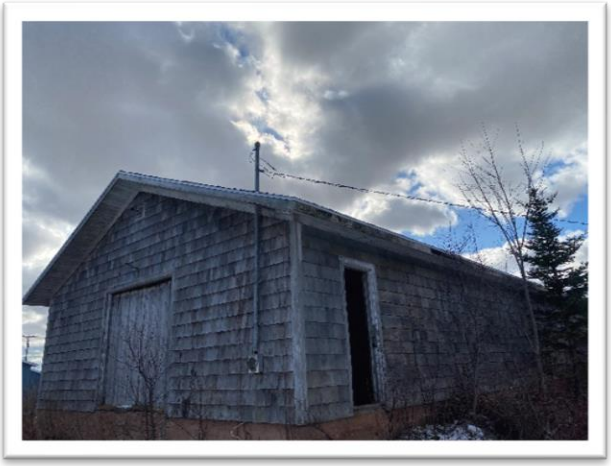


ALL-TECH
ENVIRONMENTAL SERVICES LIMITED

HAZARDOUS MATERIALS ASSESSMENT
Mount Albion Warehouse
9484 Trans-Canada Highway,
Hazelbrook, PE

Prepared For:

PEI Department of Transportation & Infrastructure
P.O. Box 2000
Charlottetown, PE

March 25, 2023

ALL-TECH Project No.: PE22400

ALL-TECH Environmental Services Limited, 70 Nicholas, Unit 4, Charlottetown, PE, C1E 3J5
Phone: (902) 569-0172 Web: http://www.toalltech.com

Bedford, NS Sydney, NS St. John, NB Moncton, NB Charlottetown, PE St John's, NL Cornerbrook, NL Gander, NL

EXECUTIVE SUMMARY

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for Mount Albion Warehouse located at 9484 TCH in Hazelbrook, Prince Edward Island.

The purpose of the assessment was to identify hazardous materials within the building which may require safe handling procedures and disposal requirements in accordance with their applicable regulations prior to any planned work, renovations, or demolition and to assist in the Asbestos Management Plan (AMP) of any in place asbestos containing materials (ACM).

This report has been prepared to document the identities, usages and locations of any designated substances and hazardous materials identified within the building.

The on-site assessment was conducted in November 2022. During the assessment, only suspect hazardous materials of paint were sampled for possible lead content.

Based on the findings from the Hazardous Materials Assessment, the following conclusions and recommendations are presented.

A summary of the Hazardous Materials identified within the building is provided below in Table 3 based on our assessment as well as safe handling requirements.

Hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix II.

Upon review of this report and based on any planned work, renovations or demolition, a full scope of work should be developed. This scope of work will be dependent upon which materials need to be disturbed or removed prior to the renovations.

TABLE A
Summary of Hazardous Materials for Management Plan
Mount Albion Warehouse

Hazardous Materials	***Description / Comments***	***Safe Handling Requirements***	***Disposal Requirements***
LEAD PAINT	White paint on exterior wood trim	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
SILICA	Presumed in the following building components: • Poured or pre-cast concrete (slab)	Trained personnel in the safe handling of silica dust and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ

This summary should not be used alone. The report must be read in its entirety.

Larry Koughan, CET, CRSP
Project Principal
ALL-TECH Environmental Services Limited

Table of Contents

SITE / CLIENT INFORMATION

Project No:	PE22400
Assessment Date:	**November 2022**
Client Name:	**PEI Department of Transportation & Infrastructure**
Address:	9484 TCH Hazelbrook, PE

1 INTRODUCTION

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for Mount Albion Warehouse located at 9484 TCH in Hazelbrook, Prince Edward Island.

The purpose of the assessment was to identify hazardous materials within the building which may require safe handling procedures and disposal requirements in accordance with their applicable regulations prior to any planned work, renovations, or demolition and to assist in the Asbestos Management Plan (AMP) of any in place asbestos containing materials (ACM).

This report has been prepared to document the identities, usages and locations of any designated substances and hazardous materials identified within the building.

The on-site assessment was conducted in November 2022. During the assessment, only suspect hazardous materials of paint were sampled for possible lead content.

1.1 SURVEY OBJECTIVES

The scope of the survey was to conduct a non-destructive assessment to identify asbestos, lead, and PCBs within the subject building as well as any other suspect hazardous materials if encountered.
ALL-TECH inspected both interior and exterior spaces of the subject building to determine whether designated substances and hazardous materials were present. Representative sampling for suspect asbestos and lead paint materials was conducted as required based on industry standards and the consultant's experience.

1.2 BACKGROUND BUILDING INFORMATION

TABLE 1 BUILDING FRAMEWORK	
Building Use	Warehouse
Number of Floors	One
Total Area	Approximately 172 m^2
Year of Construction	1956
Structure	Wood
Exterior Cladding	Wood
HVAC	NA
Roof	Not assessed
Flooring	Wood
Interior Walls	Wood
Ceilings	Wood

2 REGULATIONS & GUIDELINES

A summary table (Table 2) is provided for the applicable regulations, policies, codes, and / or guidelines of hazardous materials assessed for the purpose of this report. This information was used as reference to assess suspect hazardous materials and make recommendations based on the findings.

TABLE 2 SUMMARY OF REGULATORY FRAMEWORK	
ASBESTOS	▪ *Occupational Health and Safety Act* R.S.P.E.I. 1988, Cap. O-1.01 General Regulations – Part 49 (Including any amendments to May 2021). ▪ Guide to Asbestos Management, Workers Compensation Board of PEI. ▪ *Environmental Protection Act Chapter E-9 Waste Management Regulations*, Prince Edward Island ▪ Transportation of Dangerous Goods Act (TDGA)
LEAD	▪ Hazardous Products Act ▪ Prince Edward Island Department of Environment, Labour and Justice (PEIELJ) ▪ Transportation of Dangerous Goods Act (TDGA) ▪ The Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair. ▪ Surface Coating Materials Regulations, SOR/2016-193, Canada Consumer Product Safety Act.
PCB's	▪ Environmental Contaminants Act, Chlorophenyl Regulations ▪ Environment Canada – "Identification of Lamp Ballasts Containing PCB's," report EPS 2/CC/2 (revised) August 1991 ▪ PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act.

2.1 ASBESTOS

Asbestos materials can be found in one of two forms: friable asbestos or a non-friable type. Friable asbestos material refers to material that when dry, can be crumbled, pulverized, or reduced to a powder by hand pressure. This type of asbestos material is hazardous due to its potential to become airborne, if damaged or disturbed.

Friable asbestos building products used that have been used in the past are sprayed acoustic and fire protection insulation which were installed on mechanical room ceilings, building structures, ceiling finishes, etc., and mechanical insulation on piping, tanks, boilers, vessels, etc. Some non-friable building products are vinyl acoustic floor tiles, gaskets, transite panels, piping, and shingles.

Non-friable materials if handled improperly during removal or renovations, such as cutting transite panels with an electrical tool, can cause high fiber releases.

Asbestos is classified as a hazardous material under the TDGA and must adhere to specific requirements for transfer including but not limited to waste transfer manifests and proper placards. All asbestos waste must be disposed of at an approved municipal solid waste disposal site. Recent changes from the Prince Edward Island's Department of Environment's Environmental Protection Act, Waste Resource Management Regulations have defined asbestos as "special waste" as asbestos containing materials containing 1% or greater by weight for the purpose of disposal.

All work should be carried out by personnel trained and licensed with the provincial department of the Workers Compensation Board / Occupational Health and Safety Division for asbestos abatement.

2.2 LEAD

Lead in paints is regulated under the Canadian Environmental Protection Act (CEPA) as published in Canada Gazette Part II. The lead content limit has been set to 600 mg/kg (0.06 percent by weight) for surface coating materials.

Any disturbance or removal of lead-based materials which may generate lead dust shall have to conform to the federal and provincial Occupational Health and Safety Act and Regulations. All work should be carried out by personnel trained in the safe handling of lead-based paint coatings and shall be trained in the use of respirators and be properly fit tested.

PEIELJ has established guidelines that restrict hazardous materials from municipal landfills and Construction and Demolition (C&D) waste disposal sites which potentially may migrate / leach into groundwater and cause adverse environmental impacts. Lead coated surfaces may leach from their base materials into soil and subsequent groundwater. PEIELJ has established guidelines that materials containing 1000 mg/kg or 0.1% lead by weight shall be classified as lead-based paints. If materials are found to be above this guideline and require removal and disposal, then the materials must undergo

leachate testing to assess concentrations which could potentially leach into the ground soil and groundwater. Presently provincial requirements for lead leachate testing shall not exceed 5 mg/L.

Materials with leachable lead concentrations above provincial guidelines must be manifested as dangerous goods during transport under the federal TDGA. Hazardous materials that are being disposed of out of province must comply with Interprovincial Movement of Hazardous Waste Regulations under the Canadian Environmental Protection Act (CEPA).

PEIELJ has established guidelines that restrict hazardous materials from municipal landfills and Construction and Demolition (C&D) waste disposal sites which potentially may migrate / leach into groundwater and cause adverse environmental impacts. Lead coated surfaces may leach from their base materials into soil and subsequent groundwater. PEIELJ has established guidelines that materials containing 1000 mg/kg or 0.1% lead by weight shall be classified as lead-based paints. If materials are found to be above this guideline and require removal and disposal, then the materials must undergo leachate testing to assess concentrations which could potentially leach into the ground soil and groundwater. Presently provincial requirements for lead leachate testing shall not exceed 5 mg/L. Disposal criteria for lead containing paints are based on total and leachable concentrations are as follows:

- Materials with total lead concentrations below the applicable Total guidelines can be disposed of at any C&D disposal site.
- Materials with *total lead concentrations above* the applicable Total guidelines and *leachable lead concentrations below* the applicable Leachate guidelines must be disposed of at an approved municipal solid waste landfill that has a composite liner and leachate collection system (i.e., East Prince Waste Management Facility in Wellington, PEI). A waste generator permit must first be approved and obtained by PEIELJ.
- Materials with total and leachable lead concentrations above provincial guidelines must be transported to an approved hazardous waste disposal site.

Materials with leachable lead concentrations above provincial guidelines must be manifested as dangerous goods during transport under the federal TDGA. Hazardous materials that are being disposed of out of province must comply with Interprovincial Movement of Hazardous Waste Regulations under the Canadian Environmental Protection Act (CEPA).

2.3 POLYCHLORINATED BIPHENYLS (PCB's)

In 1976, the Canadian Environment Contaminants Act passed regulations which prohibited the use of PCBs in transformer equipment. Under the same Act, the Chlorophenyl Regulations No. 1, states that PCBs cannot be used as a constituent of electrical capacitors, electrical transformers and associated electrical equipment manufactured in or imported into Canada after July 1, 1980.

There is currently no regulatory requirement to remove in-use PCBs from service. However, should suspect PCB containing light ballasts be removed from service, they should be treated as PCB waste or if confirmed to contain PCB oil in excess of 0.5 kg.

3 METHODOLOGY

The scope of work for the survey was to visually identify controlled hazardous materials for the safe handling and disposal for the on-going management of any hazardous materials identified. Where visual identification of asbestos containing materials and lead based paints were suspected but unable to be determined, samples were collected and sent to an approved laboratory for analysis.

There was limited destructive testing of structural members (i.e., walls, flooring) during the assessment. Where accessible, areas above ceiling cavities and behind walls were visually assessed to identify potentially concealed hazardous materials.

3.1 ASBESTOS

The asbestos assessment involved a visual investigation of suspect materials for the presence of asbestos containing materials. If these materials were suspected to contain asbestos, a bulk sample was collected of the representative material to be analysed with Polarized Light Microscopy.

During the assessment, no visible suspect asbestos containing materials were encountered. The building structure is wood construction throughout.

3.2 LEAD

During the assessment, suspect lead-based paints were sampled from surfaces as determined by the consultant. Where practical, all layers of paint were removed and placed in sealed plastic bags, labelled and a chain of custody form completed to be forwarded to IATL Laboratory via courier for analysis.

3.3 POLYCHLORINATED BIPHENYLS

During the assessment, suspected PCB containing light ballasts were not observed.

4 ASSESSMENT FINDINGS

4.1 ASBESTOS

During the survey, no suspect asbestos materials were observed or sampled within the structure.

4.1.1 Texture Coat Finishes

Texture coat finishes were not observed or reported.	

4.1.2 Pipe Insulation

No pipe insulation was observed or reported.	

4.1.3 Duct Insulation and Mastic

No insulated ducts were observed or reported.	

4.1.4 Mechanical Equipment Insulation

No mechanical equipment insulations were observed or reported.	

4.1.5 Plaster and Stucco

No plaster or stucco were observed or reported.	

4.1.6 Drywall Joint Compound

No drywall joint compound was observed or reported.	

4.1.7 Ceiling Tiles

No ceiling tiles were observed or reported.	

4.1.8 Other Building Materials

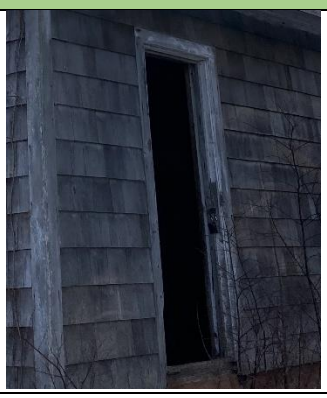
No other suspect materials were observed or reported	

4.2 LEAD-BASED PAINTS

Based on the age of the buildings, lead based paint was sampled. Only one painted surface was observed and sampled. White exterior door and trim paint was sampled at the building and sent to the laboratory for analysis of lead in paint.

Based on the assessment findings, the exterior paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials.

Laboratory analysis certificate is presented in Appendix I.

Sample No.:	***Colour / Substrate Description***	***Location***	***Lead Content (%)***	***Photo***
AWP-01	White paint / Door frame	Exterior	**0.75**	

4.3 POLYCHLORINATED BIPHENYLS (PCB's)

4.3.1 Lighting Lamp Ballasts

No fluorescent lamp ballasts were observed or reported during the assessment.

4.3.2 Transformers

Electrical transformers were not found or reported during the assessment.

4.4 SILICA

Crystalline silica is a presumed component of the following materials:

- Poured or pre-cast concrete (slab)

4.6 MERCURY

4.6.1 Mercury Containing Devices

No mercury containing devices were observed or reported.

5 SUMMARY OF HAZARDOUS MATERIALS

A summary of the Hazardous Materials identified within the building is provided below in Table 3 based on our assessment as well as safe handling requirements.

Hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix II.

Upon review of this report and based on any planned work, renovations or demolition, a full scope of work should be developed. This scope of work will be dependent upon which materials need to be disturbed or removed prior to the renovations.

TABLE 3
Summary of Hazardous Materials for Management Plan
Mount Albion Warehouse

Hazardous Materials	*Description / Comments*	*Safe Handling Requirements*	*Disposal Requirements*
LEAD PAINT	White paint on exterior wood trim	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
SILICA	Presumed in the following building components: • Poured or pre-cast concrete (slab)	Trained personnel in the safe handling of silica dust and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ

6 ON-GOING MANAGEMENT & MAINTENANCE

The following recommendations are made regarding on-going management and maintenance work involving the hazardous materials identified.

6.1 Lead

For lead-containing or lead-based paints (i.e., greater than the CEPA guidelines of 600 mg/kg (0.06 percent by weight) for surface coating materials, work procedures, engineering controls and personal protective equipment should be assessed on a site-specific basis to comply with Occupational Health and Safety regulations and Lead guidelines.

Dispose of painted materials exceeding the criteria for leachable lead as hazardous waste.

6.2 Silica

Disturbance of silica-containing products during maintenance activities may result in excessive exposures to airborne silica, especially if performed indoors and dry. Cutting, grinding, drilling or demolition of materials containing silica should be completed only with proper respiratory protection and other worker safety precautions that comply with applicable regulations and guidelines.

7 DISCLAIMER

The recommendations detailed in this report were carried out in a manner consistent with the level of care and skill normally exercised by reasonable members of the environmental and industrial hygiene consulting profession currently practicing under similar conditions in the area.
In preparing this report, ALL-TECH Environmental Services Limited relied on information supplied by others, including independent laboratories, and testing services. Except as expressly set out in this report, we have not made any independent verification of such information.

The recommendations in this report have been made in the context of existing industry accepted guidelines which were in place at the date of this report.

We trust this information is beneficial for assisting you in better understanding the process that has been carried out as well as the benefits and limitations of air sample results.

Should you have any questions or concerns pertaining to this report, please contact the undersigned directly.

ALL-TECH ENVIRONMENTAL SERVICES LIMITED

CANADIAN SOCIETY OF SAFETY ENGINEERING MEMBER

Larry G. Koughan, CET, CRSP
Senior Project Consultant

APPENDIX I

Laboratory Certificate of Analysis – Lead Paint Samples

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St.,Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673355 - Lead Paint
Project: Mount Albion Warehouse
Project No.: PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530891
Client No.: AWP-01

Description: White Paint
Location: Door Frame

Result (% by Weight): 0.75
Result (ppm): 7500
Comments: ***

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 11/28/2022
Date Analyzed: 12/05/2022
Signature:
Analyst: Chad Shaffer

Approved By:
Frank E. Ehrenfeld, III
Laboratory Director

Dated : 12/5/2022 2:45:21

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
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CERTIFICATE OF ANALYSIS

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	20 Duke St.,Suite 109	Report No.:	673355 - Lead Paint
	Bedford NS B4A 2Z5	Project:	Mount Albion Warehouse
		Project No.:	PE22400
Client:	ALL131		

Appendix to Analytical Report:

Customer Contact:
Method: ASTM D3335-85a, US EPA SW846 3050B:7000B

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com
iATL Office Manager:wchampion@iatl.com
iATL Account Representative: Semih Kocahasan
Sample Login Notes: See Batch Sheet Attached
Sample Matrix: Paint
Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

Information Pertinent to this Report:

Analysis by ASTM D3335-85a by AAS

Certification:
- National Lead Laboratory Program (NLLAP): AIHA-LAP, LLC No. 100188
- NYSDOH-ELAP No. 11021

This report meets the standards set forth in the EPA's National Lead Laboratory Accreditation Program (NLLAP) through the Laboratory Quality System Requirements (LQSR) Revision 3.0 November 5, 2007. All Environmental Lead Proficiency Analytical Testing (ELPAT) is through the AIHA-PAT established program.

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.
All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.
Method Detection Limit (MDL) per EPA Method 40CFR Part 136 Apendix B.
Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.
LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a complete list with highlighted disclaimers pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com.**

9000 Commerce Parkway Suite B
Mt. Laurel, New Jersey 08054
Telephone: 856-231-9449
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CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St.,Suite 109
Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/5/2022
Report No.: 673355 - Lead Paint
Project: Mount Albion Warehouse
Project No.: PE22400

* Insufficient sample provided to perform QC reanalysis (<200 mg)
** Not enough sample provided to analyze (<50 mg)
*** Matrix / substrate interference possible.

< less than sign, signifies none-detected below the empirical value based upon sub-sampled mass. This is often below the Reporting Limit (see above).

APPENDIX II

Summary of Hazardous Materials report

Mount Albion Warehouse - Summary of Hazardous Materials Report (2022)

Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Estimated Area (m2)	Comments	Photo
NA	Exterior	AWP-01	White paint / Exterior wood trim	**0.75**	27	White paint on doors and trim and fascia boards.	

Silica

Room No.	Location	Sample No.	Material	Comments	Photo
NA	Exterior	NA	Concrete foundation	Concrete foundation throughout the footing on the building.