Documentation		

TABLE 1 – LIST OF KNOWN ABOVEGROUND STORAGE TANKS AND APPURTENANCES

Location	Material Description	Approximate Container Size (gallons)
750,000 Gallon AST	No. 6 Fuel Oil	70,000
Overflow AST and Concrete Secondary Containment Structure	No. 6 Fuel Oil Water	5,000
Biomass Building Concrete Vault (Day Tank)	No. 6 Fuel Oil	10,000

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PART 1 – GENERAL

1.01 SUMMARY

A. The Contractor shall comply with all requirements of the Contract Documents. No work under this Section shall be performed without the presence of the Engineer.

B. The pump house, hydrant house, decommissioned utilities, fuel unloading building, rail spur, rail car fuel unloading rack, specified fencing, specified metal stairs, piping support structure, and concrete retaining wall shall be demolished in accordance with this Section.

C. The work under this Section shall take place alongside the removal of the 750,000-gallon aboveground storage tank (AST), 5,000-gallon overflow AST, concrete secondary containment structure, underground piping, aboveground piping, fuel unloading drip pans, fuel spill containment sump, and associated features and appurtenances. Refer to Section 02115 (Closure and Removal of Storage Tank Systems) for specifics.

D. The work under this section will take place alongside the excavation of soils incidental to demolition and the removal of the AST. Refer to Section 02300 (Earthwork) for specifics. The actual extent of required work incidental to demolition shall be determined by the Field Engineer in consultation with regulatory authorities. The Contractor is responsible for accounting for the time, expense, and effort associated with supporting this process and satisfying all related regulatory requirements.

E. Related Sections include the following:

1. Section 02115 – Closure and Removal of Storage Tank Systems
2. Section 02300 – Earthwork

1.02 SCOPE OF WORK

The Contractor shall demolish and remove from the site all features planned for demolition that are not associated with the ASTs or fuel oil. General demolition as outlined in this Section will likely occur in tandem with the work of Section 02115 (Closure and Removal of Storage Tank Systems), due to the nature of the site and close proximity of features covered under both sections. The Contractor shall remove and dispose of all demolition debris and waste generated or encountered during the Work in accordance with all applicable laws and regulations and the requirements of this Section and the Contract Documents.

Major elements of the Work include, but are not limited to, the following:

A. The Contractor shall provide proper notification to all state and local agencies [i.e., the Maine Department of Environmental Protection (MDEP) and Town of East Millinocket]. The Contractor shall obtain all necessary permits and

approvals, and furnish all labor, materials, equipment, insurance, and incidentals required for the proper removal and disposal of the demolition debris and associated waste including, but not limited to, buildings and building foundations, fencing, rails and rail ties, building contents, exterior metal stairs, decommissioned utility lines and poles, and support structures (piping support, rail car fuel unloading rack, retaining wall, etc.). The Contractor shall arrange for any required inspections by MDEP (as applicable), and schedule inspections at times that are convenient for the Field Engineer. The Engineer must be notified prior to all notifications to government authorities and must be present for all inspections.

B. The Contractor shall pay all fees for licenses, insurance, permits, registration and approvals.

C. The Contractor shall perform all Work in accordance with the references in this Section as well as the requirements of Occupational Safety and Health Administration (OSHA), the Health and Safety Plan (HASP), and all applicable laws and regulations.

D. It is anticipated that the Work will be performed using the existing accesses to the site features; however, the Contractor is responsible for creating alternate access for demolition if existing access is not sufficient. The location of alternate access shall be coordinated with the Engineer and approved by the Owner.

E. The Contractor shall remove, characterize and properly dispose of all demolition debris and waste encountered during demolition.

F. Prior to demolition of the hydrant house, the Contractor shall remove and properly dispose of the transformer holding a fluid containing polychlorinated biphenyl compounds (PCBs). The Contractor shall arrange for a certified hazardous waste transporter to transport the transformer to an approved PCB disposal facility for draining and disposal in accordance with applicable regulations.

G. All wastes shall be transported under bills of lading or manifests approved and signed by the Owner and Engineer. Hazardous wastes (if applicable) must be transported under a manifest, consistent with State of Maine regulations. The transporter of any potential hazardous waste generated by the Work of this Section must be a valid Transporter of Hazardous Waste in the State of Maine.

H. The Contractor shall assume that asbestos-containing materials (ACM) and lead-based paint (LBP) will be encountered during demolition. Asbestos containing materials are assumed to be found within the existing buildings set for demolition and piping on site. The contractor shall assume that any paint encountered may be lead-based paint. The Contractor shall price accordingly for demolition involving these materials and take any and all safety precautions regarding them into account prior to and during the Work.

I. The Contractor shall properly transport and dispose of all rail ties associated with the section of rail tracks set for demolition.

J. The health and safety of the Contractor's employees shall be the sole responsibility of the Contractor during performance of the Work. All work must be completed in accordance with applicable federal, state, and local agency requirements and regulations.

1.03 ESTIMATED QUANTITIES

The Contractor shall include the costs for the following:

A. Demolition, transportation, and disposal of all materials and debris associated with the pump house, hydrant house, fuel unloading building, rail spurs, exterior staircases, rail car fuel unloading rack, fencing, decommissioned utility poles, decommissioned utility lines, concrete retaining wall, piping support structure, post indicator valves, and manholes planned for demolition.

B. Any tree/vegetation clearing and removal incidental to and necessary for adequate access to site features. Vegetation clearing or removal shall be strictly limited to what is necessary to complete the Work.

C. Safety provisions and precautions necessary when encountering asbestos-containing materials and lead-based paint.

D. Removal, transportation, and disposal of all hazardous materials.

E. All other work specified in this Section and in the Contract Documents.

1.04 QUALIFICATIONS

A. Contractor selection: Contractor selected to perform the work specified in the Contract Documents shall meet the following requirements.

Person, or persons, corporation, or proprietorship competent and experienced to perform work involving demolition, tank closure, and the handling, disposal, transportation, and abatement of petroleum-contaminated material, regulated material, and/or hazardous waste. For the purposes of this Contract, the approved Contractor shall possess the following:

1. If applicable, a valid Chapter 853 waste transporter license to transport hazardous waste in the State of Maine.
2. Agreements with facilities to accept for disposal all waste generated by the Work of this Section.
3. Documentation that verifies adequate training of Contractor employees.

4. Proper equipment to execute the Work defined in this Contract.
5. Labor and materials to execute the Work under this Contract.
6. Experience directly related to the Work described in this Contract.

1.05 REFERENCE STANDARDS

A. The Contractor shall comply with all applicable federal, state, and local laws, regulations, standards, and codes, including, but not limited to, those listed below. The following are applicable references and regulations, incorporated herein by reference:

1. National Fire Protection Association (NFPA) Standard 327: Cleaning and Safeguarding Small Tanks and Containers
2. American Petroleum Institute (API), Bulletin No. 1604, Recommended Practice for Abandonment and Removal of Used Underground Storage Tanks
3. API, Bulletin No. 2015, Cleaning Petroleum Storage Tanks
4. API, RP 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents
5. API, RP 1604, Closure of Underground Petroleum Storage Tanks
6. API, Std 2015, Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning
7. American Society for Testing and Materials (ASTM), ASTM D 5088, Decontamination of Field Equipment Used at Non-radioactive Waste Sites
8. United States Environmental Protection Agency (USEPA), 40 CFR 280, Underground Storage Tanks: Technical Requirements Final Rule
9. United States Department of Labor (DOL), Occupational Safety and Health Administration (OSHA), 29 CFR 1910, Occupational Safety and Health Standards
10. USEPA, Office of Emergency and Remedial Response, Standard Operating Safety Guides, PB92-983414
11. United States DOL, OSHA 29 CFR 1910.146, Permit-Required Confined Spaces
12. United States DOL, OSHA 29 CFR 1926 Safety and Health Regulations for Construction
13. Maine Department of Labor

1.06 SUBMITTALS

A. During Construction Submittals

1. Daily receipts and monthly tracking spreadsheet for regulated materials.
2. Monthly receipts and tracking spreadsheet for non-regulated waste and materials.

B. Post-Construction Submittals

Submit all documents identified in Article 3.07 of this Section, within twenty-one (21) calendar days after completion of the on-site work of this Section.

1.07 NOTIFICATION

A. The Contractor shall notify all utilities prior to the Work and arrange for mark-outs of underground utilities in accordance with all applicable local, state and federal regulations. The Contractor is solely responsible for identifying utilities which will be adjacent to and in the locations of the Work.

B. The Contractor shall consult with the applicable electric utility company prior to conducting any work involving the decommissioned utility poles and lines to ensure safety.

1.08 EXISTING CONDITIONS

A. The Contractor may visit the project site prior to bidding. The Contractor shall notify the Owner and Engineer prior to visiting the site. The Contractor shall document all conditions that exist prior to commencement of the Work.

B. The Contractor is advised that existing subsurface conditions may not be clearly known and that he shall proceed with caution and extreme care in all phases of the Work.

C. Existing conditions are reflected to the best of the Owner's knowledge. Should conditions be encountered which are not as indicated, modifications to the Work shall be made as required at no additional expense to the Owner.

1.09 CORRECTION OF DAMAGE TO PROPERTY

A. Contractor is responsible for site security during business and non-business hours and shall consider any damage to the property not identified in the pre-job damage survey as having resulted from execution of this Contract and will correct at no additional expense to the Owner.

B. If the Contractor damages a utility, the Contractor shall repair all damage at no expense to the Owner. All damage shall be immediately reported to the Engineer.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.01 GENERAL

A. The Contractor shall have available at all times on site a site-specific Health and Safety Plan (HASP), prepared in accordance with the referenced OSHA standards and any additional safety requirements set forth by relevant specification sections. A Health Safety Officer (HSO) shall be identified in the HASP and shall be present at all times during the Work. Refer to Section 02115 (Closure and Removal of Storage Tank Systems) for further details on the responsibilities of the HSO.

B. The Contractor shall protect the work area with warning tape and install visible barricades or additional measures as necessary around the work area to assure unauthorized personnel and other trades do not enter the work zone. Protection shall be maintained throughout the work of this Section.

C. The Contractor shall verify that all appropriate utilities are disconnected, locked out, and tagged prior to starting work on or near that utility.

D. The Contractor shall perform all site preparation, restoration, security and control including but not limited to temporary fencing, lighting, backfilling and shoring to protect adjacent structures, workers and the public. Maintain safe sidewall slopes or provide adequate shoring. Excavation shoring shall meet all applicable OSHA requirements (29 CFR 1926) and the requirements in this Section.

E. If applicable, the Contractor shall segregate non-hazardous excavated material and hazardous waste as directed by the Field Engineer.

F. The Contractor shall, as necessary, deploy sorbent pads, pillows, booms and blankets to contain liquids, and prevent surface water contamination, and migration of liquids from the work area into any drains, sumps, and the environment.

G. Contractor shall provide a surface impoundment area for on-site storage of petroleum-contaminated material as follows:

1. Construct a nominal curb of wood (12” high) or hay bales around the perimeter of the impoundment area.
2. Place 6-mil polyethylene sheeting to cover the impoundment area without seams. Secure polyethylene sheet to the perimeter containment barrier.

3. Completely cover impounded stockpiled soils and materials with a heavy-duty tarp manufactured specifically for the intended purpose or 6-mil polyethylene sheeting and secure with sand bags.
4. When stored within the same impoundment area, soils and drums shall be separated from each other by an impervious barrier.
5. Remove daily, test, containerize, and properly transport and dispose off-site of all liquids, including stormwater, which collects in impoundment area, in accordance with applicable laws and regulations.

H. Dust and organic vapor shall be continuously monitored by the Contractor during all field work associated with this Section and corrective action shall be implemented by the Contractor in accordance with applicable regulations.

I. The Contractor shall make provisions for leaving the excavation(s) safely open for inspection as directed by the Engineer.

J. The Contractor shall obtain approval from the Engineer to proceed at all stages of the project as identified in the Project Specifications. The Contractor shall use an approved biodegradable cleaning solution (Contractor to submit descriptive manufacturer's literature, and Safety Data Sheets (SDS) sheets to the Engineer and obtain approval for the cleaning solution in advance - note that solutions containing chlorinated solvents or volatile organic compounds are not acceptable) and clean the interior and exterior surfaces of tank systems, piping, and appurtenances to remove all residual material and soil from the surfaces.

K. Cleaning of removed materials shall be done in an area specifically set up by the Contractor for that purpose, curbed, and lined with 6-mil polyethylene sheeting, to contain the used cleaning solution, including any overspray, and any contaminated debris removed during the cleaning process. The Contractor shall obtain the Engineer's approval prior to implementing the cleaning process.

L. Used cleaning solution and contaminated materials generated during the cleaning process shall be collected and containerized by the Contractor and disposed by the Contractor at an approved disposal facility. Prior to transportation for disposal, drums shall be labeled and stored as specified. All cleaning related materials and operations, and disposal of used cleaning solution and associated contaminated debris, shall be provided and performed at no additional cost to the Owner.

M. The Contractor shall provide the Engineer with a communication record that includes the name(s), phone number(s) and copies of correspondence with any MDEP and other officials that were contacted or who visited the Jobsite. Contractor shall not communicate with government officials without explicit authorization of the Engineer in each instance.

3.02 DEMOLITION AND REMOVAL OF WASTE

A. Demolition shall occur in sequence determined by the Contractor based on site conditions and constraints.

B. In areas requiring demolition that contain hazardous waste, all hazardous waste shall, if practicable, be removed and properly disposed of prior to demolition.

3.06 DECONTAMINATION OF EQUIPMENT AND MATERIALS

A. All decontamination procedures for equipment and materials shall conform to the requirements of applicable USEPA and MDEP regulations.

B. All recoverable equipment and materials, which have been in contact with hazardous waste shall be decontaminated prior to removal from the Jobsite. As used herein "recoverable" shall mean all items which are non-absorptive in nature and which can successfully be decontaminated. All items for which decontamination is difficult or uncertain shall be considered non-recoverable, as determined by the Engineer.

C. Construct a nominal curb and provide 6-mil polyethylene sheeting of appropriate size under items being decontaminated to catch and hold rinse fluids and protect adjacent grade area. This barrier membrane and the rinse fluids shall be considered non-recoverable.

D. Decontaminate recoverable Contractor owned equipment and materials with pressurized steam. Do not utilize any detergent agents.

E. Deposit non-liquid non-recoverable materials into USDOT containers.

F. Mark and placard containerized materials and place in the Engineer-approved impoundment area. The waste shall be sampled, analyzed and classified by the Contractor in accordance with the approved disposal facilities' requirements. Once classified and accepted by the approved facility[ies] in accordance with all federal, state, and local laws and regulations, the Contractor shall provide the Engineer with two (2) copies of all manifests.

G. After filling drums and containers, store in approved area for no more than ten (10) calendar days.

3.07 CLOSE-OUT

A. At the direction of the Engineer and if applicable, the Contractor shall place backfill in excavation areas (if applicable) and compact in accordance with Section 02300 (Earthwork). Backfill material shall be as defined in Section 02300 (Earthwork).

B. The Contractor shall restore to pre-existing or specified conditions, as directed by the Engineer, all areas which were damaged or removed during the work of this Section.

C. Upon completion of all work of this Section, the Contractor shall provide to the Engineer all documentation necessary to prepare a written Closure Report acceptable to MDEP. The documentation, provided by the Contractor, shall include, but not necessarily limited to:

1. Copies of waste bills of lading and manifests
2. Waste profiles
3. Daily logs
4. Description of tank contents and volume
5. Observed conditions of tank and piping
6. Sample results
7. Photographs
8. Truck weigh tickets
9. Disposal facility receipts
10. Description of tank dismantling and cleaning procedures
11. Copies of any communications with and submittals to regulatory agencies
12. Accurately record actual locations of capped utilities, subsurface obstructions, and other items pertinent to future development.

This documentation shall be submitted to the Engineer no later than 21 calendar days from completion of the on-site work of this Section.

D. Contractor shall acquire all permits and shall complete all manifests for signature by the Owner. The Contractor shall return all completed manifests to the Field Engineer.

3.08 PAYMENT

A. All labor, materials, incidentals and equipment shall be furnished and installed by the Contractor, and all waste shall be properly characterized and disposed of by the Contractor, for the Work under this Section and is included in the bid for this Contract. No additional payment shall be made to the Contractor for the Work specified in this Section.

END OF SECTION
*****

LIST OF SUBMITTALS

The Contractor shall provide the submittals listed below and in this Section.

SUBMITTAL	DATE SUBMITTED	DATE APPROVED
During Construction		
1. Daily and Monthly Disposal Facility Receipts with tracking spreadsheets	_____	_____
Post-Construction		
1. Waste Disposal and Project Documentation	_____	_____

NO TEXT THIS PAGE

P0ART 1 – GENERAL

1.01 SUMMARY

A. The Contractor shall comply with all requirements of the Contract Documents. No work under this Section shall be performed without the presence of the Engineer.

B. Earthwork covered under this Section will be limited only to what is specified by the Engineer or necessary to the removal of the aboveground storage tank (AST), associated features, and appurtenances. See Section 02115 (Closure and Removal of Storage Tank Systems) for specifics.

C. The Contractor shall assume that, at a minimum, some excavation of the earthen berm surrounding the AST will be necessary for access to the system and removal of buried piping. Additionally, the Contractor shall be prepared for excavation required for structure foundation removal and access to buried features and appurtenances. The actual extent of required removal for access and AST and appurtenance removal shall be determined in the field by the Contractor and Engineer in consultation with each other.

D. The Contractor shall backfill, grade, and stabilize all excavated areas following excavation and the removal of the AST, appurtenances, and specified structures. Material used for backfilling shall be previously excavated soils. In the event that the quantity of excavated soil is insufficient to backfill and restore excavated areas, common borrow shall be used for backfilling. In the event that there is an excess of excavated soils following completion of backfilling, they shall be stockpiled onsite as outlined on site plans or by the Engineer.

E. Work specified under this Section shall take place alongside the removal of the AST, associated features, and appurtenances. Refer to Section 02115 (Closure and Removal of Storage Tank Systems) for specifics.

F. Related Sections include the following:

1. Section 02060 – Demolition
2. Section 02115 – Closure and Removal of Storage Tank Systems

1.02 SCOPE OF WORK

The Contractor shall excavate the existing earthen berm as necessary for site access, in addition to all areas necessary for tank, piping, foundation, and appurtenance removal. Following excavation, the Contractor shall backfill and restore excavated areas to the grades specified on Project Plans, and stabilize any disturbed areas. The Contractor shall remove and dispose of all saturated soils and liquid encountered during the Work in accordance with all applicable laws and regulations and the requirements of this Section and the Contract Documents. For the purposes of the Work specified in this

Section, contaminated soils that are not saturated with petroleum are not considered waste and may be reused on site.

Major elements of the Work include, but are not limited to, the following:

A. Prior to the start of any excavation work, the Contractor shall consult the Engineer and propose a plan to access the site and site features. The Contractor shall outline the proposed method of access through the earthen berm surrounding the AST and the resulting estimated quantity of excavated soils. The Contractor shall consult with the Engineer if, following the start of excavation, it is determined that further excavation of the earthen berm is necessary.

B. The Contractor shall provide proper notification to all state and local agencies [i.e., Dig Safe] prior to the start of work. The Contractor shall obtain all necessary permits and approvals, and furnish all labor, materials, equipment, insurance, and incidentals required for the earthwork including, excavation, backfilling, and site restoration and stabilization.

C. The Contractor shall pay all fees for licenses, insurance, permits, registration and approvals.

D. It is anticipated that minimal excavation of the earthen berm and tank foundation areas will be required; however the Contractor (in consultation with the Engineer) is responsible for final determination of the quantity of soils to be excavated.

E. The Contractor shall remove, characterize and properly dispose of all waste products generated through dewatering and cleaning. Soil excavated during construction shall be managed in accordance with the current Environmental Media Management Plan (EMMP) for the former GNP Mill.

F. All wastes shall be transported under bills of lading or manifests approved and signed by the Owner. Hazardous wastes (if applicable) must be transported under a manifest, consistent with State of Maine regulations. The transporter of any potential hazardous waste generated by the Work of this Section must be a valid Transporter of Hazardous Waste in the State of Maine.

G. The Contractor shall dewater excavated areas as necessary and in accordance with all pertinent state regulations. The Contractor shall be prepared to dispose of an estimated 330 gallons of excavation dewatering liquid.

H. The Contractor shall be responsible for the safety of its operation, and for any damage that may result from the Contractor's work. Erect and properly maintain at all times, as required by the conditions and progress of the Work, proper safeguards for the protection of workers and the public and post danger warnings as required by law or otherwise required by the Contract Documents against hazards created by the Contractor's operation. Furnish, install and remove after completion of the work, signs, lights, barricades, fencing and other equipment for the safe execution of the Work.

I. The health and safety of the Contractor's employees shall be the sole responsibility of the Contractor during performance of the Work. The Contractor shall perform all work in accordance with the references in this Section, as well as the requirements of Occupational Safety and Health Administration (OSHA), the Health and Safety Plan (HASP), and all work must be completed in accordance with all applicable federal, state, and local agency requirements, laws, and regulations.

1.03 ESTIMATED QUANTITIES

The Contractor shall include the costs for the following:

A. Excavating all areas necessary for site access, AST and structure foundation removal, rail spur and loading rack removal, piping removal, appurtenance removal, and any other excavation incidental to these items. For the purposes of this work, all excavation conducted shall be considered incidental to the demolition and removal of site features.

B. Dewatering of all excavated areas where necessary.

C. Characterization, removal, transportation and disposal of any saturated soils and products of dewatering in accordance with the requirements of this Section and all applicable laws and regulations.

D. Any tree/vegetation clearing and removal incidental to and necessary for adequate access to site features. Vegetation clearing or removal shall be strictly limited to what is necessary to complete the Work.

E. Testing, removal, transportation and disposal of all wash and rinse waters generated by the Work.

F. Importing, placing, and compacting any fill required to restore excavated areas to the grades specified on plans, as well as the seed, topsoil, and/or other materials needed for proper stabilization.

G. All other work specified in this Section and in the Contract Documents.

1.04 QUALIFICATIONS

A. Contractor selection: Contractor selected to perform the work specified in the Contract Documents shall meet the following requirements.

Person, or persons, corporation, or proprietorship competent and experienced to perform work involving tank closure and the handling, disposal, transportation, and abatement of petroleum-contaminated material, regulated material, and/or hazardous waste. For the purposes of this Contract, the approved Contractor shall possess the following:

1. If applicable, a valid Chapter 853 waste transporter license to transport hazardous waste in the State of Maine.
2. Agreements with facilities to accept for disposal all waste generated by the Work of this Section.
3. Documentation that verifies adequate training of Contractor employees.
4. Proper equipment to execute the Work defined in this Contract.
5. Labor and materials to execute the Work under this Contract.
6. Experience directly related to the Work described in this Contract.

B. All laboratory analyses for disposal characterization of all materials shall be performed by an MDEP approved laboratory.

1.05 REFERENCE STANDARDS

A. The Contractor shall comply with all applicable federal, state, and local laws, regulations, standards, and codes, including, but not limited to, those listed below. The following are applicable references and regulations, incorporated herein by reference:

1. National Fire Protection Association (NFPA) Standard 327: Cleaning and Safeguarding Small Tanks and Containers
2. American Petroleum Institute (API), Bulletin No. 1604, Recommended Practice for Abandonment and Removal of Used Underground Storage Tanks
3. API, Bulletin No. 2015, Cleaning Petroleum Storage Tanks
4. API, RP 2003, Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents
5. API, RP 1604, Closure of Underground Petroleum Storage Tanks
6. API, Std 2015, Safe Entry and Cleaning of Petroleum Storage Tanks, Planning and Managing Tank Entry From Decommissioning Through Recommissioning
7. American Society for Testing and Materials (ASTM), ASTM D 5088, Decontamination of Field Equipment Used at Non-radioactive Waste Sites
8. United States Environmental Protection Agency (USEPA), 40 CFR 280, Underground Storage Tanks: Technical Requirements Final Rule
9. US Department of Labor (DOL), Occupational Safety and Health Administration (OSHA), 29 CFR 1910, Occupational Safety and Health Standards
10. USEPA, Office of Emergency and Remedial Response, Standard Operating Safety Guides, PB92-983414
11. US DOL, OSHA 29 CFR 1910.146, Permit-Required Confined Spaces
12. US DOL, OSHA 29 CFR 1926 Safety and Health Regulations for Construction
13. Maine Department of Labor

1.06 SUBMITTALS

A. Pre-Construction Submittal

1. The Contractor shall submit to the Engineer the chosen method for accessing the site and excavating the earthen berm, as well as anticipated quantities of excavated materials incidental to the work. The plan may be modified after the start of Work if necessary.

B. During Construction Submittals

1. Daily receipts and monthly tracking spreadsheet for regulated materials.

2. Monthly receipts and tracking spreadsheet for non-regulated waste and materials.

1.07 NOTIFICATION

A. The Contractor and/or the Owner shall notify Dig Safe and any concerned parties or agencies prior to the start of work for this Section.

B. The Contractor shall notify all utilities prior to the Work and arrange for mark-outs of underground utilities in accordance with all applicable local, state and federal regulations. The Contractor is solely responsible for identifying utilities which will be adjacent to and in the locations of the Work.

1.08 EXISTING CONDITIONS

A. The Contractor may visit the project site prior to bidding. The Contractor shall notify the Owner and Engineer prior to visiting the site. The Contractor shall document all conditions that exist prior to commencement of the Work.

B. The Contractor is advised that existing subsurface conditions may not be clearly known and that he shall proceed with caution and extreme care in all phases of the Work.

C. Existing conditions are reflected to the best of the Owner's knowledge. Should conditions be encountered which are not as indicated, modifications to the Work shall be made as required at no additional expense to the Owner.

1.09 CORRECTION OF DAMAGE TO PROPERTY

A. Contractor is responsible for site security during business and non-business hours and shall consider any damage to the property not identified in the pre-job damage survey as having resulted from execution of this Contract and will correct at no additional expense to the Owner.

B. If the Contractor damages a utility, the Contractor shall repair all damage at no expense to the Owner. All damage shall be immediately reported to the Engineer.

PART 2 – PRODUCTS

NOT USED

PART 3 – EXECUTION

3.01 GENERAL

A. The Contractor shall have available at all times on site a site-specific Health and Safety Plan (HASP), prepared in accordance with the referenced OSHA standards. A Health Safety Officer (HSO) shall be identified in the HASP and shall be present at all times during the Work. Refer to Section 02115 (Closure and Removal of Storage Tank Systems) for further details on the responsibilities of the HSO.

B. The Contractor shall protect the work area with warning tape and install visible barricades around the work area to assure unauthorized personnel and other trades do not enter the work zone. Where applicable, the Contractor may use existing fencing. Protection shall be maintained throughout the work of this Section.

C. The Contractor shall verify that all appropriate utilities are disconnected, locked out, and tagged prior to starting work on or near that utility.

D. The Contractor shall perform all site preparation, restoration, security and control including but not limited to temporary fencing, lighting, backfilling and shoring to protect adjacent structures, workers and the public. Maintain safe sidewall slopes or provide adequate shoring. Excavation shoring shall meet all applicable OSHA requirements (29 CFR 1926) and the requirements in this Section.

E. If applicable, the Contractor shall segregate non-hazardous excavated material and hazardous waste as directed by the Engineer.

F. The Contractor shall, as necessary, deploy sorbent pads, pillows, booms and blankets to contain liquids, and prevent surface water contamination, and migration of liquids from the work area into any drains, sumps, and the environment.

G. Contractor shall provide a surface impoundment area for on-site storage of petroleum-saturated material as follows:

1. Construct a nominal curb of wood (12” high) or hay bales around the perimeter of the impoundment area.
2. Place 6-mil polyethylene sheet barrier membrane to cover the impoundment area without seams. Secure polyethylene sheet to the perimeter barrier.

3. Completely cover impounded stockpiled soils and materials with a heavy-duty tarp manufactured specifically for the intended purpose and secure tarp with sand bags.

4. When stored within the same impoundment area, soils and drums shall be separated from each other by an impervious barrier.

5. Remove daily, test, containerize, and properly transport and dispose off-site of all liquids, including stormwater, which collects in impoundment area, in accordance with applicable laws and regulations.

H. Dust and organic vapor shall be continuously monitored by the Contractor during all field work associated with this Section and corrective action shall be implemented by the Contractor in accordance with applicable regulations.

I. The Contractor shall make provisions for leaving the excavation(s) safely open for inspection as directed by the Engineer.

J. The Contractor shall use an approved biodegradable cleaning solution (Contractor to submit descriptive manufacturer's literature, and Safety Data Sheets (SDS) sheets to the Engineer and obtain approval for the cleaning solution in advance - note that solutions containing chlorinated solvents or volatile organic compounds are not acceptable) to clean equipment used in excavation.

K. Used cleaning solution and petroleum-saturated materials generated during the cleaning process shall be collected and containerized by the Contractor and disposed by the Contractor at an Owner-approved disposal facility. Prior to transportation for disposal, drums shall be labeled and stored as specified. All cleaning related materials and operations, and disposal of used cleaning solution and associated contaminated debris, shall be provided and performed at no additional cost to the Owner.

L. The Contractor shall provide the Engineer with a communication record that includes the name(s), phone number(s) and copies of correspondence with any MDEP and other officials that were contacted or who visited the Jobsite. Contractor shall not communicate with government officials without explicit authorization of the Engineer in each instance.

3.02 EXCAVATION, BACKFILLING, AND SITE STABILIZATION

A. Excavation of the earthen berm and adjacent areas necessary for adequate site access shall occur prior to any tank removal activities.

B. The Contractor shall remove the tank systems and appurtenances and complete demolition in accordance with Sections 02115 (Closure and Removal of Storage Tank Systems) and 02060 (Demolition) prior to foundation area excavation.

C. Backfilling shall occur after excavation and removal of all relevant features has been completed and shall be done using excavated site soils and, where necessary to achieve the proposed grades and promote positive drainage, common borrow. The site shall be restored to the grades specified on project plans.

D. Site stabilization using the method specified on project plans shall be completed following all backfilling activities.

3.03 DEWATERING ACTIVITES

A. Dewatering activities shall take place as necessary according to a site-specific dewatering plan prepared by an engineer licensed in the State of Maine.

3.04 SAMPLING

A. The Contractor shall collect and analyze post-excavation soil and/or water samples after excavation of any petroleum-saturated material. Post-excavation sampling will be required in accordance with MDEP protocols to be determined in the field by MDEP and/or the Engineer. The results of the post-excavation sampling shall be submitted to the Engineer. The Contractor shall maintain excavations open for safe inspection until the Engineer authorizes closure of the excavation. All open excavations shall be properly barricaded in accordance with applicable regulations. No claims of delay will be permitted for maintaining excavation open until the Engineer's requirements are met. Prior to backfilling the excavation, the Engineer shall be notified and shall be given a minimum of two (2) working days' notice following receipt of post-excavation sampling results to inspect the excavation. Backfilling may only commence after authorization from the Engineer.

3.05 DISPOSAL OF CONTAMINATED MATERIALS

A. Characterize, remove, transport and dispose of saturated materials. The Contractor shall provide the Engineer with certification that all materials removed were properly disposed at an approved and permitted disposal facility.

B. The waste generated as a result of the Work shall be sampled, analyzed and classified by the Contractor in accordance with the approved disposal facilities' requirements. Whenever possible, waste generated by the Work of this Section shall be characterized prior to loading so that staging trucks and containers at the Jobsite is not required. The Contractor shall provide the Engineer with two (2) copies of the analytical results and obtain approval of the proposed disposal facility prior to transporting to the approved disposal facility. Once classified and accepted by the approved facility in accordance with all federal, state and local laws and regulations, the Contractor shall provide the Engineer with two (2) copies of all waste manifests. The Contractor shall obtain all permits and approvals necessary to conform to laws and regulations. The Contractor shall identify, in writing, the facility(ies) at which all material will be disposed. After

disposal the Contractor shall provide a certificate of disposal to the Engineer within 30 days of off-site shipment.

3.06 DECONTAMINATION OF EQUIPMENT AND MATERIALS

A. All decontamination procedures for equipment and materials shall conform to the requirements of applicable USEPA and MDEP regulations.

B. All recoverable equipment and materials, which have been in contact with petroleum shall be decontaminated prior to removal from the Jobsite. As used herein "recoverable" shall mean all items which are non-absorptive in nature and which can successfully be decontaminated. All items for which decontamination is difficult or uncertain shall be considered non-recoverable, as determined by the Engineer.

C. Construct a nominal curb and provide 6-mil polyethylene sheeting of appropriate size under items being decontaminated to catch and hold rinse fluids and protect adjacent grade area. This barrier membrane and the rinse fluids shall be considered non-recoverable.

D. Decontaminate recoverable Contractor owned equipment and materials with pressurized steam. Do not utilize any detergent agents.

E. Deposit non-liquid non-recoverable materials into USDOT containers.

F. Mark and placard containerized materials and place in the Engineer-approved impoundment area. The waste shall be sampled, analyzed and classified by the Contractor in accordance with the approved disposal facilities' requirements. Once classified and accepted by the approved facility[ies] in accordance with all federal, state, and local laws and regulations, the Contractor shall provide the Engineer with two (2) copies of all manifests.

G. After filling drums and containers, store in approved area for no more than ten (10) calendar days.

3.07 CLOSE-OUT

A. At the direction of the Engineer and if applicable, the Contractor shall place backfill in excavation and compact in accordance with this Section. Backfill material shall be as, as defined in this Section, existing excavated onsite soils, except in areas where the existing soil is insufficient to bring the excavated area to specified grades. Documentation that the material is environmentally clean shall be provided by the Contractor prior to delivery to the Jobsite.

B. The Contractor shall restore to pre-existing or specified conditions, as directed by the Engineer, all areas which were damaged or removed during the work of this Section.

D. Contractor shall acquire all permits and shall complete all manifests for signature by the Owner. The Contractor shall return all completed manifests to the Engineer.

3.08 PAYMENT

A. All labor, materials, incidentals and equipment shall be furnished and installed by the Contractor, and all waste shall be properly characterized and disposed of by the Contractor, for the Work under this Section and is included in the bid for this Contract. No additional payment shall be made to the Contractor for the Work specified in this Section.

B. In the event that additional fill is required, payment for the transportation or procurement of additional product or material shall be contingent upon the Engineer's receipt of manifests, original shipping documents (e.g., manifests and bills of lading), and original invoices.

END OF SECTION
*****

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Attachment C
Contract Drawings Titled, 'FY25 Brownfields Cleanup: Former Great Northern Paper Mill', prepared by TRC, dated July 2026

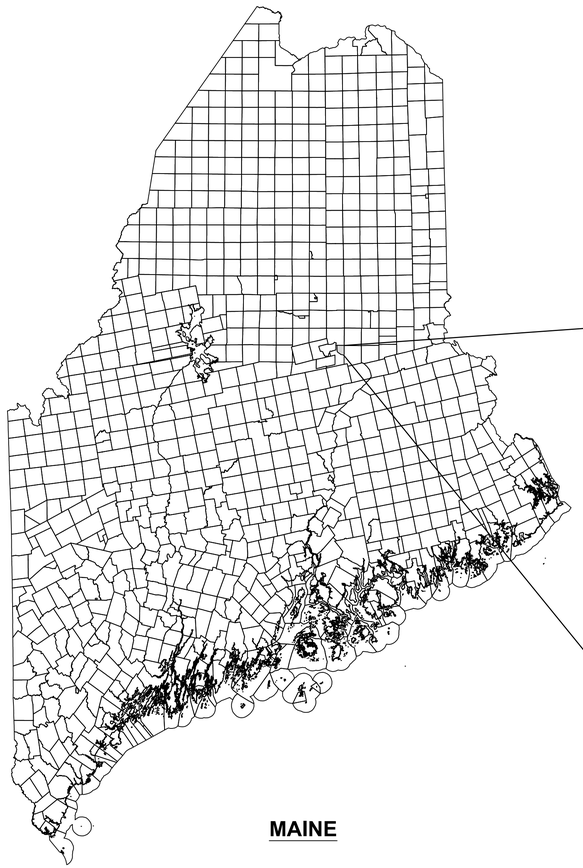
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
FUEL STORAGE AREA WEST
50 MAIN STREET, EAST MILLINOCKET, ME 04430

PREPARED FOR: **TOWN OF EAST MILLINOCKET**
53 MAIN STREET, EAST MILLINOCKET, MAINE 04430

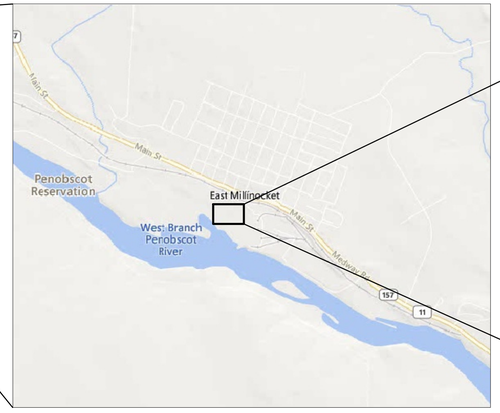
PREPARED BY: **TRC COMPANIES, INC.**
AUGUSTA, ME

DATE: **JULY 2026**

SHEET LIST TABLE	
SHEET NUMBER	**SHEET TITLE**
G1.00	TITLE SHEET
G1.01	GENERAL NOTES & LEGEND
C1.00	EXISTING CONDITIONS PLAN
C2.00	SITE DEMOLITION PLAN
C2.01	SITE RESTORATION PLAN
C3.00	CIVIL CONSTRUCTION DETAILS
C3.01	SITE PHOTOS
C4.00	EROSION & SEDIMENTATION CONTROL NOTES
C4.01	EROSION & SEDIMENTATION CONTROL DETAILS
C4.02	EROSION & SEDIMENTATION CONTROL PLAN



MAINE



PENOBSCOT COUNTY

SITE LOCATOR

WORKING COPY

TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

2534 — USR: sgordon — ATTACHED XREFS: Maine outline + Town boundaries — ATTACHED IMAGES:
DRAWING NAME: I:\AUGUSTA\FY25\Environmental\MRDEN\1 R&D Projects\East Millinocket MEBS6165-FY25 Brownfields Cleanup\02-Fuel Storage Area\15 DWG\ 6S6165_G-SHEETS.dwg — PLOT DATE: July 24, 2026 - 10:27AM — LAYOUT: G1.00
Version: 2017-10-21

GENERAL NOTES

1. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 MAINE STATE PLANE (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).
2. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
3. CONTRACTOR TO ENSURE ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL ORDINANCE, PROJECT PERMITS, STUDIES, SPECIFICATIONS, AND ANY APPLICABLE TECHNICAL REPORTS. WHERE INDICATED, STATE AND/OR LOCAL STANDARD SPECIFICATIONS SHALL APPLY.
4. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING STATE AND FEDERAL REQUIREMENTS WITH RESPECT TO STORMWATER DISCHARGE.
5. DIGSAFE AND OTHER NON-MEMBER UTILITIES SHALL BE NOTIFIED A MINIMUM OF 72-HOURS PRIOR TO COMMENCING ANY EXCAVATION. LOCATIONS OF UTILITIES ON SHEET C1.00 ARE APPROXIMATE AND HAVE NOT BEEN FIELD VERIFIED. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING, LOCATING, AND PROTECTING ALL EXISTING UTILITY LINES WITHIN OR ADJACENT TO THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
6. CONSTRUCTION SHALL NOT OCCUR IN ANY PUBLIC RIGHTS OF WAY, PUBLIC OR PRIVATE EASEMENTS, BEYOND THE LIMITS OF DISTURBANCE, OR OUTSIDE THE PROPERTY LIMITS WITHOUT NECESSARY PERMITS. ANY PUBLIC OR PRIVATE PROPERTY OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE COST OF THE CONTRACTOR.
7. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT OF WAY. OVERNIGHT PARKING OF CONSTRUCTION VEHICLES ON PRIVATE PROPERTY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. ALL PROPERTY CORNERS OR MONUMENTS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF MAINE.
9. CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS CONTROLLING THE POLLUTION OF THE ENVIRONMENT.
10. IT IS THE INTENT OF THESE PLANS THAT THE CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE THE IDENTIFIED PROJECT BOUNDARIES AND PERMITTED LIMITS OF DISTURBANCE.
11. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
12. THE CONTRACTOR SHALL SECURE PERMITS FROM THE STATE AND TOWN AS NECESSARY BEFORE DRIVING CONSTRUCTION EQUIPMENT OVER AND ACROSS STATE AND TOWN MAINTAINED ROADS.
13. ALL WORK IN THE PUBLIC RIGHTS OF WAY SHALL CONFORM WITH THE MAINE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS".

PROJECT STUDIES AND CONSULTATIONS

1. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.

SOIL MANAGEMENT NOTES

1. BASED ON THE NATURE OF THE SITE AND HISTORICAL USE OF THE PROPERTY, THE CONTRACTOR SHALL ANTICIPATE THAT PETROLEUM IMPACTED SOIL MAY BE ECNOUNTERED DURING EXCAVATION AND DECOMMISSIONING OF SUBSURFACE SITE FEATURES AND UTILITIES.
2. DURING EXCAVATION ACTIVITIES, THE ENGINEER WILL OBSERVE SOIL CONDITIONS FOR VISUAL AND/OR OLFACTORY INDICATIONS OF PETROLEUM IMPACTS. IF FREE PRODUCT OR SOILS SATURATED WITH PETROLEUM ARE IDENTIFIED, THE ENGINEER WILL DIRECT THE CONTRACTOR TO SEGREGATE AND MANAGE THIS MATERIAL SEPARETLY FOR ADDITIONAL SCREENING.
3. EXCAVATED SOIL IDENTIFIED TO BE SATURATED WITH PETROLEUM TO A DEGREE THAT IT IS NOT SUITABLE FOR RE-USE ONSITE SHALL BE TEMPORARILY STOCKPILED ON-SITE PENDING PROPER OFF-SITE REMOVAL AND DISPOSAL. EXCAVATED SOIL WILL BE STOCKPILED ATOP POLYETHYLENE SHEETING (AT LEAST 6-MIL GRADE) WITH APPROPRIATE EROSION CONTROLS IN PLACE, INCLUDING COVERING AND/OR STORMWATER RUNOFF DIVERSION. THE STOCKPILE WILL BE COVERED AT THE END OF EACH WORK SHIFT AND WHEN ACCESS IS NOT NECESSARY FOR EXTENDED PERIODS OF TIME.
4. THE TRANSFER OF SOIL FROM THE EXCAVATION TO THE STOCKPILE AREA WILL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT THE SPREAD OF CONTAMINATED MATERIALS.
5. THE STOCKPILED SOIL WILL BE STAGED IN A LOCATION PROXIMAL TO SITE ACCESS ROADS TO ALLOW FOR FUTURE REMOVAL VIA A SUITABLE TRANSPORT VEHICLE. SPECIFIC STOCKPILE LOCATION WILL DEPEND ON THE PHASE OF DEMOLITION AND DISMANTLING ACTIVITIES AND SITE CONDITIONS AT THE TIME OF THE REMOVAL EFFORT AND SHALL BE COORDINATED WITH THE OWNER AND ENGINEER.
6. IF SOIL IS BEING TRANSPORTED OFF-SITE, THE PROPER BILLS-OF-LADING AND/OR MANIFESTS, SOIL SHIPPING LOGS, OR OTHER WASTE TRANSPORTATION PAPERS SHALL ACCOMPANY THE SHIPMENT. ACCEPTANCE LETTERS AND DISPOSAL TICKETS FROM THE LANDFILL OR TREATMENT FACILITY WILL BE OBTAINED FOR ANY OFF-SITE SOIL DISPOSAL. DISPOSAL DOCUMENTATION WILL BE MAINTAINED IN THE PROJECT FILES. SOIL CHARACTERIZATION AND DISPOSAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND EXECUTED AT THE CONTRACTED UNIT RATE PRICE.
7. THE POTENTIAL CONTAMINANT OF CONCERN IN SOIL AND GROUNDWATER AT THE SITE IS PETROLEUM (FUEL OIL). AS SUCH, WORKERS SHOULD WEAR STANDARD PERSONAL PROTECTIVE EQUIPMENT TYPICAL FOR USE IN CONSTRUCTION, SUCH AS GLOVES, LONG PANTS, STURDY WORK BOOTS, AND EYE PROTECTION WHEN WORKING WITH IMPACTED SOIL OR GROUNDWATER. WORKERS SHOULD AVOID DERMAL CONTACT, INGESTION AND INHALATION OF DUST OR PARTICULATES DURING WORK, TO THE EXTENT PRACTICABLE. WHILE PERFORMING WORK IN THESE AREAS.
8. ALL EQUIPMENT THAT COMES IN CONTACT WITH POTENTIALLY IMPACTED SOIL OR GROUNDWATER NEEDS TO BE DECONTAMINATED AND VISUALLY FREE OF SOIL AND/OR GROUNDWATER BEFORE IT IS REMOVED FROM THE SITE. IF EQUIPMENT IS ALREADY VISUALLY FREE OF SOIL AND/OR GROUNDWATER, DECONTAMINATION MAY NOT BE NECESSARY. CLOTHES, RAGS, OR HEAVY-DUTY PAPER TOWELS USED IN DECONTAMINATION MAY BE DISPOSED OF IN THE REGULAR WASTE STREAM.
9. IN GENERAL, CONTAMINATION OF PERSONNEL SHALL BE PREVENTED THROUGH THE USE OF STANDARD PPE. AT MINIMUM, NITRILE GLOVES SHALL BE WORN DURING CONTACT WITH IMPACTED SOILS IN ADDITION TO OTHER LEVEL D PPE.
10. IF PETROLEUM-IMPACTED SOIL IS REMOVED DURING THE COMPLETION OF WORK, THE ENGINEER WILL DOCUMENT THESE ACTIVITIES IN A BRIEF REPORT CONTAINING A SUMMARY OF THE COMPLETED REMOVAL ACTIONS, DOCUMENTATION OF FIELD SCREENING RESULTS, AND TABULATED ANALYTICAL DATA FOR ALL CONFIRMATION LABORATORY SAMPLES AS PROVIDED BY THE CONTRACTOR.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING OVERHEAD LINES
- EXISTING TREE LINE
- EXISTING/ABANDONED RAIL LINE
- EXISTING FENCE
- EXISTING GUARD RAIL
- EXISTING STORMDRAIN
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING LEACHATE LINE
- APPROXIMATE FEMA FLOOD ZONE LIMIT
- USF TEST PIT LOCATION
- EXISTING UTILITY POLE
- EXISTING HYDRANT
- EXISTING BOLLARD
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING WELL
- SURVEY CONTROL POINT
- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE
- PROPOSED SEDIMENT BARRIER
- PROPOSED LIMITS OF DISTURBANCE
- FEATURE TO BE DEMOLISHED
- APPROXIMATE LOCATION OF UNDERGROUND PIPING/UTILITIES TO BE REMOVED
- ABOVEGROUND PIPING/UTILITIES TO BE REMOVED

SEAL:

NO.	BY	DATE	REVISION	APP'D.

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
GENERAL NOTES & LEGEND

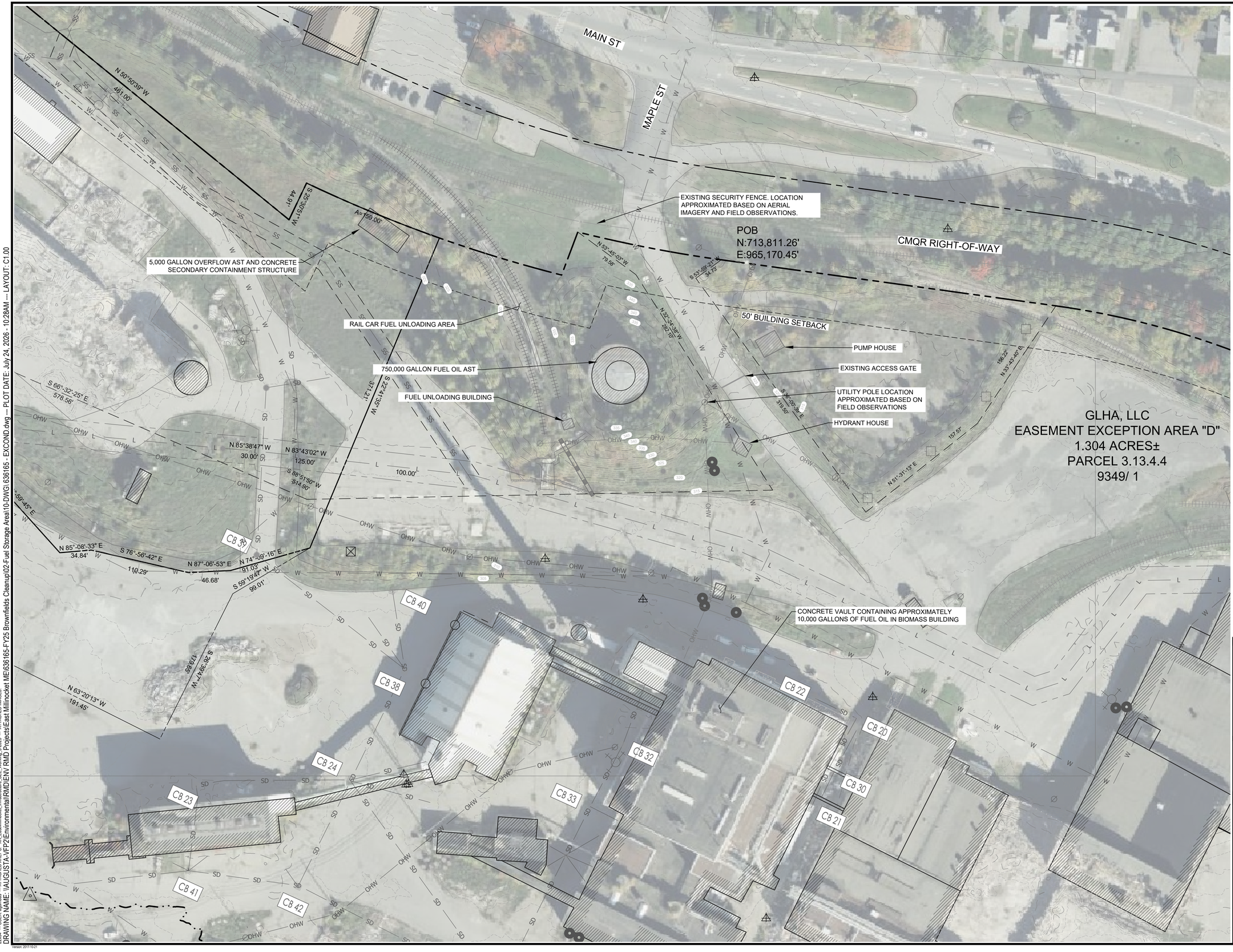
WORKING COPY

DRAWN BY:	AJG	PROJ. NO.:	636165.0000
CHECKED BY:	TND		
APPROVED BY:	TND		**G1.01**
DATE:	JULY 2026		

TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - G-SHEETS.dwg

Version: 2017-10-21
20:24 -- USER: gandrist -- ATTACHED XREFS: Maine outline+Town boundries -- ATTACHED IMAGES:
DRAWING NAME: \\AUGUSTA-V-FP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 -- PLOT DATE: July 24, 2026 - 10:27AM -- LAYOUT: G1.01



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
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PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

0 50 100 150 200
SCALE IN FEET

SEAL:

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
EXISTING CONDITIONS PLAN

WORKING COPY

DRAWN BY:	AJG	PROJ. NO.:	636165.0000
CHECKED BY:	TND		C1.00
APPROVED BY:	TND		
DATE:	JULY 2026		

TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
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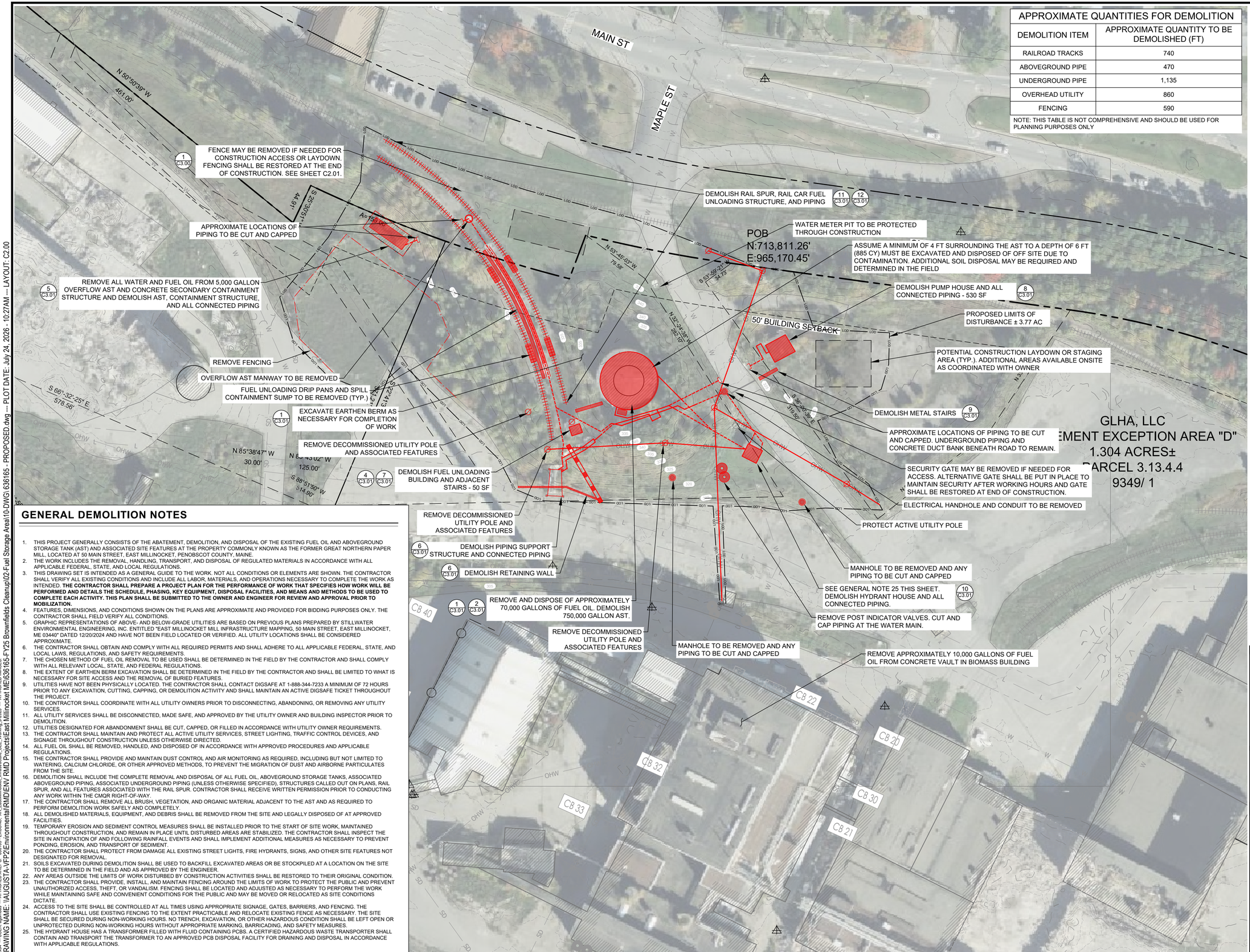
FILE NO.: 636165 - EXCOND.dwg

29:24 -- USER: gardnar -- ATTACHED XREFS: XR_EastMillinocket Infrastructure_BSE Works 3-2025 -- ATTACHED IMAGES:
DRAWING NAME: \\AUGUSTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - EXCOND.dwg -- PLOT DATE: July 24, 2026 - 10:28AM -- LAYOUT: C1.00
Version: 2017-10-21



APPROXIMATE QUANTITIES FOR DEMOLITION

DEMOLITION ITEM	APPROXIMATE QUANTITY TO BE DEMOLISHED (FT)
RAILROAD TRACKS	740
ABOVEGROUND PIPE	470
UNDERGROUND PIPE	1,135
OVERHEAD UTILITY	860
FENCING	590

NOTE: THIS TABLE IS NOT COMPREHENSIVE AND SHOULD BE USED FOR PLANNING PURPOSES ONLY

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
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- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING WELL
- SURVEY CONTROL POINT
- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE
- SF — PROPOSED SEDIMENT BARRIER
- LOD — PROPOSED LIMITS OF DISTURBANCE
- FEATURE TO BE DEMOLISHED
- APPROXIMATE LOCATION OF UNDERGROUND PIPING/UTILITIES TO BE REMOVED
- ABOVEGROUND PIPING/UTILITIES TO BE REMOVED

GENERAL DEMOLITION NOTES

1. THIS PROJECT GENERALLY CONSISTS OF THE ABATEMENT, DEMOLITION, AND DISPOSAL OF THE EXISTING FUEL OIL AND ABOVEGROUND STORAGE TANK (AST) AND ASSOCIATED SITE FEATURES AT THE PROPERTY COMMONLY KNOWN AS THE FORMER GREAT NORTHERN PAPER MILL, LOCATED AT 50 MAIN STREET, EAST MILLINOCKET, PENOBSCOT COUNTY, MAINE.
2. THE WORK INCLUDES THE REMOVAL, HANDLING, TRANSPORT, AND DISPOSAL OF REGULATED MATERIALS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
3. THIS DRAWING SET IS INTENDED AS A GENERAL GUIDE TO THE WORK. NOT ALL CONDITIONS OR ELEMENTS ARE SHOWN. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND INCLUDE ALL LABOR, MATERIALS, AND OPERATIONS NECESSARY TO COMPLETE THE WORK AS INTENDED. **THE CONTRACTOR SHALL PREPARE A PROJECT PLAN FOR THE PERFORMANCE OF WORK THAT SPECIFIES HOW WORK WILL BE PERFORMED AND DETAILS THE SCHEDULE, PHASING, KEY EQUIPMENT, DISPOSAL FACILITIES, AND MEANS AND METHODS TO BE USED TO COMPLETE EACH ACTIVITY. THIS PLAN SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL PRIOR TO MOBILIZATION.**
4. FEATURES, DIMENSIONS, AND CONDITIONS SHOWN ON THE PLANS ARE APPROXIMATE AND PROVIDED FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS.
5. GRAPHIC REPRESENTATIONS OF ABOVE- AND BELOW-GRADE UTILITIES ARE BASED ON PREVIOUS PLANS PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED "EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 03440" DATED 12/20/2024 AND HAVE NOT BEEN FIELD LOCATED OR VERIFIED. ALL UTILITY LOCATIONS SHALL BE CONSIDERED APPROXIMATE.
6. THE CONTRACTOR SHALL OBTAIN AND COMPLY WITH ALL REQUIRED PERMITS AND SHALL ADHERE TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND SAFETY REQUIREMENTS.
7. THE CHOSEN METHOD OF FUEL OIL REMOVAL TO BE USED SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND SHALL COMPLY WITH ALL RELEVANT LOCAL, STATE, AND FEDERAL REGULATIONS.
8. THE EXTENT OF EARTHEN BERM EXCAVATION SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR AND SHALL BE LIMITED TO WHAT IS NECESSARY FOR SITE ACCESS AND THE REMOVAL OF BURIED FEATURES.
9. UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. THE CONTRACTOR SHALL CONTACT DIGSAFE AT 1-888-344-7233 A MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION, CUTTING, CAPPING, OR DEMOLITION ACTIVITY AND SHALL MAINTAIN AN ACTIVE DIGSAFE TICKET THROUGHOUT THE PROJECT.
10. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS PRIOR TO DISCONNECTING, ABANDONING, OR REMOVING ANY UTILITY SERVICES.
11. ALL UTILITY SERVICES SHALL BE DISCONNECTED, MADE SAFE, AND APPROVED BY THE UTILITY OWNER AND BUILDING INSPECTOR PRIOR TO DEMOLITION.
12. UTILITIES DESIGNATED FOR ABANDONMENT SHALL BE CUT, CAPPED, OR FILLED IN ACCORDANCE WITH UTILITY OWNER REQUIREMENTS.
13. THE CONTRACTOR SHALL MAINTAIN AND PROTECT ALL ACTIVE UTILITY SERVICES, STREET LIGHTING, TRAFFIC CONTROL DEVICES, AND SIGNAGE THROUGHOUT CONSTRUCTION UNLESS OTHERWISE DIRECTED.
14. ALL FUEL OIL SHALL BE REMOVED, HANDLED, AND DISPOSED OF IN ACCORDANCE WITH APPROVED PROCEDURES AND APPLICABLE REGULATIONS.
15. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN DUST CONTROL AND AIR MONITORING AS REQUIRED, INCLUDING BUT NOT LIMITED TO WATERING, CALCIUM CHLORIDE, OR OTHER APPROVED METHODS, TO PREVENT THE MIGRATION OF DUST AND AIRBORNE PARTICULATES FROM THE SITE.
16. DEMOLITION SHALL INCLUDE THE COMPLETE REMOVAL AND DISPOSAL OF ALL FUEL OIL, ABOVEGROUND STORAGE TANKS, ASSOCIATED ABOVEGROUND PIPING, ASSOCIATED UNDERGROUND PIPING (UNLESS OTHERWISE SPECIFIED), STRUCTURES CALLED OUT ON PLANS, RAIL SPUR, AND ALL FEATURES ASSOCIATED WITH THE RAIL SPUR. CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION PRIOR TO CONDUCTING ANY WORK WITHIN THE CMQR RIGHT-OF-WAY.
17. THE CONTRACTOR SHALL REMOVE ALL BRUSH, VEGETATION, AND ORGANIC MATERIAL ADJACENT TO THE AST AND AS REQUIRED TO PERFORM DEMOLITION WORK SAFELY AND COMPLETELY.
18. ALL DEMOLISHED MATERIALS, EQUIPMENT, AND DEBRIS SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT APPROVED FACILITIES.
19. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF SITE WORK, MAINTAINED THROUGHOUT CONSTRUCTION, AND REMAIN IN PLACE UNTIL DISTURBED AREAS ARE STABILIZED. THE CONTRACTOR SHALL INSPECT THE SITE IN ANTICIPATION OF AND FOLLOWING RAINFALL EVENTS AND SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT PONDING, EROSION, AND TRANSPORT OF SEDIMENT.
20. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING STREET LIGHTS, FIRE HYDRANTS, SIGNS, AND OTHER SITE FEATURES NOT DESIGNATED FOR REMOVAL.
21. SOILS EXCAVATED DURING DEMOLITION SHALL BE USED TO BACKFILL EXCAVATED AREAS OR BE STOCKPILED AT A LOCATION ON THE SITE TO BE DETERMINED IN THE FIELD AND AS APPROVED BY THE ENGINEER.
22. ANY AREAS OUTSIDE THE LIMITS OF WORK DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.
23. THE CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN FENCING AROUND THE LIMITS OF WORK TO PROTECT THE PUBLIC AND PREVENT UNAUTHORIZED ACCESS, THEFT, OR VANDALISM. FENCING SHALL BE LOCATED AND ADJUSTED AS NECESSARY TO PERFORM THE WORK WHILE MAINTAINING SAFE AND CONVENIENT CONDITIONS FOR THE PUBLIC AND MAY BE MOVED OR RELOCATED AS SITE CONDITIONS DICTATE.
24. ACCESS TO THE SITE SHALL BE CONTROLLED AT ALL TIMES USING APPROPRIATE SIGNAGE, GATES, BARRIERS, AND FENCING. THE CONTRACTOR SHALL USE EXISTING FENCING TO THE EXTENT PRACTICABLE AND RELOCATE EXISTING FENCE AS NECESSARY. THE SITE SHALL BE SECURED DURING NON-WORKING HOURS. NO TRENCH, EXCAVATION, OR OTHER HAZARDOUS CONDITION SHALL BE LEFT OPEN OR UNPROTECTED DURING NON-WORKING HOURS WITHOUT APPROPRIATE MARKING, BARRICADING, AND SAFETY MEASURES.
25. THE HYDRANT HOUSE HAS A TRANSFORMER FILLED WITH FLUID CONTAINING PCBS. A CERTIFIED HAZARDOUS WASTE TRANSPORTER SHALL CONTAIN AND TRANSPORT THE TRANSFORMER TO AN APPROVED PCB DISPOSAL FACILITY FOR DRAINING AND DISPOSAL IN ACCORDANCE WITH APPLICABLE REGULATIONS.

PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED "*EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430*" DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

N

0 50 100 150 200
SCALE IN FEET

SEAL:

PROJECT: **TOWN OF EAST MILLINOCKET, MAINE**
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE: **SITE DEMOLITION PLAN**

WORKING COPY

DRAWN BY:	AJG	PROJ. NO.:	636165.0000
CHECKED BY:	TND		
APPROVED BY:	TND		C2.00
DATE:	JULY 2026		

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249 Western Ave,
Augusta, ME 04330
Phone: 207.621.7000
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FILE NO.: 636165 - PROPOSED.dwg

29-Jul -- USER: ajgerbus -- ATTACHED XREFS: 636165_EXDOND_XR_EastMillinocket_Infrastructure_SEE_Works_3-2026 -- ATTACHED IMAGES:
DRAWING NAME: \\AUGUSTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - PROPOSED.dwg -- PLOT DATE: July 24, 2026 - 10:27AM -- LAYOUT: C2.00
Version: 2017-10-21

20:24 --- USER: gsmtlaw --- ATTACHED VREFS: 636165_EXCOND_XR_EastMillinocket_Infrastructure_SSE_Working 3-2025 --- ATTACHED IMAGES:
DRAWING NAME: \\AUGUST\A-V\FP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - PROPOSED.dwg --- PLOT DATE: July 24, 2026 - 10:27AM --- LAYOUT: C2.01
Version: 2017-10-21

MAIN ST

MAPLE ST

CMQR RIGHT-OF-WAY

POB
N:713,811.26'
E:965,170.45'

50' BUILDING SETBACK

FENCING SHALL BE RESTORED AND ADDITIONAL PROPOSED FENCING INSTALLED AT THE END OF CONSTRUCTION

STABILIZE REMAINING BERM SECTIONS

BACKFILL EXCAVATED AREAS TO CREATE UNIFORM GRADES THAT MATCH INTO SURROUNDING AREAS

N 50°50'39" W
461.00'

S 29°30'51" W
44.91'

A=159.00'

N 53°45'03" W
79.56'

S 53°59'21" E
34.73'

N 32°26'38" W
282.70'

S 36°28'39" E
318.40'

N 31°45'40" E
186.22'

N 51°31'13" E
197.57'

S 66°32'25" E
578.56'

N 85°38'47" W
30.00'

N 83°43'02" W
125.00'

S 88°51'50" W
311.80'

100.00'

S 22°41'35" W
212.21'

S 59°45' E

N 85°-08'-33" E
34.84'

S 76°-56'-42" E
110.29'

N 87°-06'-53" E
46.68'

N 74°-09'-16" E
91.03'

S 59°19'47" W
99.01'

S 26°39'47" W
179.65'

N 63°20'13" W
191.45'

GLHA, LLC
EASEMENT EXCEPTION AREA "D"
1.304 ACRES±
PARCEL 3.13.4.4
9349/ 1

CB 40 CB 38 CB 24 CB 23 CB 22 CB 20 CB 32 CB 33 CB 30 CB 21

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING 5' CONTOUR
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- EXISTING WATER LINE
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- USF TEST PIT LOCATION
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- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE
- SF — PROPOSED SEDIMENT BARRIER
- LOD — PROPOSED LIMITS OF DISTURBANCE

PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

0 60 120 180 240
SCALE IN FEET

SITE STABILIZATION NOTES

1. THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO STABILIZE THE SITE FOLLOWING DEMOLITION.
2. ALL EXCAVATED AREAS, WITH THE EXCEPTION OF EXCAVATED BERM SECTIONS, SHALL BE BACKFILLED USING SOILS ORIGINATING ON SITE.
3. THE SITE SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE AND PREVENT PONDING, DIRECTING SURFACE WATER AWAY FROM ADJACENT PROPERTIES, STRUCTURES, AND RIGHTS-OF-WAY.
4. DISTURBED AREAS SHALL BE GRADED TO MAXIMUM 3H:1V, COVERED WITH 4" OF TOPSOIL, AND SEEDED IN ACCORDANCE WITH SHEET C4.00 TO PROVIDE PERMANENT STABILIZATION.
5. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED. MEASURES SHALL BE INSPECTED AND MAINTAINED REGULARLY AND REPAIRED OR REPLACED AS NECESSARY.
6. DUST CONTROL SHALL BE MAINTAINED DURING STABILIZATION ACTIVITIES TO PREVENT OFF-SITE MIGRATION OF SOILS OR PARTICULATES.
7. TEMPORARY DRAINAGE SWALES, BERMS, OR OTHER STORMWATER MANAGEMENT MEASURES SHALL BE PROVIDED AS NECESSARY TO CONTROL RUNOFF AND PREVENT EROSION.
8. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED SITE UNTIL FINAL ACCEPTANCE, INCLUDING REPAIR OF ANY EROSION, SETTLEMENT, OR DAMAGE CAUSED BY WEATHER EVENTS.
9. THE CONTRACTOR SHALL PERFORM ROUTINE INSPECTIONS IN ACCORDANCE WITH SHEET C4.00, TO VERIFY THE EFFECTIVENESS OF STABILIZATION MEASURES AND IMPLEMENT CORRECTIVE ACTIONS AS NECESSARY.
10. ALL WORK SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.

SEAL:

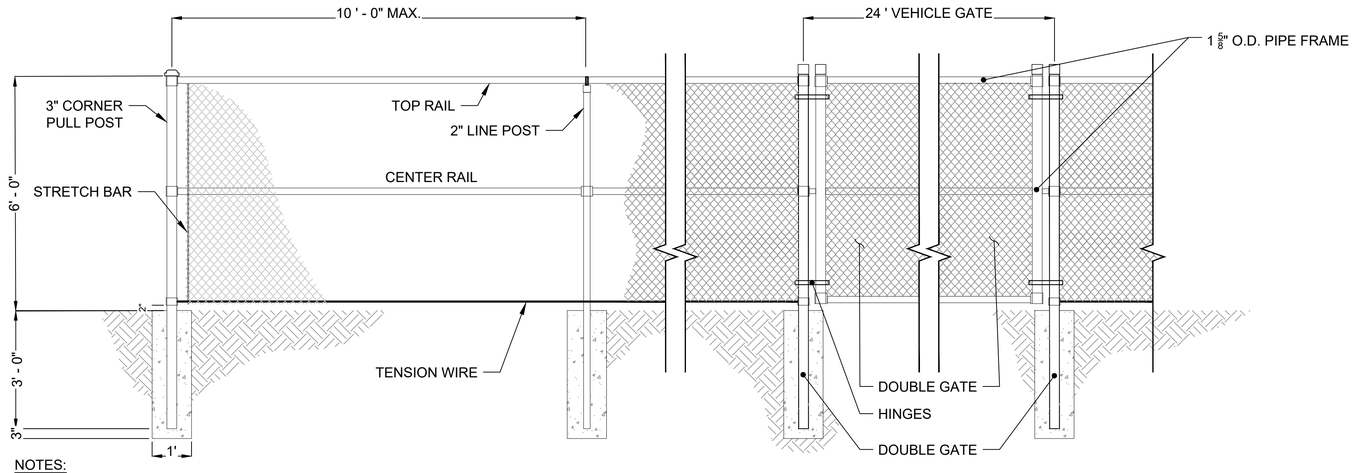
PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
SITE RESTORATION PLAN
WORKING COPY

DRAWN BY:	AJG	PROJ NO.:	636165.0000
CHECKED BY:	TND		
APPROVED BY:	TND		C2.01
DATE:	JULY 2026		

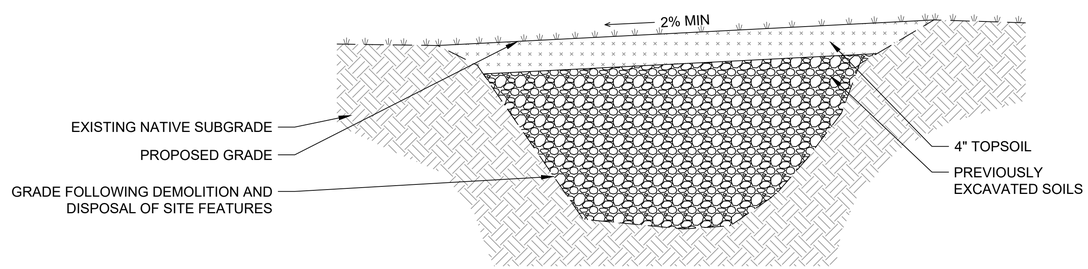
TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - PROPOSED.dwg



NOTES:
1. DOUBLE GATE SHALL HAVE LOCKING MECHANISM, DROP ROD, AND TRUSS ROD.
2. ALL FENCE COMPONENT MATERIALS SHALL BE EITHER HOT DIPPED GALVANIZED STEEL OR APPROVED ALTERNATE.
3. FENCE FABRIC SHALL BE ALUMINUM COATED.
4. DETAIL IS PROVIDED FOR ILLUSTRATIVE PURPOSES. ANY FENCING INSTALLED SHALL MATCH EXISTING FENCING TO THE EXTENT POSSIBLE.

1 / C2.00 CHAIN LINK FENCE & GATE DETAIL
NOT TO SCALE



NOTES:
1. FOLLOWING DEMOLITION, THE EXCAVATED AREAS SHALL BE BACKFILLED WITH SOILS ORIGINATING ON SITE.
2. SOILS USED FOR BACKFILLING SHALL BE COMPACTED TO 95% OF ASTM D1557 AND PLACED IN MAXIMUM COMPACTED LIFTS OF 9-INCHES.
3. FINAL GRADING SHALL PROMOTE POSITIVE DRAINAGE AND PREVENT PONDING.
4. CONTRACTOR SHALL STABILIZE DISTURBED AREAS AND ESTABLISH VEGETATION IN ACCORDANCE WITH SHEET C4.00
5. EXCAVATED SOILS TO BE MANAGED FOR RE-USE SHALL BE DEEMED SUITABLE IN ACCORDANCE WITH THE SOIL MANAGEMENT NOTES ON SHEET G1.01.

2 / C2.00 SITE STABILIZATION DETAIL
NOT TO SCALE

SEAL:

NO.	BY	DATE	REVISION	APP'D.

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
CIVIL CONSTRUCTION DETAILS
WORKING COPY

DRAWN BY:	AJG	PROJ. NO.:	636165.0000
CHECKED BY:	TND		
APPROVED BY:	TND		**C3.00**
DATE:	JULY 2026		

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249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - DT.dwg

20:24 -- USER: ajambos -- ATTACHED IMAGES: -- ATTACHED IMAGES: -- XREF: xr:shim; xa:shim2; xa:sweetie fence; xa:front house; xa:office Rock; Yellow Fence; xa:mini house; xa:mini house stairs; Rail Spur; xa:wall pipe support; xa:pcc support; xa:pcc stairs; xa:pcc2; xa:roofing shack; xa:roofing shack ref data:
DRAWING NAME: I:\AUGUSTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - DT.dwg -- PLOT DATE: July 24, 2026 - 10:28AM -- LAYOUT: C3.00
Version: 2017.10-21

1 C2.00 750,000 GALLON AST WITH CONTAINMENT BERM
NOT TO SCALE

2 C2.00 AST AUXILLIARY PIPING
NOT TO SCALE

3 C2.00 NORTHERN PERIMETER FENCE
NOT TO SCALE

4 C2.00 FUEL UNLOADING SHACK AND STAIRS
NOT TO SCALE

5 C2.00 5,000 GALLON AST & CONCRETE SECONDARY CONTAINMENT STRUCTURE
NOT TO SCALE

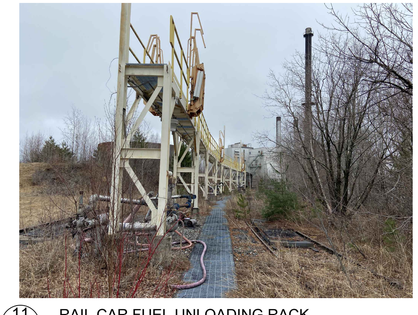
6 C2.00 RETAINING WALL & PIPING SUPPORT STRUCTURE
NOT TO SCALE

7 C2.00 STAIRS OVER CONTAINMENT BERM
NOT TO SCALE

8 C2.00 PUMP HOUSE
NOT TO SCALE

9 C2.00 METAL STAIRS ADJACENT TO PUMP HOUSE
NOT TO SCALE

10 C2.00 HYDRANT HOUSE
NOT TO SCALE



11 C2.00 RAIL CAR FUEL UNLOADING RACK
NOT TO SCALE

12 C2.00 RAIL SPUR NORTH OF PROPERY BOUNDARY
NOT TO SCALE

NO.	BY	DATE	REVISION	APP'D.

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
SITE PHOTOS
WORKING COPY

DRAWN BY:	AJG
CHECKED BY:	TND
APPROVED BY:	TND
DATE:	JULY 2026

PROJ. NO.: 636165.0000

C3.01

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249 Western Ave.
Augusta, ME 04330
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FILE NO.: 636165 - DT.dwg

Version: 2017-10-21

20:24 -- USER: aramirez -- ATTACHED XREFS: -- ATTACHED IMAGES: - AST aux piping: aerial.png; aerial2.png; aerial3.png; aerial4.png; aerial5.png; aerial6.png; aerial7.png; aerial8.png; aerial9.png; aerial10.png; aerial11.png; aerial12.png; aerial13.png; aerial14.png; aerial15.png; aerial16.png; aerial17.png; aerial18.png; aerial19.png; aerial20.png; aerial21.png; aerial22.png; aerial23.png; aerial24.png; aerial25.png; aerial26.png; aerial27.png; aerial28.png; aerial29.png; aerial30.png; aerial31.png; aerial32.png; aerial33.png; aerial34.png; aerial35.png; aerial36.png; aerial37.png; aerial38.png; aerial39.png; aerial40.png; aerial41.png;

MAINE CONSTRUCTION GENERAL PERMIT NOTES

1. THE CONTRACTOR SHALL BE CONSIDERED THE OPERATOR OF THE SITE DURING CONSTRUCTION AND SHALL SUBMIT A NOTICE OF INTENT FOR COVERAGE UNDER THE 2025 MAINE CONSTRUCTION GENERAL PERMIT (MCGP) A MINIMUM OF 30-CALENDAR DAYS PRIOR TO COMMENCING EARTH DISTURBING ACTIVITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND SUBMITTING TO THE MDEP A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE MINIMUM REQUIREMENTS OF THE MCGP. THE FINAL SWPPP AND PROOF OF NOI SHALL BE PROVIDED TO THE OWNER AND ENGINEER PRIOR TO INITIATING CONSTRUCTION AND EARTH DISTURBING ACTIVITIES.
3. THE CONTRACTOR SHALL SUBMIT A NOTICE OF TERMINATION (N.O.T.) TO THE MDEP WITHIN 30-DAYS OF COMPLETING CONSTRUCTION AND ACHIEVING PERMANENT STABILIZATION. DOCUMENTATION OF ACCEPTED N.O.T. SHALL BE PROVIDED TO THE OWNER AND ENGINEER WITH THE CONTRACTOR'S REQUEST FOR FINAL PAYMENT OR RELEASE OF RETAINAGE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CHANGES IN CONDITION, ACTIVITY, OR OPERATOR THAT WOULD REQUIRE UPDATING THE PROJECT'S NOI, SWPPP, OR MDEP NOTIFICATION. THE OWNER AND ENGINEER SHALL BE INCLUDED IN ALL CORRESPONDENCE WITH THE MDEP REGARDING THE PROJECT'S COVERAGE UNDER THE MCGP.

EROSION AND SEDIMENTATION CONTROL NOTES

1. INSTALLATION OF ALL EROSION AND SEDIMENT CONTROL MEASURES AND ASSOCIATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" (REVISED 2014) AND THE 2025 MCGP.
2. IN THE EVENT A SITUATION ARISES THAT IS NOT DEPICTED IN THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND FOLLOW THE GUIDANCE OF THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MANUAL FOR DESIGNERS AND ENGINEERS" (REVISED 2016) AND/OR THE "MAINE EROSION AND SEDIMENT CONTROL PRACTICES FIELD GUIDE FOR CONTRACTORS" (REVISED 2014).
3. THE CONTRACTOR SHALL PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE MAXIMUM EXTENT PRACTICABLE. BUFFER AREAS OUTSIDE THE APPROVED LIMITS OF WORK IMPACTED BY CONSTRUCTION SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
4. DISTURBANCE OF STEEP SLOPES (25% OR GREATER) SHALL BE MINIMIZED.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING AND CONTROLLING STORMWATER RUNOFF THROUGHOUT THE DURATION OF CONSTRUCTION. STORMWATER DISCHARGES, INCLUDING PEAK RATE AND VOLUME, SHALL BE CONTROLLED AND MANAGED TO PREVENT EROSION AT OUTLETS AND TO PREVENT ADVERSE IMPACTS AND/OR FLOODING TO DOWNGRADIENT SENSITIVE RECEPTORS, ABUTTING LAND USES, DRAINAGE CHANNELS, SWALES, STREAM CHANNELS, STREAM BANKS, UPLANDS, OR PROTECTED NATURAL RESOURCES.
6. NO DISTURBANCE SHALL OCCUR WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE UNLESS APPROVED IN THE PROJECT'S PERMITS. NATURAL RESOURCES WITHIN 50 FEET OF THE LIMITS OF DISTURBANCE OR LOCATION OF STORMWATER DISCHARGES SHALL BE PROTECTED BY A DOUBLE ROW OR PAIRED EROSION CONTROL MEASURES.
7. TOPSOIL STRIPPED OR REMOVED SHALL BE PRESERVED AND STOCKPILED ONSITE FOR USE IN RECLAIMING DISTURBED AREAS. NO TOPSOIL SHALL BE REMOVED FROM THE SITE WITHOUT AUTHORIZATION OF THE OWNER. TOPSOIL STOCKPILES SHALL BE SEEDED, MULCHED, OR OTHERWISE STABILIZED.
8. THE CONTRACTOR SHALL MINIMIZE COMPACTION OF SOILS IN AREAS TO BE REVEGETATED OR WHERE INFILTRATION PRACTICES WILL BE INSTALLED. SCARIFYING AND SOIL RESTORATION PRACTICES SHALL BE IMPLEMENTED TO REHABILITATE COMPACTED SOILS TO A CONDITION THAT IS NECESSARY TO SUPPORT VEGETATIVE GROWTH.
9. THE CONTRACTOR SHALL AVOID DISTURBANCE OF HIGH INFILTRATION CAPACITY SOILS (HSG A AND HSG B) EXCEPT IN LOCATIONS SPECIFIED ON THE DRAWINGS WITHIN THE APPROVED LIMITS OF DISTURBANCE.
10. INSTALL AND MAINTAIN PERIMETER SEDIMENT BARRIERS SUCH AS SILT FENCING AND/OTHER APPROVED EROSION CONTROL BARRIERS ALONG THE DOWNHILL LIMIT OF DISTURBANCE AS SHOWN ON THE DRAWINGS. SEDIMENT BARRIER LOCATIONS MAY BE ADJUSTED IN THE FIELD BASED ON ACTUAL SITE CONDITIONS AS DEEMED NECESSARY TO ENSURE PROPER FUNCTION. WHERE SILT FENCE CANNOT BE TOED-IN PROPERLY DUE TO TREE ROOTS, ROCKS, OR FROZEN GROUND, HAY BALES OR AN EROSION CONTROL MIX BERM MAY BE SUBSTITUTED. PERIMETER SEDIMENT BARRIERS SHALL BE INSTALLED AS SOON AS POSSIBLE BUT MAY FOLLOW INITIAL SITE PREPARATION. EROSION OR SEDIMENTATION ISSUES DEVELOPING DURING INITIAL SITE PREPARATION SHALL BE TEMPORARILY STABILIZED AS NECESSARY.
11. PRIOR TO CONSTRUCTION, STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL POINTS OF ACCESS AND EGRESS OF CONSTRUCTION VEHICLES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, REPAIRING, AND/OR REPLACING THE STABILIZED CONSTRUCTION ENTRANCE AS NECESSARY TO PREVENT SEDIMENT TRACK-OUT.
12. CONTRACTOR SHALL STABILIZE EXPOSED SOILS WITH MULCH OR OTHER NON-ERODIBLE COVER WITHIN 7 DAYS OF CESSATION OF CONSTRUCTION ACTIVITIES. AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE SHALL BE TEMPORARILY STABILIZED WITHIN 48-HOURS OF THE INITIAL DISTURBANCE OR PRIOR TO ANY 0.5-INCH 24-HOUR RAINFALL EVENT. STABILIZE ANY NEWLY GRADED SLOPE GREATER THAN 15% WITH ANCHORED EROSION CONTROL BLANKETS OR OTHER APPROVED MULCHING TECHNIQUES WITHIN 24-HOURS.
13. STORMWATER CONVEYANCES: INSTALL EROSION CONTROL BLANKETS, OR OTHER APPROVED MULCHING TECHNIQUES, AND PROPERLY SPACED STONE CHECK DAMS IN ANY SECTION OF DITCH WITHIN 24-HOURS OF FORMING, SHAPING, OR ROUGH GRADING THAT SECTION OF DITCH. CULVERT INLETS AND OUTLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS INSTALLED WITHIN 48-HOURS OF CULVERT INSTALLATION.
14. UTILITY TRENCHES, INCLUDING SPOIL AND BACKFILL PILES, SHALL BE BACKFILLED AND STABILIZED AT THE END OF EACH WORKING DAY. TRENCHES SHALL BE DEWATERED IN ACCORDANCE WITH DEWATERING NOTES.
15. APPLY TEMPORARY SEED AND MULCH TO EXPOSED AREAS WHERE ACTIVITY IS NOT ANTICIPATED FOR 14-DAYS.
16. MAINTAIN ALL TEMPORARY EROSION CONTROLS AND SEDIMENT BARRIERS UNTIL VEGETATION HAS BEEN ESTABLISHED OVER 90% OF THE AREA TO BE REVEGETATED. RESEED SPARSELY VEGETATED AREAS AS NECESSARY. REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ONCE THE SITE IS PERMANENTLY STABILIZED. SEDIMENT TRAPPED IN FRONT OF PERIMETER SEDIMENT BARRIERS SHALL BE SPREAD WITHIN AN AREA UNDERGOING FINAL GRADING AND DISTRIBUTED IN A UNIFORM MANNER CONFORMING TO LOCAL TOPOGRAPHY AND THEN STABILIZED WITH SEED AND MULCH. EROSION CONTROL MIX BERMS AND FILTER SOCKS MAY BE DEMOLISHED, AND THE EROSION CONTROL MIX FILTER MEDIA MAY BE EVENLY DISTRIBUTED ACROSS ADJACENT UPLAND (NON-WETLAND) AREAS.

HOUSEKEEPING NOTES

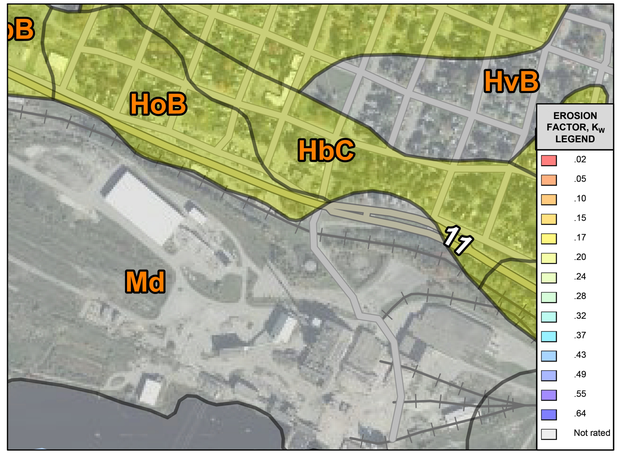
CONTRACTOR SHALL MAINTAIN THE PROJECT SITE IN ACCORDANCE WITH THE FOLLOWING PERFORMANCE STANDARDS:

1. SPILL PREVENTION: CONTROLS SHALL BE IN PLACE TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS USED AND STORED ONSITE. APPROPRIATE CONTROLS INCLUDE, BUT ARE NOT LIMITED TO, PROPER STORAGE PRACTICES THAT MINIMIZE EXPOSURE OF MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
2. GROUNDWATER PROTECTION: DURING CONSTRUCTION, THE CONTRACTOR MAY NOT STORE OR HANDLE LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER IN AREAS OF THE PROJECT SITES DRAINING TO AN INFILTRATION AREA OR WITHIN 100 FEET OF A CRITICAL RESOURCE AREA OR STREAM. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORING AND HANDLING LIQUID HAZARDOUS MATERIALS.
3. FUGITIVE SEDIMENT AND DUST: CONTRACTOR SHALL TAKE ALL NECESSARY ACTIONS TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE. OIL MAY NOT BE USED FOR DUST CONTROL. CONTRACTOR SHALL MONITOR VEHICLES ENTERING AND EXITING THE PROJECT SITE FOR EVIDENCE OF TRACKING MUD ONTO PUBLIC OR PRIVATE ROADWAYS OUTSIDE THE WORK AREA. IF NECESSARY, CONTRACTOR SHALL PROVIDE MEANS FOR SWEEPING AND CLEANING ROAD AREAS EXPERIENCING TRACKING. IF OFF-SITE TRACKING OCCURS ON PUBLIC ROADS, THEY SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. DURING THE MUD SEASON IT MAY BE NECESSARY TO INCREASE THE SIZE OF STABILIZED CONSTRUCTION ENTRANCES OR PROVIDE A WHEEL WASHING STATION. **CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE DESIGNED TO REDUCE TURBIDITY IN STORMWATER, SHALL NOT BE USED UNLESS AUTHORIZED BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.**
4. DEBRIS AND OTHER MATERIALS: CONTRACTOR SHALL MANAGE ALL LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER TO PREVENT MATERIALS FROM BECOMING A SOURCE OF POLLUTION. CONTRACTOR SHALL MINIMIZE THE EXPOSURE OF BUILDING AND LANDSCAPING MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE, AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
5. EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, SUMPS, BASINS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL REMOVE COLLECTED WATER FROM THE PONDED AREAS, EITHER THROUGH GRAVITY OR PUMPING, IN A MANNER THAT SPREADS IT THROUGH NATURAL WOODED BUFFERS OR TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE (E.G.SEDIMENT BASIN). THE CONTRACTOR SHALL AVOID PRACTICES THAT ALLOW SEDIMENT LADEN WATER FROM DEWATERING TO FLOW OVER DISTURBED AREAS OF THE PROJECT SITES. OTHER MEASURES OR METHODS MAY BE UTILIZED AS REVIEWED AND APPROVED BY THE ENGINEER AND, IF NECESSARY, THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
6. VEHICLE AND EQUIPMENT WASHING: THE CONTRACTOR SHALL PROVIDE AN EFFECTIVE MEANS OF MINIMIZING THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER TYPES OF WASH WATERS. THEY MUST ENSURE THERE IS NO DISCHARGE OF SOAPS, SOLVENTS, OR DETERGENTS IN EQUIPMENT AND VEHICLE WASH WATER. FOR WASHING APPLICATORS OR CONTAINERS USED FOR CONCRETE, FORM RELEASE OILS, CURING COMPOUNDS, OR OTHER MATERIALS, DIRECT WASH WATER INTO A LEAK-PROOF CONTAINER OR LEAK-PROOF AND LINED PIT DESIGNED SO NO OVERFLOWS CAN OCCUR DUE TO INADEQUATE SIZING OR PRECIPITATION. LOCATE ANY WASHOUT OR CLEANOUT ACTIVITIES AS FAR AWAY AS POSSIBLE FROM RECEIVING WATERS, CONSTRUCTED OR NATURAL SITE DRAINAGE FEATURES, AND STORM DRAIN INLETS, AND, TO THE EXTENT FEASIBLE, DESIGNATE AREAS TO BE USED FOR THESE ACTIVITIES AND CONDUCT SUCH ACTIVITIES IN THESE AREAS.
7. AUTHORIZED NON-STORMWATER DISCHARGES: THE CONTRACTOR SHALL IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHALL BE TAKEN TO ENSURE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENTS OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE: DISCHARGES FROM FIREFIGHTING ACTIVITY, FIRE HYDRANT FLUSHING, VEHICLE WASH WATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES, DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX C(3) OF THE MCGP, ROUTINE EXTERNAL BUILDING WASHDOWN (EXCLUDING PAINT REMOVAL AND USE OF DETERGENTS), PAVEMENT WASH WATER (EXCLUDING AREAS OF SPILLS OR LEAKS OF TOXIC/HAZARDOUS MATERIALS AND USE OF DETERGENTS), UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE, UNCONTAMINATED GROUNDWATER OR SPRING WATER, FOUNDATION OR FOOTING DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED, UNCONTAMINATED EXCAVATION DEWATERING PER APPENDIX C(5) OF THE MCGP, POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING, AND LANDSCAPE IRRIGATION.
8. UNAUTHORIZED NON-STORMWATER DISCHARGES: THE CONTRACTOR SHALL IDENTIFY AND PREVENT CONTAMINATION BY UNAUTHORIZED NON-STORMWATER DISCHARGES. UNAUTHORIZED STORMWATER DISCHARGES INCLUDE, BUT ARE NOT LIMITED TO, WASTEWATER FROM CONCRETE WASHOUT, FUELS OR HAZARDOUS SUBSTANCES, SOAPS, SOLVENTS OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING, AND TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.
9. ADDITIONAL REQUIREMENTS: COMPLETION OF THE WORK WILL REQUIRE FREQUENT ACCESS TO VARIOUS PORTIONS OF THE PROJECT AREA FROM STATE AND LOCAL ROADWAYS. CONTRACTOR SHALL MONITOR PUBLIC ROADWAYS AND SHALL CLEAN PAVEMENT BY MEANS NECESSARY IN THE EVENT THAT SEDIMENT OR TRACKING IS OBSERVED. SIGNAGE SHALL BE POSTED AT INTERSECTIONS OF PROJECT ACCESS ROADS AND PUBLIC WAYS, STATING COMPANY NAME AND 24-HOUR CONTACT PHONE NUMBER.

NRCS SOILS TABLE

ID	NAME	SLOPE RANGE	HYDROLOGIC SOIL GROUP	EROSION FACTOR, K_W
HbC	HERMON SANDY LOAM	3-8%	A	0.20
HoB	HOWLAND GRAVELLY LOAM	3-8%	C/D	0.20
HvB	HOWLAND LOAM	0-8%	C/D	N/A
Md	MADE LAND	N/A	N/A	N/A

NRCS SOILS MAP



INSPECTION & MAINTENANCE REQUIREMENTS

1. INSPECTION: THE CONTRACTOR SHALL INSPECT DISTURBED AREAS, EROSION CONTROL MEASURES, MATERIAL STORAGE AREAS, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE PER WEEK AS WELL AS BEFORE AND WITHIN 24-HOURS OF A 0.5-INCH RAINFALL EVENT. INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS OF THE PROJECT'S PERMIT AND THE MCGP.
2. MAINTENANCE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND UPKEEP OF EROSION AND SEDIMENTATION CONTROLS AND BEST MANAGEMENT PRACTICES TO ENSURE THEY REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED. REPAIR WORK SHALL BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN BY THE END OF THE NEXT WORKDAY. ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED TO MAINTAIN AT LEAST 1/2 OF THE DESIGN CAPACITY.
3. FOR REPEATED ROUTINE MAINTENANCE ITEMS, THE CONTRACTOR SHALL EITHER COMPLETE WORK NECESSARY TO PREVENT SUBSEQUENT OCCURRENCES OF THIS SAME PROBLEM, OR DOCUMENT IN THE INSPECTION REPORTS WHY THE SPECIFIC REOCCURRENCE OF THIS SAME PROBLEM SHOULD BE CONSIDERED ROUTINE MAINTENANCE AND DOES NOT REQUIRE FORMAL CORRECTIVE ACTION.
4. CORRECTIVE ACTION: SIGNIFICANT OR REPEATED REPAIRS (I.E, 3 OR MORE TIMES) OR A NEW OR REPLACEMENT CONTROL REQUIRE A CORRECTIVE ACTION THAT MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY 0.5-INCH 24-HOUR RAINFALL EVENT. IF IT IS INFEASIBLE TO COMPLETE THE REPAIR OR INSTALLATION WITHIN 7 CALENDAR DAYS, THE CONTRACTOR SHALL DOCUMENT IN THE INSPECTION REPORT WHY IT IS INFEASIBLE AND SPECIFY A SCHEDULE FOR COMPLETING THE REPAIR, INSTALLING THE BMP, AND MAKING IT OPERATIONAL.
5. DOCUMENTATION: THE CONTRACTOR SHALL KEEP A LOG OF COMPLETED INSPECTIONS AND MAINTENANCE ACTIVITIES IN WRITTEN REPORTS THAT ARE MADE AVAILABLE TO THE OWNER, ENGINEER, OR MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STAFF UPON REQUEST. THE CONTRACTOR SHALL MAINTAIN THESE REPORTS FOR A PERIOD OF AT LEAST 3 YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION AND SUBMITTAL OF THE NOTICE OF TERMINATION (NOT). THE REPORT LOG SHALL CONTAIN THE FOLLOWING INFORMATION: NAME AND QUALIFICATION OF INSPECTOR, INSPECTION DATE, MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLE ACCESS POINTS. MAJOR OBSERVATIONS SHALL INCLUDE, BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. REPORTS SHALL NOTE THE NATURE AND DATE OF CORRECTIVE ACTIONS TAKEN FOR INDIVIDUAL BMPs REQUIRING MAINTENANCE, REPAIR, OR REPLACEMENT.

DEWATERING NOTES

1. THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND OPERATE ALL CHANNELS, SUMPS, AND ALL OTHER TEMPORARY DIVERSION AND PROTECTIVE WORKS NEEDED TO DIVERT STREAM FLOW AND OTHER SURFACE WATER THROUGH OR AROUND THE CONSTRUCTION SITE. CONTROL OF SURFACE WATER SHALL BE CONTINUOUS DURING THE PERIOD THAT DAMAGE TO CONSTRUCTION WORK COULD OCCUR.
2. OPEN EXCAVATIONS SHALL BE DEWATERED AND KEPT FREE OF STANDING WATER AND MUDDY CONDITIONS AS NECESSARY FOR THE PROPER EXECUTION OF THE WORK. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL DRAINS, SUMPS AND ALL OTHER EQUIPMENT REQUIRED TO PROPERLY DEWATER THE SITE. DEWATERING SYSTEMS THAT CAUSE A LOSS OF SOIL FINES FROM THE FOUNDATION AREAS WILL NOT BE PERMITTED.
3. INSTALL DIVERSION DITCHES OR BERMS IF NECESSARY TO MINIMIZE THE AMOUNT OF CLEAN STORMWATER RUNOFF ALLOWED INTO THE EXCAVATION AREA.
4. REMOVAL OF WATER FROM THE CONSTRUCTION SITE SHALL BE ACCOMPLISHED SO THAT EROSION AND TRANSPORTATION OF SEDIMENT AND OTHER POLLUTANTS ARE MINIMIZED.
5. DISCHARGE DEWATERING EFFLUENT TO AREAS AS INDICATED IN THE DRAWINGS. DISCHARGE SHALL BE MANAGED TO ENSURE SHEET FLOW.
6. DEWATERING IN PERIODS OF INTENSE HEAVY RAIN OR WHEN THE INFILTRATIVE CAPACITY OF THE SOIL IS EXCEEDED, SHALL BE AVOIDED TO THE MAXIMUM EXTENT PRACTICABLE.
7. FLOW TO THE SEDIMENT REMOVAL STRUCTURE MAY NOT EXCEED THE STRUCTURE'S CAPACITY TO SETTLE AND FILTER FLOW OR THE STRUCTURE'S VOLUME CAPACITY.
8. WHEN TEMPORARY WORKS ARE NO LONGER NEEDED, THE CONTRACTOR SHALL REMOVE AND RETURN THE AREA TO A CONDITION SIMILAR TO THAT WHICH EXISTED BEFORE CONSTRUCTION. AREAS WHERE TEMPORARY WORKS WERE LOCATED SHALL BE GRADED SLIGHTLY FOR APPEARANCE WITH NO OBSTRUCTION TO NATURAL SURFACE WATER FLOWS OR THE PROPER FUNCTIONING AND ACCESS TO THE WORKS OF IMPROVEMENTS INSTALLED. THE CONTRACTOR SHALL EXERCISE EXTREME CARE DURING THE REMOVAL STAGES TO MINIMIZE THE LOSS OF SOIL SEDIMENT AND DEBRIS THAT WAS COLLECTED DURING CONSTRUCTION.

LAYDOWN, STAGING, & CONSTRUCTION VEHICLE PARKING AREAS

1. LAYDOWN, STAGING, AND PARKING AREAS SHALL BE IN AREAS AS SHOWN IN THE DRAWINGS OR APPROVED BY THE ENGINEER. UPGRADIENT STORMWATER DIVERSION SHALL BE USED TO DIVERT RUNOFF AROUND THESE AREAS. TEMPORARY LAYDOWN, STAGING AND PARKING AREAS USED FOR MORE THAN 12-MONTHS REQUIRE STORMWATER QUALITY TREATMENT IN ACCORDANCE WITH CHAPTER 500 STANDARDS.
2. LAYDOWN, STAGING, AND PARKING AREAS SHALL BE CONSTRUCTED TO DELIVER RUNOFF TO ADJACENT AREAS WITHOUT CAUSING EROSION OR SEDIMENTATION. SURFACES SHALL BE ADEQUATELY COMPACTED AND MAINTAINED TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO RECEIVING AREAS.

WINTER CONSTRUCTION NOTES

WINTER CONSTRUCTION IS ANY CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15, OR WHEN THE GROUND IS FROZEN OR SNOW COVERED. PORTIONS OF THE SITE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 15 SHALL BE STABILIZED IN ACCORDANCE WITH THE WINTER CONSTRUCTION STABILIZATION MEASURES SPECIFIED BELOW.

1. SITE STABILIZATION: STRAW MULCH SHALL BE APPLIED AT TWICE THE STANDARD RATE (150 LBS./1,000 SF OR 3 TONS/ACRE). MULCH SHALL BE APPLIED TO DISTURBED AREAS BROUGHT TO FINISH GRADE AT THE END OF EACH WORK DAY. MULCH SHALL NOT BE SPREAD OVER SNOW. A 3-INCH APPLICATION OF EROSION CONTROL MIX SHALL BE A SUITABLE ALTERNATIVE FOR WINTER MULCHING RATES.
2. SEDIMENT BARRIERS: ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE SHALL BE PROTECTED WITH A DOUBLE ROW OR PAIRED SEDIMENT BARRIERS. REFER TO DETAIL SHEETS.
3. DITCHING/SWALES: VEGETATED DITCHES, SWALES, OR CONCENTRATED FLOW PATHS THAT HAVE NOT BEEN STABILIZED WITH PERMANENT VEGETATION BY NOVEMBER 1, OR WILL CONTINUE TO BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, SHALL BE STABILIZED WITH RIP-RAP OR EROSION CONTROL GEOTEXTILE AS APPROVED BY THE ENGINEER.
4. SLOPES: SLOPES STEEPER THAN 8% AND SHALLOWER THAN 1H:1V THAT ARE NOT VEGETATED PRIOR TO NOVEMBER 1, SHALL BE STABILIZED WITH EROSION CONTROL BLANKET OR 4-INCHES OF EROSION CONTROL MIX. EROSION CONTROL BLANKET SHALL NOT BE ANCHORED INTO FROZEN GROUND. RIP-RAP SHALL BE USED TO STABILIZE SLOPES WITH GROUNDWATER SEEPAGE OR WHERE CONCENTRATED FLOW IS ANTICIPATED.
5. TEMPORARY WINTER SEEDING: TEMPORARY SEEDING SHALL BE APPLIED BY OCTOBER 1 IN PREPARATION FOR WINTER CONDITIONS. WINTER RYE SHALL BE APPLIED AT A RATE OF 3LBS/1,000 SF AND MULCHED IN ACCORDANCE WITH MULCHING RATES SPECIFIED IN THESE WINTER CONSTRUCTION NOTES. IF WINTER RYE FAILS TO ACHIEVE 75% COVERAGE WITH A HEIGHT OF 3-INCHES BY NOVEMBER 1, THE AREA SHALL BE STABILIZED IN ACCORDANCE WITH WINTER CONSTRUCTION SITE STABILIZATION REQUIREMENTS.
6. DORMANT SEEDING:DORMANT SEEDING SHALL BE APPLIED AT 3 TIMES THE SPECIFIED AMOUNT AFTER OCTOBER 15 OR THE FIRST KILLING FROST.
7. WINTER STABILIZATION ACCEPTANCE: PRIOR TO DEMOBILIZING FOR THE WINTER, THE CONTRACTOR SHALL REQUEST ACCEPTANCE OF WINTER STABILIZATION CRITERIA BY THE ENGINEER OR THIRD-PARTY INSPECTOR AND SUBMIT WRITTEN DOCUMENTATION TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR OF ALL EROSION CONTROLS AND SITE STABILIZATION MEASURES DURING WINTER DEMOBILIZATION.

SEED & MULCH SPECIFICATIONS

SEED MIX SPECIFICATIONS

SEED MIX NAME	SEED MIX COMPONENTS	LB./ACRE [1]
TEMPORARY SEED MIX	ANNUAL RYEGRASS	40
PERMANENT SEED MIXES		
UPLAND SEED MIX	MDOT ROADSIDE MIXTURE #2 SECTION 717.05 (OR APPROVED EQUAL)	175
SUPPLEMENTAL WINTER SEED MIX [2]	WINTER RYEGRASS	120

NOTES:
1. INCREASE SEEDING RATES 10% WHEN HYDROSEEDING
2. WINTER RYE WILL BE ADDED TO UPLAND SEED MIX AT A RATE OF 3 LB./1,000 SF BETWEEN OCTOBER 1 AND APRIL 15

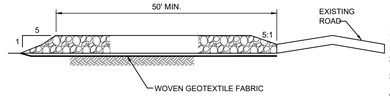
SUMMARY OF TEMPORARY AND PERMANENT MULCH APPLICATION REQUIREMENTS

CONDITION	TIMING	MULCH TYPE [2]	APPLICATION RATES
TEMPORARY			
INACTIVE AREAS	APPLY MULCH OR APPROVED ALTERNATIVE TO ALL EXPOSED AREAS AT THE END OF EACH WORKING DAY, AS REQUIRED FOR EER SUBCATCHMENTS.	STRAW MULCH OR WOOD FIBER MULCH OR EROSION CONTROL MIX	2 TONS/ACRE 1 TON/ACRE 3" THICK OVER AREA
ALL DISTURBED AREAS OF THE CONSTRUCTION WORKSPACE	APPLY MULCH OR APPROVED ALTERNATIVE TO ALL EXPOSED AREAS AT THE END OF EACH WORKING DAY, AS REQUIRED FOR EER SUBCATCHMENTS.	STRAW MULCH OR WOOD FIBER MULCH	2 TONS/ACRE 1 TON/ACRE [3]
ALL WORK AREAS EXPOSED ARE TO BE MULCHED DAILY EACH TIME SOIL IS DISTURBED	NOVEMBER 1 - APRIL 15 [4]	STRAW MULCH OR WOOD FIBER MULCH	4 TONS/ACRE 2 TONS/ACRE
PERMANENT			
ON ALL EXPOSED AREAS AFTER SEEDING TO STABILIZE THE SOIL SURFACE	PERMANENT GRASS AND/OR LEGUME SEEDING COVERED BY STRAW MULCH ON ALL AREAS THAT HAVE BEEN RESTORED TO FINAL GRADE. THIS DOES NOT APPLY TO AREAS STABILIZED BY OTHER MEANS SUCH AS JUTE MATTING OR PERMANENT EROSION CONTROL MIX.	CRIMPED STRAW MULCH OR WOOD FIBER MULCH	2 TONS/ACRE 1 TON/ACRE

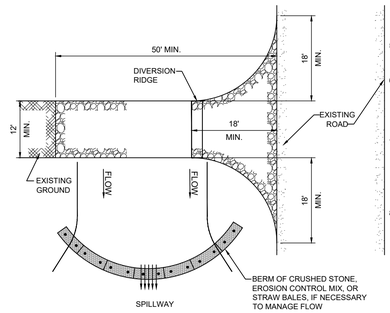
NOTES:
1. IN ALL CASES, SUFFICIENT MULCH SHALL BE APPLIED SUCH THAT NO SOIL IS VISIBLE THROUGH THE MULCH.
2. DOUBLE RATE OF WOOD FIBER MULCH WHEN USED IN OR ADJACENT TO CRITICAL AREAS. INCREASE MULCH RATE BY HALF UNDER SOLAR ARRAY DRIP EDGE.
3. STRAW, HAY, OR HYDROMULCH (WOOD FIBER OR PAPER MULCH AS APPROPRIATE) SHALL PROVIDE MINIMUM 90 PERCENT GROUND COVERAGE.
4. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.

SUMMARY OF SEEDING REQUIREMENTS

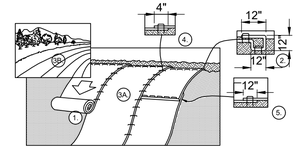
CONDITION	TIMING [1]	SEED MIX
TEMPORARY SEEDING [3]	TEMPORARY SEED BETWEEN APRIL 15 AND OCTOBER 1 ONLY. DISTURBED AREAS OR SOIL STOCKPILES WILL BE SEEDED IMMEDIATELY IF FURTHER DISTURBANCE IS NOT EXPECTED FOR 14 DAYS OR MORE.	TEMPORARY SEED MIX
PERMANENT SEEDING [3,4]		
UPLAND PORTIONS OF THE CONSTRUCTION AREA	DISTURBED AREA WILL BE SEEDED WITHIN 7 DAYS OF FINAL GRADING.	UPLAND SEED MIX
SLOPES > 3:1	DISTURBED AREA WILL BE SEEDED IMMEDIATELY AFTER SEEDBED PREPARATION.	UPLAND SE



NOTES:
1. STONE SIZE - USE 2" CRUSHED STONE.
2. LENGTH - NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MIN. BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. WOVEN GEOTEXTILE FABRIC - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN VEHICLE WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

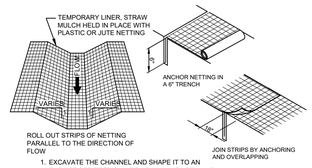


1 C4.00 **STABILIZED CONSTRUCTION ENTRANCE**
NOT TO SCALE



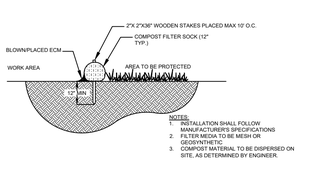
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 12" DEEP X 12" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTEDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN THE SLOPE. HORIZONTAL (B) INSTALLATION MAY BE APPROPRIATE IN SOME INSTANCES AS APPROVED BY THE ENGINEER. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH A MINIMUM OF 4"-6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 12" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

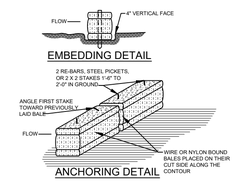
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.



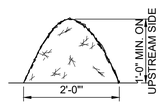
1. EXCAVATE THE CHANNEL AND SHAPE IT TO AN EVEN CROSS-SECTION AS SHOWN. WHEN STAKING INDICATE A 0.2' OVERCUT AROUND THE CHANNEL PERIMETER FOR SILTING AND BULKING.
2. GRADE SOIL AWAY FROM CHANNEL SO THAT SURFACE WATER MAY ENTER FREELY.
3. APPLY LIME, FERTILIZER AND SEED TO THE CHANNEL AND ADJOINING AREAS IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
4. SPREAD HAY OR STRAW MULCH AT THE RATE OF 100LB/1000 SF.
5. HOLD MULCH IN PLACE IMMEDIATELY AFTER SPREADING WITH A PLASTIC NETTING INSTALLED AS SHOWN.
6. START LAYING THE NET FROM THE TOP OF THE UPSTREAM END OF THE CHANNEL AND UNROLL IT DOWN GRADE. DO NOT STRETCH THE NETTING.
7. BURY THE UP SLOPE END AND STAPLE THE NET EVERY 12" ACROSS THE TOP END, EVERY 3 FT AROUND THE EDGES AND ACROSS THE NET SO THAT THE STRAW IS HELD CLOSELY AGAINST THE SOIL, HOWEVER, DO NOT STRETCH THE NETTING WHEN STAPLING.
8. NETTING STRIPS SHOULD BE JOINED TOGETHER ALONG THE SIDES WITH A 3" OVERLAP AND STAPLED TOGETHER.
9. TO JOIN ENDS OF STRIPS, INSERT A NEW ROLL OF NET IN A TRENCH AS WITH THE UP SLOPE END AND OVERLAP IT 18" WITH THE PREVIOUSLY LAID UPPER ROLL. TURN UNDER 6" OF THE 18" OVERLAP AND STAPLE EVERY 12" ACROSS THE END.

3 C4.00 **EROSION CONTROL BLANKET & GRASS LINED DITCH**
NOT TO SCALE



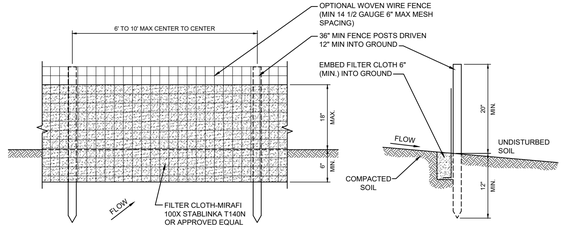


5 C4.00 **COMPOST FILTER SOCK & STRAW BALE ABRRIER (AS NEEDED)**
NOT TO SCALE



EROSION CONTROL SOIL/BARK MIX: SHALL CONSIST OF SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK OR FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING SYSTEMS. THE MIX SHALL CONFORM TO THE FOLLOWING:
1. pH - 5.0 TO 8.0.
2. SCREEN SIZE: 6" - 100% PASSING
   3/4" - 70% TO 85% PASSING
   MIX SHALL NOT CONTAIN LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS
3. ORGANIC MATERIAL 20% - 100% (DRY WEIGHT BASIS)
   ORGANIC PORTION MUST BE FIBROUS AND ELONGATED
4. SOLUBLE SALTS SHALL BE < 4.0 mmhos/cm

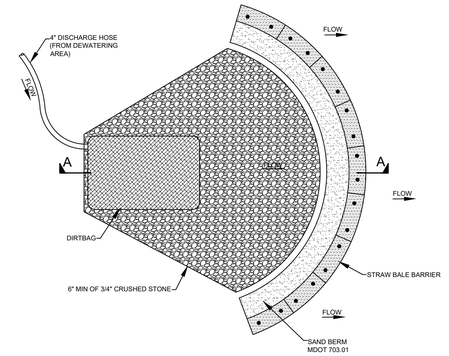
6 C4.00 **EROSION CONTROL BERM (AS NEEDED)**
NOT TO SCALE



1. WOVEN WIRE FENCE TO BE FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILD-UP REACHES 1/3 THE HEIGHT OF THE FENCE.

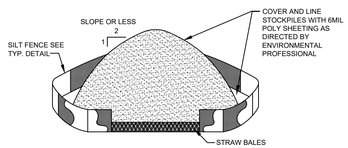
POSTS:	STEEL "T" OR "U" TYPE OR 2" HARDWOOD.
FENCE:	WOVEN WIRE. 14 1/2 GA 6" MAX MESH OPENING.
FILTER CLOTH:	FILTER X, MIRAFI 100X, STABLINKA T140N OR APPROVED EQUAL.
PREFABRICATED:	ENVIROFENCE OR APPROVED EQUAL

2 C4.00 **SILT FENCE DETAIL**
NOT TO SCALE



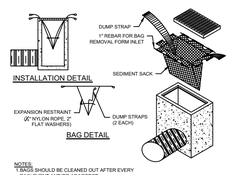
DEWATERING DETAIL NOTES:
1. DIRT BAG MATERIAL BASED ON PARTICLE SIZE IN DIRTY WATER. I.E, FOR COARSE PARTICLES A WOVEN MATERIAL IS PREFERRED; FOR SILTS/CLAYS A NON-WOVEN MATERIAL SHOULD BE IMPLEMENTED.
2. DO NOT OVER PRESSURIZE DIRT BAG OR USE BEYOND CAPACITY.
3. LOCATE DISCHARGE SITE AS INDICATED ON THE SITE GRADING PLAN.
4. DOWN GRADIENT RECEIVING AREA MUST BE WELL VEGETATED OR OTHERWISE STABLE FROM EROSION. E.G., PERMANENT VEGETATION OR COARSE GRAVEL/STONE.
5. DISCHARGE OF DEWATERING ACTIVITIES PROHIBITED WITHIN 25' OF A NATURAL RESOURCE.

4 C4.00 **EXCAVATION DEWATERING DETAIL (AS NEEDED)**
NOT TO SCALE



INSTALLATION NOTES:
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. STOCKPILE AREA SHALL BE LINED WITH 6MIL POLY SHEETING PRIOR TO SOIL PLACEMENT.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, THEN STABILIZED WITH VEGETATION OR COVERED.

7 C4.00 **TYPICAL SOIL STOCKPILE**
NOT TO SCALE



8 C4.00 **CATCH BASIN INLET PROTECTION (AS NEEDED)**
NOT TO SCALE

ISSUED FOR BID
NOT FOR CONSTRUCTION

SEAL:

NO.	BY	DATE	REVISION	APP'D.

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
EROSION & SEDIMENTATION CONTROL DETAILS
WORKING COPY

DRAWN BY:	AJG
CHECKED BY:	TND
APPROVED BY:	TND
DATE:	JULY 2026

PROJ. NO.: 636165.0000

C4.01

TRC
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Augusta, ME 04330
Phone: 207.621.7000
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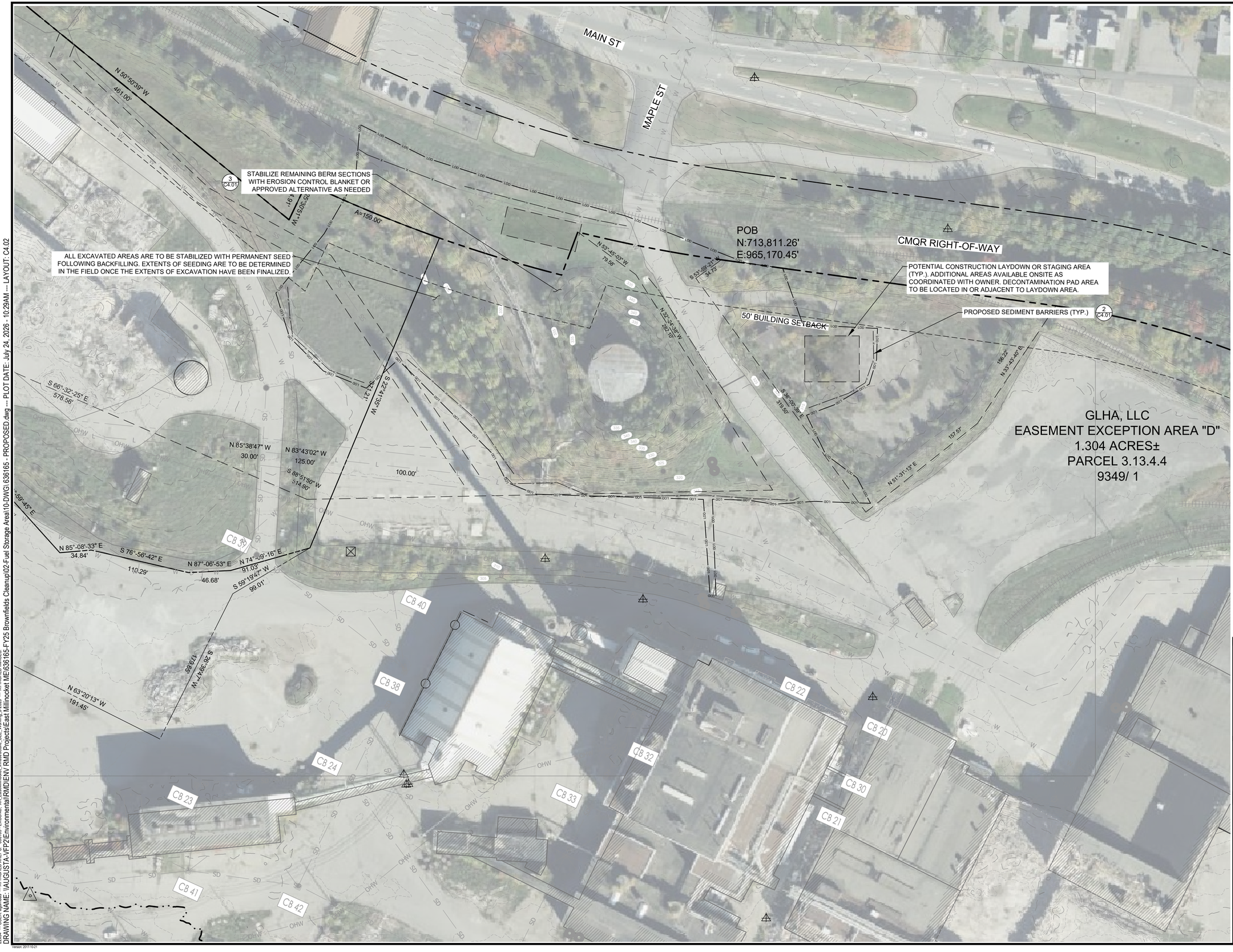
FILE NO.: 636165 - ESC.dwg

2/24/26 -- USER: agardea -- ATTACHED XREFS: --- ATTACHED IMAGES:
DRAWING NAME: \\AUG\USTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - ESC.dwg --- PLOT DATE: July 24, 2026 - 10:29AM --- LAYOUT: C4.01
Version: 2017-10-21

23-24 - USER: garobba - ATTACHED XREFS: 636165_EXCOND_XR_EastMillinocket_Infrastructure_SE - Works 3.2005 - ATTACHED IMAGES:
DRAWING NAME: \\AUGUSTA-VFP2\Environmental\RMD\ENV RMD Projects\East Millinocket ME\636165-FY25 Brownfields Cleanup\02-Fuel Storage Area\10-DWG\ 636165 - PROPOSED.dwg --- PLOT DATE: July 24, 2026 - 10:29AM --- LAYOUT: C4.02
Version: 2017-10-21



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- APPROXIMATE RIGHT-OF-WAY
- EXISTING PAVED ROAD
- EXISTING UNPAVED ROAD
- EXISTING FENCE
- EXISTING BUILDING
- EXISTING 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING OVERHEAD LINES
- EXISTING TREE LINE
- EXISTING/ABANDONED RAIL LINE
- EXISTING FENCE
- EXISTING GUARD RAIL
- EXISTING STORMDRAIN
- EXISTING SANITARY SEWER
- EXISTING WATER LINE
- EXISTING LEACHATE LINE
- APPROXIMATE FEMA FLOOD ZONE LIMIT
- USF TEST PIT LOCATION
- EXISTING UTILITY POLE
- EXISTING HYDRANT
- EXISTING BOLLARD
- EXISTING CATCH BASIN
- EXISTING SEWER MANHOLE
- EXISTING MANHOLE
- EXISTING WELL
- SURVEY CONTROL POINT
- EXISTING GATE VALVE
- EXISTING LIGHT/LAMP
- EXISTING POST INDICATOR CONTROL VALVE
- SF — PROPOSED SEDIMENT BARRIER
- LOD — PROPOSED LIMITS OF DISTURBANCE

PLAN REFERENCES

1. HORIZONTAL COORDINATE SYSTEM IS BASED ON NAD83 MAINE STATE PLAN (US SURVEY FEET, EAST ZONE, ME83-EF). ELEVATIONS ARE BASED ON NAV88 (US SURVEY FEET).
2. EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED ON A DRAWING PREPARED BY STILLWATER ENVIRONMENTAL ENGINEERING, INC. ENTITLED *"EAST MILLINOCKET MILL INFRASTRUCTURE MAPPING, 50 MAIN STREET, EAST MILLINOCKET, ME 04430"* DATED 12-20-2024.
3. BOUNDARY SURVEY AND EXISTING TOPOGRAPHIC FEATURES WERE PROVIDED BY PLISGA & DAY LAND SURVEYORS AS REFERENCED IN STILLWATER ENGINEERING, INC. DRAWING IN PLAN REFERENCE (1).
4. AERIAL IMAGERY UNDERLAY SOURCED FROM BING MAPS AND IS GEOREFERENCED HOWEVER, LOCATIONS SHOULD BE CONSIDERED APPROXIMATE.

N

0 50 100 150 200
SCALE IN FEET

SEAL:

PROJECT:
TOWN OF EAST MILLINOCKET, MAINE
FY25 BROWNFIELDS CLEAN-UP
FORMER GREAT NORTHERN PAPER MILL
50 MAIN STREET, EAST MILLINOCKET, ME 04430

TITLE:
EROSION & SEDIMENTATION CONTROL PLAN

WORKING COPY

DRAWN BY:	AJG	PROJ. NO.:	636165.0000
CHECKED BY:	TND		
APPROVED BY:	TND		C4.02
DATE:	JULY 2026		

TRC
249 Western Ave.
Augusta, ME 04330
Phone: 207.621.7000
www.trccompanies.com

FILE NO.: 636165 - PROPOSED.dwg

Attachment D
Sample Notice of Award and Contract and U.S. EPA Brownfields Cleanup Grant Cooperative Agreement Terms & Conditions

NOTICE OF AWARD & CONTRACT

TOWN OF EAST MILLINOCKET, MAINE
FORMER GREAT NORTHERN PAPER MILL FUEL SOTRAGE AREA WEST CLEANUP
50 MAIN STREET, EAST MILLINOCKET, MAINE
U.S. EPA BROWNFIELDS CLEANUP PROJECT

THIS NOTICE OF AWARD AND CONTRACT is dated _____ by and between **the Town of East Millinocket, Maine** (hereinafter called OWNER) and _____ (hereinafter called CONTRACTOR). OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1 - WORK

1.1 CONTRACTOR shall furnish all labor, equipment, supplies, and materials necessary to complete the Work as specified or indicated in TRC Environmental Corporation's Request for Bids, dated July 23, 2026, and [REFERENCE ADDENDA AND CONTRACTOR BID FORM AS APPLICABLE]. These documents, described herein, along with all attachments and/or appendices, in their entirety, form the "Contract Documents".

1.2 Work shall be performed for the Contract Sum of **$**_____, as indicated on and [REFERENCE CONTRACTOR BID FORM]. This completed bid form is also appended to this Notice of Award and Contract.

Article 2 – ENGINEER

The ENGINEER for this project is TRC Environmental Corporation, 249 Western Ave, Augusta, Maine 04330 c/o Thomas N. Daniels Jr., P.E., who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3 - CONTRACT TIME

3.1 The Work will be substantially completed on or before January 22, 2027, and final completion and ready for final payment request on or before January 27, 2027.

3.1.1 Final Payment Requirements. Final payment is contingent upon receipt of all required closeout documentation, including:

- Certified Payrolls
- Waste Disposal Manifests
- PCB and Asbestos Disposal Documentation
- Lien Waivers
- Final Inspection and Acceptance
- Any Other Required Regulatory Closeout Documentation

SAMPLE

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence for this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.1 above, plus any extensions thereof, allowed in accordance with the Request for Bids or as approved by the ENGINEER and OWNER. They also recognize the delays, expense and difficulties involved in proving the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that, as liquidated damages for delay (but not as a penalty), CONTRACTOR may be required to pay OWNER five hundred dollars and zero cents ($500.00) for each calendar day that expires after the time specified in Paragraph 3.1 for Substantial Completion, until the Work is substantially complete. After Substantial Completion if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the time specified in Paragraph 3.1 for completion and readiness for final payment, or any proper extension thereof granted by OWNER, CONTRACTOR may be required to pay OWNER five hundred dollars and zero cents ($500.00) for each calendar day that expires after the time specified in Paragraph 3.1 for completion and readiness for final payment.

Article 4 - CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents an amount in current funds as follows at the Contract Price and Unit Prices, agreed upon in the CONTRACTOR's Bid Form attached to this Notice of Award and Contract.

Article 5 - PAYMENT PROCEDURES

5.1 Payment for all work done shall be included in the bid price on the Bid Form unless otherwise noted.

5.2 CONTRACTOR shall submit invoices to the ENGINEER for review and approval. ENGINEER will make recommendations for payment to the OWNER. No extra Work, Work not included in Contract Documents, or change orders shall be compensable unless approved by the OWNER prior to the Work being performed.

Article 6 - CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

6.1 CONTRACTOR has examined and carefully studied and Contract Documents.

6.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

6.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

6.4 CONTRACTOR has carefully studied all environmental reports pertaining to hazardous materials present at the Site, which have been identified in the Contract Documents; CONTRACTOR accepts the determination of the extent of the hazardous materials contained in such reports. CONTRACTOR has carefully studied all reports and all drawings of physical

SAMPLE

conditions in or relating to existing surface or subsurface structures at the site which have been identified in the Contract Documents; CONTRACTOR accepts the determination of the extent of the "technical data" contained in such reports and drawings upon which CONTRACTOR is entitled to rely as provided in the Request for Bids. CONTRACTOR acknowledges that such reports and drawings may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

6.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

6.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

6.7 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

Article 7 - MISCELLANEOUS

7.1 Work under this Contract will be paid for, in part, by a U.S. EPA Brownfields Cleanup Grant awarded to the OWNER. CONTRACTOR shall comply with all applicable terms and conditions established in the cooperative agreement between the OWNER and U.S. EPA for the specific cleanup activities and Scope of Work outlined in the Request for Bids. A copy of the cooperative agreement terms and conditions are attached for reference.

7.2 CONTRACTOR must furnish the required Certificate of Insurance (COI) and naming the Town of East Millinocket, Maine as additionally insured and W-9 within ten calendar days from the date of this Notice of Award and Contract to the CONTRACTOR. Failure to furnish said COI and W-9 within ten days from the date of this Notice of Award and Contract, the OWNER will be entitled to consider the CONTRACTOR'S rights arising out of the OWNER'S acceptance of your Bid as abandoned.

7.3 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may

SAMPLE

not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

7.4 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

7.5 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provisions or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

7.6 To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of CONTRACTOR under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of CONTRACTOR, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.

SAMPLE

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Notice of Award and Contract. The OWNER will keep the original Notice of Award and Contract and copies have been delivered to the CONTRACTOR and ENGINEER. All portions of the Contract Document have been identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This Notice of Award and Contract will be effective on August 21, 2026.

OWNER: Town of East Millinocket, Maine	CONTRACTOR: _____
By _____	By _____
Attest _____	Attest _____
Address for giving notices	Address for giving notices
_____	_____
_____	_____
	License No. _____
	gent for service of process:_____
	(If CONTRACTOR is a corporation, attach evidence of authority to sign).

END OF DOCUMENT

SAMPLE

PAYMENT BOND

Contractor	**Surety**
Name: **[Contractor, from Contract]** Address *(principal place of business)*:	Name: **[Full formal name of Surety]** Address *(principal place of business)*: **[Address of Surety's principal place of business]**
Owner	**Contract**
Name: Town of East Millinocket Mailing address *(principal place of business)*: Town of East Millinocket 53 Main Street East Millinocket, Maine 04330	Description *(name and location)*: Former Great Northern Paper Mill fuel storage area west cleanup and restoration. Contract Price: **[Price, from Contract]** Effective Date of Contract: **[Date, from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Payment Bond, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond will arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.

4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.

5. The Surety's obligations to a Claimant under this Bond will arise after the following:

    5.1. Claimants who do not have a direct contract with the Contractor

        5.1.1. have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and

        5.1.2. have sent a Claim to the Surety (at the address described in Paragraph 13).

    5.2. Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).

6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.

7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

    7.1. Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

    7.2. Pay or arrange for payment of any undisputed amounts.

    7.3. The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 will not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

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8. The Surety's total obligation will not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond will be credited for any payments made in good faith by the Surety.

9. Amounts owed by the Owner to the Contractor under the Construction Contract will be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfying obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.

10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.

11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

12. No suit or action will be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit will be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, will be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted here from and provisions conforming to such statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

    16.1. *Claim*—A written statement by the Claimant including at a minimum:

        16.1.1. The name of the Claimant;

        16.1.2. The name of the person for whom the labor was done, or materials or equipment furnished;

        16.1.3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;

        16.1.4. A brief description of the labor, materials, or equipment furnished;

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16.1.5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;

16.1.6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;

16.1.7. The total amount of previous payments received by the Claimant; and

16.1.8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2. *Claimant*—An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond is to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

18. Modifications to this Bond are as follows: **[Describe modification or enter "None"]**

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PERFORMANCE BOND

Contractor	**Surety**
Name: **[Contractor, from Contract]** Address *(principal place of business)*:	Name: **[Full formal name of Surety]** Address *(principal place of business)*: **[Address of Surety's principal place of business]**
Owner	**Contract**
Name: Description *(name and location)*: Mailing address *(principal place of business)*: Town of East Millinocket 53 Main Street East Millinocket, Maine 04330	Description *(name and location)*: Former Great Northern Paper Mill fuel storage area west cleanup and restoration. Contract Price: **[Price, from Contract]** Effective Date of Contract: **[Date from Contract]**

Bond

Bond Amount: **[Amount]**

Date of Bond: **[Date]**

(Date of Bond cannot be earlier than Effective Date of Contract)

Modifications to this Bond form:

☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth in this Performance Bond, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

Contractor as Principal	Surety
_____ *(Full formal name of Contractor)*	_____ *(Full formal name of Surety) (corporate seal)*
By: _____ *(Signature)*	By: _____ *(Signature)(Attach Power of Attorney)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____
Attest: _____ *(Signature)*	Attest: _____ *(Signature)*
Name: _____ *(Printed or typed)*	Name: _____ *(Printed or typed)*
Title: _____	Title: _____

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party is considered plural where applicable.

EJCDC® C-610, Performance Bond.
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1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond will arise after:

    3.1. The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice may indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 will be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement does not waive the Owner's right, if any, subsequently to declare a Contractor Default;

    3.2. The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

    3.3. The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 does not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

    5.1. Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

    5.2. Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

    5.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

    5.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

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5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment, or the Surety has denied liability, in whole or in part, without further notice, the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner will not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety will not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

   7.1. the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

   7.2. additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

   7.3. liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price will not be reduced or set off on account of any such unrelated obligations. No right of action will accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond must be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and must be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit will be applicable.

12. Notice to the Surety, the Owner, or the Contractor must be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement will be deemed deleted therefrom and provisions conforming to such

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statutory or other legal requirement will be deemed incorporated herein. When so furnished, the intent is that this Bond will be construed as a statutory bond and not as a common law bond.

14. Definitions

    14.1. *Balance of the Contract Price*—The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

    14.2. *Construction Contract*—The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

    14.3. *Contractor Default*—Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

    14.4. *Owner Default*—Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

    14.5. *Contract Documents*—All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond will be deemed to be Subcontractor and the term Owner will be deemed to be Contractor.

16. Modifications to this Bond are as follows: **[Describe modification or enter "None"]**

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U.S. ENVIRONMENTAL PROTECTION AGENCY

Cooperative Agreement

GRANT NUMBER (FAIN): 00A01955 **MODIFICATION NUMBER:** 0 **PROGRAM CODE:** 4B	**DATE OF AWARD** 07/31/2025
TYPE OF ACTION New	**MAILING DATE** 08/05/2025
PAYMENT METHOD: ASAP	**ACH#** 10759

RECIPIENT TYPE:
Township

Send Payment Request to:
Contact EPA RTPFC at: rtpfc-grants@epa.gov

RECIPIENT:
TOWN OF EAST MILLINOCKET
53 MAIN ST
EAST MILLINOCKET, ME 04430-126
EIN: 01-6000149

PAYEE:
TOWN OF EAST MILLINOCKET
53 Main Street
East Millinocket, ME 04430-1126

PROJECT MANAGER	EPA PROJECT OFFICER	EPA GRANT SPECIALIST
Michael Michaud 53 Main Street East Millinocket, ME 04430-1126 **Email:** MichaelMichaud@gmail.com **Phone:** 207-723-1190	William Lariviere 5 Post Office Square Boston, MA 02109 **Email:** Lariviere.William@epa.gov **Phone:** 617-918-1231	Julie Ross Grants Management Branch **Email:** Ross.Julie@epa.gov **Phone:** 617-918-1317

PROJECT TITLE AND DESCRIPTION

Cleanup Cooperative Agreement for the Town of East Millinocket

Brownfields are real property, the expansion, development or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. This agreement will provide funding under the Infrastructure Investment and Jobs Act to the Town of East Millinocket to conduct remediation activities as authorized by CERCLA 104(k)(3) in East Millinocket, Maine.Specifically, this agreement will provide funding to the recipient to clean up two brownfield sites. Additionally, the recipient will competitively procure (as needed) and direct a Qualified Environmental Professional to conduct environmental site activities, will create a community involvement plan and administrative record for the site, and will report on interim progress and final accomplishments by completing and submitting relevant portions of the Property Profile Form using EPA's Assessment, Cleanup and Redevelopment Exchange System (ACRES).

Further, the recipient will remediate two brownfield sites and anticipates holding two community meetings, finalizing two Analysis of Brownfield Cleanup Alternatives, and submitting 16 quarterly reports. Work conducted under this agreement will benefit the residents, business owners, and stakeholders in and near the Town of East Millinocket, Maine.No subawards are included in this assistance agreement.

BUDGET PERIOD	PROJECT PERIOD	TOTAL BUDGET PERIOD COST	TOTAL PROJECT PERIOD COST
07/01/2025 - 09/30/2029	07/01/2025 - 09/30/2029	$ 4,000,000.00	$ 4,000,000.00

NOTICE OF AWARD

Based on your Application dated 11/14/2024 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards $ 4,000,000.00. EPA agrees to cost-share 100.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of $ 4,000,000.00. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.

ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)	AWARD APPROVAL OFFICE
ORGANIZATION / ADDRESS	**ORGANIZATION / ADDRESS**
U.S. EPA, Region 1, EPA New England 5 Post Office Square, Suite 100 Boston, MA 02109-3912	U.S. EPA, Region 1, EPA New England R1 - Region 1 5 Post Office Square, Suite 100 Boston, MA 02109-3912

THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Digital signature applied by EPA Award Official Arthur Johnson - Director of MSD	**DATE** 07/31/2025

EPA Funding Information

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	$ 0	$ 4,000,000	$ 4,000,000
EPA In-Kind Amount	$ 0	$ 0	$ 0
Unexpended Prior Year Balance	$ 0	$ 0	$ 0
Other Federal Funds	$ 0	$ 0	$ 0
Recipient Contribution	$ 0	$ 0	$ 0
State Contribution	$ 0	$ 0	$ 0
Local Contribution	$ 0	$ 0	$ 0
Other Contribution	$ 0	$ 0	$ 0
Allowable Project Cost	$ 0	$ 4,000,000	$ 4,000,000

Assistance Program	Statutory Authority	Regulatory Authority
66.818 - Brownfields Multipurpose, Assessment, Revolving Loan Fund, and Cleanup Cooperative Agreements	CERCLA: Secs. 104(k)(3) & 104(k)(5)(E) & 104(k)(10)(B)(iii) & Infrastructure Investment and Jobs Act (IIJA) (PL 117-58)	2 CFR 200, 2 CFR 1500 and 40 CFR 33

Fiscal									
Site Name	Req No	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
-	25010CG028	25	E4SD	0120AG7	000D79X89	4114	-	-	$ 4,000,000
									$ 4,000,000

Budget Summary Page

Table A - Object Class Category (Non-Construction)	Total Approved Allowable Budget Period Cost
1. Personnel	$ 40,000
2. Fringe Benefits	$ 0
3. Travel	$ 5,000
4. Equipment	$ 0
5. Supplies	$ 2,000
6. Contractual	$ 405,000
7. Construction	$ 3,548,000
8. Other	$ 0
9. Total Direct Charges	$ 4,000,000
10. Indirect Costs: 0.00 % Base	$ 0
11. Total (Share: Recipient 0.00 % Federal 100.00 %)	$ 4,000,000
12. Total Approved Assistance Amount	$ 4,000,000
13. Program Income	$ 0
14. Total EPA Amount Awarded This Action	$ 4,000,000
15. Total EPA Amount Awarded To Date	$ 4,000,000

Administrative Conditions

National Administrative Terms and Conditions

General Terms and Conditions

The recipient agrees to comply with the current Environmental Protection Agency (EPA) general terms and conditions available at: https://www.epa.gov/system/files/documents/2024-10/fy_2025_epa_general_terms_and_conditions_effective_october_1_2024_or_later.pdf

These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions, or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at: https://www.epa.gov/grants/grant-terms-and-conditions#general.

A. Correspondence Condition

The terms and conditions of this agreement require the submittal of reports, specific requests for approval, or notifications to EPA. Unless otherwise noted, all such correspondence should be sent to the following email addresses:

- Federal Financial Reports (SF-425): rtpfc-grants@epa.gov and Project Officer on Page 1 of Award Document
- All other forms/certifications/assurances, Indirect Cost Rate Agreements, Requests for Extensions of the Budget and Project Period, Amendment Requests, Requests for other Prior Approvals, updates to recipient information (including email addresses, changes in contact information or changes in authorized representatives) and other notifications: Grants Specialist and Project Officer on Page 1 of Award Document
- Payment requests (if applicable): Grants Specialist and Project Officer on Page 1 of Award Document
- Quality Assurance documents, workplan revisions, equipment lists, programmatic reports and deliverables: Project Officer on Page 1 of Award Document AND R1QAPPs@epa.gov

B. Pre-Award Costs

In accordance with 2 CFR 1500.9, the recipient may charge otherwise allowable pre-award costs (both Federal and non-Federal cost sharing) incurred from ***07/01/2025*** to the actual award date provided that such costs were contained in the approved application and all costs are incurred within the approved budget period.

Programmatic Conditions

FY25 Brownfields Cleanup Cooperative Agreement

Infrastructure Investment and Jobs Act Funds

Terms and Conditions

Please note that these Terms and Conditions (T&Cs) apply to Brownfield Cleanup Cooperative Agreements awarded under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 104(k) and the Infrastructure Investment and Jobs Act (IIJA).

I. GENERAL FEDERAL REQUIREMENTS

A. Federal Policy and Guidance

1. Cooperative Agreement Recipients: By awarding this cooperative agreement, the Environmental Protection Agency (EPA) has approved the application for the Cooperative Agreement Recipient (CAR) submitted in the Fiscal Year 2025 (FY25) competition for Brownfield Cleanup cooperative agreements. EPA's approval of the FY25 application indicates that the CAR is in compliance with the Site Characterization requirement (as outlined in Section III.B.9. of the FY25 Cleanup Grant Guidelines) and has provided information to EPA that demonstrates that a sufficient level of site characterization from environmental site assessments have been performed for the remediation work to begin on the site(s) subject to this agreement.

2. In implementing this agreement, the CAR shall ensure that work done with cooperative agreement funds complies with the requirements of CERCLA § 104(k). The CAR shall also ensure that cleanup activities supported with cooperative agreement funding comply with all applicable Federal and state laws and regulations. The CAR must ensure cleanups are protective of human health and the environment.

3. The CAR must consider whether it is required to conduct cleanups through a State or Tribal response program. If the CAR chooses not to participate in a State or Tribal response program, then the CAR is required to consult with the EPA Project Officer to ensure the proposed cleanup is protective of human health and the environment.

If the State or Tribe does not have a promulgated response program that is applicable to the planned brownfield activity, then the CAR is required to consult with the EPA Project Officer to ensure the protectiveness of human health and the environment.

4. A term and condition or other legally binding provision shall be included in all subawards entered into with the funds awarded under this agreement, or when funds awarded under this agreement are used in combination with non-Federal sources of funds, to ensure that the CAR complies with all applicable Federal and state laws and requirements. In addition to CERCLA § 104(k), applicable Federal laws and requirements include 2 CFR Part 200.

5. The CAR must comply with Federal cross-cutting requirements. These requirements include, but are not limited to, DBE requirements found at 40 CFR Part 33 (as applicable); OSHA Worker Health & Safety Standard 29 CFR § 1910.120; Uniform Relocation Act (40 USC § 61); National Historic Preservation Act (16 USC § 470); Endangered Species Act (P.L. 93-205); Permits required by Section 404 of the Clean Water Act; Contract Work Hours and Safety Standards Act, as amended (40 USC §§ 327-333); the Anti-Kickback Act (40 USC § 3145); and Section 504 of the Rehabilitation Act of 1973, 29 USC §§ 793 and 794; 40 CFR Part 7, Subpart C. For additional information on cross-cutting requirements visit https://www.epa.gov/grants/epa-subaward-cross-cutter-requirements.

6. The CAR must comply with Davis-Bacon Related Act prevailing wage requirements and associated U.S. Department of Labor (DOL) regulations for all construction, alteration, and repair contracts and subcontracts awarded with funds provided under this agreement by operation of CERCLA § 104(g). For more detailed information on complying with the Davis-Bacon Related Act, please see the Contract Provisions for Davis-Bacon and Related Acts and the Brownfields Davis-Bacon terms and conditions.

7. Refer to the General Term & Conditions for Buy America Sourcing requirements under the Build America, Buy America (BABA) provisions of the Infrastructure Investment and Jobs Act (IIJA; also known as Bipartisan Infrastructure Law or BIL) (P. L. 117-58, §§70911-70917).

8. The recipient agrees to have financial management and programmatic management systems in place to:

a. Track and report on expenditures of IIJA funds.

b. Track and report outputs and outcomes achieved with IIJA funds.

II. SITE OWNERSHIP/RECIPIENT ELIGIBILITY REQUIREMENTS

A. Site Ownership

1. The CAR may only clean up the site(s) it solely owns that is specified in the workplan for this cooperative agreement. The CAR must retain ownership of the site(s) while Brownfield Cleanup Grant funds are disbursed for the cleanup of the site(s) and must consult with the EPA Project Officer prior to transferring title or otherwise conveying the real property comprising the site(s). For the purposes of this agreement, the term “owns” means fee simple title unless the EPA previously approved a different ownership arrangement.

B. Continuing Obligations for CARs

1. EPA awarded this cooperative agreement to the CAR based on information indicating that the CAR would not use cooperative agreement funds to pay for a response cost at the site for which the CAR was potentially liable under CERCLA § 107. The CAR must demonstrate that it meets the requirements for one of the Landowner Liability Protections as either a Bona Fide Prospective Purchaser (BFPP), Contiguous Property Owner (CPO), or Innocent Landowner (ILO). These requirements include certain threshold criteria and continuing obligations that must be met in order for the CAR to maintain its eligible status. If the CAR fails to meet these obligations, EPA may disallow the costs incurred under this cooperative agreement for cleaning up the site under CERCLA § 104(k)(8)(C). The Landowner Liability Protection requirements include:

a. Performing “all appropriate inquiries” into the previous ownership and uses of the property before acquiring the property.

b. Not being potentially liable or affiliated with any other person who is potentially liable for response costs at the site through any direct or indirect familial relationship, any contractual, corporate, or financial relationship, or through the result of a reorganized business entity that was potentially liable.

While not necessary to obtain ILO protection, the CAR must still establish by a preponderance of the evidence that the act or omission that caused the release or threat of release of hazardous substances and any resulting damages were caused by a third party with whom the person does not have an employment, agency, or contractual relationship.

c. Demonstrating that no disposal of hazardous substances occurred at the facility after acquisition by the landowner (does not specifically apply for the CPO protection).

d. Taking “reasonable steps” with respect to hazardous substance releases by stopping any continuing releases, preventing any threatened future releases, and preventing or limiting human, environmental, or natural resource exposure to any previously released hazardous substance.

e. Complying with any land use restrictions established or relied on in connection with the response action at the site and not impeding the effectiveness or integrity of institutional controls employed in connection with the response action.

f. Providing full cooperation, assistance, and access to persons that are authorized to

conduct response actions or natural resource restoration at the site from which there has been a release or threatened release.

g. Complying with information requests and administrative subpoenas (does not specifically apply for the ILO protection).

h. Providing all legally required notices with respect to the discovery or release of any hazardous substances at the site (does not specifically apply for the ILO protection).

Notwithstanding the CAR's continuing obligations under this agreement, the CAR is subject to the applicable liability provisions of CERCLA governing its status as a BFPP, CPO, or ILO. CERCLA requires additional obligations to maintain the liability limitations for BFPP, CPO, and ILO; the relevant provisions for these obligations include §§ 101(35), 101(40), 107(b), 107(q) and 107(r).

CARs that are exempt from CERCLA liability or do not have to meet the requirements for asserting an affirmative defense to CERCLA liability must also comply with continuing obligation items c.-h.

C. Site Substitution and Cleanup Method Changes

1. The CAR must use funds provided by this agreement to clean up the brownfield site(s) in the EPA-approved workplan. The CAR shall not substitute a different brownfield site.

2. The CAR shall not make substantial changes to the cleanup method described in the workplan, including changes to the expected cleanup based on public comment or other reasons, without prior EPA approval.

III. GENERAL COOPERATIVE AGREEMENT ADMINISTRATIVE REQUIREMENTS

A. Sufficient Progress

1. This condition supplements the requirements of the Termination and Sufficient Progress Conditions in the General Terms and Conditions.

The EPA Project Officer will assess whether the recipient is making sufficient progress in implementing the cooperative agreement 18 months and 30 months from the date of award. If EPA determines that the CAR has not made sufficient progress in implementing the cooperative agreement, the CAR, if directed to do so, must implement a corrective action plan

concurred on by the EPA Project Officer and approved by the Grants Management Officer or Award Official. Alternatively, EPA may terminate this agreement under 2 CFR § 200.340 either for material non-compliance with its terms or with the consent of the CAR, depending on the circumstances.

Sufficient progress at 18 months is indicated when:

- an appropriate remediation plan is in place, institutional control development (if necessary) has commenced;
- initial community engagement activities have taken place;
- relevant state or tribal pre-cleanup requirements are being addressed;
- a Qualified Environmental Professional has been procured; and
- a solicitation for remediation services has been issued.

Sufficient progress at 30 months is indicated when:

- at least 50% of the site-specific activities have been completed and funds have been requested by and disbursed to the CAR;
- a Quality Assurance Project Plan has been approved by EPA; and
- other documented activities have occurred that demonstrate to EPA's satisfaction that the CAR will successfully perform the cooperative agreement.

B. Substantial Involvement

1. The EPA Project Officer will be substantially involved in overseeing and monitoring this cooperative agreement. Substantial involvement, includes, but is not limited to:

a. Close monitoring of the CAR's performance to verify compliance with the EPA-approved workplan and achievement of environmental results.

b. Participation in periodic telephone conference calls to share ideas, project successes and challenges, etc., with EPA.

c. Reviewing and commenting on quarterly and annual reports prepared under the cooperative agreement (the final decision on the content of reports rests with the recipient or subrecipients receiving pass-through awards).

d. Reviewing and approving Quality Assurance Project Plans and related documents or verifying that appropriate Quality Assurance requirements have been met where quality assurance activities are being conducted pursuant to an EPA-approved Quality Assurance Management Plan.

Substantial involvement may also include, depending on the direction of the EPA Project Officer:

e. Collaboration during the performance of the scope of work including participation in project activities, to the extent permissible under EPA policies. Examples of collaboration include:

i. Consultation between EPA staff and the CAR on effective methods of carrying out the scope of work provided the CAR makes the final decision on how to perform authorized activities.

ii. Advice from EPA staff on how to access publicly available information on EPA or other Federal agency websites.

iii. With the consent of the CAR, EPA staff may provide technical advice to the CAR's contractors or subrecipients provided the CAR approves any expenditures of funds necessary to follow advice from EPA staff. (The CAR remains accountable for performing contract and subaward management as specified in 2 CFR § 200.318 and 2 CFR § 200.332 as well as the terms of the EPA cooperative agreement.)

iv. EPA staff participation in meetings, webinars, and similar events upon the request of the CAR or in connection with a co-sponsorship agreement.

f. Reviewing and approving that the Analysis of Brownfield Cleanup Alternatives (ABCA), or equivalent state Brownfields program document, meets the Brownfields Program's requirements for an ABCA.

g. Reviewing proposed procurements in accordance with 2 CFR § 200.325, as well as the substantive terms of proposed contracts or subawards as appropriate. This may include reviewing requests for proposals, invitations for bids, scopes of work, and/or plans and specifications for contracts over $250,000 prior to advertising for bids.

h. Reviewing the qualifications of key personnel. (EPA does not have the authority to select employees or contractors, including consultants, employed by the CAR or subrecipients receiving pass-through awards.)

i. Reviewing information in performance reports to ensure all costs incurred by the CAR and/or its contractor(s) if needed to ensure appropriate expenditure of grant funds.

EPA may waive any of the provisions in Section III.B.1. The EPA Project Officer will provide waivers to provisions a. – d. in Section III.B.1. in writing.

2. Effects of EPA's substantial involvement include:

a. EPA's review of any project phase, document, or cost incurred under this cooperative agreement will not have any effect upon CERCLA § 128 *Eligible Response Site* determinations or rights, authorities, and actions under CERCLA or any Federal statute.

b. The CAR remains responsible for ensuring that all cleanups are protective of human health and the environment and comply with all applicable Federal and state laws. If changes to the expected cleanup become necessary based on public comment or other reasons, the CAR must consult with the EPA Project Officer and the State.

c. The CAR and its subrecipients remain responsible for ensuring costs are allowable under 2 CFR Part 200, Subpart E.

C. Cooperative Agreement Recipient Roles and Responsibilities

1. CARs, other than state or Tribal entities, that procure a contractor(s) (including consultants) where the contract will be more than the micro-purchase threshold in 2 CFR § 200.320(a)(1) ($10,000 for most CARs) must select the contractor(s) in compliance with the competitive procurement standards in 2 CFR Part 200 (including the requirements for full and open competition). Additionally, all CARs (including State and Tribal entities), regardless of the contract amount, must comply with EPA's regulations at 40 CFR Part 33 as applicable. For additional information on these requirements, see https://www.epa.gov/grants/rain-2025-g02 and the “Utilization of Disadvantaged Business Enterprises” General Term and Condition of this agreement. These requirements also apply to procurement processes that were completed before the award of this cooperative agreement, to include if the CAR intends to submit payment requests for pre-award costs. See EPA's Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements and the *Brownfields Grants: Guidance on Competitively Procuring a Contractor* for additional information.

CARs may procure multiple contractors to ensure the appropriate expertise is in place to perform work under the agreement (e.g., expertise to conduct site remediation activities vs. community engagement) and to allow the ability for work be performed concurrently at multiple sites.

2. The CAR must acquire the services of a Qualified Environmental Professional(s) as defined in 40 CFR § 312.10, if it does not have such a professional on staff to coordinate, direct, and oversee the brownfield site cleanup activities at a given site.

3. Cybersecurity – The recipient agrees that when collecting and managing environmental data under this cooperative agreement, it will protect the data by following all applicable State or Tribal law cybersecurity requirements.

a. EPA must ensure that any connections between the recipient's network or

information system and EPA networks used by the recipient to transfer data under this agreement are secure. For purposes of this section, a connection is defined as a dedicated persistent interface between an Agency Information Technology (IT) system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.

If the recipient's connections as defined above do not go through the Environmental

Information Exchange Network or EPA's Central Data Exchange, the recipient agrees to contact the EPA Project Officer no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by EPA's regulatory programs for the submission of reporting and/or compliance data.

b. The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in Cybersecurity Section a. above if the subrecipient's network or information system is connected to EPA networks to transfer data to the Agency using systems other than the Environmental Information Exchange Network or EPA's Central Data Exchange. The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR § 200.332(e), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and EPA.

4. All geospatial data created must be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Information on these standards may be found at www.fgdc.gov.

5. The CAR agrees to provide the proposed leveraged funding that is described in its workplan. If the proposed leveraging does not materialize during the period of award performance, and the CAR does not provide a satisfactory explanation, EPA may consider this factor in evaluating future applications from the CAR. In addition, if the proposed leveraging does not materialize during the period of award performance, then EPA may reconsider the legitimacy of the award. If EPA determines that the CAR knowingly or recklessly provided inaccurate information regarding the leveraged funding in its FY25 application, EPA may take action as authorized by CERCLA 104(k)(8)(C), 2 CFR Parts 200 and 1500, and/or 2 CFR Part 180 as applicable.

D. Quarterly Performance Reports

1. In accordance with the regulations at 2 CFR Parts 200 and 1500 (specifically, 2 CFR § 200.329, *Monitoring and Reporting Program Performance*), the CAR agrees to submit quarterly performance reports to the EPA Project Officer within 30 days after each reporting period. Initially, quarterly performance reports will be submitted via email or via the optional Quarterly Reporting function tool within the Assessment, Cleanup and Redevelopment Exchange System (ACRES). The EPA Project Officer will notify the CAR when use of the Quarterly Reporting tool within ACRES is required. Once the EPA Project Officer notifies the CAR of required use, the CAR agrees to use this tool to input quarterly performance reports directly into ACRES within 30 days after each reporting period. The reporting periods are October 1 – December 31 (1st quarter); January 1 – March 31 (2nd quarter); April 1 – June 30 (3rd quarter); and July 1 – September 30 (4th quarter). If a due date falls on a weekend or holiday, the report will be due on the next business day.

These reports shall cover work status, work progress, difficulties encountered, preliminary data results, and a statement of activity anticipated during the subsequent reporting period, including a description of equipment, techniques, and materials to be used or evaluated. A discussion of expenditures and financial status for each workplan task, along with a comparison of the percentage of the project completed to the project schedule and an explanation of significant discrepancies from the EPA-approved workplan and budget shall be included in the report. The report shall also include any changes of key personnel concerned with the project that were approved by the EPA Grants Management Officer or Award Official. (Note, as provided at 2 CFR § 200.308, *Revision of budget and program*, the CAR must seek prior approval from the EPA Grants Management Officer or Award Official for a change in a key personnel (including employees and contractors) that are identified by name or position in the workplan. Prior approval means the written approval obtained in advance of a recipient taking an action by an authorized official of a Federal agency or pass-through entity of certain costs or programmatic decisions.)

2. The CAR must submit performance reports on a quarterly basis in ACRES using the Cleanup Quarterly Report function. Quarterly performance reports must include:

a. A summary that clearly differentiates between activities completed with EPA funds provided under the Brownfield Cleanup cooperative agreement and related activities completed with other sources of leveraged funding.

b. A summary and status of approved activities performed during the reporting quarter; a summary of the performance outputs/outcomes achieved during the reporting quarter; and a description of problems encountered during the reporting quarter that may affect the project schedule.

c. A comparison of actual accomplishments to the anticipated outputs/outcomes specified in the EPA-approved workplan and reasons why anticipated outputs/outcomes were not met.

d. An update on the project schedule and milestones, including an explanation of any discrepancies from the EPA-approved workplan.

e. A budget summary table with the following information: current approved project budget; EPA funds drawn down during the reporting quarter; costs drawn down to date (cumulative expenditures); program income generated and used (if applicable); and total remaining funds. The budget summary table must include costs that are charged to the “other” budget object class category (e.g., subawards, etc.).

The CAR shall include an explanation of any discrepancies in the budget from the EPA-approved workplan, cost overruns or high unit costs, and other pertinent information. If significant developments occur that negatively impact the Federal Award, the CAR shall include information on their plan for corrective action and any assistance needed to resolve the situation. The CAR shall include a statement on funding transfers[1] among direct budget categories or programs, functions and activities that occurred during the quarter and cumulatively during the period of performance.

Note: ACRES reporting requirements may change over time, based on expansion of EPA's information collection authority, and the CAR is responsible for complying with the latest ACRES reporting requirements at the time of each quarterly performance report. The EPA Project Officer will notify the CAR when ACRES reporting requirements specific to Brownfields Cleanup change.

f. For local governments that are using cooperative agreement funds for health monitoring, the quarterly report must also include the specific budget, the quarterly expenditure, and cumulative expenditures to demonstrate that 10% of Federal funding is not exceeded.

Note: Each property where cleanup activities were performed and/or completed must have its corresponding information updated in ACRES (or via the Property Profile Form with prior approval from the EPA Project Officer) prior to submitting the quarterly performance report (see Section III.E. below).

3. The CAR must maintain records that will enable it to report to EPA on the amount of funds disbursed by the CAR to clean up the specific property(ies) under this cooperative agreement.

4. In accordance with 2 CFR § 200.329(e), the CAR agrees to inform the EPA Project Officer as soon as problems, delays, or adverse conditions become known which will materially impair the ability to meet the outputs/outcomes specified in the EPA-approved workplan.

E. Property Profile Submission

1. The CAR must report on interim progress (e.g., clean up started) and any final accomplishments (e.g., clean up completed, contaminants removed, institutional controls required, engineering controls required, leveraged dollars and/or jobs) by completing and submitting relevant portions of the electronic Property Profile Form using the Assessment, Cleanup and Redevelopment Exchange System (ACRES). The CAR must enter the data in ACRES as soon as the interim action or final accomplishment has occurred, or within 30 days after the end of each reporting quarter. The CAR must enter any new data into ACRES prior to submitting the quarterly performance report to the EPA Project Officer. The CAR must utilize the electronic version of the Property Profile Form in ACRES unless approval is obtained from the EPA Project Officer to use the hardcopy version of the Property Profile Form or its use is included in the approved workplan.

F. Final Cooperative Agreement Performance Report with Environmental Results

1. In accordance with the regulations at 2 CFR Parts 200 and 1500 (specifically, § 200.329, *Monitoring and Reporting Program Performance* and 2 CFR § 200.344(a), *Closeout*), the CAR agrees to submit to the EPA Project Officer within 120 days after the expiration or termination of the approved project period a final performance report on the cooperative agreement via email; unless the EPA Project Officer agrees to accept a paper copy of the report. The final performance report shall document and summarize the elements listed in Section III.D.2., as appropriate, for activities that occurred over the entire project period.

IV. FINANCIAL ADMINISTRATION REQUIREMENTS

A. Cost Share Requirement

1. As provided in IIJA, no cost share is required for this agreement.

B. Eligible Uses of the Funds for the Cooperative Agreement Recipient

1. To the extent allowable under the EPA-approved workplan, cooperative agreement funds may be used for eligible programmatic expenses necessary to clean up sites. Eligible programmatic expenses include activities described in Section V. of these Terms and Conditions. In addition, eligible programmatic expenses may include:

a. Ensuring cleanup activities at a particular site are authorized by CERCLA § 104(k) and the EPA-approved workplan.

b. Ensuring that a cleanup complies with applicable requirements under Federal and state laws, as required by CERCLA § 104(k).

c. Preparing and updating an Analysis of Brownfield Cleanup Alternatives (ABCA) which will include information about the site and contamination issues, cleanup standards, applicable laws, alternatives considered, and the proposed cleanup.

d. Using up to $50,000 of the cooperative agreement funds to conduct unforeseen environmental site assessment activities only when:

i. the state or Tribal environmental authority requires additional site characterization in order to move forward with the remediation, as provided at CERCLA § 104(k)(10)(B)(i)(I); or

the site is not enrolled in the State or Tribal response program and the Environmental Professional recommends, in writing, additional site characterization in order to move forward with the remediation, as provided at CERCLA § 104(k)(10)(B)(i)(I); and

ii. the CAR has exhausted available resources to conduct the environmental site assessment, including the resources described in the FY25 application.

The CAR must obtain written approval from the EPA Project Officer to use funding from this cooperative agreement to characterize the site.

e. Developing a Quality Assurance Project Plan (QAPP) as required by 2 CFR § 1500.12. The specific requirement for a QAPP is outlined in *Implementation of Quality Assurance Requirements for Organizations Receiving EPA Financial Assistance* available at https://www.epa.gov/grants/implementation-quality-assurance-requirements-organizations-receiving-epa-financial.

f. Performing limited site characterization to confirm the effectiveness of the proposed cleanup design or the effectiveness of a cleanup once an action has been completed.

g. Ensuring that public participation requirements are met. This includes preparing a Community Involvement Plan which will include reasonable notice, opportunity for public involvement and comment on the proposed cleanup, and response to comments.

h. Establishing an Administrative Record.

g. Using a portion of the cooperative agreement funds to purchase environmental insurance for the remediation of the site. [Funds shall not be used to purchase insurance intended to provide coverage for any of the ineligible uses under Section IV., *Ineligible Uses of the Funds for the Cooperative Agreement Recipient*.]

j. Any other eligible programmatic costs, including direct costs incurred by the recipient in reporting to EPA; procuring and managing contracts; awarding, monitoring, and managing subawards to the extent required to comply with 2 CFR § 200.332 and the “Establishing and Managing Subawards” General Term and Condition; and carrying out community engagement pertaining to the cleanup activities.

2. Under CERCLA § 104(k)(5)(E), CARs and subrecipients may use up to 5% of the amount of Federal funding for this cooperative agreement for administrative costs, including indirect costs under 2 CFR § 200.414. The limit on administrative costs for the CAR under this agreement is $200,000. The total amount of indirect costs and any direct costs for cooperative agreement administration by the CAR paid for by EPA under the cooperative agreement shall not exceed this amount. Subrecipients may use up to 5% of the amount of Federal funds in their subawards for administrative costs. As required by 2 CFR § 200.403(d), the CAR and subrecipients must classify administrative costs as direct or indirect consistently and shall not

classify the same types of costs in both categories. The term “administrative costs” does not include:

a. Investigation and identification of the extent of contamination of a brownfield site;

b. Design and performance of a response action; or

c. Monitoring of a natural resource.

Eligible cooperative agreement and subaward administrative costs subject to the 5% limitation include direct costs for:

a. Costs incurred to comply with the following provisions of the *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* at 2 CFR Parts 200 and 1500 other than those identified as programmatic.

i. Record-keeping associated with equipment purchases required under 2 CFR § 200.313;

ii. Preparing revisions and changes in the budgets, scopes of work, program plans, and other activities required under 2 CFR § 200.308;

iii. Maintaining and operating financial management systems required under 2 CFR § 200.302;

iv. Preparing payment requests and handling payments under 2 CFR § 200.305;

v. Financial reporting under 2 CFR § 200.328;

vi. Non-Federal audits required under 2 CFR Part 200, Subpart F; and

vii. Closeout under 2 CFR § 200.344 with the exception of preparing the recipient's final performance report. Costs for preparing this report are programmatic and are not subject to the 5% limitation on direct administrative costs.

b. Pre-award costs for preparation of the proposal and application for this cooperative agreement (including the final workplan) or applications for subawards are not allowable as direct costs but may be included in the CAR's or subrecipient's indirect cost pool to the extent authorized by 2 CFR § 200.460.

3. **Local Governments Only –** If authorized in the EPA-approved workplan and budget narrative, up to 10% of the funds awarded by this agreement may be used by the CAR itself as a programmatic cost for Brownfield Program development and implementation of monitoring health conditions and institutional controls. The health monitoring activities must be associated with brownfield sites at which at least a Phase II environmental site assessment is conducted and is contaminated with hazardous substances. The CAR must maintain records on funds that will be used to carry out this task to ensure compliance with this requirement.

C. Ineligible Uses of the Funds for the Cooperative Agreement Recipient

1. Cooperative agreement funds shall not be used by the CAR for any of the following activities:

a. Pre-cleanup Phase I and Phase II environmental site assessment activities with the exception of site monitoring activities that are reasonable and necessary during the cleanup process, including determination of the effectiveness of a cleanup;

b. Monitoring and data collection necessary to apply for, or comply with, environmental permits under other Federal and state laws, unless such a permit is required as a component of the cleanup action;

c. Construction, demolition, and post-cleanup site development activities that are not cleanup actions (e.g., marketing of property (activities or products created specifically to attract buyers or investors), construction of a new facility, or addressing public or private drinking water supplies that have deteriorated through ordinary use);

d. Job training activities unrelated to performing a specific cleanup at a site (i.e., on the job training) covered by the cooperative agreement;

e. To pay for a penalty or fine;

f. To pay a Federal cost share requirement (e.g., a cost share required by another Federal grant) unless there is specific statutory authority;

g. To pay for a response cost at a brownfield site for which the CAR or subaward recipient is potentially liable under CERCLA § 107;

h. To pay a cost of compliance with any Federal law, excluding the cost of compliance with laws applicable to the cleanup; and

i. Unallowable costs (e.g., lobbying and purchases of alcoholic beverages) under 2 CFR Part 200, Subpart E.

2. Cooperative agreement funds shall not be used for any of the following properties:

a. Facilities listed, or proposed for listing, on the National Priorities List (NPL);

b. Facilities subject to unilateral administrative orders, court orders, and administrative orders on consent or judicial consent decree issued to or entered by parties under CERCLA;

c. Facilities that are subject to the jurisdiction, custody or control of the United States government except for land held in trust by the United States government for an Indian Tribe; or

d. A site excluded from the definition of a brownfield site for which EPA has not made a property-specific funding determination.

V. CLEANUP REQUIREMENTS

A. Authorized Cleanup Activities

1. The CAR shall prepare an Analysis of Brownfield Cleanup Alternatives (ABCA), or equivalent state Brownfields program document, which will include information about the site and contamination issues (i.e., exposure pathways, identification of contaminant sources, etc.); cleanup standards; applicable laws; alternatives considered; and the proposed cleanup. The evaluation of alternatives must include effectiveness, ability to implement, and the cost of the response proposed. The evaluation of alternatives must also consider the resilience of the remedial options to address potential adverse impacts caused by extreme weather events (e.g., sea level rise, drought, increased frequency and intensity of flooding, etc.). The alternatives may additionally consider the degree to which they reduce greenhouse gas discharges, reduce energy use or employ alternative energy sources, reduce volume of wastewater generated/disposed of, reduce volume of materials taken to landfills, and recycle and re-use materials generated during the cleanup process to the maximum extent practicable. The evaluation will include an analysis of reasonable alternatives including no action. The cleanup method chosen must be based on this analysis and documented in a decision document upon completion of the public comment period. The CAR must consult with the relevant state program (or EPA if there is not a state program that covers the site) to determine if the selected cleanup requires formal modification based on public comments or new information.

2. Prior to conducting or engaging in any on-site activity with the potential to impact historic properties (such as invasive sampling or cleanup), the CAR shall consult with the EPA Project Officer regarding potential applicability of the National Historic Preservation Act (NHPA) (16 USC § 470) and, if applicable, shall assist EPA in complying with any requirements of the NHPA and implementing regulations.

B. Quality Assurance (QA) Requirements

Authority: Quality Assurance applies to all assistance agreements involving environmental information as defined in 2 C.F.R. § 1500.12 Quality Assurance.

When environmental data are collected as part of the brownfield cleanup (e.g., cleanup verification sampling, post-cleanup confirmation sampling), the CAR shall comply with 2 CFR § 1500.12 requirements to develop and implement quality assurance practices sufficient to produce data adequate to meet project objectives and to minimize data loss. State law may impose additional QA requirements.

The recipient will develop Quality Assurance Project Plans (QAPP) for all applicable projects and tasks involving environmental information operations in accordance with the most current version of EPA *Quality Assurance Project Plan Standard.* Regional guidance documents and national guidance documents may be helpful in meeting the requirements.

“Environmental information operations” is a collective term for work performed to collect, produce, evaluate, or use environmental information or the design, construction, operation, or application of environmental technology. For EPA, environmental information includes direct measurements of environmental parameters or processes, analytical testing of environmental conditions, information provided by models, information compiled from other sources such as databases, software applications, or existing literature, the development of environmental software, tools, or models, or the design, construction, operation, or application of environmental technology.

The QAPP must be approved by EPA prior to environmental information operations, except under circumstances requiring immediate action to protect human health and the environment or operations conducted under police powers. Unless an alternate schedule has been agreed upon, QAPPs are to be submitted at least 60 days before project activities begin. QAPPs are submitted electronically to the following:

EPA Project Officer/Tribal Coordinator (see page 1 of assistance agreement for contact information) and Regional Quality Assurance Branch via R1QAPPs@epa.gov

For organizations with an EPA-approved Quality Management Plan (QMP), the recipient will submit an annual update letter to EPA documenting progress over the year and any changes to the QMP. Annual update letters will be sent every year for four years until the expiration of the QMP (five years from initial EPA approval). Annual QA update letters will be sent to the EPA Project Officer/Tribal Coordinator and the RQAM on the anniversary of the approval of the QMP by the RQAM; or on another

mutually agreeable schedule.

For Reference:

• Quality Management Plan (QMP) Standard and EPA's Quality Assurance Project Plan (QAPP) Standard; contain quality specifications for EPA and non-EPA organizations and definitions applicable to these terms and conditions.

• EPA QA/G-5: *Guidance for Quality Assurance Project Plans*.

• EPA's Quality Program website has a list of QA managers, and Specifications for EPA and Non-EPA Organizations.

• The Office of Grants and Debarment Implementation of Quality Assurance Requirements for Organizations Receiving EPA Financial Assistance.

3. **Competency of Organizations Generating Environmental Measurement Data:** In

accordance with Agency Policy Directive Number FEM-2012-02, *Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements*, the CAR agrees, by entering into this agreement, that it has demonstrated competency prior to award, or alternatively, where a pre-award demonstration of competency is not practicable, the CAR agrees to demonstrate competency prior to carrying out any activities under the award involving the generation or use of environmental data. The CAR shall maintain competency for the duration of the project period of this agreement and this will be documented during the annual reporting process. A copy of the Policy is available online at https://www.epa.gov/measurements-modeling/documents-about-measurement-competency-under-assistance-agreements or a copy may also be requested by contacting the EPA Project Officer for this award.

C. Public Involvement and Community Outreach

1. All cleanup activities require a site-specific Community Involvement Plan. The plan must include providing reasonable notice to the community and opportunity for public involvement and comment on the proposed cleanup options under consideration for the site. All information, including responses to public comments and administrative records, may be made available to the public to the extent consistent with 2 CFR § 200.338 and applicable state, tribal, or local law.

D. Public Awareness

1. The CAR agrees to clearly reference EPA investments in the project during all phases of community outreach outlined in the EPA-approved workplan which may include the development of post-project summary or success materials that highlight achievements to which this project contributed.

a. If any documents, fact sheets, and/or web materials are developed as part of this cooperative agreement, then they shall comply with the *Acknowledgement Requirements for Non-ORD Assistance Agreements* in the General Terms and Conditions of this agreement.

b. If a sign is developed as part of a project funded by this cooperative agreement, then the sign shall include either a statement (e.g., this project has been funded, wholly or in part, by EPA) and/or EPA's logo acknowledging that EPA is a source of funding for the project. The EPA logo may be used on project signage when the sign can be placed in a visible location with a direct linkage to site activities. Use of the EPA logo must follow the sign specifications available at https://www.epa.gov/grants/epa-logo-seal-specifications-signage-produced-epa-assistance-agreement-recipients.

u+00A0 To obtain the appropriate EPA logo or seal graphic file, the CAR should send a request directly to the EPA Office of Public Affairs (OPA) and include the EPA Project Officer in the communication. Instructions for contacting OPA are available at https://www.epa.gov/aboutepa/using-epa-seal-and-logo.

c. EPA Logo: If the EPA logo is displayed along with logos from other participating entities on websites, outreach materials, or reports, it must **not** be prominently displayed to imply that any of the recipient's or subrecipient's activities are being conducted by the EPA. Instead, the EPA logo must be accompanied with a statement indicating that the Town of East Millinocket received Federal financial assistance from EPA for the project. The recipient will ensure compliance with the sign specifications provided by the OPA available at https://www.epa.gov/stylebook/using-epa-seal-and-logo. As provided in the sign specifications from OPA, the EPA logo is the preferred identifier for assistance agreement projects and use of the EPA seal requires prior approval from the EPA.

d. Procuring Signs: Consistent with section 6002 of RCRA, 42 U.S.C. 6962, and 2 CFR 200.323, recipients are encouraged to use recycled or recovered materials when procuring signs. Signage costs are considered an allowable cost under this assistance agreement provided that the costs associated with signage are reasonable.

2. The CAR agrees to notify the EPA Project Officer listed in this award document of public or media events publicizing the accomplishment of significant events related to construction and/or site reuse projects as a result of this agreement, and provide the opportunity for attendance and participation by Federal representatives with at least ten (10) working days' notice.

3. To increase public awareness of projects serving communities where English is not the predominant language, CARs are encouraged to include in their outreach strategies communication in non-English languages. This includes translating the language on signs (excluding the EPA logo or seal) into the appropriate non-English language(s). Translation costs for this purpose are allowable, provided the costs are reasonable.

4. All public awareness activities conducted with EPA funding are subject to the provisions in the General Terms and Conditions on compliance with section 504 of the Americans with Disabilities Act.

E. Administrative Record

1. The CAR shall establish an Administrative Record that contains the documents that form the basis for the selection of a cleanup plan. Documents in the Administrative Record shall include the ABCA; site investigation reports; the cleanup plan (or the contractor solicitation if it includes the cleanup plan); cleanup standards used; responses to public comments; and verification that shows that cleanup is complete. The CAR shall keep the Administrative Record available at a location convenient to the public and make it available for inspection. The Administrative Record must be retained for three (3) years after the termination of the cooperative agreement subject to any requirements for maintaining records of site cleanups ongoing at the time of termination.

F. Implementation of Cleanup Activities

1. The CAR shall ensure the adequacy of each cleanup in protecting human health and the environment as it is implemented.

2. If the CAR is unable or unwilling to complete the cleanup, the CAR shall ensure that the site is secure. The CAR shall notify the appropriate state or Tribal agency and EPA to ensure an orderly transition should additional activities become necessary.

G. Completion of Cleanup Activities

1. The CAR shall ensure that the successful completion of a cleanup is properly documented. This must be done through a final report or letter from a Qualified Environmental Professional, or other documentation provided by a State or Tribe that shows cleanup is complete (including No Further Action letters, institutional controls, etc.). This documentation must be included as part of the Administrative Record.

H. Inclusion of Additional Terms and Conditions

1. In accordance with 2 CFR § 200.334, the CAR shall maintain records pertaining to the cooperative agreement for a minimum of three (3) years following submission of the final financial report unless one or more of the conditions described in the regulation applies. The CAR shall provide access to records, including subrecipients' records, relating to cleanups supported with Cleanup cooperative agreement funds to authorized representatives of the Federal government as required by 2 CFR § 200.337.

2. The CAR has an ongoing obligation to advise EPA if it assessed any penalties resulting from environmental noncompliance at the site(s) subject to this agreement.

VI. PAYMENT AND CLOSEOUT

For the purposes of these Terms and Conditions, the following definitions apply: “payment” is EPA's transfer of funds to the CAR; “closeout” refers to the process EPA follows to ensure that all administrative actions and work required under the cooperative agreement have been completed.

A. Payment Schedule

1. The CAR may request advance payment from EPA pursuant to 2 CFR § 200.305(b)(1) and the prompt disbursement requirements of the General Terms and Conditions of this agreement. The CAR must pay subrecipients in advance provided the subrecipient complies with the requirements of 2 CFR § 200.305(b)(1).

This requirement does not apply to states which are subject to 2 CFR § 200.305(a).

B. Schedule for Closeout

1. Closeout will be conducted in accordance with 2 CFR § 200.344. EPA will close out the award when it determines that all applicable administrative actions and all required work under the cooperative agreement have been completed.

2. The CAR, within 120 days after the expiration or termination of the cooperative agreement, must submit all financial, performance, and other reports required as a condition of the cooperative agreement.

a. The CAR must submit the following documentation:

i. The Final Cooperative Agreement Performance Report as described in Section III.F. of these Terms and Conditions.

ii. Administrative and Financial Reports as described in the General Terms and Conditions of this agreement.

b. The CAR must ensure that all appropriate data have been entered into ACRES or all hardcopy Property Profile Forms are submitted to the EPA Project Officer.

c. As required by 2 CFR § 200.344, the CAR must immediately refund to EPA any balance of unobligated (unencumbered) advanced cash or accrued program income that is not authorized to be retained for use on other cooperative agreements.

[1] Per EPA's General Term and Condition, the CAR must obtain prior approval from the EPA Grants Management Officer or Award Official for cumulative transfers of funds in excess of 10% of the total budget.

Davis-Bacon Term and Condition for Brownfields

1. **Program Applicability**
    a. **Program Name:** Brownfields Program
    b. **Statute:** Brownfields Direct Cleanup and Revolving Loan Fund Grants authorized by 42 U.S.C. 9604(k) are subject to Davis-Bacon and Related Acts (DBRA) as provided in 42 U.S.C. 9604(g)
    c. **Activities subject to Davis-Bacon:**
        i. **Brownfield Sites Contaminated with Hazardous Substances:** All construction, alteration, and repair activity involving the remediation of hazardous substances is subject to DBRA. This includes:

- Excavation of contaminated soil;
- Construction of caps, barriers, and structures which permanently house treatment equipment;
- Installation of water supply wells/piping/connections;
- Abatement of contamination in buildings; and
- Demolition (if followed by new construction).

1.

        ii. **Brownfield Sites Contaminated with Petroleum:** DBRA prevailing wage requirements apply when the project includes:

- Excavation of contaminated soil and/or tank removal if followed by paving and concrete replacement, or if it is an extensive soil excavation project;
- Construction of caps, barriers, and structures which permanently house treatment equipment; and
- Installation of water supply wells/piping/connections and related excavation and replacement of contaminated soil.

    d. **Prevailing Wage Classification (e.g., Heavy Construction, Residential, Commercial) (optional):**

- **Heavy Construction:** EPA has determined the “Heavy Construction” classification should be used when soliciting competitive contracts or issuing ordering instruments to existing contractors for:

  - Excavation and removal of contaminated soil;
  - Construction of caps or barriers;
  - Replacement of paving and concrete; and
  - Installation of water supply wells/piping/connections.

- **Building Construction:** EPA has determined the “Building Construction” classification should be used when soliciting competitive contracts or issuing ordering instruments for the construction of:

  - Demolition (if followed by new construction);
  - Construction of structures which permanently house treatment equipment; and
  - Abatement of contamination in buildings (other than residential structures less than 4 stories in height).

- **Residential Construction:** EPA has determined the “Residential Construction” classification should be used when soliciting competitive contracts or issuing ordering instruments for the abatement of contamination in residential structures less than 4 stories in height.

2. **Davis-Bacon and Related Acts**

   DBRA is a collection of labor standards provisions administered by the Department of Labor, that are applicable to grants involving construction. These labor standards include the:

- Davis-Bacon Act, which requires payment of prevailing wage rates for laborers and mechanics on construction contracts of $2,000 or more
- Copeland “Anti-Kickback” Act, which prohibits a contractor or subcontractor from inducing an employee into giving up any part of the compensation to which he or she is entitled; and
- Contract Work Hours and Safety Standards Act, which requires overtime wages to be paid for over 40 hours of work per week, under contracts in excess of $100,000.

3. **Recipient Responsibilities When Entering Into and Managing Contracts:**

   c. **Solicitation and Contract Requirements:**

      iii. **Include the Correct Wage Determinations in Bid Solicitations and Contracts:** Recipients are responsible for complying with the procedures provided in 29 CFR 1.6 when soliciting bids and awarding contracts.

      iv. **Include DBRA Requirements in All Contracts:** Include the following text on all contracts under this grant:

      “By accepting this contract, the contractor acknowledges and agrees to the terms provided in the DBRA Requirements for Contractors and Subcontractors Under EPA Grants.”

1.

b. **After Award of Contract:**

ii. **Approve and Submit Requests for Additional Wages Rates:** Work with contractors to request additional wage rates if required for contracts under this grant, as provided in 29 CFR 5.5(a)(1)(iii).

iii. **Provide Oversight of Contractors to Ensure Compliance with DBRA Provisions:** Ensure contractor compliance with the terms of the contract, as required by 29 CFR 5.6.

4. **Recipient Responsibilities When Establishing and Managing Additional Subawards:**

d. **Include DBRA Requirements in All Subawards (including Loans):**

Include the following text on all subawards under this grant:

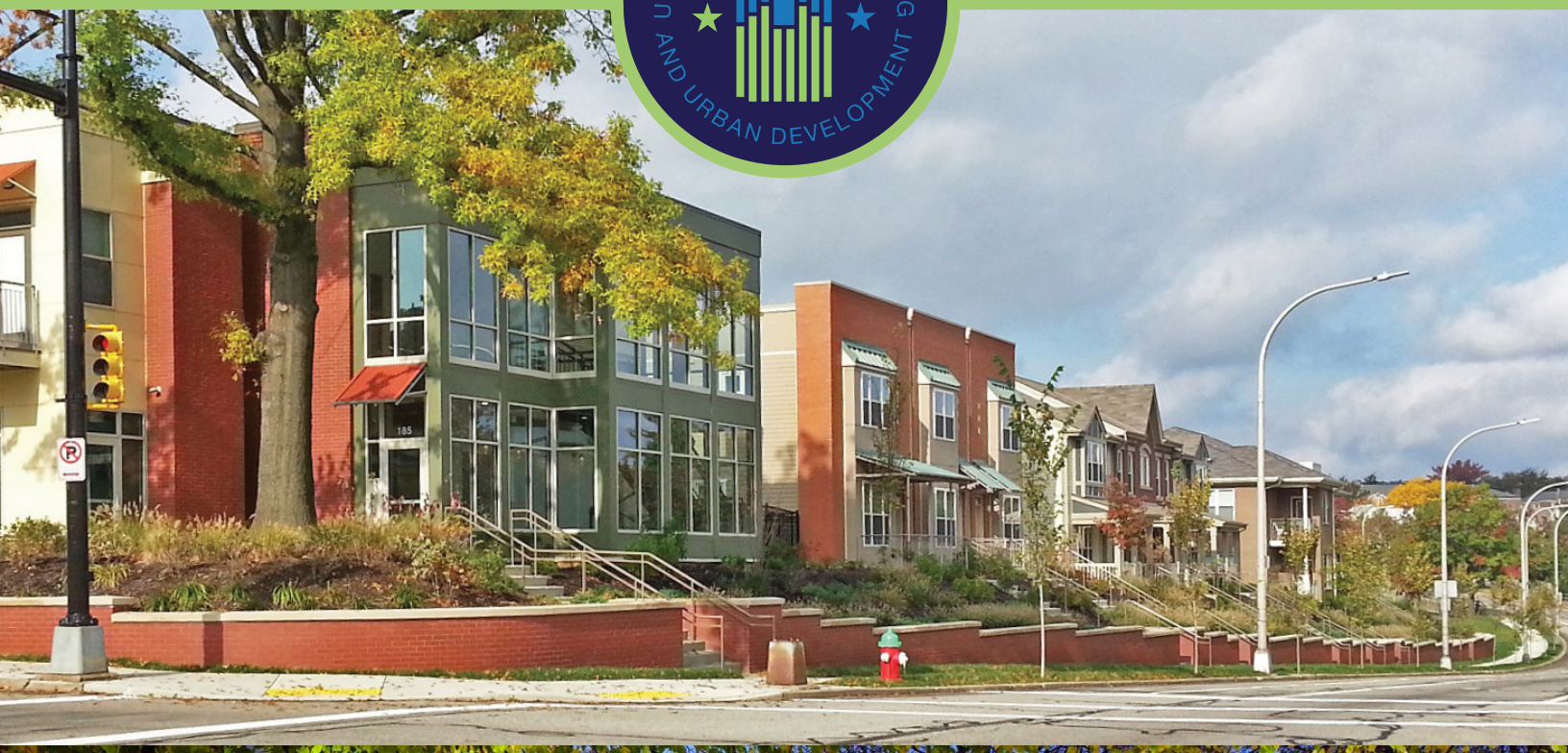
"By accepting this award, the EPA subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA Requirements for EPA Subrecipients."

1.

b. **Provide Oversight to Ensure Compliance with DBRA Provisions:** Recipients are responsible for oversight of subrecipients, and must ensure subrecipients comply with the requirements in 29 CFR 5.6.

5. The contract clauses set forth in this Term & Condition, along with the correct wage determinations, will be considered to be a part of every prime contract covered by Davis-Bacon and Related Acts (see 29 CFR5.1), and will be effective by operation of law, whether or not they are included or incorporated by reference into such contract, unless the Department of Labor grants a variance, tolerance, or exemption. Where the clauses and applicable wage determinations are effective by operation of law under this paragraph, the prime contractor must be compensated for any resulting increase in wages in accordance with applicable law.

Attachment E
Davis-Bacon Act Contractor Guide



DAVIS-BACON AND LABOR STANDARDS

AGENCY/CONTRACTOR GUIDE

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INTRODUCTION

This Guide has been developed as part of HUD's communications strategy with its approximately 5,000 client agencies, and contractors performing work on construction projects that are assisted by the U.S. Department of Housing and Urban Development and subject to Davis-Bacon prevailing wage requirements. This Guide does not address contractor requirements involved in direct Federal contracting where HUD or another Federal agency enters into a procurement contract. While the guidance contained in this Guide is generally applicable to any Davis-Bacon-covered project, specific questions pertaining to direct Federal contracts should be addressed to the Contracting Officer who signed the contract for the Federal agency.

This Guide has been designed to help agencies develop organizational and administrative policies that will enable them to meet labor standards contractual responsibilities in the administration of HUD-assisted programs as efficiently as possible. It is also useful as a training tool and a ready reference for compliance staff. Further, it may be used by contractors to provide further background. While this Guide is intended to address numerous situations, it was not written to cover every possible labor standards issue. If there is a labor standards issue not addressed in this Guide, please contact your local HUD Labor Standards Specialist (LSS). Throughout this Guide, the acronym "LCA" or "LCAs" shall mean state, tribal, and local agencies.

This Guide also provides information to assist with Davis-Bacon labor standards compliance. HUD's Office of Davis-Bacon and Labor Standards worked with the U.S. Department of Labor's Wage and Hour Division to ensure that the labor standards provisions required to be incorporated in Davis-Bacon contracts and the specifics of complying with them represent the latest information. The U.S. Department of Labor (DOL) has general administrative oversight of all Federal contracting agencies, such as HUD, which administer the day-to-day responsibilities of enforcing Davis-Bacon provisions in construction contracts they either fund or assist in funding.

This Guide contains five main chapters. The first chapter includes basic DBA definitions that affect every Davis-Bacon-covered project. The second chapter lists the responsibilities of state, tribal, and local contracting agencies that administer HUD programs. The third chapter includes the laws and regulations associated with Federal labor standards administration and enforcement. The fourth chapter describes LCA flexibility for labor standards responsibilities. The fifth and final chapter discusses payroll compliance reviews and corrections.

Finally, not all HUD construction projects are covered by Davis-Bacon wage rates. For the pur¬pose of this Guide, we are assuming that a determination has already been made that Davis-Bacon wage rates are applicable. If you need assistance in determining whether Davis-Bacon wage rates apply to a project or if you need other related technical assistance, please contact the HUD Labor Standards Field staff for your area. If you do not know which staff to contact, a list of Labor Standards field offices with their geographic areas, telephone numbers and email addresses are located on HUD's Home Page at the address below.

RESOURCE

Visit the Office of Davis Bacon and Labor Standards online:
www.hud.gov/program_offices/davis_bacon_and_labor_standards

KEY LABOR STANDARDS OBJECTIVES OF THE GUIDE

The Office of Davis-Bacon and Labor Standards has identified five Key Labor Standards Objectives—the basics of what must be accomplished in order to protect workers' rights. We also identified all the policies, procedures, and paperwork at our disposal—what we do ourselves and what we impose on contractors. HUD eliminated superfluous requirements and will not institute policies, procedures, or paperwork that is not required by statute or regulation, or that does not contribute to one or more of the Key Objectives.

Apply Davis-Bacon requirements properly

Make certain that labor standards, including Davis-Bacon prevailing wage rates, are applied where required. Ensure that any exemptions or exceptions are identified.

Through education and advice, support contractor compliance with labor standards

Provide basic training and technical support to contractors to ensure that they understand their obligations under prevailing wage and reporting requirements.

Monitor contractor performance

Perform reviews of certified payroll submissions and other information to help ensure contractor compliance with labor standards provisions and the payment of prevailing wages to workers.

Investigate probable violations and complaints of underpayment

Thoroughly explore any evidence of violations, especially allegations of underpayment.

Pursue debarment and other available sanctions against repeat labor standards violators

Carry out a zero tolerance policy toward contractors who violate prevailing wage laws.

RESOURCE

Program technical guidance

For interpretations of program requirements or handbooks and instructions on the use of forms:

Housing Programs - See our Contact List for help.

BASIC DBA DEFINITIONS

There are several compliance principles, definitions, and interpretations that affect every Davis-Bacon-covered project.

Responsibilities of employers

All employers (contractors, subcontractors, and any lower-tier subcontractors) are required to pay all laborers and mechanics employed or working on the site of the work unconditionally and not less often than once per week the full amount of wages and bona fide fringe benefits computed at rates not less than those contained in the wage decision. Employers must prepare, certify, and submit weekly payroll reports reflecting all the laborers and mechanics (employees) engaged in construction on the site of the work. Employers may also be required to submit related documentation in order to demonstrate compliance.

Responsibilities of the principal (prime) contractor

The principal contractor (also referred to as the "prime contractor") is responsible for the full compliance of all employers (itself, subcontractors, and any lower-tier subcontractors) with the labor standards provisions applicable to the project.

Prime contractor

The principal contractor.

Subcontractor

All subcontractors and lower-tier subcontractors.

Employer

Any contractor, subcontractor, or lower-tier subcontractor that has engaged the services of laborers or mechanics on the project.

To make this Guide easier to understand, the term "prime contractor" will mean the principal contractor; "subcontractor" will mean all subcontractors including lower-tier subcontractors; and the term "employer" will mean all contractors as a group, including the prime contractor and any subcontractors and lower-tier subcontractors.

Laborers and mechanics

Those individuals whose duties are manual or physical in nature, including workers who are performing the work of a trade (e.g., electrician). "Laborers" and "mechanics" include apprentices, trainees, helpers, and, for contracts subject to the Contract Work Hours and Safety Standards Act (CWHSSA), watchmen and guards.

Working foremen

Foremen or supervisors that perform construction work and devote more than 20% of their time as a laborer or mechanic are treated, for labor standards purposes, as "laborers" or "mechanics" for their time spent working as a laborer or mechanic.

Exclusions

Persons whose duties are primarily administrative, managerial, or clerical are not laborers or mechanics.

Employee

Every person who performs the work of a laborer or mechanic is "employed" regardless of any contractual relationship that may be alleged to exist between a contractor or subcontractor and such person.

Working subcontractors

Persons who perform the work of laborers or mechanics and who represent themselves to be owners of businesses, sole proprietors, or self-employed are not exempt from prevailing wage requirements. These laborers and mechanics are "employed" and are entitled to the prevailing wage for the type of work they perform, and must be reported on the payroll report for their craft, hours of work, and wages paid. For additional information, see LR-96-01, Labor Standards for Self-Employed Laborers and Mechanics.

Administrative allowances

HUD permits administrative allowances concerning payroll reporting and certification requirements relating to the following:

- Owners of Businesses Working with Their Crew
- Owner/Operators of Power Equipment
- Owner/Operators of Trucks

Apprentice

A person employed and individually registered in a bona fide apprenticeship program. Bona fide programs are those that have been registered with DOL, Employment and Training Administration, Office of Apprenticeship, or with a DOL-recognized State Apprenticeship Agency (SAA). (Note that an SAA must also partner with a State Apprenticeship Council (SAC). The SAC must consist of an equal number of representatives of employer and employee organizations.)

Probationary apprentice

A person in the first 90 days of probationary employment as an apprentice in a bona fide apprenticeship program but who has not yet been formally registered in such program may be considered an "apprentice" provided that DOL or SAC has certified that such person is eligible for probationary employment as an apprentice.

Pre-apprentice

A person who is employed as a "pre-apprentice"—that is, in a preparatory position which may result in registration in an apprenticeship program—is not considered to be an "apprentice."

Trainee

A person registered and receiving on-the-job training in a construction occupation pursuant to a training program approved in advance by the Office of Apprenticeship Training.

Prevailing wages or wage rates

Davis-Bacon prevailing wage rates generally appear as a basic hourly rate plus fringe benefits, if any. "Prevailing wage" is made up of two interchangeable components: the basic hourly wage, and fringe benefits. The total of the basic hourly wage and fringe benefits comprises the "prevailing wage" obligation. This obligation may be met by any combination of cash wages and creditable "bona fide" fringe benefits provided by the employer. For example:

The Davis-Bacon wage decision requires:

Basic Hourly Rate	$10.00
Fringe Benefits	$1.00
Total Prevailing Wage	$11.00

Employers may comply by paying:

1. $11.00 in cash wages;
2. $10.00 plus $1.00 in bona fide fringe benefits; or
3. Any combination of wages and benefits that totals $11.00 per hour.

Piece rate/piece work employees

Employees whose earnings are calculated by the amount of work produced (rather than hours worked) must receive no less than the applicable DBRA/MWD (Davis-Bacon and Related Acts/Maintenance Wage Determination) wage rate based upon the hours of work performed. The employer must divide the piece rate earnings by the actual hours worked to determine the "effective" hourly rate. The effective hourly rate must be calculated for each week's earnings and must be no less than the applicable prevailing wage rate. It does not matter whether the effective hourly rate changes from week to week as long as the result is at least as much as the prevailing wage rate. If the effective hourly rate is less than the applicable prevailing wage rate, the employee must be compensated at the prevailing wage rate for all hours worked.

Fringe benefits

Fringe benefits may include:

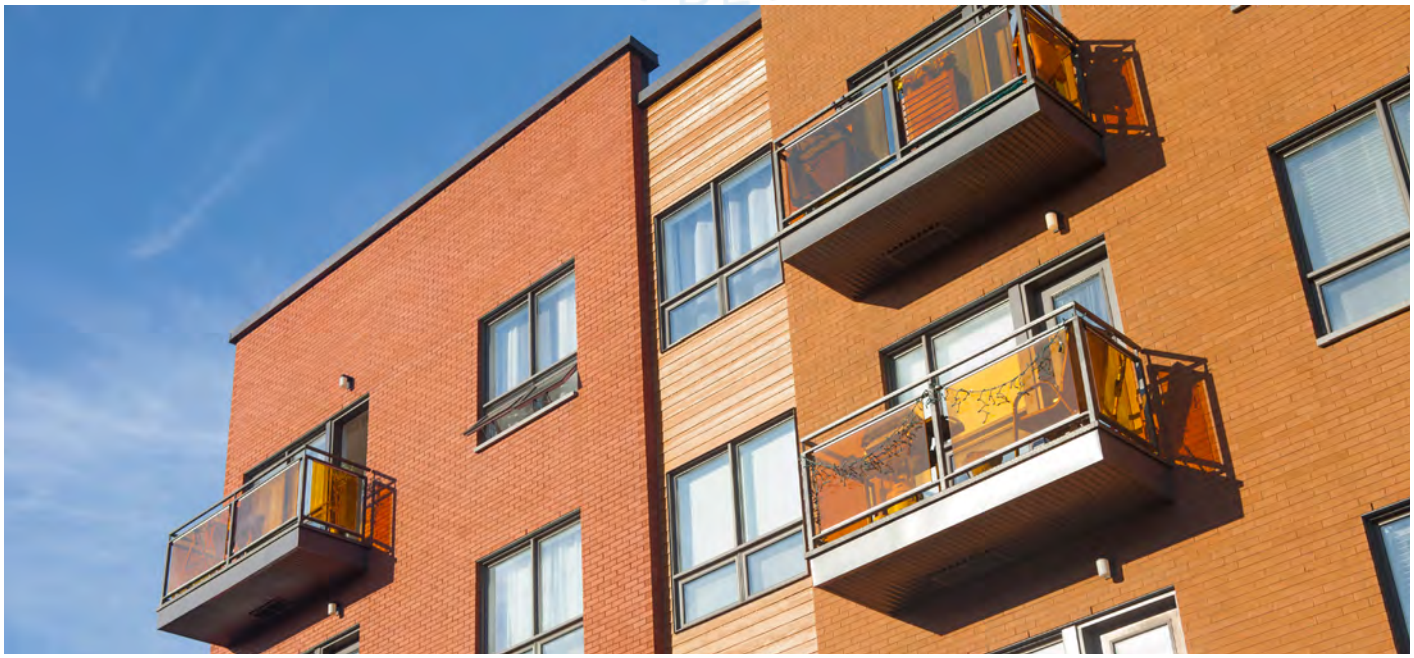
- Sick, vacation, or holiday pay;
- Costs to defray expenses of apprenticeship or similar programs;
- Medical or hospital care;
- Supplemental unemployment benefits;
- Life insurance;
- Pensions on retirement or death;
- Compensation for injuries or illness resulting from occupational activity;
- Other bona fide fringe benefits; or
- Insurance to provide any of the above.

MORE INFO

In addition, fringe benefits may reflect the rate of costs to the employer that may be reasonably anticipated in providing bona fide fringe benefits pursuant to an enforceable commitment to carry out a financially responsible program.

MORE INFO

Fringe benefits do not include employer contributions or pay ments required by other federal, state, or local law, such as FICA (Federal Insurance Contributions Act), workers' compensation, or unemployment compensation.



Overtime

Overtime (O/T) hours are defined as all hours worked in excess of 40 hours in any workweek. Where governed by Federal labor standards, O/T hours shall be compensated at not less than one and one-half times the regular rate of basic pay plus the straight-time (S/T) rate of any required fringe benefits.

Deductions

The employer may make payroll deductions as permitted by DOL regulations in 29 CFR Part 3. These regulations prohibit the employer from requiring employees to "kick back" any of their earnings. Deductions may include employee obligations for income taxes, Social Security payments, insurance premiums, retirement contributions, savings accounts, and any other legally permissible deduction authorized by the employee. Deductions may also be made for payments on judgments and other financial obligations legally imposed against the employee (which will require documentation).

Site of work

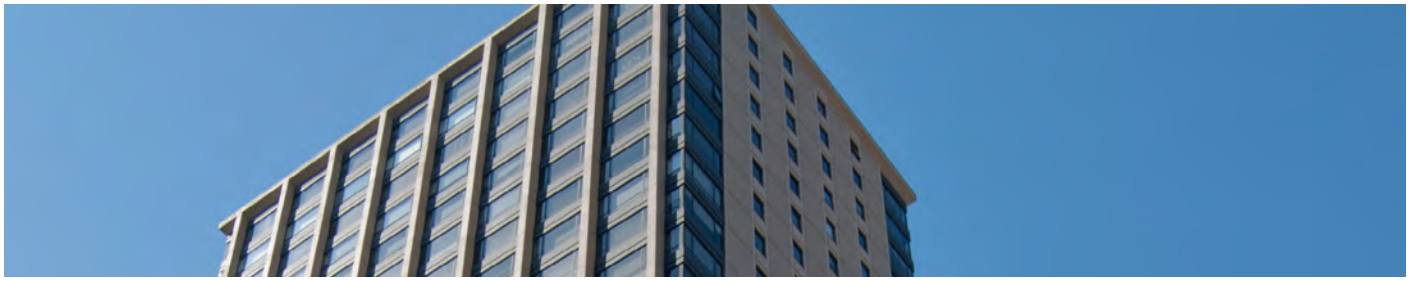
The "site of work" is limited to the physical place or places where the construction called for in the contract will remain when work on it has been completed. "Site of work" includes other adjacent or nearby properties used by the contractor/subcontractor in the construction of the project (e.g., fabrication sites) provided they are dedicated exclusively or nearly so to the performance of the contract or project, and are so located in proximity to the actual construction location that it would be reasonable to include them.

Proper designation of trade

Each laborer and mechanic shall be classified in accordance with the work classifications listed on the wage decision and the actual type of work they perform and shall be paid the appropriate wage rate and fringe benefits for the classification regardless of their level of skill. In other words, if someone is performing carpentry work on the project, they must be paid no less than the wage rate on the wage decision for carpenters even if they aren't considered by the employer to be fully trained as a carpenter. Remember, the only people who can be paid less than the rate for their craft are apprentices and trainees registered in approved programs.

Split classification

Laborers and mechanics that perform work in more than one classification may be compensated at the rate specified for each classification provided that the employer maintains time records that accurately set forth the time spent in each classification in which the work was performed. If accurate time records are not maintained, the employee shall be compensated at the highest of all wage rates for the classifications in which work was performed.



LCA RESPONSIBILITIES

State, tribal, and local contracting agencies (LCAs) that administer HUD programs agree to administer and enforce Davis-Bacon requirements as a condition for receiving HUD program assistance. LCAs have the following responsibilities:

1. Designate appropriate staff (e.g., a Contract Administrator) before the start of construction to ensure compliance with all applicable labor standards requirements and to act for and in liaison with HUD. Provide the name(s) of the staff to the appropriate HUD Field Office of Davis-Bacon and Labor Standards.

2. Establish a construction contract management system that meets the standards of 2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

3. Ensure that all bid documents, contracts, and subcontracts contain the applicable Davis-Bacon wage decision and Federal labor standards provisions.

4. Ensure that no contract is awarded to a contractor that is ineligible (e.g., debarred) for Federally-assisted work.

5. Conduct on-site inspections including interviews with laborers and mechanics employed on the construction project. Ensure that the applicable Davis-Bacon wage decision, DOL's Davis-Bacon poster (Form WH-1321), and additional classifications are displayed at the job site.

6. Review certified payroll reports (CPRs) and related documentation. Identify any discrepancies and/or violations. Ensure that any needed corrections are made promptly, including the payment of wage restitution as needed, and the assessment and collection of liquidated damages, as appropriate.

7. Maintain full documentation of Federal labor standards administration and enforcement activities.

8. Refer potential criminal or complex enforcement actions to HUD, in addition to CWHSSA liquidated damages assessments for O/T violations and debarment recommendations.

9. Comply with all HUD requirements concerning statutory, program, and/or other requirements.

10. Prepare Federal labor standards enforcement reports as required in DOL regulations (29 CFR Part 5, § 5.7).

LAWS AND REGULATIONS

The Davis-Bacon Act (DBA)

The DBA, enacted in 1931, applies to contracts in excess of $2,000 for construction, alteration, and/or repair of public buildings or public works, including painting and decorating, to which the United States or the District of Columbia is a party. This type of applicability is referred to as direct Davis-Bacon Act or DBA coverage. An example of DBA coverage is when HUD contracts directly for repairs to HUD-owned properties. HUD's Office of the Chief Procurement Officer manages these types of contracts. The DBA requires that the advertised specifications for such contracts contain a provision stating that the minimum wages to be paid to various classes of laborers and mechanics must be based upon the wages found to be prevailing by the Secretary of Labor.

Most HUD construction work is not covered by the DBA since HUD does not usually contract directly for construction work. Rather, Davis-Bacon wage rates apply to HUD programs because of prevailing wage requirements expressed in HUD "Related Acts" such as the U. S. Housing Act of 1937 and the Housing and Community Development Act of 1974, as amended. The Related Acts (referred to throughout this Guide as the Davis-Bacon and Related Acts or DBRA) are discussed further in Section 5.9.

The DBA includes provisions that:

1. Require the contractor or subcontractor to pay all mechanics and laborers at least once per week;

2. Prohibit contractors or subcontractors from taking deductions or rebates from wages earned by laborers and mechanics;

3. Require the contractor or subcontractor to pay Davis-Bacon wages to all laborers and mechanics employed on the site of the work regardless of their skill level, and regardless of any contractual relationship alleged to exist between the laborers and mechanics and the contractor or subcontractor;

4. Require the contractor or subcontractor to post the scale of wages to be paid (i.e., the applicable Davis-Bacon wage decision) in a prominent and accessible place at the work site;

5. Define prevailing wages to include fringe benefits;

6. Permit the withholding of payments due to the contractor on account of wage restitution that may be found due to the laborers and mechanics;

7. Permit the payment of wage restitution from amounts withheld from contract payments;

8. Permit the termination of the contract where it is found that any laborer or mechanic is underpaid; and

9. Permit the debarment of persons or firms found to have disregarded their obligations to employees and subcontractors.

The Contract Work Hours and Safety Standards Act (CWHSSA)

The CWHSSA applies to both direct federal contracts and to federally-assisted contracts where those contracts require or involve the employment of laborers and mechanics and where federal wage standards (e.g., Davis-Bacon or HUD-determined prevailing wage rates) are applicable. CWHSSA provisions apply to all laborers and mechanics, including watchmen and guards, employed by any contractor or subcontractor. CWHSSA also applies to maintenance laborers and mechanics employed by contractors or subcontractors engaged in the operation of Public Housing Agencies (PHA), Tribally Designated Housing Entities (TDHE), and Indian Housing Agencies (IHA) developments.

CWHSSA O/T provisions do not apply to laborers and mechanics employed directly by PHAs or IHAs. However, O/T provisions generally apply to these workers under the Fair Labor Standards Act (FLSA). HUD does not have authority to enforce FLSA violations. Refer complaints of FLSA violations to DOL, Wage and Hour Division.

CWHSSA provides that all O/T hours (defined as hours worked in excess of 40 during any workweek on the CWHSSA-covered project site) must be compensated at a rate not less than one and one-half times the regular basic rate of pay. Where CWHSSA O/T provisions are applicable, compensatory time in lieu of premium pay for O/T hours is not permissible. In the event of O/T violations, the CWHSSA renders the contractor liable to the underpaid workers for wage restitution and to the United States Government for liquidated damages computed per person per day at a rate that DOL publishes annually. It is a federal criminal misdemeanor to intentionally violate CWHSSA standards.

Exemptions:

- CWHSSA O/T provisions do not apply where the federal assistance is only in the nature of a loan guarantee or insurance.
- CWHSSA O/T provisions do not apply to prime contracts of $100,000 or less.

RESOURCE

DOL posts current fines at:
https://www.dol.gov/whd/govcontracts/cwhssa.htm#cmp

The Copeland Act (Anti-Kickback Act)

The Copeland Act concerns three facets of prevailing wage compliance:

1. The "anti-kickback" provision prohibits contractors and subcontractors from inducing an employee working on a covered contract to give up any part of the compensation to which he or she is entitled. Violations are a criminal offense and are punishable by a $5,000 fine or imprisonment up to five years, or both.

2. Associated DOL regulations restrict payroll deductions to those that are permissible without DOL approval as explained at 29 CFR § 3.5; deductions that require advance DOL approval are explained at 29 CFR § 3.6.

3. The Act requires the submission of weekly CPRs accompanied by a Statement of Compliance by all contractors and subcontractors engaged in such construction, prosecution, completion, or repair. The willful falsification of a CPR or statement of compliance may subject the employer to civil or criminal prosecution under § 1001 of Title 18 and § 3729 of Title 31 of the United States Code (USC), and may also be a cause for debarment.

Exemptions:

- Copeland Act CPR requirements are applicable only where Davis-Bacon (DBA or DBRA) prevailing wage provisions are applicable.
- Copeland Act anti-kickback provisions do not apply where the only federal assistance is a loan guarantee.

The Fair Labor Standards Act (FLSA)

The FLSA governs matters such as federal minimum wage rates and O/T. These standards are generally applicable to any labor performed and may be pre-empted by other (often more stringent) federal standards such as the DBRA prevailing wage requirements and CWHSSA O/T provisions. The authority to administer and enforce FLSA provisions resides solely with DOL.

Portal-to-Portal Act (PA)

The PA applies to the DBA and prevents the commencement of any court suit for unpaid S/T wages more than two years after performance of the work (three years in the case of willful violations), where permissible under the law. However, DOL's position is that the PA does not apply to administrative actions initiated through Administrative Law Judge (ALJ) hearing procedures; thus, the PA does not preclude corrective administrative action after two (or three) years.

The PA does not apply to federally-assisted (DBRA) projects. Instead, the various State statutes of limitations apply to such projects in private actions where they are judicially determined to be permissible under the law. The Federal six-year statute of limitations applies in government enforcement actions.

McNamara-O'Hara Service Contract Act (SCA)

The SCA governs maintenance and other service work and applies when the Federal Government or the District of Columbia contracts directly for such services and the value of the contract exceeds $2,500. SCA coverage in HUD programs is limited because HUD infrequently enters into direct contracts for services in the administration of its programs. By way of example, however, a contract for maintenance service at an HUD-owned multifamily property would be covered by the SCA. Like DBA contracts, SCA contracts are managed under the auspices of HUD's Office of the Chief Procurement Officer. SCA enforcement authority resides solely with DOL.

Davis-Bacon Regulations

DOL has published rules and instructions concerning Davis-Bacon and other labor laws in the Code of Federal Regulations (CFR). These regulations can be found in Title 29 CFR Parts 1, 3, 5, 6, and 7. Part 1 explains how DOL establishes and publishes DBA wage determinations (also referred to as wage decisions) and provides instructions on how to use the determinations. Part 3 describes Copeland Act requirements for payroll deductions and the submission of weekly CPRs. Part 5 covers the labor standards provisions that are in contracts relating to Davis-Bacon Act wage rates and the responsibilities of contractors and contracting agencies to administer and enforce the provisions. Part 6 provides for administrative proceedings enforcing Federal labor standards on construction and service contracts. Finally, Part 7 sets parameters for practice before the Administrative Review Board. These regulations are used as the basis for administering and enforcing the laws.

DOL Regulations are available online: www.ecfr.gov/current/title-29

Construction Contract Provisions and Labor Standards Administration

Labor standards administration involves the activities that take place primarily before construction begins. Administration sets the stage for the compliance activities that occur during the construction phase. The first and sometimes most difficult step is determining whether and to what extent Davis-Bacon wage standards apply to a particular contract or project. The Factors of Labor Standards Applicability (see Appendix II-6) should be helpful. Most HUD-assisted construction work is covered by Davis-Bacon, but there are some exceptions. The best and safest approach is to first assume that Davis-Bacon requirements will be applicable whenever the contract/project involves construction work valued in excess of $2,000, then look more closely to see if there is any reason for non-coverage. Each contract subject to Davis-Bacon labor standards requirements must contain labor standards clauses and a Davis-Bacon wage decision. These documents are normally wound into the contract specifications.

The labor standards clauses

The contract for construction is the vehicle to ensure contractor compliance and Davis-Bacon wage enforcement. Therefore, the bid specifications and/or the contract for each project subject to Davis-Bacon wage rates must contain both a Davis-Bacon wage decision and labor standards clauses. The labor standards clauses describe the responsibilities of the contractor concerning Davis-Bacon wages and obligate the contractor to comply with the Davis-Bacon wage and reporting requirements and with the O/T provisions of the CWHSSA (applicable only when the prime contract is valued at over $100,000).

The labor standards clauses also provide for remedies in the event of violations, including the withholding of payments due to the contractor to ensure the payment of wages or liquidated damages that may be found due, and sanctions should violations occur. These contract clauses enable the contract administrator to enforce the Federal labor standards applicable to the project. HUD has standard forms that contain contract clauses. For example, the HUD-92554M, Supplementary Conditions Of The Contract for Construction, which is issued primarily for FHA (Federal Housing Administration) multifamily housing and other construction projects administered by HUD; the HUD-4010, Federal Labor Standards Provisions, which is used for CDBG (Community Development Block Grant) and HOME (HOME Investment Partnerships Program) projects; and the HUD-5370, General Conditions for Construction Contracts (construction contracts >$150,000) or the HUD-5370-EZ, General Contract Conditions for Small Construction/Development Contracts (construction contracts >$2,000 but ≤$150,000) which are used for Public and Indian Housing projects. These should be wound into the contract specifications or incorporated by specific reference in the bid/contract documents (see Labor Relations Letter 96-03).

RESOURCE

A fillable version of this form is available online at HUDClips www.hud.gov/program_offices/administration/hudclips/forms Contact the contract administrator monitoring the project for assistance with a Project Wage Rate.

Specific Davis-Bacon Related Act (statute) for the program involved

Related Acts are program statutes that contain provisions requiring compliance with the wages that the Secretary of Labor finds to be prevailing pursuant to the Davis-Bacon Act. These are commonly referred to as the Davis-Bacon and Related Acts or DBRA.

HUD Related Acts include (but are not limited to) the:

- National Housing Act;
- U. S. Housing Act of 1937;
- Housing and Community Development Act of 1974;
- National Affordable Housing Act of 1990; and
- Native American Housing Assistance and Self-determination Act of 1996, each as amended.

Many of the labor provisions in HUD Related Acts contain applicability thresholds based upon the number of dwelling units involved. Some thresholds are based upon the amount of HUD assistance or the use of HUD funds or assistance. In addition, most HUD Related Acts contain exemptions from prevailing wage coverage for bona-fide volunteers. It is important for DBLS and LCA staff to be familiar with the statutory provisions and how these are interpreted.

The labor provisions found in current HUD Related Acts are excerpted for reference in Appendix II-1 to this Guide. Applicability factors relating to specific HUD Related Acts are in Appendix II-6.

Labor Standards Letters

This special directives series is designed to provide current and thorough guidance on Davis-Bacon issues in HUD programs. Popular topics include Davis-Bacon applicability, and prevailing wage requirements concerning self-employed laborers and mechanics. Labor Standards Letters are available online at the Davis-Bacon and Labor Standards Library: www.hud.gov/program_offices/davis_bacon_and_labor_standards/olr_lrl

HUD Guides

These Guides complement the guidance and instructions provided in HUD Handbook 1344.1, Federal Labor Standards Compliance in HUD Programs. These Guides are also available at the Davis-Bacon and Labor Standards Library.

Davis-Bacon Wage Decisions

The term “wage decision” includes the original decision and any subsequent decisions that modify, supersede, correct, or otherwise change the provisions of the original decision. The term “wage decision” is used within this Guide to mean the Davis-Bacon wage decision. The terms “wage decision” and “wage determination” are used interchangeably. A wage decision is a schedule of construction work classifications, wage rates, and fringe benefits that represent the minimum rates that must be paid to workers employed in those classifications. Wage decisions are established for defined geographic areas, usually by county

or group of counties, and four general characters of construction work.

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RESOURCE

All current Davis Bacon wage decisions can be accessed online at no cost at www.sam.gov

Character of work

There are four basic categories (or characters) of wage decisions based on the type of construction. DOL established these categories and provides details of each one in All Agency Memoranda Nos. 130 and 131. DOL provides further guidance in All Agency Memorandum 236, Prevailing Wage Resource Book, and Field Operations Handbook, Chapter 15. The four categories include:

1. **Residential:** Residential construction includes the construction, alteration, or repair of single-family houses or apartment buildings of no more than four stories in height. This typically includes all incidental items unless there is an established area practice to the contrary.

Incidental items are elements of a project whose function is to support the principal purpose and do not change the overall character of work. Examples of incidental items include sidewalks and handrails installed to support residential or building projects. While sidewalks intrinsically constitute "highway" construction, this element considered in conjunction with a residential or building project becomes incidental to the principal purpose of the construction and is subject to the same wage decision that applies to the principal purpose.

Character of work (continued)

2. **Building:** Building construction generally is the construction of sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment, or supplies. This category includes buildings exceeding four stories in height that have housing units and buildings of four stories or less that do not have housing units. This category also includes incidental items such as grading, sidewalks, and utilities. Building examples include high-rise apartment buildings, nursing homes and convalescent facilities, community centers, fire stations, commercial buildings, parking garages, and dormitories.
3. **Highway:** Highway construction includes the construction, alteration, or repair of roads, streets, highways, alleys, parking areas, and other similar projects not incidental to the main category of construction, which is either residential or building for housing development projects.
4. **Heavy:** Heavy construction includes those projects that are not properly classified as "residential," "building," or "highway." Some examples include antenna towers, canals, landscaping, drainage and irrigation projects, permanent erosion control, storm sewers, and storage tanks.

General wage decisions

Most Davis-Bacon wage decisions are general wage decisions. DOL usually publishes these annually and may modify or supersede them throughout the year. LCAs and HUD Labor Standard Specialists (LSS) may use general wage decisions without advance notice or approval from DOL. Most Davis-Bacon wage decisions are available as published general wage decisions.

General wage decisions and project wage decisions may be modified from time to time to keep them current, correct errors, and for other purposes. Modifications may be limited to one or more particular work classifications and wage rates. Modifications are effective to a project if HUD or an LCA receives them, or if notice of the modification is published at www.sam.gov prior to the lock-in date. Modifications to a project wage decision expire on the same date as the original project wage decision. A modification to a general wage determination remains in effect until it is superseded by a subsequent modification, or the original general wage decision is superseded or cancelled.

Project wage decisions

If an appropriate wage decision (by location, character of work, or specific trade required) is not published in the general wage decisions, a project wage decision shall be requested from DOL. Project wage decisions are applicable only to the construction work specified on the request to DOL and listed on the front page of the wage decision. Project wage decisions are valid for 180 days from the date of original issuance by DOL. The issuance and expiration dates will be indicated on the front page of the wage decision. Like general wage decisions, project wage decisions may be modified.

A project wage decision may be applicable even though a general wage determination is published which covers the geographic location and character of work involved. For example: A project involves only roof replacement on a 4-story apartment building and the only classification needed for the entire contract is a roofer.

Project wage decisions (continued)

A general wage decision is published for residential construction in the county in which the project is located; however, the general wage decision does not include a roofer classification and wage rate. In this case, the general wage decision is not relevant to the roof replacement and a project wage decision may be requested from DOL.

RESOURCE

General wage decisions and modifications are available at www.sam.gov

This is the only online location endorsed by DOL. Project wage decisions must be requested on a case by case basis from DOL.

Project wage decisions, as needed

The LCA or LSS shall submit a completed SF-308, Request for Wage Determination And Response to Request, to the DOL National Office, allowing 30 days for receipt of the project wage decision from DOL.

Selecting the correct wage decision

The responsible contracting officer (also referred to as the contract administrator) selects and assigns wage decisions to specific contracts or projects. For HUD-administered projects (e.g., FHA-insured multifamily development), the responsible contracting officer is the LSS. In addition, the LSS provides technical support and oversight to LCAs administering HUD programs in selecting and assigning appropriate wage decisions. Determining wage decisions is dependent upon the geographic location and the character of work (Residential, Building, Highway, and/or Heavy) assigned to the project.

A request for additional classification and wage rates may be made only after contract award. The request must originate with the contractor/employer and must be submitted by the LCA to DOL.

MORE INFO

Conformances (additional classifications)

At times, the wage decision will not contain some of the work classification and wage rates that are needed for the construction work. In these cases, send a form SF 1444 to DOL at whd-cbaconformance_incoming@dol.gov

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Verify contractor eligibility

Once the LCA has selected the contractor to whom they wish to award the contract, the LCA must verify that the contractor is not ineligible (e.g., debarred) from participation in Federal programs. Only the eligibility of the prime contractor needs to be verified. The U.S. General Services Administration (GSA) maintains a list of ineligible contractors, which can be accessed online at www.sam.gov.

An additional classification and wage rate will be approved by DOL where:

1. The requested work classification is used in the area of the project by the construction industry;
2. The work that will be performed is not performed by a work classification already contained in the wage decision;
3. The proposed wage rate bears a reasonable relationship to the wage rates on the wage decision; and
4. The workers that will be employed in the requested work classification (if known) or the workers' representatives (if any) agree with the proposed wage rate.

Provide contractor training

The LCA must make certain that the contractor understands its responsibilities for Davis-Bacon compliance: The principal contractor is responsible for the full compliance of all employers (the contractor, subcontractors, and any lower-tier subcontractors) with the labor standards provisions applicable to the project. LCAs may also wish to provide formal training separate from the contracting process for contractors that are interested in performing work on HUD-assisted contracts and want to learn more about what is involved.

CONTRACTOR RESPONSIBILITIES

See Section 4 in the Contractor Addendum.

CONTRACT ADMINISTRATOR RESPONSIBILITIES

See Section 5 in the Contractor Addendum.

LCA FLEXIBILITY FOR LABOR STANDARDS RESPONSIBILITIES

While some aspects of labor standards administration are inflexible, such as which wage decision is applicable to a specific project, the following aspects are not. For these, HUD leaves the preference of how to achieve end results with the LCA.

LCAs may hold preconstruction conferences for labor standards purposes.

HUD acknowledges that there are many good reasons to hold a preconstruction conference (PCC), and these conferences are strongly encouraged in order to have the opportunity to discuss topics such as construction inspections, progress and contractor payment requirements, Section 3 employment and training, and other issues particular to the project. However, HUD has determined that the time and resources used to conduct and document PCCs for labor standards purposes do not yield measurably better results.

Many contractors have prior Davis-Bacon contract experience and have demonstrated successful performance. These contractors do not require the repetitive basic training that is provided at most PCCs. Contractors new to Davis-Bacon projects that understand the basic requirements and choose not to comply will likely not be persuaded to fully comply just because they attended a PCC.

LCAs may prepare Project Wage Rate Sheets

Some general wage decisions cover large areas (e.g., several counties or different characters of construction) and may contain wage rates that do not apply to the contract/project to which the wage decision applies. Such wage decisions can be difficult to decipher and confusing to contractors and subcontractors, and to the workers reviewing the wage decision to determine whether they are being paid correctly. For ease of reference for the LSS/LCA, the prime contractor and any subcontractors, and the workers, the LSS/LCA may prepare a form HUD-4720, Project Wage Rate Sheet, which should reflect the most commonly used work classifications and wage rates as contained in the wage decision applicable to the project. The Project Wage Rate Sheet should be prepared only after the wage decision has been "locked-in" by contract award or start of construction, as applicable. The Project Wage Rate Sheet does not replace the wage decision; it is only provided as a convenience. If there is a conflict between the Project Wage Rate Sheet and the wage decision, the wage decision prevails.

LCAs can prepare a Project Wage Rate Sheet for contracts using the onscreen fillable versions in either the HUD Forms or DBLS websites. HUD DBLS staff is available to provide assistance to LCAs in preparing Project Wage Rate Sheets. HUD strongly recommends incorporation of the full wage decision text into bid solicitations and contracts, either in hard copy or by specific reference.

LCAs may develop their own labor standards file system

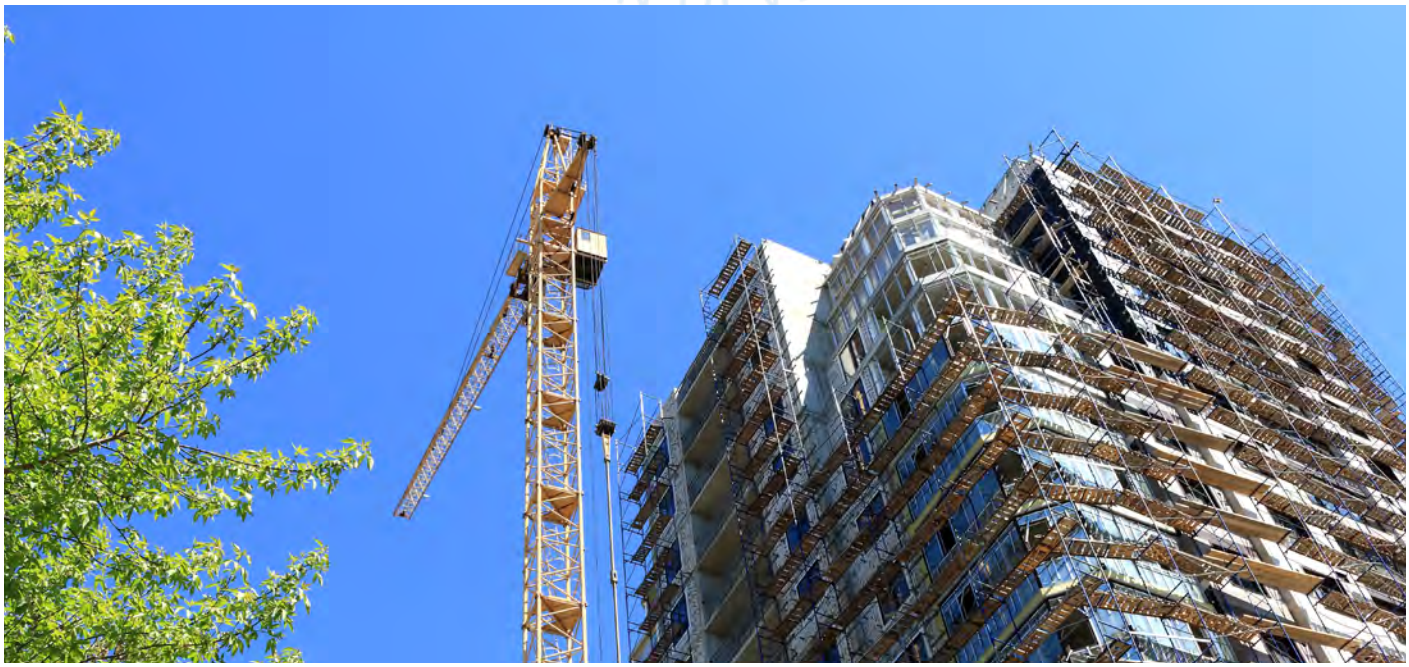
HUD believes that LCAs can best determine how to maintain their files provided that certain minimum requirements are met. The minimum requirements include compliance with DOL regulations that certified payrolls and basic records relating to the payrolls be preserved for no less than three years after completion of the project and the resolution of any enforcement actions that may carry over after completion. In addition, the files must be maintained in such a way that the LCA can utilize them to demonstrate its own compliance with its labor standards administration and enforcement responsibilities. For example, the LCA must, at HUD's request, demonstrate how it has documented that the eligibility of the prime contractor was verified for each contract.

LCAs may target on-site interviews with laborers and mechanics

HUD is interested in using on-site interviews as a proactive enforcement tool rather than to meet a "representative sampling" quota. Instead of conducting interviews randomly for the sake of assembling a sample, LCAs are encouraged to target interviews to projects or groups of workers where violations are suspected or alleged. In this way, on-site interviews can be used to support a specific ongoing enforcement action. HUD realizes that this approach may mean that fewer on-site interviews may be conducted randomly; HUD considers targeting a far more efficient and effective means of utilizing on-site interview resources.

LCAS may limit payroll reviews to spot-checks and HUD-11 (Employee Interview Form) comparison

The goal: to detect falsification. HUD believes that serious violations involving underpaid workers and significant wage restitution may be overlooked because the contract administrator is overtasked with HUD-mandated payroll review minutiae. HUD recognizes that it is not possible to conduct payroll reviews in 100% of cases; therefore, it is not possible to identify and correct every discrepancy and underpayment. It is also the case that the violations disclosed behind falsified payrolls are much more egregious (both in terms of affected workers and the amount of underpayment) than violations that appear on the face of the payroll records. Accordingly, HUD has prioritized payroll reviews so that the objective is to detect falsification, and so that enforcement activities will yield the greatest impact. HUD has developed guidance on how to detect falsification through spot-checks and HUD-11 interview comparison. (See Willful Violations and Falsification Applicability in Appendix III-1.)



LCAS may limit payroll reviews to spot-checks and HUD-11 (Employee Interview Form) comparison (continued)

Routine payroll review results may be communicated to the prime contractor by telephone and documented with a record in the file. Many times, the types of deficiencies that come to the attention of the contract administrator can be handled more efficiently and just as effectively with good informal communication (e.g., a telephone call, email, etc.) with the employer/prime contractor rather than with formal letters. Examples of the types of issues that could easily be addressed informally—assuming the cooperation of both sides—include a missing payroll report or missing apprenticeship certificates, requests for employee authorizations for deductions, small underpayments that appear on the face of the payroll, and similar matters. With the prime contractor's cooperation, these matters can be disposed of quickly with a telephone call and a brief note to the contract file documenting the call. If the employer/prime contractor does not respond appropriately to this type of communication, it may be necessary to resort to more formal means.

RESOURCE

The Department of Housing and Urban Development (HUD) one stop forms resource page.

www.hud.gov/program_offices/administration/hudclips/forms

FEDERAL LABOR STANDARDS COMPLIANCE CHECKLIST FOR DAVIS-BACON COVERED PROJECTS

RESOURCE

See LCA DBRA Checklist online at the link below:
https://www.hud.gov/program_offices/davis_bacon_and_labor_standards/OLRLibrary

REVIEWING PAYROLLS

See Section 7 in the Contractor Addendum.

REPORTING PAYROLLS

See Section 8 in the Contractor Addendum.

PAYROLL COMPLIANCE REVIEWS AND CORRECTIONS

Compliance reviews

The contract administrator or other inspector may visit the project site and interview some of the workers concerning their employment on the project. DOL may also independently conduct its own reviews (see 10.2.2 in the Contractor Addendum). In addition, the contract administrator will periodically review payrolls and related submissions, comparing the interview information to the payrolls, to ensure that the labor standards requirements have been met. Contractors will be notified by the contract administrator if these reviews find any discrepancies or errors, and will be given instructions about what steps must be taken to correct any problems.

On-site interviews

Every employer (contractor, subcontractor, etc.) must make their employees available for interview at the job site with the contract administrator or other agency representative (or HUD or DOL representative). The interviews are confidential and the employees will be asked about the number of hours they work, the kind of work they perform, and their rate of pay. Every effort will be made to ensure that these interviews cause as little disruption as possible to the ongoing work. The interviewer will record the interview information, usually on a form HUD-11, Record of Employee Interview, and forward the interviews to the contract administrator. Completed HUD-11s must be compared to the corresponding contractor and subcontractor certified payrolls to test and verify the accuracy of the payroll information.

RESOURCE

HUD 11 forms are available online in English and in Spanish in a fillable format via the HUD Forms website (www.hud.gov/program_offices/administration/hudclips/forms) and at the DBLS website (www.hud.gov/program_offices/davis_bacon_and_labor_standards/olrform).

Project payroll reviews

The contract administrator will compare the information on the interview forms to the corresponding payrolls to ensure that the workers are properly listed on the payrolls for the days and hours worked on the job site, work classification, and rate of pay. The contract administrator will also review the payroll submissions to make certain that the payrolls are complete and signed, that employees are paid no less than the wage rate for the work classification shown, that apprentice and trainee certifications are submitted (where needed), that employee or other authorizations for other deductions are submitted (where needed), etc. Contract administrators should be particularly alert for indications of payroll falsification—misinformation on payrolls to conceal underpayments. Falsification on payrolls indicates that a contractor or subcontractor is aware of its obligations, is knowingly underpaying its employees, and is attempting to avoid detection of the violations. See Appendix III-1 for an explanation of willful violations and falsification indicators.

Typical payroll errors and required corrections

Contract administrators must ensure the full correction of all discrepancies disclosed during compliance monitoring conducted by the LCA, HUD, or DOL. This includes the collection of documentation to demonstrate that corrective measures have been successfully completed. They must:

1. **Examine and resolve probable violations and complaints of underpayment.** Contract administrators must explore probable violations—particularly those involving falsification of payrolls and complaints alleging underpayments. In addition to the HUD-11, Record of Employee Interview, HUD has developed a questionnaire form (HUD-4730) and a complaint intake form (HUD-4731) for HUD and LCA use. The forms are available in onscreen fillable formats at the HUD forms website and via the DBLS website;

2. **Refer complex issues and/or falsification cases to HUD or DOL.** Some issues may be more complex than LCAs are able to address. HUD encourages LCAs to consult with the LSS for their area to secure appropriate guidance and support. HUD has decided, in consultation with DOL, that it will refer to DOL cases involving falsification of payrolls or related documents for DOL investigation. HUD strongly suggests that LCAs employ this strategy for cases involving falsification;

3. **Take steps to ensure the full resolution of any monetary liability that has or may be imposed for labor standards reasons.** Contract administrators must take prompt action to ensure that funds will be available to satisfy any labor standards liability that may be imposed. Actions include the withholding of contract payments due to the contractor and requiring funding for an escrow account to guarantee the satisfaction of any restitution and/or liquidated damages assessment that may be pending at contract closeout;

Typical payroll errors and required corrections (continued)

4. **Recommend debarment against repeat violators.** HUD has implemented a zero tolerance policy against contractors who are repeat violators of Davis-Bacon labor standards. The first time an employer is found in violation, the employer is required to pay full restitution to all affected workers and to pay any CWHSSA liquidated damages (for O/T violations) that may be assessed. In addition, the employer must provide written assurance of future compliance. If the employer promptly completes these corrective actions, HUD will not object if the LCA does not recommend debarment against the employer unless there are extenuating circumstances that warrant debarment. If the employer is found in violation again, the LCA must require full correction of any underpayments and payment of CWHSSA liquidated damages assessed. A debarment recommendation made by the LCA against the employer is expected; and

5. **Prepare and submit enforcement reports.** In accordance with DOL regulations (29 CFR Part 5, § 5.7), the contract administrator must prepare and submit to HUD an enforcement report in any case where an employer (contractor or subcontractor) has underpaid its employees by $1,000 or more or where there is reason to believe that the violations are aggravated or willful, and prepare and submit to HUD semi-annual enforcement reports concerning all Davis-Bacon labor standards administration and enforcement activities involving all HUD-assisted programs. Enforcement reports cover wage underpayments by contractors and subcontractors. Note that enforcement reports concern only wage violations associated with projects or contracts subject to the labor standards provisions of the DBRA.

Employer-specific enforcement reports

These enforcement reports are used for three general purposes. First, to report to the Secretary of Labor on Davis-Bacon enforcement actions successfully completed in the field by all federal, state, and local agencies. Second, to refer to the Wage and Hour Administrator investigative findings that are in dispute (e.g., where the employer contests findings of underpayment made against it and requests a hearing to appeal the findings). Third, to make recommendations for debarment and other sanctions and for recommendations concerning liquidated damages computed for CWHSSA O/T violations. (See Labor Relations Letter LR-92-02 for additional guidance concerning employer-based enforcement reports.)

6. **Semi-Annual Enforcement Reports.** HUD is required to furnish to DOL semi¬-annual reports (SARs) concerning the volume of DBRA-covered activities and the compliance and enforcement of DBRA labor standards provisions in HUD programs. The reports are due to DOL by April 30 and October 31 of each calendar year and cover the periods of October 1 through March 31 and April 1 through September 30, respectively. (See DOL regulations at 29 CFR § 5.7(b) and All Agency Memorandum 189.)

Typical payroll errors and required corrections (continued)

To prepare the SAR, HQLS (Headquarters Office Davis-Bacon and Labor Standards) collects data from the LSIS (Labor Standards Information System) and from each RLSO (Regional Labor Standards Officer), and then submits the report to DOL, which accepts electronic submittals of the semi-annual reports in lieu of paper copies at SemiAnnualReport@DOL.gov. HUD collects the reports from its client agencies and compiles a comprehensive report to DOL covering all HUD-assisted Davis-Bacon construction activity. The report may be completed onscreen, saved, and attached to an email message for submission purposes.

RESOURCE

A copy of the Semi Annual Report form (HUD 4710) and instructions (HUD4710i) for LCAs and are available at HUDClips (www.hud.gov/program_offices/administration/hudclips/forms) and at the Davis Bacon and Labor Standards Forms page (www.hud.gov/program_offices/davis_bacon_and_labor_standards/olrform).

MORE INFO

States may report directly to DOL, as the state chooses. PHAs, IHAs, and TDHEs should send data for Davis Bacon projects only; data relating to HUD determined maintenance wage rate projects or projects subject to Tribally determined wage rates (for construction or maintenance work) should not be included.

Common errors

The following paragraphs describe common payroll errors and the corrective steps that must be taken.

Inadequate payroll information

If an alternate payroll format used by an employer (such as some computer payrolls) is inadequate (e.g., does not contain all the necessary information that would be on the optional form WH-347), the employer will be asked to resubmit the payrolls on an acceptable form.

Missing identification numbers

If the first payroll on which an employee appears does not contain the employee's individually identifying number, the employer will be asked to supply the missing information. This information can be reported on the next payroll submitted by the employer if the employer is still working on the project. Otherwise, the employer will be asked to submit a correction certified payroll.

Incomplete payrolls

If the information on the payroll is not complete, for example, if work classifications or rates of pay are missing, the employer will be asked to send a correction certified payroll.

Classifications

If the payrolls show work classifications that do not appear on the wage decision, the employer will be asked to reclassify the employees in accordance with the wage decision, or the employer may request an additional classification and wage rate (see Section 9 in the Contractor Addendum). If reclassification results in underpayment (i.e., the wage rate reported on the payroll is less than the rate required for the new classification), the employer will be asked to pay wage restitution to all affected reclassified employees (see Section 10 in the Contractor Addendum for instructions about wage restitution).

Wage rates

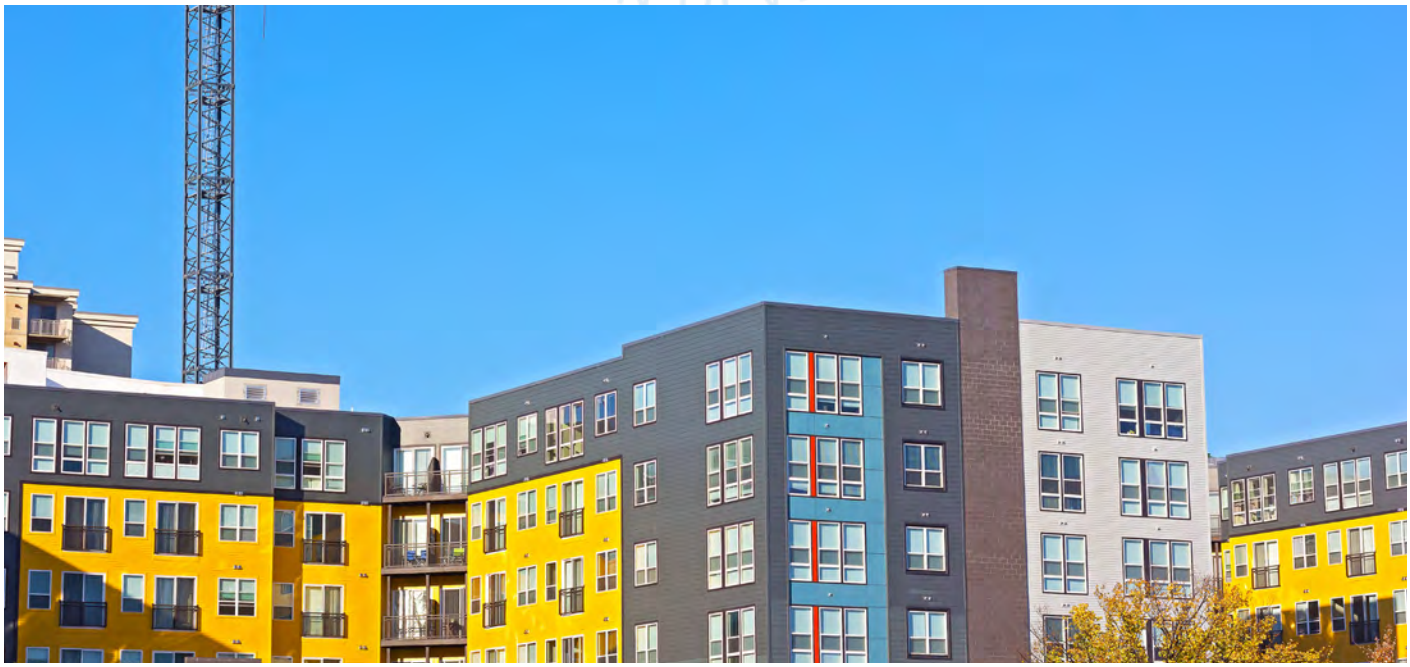
If the wage rates on the payroll are less than the wage rates on the wage decision for the work classifications reported, the employer will be asked to pay wage restitution to all affected employees.

Indications of falsification on payrolls

The greatest threat to construction workers entitled to a statutorily-mandated prevailing wage for their craft is from employers who know what is required, choose not to pay the required prevailing wage rates, and falsify CPRs to conceal the underpayments. Such willful violators see the workers' underpayment as their own gain and engage in deception to increase this gain. In addition, willful violators that successfully escape detection and are not required to pay prevailing wages will continue to bid on Davis-Bacon contracts until their violations are disclosed and administrative sanctions such as debarment are imposed.

Falsification indicators

HUD has prepared a list and explanation of four common falsification indicators that are detectable during payroll "spot-checks."



Information reported on payrolls that indicate falsification suggests willful, much more serious violations in terms of the amount of back wages that may be due and the number of employees affected.

Such cases most often warrant investigation, which can include on-site interviews, mailing questionnaires to employees, taking written statements or complaints, and other methods to gather and assess the facts of the case. See Appendix III-1 for an explanation of willful violations and falsification indicators.

Apprentices and trainees

If a copy of the employee's registration or the approved program ratio and wage schedule are not submitted with the first payroll on which an apprentice or trainee appears, the employer will be asked to submit a copy of each apprentice's or trainee's registration and/or the approved program ratio and wage schedule. If the ratio of apprentices or trainees to journeymen on the payroll is greater than the ratio in the approved program, the employer will be asked to pay wage restitution to any excess apprentices or trainees. Also, any apprentice or trainee that is not registered in an approved program must receive the journeyman's wage rate for the classification of work they performed.

Overtime

If the employees did not receive at least time and one-half for any O/T hours worked on the project, the following will occur:

1. If the project is subject to CWHSSA O/T requirements, the employer will be asked to pay wage restitution for all O/T hours worked on the project.

The employer may also be liable to the United States for liquidated damages computed at $26 per day per violation, and indexed to increase annually. Or,

2. If the project is not subject to CWHSSA, the employer will be notified of the possible FLSA O/T violations.

Also, the contract administrator may refer the matter to DOL for further review.

Computations

If the payroll computations (hours worked times rate of pay) or extensions (deductions, net pay) show frequent errors, the employer will be asked to take greater care. Wage restitution may be required if underpayments resulted from the errors.

Deductions

If there are any "Other" deductions that are not identified, or if employee authorization isn't provided, or if there is any unusual (very high, or large number) deduction activity, the employer will be asked to identify the deductions, provide employee authorization, or explain unusual deductions, as necessary.

HUD does not enforce or attempt to provide advice on employer obligations to make deductions from employee earnings for taxes or Social Security. However, HUD may refer to the IRS or other responsible agency copies of CPRs that show wages paid in gross amounts (i.e., without tax deduction) for its review and appropriate action.

Fringe benefits

If the wage decision contains fringe benefits but the payroll does not indicate how fringe benefits were paid (neither 4(a) nor 4(b) is marked on the Statement of Compliance), the employer may be asked to submit correction certified payrolls and will be required to pay wage restitution if underpayments occurred.

However, if the basic hourly rates for the employees are at least as much as the total wage rate on the wage decision (basic hourly rate plus the fringe benefit rate), no correction is necessary.

Signature

If the payroll Statement of Compliance is not signed or is missing, the employer will be asked to submit a signed Statement of Compliance for each payroll affected. If the Statement of Compliance is signed by a person who is not a principal of the firm and that person has not been authorized by principal to sign, the employer will be asked to provide an authorization or to resubmit the Statement(s) of Compliance bearing the signature of a principal or other authorized signatory.

On-site interview comparisons

If the comparison of on-site interviews to the payrolls indicates any discrepancies (e.g., the employee does not appear on the payroll for the date of the interview), the employer will be asked to submit a correction CPR.

Correction certified payroll

Any and all changes to data on a submitted payroll report must be reported on a certified correction payroll. In no case will a payroll report be returned to the prime contractor or employer for revision.

Restitution for underpayment of wages

Where underpayments of wages have occurred, the employer will be required to pay wage restitution to the affected employees. Wage restitution must be paid promptly in the full amounts due, less permissible and authorized deductions. All wages paid to laborers and mechanics for work performed on the project, including wage restitution, must be reported on a CPR. If a violation of labor standards requirements results in an underpayment of wages to employees, the LCA should notify the prime contractor to either make wage restitution or direct its subcontractor to do so. Where restitution amounts are in excess of $10 per worker, the employer must attest to wage restitution paid on a correction certified payroll.

Notification to the Employer/Prime contractor

The contract administrator will notify the employer and/or prime contractor in writing of any underpayments that are found during payroll or other reviews. The contract administrator will describe the underpayments and provide instructions for computing and documenting the restitution to be paid. The employer/prime contractor is allowed 30 days to correct the underpayments. Note that the prime contractor is responsible to the contract administrator for ensuring that restitution is paid. If the employer is a subcontractor, the subcontractor will usually make the computations and restitution payments and furnish the required documentation through the prime contractor.

Notification to the Employer/Prime contractor (continued)

MORE INFO

The contract administrator may communicate directly with a subcontractor when the underpayments are plainly evident and the subcontractor is cooperative. It is best to work with the prime contractor when the issues are complex, when there are significant underpayments, and/or the subcontractor is not co operative. In all cases, the subcontractor must ensure that the prime contractor receives a copy of the required documentation.

Computing wage restitution

Wage restitution is simply the difference between the wage rate paid to each affected employee and the wage rate required on the wage decision for all hours worked where underpayments occurred. The difference in the wage rates is called the adjustment rate. The adjustment rate times the number of hours involved equals the gross amount of restitution due. Alternatively, wage restitution may be computed by calculating the total amount of Davis-Bacon wages earned and subtracting the total amount of wages paid. The difference is the amount of back wages due.

Total hours worked times (x) adjustment rate (DB rate – rate paid) = wage restitution due; or

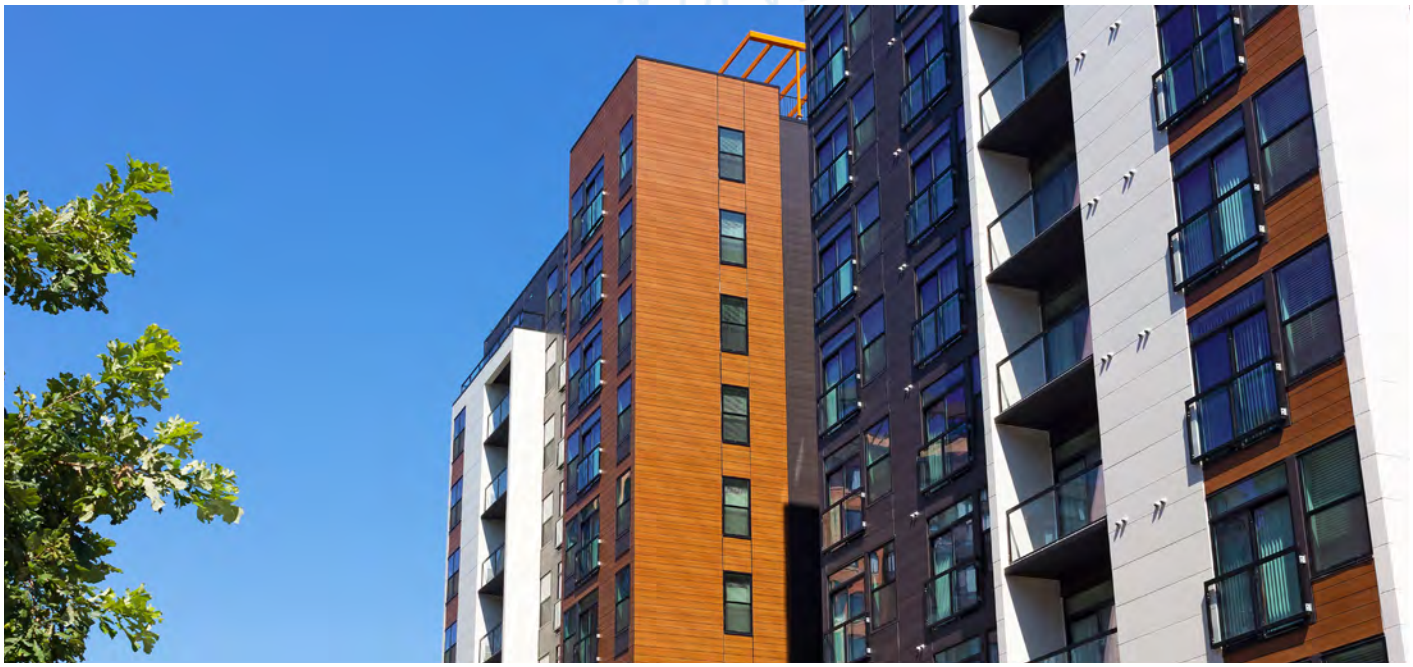
Total wages earned minus (-) total wages paid = wage restitution due.

Correction certified payrolls

The employer will be required to report the restitution paid on a correction certified payroll. The correction payroll will reflect the period for which restitution is due (e.g., Payrolls #1 through #6, or a beginning date and ending date). The correction payroll will list each employee to whom restitution is due and their work classification, the total number of work hours involved (daily hours are usually not applicable for wage restitution), the adjustment wage rate (the difference between the required wage rate and the wage rate paid), the gross amount of restitution due, deductions, and the net amount actually paid. A properly signed Statement of Compliance must accompany the correction payroll. HUD no longer requires the signature of the employee on the correction payroll to evidence employee receipt of restitution payment. In addition, except in the most extraordinary cases, HUD no longer requires employers to submit copies of restitution checks (certified, cashier's, canceled, or other) or employee-signed receipts or waivers.

MORE INFO

In the course of basic enforcement and corrections, the em ployer need only submit a correction CPR to evidence wage restitution paid. Other documentation such as copies of checks, copies of cancelled checks, receipts signed by the employees, employee signatures on the correction CPR, etc., is not required.



Review of correction CPR

The contract administrator will review the correction certified payroll to ensure that full restitution was paid. The prime contractor shall be notified in writing of any discrepancies and will be required to make additional payments, if needed, documented on a correction certified payroll within 30 days.

Withholding payments due to the contractor

If wage violations are not corrected within 30 days after notification to the prime contractor, the LCA may cause the withholding of payments due to the contractor in the amount needed to ensure the full payment of restitution and, if applicable, liquidated damages computed for CWHSSA O/T violations. Only the amounts necessary to meet the potential back wage and CWHSSA liquidated damages liabilities should be withheld.

Unfound workers

Sometimes, wage restitution cannot be paid to an affected employee because, for example, the employee has moved and cannot be located. After wage restitution has been paid to all the workers who could be located, the employer must submit a list of any workers who could not be found and paid (i.e., unfound workers), providing their name, Social Security number, last known address, and the gross amount due. In such cases, at the end of the project the prime contractor will be required to place in a deposit or labor standards escrow account an amount equal to the total gross amount of restitution that could not be paid because the employee(s) could not be located. The contract administrator will continue attempts to locate the unfound workers for three years after the completion of the project. After three years, any amount remaining in the account for unfound workers will be credited and/or forwarded by the contract administrator to HUD. Contact the HUD LSS for your area if you encounter this situation.

ADDITIONAL WORK CLASSIFICATION AND WAGE RATES

See Section 9 in the Contractor Addendum.

SANCTIONS AND RESTITUTION

See Section 9 in the Contractor Addendum.

APPENDIX

- Appendix I-1 Reorganization Plan No. 14 of 1950
- Appendix I-2 Delegations of Authority
- Appendix I-3 Labor Standards Core Work Activities
- Appendix II-1 HUD Davis-Bacon Related Acts
- Appendix II-2 Davis-Bacon Act Copeland Anti-Kickback Act
- Appendix II-3 Contract Work Hours and Safety Standards Act
- Appendix II-4 Federal Labor Standards Coverage in Major HUD Programs
- Appendix II-5 Factors of Labor Standards Applicability
- Appendix III-1 HUD's Willful Violations and Falsification Applicability
- Appendix III-2 Sample Deposit Schedule
- Appendix III-3 Sample Tax Withholding Notice
- Appendix III-4 Unfound Worker Schedule
- Appendix III-5 Refund of Deposit Memorandum Template
- Appendix IV-1 Acronyms and Symbols

Attachment F
US Department of Labor: Davis-Bacon Act Wage Rates

"General Decision Number: ME20260014 01/02/2026

Superseded General Decision Number: ME20250014

State: Maine

Construction Type: Building

Counties: Lincoln, Oxford and Waldo Counties in Maine.

BUILDING CONSTRUCTION PROJECTS (does not include single family homes or apartments up to and including 4 stories).

Modification Number	Publication Date
0	01/02/2026

BRMA0003-013 05/01/2025

	Rates	Fringes
BRICKLAYER	$ 43.91	28.47

ELEV0004-006 01/01/2025

	Rates	Fringes
ELEVATOR MECHANIC	$ 74.17	38.435+a+b

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day and the Friday after Thanksgiving.

b. VACATION: Employer contributes 8% of basic hourly rate for 5 years or more of service; 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

IRON0007-034 09/16/2025

	Rates	Fringes
IRONWORKER (ORNAMENTAL AND REINFORCING)	$ 33.65	26.27

LABO0327-003 12/01/2023

	Rates	Fringes
LABORER: Common or General (Industrial Work Only)	$ 21.90	19.72

SUME2014-023 01/31/2017

	Rates	Fringes
CARPENTER, Includes Drywall Hanging, and Metal Stud Installation	$ 19.56	9.13
CEMENT MASON/CONCRETE FINISHER	$ 16.13	3.82
DRYWALL FINISHER/TAPER	$ 16.84	2.87

ELECTRICIAN.....$ 25.27 9.30

IRONWORKER, STRUCTURAL.....$ 22.17 9.28

LABORER: Common or General.....$ 14.96 5.89

LABORER: Mason Tender - Brick...$ 18.33 2.01

OPERATOR:
Backhoe/Excavator/Trackhoe.....$ 20.42 3.12

OPERATOR: Crane.....$ 23.98 7.46

PAINTER (Brush and Roller).....$ 15.86 2.66

PLUMBER, Includes HVAC Pipe
Installation.....$ 20.35 5.09

SHEET METAL WORKER, Includes
HVAC Duct Installation.....$ 16.97 1.92

TRUCK DRIVER: Dump Truck.....$ 14.79 2.53

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within

the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are

based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION
"

Attachment G
US Department of Labor: Employee Rights Under Davis-Bacon Act

WORKER RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS WORKING ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

The law requires employers to display this poster where workers can readily see it.

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved federal or state apprenticeship programs.

RETALIATION

The law prohibits discharging or otherwise retaliating against workers for filing a complaint, cooperating in an investigation, or testifying in a proceeding under the Davis-Bacon and Related Acts.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.

WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

866-487-9243
dol.gov/agencies/whd

WH1321 REV 07/24

Attachment H
US Department of Labor & GSA Request for Labor Classifications

Request For Authorization Of Additional Classification And Rate	Check Appropriate Box ☐ Service Contract ☐ Construction Contract	**OMB Control Number: 9000-0066** **Expiration Date: 5/31/2027**

Instructions: The Contractor shall complete items 3 through 16, keep a pending copy, and submit the request, in quadruplicate, to the Contracting Officer.

1. **To:** Administrator, Wage And Hour Division U.S. Department Of Labor Washington, DC 20210	2. **From:** (Reporting Office)
3. Contractor	4. Date Of Request

5. Contract Number	6. Date Bid Opened (Sealed Bidding)	7. Date Of Award	8. Date Contract Work Started	9. Date Option Exercised (If Applicable) (Service Contract Only)

10. Subcontractor (If Any)

11. Project And Description Of Work (Attach Additional Sheet If Needed)

12. Location (City, County, And State)

13. In Order To Complete The Work Provided For Under The Above Contract, It Is Necessary To Establish The Following Rate(s) For The Indicated Classification(s) Not Included In The Department Of Labor Determination

Number: Dated:

a. List In Order: Proposed Classification Title(s); Job Description(s); Duties; And Rationale For Proposed Classifications (Service contracts only)	b. Wage Rate(s)	c. Fringe Benefits Payments
(Use reverse or attach additional sheets, if necessary)		

14. Signature And Title Of Subcontractor Representative (If Any)	15. Signature And Title Of Prime Contractor Representative

16. Signature Of Employee Or Representative	Title	Check Appropriate Box - Referencing Block 13. ☐ Agree ☐ Disagree

To Be Completed By Contracting Officer (Check As Appropriate - See FAR 22.1019 (Service Contract Labor Standards) Or FAR 22.406-3 (Construction Wage Rate Requirements))

☐ The Interested Parties Agree And The Contracting Officer Recommends Approval By The Wage And Hour Division. Available Information And Recommendations Are Attached.

☐ The Interested Parties Cannot Agree On The Proposed Classification And Wage Rate. A Determination Of The Question By The Wage And Hour Division Is Therefore Requested. Available Information And Recommendations Are Attached.

(Send 3 copies to the Department of Labor)

Signature Of Contracting Officer Or Representative	Title And Commercial Telephone Number	Date Submitted

Paperwork Reduction Act Statement

This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 9000-0066. We estimate that it will take .5 hours to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

Attachment I
US Department of Labor & GSA Labor Interview

LABOR STANDARDS INTERVIEW

CONTRACT NUMBER	EMPLOYEE INFORMATION		
	LAST NAME	FIRST NAME	MI
NAME OF PRIME CONTRACTOR			
	STREET ADDRESS		
NAME OF EMPLOYER			
	CITY	STATE	ZIP CODE
SUPERVISOR'S NAME			
LAST NAME / FIRST NAME / MI	WORK CLASSIFICATION	WAGE RATE	

ACTION	CHECK BELOW YES	NO
Do you work over 8 hours per day?	☐	☐
Do you work over 40 hours per week?	☐	☐
Are you paid at least time and a half for overtime hours?	☐	☐
Are you receiving any cash payments for fringe benefits required by the posted wage determination decision?	☐	☐

WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY?

	TOOLS YOU USE	
HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW?		
DATE OF LAST WORK DAY BEFORE INTERVIEW *(YYMMDD)*		
DATE YOU BEGAN WORK ON THIS PROJECT *(YYMMDD)*		

THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE

EMPLOYEE'S SIGNATURE	DATE *(YYMMDD)*

INTERVIEWER	SIGNATURE	TYPED OR PRINTED NAME	DATE *(YYMMDD)*

INTERVIEWER'S COMMENTS

WORK EMPLOYEE WAS DOING WHEN INTERVIEWED	ACTION *(If explanation is needed, use comments section)*	YES	NO
	IS EMPLOYEE PROPERLY CLASSIFIED AND PAID?	☐	☐
	ARE WAGE RATES AND POSTERS DISPLAYED?	☐	☐

FOR USE BY PAYROLL CHECKER

IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?

☐ YES ☐ NO

COMMENTS

CHECKER

LAST NAME	FIRST NAME	MI	JOB TITLE

SIGNATURE	DATE *(YYMMDD)*

Attachment J
US Department of Labor & HUD Labor Standards & Revisions

A. APPLICABILITY

The Project or Program to which the construction work covered by this Contract pertains is being assisted by the United States of America, and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

(1) MINIMUM WAGES

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment, computed at rates not less than those contained in the wage determination of the Secretary of Labor (which is attached hereto and made a part hereof), regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH1321)) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place, where it can be easily seen by the workers.

(ii) Additional Classifications.

(A) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
(2) The classification is utilized in the area by the construction industry; and
(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor, the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division ("Administrator"), Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget ("OMB") under OMB control number 1235-0023.)

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, or HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1235-0023.)

(D) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (1)(ii)(B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1235-0023.)

(2) Withholding. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the U.S. Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The U.S. Department of Labor shall make such disbursements in the case of direct Davis-Bacon Act contracts.

(3) Payrolls and basic records.

(i) Maintaining Payroll Records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification(s), hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid.

Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv), that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1235-0023 and 1215-0018)

(ii) Certified Payroll Reports.

(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at **https://www.dol.gov/agencies/whd/forms** or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the U.S. Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1235-0008.)

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract; and

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (a)(3)(ii)(b).

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph (a)(3)(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the U.S. Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate), to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program.

If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed, unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

(5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this Contract.

(6) Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs (1) through (11) in this paragraph (a) and such other clauses as HUD or its designee may, by appropriate instructions, require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

(7) Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

(8) Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this Contract.

(9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

(10) Certification of Eligibility.

(i) By entering into this Contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) Anyone who knowingly makes, presents, or submits a false, fictitious, or fraudulent statement, representation or certification is subject to criminal, civil and/or administrative sanctions, including fines, penalties, and imprisonment (e.g., 18 U.S.C. §§ 287, 1001, 1010, 1012; 31 U.S.C. §§ 3729, 3802.

(11) Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic, to whom the wage, salary, or other labor standards provisions of this Contract are applicable, shall be discharged or in any other manner discriminated against by the contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The provisions of this paragraph (b) are applicable where the amount of the prime contract exceeds **$100,000**. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work, which may require or involve the employment of laborers or mechanics, shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek, unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph B(1) of this paragraph, the contractor, and any subcontractor responsible therefor, shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph B(1) of this paragraph, **in the sum set by the U.S. Department of Labor at 29 CFR 5.5(b)(2)** for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph B(1) of this paragraph. In accordance with the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. § 2461 Note), the DOL adjusts this civil monetary penalty for inflation no later than January 15 each year.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall, upon its own action or upon written request of an authorized representative of the U.S. Department of Labor, withhold or cause to be withheld from any moneys payable on account of work performed by the contractor or subcontractor under any such contract, or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages, as provided in the clause set forth in subparagraph B(2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph B(1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs B(1) through (4) of this paragraph.

C. HEALTH AND SAFETY

The provisions of this paragraph (c) are applicable where the amount of the prime contract exceeds **$100,000**.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his or her health and safety, as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The contractor shall comply with all regulations issued by the Secretary of Labor pursuant to 29 CFR Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 U.S.C. § 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract, so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Attachment K
US EPA Green Remediation Policy Requirements

Clean and Greener Policy for Contaminated Sites
EPA Region 1
Office of Site Remediation and Restoration

Revised February 2012

A core part of EPA's mission is ensuring that contaminated sites are cleaned up to be protective of human health and the environment. The process of cleaning up and returning these sites to beneficial use generally requires energy, water, materials, and other resources that can create an environmental footprint of its own. An *environmental footprint* considers the broader environmental impacts of an activity, such as the depletion and degradation of natural resources or other potential consequences.

EPA Region 1's Office of Site Remediation and Restoration is committed to using and promoting strategies and practices that reduce the environmental footprint during cleanup and restoration activities, to the extent feasible and consistent with applicable statutes, regulations and guidance. This *Clean and Greener Policy for Contaminated Sites* embraces the following green remediation objectives, where practical and appropriate:

- Minimize total energy use and maximize use of renewable energy;
- Minimize air emissions and greenhouse gas generation;
- Minimize water use and impacts to water resources;
- Reduce, reuse, and recycle materials and wastes; and
- Protect and minimize adverse impacts to land and ecosystems.

Opportunities for achieving these green remediation objectives should be evaluated for each stage of the site cleanup process. These opportunities will depend on site-specific conditions and will vary accordingly. Some examples of potential activities include:

- Utilizing solar, wind, or on-site landfill methane to power remediation systems and heat buildings;
- Reducing energy consumption by on-site equipment and buildings;
- Using cleaner fuels, diesel emission controls, and other emission reduction practices for construction vehicles and other equipment;
- Choosing more energy efficient modes of transportation for waste and materials (e.g., use of rail for long distance hauling);
- Employing best management practices for stormwater (e.g., bioremediation terraces);
- Reducing water use and recycling treated waste water;
- Substituting recycled materials for virgin materials (e.g., coal-ash based cement instead of Portland cement, 100% recycled geotextile fabric for cover systems); and
- Supporting environmentally-sustainable site reuse (e.g., renewable energy production, smart growth, healthy and productive ecosystems, green buildings).

This policy applies to all cleanups performed by EPA or under EPA oversight through the Superfund, Resource Conservation and Recovery Act (RCRA) corrective action, Underground Storage Tank (UST), and Brownfields programs. Region 1 will also promote this policy in state-authorized and state-lead cleanup programs.

This policy does not change or modify any legal requirements regarding the selection of appropriate cleanup actions under applicable law. Nor is it intended to compromise cleanup objectives, community interests, the reasonableness of cleanup timeframes, or the protectiveness of cleanup actions. EPA will consult with communities regarding response actions and will consider anticipated future land use, consistent with existing requirements. This policy shall be implemented consistent with the national *Principles for Greener Cleanups* issued by EPA's Office of Solid Waste and Emergency Response on August 27, 2009 (www.epa.gov/oswer/greenercleanups/principles.html).

Issued on: 2/14/2012

James T. Owens, III, Director
Office of Site Remediation and Restoration
EPA Region 1

U.S. Environmental Protection Agency
Office of Solid Waste and Emergency Response

Principles for Greener Cleanups

Protecting Communities and the Environment for a Sustainable Future

As a nation, we value land as a natural, cultural, and economic resource. Cleaning up contaminated land protects human health and the environment and enables communities and other stakeholders to pursue future beneficial use or reuse of resources for economic, environmental, and societal purposes. Prevention and remediation of contamination plays a central role in seeking a sustainable future.

A goal of the U.S. Environmental Protection Agency (EPA) Office of Solid Waste and Emergency Response (OSWER) and its many partners is to preserve and restore land by promoting and using protective waste management practices and by assessing and cleaning up contaminated sites. OSWER cleanup programs (including national and regional programs) address contaminated soil, groundwater, surface water, sediments, air, and other environmental media.

EPA cleanup programs include common elements such as an initial site assessment, initial site stabilization when needed to protect against imminent threats, site characterization, cleanup option evaluation, selection, and implementation, and when appropriate, longer-term management of the site When done in close consultation with local communities, these cleanup programs not only protect human health but also allow communities and other stakeholders to promote beneficial, protective future uses of the property.

Doing our Work Smarter – and Greener

Cleaning up sites can be viewed as "green" from the perspective of the cleanup improving environmental and public health conditions. However, cleanup activities use energy, water and materials resources to achieve cleanup objectives. The process of cleanup therefore creates an environmental footprint of its own. Over time, we have learned that we can optimize environmental performance and implement protective cleanups that are **greener** by increasing our understanding of the environmental footprint and, when appropriate, and taking steps to minimize that footprint.

OSWER cleanup programs should consider these Principles for Greener Cleanups during any phase of work, including site investigation, evaluation of cleanup options, and optimization of the design, implementation, and operation of new or existing cleanups. All cleanup approaches, and all elements of the cleanup process, can be optimized to enhance their overall environmental outcome; therefore, green remediation involves more than merely adopting a specific technology or technique.

These Principles for Greener Cleanups are not intended to allow cleanups that do not satisfy threshold requirements for protectiveness, or do not meet other site specific cleanup objectives, to be considered greener cleanup. The Principles are not intended to trade cleanup program

objectives for other environmental objectives. Successful green cleanup practices can help achieve cleanup objectives by ensuring protectiveness while decreasing the environmental footprint of the cleanup activity itself. Some examples include using equipment that emits less particulate matter to the air, sizing equipment accurately to avoid wasted energy, water, and material, and using renewable energy or recycled material to decrease greenhouse gas emissions and conserve resources.

These Principles for Greener Cleanups are intended to improve the decision-making process for cleanup activities in a way that ensures the protection of human health and the environment and reduces environmental impacts on communities. These approaches can include environmental footprint assessment, resource efficiency, best management practices, and technology innovation. Green cleanup environmental footprint assessments should be conducted in a transparent manner and should include, at a minimum, energy use, air emissions, water impacts, materials use, and land and ecosystem protection. (See the attachment for additional information on the elements that may be considered in carrying out a green cleanup environmental footprint assessment.)

These Principles for Greener Cleanups focus on the environmental footprint of *cleanup* activities. Community and stakeholder input about the reasonably anticipated future land use of the site - residential, commercial, industrial, recreational, or ecological – are important and often integrated into cleanup decisions; however, greener cleanup assessments generally are not designed to provide information on the environmental impacts associated with the future uses of the property. While not a part of a greener cleanup assessment, communities and other stakeholders are encouraged to carefully assess and consider life cycle implications associated with the future use of the site and to adopt more sustainable approaches for land use, building and infrastructure design and construction, community health and livability, and resource conservation and protection.

While preventing and cleaning up contamination is inherently "green", the terms green cleanup, greener cleanup, and green remediation are used by OSWER cleanup programs interchangeably in this and other documents.

As a matter of policy,

OSWER's goal is to evaluate cleanup actions comprehensively to ensure protection of human health and the environment and to reduce the environmental footprint of cleanup activities, to the maximum extent possible. In considering these Principles, OSWER cleanup programs will assure that the cleanups and subsequent environmental footprint reduction occur in a manner that is consistent with statutes and regulations governing EPA cleanup programs and without compromising cleanup objectives, community interests, the reasonableness of cleanup timeframes, or the protectiveness of the cleanup actions. OSWER will continue to coordinate with its partners and develop approaches to facilitate continued progress in furthering these Principles for Greener Cleanups.

1. Consistent with existing laws and regulations, it is OSWER policy that all cleanups:
   - Protect human health and the environment
   - Comply with all applicable laws and regulations
   - Consult with communities regarding response action impacts consistent with existing requirements
   - Consider the anticipated future land use of the site.

2. The following five elements of a green cleanup assessment may assist in the evaluation and documentation used in selecting and implementing protective cleanup activities. (See the attachment for further information on these five elements.)

- Total Energy Use and Renewable Energy Use
- Air Pollutants and Greenhouse Gas Emissions
- Water Use and Impacts to Water Resources
- Materials Management and Waste Reduction
- Land Management and Ecosystems Protection

3 As tools are developed and deployed, when it is feasible to use greener cleanup approaches, OSWER cleanup programs will document how these five elements were considered and implement best practices to reduce the environmental footprint of cleanups. The nature of greener cleanup assessments can vary with the complexity of the site, program and community priorities, and the availability of tools. Assessment activities should be performed in a transparent manner involving the community and other stakeholders and describe how the programs have considered the items described in (1) and (2) above.

4. OSWER will evaluate progress in reducing the environmental footprint of protective cleanups.

5. Greener Cleanup approaches span multiple cleanup programs and reflect a developing set of practices. Legal authorities differ by cleanup program; environmental issues and community priorities differ from region-to-region and site-to-site; and greener cleanup best practices and assessment tools are at the early stages of development and testing. Greener cleanup approaches, therefore, may vary from site-to-site and program-to-program and will continue to evolve by incorporating lessons from the growing state of knowledge.

Mathy Stanislaus, Assistant Administrator
Office of Solid Waste and Emergency Response
U.S. Environmental Protection Agency

8/27/09
Date:

Recommended Elements for Greener Cleanup Environmental Footprint Assessments and Best Practices

OSWER cleanup programs should consider these recommended elements when carrying out greener cleanup environmental footprint assessments and evaluating best practices that may be useful during the cleanup process.

1. Minimize Total Energy Use and Maximizes Use of Renewable Energy
   - Minimize energy consumption (e.g. use energy efficient equipment)
   - Power cleanup equipment through onsite renewable energy sources
   - Purchase commercial energy from renewable resources

2. Minimize Air Pollutants and Greenhouse Gas Emissions
   - Minimize the generation of greenhouse gases
   - Minimize generation and transport of airborne contaminants and dust
   - Use heavy equipment efficiently (e.g. diesel emission reduction plan)
   - Maximize use of machinery equipped with advanced emission controls
   - Use cleaner fuels to power machinery and auxiliary equipment
   - Sequester carbon onsite (e.g., soil amendments, revegetate)

3. Minimize Water Use and Impacts to Water Resources
   - Minimize water use and depletion of natural water resources
   - Capture, reclaim and store water for reuse (e.g. recharge aquifer, drinking water irrigation)
   - Minimize water demand for revegetation (e.g. native species)
   - Employ best management practices for stormwater

4. Reduce, Reuse and Recycle Material and Waste
   - Minimize consumption of virgin materials
   - Minimize waste generation
   - Use recycled products and local materials
   - Beneficially reuse waste materials (e.g., concrete made with coal combustion products replacing a portion of the Portland cement)
   - Segregate and reuse or recycle materials, products, and infrastructure (e.g. soil, construction and demolition debris, buildings)

5. Protect Land and Ecosystems
   - Minimize areas requiring activity or use limitations (e.g., destroy or remove contaminant sources)
   - Minimize unnecessary soil and habitat disturbance or destruction
   - Use native species to support habitat
   - Minimize noise and lighting disturbance