


**HAZARDOUS MATERIALS ASSESSMENT**  
**Forestry Depot – Beach Grove**  
**170 Beach Grove Road,**  
**Charlottetown, PE**

Prepared For:

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

March 25, 2023

ALL-TECH Project No.: PE22400



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## EXECUTIVE SUMMARY

*ALL-TECH Environmental Services Limited* was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for the Forestry Depot – Beach Grove located at 170 Beach Grove Road in Charlottetown, 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 December 2022. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

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 A based on our assessment as well as safe handling requirements. Areas identified with visually the same ACM materials are outlined in Appendix III Site drawing with ACM locations.

Assessment Summary of ACM conditions and action report is outlined in Appendix IV and shall be used in conjunction with PEI Department of Transportation & Infrastructure's Asbestos Management Plan (2023) and shall be subject to annual review.

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. Should ACM not require disturbance or removal, then those identified shall remain in place and be part of the Management Plan.

<b>TABLE A</b>			
<b>Summary of Hazardous Materials</b>			
<b>Forestry Depot – Beach Grove</b>			
<i>Hazardous Materials</i>	<i>Description / Comments</i>	<i>Safe Handling Requirements</i>	<i>Disposal Requirements</i>
<b>ASBESTOS</b>	Vinyl sheet flooring	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH Division and all other pertinent sections of the <i>Occupational Health and Safety Act R.S.P.E.I.</i>	Regulatory approval from PEIELJ
	Transite hardboard		Disposal at approved facility such as EPWMF in Wellington, PEI

<b>LEAD</b>	<ul style="list-style-type: none"> <li>- Brown exterior trim paint</li> <li>- White door trim paint</li> <li>- Yellow wall paint</li> <li>- Black stair paint</li> </ul>	<p>TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I</p>	<p>Regulatory approval from PEIELJ  Additional analysis required for TCLP for disposal purposes, if required.</p>
<b>MERCURY</b>	<p>fluorescent lamp tubes mercury containing thermostats</p>	<p>Do not break lamps or separate liquid mercury from components</p>	<p>Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable Regulations.</p>
<b>SILICA</b>	<p>Presumed in the following building components:</p> <ul style="list-style-type: none"> <li>• Poured or pre-cast concrete (slab / floors)</li> </ul>	<p>Trained personnel in the safe handling of silica dust and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I</p>	<p>Regulatory approval from PEIELJ</p>

**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**

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## SITE / CLIENT INFORMATION

Project No:	PE22400
<b>Assessment Date:</b>	<b>December 2022</b>
Client Name:	<b>PEI Department of Transportation &amp; Infrastructure</b>
Address:	Forestry Depot – Beach Grove 170 Beach Grove Road Charlottetown, 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 the Forestry Depot – Beach Grove located at 170 Beach Grove Road in Charlottetown, 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 December 2022. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

### 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 storage / offices
Number of Floors	2
Total Area	Approximately 429 m <sup>2</sup>
Year of Construction	1950
Structure	Wood, concrete
Exterior Cladding	Wood
HVAC	NA
Roof	Not assessed
Flooring	Concrete; vinyl sheet and vinyl floor tile
Interior Walls	Drywall; wood
Ceilings	Drywall

## 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	
<b>ASBESTOS</b>	<ul style="list-style-type: none"> <li>▪ <i>Occupational Health and Safety Act</i> R.S.P.E.I. 1988, Cap. O-1.01 General Regulations – Part 49 (Including any amendments to May 2021).</li> <li>▪ Guide to Asbestos Management, Workers Compensation Board of PEI.</li> <li>▪ <i>Environmental Protection Act Chapter E-9 Waste Management Regulations</i>, Prince Edward Island</li> <li>▪ Transportation of Dangerous Goods Act (TDGA)</li> </ul>
<b>LEAD</b>	<ul style="list-style-type: none"> <li>▪ Hazardous Products Act</li> <li>▪ Prince Edward Island Department of Environment, Labour and Justice (PEIELJ)</li> <li>▪ Transportation of Dangerous Goods Act (TDGA)</li> <li>▪ The Environmental Abatement Council of Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair.</li> <li>▪ Surface Coating Materials Regulations, SOR/2016-193, Canada Consumer Product Safety Act.</li> </ul>
<b>PCB's</b>	<ul style="list-style-type: none"> <li>▪ Environmental Contaminants Act, Chlorophenyl Regulations</li> <li>▪ Environment Canada – "Identification of Lamp Ballasts Containing PCB's," report EPS 2/CC/2 (revised) August 1991</li> <li>▪ PCB Regulations, SOR/2008-273, Canadian Environmental Protection Act.</li> </ul>

## 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).

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- 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**

Using standard bulk sampling methodologies, representative suspect asbestos containing materials were sampled from ceiling & wall finishes, floor coverings, located throughout the building. Samples were placed in sealed plastic bags, labelled and a chain of custody form completed to be forwarded to IATL Laboratory via courier for analysis.

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.

It should be noted that asbestos containing materials may be present behind unrevealed areas. During demolition of these materials, precautions should be taken such as the use of personal protective equipment in the event of exposing concealed asbestos materials. If suspect materials are revealed, have them tested immediately.

### **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, suspect PCB containing light ballasts were examined for PCB identification or by recording serial numbers for reference. Ballasts were inspected and manufacturers name, date and serial numbers were recorded when visible. The manufacturers identification numbers were then compared to Environment Canada's "Identification of Lamp Ballasts Containing PCB's," Report EPS 2/CC/2 9(revised), August 1991.

It should be noted that the assessment did not include the sampling / testing or analysis of the suspect PCB containing materials.

## 4 ASSESSMENT FINDINGS

### 4.1 ASBESTOS

During the survey, the consultant collected individual bulk material samples of suspect ACMs within the structure. Laboratory analysis certificates are presented in Appendix I.


A total of sixteen (16) bulk material samples were collected within the building during the survey. Some of these samples such as tile floor coverings were separated and a total of twenty-three (23) samples were analyzed. Of the 23 samples analyzed, two were found to be asbestos containing.

Individual items sampled and ACM materials identified are itemized in each sub-section below.

#### 4.1.1 Texture Coat Finishes

Texture coat finishes were not observed or reported during the assessment.	
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#### 4.1.2 Pipe Insulation

Straight runs of pipe insulation noted as fiberglass insulation. No parging cement was noted or reported during the assessment.	
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#### 4.1.3 Duct Insulation

No insulated ducts were observed or reported.



#### 4.1.4 Mechanical Equipment Insulation

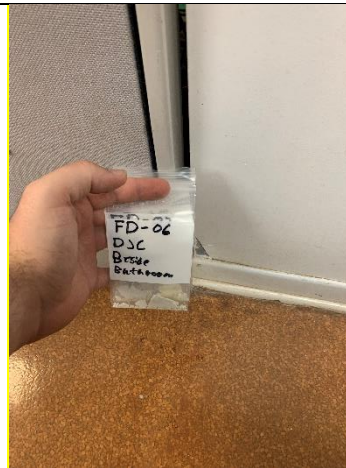
No mechanical insulation was observed or reported.

#### 4.1.5 Plaster



No plaster was observed or reported.

#### 4.1.6 Drywall Joint Compound

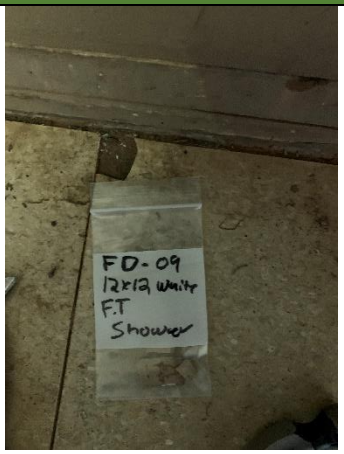
Drywall joint compound walls and ceilings were noted and sampled in various random locations throughout the building. Representative sampling was completed within the building. A total of eight (8) joint compound samples were collected during the assessment. None of the samples were found to contain asbestos.



#### 4.1.7 Vinyl Sheet Flooring

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
FD-10	Brown vinyl sheet flooring with tan mastic and floor levelling compound	Office area	Brown vinyl flooring <b>15% Chrysotile</b>  Mastic and levelling compound – None detected	
FD-14	Tan color vinyl sheet flooring with white mastic	2 <sup>nd</sup> floor office	None Detected in flooring or mastic.	

#### 4.1.8 Vinyl Floor Tiles

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
FD-9	12" x 12" white vinyl floor tile with yellow mastic	Shower	None Detected in floor tile or mastic	

#### 4.1.9 Ceiling Tiles

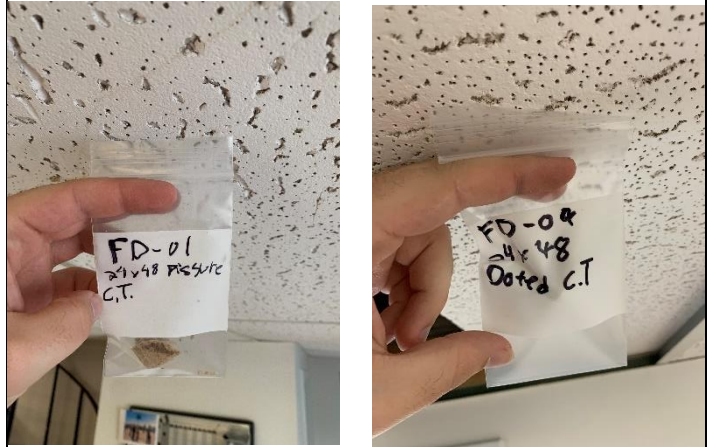
In-lay acoustic fissure ceiling tiles were observed and sampled in various random locations throughout the building.

Two visibly different ceiling tiles were observed and representative sample of each were collected. Designs were labelled as fissure and dotted.

A total of four (4) ceiling tiles were collected during the assessment. The fissure design tiles sampled as FD-1 was detected with 0.25% chrysotile and sample FD-2 was detected with 0.75% amosite. These tiles would be considered < 1% asbestos and therefore would not be considered an ACM.

The other dotted ceiling tiles (samples FD-3 & FD-4) did not detect any traces of asbestos.

In addition, ALL-TECH conducted ceiling tile sampling within the noted building in April 2016. A total of six various ceiling tiles were tested and none were found to contain asbestos.



#### 4.1.10 Other Materials

Transite hardboard in boiler room found to contain **20% Chrysotile asbestos.**



Attic insulation visibly identified as fiberglass insulation.



#### 4.1.11 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and were excluded from the assessment. These materials are presumed to contain asbestos until otherwise proven by sampling and analysis:

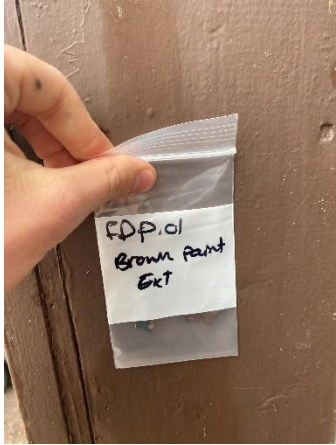
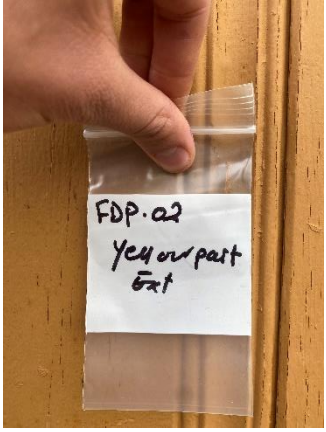
- Roofing felts and tar

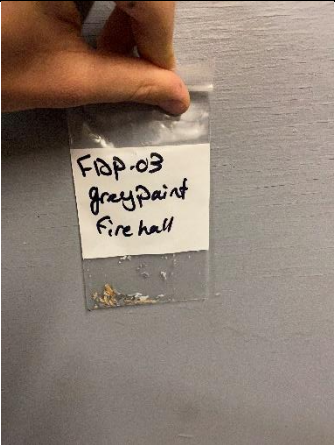

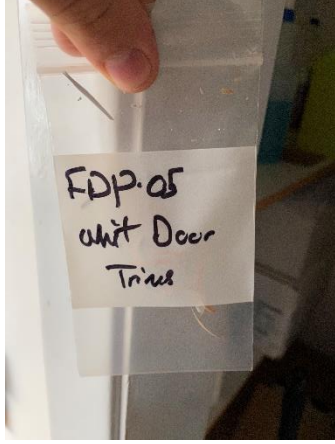
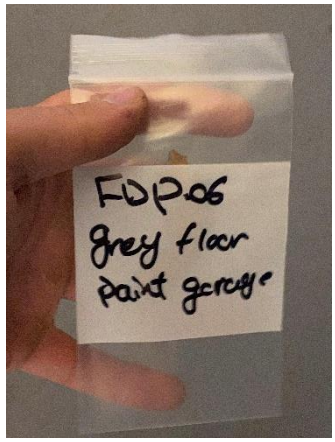
## 4.2 LEAD-BASED PAINTS

Based on the age of the building, lead based paints were sampled. A total of twelve (12) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

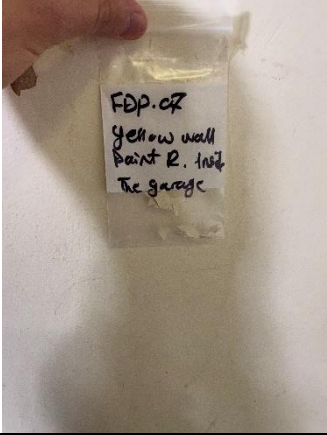
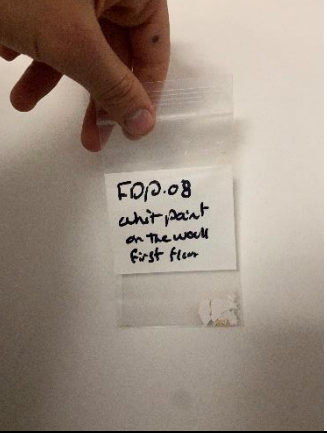
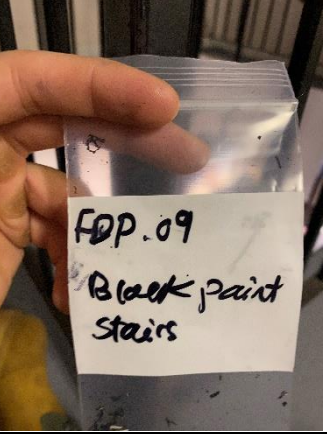
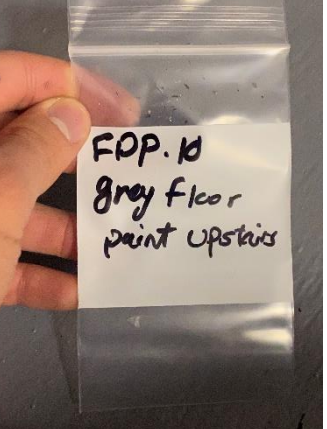
Based on the assessment findings, four (4) of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials. Exceedances are noted in bold red in the table below.

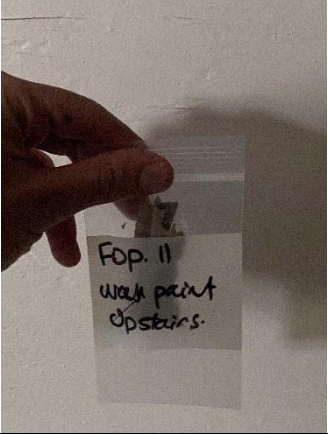
Laboratory analysis certificate is presented in Appendix II.

Sample No.:	Colour / Substrate Description	Location	Lead Content (%)	Photo
FDP-01	Brown door / trim paint	Exterior	<b>1.5</b>	
FDP-02	Yellow / gold siding paint	Exterior	< 0.0065	

FDP-03	Grey paint	Fire hall 113	0.011	
FDP-04	White paint	Fire hall 113	0.017	
FDP-05	White door trim paint	Office areas	<b>0.065</b>	
FDP-06	Grey floor paint	Garage Maintenance shop 109	0.013	



FDP-07	Yellow wall paint	Outside storage room 110	2.4	
FDP-08	White wall paint	Main office area 101	0.018	
FDP-09	Black paint on stairs	2 <sup>nd</sup> floor	0.36	
FDP-10	Grey floor paint	2 <sup>nd</sup> floor	< 0.0060	


FDP-11	White wall paint	2 <sup>nd</sup> floor	0.025	
FPD-12	White ceiling paint	2 <sup>nd</sup> floor	< 0.0061	NA

### 4.3 POLYCHLORINATED BIPHENYLS (PCB's)

Recessed light fixtures were observed in the building. Typical ballasts found and reported are noted below in section 4.3.1. Manufacturer's labels were marked as non-PCB containing.

Through referencing and markings on lamp ballasts, it was determined that the ballasts observed on site are non-PCB containing.

#### 4.3.1 Lighting Lamp Ballasts

<p>Photo 1 – Philips RQM Lamp Ballasts. Ballast marked as non-PCB's.</p>	
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#### 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)

## 4.5 MERCURY

### 4.5.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

### 4.5.2 Mercury Containing Devices

Mercury containing thermostats were observed within the building.



## 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. Areas identified with visually the same ACM materials are outlined in Appendix III Site drawing with ACM locations.

Assessment Summary of ACM conditions and action report is outlined in Appendix IV and shall be used in conjunction with PEI Department of Transportation & Infrastructure's Asbestos Management Plan (2023) and shall be subject to annual review.

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. Should ACM not require disturbance or removal, then those identified shall remain in place and be part of the Management Plan.

**TABLE 3**  
**Summary of Hazardous Materials**  
**Forestry Depot – Beach Grove**

<b>Hazardous Materials</b>	<b>Description / Comments</b>	<b>Safe Handling Requirements</b>	<b>Disposal Requirements</b>
<b>ASBESTOS</b>	Vinyl sheet flooring	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH Division and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	Regulatory approval from PEIELJ
	Transite hardboard		Disposal at approved facility such as EPWMF in Wellington, PEI
<b>LEAD</b>	<ul style="list-style-type: none"> <li>- Brown exterior trim paint</li> <li>- White door trim paint</li> <li>- Yellow wall paint</li> <li>- Black stair paint</li> </ul>	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the <i>Occupational Health and Safety Act</i> R.S.P.E.I.	Regulatory approval from PEIELJ  Additional analysis required for TCLP for disposal purposes, if required.
<b>MERCURY</b>	fluorescent lamp tubes mercury containing thermostats	Do not break lamps or separate liquid mercury from components	Recycle and reclaim mercury from fluorescent lamps when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable Regulations.
<b>SILICA</b>	Presumed in the following building components: <ul style="list-style-type: none"> <li>• Poured or pre-cast concrete (slab / floors)</li> </ul>	Trained personnel in the safe handling of silica dust and all other pertinent sections of the <i>Occupational Health and Safety Act</i> 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.

Perform a detailed intrusive assessment prior to building renovation or demolition operations. The assessment should include destructive testing (e.g., coring and/or removal of building finishes and components), and other materials not previously tested (e.g., roofing materials).

## 6.1 Asbestos

Ensure policies and procedures outlined in the buildings Asbestos Management Plan (AMP) are followed when conducting asbestos-related work at this facility.

Perform a re-assessment of asbestos-containing materials (ACM) on an annual basis. The next reassessment of ACM should be performed prior to April 2024 to remain in compliance.

Remove ACM prior to alteration or maintenance work if ACM may be disturbed by the work. Follow appropriate asbestos precautions for the classification of work being performed.

Asbestos-containing materials must be disposed of at a landfill approved to accept asbestos waste.

Update the asbestos inventory upon completion of the abatement and removal of asbestos-containing materials and any other relevant findings.

## 6.2 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.

## 6.3 PCBs

When light fixtures are removed from service, examine light ballasts for PCB content. If ballasts are not clearly labelled as “non-PCB,” or are confirmed or suspected to contain PCBs, package and ship ballasts for destruction at a federally permitted facility.

## 6.4 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.

## 6.5 Mercury

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent lamps and thermostats when taken out of service. Mercury is classified as a hazardous

waste and must be disposed of in accordance with applicable regulations.

## 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.



*Larry G. Koughan, CET, CRSP  
Senior Project Consultant*



***APPENDIX I***

***Laboratory Certificate of Analysis – Asbestos PLM Samples***

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited 20 Duke St., Suite 109 Bedford NS B4A 2Z5	Report Date: 12/8/2022 Report No.: 673779 - PLM Project: Beach Grove Forestry Depot Project No.: PE22400	Rev #2, 1/23/2023
Client: ALL131		

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7534427 <b>Client No.:</b> FD-1	<b>Analyst Observation:</b> White Ceiling Tile <b>Client Description:</b> 24x48 Fissure Ceiling Tile	<b>Location:</b> 1st Floor Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>PC 0.25 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 60 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 9.75

Note: Sample/Layer analyzed by Aidan Becker, 12/12/22.

<b>Lab No.:</b> 7534428 <b>Client No.:</b> FD-2	<b>Analyst Observation:</b> White Ceiling Tile <b>Client Description:</b> 24x48 Fissure Ceiling Tile	<b>Location:</b> 1st Floor Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>PC 0.75 Amosite</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 30 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 9.25


Note: Sample/Layer analyzed by Aidan Becker, 12/12/22.

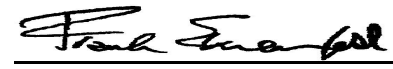
<b>Lab No.:</b> 7534429 <b>Client No.:</b> FD-3	<b>Analyst Observation:</b> White/Beige Ceiling Tile <b>Client Description:</b> 24x48 Doted Ceiling Tile	<b>Location:</b> 1st Floor Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 55 Cellulose 15 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 30

<b>Lab No.:</b> 7534430 <b>Client No.:</b> FD-4	<b>Analyst Observation:</b> White/Beige Ceiling Tile <b>Client Description:</b> 24x48 Doted Ceiling Tile	<b>Location:</b> 1st Floor Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 55 Cellulose 15 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 30

<b>Lab No.:</b> 7534431 <b>Client No.:</b> FD-5	<b>Analyst Observation:</b> White Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Main Entrance <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 12/5/2022  
Date Analyzed: 12/08/2022  
Signature:   
Analyst: Christopher Riffe

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited 20 Duke St., Suite 109 Bedford NS B4A 2Z5	Report Date: 12/8/2022 Report No.: 673779 - PLM Project: Beach Grove Forestry Depot Project No.: PE22400	Rev #2, 1/23/2023
Client: ALL131		

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7534431(L2) <b>Client No.:</b> FD-5	<b>Analyst Observation:</b> Beige Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Main Entrance <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534432 <b>Client No.:</b> FD-6	<b>Analyst Observation:</b> White Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Beside Bathroom <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534432(L2) <b>Client No.:</b> FD-6	<b>Analyst Observation:</b> Beige Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Beside Bathroom <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534433 <b>Client No.:</b> FD-7	<b>Analyst Observation:</b> Off-White Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Shower <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534434 <b>Client No.:</b> FD-8	<b>Analyst Observation:</b> Off-White Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> Workshop <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534435 <b>Client No.:</b> FD-9	<b>Analyst Observation:</b> Tan Floor Tile <b>Client Description:</b> 12x12 White Floor Tile	<b>Location:</b> Shower <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 12/5/2022  
Date Analyzed: 12/08/2022  
Signature:   
Analyst: Christopher Riffe

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited 20 Duke St., Suite 109 Bedford NS B4A 2Z5	Report Date: 12/8/2022 Report No.: 673779 - PLM Project: Beach Grove Forestry Depot Project No.: PE22400	Rev #2, 1/23/2023
Client: ALL131		

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7534435(L2) <b>Client No.:</b> FD-9	<b>Analyst Observation:</b> Dk Yellow Mastic <b>Client Description:</b> 12x12 White Floor Tile	<b>Location:</b> Shower <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Insufficient material provided to verify results.

<b>Lab No.:</b> 7534436 <b>Client No.:</b> FD-10	<b>Analyst Observation:</b> Grey Floor Material <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

<b>Lab No.:</b> 7534436(L2) <b>Client No.:</b> FD-10	<b>Analyst Observation:</b> Brown Vinyl Sheet Flooring <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>15 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 85

<b>Lab No.:</b> 7534436(L3) <b>Client No.:</b> FD-10	<b>Analyst Observation:</b> Tan Mastic <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Insufficient material provided to verify results.

<b>Lab No.:</b> 7534436(L4) <b>Client No.:</b> FD-10	<b>Analyst Observation:</b> White Leveling Compound <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> Office Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Insufficient material provided to verify results.

<b>Lab No.:</b> 7534437 <b>Client No.:</b> FD-11	<b>Analyst Observation:</b> Beige Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> 2nd Floor Ceiling <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 12/5/2022  
Date Analyzed: 12/08/2022  
Signature:   
Analyst: Christopher Riffe

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited 20 Duke St., Suite 109 Bedford NS B4A 2Z5	Report Date: 12/8/2022 Report No.: 673779 - PLM Project: Beach Grove Forestry Depot Project No.: PE22400	Rev #2, 1/23/2023
Client: ALL131		

PLM BULK SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7534438 <b>Client No.:</b> FD-12	<b>Analyst Observation:</b> Brown Board <b>Client Description:</b> Hardboard	<b>Location:</b> Boiler Room <b>Facility:</b>
<u>Percent Asbestos:</u> <i>20 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 80
<b>Lab No.:</b> 7534439 <b>Client No.:</b> FD-13	<b>Analyst Observation:</b> Off-White Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> 2nd Floor Storage <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 7534440 <b>Client No.:</b> FD-14	<b>Analyst Observation:</b> Tan Vinyl Sheet Flooring <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> 2nd Floor Office <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 7534440(L2) <b>Client No.:</b> FD-14	<b>Analyst Observation:</b> White Mastic <b>Client Description:</b> Vinyl Sheet Flooring	<b>Location:</b> 2nd Floor Office <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 7534441 <b>Client No.:</b> FD-15	<b>Analyst Observation:</b> Beige Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> 2nd Floor Office Ceiling <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
<b>Lab No.:</b> 7534442 <b>Client No.:</b> FD-16	<b>Analyst Observation:</b> Tan Joint Compound <b>Client Description:</b> Drywall Joint Compound	<b>Location:</b> 2nd Floor Common Area <b>Facility:</b>
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 12/5/2022  
Date Analyzed: 12/08/2022  
Signature:   
Analyst: Christopher Riffe

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

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CERTIFICATE OF ANALYSIS

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

Report Date: 12/8/2022  
Report No.: 673779 - PLM  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

## Appendix to Analytical Report

**Customer Contact:**

**Method:** 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

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:** Bulk Building Materials

**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](http://www.iATL.com) and in 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.

This report shall not be reproduced except in full, without written approval of the laboratory.

### Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

### Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

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CERTIFICATE OF ANALYSIS

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

Report Date: 12/8/2022  
Report No.: 673779 - PLM  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)  
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

### 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 list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at [customerservice@iatl.com](mailto:customerservice@iatl.com).

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

### Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov), United States Geological Survey (USGS) [www.minerals.usgs.gov/minerals/](http://www.minerals.usgs.gov/minerals/), US EPA [www.epa.gov/asbestos](http://www.epa.gov/asbestos). The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite ([https://www.wadsworth.org/sites/default/files/WebDoc/I198\\_8\\_02\\_2.pdf](https://www.wadsworth.org/sites/default/files/WebDoc/I198_8_02_2.pdf))

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116  
**Requirements/Comments:** Minimum of 0.1 g of sample. ~0.25% for most samples.

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CERTIFICATE OF ANALYSIS

---

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

Report Date: 12/8/2022  
Report No.: 673779 - PLM  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

2) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.

3) **Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Floats" only.

4) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Sinks" only.

5) **Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004  
**Requirements/Comments:** Minimum 50g\*\* of dry sample. Analysis of "Suspension" only.

\*With advance notice and confirmation by the laboratory.

\*\*Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

\*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

***APPENDIX II***

***Laboratory Certificate of Analysis – Lead Paint Samples***

CERTIFICATE OF ANALYSIS

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

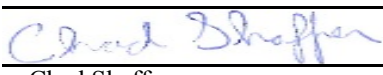
Report Date: 12/9/2022  
Report No.: 673763 - Lead Paint  
Project: Beach Grove Forestry Depot  
Project No.: PE22400


Client: ALL131

LEAD PAINT SAMPLE ANALYSIS SUMMARY

<b>Lab No.:</b> 7534249 <b>Client No.:</b> FDP-01	<b>Description:</b> Brown Paint <b>Location:</b> Exterior	<b>Result (% by Weight):</b> 1.5 <b>Result (ppm):</b> 15000 <b>Comments:</b> ***
<b>Lab No.:</b> 7534250 <b>Client No.:</b> FDP-02	<b>Description:</b> Yellow Paint <b>Location:</b> Exterior	<b>Result (% by Weight):</b> <0.0065 <b>Result (ppm):</b> <65 <b>Comments:</b>
<b>Lab No.:</b> 7534251 <b>Client No.:</b> FDP-03	<b>Description:</b> Grey Paint <b>Location:</b> Fire Hall	<b>Result (% by Weight):</b> 0.011 <b>Result (ppm):</b> 110 <b>Comments:</b> ***
<b>Lab No.:</b> 7534252 <b>Client No.:</b> FDP-04	<b>Description:</b> White Paint <b>Location:</b> Fire Hall	<b>Result (% by Weight):</b> 0.017 <b>Result (ppm):</b> 170 <b>Comments:</b> *
<b>Lab No.:</b> 7534253 <b>Client No.:</b> FDP-05	<b>Description:</b> White <b>Location:</b> Door Trim	<b>Result (% by Weight):</b> 0.065 <b>Result (ppm):</b> 650 <b>Comments:</b> * ***
<b>Lab No.:</b> 7534254 <b>Client No.:</b> FDP-06	<b>Description:</b> Grey Floor Paint <b>Location:</b> Garage	<b>Result (% by Weight):</b> 0.013 <b>Result (ppm):</b> 130 <b>Comments:</b> ***
<b>Lab No.:</b> 7534255 <b>Client No.:</b> FDP-07	<b>Description:</b> Yellow Wall Paint <b>Location:</b> Room Inside Garage	<b>Result (% by Weight):</b> 2.4 <b>Result (ppm):</b> 24000 <b>Comments:</b>
<b>Lab No.:</b> 7534256 <b>Client No.:</b> FDP-08	<b>Description:</b> White Paint On The Wall <b>Location:</b> First Floor	<b>Result (% by Weight):</b> 0.018 <b>Result (ppm):</b> 180 <b>Comments:</b> ***

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

Date Received: 12/5/2022  
Date Analyzed: 12/09/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director



CERTIFICATE OF ANALYSIS

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

Report Date: 12/9/2022  
Report No.: 673763 - Lead Paint  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7534257  
Client No.: FDP-09

Description: Blank Paint  
Location: On The Stairs

Result (% by Weight): <Void  
Result (ppm): <Void  
Comments: \*\*

Lab No.: 7534258  
Client No.: FDP-10

Description: Grey Floor Paint  
Location: Upstairs

Result (% by Weight): <0.0060  
Result (ppm): <60  
Comments:

Lab No.: 7534259  
Client No.: FDP-11

Description: Wall Paint  
Location: Upstairs


Result (% by Weight): 0.025  
Result (ppm): 250  
Comments:


Lab No.: 7534260  
Client No.: FDP-12

Description: Ceiling Paint  
Location: Upstairs

Result (% by Weight): <0.0061  
Result (ppm): <61  
Comments: \*\*\*

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

Date Received: 12/5/2022  
Date Analyzed: 12/09/2022  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

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

Report Date: 12/9/2022  
Report No.: 673763 - Lead Paint  
Project: Beach Grove Forestry Depot  
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](http://www.iATL.com) and in 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.

This report shall not be reproduced except in full, without written approval of the laboratory.

### 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 Appendix 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](mailto:customerservice@iatl.com).

---

CERTIFICATE OF ANALYSIS

---

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

Report Date: 12/9/2022  
Report No.: 673763 - Lead Paint  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

- \* 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).

---

CERTIFICATE OF ANALYSIS

---

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

Report Date: 2/28/2023  
Report No.: 678786 - Lead Paint      Rev #2, 3/6/2023  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

---

LEAD PAINT SAMPLE ANALYSIS SUMMARY

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**Lab No.:** 7575561  
**Client No.:** FDP-09

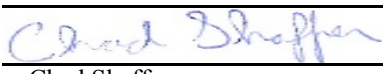
**Description:** Black Paint  
**Location:** Stairs


**Result (% by Weight):** 0.36  
**Result (ppm):** 3600  
**Comments:** \*

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

---

Date Received: 2/23/2023  
Date Analyzed: 02/28/2023  
Signature:   
Analyst: Chad Shaffer

Approved By:   
Frank E. Ehrenfeld, III  
Laboratory Director

---

CERTIFICATE OF ANALYSIS

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

Report Date: 2/28/2023  
Report No.: 678786 - Lead Paint  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

## Appendix to Analytical Report:

**Customer Contact:**

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

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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.

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CERTIFICATE OF ANALYSIS

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

Report Date: 2/28/2023  
Report No.: 678786 - Lead Paint  
Project: Beach Grove Forestry Depot  
Project No.: PE22400

Client: ALL131

- \* 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 III***

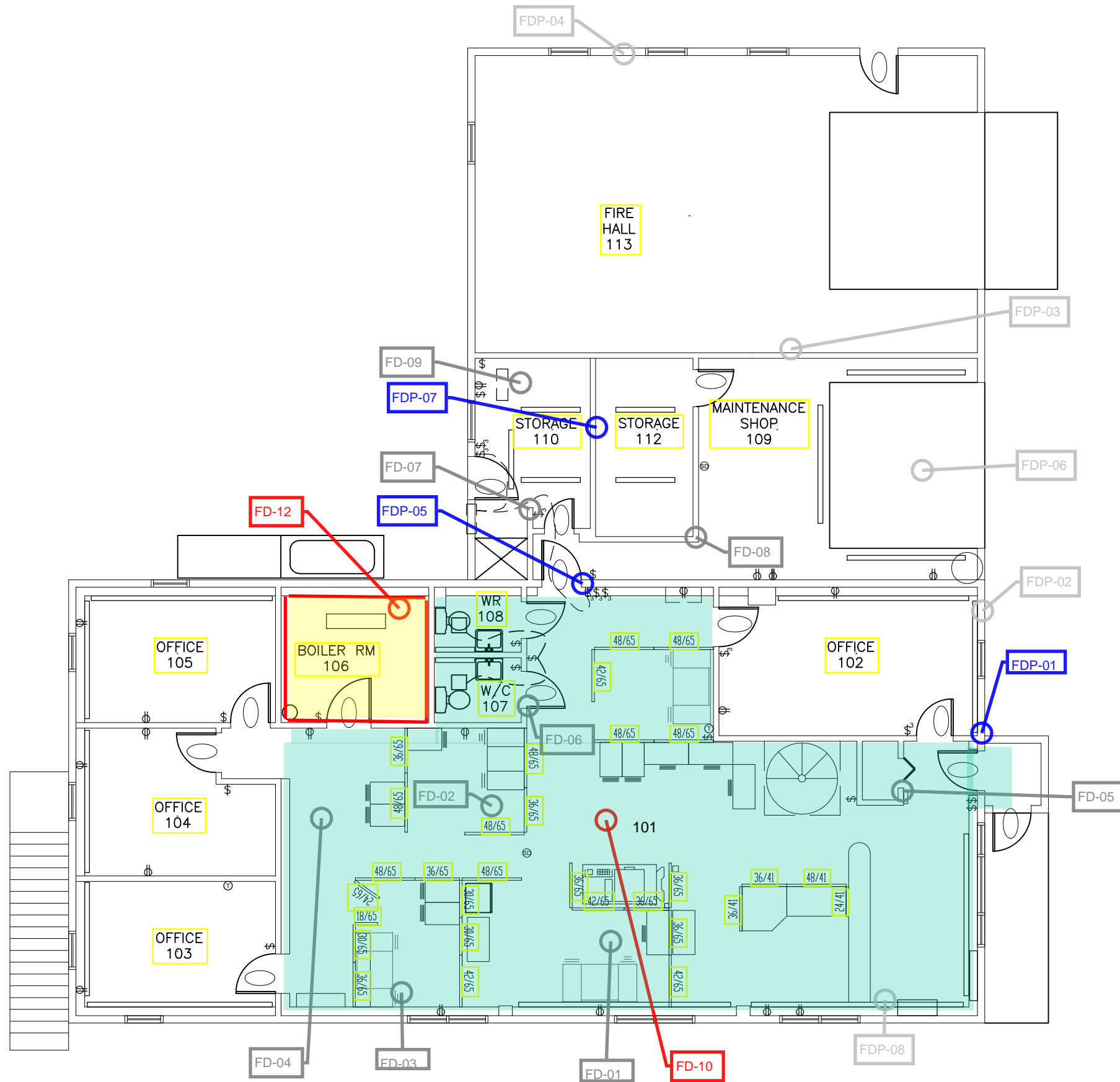
***Site Drawings with sample locations and ACM locations***

ASBESTOS SURVEY BY



**ASBESTOS LEGEND**

- = CEILING
- = FLOOR
- = CEILING AND FLOOR
- = UNSURVEYED AREA
- = APPLIANCE
- = MECHANICAL
- = PIPE MATERIAL
- = DUCT WORK
- = ELECTRICAL
- = ACM WALL
- = LEAD PAINT WALL
- = SAMPLE NUMBER ASBESTOS DETECTED
- = SAMPLE NUMBER NO ASBESTOS DETECTED
- = SAMPLE NUMBER LEAD DETECTED
- = SAMPLE NUMBER NO LEAD DETECTED



PE22400  
 BEACH GROVE FORESTRY  
 170 BEACH GROVE RD.  
 CHARLOTTETOWN, PEI

BEACH GROVE FORESTRY  
 1ST FLOOR

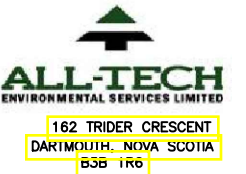
Design: LJK  
 Date: FEB\_2023  
 Drawn: AJH  
 Date: MAR\_2023

NOTE:  
 THIS DRAWING SHOULD BE USED FOR REFERENCE PURPOSES ONLY REFER TO THE ASBESTOS AND LEAD SURVEYS FOR THE ROOM BY ROOM DATE FOR SPECIFIC DETAILS















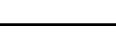
Scale: 1 OF 3  
 Scale: NOT TO SCALE

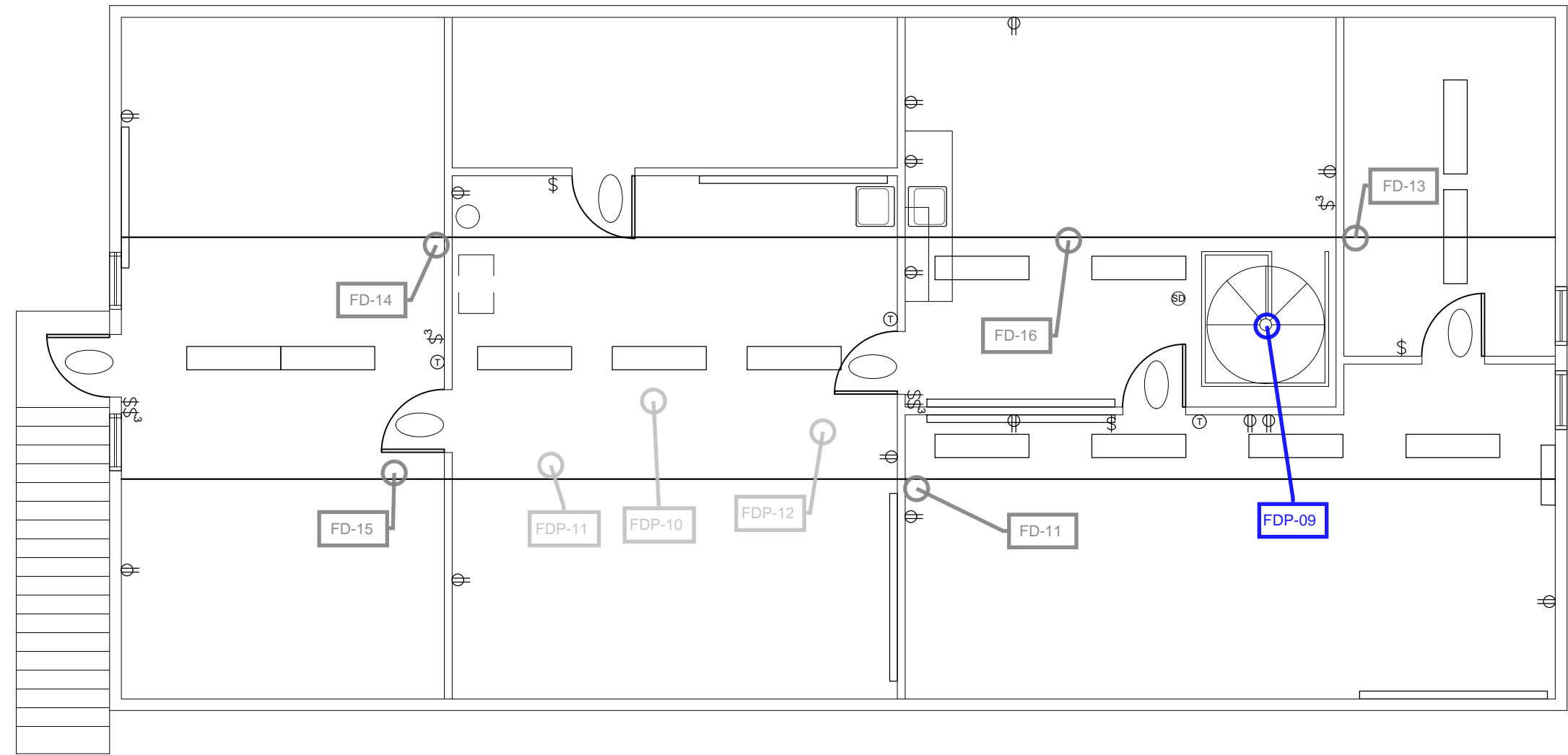


ASBESTOS SURVEY BY



**ASBESTOS LEGEND**

-  = CEILING
-  = FLOOR
-  = CEILING AND FLOOR
-  = UNSURVEYED AREA
-  = APPLIANCE
-  = MECHANICAL
-  = PIPE MATERIAL
-  = DUCT WORK
-  = ELECTRICAL
-  = ACM WALL
-  = LEAD PAINT WALL
-  = SAMPLE NUMBER ASBESTOS DETECTED
-  = SAMPLE NUMBER NO ASBESTOS DETECTED
-  = SAMPLE NUMBER LEAD DETECTED
-  = SAMPLE NUMBER NO LEAD DETECTED



PE22400  
 BEACH GROVE FORESTRY  
 170 BEACH GROVE RD.  
 CHARLOTTETOWN, PEI

Drawing BEACH GROVE FORESTRY 2ND FLOOR

Design: LK  
 Date: FEB\_2023  
 Drawn: AJH  
 Date: MAR\_2023

NOTE:  
 THIS DRAWING SHOULD BE USED FOR REFERENCE PURPOSES ONLY REFER TO THE ASBESTOS AND LEAD SURVEYS FOR THE ROOM BY ROOM DATE FOR SPECIFIC DETAILS

Scale	2 OF 2
Scale	NOT TO SCALE
Revisions	Date

***APPENDIX IV***

***Summary of ACM conditions report***

# Beach Grove Forestry (1st floor) - Summary of ACM Conditions Report (2022)

Room No.	Description	Sample No.	Material description	Asbestos Type & Content (%)	Estimated Volume or Area	Friable (F) Non-friable (NF)	Access	Condition	Action Code (refer to legend)	Photo
101	Main office area	FD-10	Brown vinyl sheet flooring	Chrysotile 15%	102 m2	F	A	Good	5	
106	Boiler room	FD-12	Transite hardboard	Chrysotile 20%	42.7 m2	NF	A	Good	5	
107	Washroom	VFD-10	Brown vinyl sheet flooring	Chrysotile 15%	2.6 m2	F	A	Good	5	
108	Washroom	VFD-10	Brown vinyl sheet flooring	Chrysotile 15%	2.6 m2	F	A	Good	5	

**LEGEND**

<b>Sample Number Identifiers</b>		<b>Units</b>	
FD-##	actual sample number	EA	Each
VFD-##	visually identified same as this sample number	m	meters
		m2	square metres
		m3	cubic metres

**ASSESSMENT CODES**

<b>ACCESS</b>		<b>CONDITION</b>	
<b>A</b>	Accessible to all building occupants	<b>GOOD</b>	ACM is completely covered and/or exhibits no evidence of damage or deterioration
<b>B</b>	Accessible to maintenance and operations staff without a ladder	<b>FAIR</b>	Minor penetrating damage to ACM (cuts, tears, nicks, deterioration, or delamination).
<b>C</b>	Accessible to maintenance and operations staff with a ladder. Also rarely entered, locked areas	<b>POOR</b>	ACM is damaged, deteriorated or delaminated
<b>D</b>	Not normally accessible		

**ACTION CODES**

<b>1</b>	Immediate Clean-up of Debris that is likely to be disturbed.	<b>4</b>	ACM repair
<b>2</b>	ACM Removal required for compliance.	<b>5</b>	Continued management and surveillance.
<b>3</b>	Proactive ACM Removal.		


***APPENDIX V***

***Summary of other Hazardous Materials report***

# Beach Grove Forestry - Summary of other Hazardous Materials Report (2022)

## Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
	Exterior	FDP-01	Brown trim and door paint / Wood	1.5		
various locations		FDP-05	White door trim paint / Wood	0.065		
112	1st floor Storage	FDP-07	Yellow wall paint	2.4		

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
	2nd floor stairs	FDP-09	Black paint on stairs	0.36		

**Silica**

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