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EPA Region 1 RAC 2 Contract No. EP-S1-06-03

July 30, 2010
Nobis Project No. 80048

Via Electronic Submittal

U.S. Environmental Protection Agency, Region 1
Attention: Mr. James Byrne, Task Order Project Officer
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3919

Subject: Transmittal of Draft Targeted Brownfields Assessment
Bates Mill, Number 5 (RECOVERY), Lewiston, Maine
Brownfields Targeted Site Assessment
Task Order No. 0048-SI-BZ-0100

Dear Mr. Byrne:

Attached for your review is the Draft Targeted Brownfields Assessment (TBA), for the Bates Mill, Number 5 (RECOVERY), located in Lewiston, Maine. This TBA addresses sampling and analytical activities conducted at the Site.

Should you have any questions or comments, please contact me at (978) 703-6018, or MBouvier@nobisengineering.com.

Sincerely,

NOBIS ENGINEERING, INC.

Marc A. Bouvier, P.G.
Project Manager

Enclosure

c: Brian Beneski, Lewiston Brownfields Coordinator, MEDEP (1 Copy)
Jayne Jochem, City of Lewiston Brownfields Coordinator (1 Copy)
File 80048/MA

Draft Targeted Brownfields Assessment

Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

Brownfields Targeted Site Assessments
EPA Task Order No. 0048-SI-BZ-0100

REMEDIAL ACTION CONTRACT
No. EP-S1-06-03

FOR

U.S. Environmental Protection Agency
Region 1

BY

Nobis Engineering, Inc.

Nobis Project No. 80048

July 2010

U.S. Environmental Protection Agency

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Draft Targeted Brownfields Assessment

Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine
Brownfields Targeted Site Assessments
EPA Task Order No. 0048-SI-BZ-0100

REMEDIAL ACTION CONTRACT
No. EP-S1-06-03

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July 2010

Scott Harding, P.E.
Deputy Program Manager

Marc A. Bouvier, P.G.
Project Manager

TABLE OF CONTENTS
DRAFT TARGETED BROWNFIELDS ASSESSMENT
BATES MILL, NUMBER 5 (RECOVERY)
LEWISTON, MAINE

SECTION **PAGE**

1.0 INTRODUCTION 1

2.0 BACKGROUND 1
- 2.1 Scope of Work 2
- 2.2 Objectives 3
- 2.3 Site Description and Features 3
- 2.4 Site History and Land Use 4
- 2.5 Adjacent Property Land Use 4

3.0 SITE INVESTIGATION ACTIVITIES 4
- 3.1 Hazardous/Regulated Materials Survey 5
- 3.2 PCB Sampling 5
- 3.3 Asbestos Survey 6
- 3.4 Lead Based Paint (LBP) Survey and Results 7
- 3.5 Mold Survey 8

4.0 LABORATORY ANALYTICAL RESULTS 8
- 4.1 PCB Sampling Data 8
- 4.2 Asbestos Survey Data 9
- 4.3 Mold Survey Data 10

5.0 FINDINGS AND CONCLUSIONS 10

6.0 RECOMMENDATIONS 13

7.0 LIMITATIONS AND CONDITIONS 14

TABLES

NUMBER

1 Summary of Hazardous/Regulated Materials Inventory
2a Summary of Concrete PCB Sampling Analytical Results
2b Summary of Transformer/Switch Oil PCB Sampling Analytical Results
3 Summary of ACM Sampling Analytical Results
4 Summary of Mold Sampling Analytical Results

TABLE OF CONTENTS (cont.)
DRAFT TARGETED BROWNFIELDS ASSESSMENT
BATES MILL, NUMBER 5 (RECOVERY)
LEWISTON, MAINE

FIGURES

NUMBER

1 Locus Plan
2 Investigation Area Plan
3 Sample Location Plan

APPENDIX

A Summit Environmental Consultants, Inc. Hazardous Materials Survey Report

1.0 INTRODUCTION

This Targeted Brownfields Assessment (TBA) report was prepared by Nobis Engineering, Inc. (Nobis) for the United States Environmental Protection Agency (EPA) under contract No. EP-S1-06-03, Task Order No. 0048-SI-BZ-0100. This TBA Report presents the results of site-specific data collection activities conducted at the Generating Station of Bates Mill Number 5, located at the intersection of Main and Canal Streets (Site) in Lewiston, Maine. A Locus Map is included as Figure 1.

EPA's TBA is "designed to help minimize the uncertainties of contamination often associated with Brownfields", which by definition are sites that "may be contaminated by a controlled substance; contaminated by petroleum or a petroleum product excluded from the definition of 'hazardous substance'; or mine-scarred land". TBA activities were conducted to assess potential for redevelopment or reuse at the Site, and to evaluate Site conditions that may be "complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant" so that the Site may be refurbished or demolished for redevelopment.

2.0 BACKGROUND

Bates Mill, Number 5, constructed between 1912 and 1914, was specifically designed for weaving bedspreads utilizing jacquard looms. Textile manufacturing was conducted at the mill until the decline of the industry in the 1960s. In 1992, the City of Lewiston acquired the building due to tax default, and began to investigate redevelopment and rehabilitation of the building and/or mill site.

In 1994, J.B. Plunkett Associates, Inc. (JPB) conducted a site walk to document interior and exterior surface conditions at the mill. JPB also conducted a state, federal, and municipal file review for the purposes of the environmental site assessment (ESA). EAS findings include the following:

- An inactive above ground storage tank (AST) previously containing 50 percent hydrogen peroxide was identified at the Site;

- More than twenty unmarked and marked 55-gallon drums with unknown contents and quantities were identified on both floors of the Site;

- Several floor drains were identified in the building which may or may not discharge into the city sewer system;

- A large quantity of suspect asbestos containing materials were identified throughout the building with some materials in poor condition;

- Several old electrical transformers are located in and on the Site which may contain polychlorinated biphenyls (PCBs);

- Painted building surfaces contain low lead concentrations;

- The Site is listed as a RCRA small quantity hazardous waste generating facility, and other small quantity generators are located within 0.50 miles of the Site;

- Stained soils were observed on the north end of the Site which appear to originate from the adjacent property (Lewiston Radiator Works);

- An underground storage tank (UST) may exist on the abutting property to the north which could not be confirmed as being in compliance with Maine state law; and

At the time of the inspection, JBP rated Mill Number 5 as a moderate to high environmental risk based on identified environmental liabilities, findings of the ESA, and past and current industrial uses at the Site. In addition, recent subsurface investigations completed in the vicinity of Mill Number have identified low concentrations of semi-volatile organic chemicals in soil and groundwater.

2.1 Scope of Work

As part of this TBA, Nobis performed a hazardous materials survey and limited concrete sampling. This information will assist the City of Lewiston in the planning to rehabilitate or demolish and remove the Site building. TBA activities were limited to the Generating Station portion of the Mill Number 5 (investigation area, depicted on Figure 2) and included the following tasks:

- Hazardous materials survey to identify regulated materials;
- Sampling of stained concrete for the presence of PCBs in the vicinity of historical equipment including air compressors, electrical transformers, and power generating equipment;
- Survey to determine the presence of lead-based paints (LBP);
- Survey to locate and quantify asbestos containing material (ACM); and
- Sampling of mold/fungi.

In addition, Nobis collected oil samples from historical transformers and oil containing switches located in the transformer room and operating floor portion of the investigation area.

2.2 Objectives

The objectives of this TBA were to assess hazardous and regulated materials and possible concrete contamination in the generating station portion of Bates Mill Number 5 for the purpose of supporting redevelopment and/or demolition decisions concerning the Site.

2.3 Site Description and Features

Bates Mill, Number 5 consists of 8.1 acres of land bordered by Main Street, the Upper Canal, the first Cross Canal and Lincoln Street, excluding Raymond Park.

The 2-story, 345,500 square foot (sf) site structure was constructed between 1912 and 1914 on a 172,750 sf footprint. The building features a reinforced concrete frame with a ‘sawtooth’ roof designed for maximum natural light, ventilation, and vertical clearance.

A power generating station (investigation area), located on the south end of the building, consists of the operational floor, generating station mezzanine, and neighboring transformer room. On the operational floor, three generators and associated exciters are located along the east wall and control panels/busses, transformers, switches, and oil circuit breakers are located on the west wall. The mill air compressor and fire pumps are located along the north wall. The mezzanine overlooks the operational floor, and air compressor and tanks, and a lifting crane are located in this area. The generating station is leased and operated by the Nexterra Energy Corporation (NEC, formally Florida Power and Light).

There is a waterway (forebay) that runs under the building on the south east corner (Canal Street side) and flows west through a series of turbines (turbine flume) and exits through draft tubes located under the operating floor into the Cross Canal Tailrace. Refer to Figure 2 for the Site layout.

2.4 Site History and Land Use

Bates Mill Number 5 was designed specifically as a mill to house jacquard weaving looms. According to research, textile manufacturing was the prominent business at the Bates Mill Number 5 Complex, with as many as 1,200 workers producing up to 60,000 bedspreads per week during the height of the manufacturing boom in Lewiston. During the 1960s, the decline of the industry (mills were relocating further south due to cheaper labor and power rates) led to a work force of less than 100 people producing up to 2,000 bedspreads per week.

In 1992 the City took possession of Bates Mill due to tax default, and allowed for business to continue at the mill in an attempt to generate revenue to cover building costs. In 2001, business operations at the mill ceased. The mill has since been used for storage, and aside from the NEC generating station, the mill is currently vacant.

2.5 Adjacent Property Land Use

Bates Mill Number 5 is located in the Downtown area of Lewiston. Adjacent properties consist of other mill buildings associated with the Bates Mill Complex located to the south, and mixed commercial and business use is present along Main Street and in the Downtown area of Lewiston to the east, and north.

3.0 SITE INVESTIGATION ACTIVITIES

Summit Environmental Consultants Inc. (Summit) was contracted to perform portions of the site investigation and site sampling activities. Atlantic Environmental Services (AES) was sub-contracted to complete the lead based paint (LBP) portion of the hazardous materials survey. Summit's survey report is included as Attachment A.

Site investigation activities were conducted in accordance with the Field Task Work Plan (FTWP) and Quality Assurance Project Plan (QAPP) Addendum prepared by Nobis and

approved by the EPA in June 2010. The Addendum references the Generic QAPP, dated March 2010, prepared by Nobis, and addresses sampling and analytical activities specific to the Site. The QAPP and QAPP addendum were in general accordance with EPA New England, Region I Planning and Documenting Brownfields Projects Generic Quality Assurance Project Plans, and TBA activities were documented in the Site Specific QAPP Addenda dated March 2009.

The following tasks were completed as part of the hazardous material inspection conducted on the Generating Station portion of Bates Mill Number 5:

- Hazardous and regulated materials survey.
- Concrete and transformer oil sampling for PCBs;
- Lead based paint survey;
- Asbestos containing materials survey;
- Mold investigation;

A Sample Location Plan is included as Figure 3. Information collected during TBA activities is included in the following sections.

3.1 Hazardous/Regulated Materials Survey

On June 24, 2010, Nobis oversaw the hazardous materials survey conducted by Summit. Garth Armstrong was on-site to inventory hazardous and regulated materials located in the generating station section of the mill building. Materials identified during the survey appeared to be stored properly and in good condition. Table 1 presents the results of the hazardous materials inventory.

3.2 PCB Sampling

Stained Concrete Sampling

On June 24, 2010, Nobis oversaw concrete sampling conducted at the Site. Eleven concrete samples were collected from visibly stained areas located on the operating floor and mezzanine of the generating plant, as well as from the adjacent transformer room located off of the main mill floor. Three samples were collected in the vicinity of the operating floor air compressor, two samples were collected from the vicinity of the generators along the east wall of the operating floor, two samples were collected in the vicinity of the electrical panel along the west wall of the

operating floor, one sample was collected in the vicinity of the air compressor on the mezzanine level, and three samples were collected in the vicinity of the three transformers located in the adjacent transformer room. Figure 3 depicts locations of the sample areas.

Concrete samples were collected by using a hammer drill to advance a drill bit 1 inch into the surface of the concrete. Drill cuttings were composited from several bore holes at each sample location, placed into laboratory supplied sample jars, and transported via laboratory courier to Maine Environmental Laboratory (MEL) in Yarmouth, Maine for laboratory analysis.

Transformer/Switch Oil Sampling

On July 12, 2010, Summit returned to the Site to collect oil samples from three transformers and three oil containing electrical switches associated with generating station operations. The three transformers are located in the neighboring transformer room located off of the main mill floor, and the three switches are located on the operating floor. Figure 3 depicts the oil sample locations.

Oil samples were collected by draining oil from each piece of equipment though dedicated tubing and into laboratory supplied sample jars. Oil samples were transported via laboratory currier to MEL for laboratory analysis. PCB sampling analytical results for both concrete and oil samples are discussed in Section 4.1 below.

3.3 Asbestos Survey

On June 24, 2010, Nobis oversaw the asbestos containing materials (ACM) survey conducted by a Maine certified asbestos inspector. The inspector was on-site to visually identify suspect ACM and collect bulk samples for laboratory analysis. Areas inspected for ACM included the operating floor of the main generating station and associated mezzanine, as well as the forebay/turbine flume area located adjacent to the main generating station area.

A visual inspection was conducted in all three investigation areas. During the survey a total of six bulk samples were collected from the main generating station operating floor. Material sampled included gasket material found in boxes on the main floor and a caulking material associated with the windows on the west wall of the operating floor. Due to federal regulations and sampling protocols, three samples were collected from each suspect material.

Suspect ACM was not identified in the mezzanine area. Suspect ACM was identified in the flume/forebay area in the form of pipe insulation; however, bulk samples of this material were not collected because the piping is suspended over the water flow section of the flume and therefore inaccessible at the time of the inspection. In addition, due to safety concerns with live electricity, access was not granted to the electrical bank (switch/bus transformer area) located along the west wall of the operating floor. Several signs indicating the presence of ACM were observed in this area; however, it is uncertain what materials the signs are referring to due to the restricted access to this area. Asbestos analytical results are discussed in Section 4.2 below.

3.4 Lead Based Paint (LBP) Survey and Results

On June 24, Nobis oversaw the LBP survey to determine the presence of lead-based paint on components throughout the Generating Station. Areas tested for LBP include the generating station operational floor, the operational floor mezzanine, and the accessible areas of the flume/forebay.

LBP testing was performed by a Maine Department of Environmental Protection certified Lead Risk Assessor utilizing a portable X-ray Fluorescence Analyzer (XRF) that non-destructively tests for the presence of lead on building components. The XRF has the ability to detect concentrations of LBP between 0.3 milligrams per square centimeter (mg/cm^2) and 9.9 mg/cm^2. Lead components with concentrations greater than 9.9 mg/cm^2 were listed as "> 9.9 mg/cm^2" on the equipment readout.

Once lead-containing components were identified, a visual assessment as to the current condition of the paint was also performed and documented. Since the XRF analyzes lead concentrations in real time, laboratory samples were not collected for initial LBP characterization of the generating station.

During the LBP survey, the ceiling, walls, support columns, metal window frames, staircase components and several doorways all tested positive for lead-based paint. Lead-containing components were found to be in poor condition, where the paint is severely worn, weathered, or no longer adhering, (i.e. peeling, cracking, flaking, chalking; or the substrate is broken, exposed, or otherwise deteriorated). The flume/forebay area had a limited amount of lead, as most

components were unpainted. XRF survey results are presented in Appendix D (AES report) of the Summit report, which is included as Appendix A.

3.5 Mold Survey

On June 24, 2010, Nobis oversaw the mold survey conducted on the operating floor, associated mezzanine, and forebay/turbine flume areas of the investigation area. During the survey, five samples were collected for laboratory analysis from the east wall of the operating floor, where visible mold was present due to water flowing through the wall from the neighboring turbine flume. Suspected mold containing building materials were placed into plastic bags and submitted for mold analysis at the laboratory. Figure 3 depicts mold sample locations. Mold analytical results are discussed in Section 4.3 below.

4.0 LABORATORY ANALYTICAL RESULTS

4.1 PCB Sampling Data

Concrete Sample Data

Eleven concrete samples were submitted to MEL for PCB analysis. PCB-1254 was detected in each of the samples submitted for laboratory analysis. Laboratory results were compared to the EPA Toxic Substance Control Act (TSCA) clean-up standard (criteria established to assess potential risk to receptors from exposure) for PCBs. PCBs were detected in samples WW-1, WW-2, TR-1 (concrete), TR-2 (concrete), and TR-3(concrete) at levels above TSCA standards. No other PCBs were detected in any of the concrete samples. Analytical results of the Concrete sampling are depicted in Table 2a.

Transformer/Switch Oil Data

PCBs were not detected in the three samples collected from the operating floor switches. PCB-1260 was detected in the three transformer samples; however, PCB concentrations were less than the disposal threshold of 50 mg/kg established by TSCA. According to TSCA regulations, oils containing less than 50 mg/kg of PCBs are not considered hazardous; however, used oil containing any quantifiable level of PCBs (> 2 ppm) cannot be recycled and must be sent to an EPA approved PCB incinerator. Analytical results of the transformer oil sampling are depicted in

Table 2b. Recommendations for dealing with PCB contaminated media are presented in Section 6.0 below.

PCB Results

As stated above, five of the concrete samples returned results above the TSCA cleanup standard of 1 ppm. Concrete samples TR-1 (concrete), TR-2 (concrete), and TR-3 (concrete) were collected in the vicinity of oil containing transformers, and in conjunction with transformer oil samples TR-1 (oil), TR-2 (oil), and TR-3 (oil). Based on TSCA regulations, since sample results of oil samples TR-1 (oil), TR-2 (oil), and TR-3 (oil) indicate that the source oils contain less than 50 ppm PCBs (transformer tanks), removal of the stained concrete in the areas where concrete samples TR-1 (concrete), TR-2 (concrete), and TR-3 (concrete) were collected does not warrant a TSCA removal. Because concrete samples WW-1 and WW-2 returned PCB results greater than 1ppm and are not associated with a known source oil (i.e. neighboring transformer or switch) TSCA removal regulations apply to the areas where concrete samples WW-1 and WW-2 were collected.

In addition, Maine Department of Environmental Protection (MEDEP) Remedial Action Guidelines (RAGs) require remediation or encapsulation of PCB stained concrete if PCB levels are detected above 6.5 ppm. Because PCBs were detected above 6.5ppm at sample location TR-2 (concrete), remediation or encapsulation is required in this sample area.

4.2 Asbestos Survey Data

Bulk samples were transmitted under a chain-of-custody to EMSL Analytical, Inc., an accredited Maine certified laboratory, located at 7 Constitution Way, Suite 107 in Woburn, Massachusetts. Samples were analyzed by polarized light microscopy (PLM) in accordance with the EPA "Method for Determination of Asbestos in Bulk Material;" EPA/600/R-93/116 (July 1993). Results of bulk sample analysis are presented in Table 3.

Results of the laboratory analyses did not identify the presence of asbestos (greater than or equal to 1 percent) in the six bulk samples analyzed by PLM. Pipe insulation identified as Suspect ACM in the flume/forebay should be considered ACM and handled as such until analytical testing proves otherwise. Additional inspection activities should be conducted in the electrical bank area where access was denied due to live electricity.

4.3 Mold Survey Data

Mold samples were transmitted under a chain-of-custody to Northeast Laboratory Services (NLS), located at 289 China Road, Winslow, Maine. Samples were visually analyzed under a microscope by NLS direct exam methods. Mold sampling results are presented in Table 4.

Results of the laboratory analyses identified the presence of mold in one of the five samples submitted for analysis. Trace amounts of Chlamydospores were detected in sample Mold #1. Refer to Sections 2.2.3 and 3.2.4 of the Summit report (Appendix A) for Summit's discussion of the mold sampling event.

5.0 FINDINGS AND CONCLUSIONS

The results of the hazardous materials inspection conducted by Summit on the generating station section of the Bates Mill Number 5 include the following:

Hazardous Materials Survey

Hazardous and regulated materials identified at the Site include:

- fluorescent light bulbs and fixtures;
- drums of non-chlorinated oil waste;
- paint, aerosol cans, and oil buckets;
- emergency lighting (lead acid batteries);
- compressed gas cylinders; and
- oil-containing machinery and equipment.

PCB Sampling

- Eleven concrete samples were collected from stained concrete areas located throughout the investigation area. Five of the samples (TR-1 (concrete), TR-2 (concrete), TR-3 (concrete), WW-1, WW-2) contained PCBs (Arochlor-1254) at levels above the potential TSCA cleanup standard (1 ppm).

- Analysis of transformer oil collected in the vicinity of concrete samples TR-1 (concrete), TR-2 (concrete), TR-3 (concrete) confirmed results less than 50 ppm for PCBs in oil samples TR-1 (oil), TR-2 (oil), and TR-3 (oil). Since the source oil contains less than 50 ppm of PCBs, removal of stained concrete in the areas of the transformers does not warrant a TSCA removal.

- Because concrete samples WW-1 and WW-2 returned PCB results greater than 1 ppm and are not associated with a known source oil (i.e. neighboring transformer or switch), TSCA regulations apply for the removal of concrete in these areas.

- Because PCBs were detected above 6.5 ppm at sample location TR-2 (concrete), remediation or encapsulation of the concrete is required in this sample area.

- Six oil samples were collected from three transformers and three oil containing switched located throughout the investigation area. PCBs were detected at low concentrations in oils collected from the transformers and PCBs were not detected in the switch oil samples.

- Because PCBs were detected in transformer oils at levels less than 50 ppm, these oils are not considered hazardous waste; however, since transformer oils contain > 2 ppm PCBs, these oils cannot be recycled and must be sent to an EPA approved PCB incinerator.

Asbestos Survey

- Six bulk samples were collected for laboratory analysis. Material sampled included gasket material and window caulking associated with the west wall windows. Laboratory analyses did not identify the presence of asbestos (greater than or equal to 1 percent) in the six bulk samples analyzed by PLM.

- Suspect ACM was identified in the flume/forebay area in the form of pipe insulation. Bulk samples of this material were not collected because the piping was inaccessible. Suspect should be considered ACM and handled as such until analytical testing proves otherwise.

- Access was not granted to the Electrical Bank area located along the west wall of the operating floor (live high voltage area). Several signs indicating the presence of ACM were observed in this area.

Lead Based Paint Survey

- Building components that tested positive for LBP include:
  - Ceiling
  - Walls, and support columns;
  - Metal window frames;
  - Staircase components; and
  - Doorways.
- Lead-containing components were found to be in poor condition (peeling, cracking, flaking, chalking, etc.).

Mold Survey

- Five samples collected from the east wall of the operating floor were submitted for laboratory analysis.
- Trace amounts of Chlamydospores were detected in sample Mold #1 only.

6.0 RECOMMENDATIONS

Based on the results of the hazardous materials survey, Nobis recommends the following:

- Hazardous and regulated materials identified at the Site should be stored and managed in accordance with federal and state regulations.

- Additional concrete samples should be collected for laboratory analysis along the west wall of the operational floor to delineate the extents of PCB contaminated concrete.

- Stained concrete in the vicinity of Transformer 2 should be contained with a MEDEP approved encapsulating coating to prevent contact with PCB impacted concrete. Wastes associated with the encapsulation process must be handled as special waste. In addition, since composite samples were collected from stained areas, and since concentrations can vary across these areas, Nobis recommends encapsulating any stained areas of concrete that are to remain in place.

- Demolition and renovation activities at the site building that will affect ACM will require asbestos abatement and disposal in accordance with local, State, and Federal regulations. Federal regulations require a 10-day notification prior to the commencement of any asbestos abatement work. Asbestos abatement should be conducted by a certified asbestos abatement contractor.

- Demolition/renovation of lead contaminated site features is required to be performed by a contractor in compliance with the OSHA Rules for Occupational Health and Environmental Controls for Lead 29 CFR 1926.62, including implementation of a written worker protection program, personal air monitoring, and respiratory protection program.

- Analytical testing of lead materials may be required for disposal characterization. Sampling and TCLP analysis of lead materials with low to mid-range XRF results may be used to establish lower limits under which materials can be disposed of as non-hazardous waste. Under the Resource Conservation and Recovery Act (RCRA), the acceptable level of lead (i.e. not hazardous waste) in demolition debris is 5 milligrams per

liter (mg/L) by toxicity characteristic leaching procedure (TCLP) lead analysis. If demolition debris exceeds 5 mg/L of lead by TCLP it must be disposed of as hazardous waste.

- Further evaluation of lead components listed in poor condition may be needed to assess worker safety. Paint dust and debris should be abated, and the remaining painted surfaces should be encapsulated to prevent hazardous conditions.

7.0 LIMITATIONS AND CONDITIONS

The site evaluation is based on the conditions existing at the subject site on the dates of site visits and field investigation activities. Past conditions are considered on the basis of readily available records, interviews, and recollections. Site conditions are subject to variations and changes over time. This report is based on the current fully implemented environmental regulations. Future regulatory modifications, agency interpretations, and/or attitude changes may affect the environmental status of the site.

TABLES

Table 1
Summary of Hazardous/Regulated Materials Inventory
Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

Hazardous Materials Inventory		
Location	**Quantity**	**Item**
Operating Floor	3	2' Flourescent Lightbulbs
Operating Floor	38	4' Flourescent Lightbulbs
Operating Floor	21	Light fixtures with ballasts (not known if they contain PCBs)
Operating Floor	1	5 gallon pail of solvent-impacted rags
Operating Floor	1	20 gallon drum non-chlorinated oil waste
Operating Floor	5	Aerosol cans
Operating Floor	3	Vials of unidentified oil
Operating Floor	2	Gallons paint
Operating Floor	3	5 gallon pails of DTE oil
Operating Floor	2	Emergency lights
Operating Floor	1	Compressed nitrogen cylinder
Operating Floor	3	Turbine shafts with unknown amount of oil
Operating Floor	2	Water pumps with unknown amount of oil
Operating Floor	2	Air compressors with unknown amount of oil

Table 2a
Summary of Concrete PCB Sampling Analytical Results
Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

Concrete Sample Results												
Sample ID	**TSCA Cleanup Standard (CS)**	AC-1	AC-2	AC-3	EW-1	EW-2	WW-1	WW-2	TR-1 (Concrete)	TR-2 (Concrete)	TR-3 (Concrete)	2AC-1
	Date	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10	6/24/10
PCB-1016	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	1	0.335	0.691	0.275 P	0.352	0.686	**5.49**	**1.19**	**4.22**	**14.6**	**1.93**	0.277
PCB-1260	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
ND = Value is below method detection limits.
Results/CS listed in milligrams per kilogram (mg/kg), or parts per million.
TSCA = USEPA Toxic Substance Control Act
P = Sample did not meet confirmation acceptance criteria for percent difference.
Shaded and Bolded values exceed the TSCA Cleanup Standard.

Table 2b
Summary of Transformer/Switch Oil PCB Sampling Analytical Results
Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

Oil Sample Results							
Sample ID	**TSCA Disposal Threshold Value (DTV)**	TR-1 (oil)	TR-2 (oil)	TR-3 (oil)	LLS-5	LLS-6	ULS-1
	Date	7/12/10	7/12/10	7/12/10	7/12/10	7/12/10	7/12/10
PCB-1016	50	ND	ND	ND	ND	ND	ND
PCB-1221	50	ND	ND	ND	ND	ND	ND
PCB-1232	50	ND	ND	ND	ND	ND	ND
PCB-1242	50	ND	ND	ND	ND	ND	ND
PCB-1248	50	ND	ND	ND	ND	ND	ND
PCB-1254	50	ND	ND	ND	ND	ND	ND
PCB-1260	50	17.6	22.8	24.3	ND	ND	ND

Notes:
ND = Value is below method detection limits.
Results/DTV listed in milligrams per kilogram (mg/kg), or parts per million.
TSCA = USEPA Toxic Substance Control Act
P = Sample did not meet confirmation acceptance criteria for percent difference.
Shaded and Bolded values exceed the TSCA Disposal Threshold Value

Table 3
Summary of ACM Sampling Analytical Results
Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

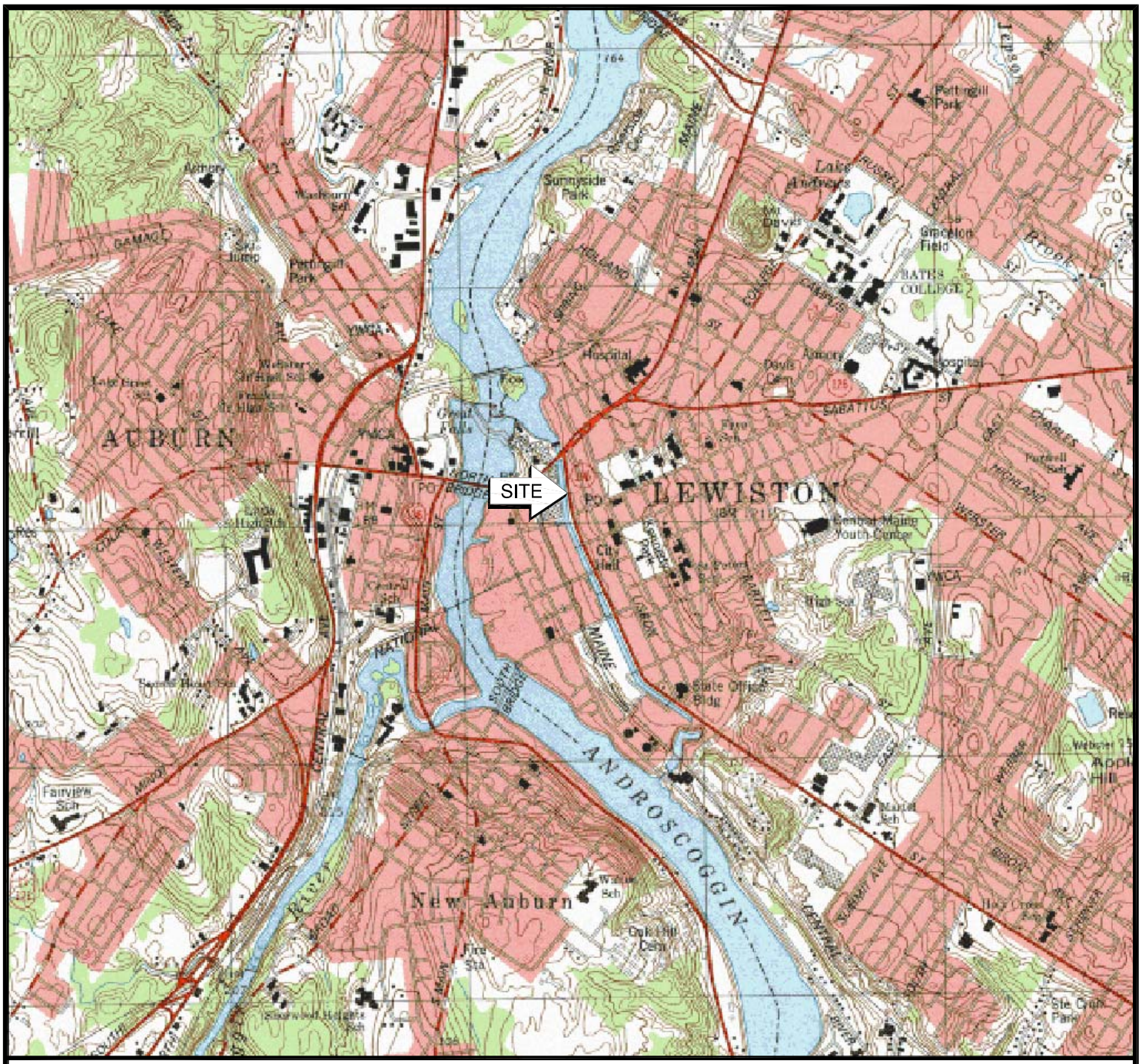
Sample ID	Description	Composition	Asbestos Content
3096-001A	Tan Gasket Material	90% Cellulose, 10% Non-Fibrous	None Detected
3096-001B	Tan Gasket Material	90% Cellulose, 10% Non-Fibrous	None Detected
3096-001C	Tan Gasket Material	90% Cellulose, 10% Non-Fibrous	None Detected
3096-002A	Red Window Caulk	100% Non-fibrous	None Detected
3096-002B	Red Window Caulk	100% Non-fibrous	None Detected
3096-002C	Red Window Caulk	100% Non-fibrous	None Detected

Table 4
Summary of Mold Sampling Analytical Results
Bates Mill, Number 5 (RECOVERY)
Lewiston, Maine

Mold Sample Results					
Sample ID	Mold #1	Mold #2	Mold #3	Mold #4	Mold #5
Date	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun
Type					
Chlamydospores	Trace	ND	ND	ND	ND

Notes:
ND = Value is below method detection limits.

FIGURES



NORTH

USGS TOPOGRAPHIC MAP

LEWISTON, MAINE

1979

APPROXIMATE SCALE
1 INCH = 2,000 FEET

Nobis

Nobis Engineering, Inc.
585 Middlesex St.
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Tel (978) 683-0891
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QUADRANGLE LOCATION

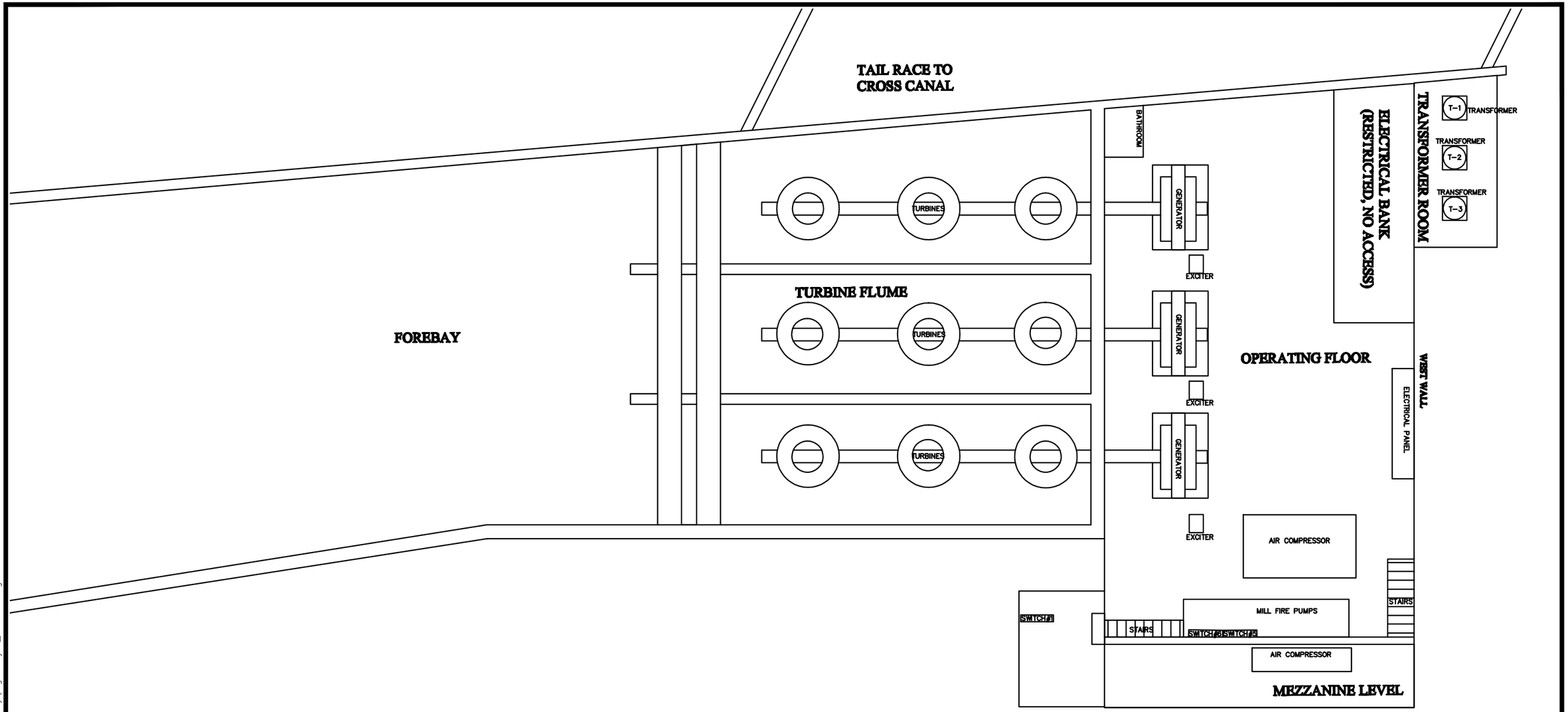
FIGURE 1

LOCUS PLAN
BATES MILL NO. 5
52 CANAL STREET
LEWISTON, MAINE

PROJECT: 80048.00

JULY 2010

R:\80000 Task Orders\80048 Bates Mill Number 5 (RECOVERY)\Technical Data\CAD\dwg\80048-LOCUS.dwg



NOTES:

1. THIS SITE SKETCH WAS DEVELOPED FROM A SITE PLAN SUPPLIED BY THE SITE OWNER, SITE OBSERVATIONS BY NOBIS ENGINEERING, INC. AND (CITY) ASSESSOR'S TAX MAPS.
2. LOCATIONS AND SITE FEATURES DEPICTED HEREON ARE APPROXIMATE AND GIVEN FOR ILLUSTRATIVE PURPOSES ONLY.

NORTH

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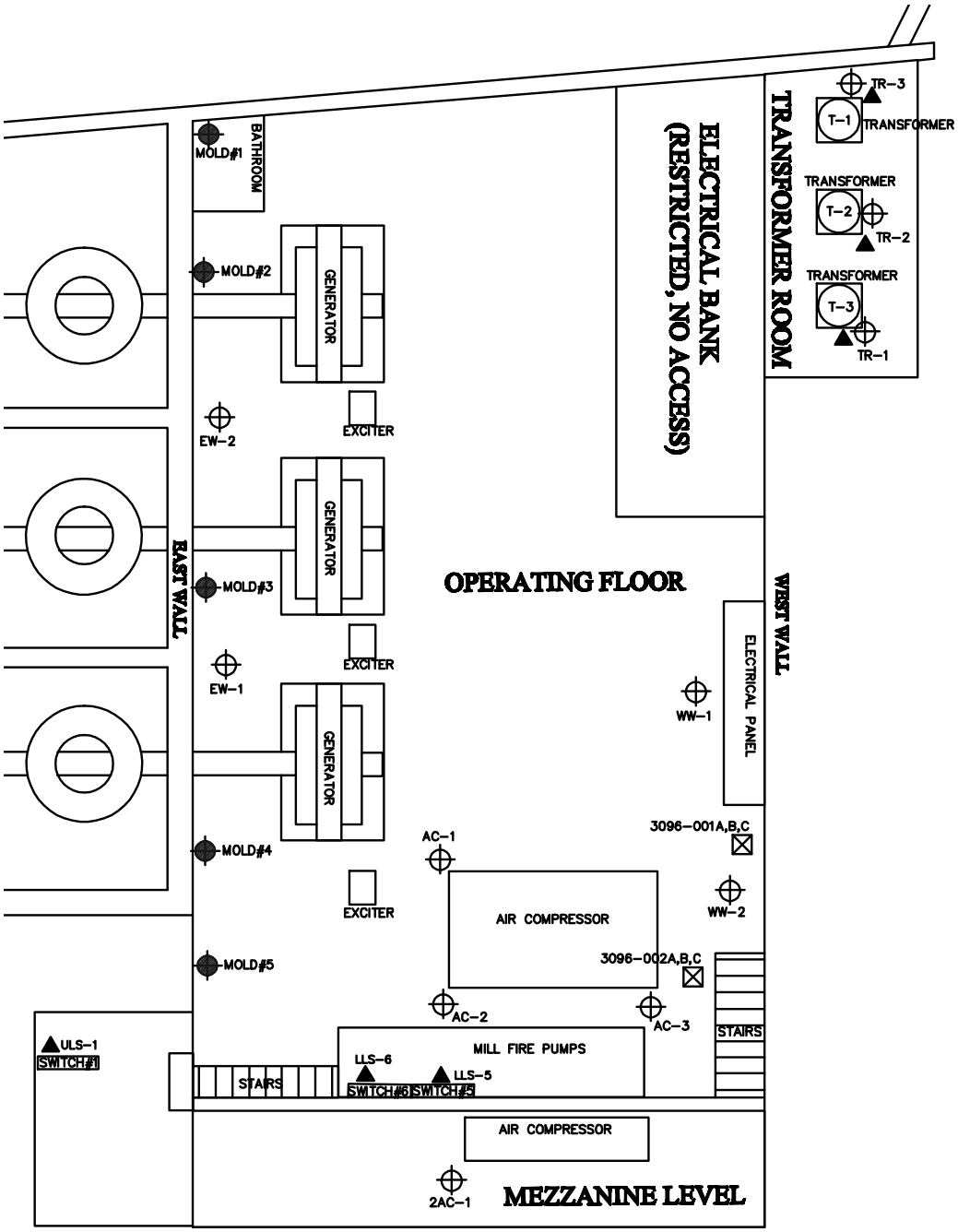
www.nobisengineering.com

FIGURE 2

INVESTIGATION AREA PLAN
TARGETTED BROWNFIELDS ASSESSMENT
BATES MILL NUMBER 5 (RECOVERY)
LEWISTON, MAINE

DRAWN BY:	PC	APPROVED BY:	JB
PROJECT:	80040.02	JULY 2010	

R:\80000 Task Orders\80048 Bates Mill Number 5 (RECOVERY)\Figure 2jnb_recover.dwg



LEGEND

☒ 3096-001	ASBESTOS SAMPLE LOCATION
⊕ EW-2	CONCRETE SAMPLE LOCATION
● MOLD#1	MOLD SAMPLE LOCATION
▲ UAC-1	TRANSFORMER/SWITCH OIL SAMPLE LOCATION

NORTH

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FIGURE 3

SAMPLE LOCATION PLAN
TARGETTED BROWNFIELDS ASSESS,EMT
BATES MILL NUMBER 5 (RECOVERY)
LEWISTON, MAINE

DRAWN BY:	PC	APPROVED BY:	JB
PROJECT:	80048.02	JULY 2010	

R:\80000 Task Orders\80048 Bates Mill Number 5 (RECOVERY)\Figure 2jnb_recover.dwg

APPENDIX A

SUMMIT
ENVIRONMENTAL CONSULTANTS, INC.

ENVIRONMENTAL CONSULTING • CONSTRUCTION INSPECTION & MATERIALS TESTING

HAZARDOUS MATERIALS ASSESSMENT
BATES MILL #5
POWER GENERATING FACILITY
LEWISTON, MAINE

Prepared for:

NOBIS ENGINEERING
585 Middlesex Street
Lowell, Massachusetts 01851

Prepared by:

SUMMIT ENVIRONMENTAL CONSULTANTS, INC.
434 Cony Road
Augusta, Maine 04330

July 22, 2009
Project # 10-3096

EXECUTIVE SUMMARY

Summit Environmental Consultants, Inc. (Summit) was contracted by Nobis Engineering (Nobis) under a Targeted Brownfields Assessment (TBA) Grant from the United States Environmental Protection Agency (USEPA) to conduct a Hazardous Materials Inventory of the Bates Mill #5 Power Generating Facility in Lewiston, Maine.

In June 24 and July 12, 2010, Summit performed the following work:

- Identified and collected samples of suspect asbestos-containing materials (ACM) for laboratory analysis;
- Completed a Lead-Based Paint (LBP) screening using an X-Ray Fluorescence (XRF) analyzer, for interior and exterior surfaces of the building;
- Completed a hazardous materials inventory within the building;
- Collected five bulk samples of building materials present within the building which appeared to host mold growth;
- Collected five samples of oil from transformers and switches present within the building to determine if polychlorinated biphenyls (PCBs) are present in the oil; and
- Collected eleven concrete chip samples to determine if PCBs are present in the concrete floors.

The collected samples were submitted to the following laboratories for analysis:

- Concrete chip and oil samples - Maine Environmental Laboratory (MEL) in Yarmouth, Maine;
- Mold samples - Northeast Laboratory Services (NEL) in Winslow, Maine: and
- Suspect asbestos samples - EMSL Laboratory in Woburn, Massachusetts.

A summary of findings for each task follows:

- Five of the eleven concrete samples were reported to contain PCBs above the USEPA Toxic Substance Control Act (TSCA) reporting limit of 1.0 parts per million (ppm).
- Three of the six oil samples were reported to contain PCBs above 2.0 ppm.
- One of the five samples collected for mold was identified as having a small colony of Chlamydospores. Mold was not detected on the other four samples.
- ACM in the form of pipe insulation was identified within the building.
- Lead-based paint was identified on wood and metal substrates throughout the interior of the structure.

The following recommendations are based on the data gathered during the completion of this investigation and inventory:

1. Collect and analyze additional concrete samples along the west wall to determine the extent of PCB impacts within the building.
2. Clean and encapsulate concrete within the Transformer Room with a MEDEP-approved encapsulating coating to prevent contact with the PCB-impacted concrete. Wastes associated with the cleaning process must be handled as special waste.

3. ACM and LBP impacted by future renovation or demolition activities should be managed in accordance with applicable federal and state regulations.
4. Hazardous materials identified within the building should be managed in accordance with applicable state and federal regulations.

EXECUTIVE SUMMARY ..... **I**
1.0 INTRODUCTION **4**
1.1 Deviations from the Work Plan 4
2.0 FIELD SAMPLING **4**
2.1 HAZARDOUS MATERIALS AND PETROLEUM PRODUCT INVENTORY 4
2.2 SAMPLE SUMMARY 4
2.2.1 Concrete Samples 4
2.2.2 Oil Samples 5
2.2.3 Mold Samples 5
2.2.4 Asbestos-Containing Materials 5
2.2.5 Lead Based Paint 5
3.0 EVALUATION AND PRESENTATION OF RESULTS **5**
3.2 ANALYTICAL DATA 5
3.2.1 Concrete Samples 5
3.2.2 Oil Samples 6
3.2.3 Asbestos Samples 7
3.2.4 Mold Samples 8
3.2.5 Lead Based Paint 8
4.0 CONCLUSIONS **8**
5.0 RECOMMENDATIONS **9**

Tables:

Table 1: Hazardous Materials Inventory
Table 2: Concrete Analytical Results
Table 3: Oil Sample Analytical Results
Table 4: Asbestos Analytical Results
Table 5: Mold Sample Analytical Results

Figures:

Figure 1: Site Location Map
Figure 2: Sample Location Map

Appendices:

Appendix A: Maine Environmental Laboratory Reports
Appendix B: EMSL Report
Appendix C: Northeast Laboratory Report
Appendix D: Atlantic Environmental Services Lead-Based Paint XRF Testing Report

1.0 INTRODUCTION

This Hazardous Materials Inventory was conducted by Summit Environmental Consultants, Inc. (Summit) for Nobis Engineering (Nobis) under a grant from the United States Environmental Protection Agency's (USEPA) Targeted Brownfields Assessment (TBA) process. The Scope of Work was developed by Nobis with the approval of the USEPA prior to commencement of the on-site activities.

1.1 Deviations from the Work Plan

During the field investigation three oil-containing transformers and three oil-containing switches were identified. These items, which were not included as part of the original scope of work, were sampled at the request of Nobis. The oil samples were submitted to an off-site laboratory for PCB analysis.

2.0 FIELD SAMPLING

The scope of work completed for this hazardous materials assessment is as described in the project work plan prepared by Nobis in March of 2010. Summit personnel were on-site on June 24, 2010 and July 12, 2010 to conduct the specified field sampling.

2.1 HAZARDOUS MATERIALS AND PETROLEUM PRODUCT INVENTORY

Summit performed a visual hazardous materials and petroleum product inventory of materials present within the building. Materials identified within the building appeared to be in good shape and were stored appropriately. A summary of hazardous materials identified during the inventory is presented in Table 1:

TABLE 1: HAZARDOUS MATERIALS INVENTORY

Quantity	Item
3	2' Flourescent Lightbulbs
38	4' Flourescent Lightbulbs
21	Light fixtures with ballasts (not known if they contain PCBs)
1	5 gallon pail of solvent-impacted rags
1	20 gallon drum non-chlorinated oil waste
5	aerosol cans
3	vials of unidentified oil
2	gallons paint
3	5 gallon pails of DTE oil
2	Emergency Lights
1	Compressed Nitrogen Cylinder
3	Turbine shafts with unknown amount of oil
2	Water pumps with unknown amount of oil
2	Air compressors with unknown amount of oil

2.2 SAMPLE SUMMARY

2.2.1 Concrete Samples

Eleven concrete samples were collected using an electric hammer drill with a masonry bit. The masonry bit was decontaminated prior to collection of samples from each location. Samples

were collected from 0-1" below the concrete surface and containerized in a pre-cleaned four-ounce jar. Each sample was analyzed for the presence of PCBs. A detailed discussion of results is provided in Section 3.2.1.

2.2.2 Oil Samples

Three oil-containing transformers and three oil-containing switches were identified within the building during the initial site walk-through with a representative of the Bates Mill Complex. Each piece of equipment was sampled using dedicated tubing and the sample was placed in an glass vial (with no preservative). Each sample was analyzed for the presence of PCBs. A detailed discussion of results is provided in Section 3.2.2.

2.2.3 Mold Samples

Five bulk samples of building materials present within the building which appear to host mold growth, were collected and analyzed for the presence and type of mold. Each sample was containerized in a plastic bag prior to submission to the analytical laboratory. Sample locations are presented in Figure 2. A detailed discussion of results is provided in Section 3.2.4.

2.2.4 Asbestos-Containing Materials

Six samples of suspect asbestos-containing materials (ACM) were collected during the field survey by a Maine-licensed asbestos inspector. Bulk samples of identified suspect ACM were collected in accordance with Maine Department of Environmental Protection (MEDEP) regulations. A summary of identified ACM is present in Section 3.2.3.

2.2.5 Lead Based Paint

A Lead-Based Paint (LBP) screening was performed, by Atlantic Environmental Services (representing Summit) on the interior of the building to identify the presence of LBP on accessible building surfaces and components. The LBP screening was performed using an X-Ray Fluorescence (XRF) analyzer. Results of the LBP screening are presented in Section 3.2.5.

3.0 EVALUATION AND PRESENTATION OF RESULTS

3.2 ANALYTICAL DATA

3.2.1 Concrete Samples

Concrete sample results were compared to the applicable cleanup guidelines set forth by the USEPA Toxic Substance Control Act (TSCA). These guidelines are established as criteria to assess potential risk to human receptors from exposure to elevated concentrations of analyzed constituents.

A summary of laboratory analytical results for the concrete samples collected from within the building is presented in Table 1.

Aroclor 1254, a PCB congener, was identified in all of the concrete samples collected at the Site. Five of the samples were reported to contain PCB concentrations at levels above the TSCA standard of 1.0 ppm. It should be noted that three of these concrete samples were collected from areas surrounding oil-containing transformers, whose oils were sampled and analyzed as well (These transformers are assumed to be the source of the oil present in the concrete and are termed "Source Oils". The results of the oil samples for the transformers present within the transformer room (T-1, T-2, and T-3) indicate that the PCB concentrations within these transformers were less than 50.0 ppm. Since the "source" of the oil present in the concrete was determined to have concentrations of PCBs below the TSCA threshold, the concrete

identifed as containing concentrations of PCBs do not require a TSCA mandated removal. However, the MEDEP Remedial Action Guidelines (RAGs) for Excavation or Construction Worker is 6.5 ppm for PCBs. Therefore concrete around Transformer #2, located within the Transformer Room, requires either remediation or encapsulation in accordance with MEDEP guidelines.

The remaining two samples, with identified PCB concentrations were collected from oil stained areas along the West Wall (WW-1 and WW-2) of the building. Because the source of the oil staining where these samples were collected is unknown, it must be assumed under the r TSCA rules that the source of the oil stains contained PCB concentrations greater than 50.0 ppm, therefore requiring removal in accordance with TSCA. Analytical results are included in Appendix A.

TABLE 2: CONCRETE SAMPLE RESULTS

LOCATION	AC-1	AC-2	WW-1	AC-3	EW-1	WW-2	EW-2	TR-1	TR-3	TR-2	2AC-1	TSCA
DATE	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
PCB - 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
PCB - 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
PCB - 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
PCB - 1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
PCB - 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
PCB - 1254	0.335	0.691	**5.49**	.275 P	0.352	**1.190**	0.686	**4.220**	**1.930**	**14.600**	0.277	1
PCB - 1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1

Table Notes:
ND = Value is below method detection limits
mg/kg = milligrams per kilogram, or parts per million
J = Estimated
TSCA = USEPA Toxic Substance Control Act
P = Sample did not meet confirmation acceptance criteria for percent difference

3.2.2 Oil Samples

The six oil samples collected from transformers and switches were reported as containing PCBs concentrations less than 50.0 ppm, the regulatory standard established by TSCA, as hazardous. The three large transformers located within the electrical room outside of the main generating room, were reported to contain concentrations of PCBs greater than (>) 2.0 ppm. According to TSCA rules, used oil containing any quantifiable level of PCBs $\geq$ 2.0 ppm must not be recycled but must be sent to an EPA approved PCB incinerator for disposal. Analytical results are included in Appendix A.

TABLE 3: OIL SAMPLE RESULTS							
LOCATION	TR-1	TR-2	TR-3	LLS-5	LLS-6	ULS-1	TSCA
DATE	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
PCB - 1016	ND	ND	ND	ND	ND	ND	50
PCB - 1221	ND	ND	ND	ND	ND	ND	50
PCB - 1232	ND	ND	ND	ND	ND	ND	50
PCB - 1242	ND	ND	ND	ND	ND	ND	50
PCB - 1248	ND	ND	ND	ND	ND	ND	50
PCB - 1254	ND	ND	ND	ND	ND	ND	50
PCB - 1260	17.6	22.8	24.3	ND	ND	ND	50

Table Notes:
ND = Value is below method detection limits
mg/kg = milligrams per kilogram, or parts per million
TSCA = USEPA Toxic Substance Control Act

3.2.3 Asbestos Samples

The asbestos identification survey was performed on June 24, 2010 by Ms. Sue Chase, an asbestos inspector licensed in the State of Maine. Bulk samples of identified suspect ACM were collected from the interior of the building. Roofing materials and other exterior materials were not included in the original scope of work and were not assessed or sampled as part of this survey. Based upon the age of the building, the built up asphalt roofing system present on the building should be assumed to be asbestos-containing.

The Generating Station includes the main generator room, a mezzanine, a crawl space area beneath the main generating floor (identified by Nobis as a confined space), a second floor transformer room, and the mezzanine level forebay room where river water enters the horizontal turbines.

Suspect ACM identified within the building included window caulk, gasket material, pipe insulation, and wall plaster. A total of six bulk samples of suspect ACM were submitted to EMSL-MA in Woburn, Massachusetts for laboratory analysis. EMSL-MA is licensed by the MEDEP to perform asbestos bulk sample analysis. The samples were analyzed using the USEPA recommended procedure of Polarized Light Microscopy (PLM) with dispersion staining. Analytical results are presented in Appendix B. Pipe insulation present near the ceiling of the mezzanine level forebay room could not be sampled because the piping was inaccessible. This pipe insulation is assumed to be ACM.

Areas not accessible to the Summit surveyor, due to accessibility or safety conditions include the area adjacent to the control panels, switchgear, and oil circuit breakers along the west wall of the building, as the power was active at the time of the assessment; the space beneath the floor of the main generating area, which is considered a confined space. Quantities and locations of identified ACM is presented in Table 4.

TABLE 4: ASBESTOS-CONTAINING MATERIALS				
LOCATION	ACM TYPE	SAMPLE NUMBER	QUANTITY	COMMENTS
Forebay Room	10-inch pipe insulation	Assumed	120 Linear Feet (LF)	Fair Condition - Not accessible for sampling
	2-inch pipe insulation	Assumed	10 LF	Good Condition - Not accessible for sampling

3.2.4 Mold Samples

Five bulk samples of building materials, identified to have evidence of mold growth on their surfaces, were collected and analyzed for the presence of mold using direct microscopic examination. Mold of the Clamydospore species was reported on one of the five samples. The laboratory analyst described the growth as a "Trace" amount, based upon a qualitative scale. Analytical results are included in Appendix C

TABLE 5: MOLD SAMPLE RESULTS					
LOCATION	Mold #1	Mold #2	Mold #3	Mold #4	Mold #5
DATE	24-Jun	24-Jun	24-Jun	24-Jun	24-Jun
Chlamydospores	**Present**	ND	ND	ND	ND

Table Notes:
ND = Value is below method detection limits

3.2.5 Lead Based Paint

The power plant, located within the mill complex consists of two levels, of which the upper level overlooks the lower floor area where all equipment is located. Additionally, the upper room accessible from the exterior was also checked for the presence of lead-based paint.

As indicated on the field forms, the ceiling, walls, support columns, metal window frames, staircase components and several doorways all tested positive for lead-based paint. Due to the rooms' usage, the lead-containing components that were identified were found to be in poor condition. The upper room had a limited amount of lead; most components were natural. The full report (which includes tables and figures) is included as Appendix D.

4.0 CONCLUSIONS

Five of the concrete samples analyzed were reported to contain PCBs at concentrations greater than 1.0 ppm. Three of these samples, however were collected from areas surrounding transformers which also had oil samples collected from them. These three oil samples were reported as containing PCB concentrations of less than 50.0 ppm, therefore the TSCA rules do not apply to the concrete results from samples TR-1, TR-2, and TR-3, but the MEDEP RAGs for Excavation and Construction Workers would require either remediation or encapsulation of the concrete around Transformer #2. According to MEDEP, encapsulation is an acceptable means of remediating with this area as it is used in an industrial manner (i.e. an electrical room).

Concrete results from WW-1 and WW-2 were associated with staining and not with an individual transformer which could be sampled. Due to the unknown source of the staining, the TSCA rules (i.e. sample results greater than 1.0 ppm from an unknown source) would apply to cleanup requirements for these results. However, the small sample size makes extent of the cleanup unknown at this time. Cleanup in this area would require removal of the concrete impacted with PCBs and re-sampling to document its removal to less than 1.0 ppm.

Three of the six oil samples contained PCBs above 2.0 ppm. TSCA requires oils According to TSCA rules, used oil containing any quantifiable level of PCBs $\geq$ 2.0 ppm must be disposed of at an approved PCB incinerator.

One of the five samples collected for mold was identified as having a small colony of Chlamydospores. The other four samples were non-detect for mold.

Asbestos is assumed to be present in pipe insulation within the building. Due to the location of this material, near the ceiling of the mezzanine level forebay room, it was not sampled.

Lead-based paint was identified on wood and metal substrates throughout the interior of the structure.

5.0 RECOMMENDATIONS

Based on the data generated during this investigation and inventory, Summit makes the following recommendation:

1. Collect and analyze additional concrete samples along the west wall to determine the extent of PCB impacts within the building.
2. Clean and encapsulate concrete within the Transformer Room with aMEDEP-approved encapsulating coating to prevent contact with the PCB-impacted concrete. Wastes associated with the cleaning process must be handled as special waste.
3. ACM and LBP impacted by future renovation or demolition activities should be managed in accordance with applicable federal and state regulations.
4. Hazardous materials identified within the building should be managed in accordance with applicable state and federal regulations.

Please feel free to contact either of us with any questions.

Sincerely,
SUMMIT ENVIRONMENTAL CONSULTANTS, INC.

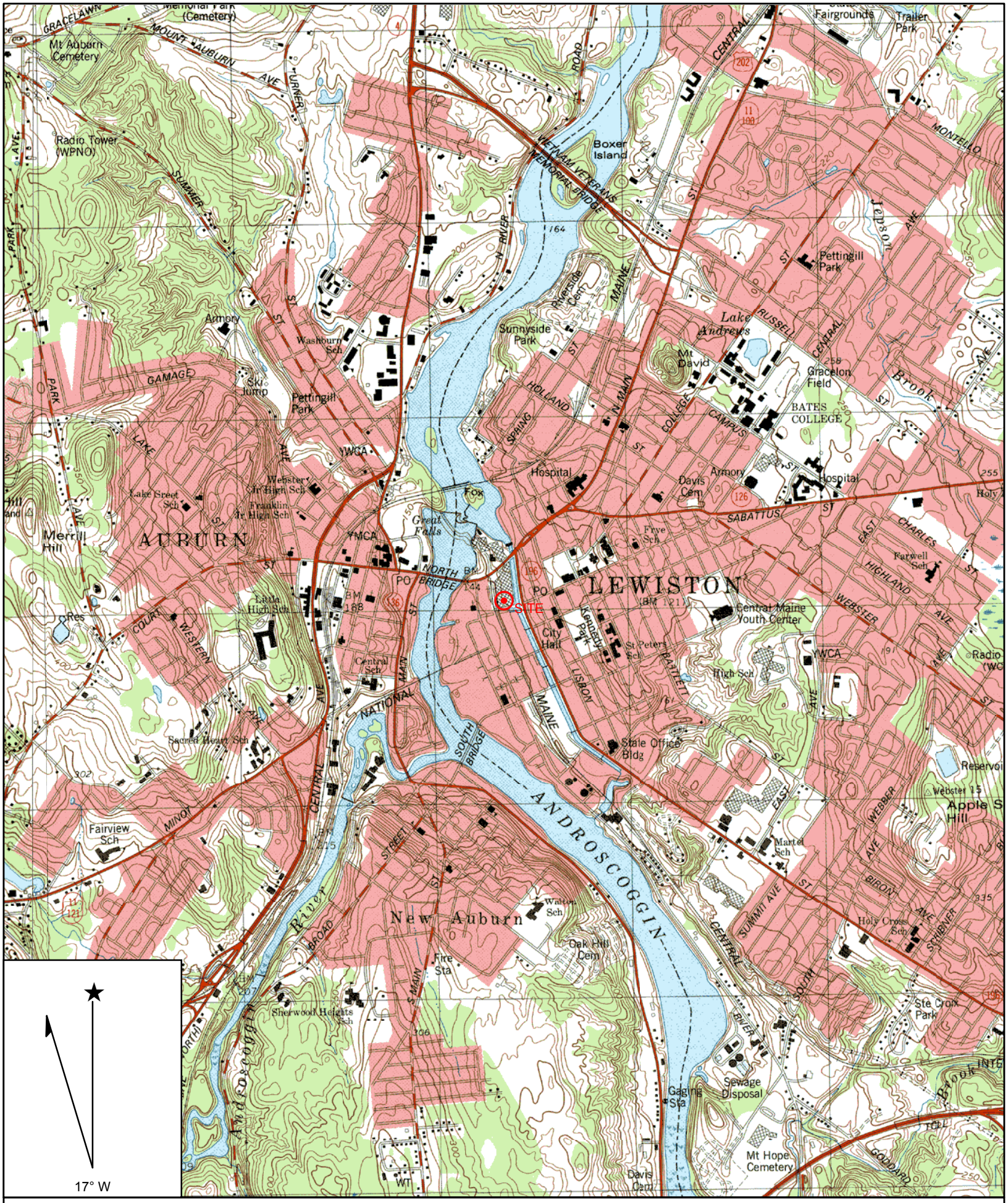
John K. Cressey
Project Scientist

Dennis B. Kingman, Jr., CHMM
Manager, Environmental Services

Figures

Figure 1

Site Location Map



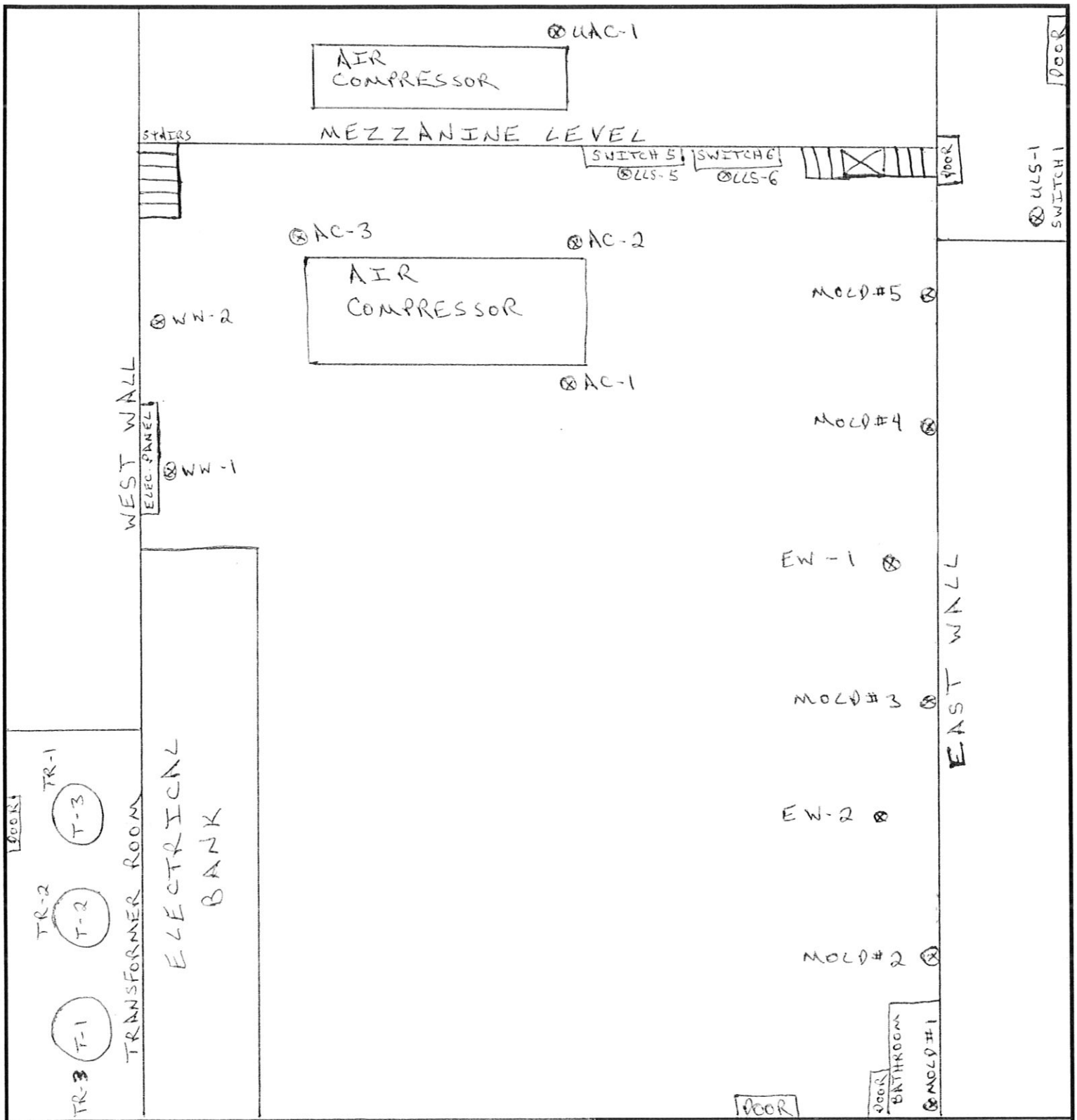
Name: LEWISTON
Date: 7/26/2010
Scale: 1 inch equals 2000 feet

Location: 044° 05' 45.6" N 070° 13' 11.0" W
Caption: Figure 1: Site Location
Mill #5 Power Generating Fac.
Lewiston, Maine

Copyright (C) 1997, Maptech, Inc.

Figure 2

Site Plan



CLIENT: NOBIS ENGINEERING	PROJECT: HAZMAT ASSESSMENT MILL #5 POWER GENERATING FACILITY LEWISTON, MAINE		
SUMMIT ENVIRONMENTAL CONSULTANTS, INC. 640 MAIN STREET LEWISTON, MAINE 04240	TITLE: SITE PLAN		
	DRAWN: G.W.A.	SCALE: Not to scale	
	DESIGN: -----	DATE: 07/21/10	FIGURE: 2
PROJECT NO.: 10-3096	APPROVED: J.K.C.	FILE NO.: 10-3096	

Appendices

Appendix A

Maine Environmental Laboratory Reports

analytics environmental laboratory LLC

195 Commerce Way Suite E
Portsmouth, New Hampshire 03801
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800-929-9906
www.analyticslab.com

Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

Report Number: 67095

Revision: Rev. 0

Re: SME 934-10

Enclosed are the results of the analyses on your sample(s). Samples were received on 28 June 2010 and analyzed for the tests listed. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Sample Analysis: The attached pages detail the Client Sample IDs, Lab Sample IDs, and Analyses requested

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, Virginia, Maryland, and is accredited by the Deparment of Defense (DOD) ELAP program. A list of actual certified parameters is available upon request.

If you have any questions on these results, please do not hesitate to contact us.

Authorized signature _____
Stephen L. Knollmeyer Lab. Director

Date 7/8/2010

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analytics environmental laboratory LLC

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CLIENT: Maine Environmental Laboratory, Inc. **REPORT NUMBER: 67095** **REV: Rev. 0**

PROJECT: SME 934-10

Lab Number	Sample Date	Station Location	Analysis	Comments
67095-1	06/24/10	AC-1	EPA 8082 (PCBs only)	
67095-2	06/24/10	AC-2	EPA 8082 (PCBs only)	
67095-3	06/24/10	WW-1	EPA 8082 (PCBs only)	
67095-4	06/24/10	AC-3	EPA 8082 (PCBs only)	
67095-5	06/24/10	EW-1	EPA 8082 (PCBs only)	
67095-6	06/24/10	WW-2	EPA 8082 (PCBs only)	
67095-7	06/24/10	EW-2	EPA 8082 (PCBs only)	
67095-8	06/24/10	TR-1	EPA 8082 (PCBs only)	
67095-9	06/24/10	TR-3	EPA 8082 (PCBs only)	
67095-10	06/24/10	TR-2	EPA 8082 (PCBs only)	
67095-11	06/24/10	2AC-1	Electronic Data Deliverable	
	06/24/10	2AC-1	EPA 8082 (PCBs only)	

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
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Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-1
Matrix:	Solid
Percent Solid:	98
Dilution Factor:	4.7
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: AC-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	160	U
PCB-1221	160	U
PCB-1232	160	U
PCB-1242	160	U
PCB-1248	160	U
PCB-1254	160	**335**
PCB-1260	160	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	103	%
Decachlorobiphenyl	65	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

FCB Report

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
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800-929-9906

Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-2
Matrix:	Solid
Percent Solid:	96
Dilution Factor:	4.9
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: AC-2

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	160	U
PCB-1221	160	U
PCB-1232	160	U
PCB-1242	160	U
PCB-1248	160	U
PCB-1254	160	**691**
PCB-1260	160	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	87	%
Decachlorobiphenyl	60	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

PCB Report

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-3
Matrix:	Solid
Percent Solid:	97
Dilution Factor:	20
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: WW-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	660	U
PCB-1221	660	U
PCB-1232	660	U
PCB-1242	660	U
PCB-1248	660	U
PCB-1254	660	**5490**
PCB-1260	660	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	*	%
Decachlorobiphenyl	*	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

PCB Report

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Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-4
Matrix:	Solid
Percent Solid:	97
Dilution Factor:	5.0
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: AC-3

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	170	U
PCB-1221	170	U
PCB-1232	170	U
PCB-1242	170	U
PCB-1248	170	U
PCB-1254	170	**275 P**
PCB-1260	170	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	91	%
Decachlorobiphenyl	42	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results. P=Sample did not meet confirmation acceptance criteria for percent difference.

PCB Report

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PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-5
Matrix:	Solid
Percent Solid:	97
Dilution Factor:	5
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: EW-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	170	U
PCB-1221	170	U
PCB-1232	170	U
PCB-1242	170	U
PCB-1248	170	U
PCB-1254	170	**352**
PCB-1260	170	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	112	%
Decachlorobiphenyl	69	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

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Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-6
Matrix:	Solid
Percent Solid:	98
Dilution Factor:	20
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: WW-2

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	660	U
PCB-1221	660	U
PCB-1232	660	U
PCB-1242	660	U
PCB-1248	660	U
PCB-1254	660	**1190**
PCB-1260	660	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	*	%
Decachlorobiphenyl	*	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

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Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-7
Matrix:	Solid
Percent Solid:	97
Dilution Factor:	5.0
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: EW-2

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	170	U
PCB-1221	170	U
PCB-1232	170	U
PCB-1242	170	U
PCB-1248	170	U
PCB-1254	170	**686**
PCB-1260	170	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	107	%
Decachlorobiphenyl	94	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

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Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-8
Matrix:	Solid
Percent Solid:	97
Dilution Factor:	10
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: TR-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	330	U
PCB-1221	330	U
PCB-1232	330	U
PCB-1242	330	U
PCB-1248	330	U
PCB-1254	330	**4220**
PCB-1260	330	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	84	%
Decachlorobiphenyl	90	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

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Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-9
Matrix:	Solid
Percent Solid:	99
Dilution Factor:	4.9
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: TR-3

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	160	U
PCB-1221	160	U
PCB-1232	160	U
PCB-1242	160	U
PCB-1248	160	U
PCB-1254	160	**1930**
PCB-1260	160	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	99	%
Decachlorobiphenyl	48	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

PCB Report

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PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-10
Matrix:	Solid
Percent Solid:	98
Dilution Factor:	20
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: TR-2

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	660	U
PCB-1221	660	U
PCB-1232	660	U
PCB-1242	660	U
PCB-1248	660	U
PCB-1254	660	U
PCB-1260	660	**14600**

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	*	%
Decachlorobiphenyl	*	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

PCB Report

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Mr. Herb Kodis
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PO Box 1107
Yarmouth, ME 04096-1107

July 8, 2010

SAMPLE DATA

Lab Sample ID:	67095-11
Matrix:	Solid
Percent Solid:	98
Dilution Factor:	4.8
Collection Date:	06/24/10
Lab Receipt Date:	06/28/10
Extraction Date:	06/28/10
Analysis Date:	06/30/10

CLIENT SAMPLE ID

Project Name: SME 934-10

Project Number:

Field Sample ID: 2AC-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	160	U
PCB-1221	160	U
PCB-1232	160	U
PCB-1242	160	U
PCB-1248	160	U
PCB-1254	160	**277**
PCB-1260	160	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	119	%
Decachlorobiphenyl	69	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

Sample preparation conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 3540C.

COMMENTS: Results are expressed on a dry weight basis. The closing continuing calibration standard had low recoveries. The analytical window was reanalyzed with similar results.

PCB Report

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AEL

MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066
e-mail: melab@maine.rr.com

PROJECT MANAGER: J. Cressey
TELEPHONE:
FAX # / E-MAIL:
COMPANY:
PURCHASE ORDER # / BILL TO:
ADDRESS:
PROJECT NAME: SMLE934-10
SAMPLER NAME: G. Armstrong

LABORATORY REPORT #:
Delivered by:

TURNAROUND REQUEST
☒ Standard
☐ Priority (SURCHARGE)

Quote # MEL312001-35

ANALYSES: PCB's w/ Soxnlet

SAMPLE IDENTIFICATION	# CONTAINERS	TYPE OF CONTAINERS	FIELD FILTRATION YES	FIELD FILTRATION NO	SAMPLE MATRIX	GRAB	COMP.	METHOD PRESERVED	SAMPLING DATE	SAMPLING TIME	PCB's w/ Soxnlet	LABORATORY IDENTIFICATION/ SUBCONTRACTOR
7C-1	1	GL		X	Concrete	X		4°C	6/24	900	X	670950-1
7C-2	1									920	X	2
UW-1	1									950	X	3
7C-3	1									940	X	4
EW-1	1									1030	X	5
WW-2	1									1010	X	6
EW-2	1									1100	X	7
TR-1	1									1115	X	8
TR-3	1									1150	X	9
TR-2	1									1130	X	10
ZAC-1	1									100	X	11
								CP 6/28/10				

Analytics Report 67095 page 0014 of 14

Received within hold time: ☒ yes ☐ no ☐ N/A
Received in good condition: ☒ yes ☐ no ☐ N/A
Temp. Blank °C 3-6 /Frozen ice packs ☐ N/A
Samples received preserved: ☒ yes ☐ no ☐ N/A labels 1st by CP 6/28/10
Custody seal present: ☐ yes ☒ no

COMMENTS: MEDEP EDD - mill #5

		DATE	TIME
RELINQUISHED BY SAMPLER:	RAM 6/28/10		
RELINQUISHED BY:		6/28/10	1200
RELINQUISHED BY:	RAM 6/28/10		

RECEIVED BY:
RECEIVED BY: Kelleigh McKenna
RECEIVED BY LABORATORY:

MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066
e-mail: melab@maine.rr.com

LABORATORY REPORT # SME934-10

Delivered by: Garth

PROJECT MANAGER: John Cressey
TELEPHONE: 621-8334
FAX # / E-MAIL: 626-9094
COMPANY: Summit Environmental
PURCHASE ORDER # / BILL TO: 10-3096
ADDRESS: 434 Cony Road Augusta, ME 04330
PROJECT NAME: Mill #5
SAMPLER NAME: Garth Armstrong

TURNAROUND REQUEST
☒ Standard
☐ Priority (SURCHARGE)
Quote #_____

ANALYSES: PCBs w/ Soxhlet

SAMPLE IDENTIFICATION	# CONTAINERS	TYPE OF CONTAINERS	FIELD FILTRATION YES	FIELD FILTRATION NO	SAMPLE MATRIX	GRAB	COMP.	METHOD PRESERVED	SAMPLING DATE	SAMPLING TIME	PCBs w/ Soxhlet	LABORATORY IDENTIFICATION/ SUBCONTRACTOR
AC-1	1	GL		X	Concrete	X		6°C	6/24	900	X	
AC-2	1	GL		X	Concrete	X		6°C	6/24	920	X	
WW-1	1	GL		X	Concrete	X		6°C	6/24	950	X	
AC-3	1	GL		X	Concrete	X		6°C	6/24	940	X	
EW-1	1	GL		X	Concrete	X		6°C	6/24	1030	X	
WW-2	1	GL		X	Concrete	X		6°C	6/24	1010	X	
EW-2	1	GL		X	Concrete	X		6°C	6/24	1100	X	
TR-1	1	GL		X	Concrete	X		6°C	6/24	1115	X	
TR-3	1	GL		X	Concrete	X		6°C	6/24	1150	X	
TR-2	1	GL		X	Concrete	X		6°C	6/24	1130	X	
2AC-1	1	GL		X	Concrete	X		6°C	6/24	100	X	

Received within hold time ☒ yes ☐ no ☐ N/A
Received in good condition ☒ yes ☐ no ☐ N/A
Temp. Blank °C 5.3 / Frozen ice packs ☐ N/A
Samples received preserved ☒ yes ☐ no ☐ N/A
Custody seal present ☐ yes ☒ no

COMMENTS: * Edd

RELINQUISHED BY SAMPLER: [signature] DATE 6/28/10 TIME 9:27 RECEIVED BY:
RELINQUISHED BY: DATE TIME RECEIVED BY:
RELINQUISHED BY: DATE 6/28/10 TIME 0927 RECEIVED BY LABORATORY: [signature]

COC-04

analytics environmental laboratory LLC

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Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

Report Number: 67215

Revision: Rev. 0

Re: SME 940-10

Enclosed are the results of the analyses on your sample(s). Samples were received on 14 July 2010 and analyzed for the tests listed. Samples were received in acceptable condition, with the exceptions noted below or on the chain of custody. These results pertain to samples as received by the laboratory and for the analytical tests requested on the chain of custody. The results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report. Please see individual reports for specific methodologies and references.

Lab Number	Sample Date	Station Location	Analysis	Comments
67215-1	07/12/10	T-1	EPA 8082 (PCB's only)	
67215-2	07/12/10	T-2	EPA 8082 (PCB's only)	
67215-3	07/12/10	T-3	EPA 8082 (PCB's only)	
67215-4	07/12/10	LLS-5	EPA 8082 (PCB's only)	
67215-5	07/12/10	LLS-6	EPA 8082 (PCB's only)	
67215-6	07/12/10	ULS-1	EPA 8082 (PCB's only)	

Sample Receipt Exceptions: None

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts, Connecticut, Rhode Island, Virginia, Maryland, and is accredited by the Deparment of Defense (DOD) ELAP program. A list of actual certified parameters is available upon request.

If you have any questions on these results, please do not hesitate to contact us.

Authorized signature _____
Stephen L. Knollmeyer Lab. Director

Date 07/21/2010

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analytics environmental laboratory LLC

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Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID:	67215-1
Matrix:	Oil
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	07/12/10
Lab Receipt Date:	07/14/10
Extraction Date:	07/15/10
Analysis Date:	07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: T-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	**17600**

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	67	%
Decachlorobiphenyl	68	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

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analytics environmental laboratory LLC

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Mr. Herb Kodis
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Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID: 67215-2
Matrix: Oil
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 07/12/10
Lab Receipt Date: 07/14/10
Extraction Date: 07/15/10
Analysis Date: 07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: T-2

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	**22800**

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	67	%
Decachlorobiphenyl	70	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

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Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID:	67215-3
Matrix:	Oil
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	07/12/10
Lab Receipt Date:	07/14/10
Extraction Date:	07/15/10
Analysis Date:	07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: T-3

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	**24300**

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	67	%
Decachlorobiphenyl	70	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

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PO Box 1107
Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID:	67215-4
Matrix:	Oil
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	07/12/10
Lab Receipt Date:	07/14/10
Extraction Date:	07/15/10
Analysis Date:	07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: LLS-5

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	65	%
Decachlorobiphenyl	67	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID:	67215-5
Matrix:	Oil
Percent Solid:	N/A
Dilution Factor:	1.0
Collection Date:	07/12/10
Lab Receipt Date:	07/14/10
Extraction Date:	07/15/10
Analysis Date:	07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: LLS-6

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	65	%
Decachlorobiphenyl	68	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

Authorized signature

analytics environmental laboratory LLC

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111 Fax 603-430-2151
800-929-9906

Mr. Herb Kodis
Maine Environmental Laboratory, Inc.
PO Box 1107
Yarmouth, ME 04096-1107

July 21, 2010

SAMPLE DATA

Lab Sample ID: 67215-6
Matrix: Oil
Percent Solid: N/A
Dilution Factor: 1.0
Collection Date: 07/12/10
Lab Receipt Date: 07/14/10
Extraction Date: 07/15/10
Analysis Date: 07/20/10

CLIENT SAMPLE ID

Project Name: SME 940-10

Project Number:

Field Sample ID: ULS-1

PCB ANALYTICAL RESULTS

COMPOUND	Quantitation Limit µg/kg	Results µg/kg
PCB-1016	2000	U
PCB-1221	2000	U
PCB-1232	2000	U
PCB-1242	2000	U
PCB-1248	2000	U
PCB-1254	2000	U
PCB-1260	2000	U

Surrogate Standard Recovery

2,4,5,6-Tetrachloro-m-xylene	67	%
Decachlorobiphenyl	66	%

U=Undetected J=Estimated E=Exceeds Calibration Range B=Detected in

METHODOLOGY: Sample analysis conducted according to Test Methods for Evaluating Solid Waste, SW-846 Method 8082.

COMMENTS: Sample not amenable to percent solids determination. Results are expressed on an as received basis.

PCB Report

Authorized signature

AE2

MAINE ENVIRONMENTAL LABORATORY- Chain of Custody

One Main Street Yarmouth, Maine 04096-6716 (207) 846-6569 fax: (207) 846-9066
e-mail: melab@maine.rr.com

PROJECT MANAGER: H. Kodis
TELEPHONE:
FAX # / E-MAIL:
COMPANY:
PURCHASE ORDER # / BILL TO:
ADDRESS:
PROJECT NAME: SME940-10
SAMPLER NAME: G. Armstrong

LABORATORY REPORT #:
Delivered by:
TURNAROUND REQUEST: ☑ Standard 7/23 ☐ Priority (SURCHARGE)
me20120101-35
Quote #:

SAMPLE IDENTIFICATION	# CONTAINERS	TYPE OF CONTAINERS	FIELD FILTRATION YES	FIELD FILTRATION NO	SAMPLE MATRIX	GRAB	COMP.	METHOD PRESERVED	SAMPLING DATE	SAMPLING TIME	ANALYSES: PCS	LABORATORY IDENTIFICATION/ SUBCONTRACTOR
-1	1	vial		X	oil	X		≤6°C	07/12/10		X	67215-1
-2	1			X		X					X	2
-3	1			X		X					X	3
LS-5	1			X		X					X	4
LS-6	1			X		X					X	5
LS-1	1			X		X					X	6

cp 7/14/10

Received within hold time ☑ yes ☐ no ☐ N/A
Received in good condition ☑ yes ☐ no ☐ N/A
Temp. Blank °C 6 /Frozen ice packs ☐ N/A
Samples received preserved ☑ yes ☐ no ☐ N/A
Custody seal present ☐ yes ☑ no
Labels tdby

COMMENTS: JBB 7/14/10

RELINQUISHED BY SAMPLER:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE 7/14/10	TIME 1:55	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY LABORATORY:

COC-04 F 7/13

Appendix B

EMSL Report

EMSL Analytical, Inc.
7 Constitution Way, Suite 107, Woburn, MA 01801
Phone: (781) 933-8411 Fax: (781) 933-8412 Email: bostonlab@emsl.com

Attn: **Suzanne Chase**
Summit Environmental Consultants, Inc.
640 Main Street
Lewiston, ME 04240

Fax: (207) 795-6128 Phone: (207) 795-6009
Project: **10-3096 / Bates Mill #5; Lewiston, ME**

Customer ID: SECI78
Customer PO:
Received: 06/25/10 9:50 AM
EMSL Order: 131002727

EMSL Proj:
Analysis Date: 6/30/2010

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos				Asbestos
Sample	**Description**	**Appearance**	**%**	**Fibrous**	**%**	**Non-Fibrous**	**% Type**
3096-001A - Gasket Material *131002727-0001*	- Gasket Material Material	Tan Fibrous Homogeneous	90%	Cellulose	10%	Non-fibrous (other)	**None Detected**
3096-001B - Gasket Material *131002727-0002*	- Gasket Material Material	Tan Fibrous Homogeneous	90%	Cellulose	10%	Non-fibrous (other)	**None Detected**
3096-001C - Gasket Material *131002727-0003*	- Gasket Material Material	Tan Fibrous Homogeneous	90%	Cellulose	10%	Non-fibrous (other)	**None Detected**
3096-002A - Window Caulk *131002727-0004*	- Window Caulk	Red Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
3096-002B - Window Caulk *131002727-0005*	- Window Caulk	Red Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**
3096-002C - Window Caulk *131002727-0006*	- Window Caulk	Red Non-Fibrous Homogeneous			100%	Non-fibrous (other)	**None Detected**

Initial report from 06/30/2010 11:06:10

Analyst(s)

Steve Grise (6)

Renaldo Drakes
or other approved signatory

Due to magnification limitations inherent in PLM, asbestos fibers in dimensions below the resolution capability of PLM may not be detected. Samples reported as <1% or none detected may require additional testing by TEM to confirm asbestos quantities. The above test report relates only to the items tested and may not be reproduced in any form without the express written approval of EMSL Analytical, Inc. EMSL's liability is limited to the cost of analysis. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client.Samples received in good condition unless otherwise noted.
Samples analyzed by EMSL Analytical, Inc. 7 Constitution Way, Suite 107, WoburnMA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-107T3 and VT AL357102

THIS IS THE LAST PAGE OF THE REPORT.

131002727

131002727

EMSL – MA	EMSL – CT	EMSL – NY	EMSL – NJ
7 Constitution Way, Ste 107 Woburn, MA 01801 (781) 933-8411 (781) 933-8412 Fax	4 Fairfield Blvd. Wallingford, CT 06492 (203) 284-5948 (203) 284-5978 Fax	307 West 38th Street New York, NY 10018 (866) 448-3675 (212) 290-0058 Fax	107 Haddon Avenue Westmont, NJ 08108 (800) 220-3675 (856) 858-4960 Fax

www.emsl.com

Your Name: Suzanne Chase **Project Manager:** SYC

Company: Summit Environmental Consultants, Inc.

Street: 640 Main Street

City/State/Zip: Lewiston, Maine 04240

Phone: 207-795-6009 **Fax:** 207-795-6128 **Email:** schase@summitenv.com

Project Name Bates Mill #5 **Project #:** 10-3096

Project Location: Lewiston **Project State (US):** ME

TURNAROUND TIME

☐ 3 Hours	☐ 6 Hours	☐ 12 Hours	☐ 24 Hours	☐ 48 Hours	X 72 Hours	☐ 4 Days	☐ 5 Days	☐ 6-10 Days

SAMPLE MATRIX

☐ Air	☐ Bulk	☐ Soil	☐ Wipe	☐ Micro-Vac	☐ Drinking Water	☐ Wastewater	☐ Chips	☐ Other

ASBESTOS ANALYSIS

PCM - Air
- ☐ NIOSH 7400 (A) Issue 2: August 1994
- ☐ OSHA w/TWA

TEM AIR
- ☐ AHERA 40 CFR, Part 763 Subpart E
- ☐ NIOSH 7402 Issue 2
- ☐ EPA Level II

PLM - Bulk
- X EPA 600/R-93/116
- ☐ NY Stratified Point Count
- ☐ California Air Resource Board (CARB) 435
- ☐ NIOSH 9002
- ☐ PLM NOB (Gravimetric) NYS 198.1
- ☐ EPA Point Count (400 Points)
- ☐ EPA Point Count (1,000 Points)
- ☐ Standard Addition Point Count

SOILS
- ☐ EPA Protocol Qualitative
- ☐ EPA Protocol Quantitative
- ☐ EMSL MSD 9000 Method fibers/gram
- ☐ Superfund EPA 540-R097-028 (dust generation)

TEM BULK
- ☐ Drop Mount (Qualitative)
- ☐ Chatfield SOP-1988-02
- ☐ TEM NOB (Gravimetric) NY 198.4

TEM MICROVAC
- ☐ ASTM D 5755-95 (Quantitative)

TEM WIPE
- ☐ ASTM D-6480-99
- ☐ Qualitative☐

TEM WATER
- ☐ EPA 100.1
- ☐ EPA 100.2
- ☐ NYS 198.2
- ☐ Other:_____

LEAD ANALYSIS

Flame Atomic Absorption
- ☐ Wipe, SW846-7420☐ASTM ☐ non ASTM
- ☐ Soil, SW846-7420
- ☐ Air, NIOSH 7082
- ☐ Chips, SW846-7420 or AOAC 5.009 (974.02)
- ☐ Wastewater, SW 846-7420
- ☐ TCLP LEAD SW846-1311/7420

Graphite Furnace Atomic Absorption
- ☐ Air, NIOSH 7105
- ☐ Wastewater, SW846-7421
- ☐ Soil, SW846-7421
- ☐ Drinking Water, EPA 239.2

ICP – Inductively Coupled Plasma
- ☐Wipe, SW846-6010☐ASTM ☐ non ASTM
- ☐ Soil, SW846-6010
- ☐ Air, NIOSH 7300

MATERIALS ANALYSIS

- ☐ Full Particle Identification
- ☐ Optical Particle Identification
- ☐ Dust Mites and Insect Fragments
- ☐ Particle Size & Distribution
- ☐ Product Comparison
- ☐ Paint Characterizaton
- ☐ Failure Analysis
- ☐ Corrosion Analysis
- ☐ Glove Box Containment Study
- ☐ Petrographic Examination of Concrete
- ☐ Portland Cement in Workplace Atmospheres (OSHA ID-143)
- ☐ Man Made Vitrous Fibers – MMVF's
- ☐ Synthetic Fiber Identification
- ☐ Other:_____

MICROBIAL ANALYSIS

Air Samples
- ☐Mold & Fungi by Air O Cell
- ☐Mold & Fungi by Agar Plate count & id
- ☐Bacterial Count and Gram Stain
- ☐Bacterial Count and Identification

Water Samples
- ☐ Total Coliforms, Fecal Coliforms
- ☐ Escherichia Coli, Fecal Streptococcus
- ☐ Legionella
- ☐ Salmonella
- ☐ Giardia and Cryptosporidium

Wipe and Bulk Samples
- ☐ Mold & Fungi – Direct Examination
- ☐ Mold & Fungi – (Culture follow up to direct examination if necessary)
- ☐ Mold & Fungi – Culture (Count & ID)
- ☐ Mold & Fungi – Culture (Count only)
- ☐ Bacterial Count & Gram Stain
- ☐ Bacterial Count & Identification (3 most prominent types)
- ☐ Other:_____

IAQ ANALYSIS

- ☐ Nuisance Dust (NIOSH 0500 & 0600)
- ☐ Airborne Dust (PM10, TSP)
- ☐ Silica Analysis by XRD ☐Niosh 7500
- ☐ HVAC Efficiency
- ☐ Carbon Black
- ☐ Airborne Oil Mist
- ☐ Other:_____

Additional Information/Comments/Instructions: **Positive Stop (A,B,C);**

Client Sample # (S) _____ **TOTAL SAMPLE #** 6

Relinquished: Suzy Chase **Date:** 6-24-10 **Time:** 1140

Received: **Date:** **Time:**

Relinquished: **Date:** **Time:**

Received: **Date:** **Time:**

RECEIVED
JUN 25 2010
BY: A.S. 9:50

FedEx # 793667438784

131002727

131002727

EMSL
www.emsl.com

EMSL – MA	EMSL – CT	EMSL – NY	EMSL – NJ
7 Constitution Way, Ste 107	4 Fairfield Blvd.	307 West 38th Street	107 Haddon Avenue
Woburn, MA 01801	Wallingford, CT 06492	New York, NY 10018	Westmont, NJ 08108
(781) 933-8411	(203) 284-5948	(866) 448-3675	(800) 220-3675
(781) 933-8412 Fax	(203) 284-5978 Fax	(212) 290-0058 Fax	(856) 858-4960 Fax

	SAMPLE NUMBER	SAMPLE DESCRIPTION/LOCATION	VOLUME Air (L)	Area (Inches sq.)
1	3096-001A	gasket material		
2	3096-001B	"		
3	3096-001C	"		
4	3096-002A	window caulk		
5	3096-002B	"		
6	3096-002C	"		
	3096-			
	3096-			
	3096-			
	3096-			
	3096-			
	3096-			
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	3096-			
	3096-			
	3096-			
	3096-			
	3096-			
	3096-			

Relinquished:	Jay Chase	Date:	6-24-10	Time:	1140
Received:		Date:		Time:	
Relinquished:		Date:		Time:	
Received:		Date:		Time:	

RECEIVED
JUN 25 2010
BY: [illegible]

Appendix C

Northeast Laboratory Report

Northeast Laboratory SERVICES

1-800-244-8378 Phone
1-207-873-7022 FAX
227 China Rd.
Winslow, ME 04901

Client: Summit Env.

Address: 434 Cony Rd
Augusta Maine
04330

Analysis Report
Direct Microscopic Exam

SOP 4.3.25-27

Date Sampled: 6/24/10
Date Received: 6/25/10
Date Reported: 7/1/10
Project: Bates Mill #5

Lab Number	Sample Type	Description	Background Debris (1)	Mold Growth (2)	Comments	Sample Condition
MJ 10812	Bulk	Mold #1	2	1 Chlamydospores		Good
MJ 10813	Bulk	Mold #2	2	n.d.		Good
MJ 10814	Bulk	Mold #3	2	n.d.		Good
MJ 10815	Bulk	Mold #4	2	n.d.		Good
MJ 10816	Bulk	Mold #5	2	n.d.		Good

Qualitative Scale: N.D. = Not Detected; 1 = Lowest (Trace); 5 = Highest (Heavy or Highly Abundant Presence)
*= Spores only, no growth structures present.

(1) Background particles include organic and inorganic debris from a variety of sources, and generally occur as a result of settling from an airborne state.

(2) Mold observed with associated vegetative structures (unless otherwise indicated). In addition to a relative numerical abundance rating, molds present are identified to the highest level possible. Mold growing at level 4 or above could obscure the visibility of other, smaller mold growing under and/or within the heavily growing mold.

Created By: _____
Tom Cheetham, Phd, Environmental Microbiology Department

Reviewed By: _____
Brett Goodrich, Manager, Environmental Microbiology Dept.

Analytical results and reports are generated by NEL at the request of and for the exclusive use of the person or entity (client) named on this report. Results, reports or copies of same will not be released by NEL to any third party without the prior express written consent from the client named in this report. This report applies only to those samples taken at the time, place and location referenced by the client. This report makes no express or implied warranty or guarantee as to the sampling methodology used by the individual performing the sampling unless sampling was performed by NEL. The client is solely responsible for the use and interpretation of these results and NEL makes no express or implied warranties as to such use or interpretation. NEL is not able to make and does not make a determination as to the soundness or safety of a product, environment or property from only the samples sent to their laboratory for analysis. Unless otherwise specified by the Client, NEL reserves the right to dispose of all samples after the testing of such samples is sufficiently completed or after a thirty-day period, whichever period is greater. Samples for Microbiology that degrade rapidly or pass their hold times will be retained for shorter periods or not at all. NEL liability extends only to the cost of the testing.

Northeast Laboratory SERVICES

P.O. Box 788 • Waterville, ME 04903-0788
207-873-7711 / Fax: 207-873-7022

Shipping: 227 China Road
Winslow, Maine 04901

CHAIN OF CUSTODY RECORD

Company Name: SUMMIT ENVIRONMENTAL

Reporting Address: 434 CONY ROAD AUGUSTA, ME 04330

Client Contact: JOHN CRESSEY Phone 621-8334 Fax 626-9094

Billing Name: SUMMIT ENVIRONMENTAL

Billing Address: 434 CONY ROAD AUGUSTA, ME 04330

PO #: 10-3096

Quote #

Project Name BATES MILL #5

Lab Comments:

Sample Designation	Sample Date/Time	Preservation: 1 H_2SO_4, 2=HNO_3, 3=HCL, 4=NaOH, 5=Thio, 6=4°C, 7=None	Container Size, Type	QTY	Sample Type Code: G = Grab C = Composite	Matrix Code Choose One: GW = Ground Water WW = Waste Water DW = Drinking Water SW = Surface Water O = Oil WP = Wipe S = Soil F = Food Other (Please List)	Analyses Requested	Lab Sample ID
MOLD #1	6/24 900	7	BAG	1	G	OTHER - PAINT	MOLD	MJ10812
MOLD #2	6/24 910	↓	↓	↓	↓	↓	↓	813
MOLD #3	6/24 920	↓	↓	↓	↓	↓	↓	814
MOLD #4	6/24 930	↓	↓	↓	↓	↓	↓	815
MOLD #5	6/24 940	↓	↓	↓	↓	↓	↓	816

Notes:

Sampled By: SUE CHASE

Known hazards associated with samples:

Relinquished By	Date/Time	Received By	Date/Time	pH
[signature]	6-25 345	[signature]	6/25/10 1545	
Relinquished By	Date/Time	Received By	Date/Time	Rush Yes 5 days 50% surcharge 2 days 100% surcharge
Relinquished By	Date/Time	Received By	Date/Time	Field Filtered Y / N

The recommended temperature of the internal container is 2-6°C. Do you authorize analysis if the temp is out of range?

Yes No

Chain of Custody must be filled out completely. This includes signature, sample description, analysis requested, date and time sampled.

If not completed, samples will be rejected.

Rev. 8/04 Form #NEL 100

If a sample is hazardous or radioactive, the sample will be returned to the client at the client's expense.
Standard turn-around-time is 10 business days - depending on season.

NORTHEAST LABORATORY SERVICES
SAMPLE RECEIPT CONDITION REPORT

Client: Summit Envir.

Date/Time Received: 6/25/10 1545 **Initials:** Cw

Project: _____

Rush? Yes No TAT

NEL Sample Numbers: MJ 10812-6

Delivered by: _____

Tracking Number: _____

FOOD AND WATER

	Yes	No
1. Are custody seals present?	___	___
2. Is the COC properly filled out?	___	___
3. Do sample labels match the COC?	___	___
4. Are samples within the analytical hold time?	___	___
5. Is there sufficient volume to perform tests?	___	___
6. Are samples in good condition?	___	___

Comments: _____

INDOOR AIR QUALITY

	Yes	No
1. Is the COC properly filled out?	✓	___
2. Do sample labels match the COC?	✓	___
3. Are samples in good condition?	✓	___

Comments: _____

CONTROLLED

Appendix D

Atlantic Environmental Services Lead-Based Paint XRF Testing Report

AES *Atlantic Environmental Services*
PO Box 615
West Kennebunk, Maine 04094

John Cressey
Summit Environmental Consultants, Inc.
434 Cony Road
Augusta, Maine 04330

RE: Lead-Based Paint XRF Testing
Bates Mill #5 Power Plant, Lewiston, Maine
AES Job #: 10-205

Dear Mr. Cressey:

Atlantic Environmental Services has completed the environmental lead-based paint testing at the power plant located at Bates Mill #5 in Lewiston, Maine.

Purpose

The purpose of this testing was to determine the presence of lead-based paint on components throughout the facility. The lead-based paint testing was performed utilizing a portable X-ray Fluorescence Analyzer (XRF) that non-destructively tests for the presence of lead on building components. Once lead-containing components were identified, a visual assessment as to the current condition of the paint was also performed.

Lead Testing Procedures

On June 24, 2010, I, Deborah A. Kasik, *ME DEP* certified Lead Risk Assessor, License #LR-0003, performed the Lead-Based Paint Testing.

The lead-based paint testing was performed in accordance with the *established protocols* outlined in the *State of Maine Department of Environmental Protection's* Lead Management Regulations, Chapter 424, Section 7, as they apply to this project. The testing provides information on the lead-based paint content and assessment of condition for the surfaces tested. All results have been included on the field forms for your review.

The lead-based paint testing was conducted utilizing a portable X-ray Fluorescence Lead Paint Analyzer (RMD LPA-1), which non-destructively tests for the presence of lead-based paint. This equipment is licensed with the Department of Human Services Radiation Control Program and operated in accordance with all applicable regulations and conditions of licensure.

Explanation of Analysis Methods

The X-ray Fluorescence Lead Paint Analyzer is a complete lead paint analysis system that quickly, accurately, and non-destructively measures the concentration of lead-based paint on surfaces. X-ray Fluorescence is a common technique utilizing gamma rays to bombard the surface, causing the atoms in the paint to emit characteristic X-rays. These characteristic X-rays are detected and analyzed to provide the apparent lead concentration information.

The RMD LPA-1 has the ability to read concentrations of lead in paint up to 9.9 milligrams per square centimeter; if the content of lead in the paint is greater than 9.9, the reading for that component will be listed as >9.9 mg/cm^2. The minimum detection limit of this particular equipment is 0.3 milligrams per square centimeter.

Calibration of the equipment is required by regulation and, as indicated on the Field Sheets, the readings were within the limits established by the manufacturer.

Limitations

In certain circumstances, leaded components may be covered by other building components, such as sheetrock over old painted walls and ceilings. It should be understood that the lead testing process is non-destructive, unless authorization has been received by the Owner to access otherwise inaccessible components. Those areas where access was achievable, the surfaces were tested and the results included on the field forms. In cases where the components were inaccessible, the Owner can either assume that these inaccessible components contain lead-based paint or have them tested when renovation work may disturb them. The XRF readings obtained on the accessible surface are therefore for that surface only (i.e. XRF reading on paneling) and do not apply to the surface beneath it.

Observations/Results

The power plant, located within the mill complex consists of two levels, of which the upper level overlooks the lower floor area where all equipment is located. Additionally, the upper room accessible from the exterior was also checked for the presence of lead-based paint.

As indicated on the attached field forms, the ceiling, walls, support columns, metal window frames, staircase components and several doorways all tested positive for lead-based paint. Due to the rooms' usage, the lead-containing components that were identified were found to be in poor condition. The upper room had a limited amount of lead; most components were natural.

Explanation of Results

Components found to contain lead-based paint have also been assessed in terms of the condition of the paint. This assessment is based on the definitions outlined in the DEP regulations and utilized as an industry standard. There are three different classifications for paint condition - good, fair, and poor, which are 'generally' defined as follows:

- GOOD: paint which is entirely intact.
- FAIR: paint is intact, but worn; minor chips are evident as a result of normal wear and tear; no adhesion or substrate problems, e.g. no broken wallboard is present.
- POOR: paint is severely worn, weathered, or no longer adhering, i.e. peeling, cracking, flaking, chalking; or the substrate is broken, exposed, or otherwise deteriorated.

Recommendations

The objective of this testing was to determine the presence of lead-based paint and assess the condition of the paint as it currently exists. All scraping, sanding, cutting, welding, grinding, or demolition of any painted surface should not be performed under dry conditions in which airborne dust can be generated. Similarly, renovation/demolition activities that may impact lead-containing components are a concern with respect to the generation of airborne lead dust; therefore, safety measures such as the use of engineering controls are essential in order to protect human health and the environment. Contractors performing renovation/demolition activities in which excessive amounts of lead dust may be generated shall be trained in the hazards of lead-containing materials and the subsequent removal, cleaning, packaging, and handling of these materials as well as wearing NIOSH approved respirators, disposable clothing, and other requirements of the standard. All work operations shall be performed in accordance with the following:

- ❑ *OSHA 29 CFR Part 1926.62, Lead Standard*.

The lead dust generated from any renovation work must be contained so that exposure is minimal, for both the workers and any occupants. After any renovation work is completed the dust should immediately be cleaned in order to prevent migration to other areas of the structure or waterway.

Monitoring lead-containing components that remain for condition changes is important; any changes should be addressed immediately. Any work, whether it is on the interior or exterior of the structure should be performed in a safe manner so as to minimize the amount of dust that is generated.

Additional recommendation: when ordering building materials for renovation/rehabilitation projects, order should state 'Lead-Free'.

If you should have any questions at all concerning the information contained herein, or in general, please do not hesitate to contact me at (207) 604-2581 or via email at dkasik@metrocast.net .

Sincerely,

Deborah A. Kasik

Deborah A. Kasik
Lead Risk Assessor (LR#0003)

Enclosures

ENVIRONMENTAL LEAD-BASED PAINT XRF RESULTS

CLIENT: Summit Environmental Consultants, Inc. **DATE:** 6/24/2010
SITE: Power Plant, Bates Mill #5, Lewiston, ME **AES #** 10-205

FIELD ID #	SAMPLE LOCATION	COMPONENT(S)	# OF RDGS	RESULTS	NOTES
L-1	POWER PLANT	CEILING	1	2.6	TAN/WHITE CONCRETE
L-2	POWER PLANT	A' UPPER WALL	1	<0.3	TAN CONCRETE
L-3	POWER PLANT	A' LOWER WALL	1	1.2	BLACK CONCRETE
L-4	POWER PLANT	A' DOUBLE DOORS	1	>9.9	BLACK METAL
L-5	POWER PLANT	A' WINDOW FRAME	1	3.1	BLUE METAL
L-6	POWER PLANT	A' PANELS	1	7.4	TAN METAL
L-7	POWER PLANT	A' STAIR HANDRAIL	1	<0.3	BLACK/RUST
L-8	POWER PLANT	A' STAIR TREADS	1	>9.9	BLACK METAL
L-9	POWER PLANT	A' STAIR MOPBOARD	1	6.0	BLACK METAL
L-10	POWER PLANT	A' STAIR/ROOM UPPER WALLS	1	3.1	TAN CONCRETE
L-11	POWER PLANT	A' STAIR/ROOM LOWER WALLS	1	3.0	BLACK CONCRETE
L-12	POWER PLANT - UPPER SECTION	B' UPPER WALLS	1	0.4	TAN CONCRETE
L-13	POWER PLANT - UPPER SECTION	B' LOWER WALLS	1	0.5	BLACK CONCRETE
L-14	POWER PLANT - UPPER SECTION	B' SUPPORT COLUMNS UP/LOW	2	1.2/2.5	TAN/BLACK CONCRETE

NOTES: RMD LPA-1 (XRF): UNIT # 3305 RADIATION LICENSE #31223G CALIBRATION STANDARD: 1.0 +/- 0.3 MG/CM^2
ALL RESULTS EXPRESSED AS MG/CM^2 UNLESS OTHERWISE NOTED. PRE/POST CALIBRATION READINGS: 1.1/1.0
LEAD PAINT - POOR CONDITION = YELLOW HIGHLIGHTED ; LEAD PAINT - GOOD TO FAIR CONDITION = BLUE HIGHLIGHTED

SIGNATURE OF DEP CERTIFIED LEAD RISK ASSESSOR: Deborah A. Kasik **DATE:** 6/24/2010

ENVIRONMENTAL LEAD-BASED PAINT XRF RESULTS

CLIENT: Summit Environmental Consultants, Inc. **DATE:** 6/24/2010
SITE: Power Plant, Bates Mill #5, Lewiston, ME **AES #** 10-205

FIELD ID #	SAMPLE LOCATION	COMPONENT(S)	# OF RDGS	RESULTS	NOTES
L-15	POWER PLANT - UPPER SECTION	B' SMALL DOOR CASING/JAMB	2	0.4/0.3	BLACK WOOD
L-16	POWER PLANT - UPPER SECTION	B' GARAGE DOOR CASING/JAMB	2	<0.3/<0.3	BLACK METAL/WOOD
L-17	POWER PLANT - MID LEVEL	SUPPORT COLUMN UPPER/LOWER	2	1.1/2.0	TAN/BLACK CONCRETE
L-18	POWER PLANT - LOWER SECTION	FLOOR	2	<0.3/<0.3	RED CONCRETE
L-19	POWER PLANT	C' WALLS	2	4.2/4.0	TAN/BLACK CONCRETE
L-20	POWER PLANT	C' SUPPORT COLUMNS	2	3.9/3./	TAN CONCRETE
L-21	POWER PLANT	C' STAIRCASE	1	2.7	BLACK METAL
L-22	POWER PLANT	C' UPPER RAILING	1	1.9	RED CONCRETE
L-23	POWER PLANT	D' WINDOWS	1	<0.3	TAN WOOD
L-24	POWER PLANT	D' DOOR	1	>9.9	TAN WOOD
L-25	POWER PLANT	D' WALLS	1	4.2	TAN CONCRETE
L-26	POWER PLANT - EQUIPMENT	B UNIT #1	1	1.0	DARK GREEN METAL
L-27	POWER PLANT - EQUIPMENT	B UNIT #1 BASE	1	<0.3	DARK GREEN
L-28	POWER PLANT - UPPER ROOM (EXTERIOR ACCESS)	WINDOWS	1	2.1	GRAY WOOD

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LEAD PAINT - POOR CONDITION = YELLOW HIGHLIGHTED ; LEAD PAINT - GOOD TO FAIR CONDITION = BLUE HIGHLIGHTED

SIGNATURE OF DEP CERTIFIED LEAD RISK ASSESSOR: Deborah A. Kasik **DATE:** 6/24/2010