



HAZARDOUS MATERIALS ASSESSMENT

Coast Guard Building

1 Queen Street,

Charlottetown, PE

Prepared For:

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

March 26, 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 Coast Guard Building located at 1 Queen Street, 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 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 A Summary of Hazardous Materials Coast Guard Building			
Hazardous Materials	Description / Comments	Safe Handling Requirements	Disposal Requirements
ASBESTOS	Asbestos containing floor coverings (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 Disposal at approved facility such as EPWMF in Wellington, PEI
LEAD	-Grey exterior siding paint. -Black door trim paint. -Green paint on metal pipe. -Cream color paint on concrete walls. -Grey paint on concrete floor. -Tan paint on door and trim.	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.
MERCURY	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.
SILICA	Presumed in the following building components: <ul style="list-style-type: none"> • Poured or pre-cast concrete (slab); block walls • Masonry and mortar 	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

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
Assessment Date:	December 2022
Client Name:	PEI Department of Transportation & Infrastructure
Address:	Coast Guard Building 1 Queen Street, 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 Coast Guard Building located at 1 Queen Street, 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	Former Coast Guard building / storage
Number of Floors	1
Total Area	Approximately 1,607 m ²
Year of Construction	Not known
Structure	Steel; concrete
Exterior Cladding	Metal / brick
HVAC	Non insulated
Roof	Flat - Not assessed
Flooring	Vinyl sheet flooring; vinyl floor tiles; concrete
Interior Walls	Concrete block; drywall; plaster
Ceilings	Plaster ; 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	
ASBESTOS	<ul style="list-style-type: none"> ▪ <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). ▪ Guide to Asbestos Management, Workers Compensation Board of PEI. ▪ <i>Environmental Protection Act Chapter E-9 Waste Management Regulations</i>, Prince Edward Island ▪ Transportation of Dangerous Goods Act (TDGA)
LEAD	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ 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. 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 of hazardous materials prior to renovations within the building. 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, and roof membranes) 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 twenty-eight (28) bulk material samples were collected within the building during the survey. Some of these samples such as tile floor coverings and plasters were separated and a total of forty-four (44) samples were analyzed. Of the 44 samples analyzed, one (1) was found to be asbestos containing.

Other materials such as pipe and duct insulations visually identified as fiberglass insulation were noted and not sampled.

For details on approximate quantities, condition, friability, accessibility and locations of hazardous materials; refer to the Summary of ACM conditions report in Appendix IV.

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

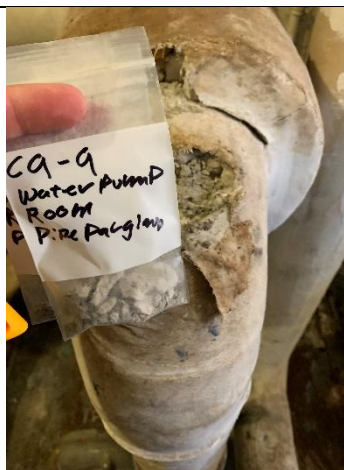
4.1.1 Texture Coat Finished

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

Pipe parging cement is present on pipe fittings as identified through various samples within the building. A total of six (6) parging cement samples were collected and none were found to contain asbestos.

Straight sections of pipe are insulated with fibreglass insulation.



Parging cement on pipe fittings



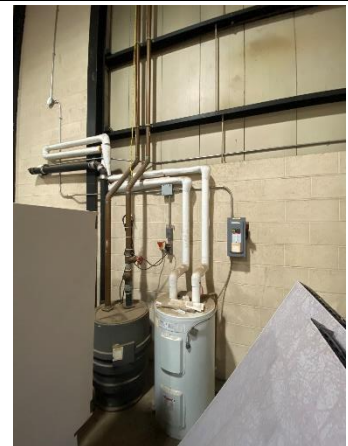
Straight run fiberglass insulation

4.1.3 Duct Insulation and Mastic

No insulated ducts were observed or reported.	
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4.1.4 Mechanical Equipment Insulation

Newer boiler system in place.
Mechanical equipment is either uninsulated or insulated with non-asbestos fiberglass.



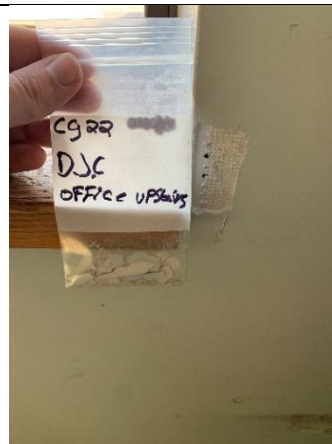
4.1.5 Plaster

Plaster ceiling was noted and sampled in one office of the building.
The plaster sample was collected with both the white scratch coat and underlying base coats analyzed. None of the samples were found to contain asbestos.




4.1.6 Drywall Joint Compound

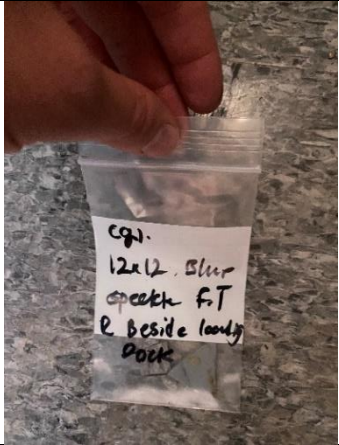

Drywall joint compound walls and ceilings were noted and sampled in various random locations throughout the building.
Representative sampling was completed within the building.
A total of ten (10) joint compound samples were collected during the assessment. None of the samples were found to contain asbestos.



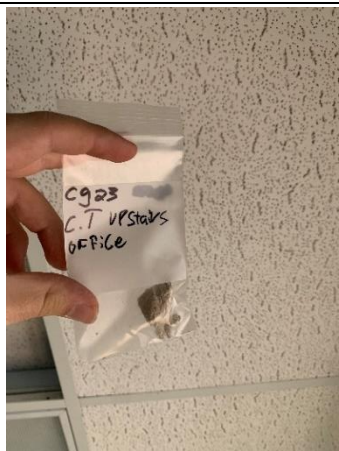
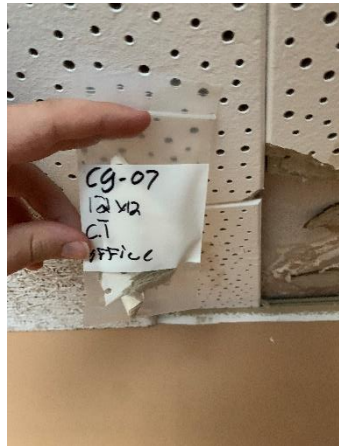
4.1.7 Vinyl Sheet Flooring

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
CG-02	Red colour vinyl sheet flooring	Entrance to loading dock	40% Chrysotile	

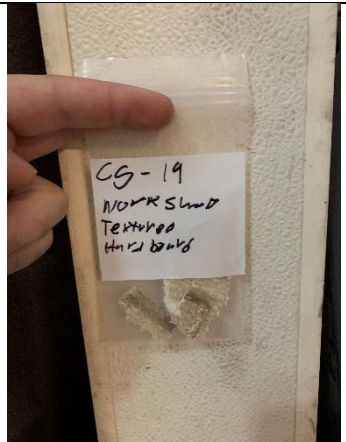
4.1.8 Vinyl Floor Tiles

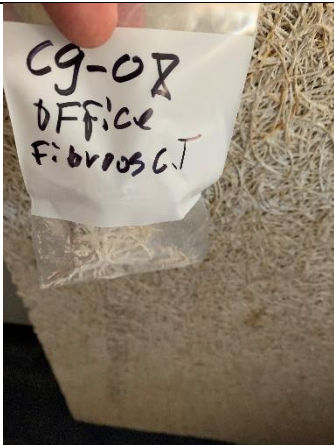
Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
CG-01 CG-12 CG-28	12" x 12" blue speckled floor tile with yellow mastic	Various locations	None Detected in floor tile or yellow or black mastic	
CG-21 CG-24	12" x 12" White floor tile with Yellow/black mastic	Top of Stairs Landing / Office	None Detected in floor tile or mastic	

4.1.9 Ceiling Tiles

CG-13 CG-20 CG-23 CG-27	24" x 48" acoustic fissure ceiling tiles	Various locations	None Detected in all samples	
CG-07	12" x 12" pin hole ceiling tiles	Office	None Detected	

4.1.10 Other Building Materials

CG-19	Tan/Gray textured covering with White caulking & yellow mastic	Workshop	None Detected in covering, caulking or mastic	
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CG-08	Acoustic fibreboard	Office area	None Detected	
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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

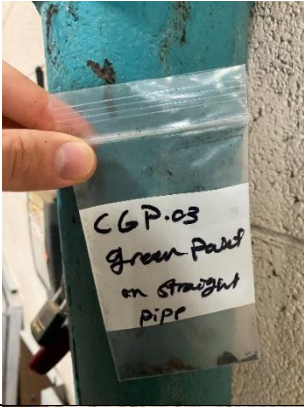

4.2 LEAD-BASED PAINTS


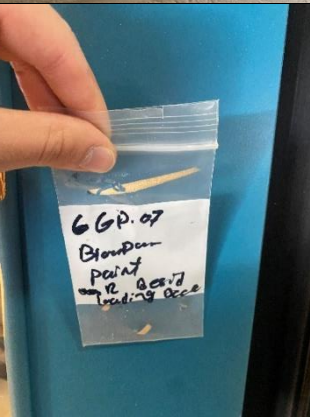
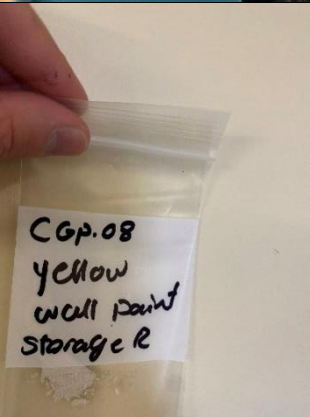

Based on the age of the buildings, lead based paints were sampled. A total of fourteen (14) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

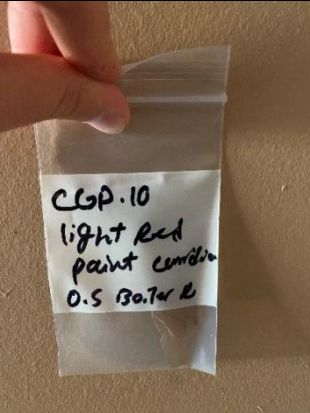
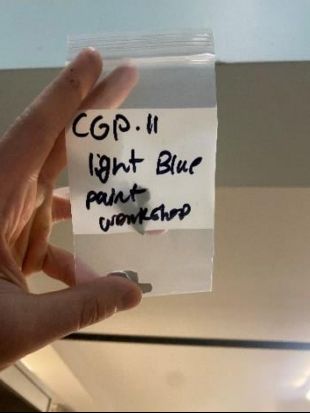
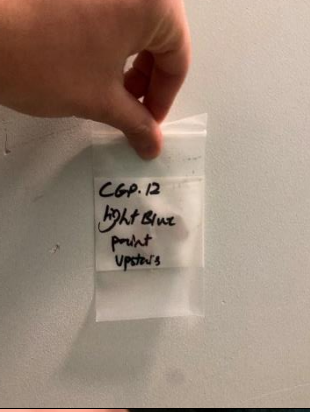

Based on the assessment findings, six (6) of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials. Exceedances are noted in bold red in the table below.

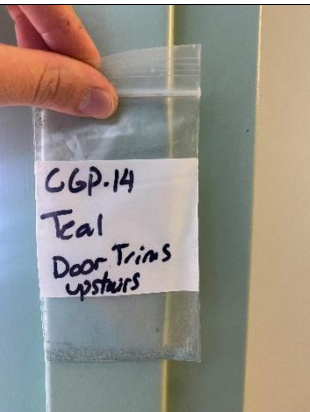
Laboratory analysis certificate is presented in Appendix II.

Sample No.:	Colour / Substrate Description	Location	Lead Content (%)	Photo
CGP-01	Gray siding paint	Exterior	0.96	

CGP-02	Black door trim paint	Warehouse Storage	0.25	
CGP-03	Green paint on pipe	Warehouse Storage	0.94	
CGP-04	Cream wall paint on concrete block	Warehouse Storage	0.12	
CGP-05	Grey floor paint	Warehouse Storage	0.15	

CGP-06	Grey wall paint	Warehouse office	< 0.0087	
CGP-07	Blue door paint	Loading Dock	< 0.0087	
CGP-08	Yellow wall paint	Storage Room	< 0.0074	
CGP-09	Tan paint / Trim & Doors	Storage Room	0.070	

CGP-10	Light red wall	Corridor Outside Boiler Room	< 0.006	
CGP-11	Light blue wall paint	Workshop	< 0.0077	
CGP-12	Light blue wall paint	Upper level (mezzanine)	< 0.0074	
CGP-13	Dark blue paint on stairs	Stairs to second level	< 0.0079	

CGP-14	Teal colour door trim paint	Upper level (mezzanine)	< 0.016	
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4.3 POLYCHLORINATED BIPHENYLS (PCB's)

Recessed light fixtures were observed throughout the building. Ballasts observed and reported were GFI & Advance ballasts. 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

Photo 1 - Advance Standard REL Lamp Ballasts with manufacturers label as "No PCB's".

Photo 2 – Typical light fixtures for these ballasts.



Photo 1



Photo 2

Photo 1 - CFI Label Lamp Ballasts dated 1999. Non-PCB containing ballasts.

Photo 2 – Typical light fixtures for these ballasts.



Photo 1



Photo 2

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
- Masonry and mortar
- Plaster

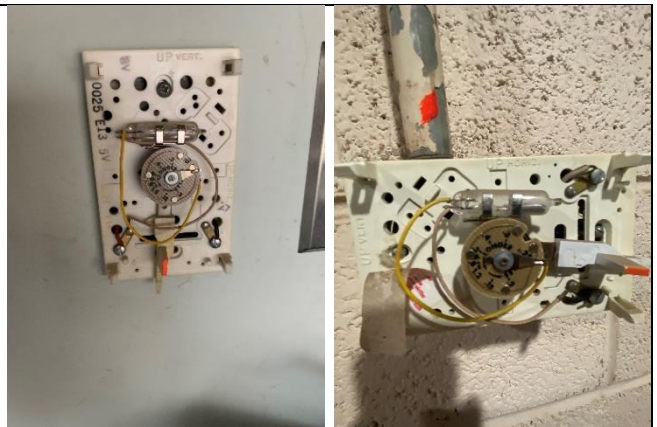
4.6 MERCURY

4.6.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

4.6.2 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 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
Coast Guard Building

<i>Hazardous Materials</i>	<i>Description / Comments</i>	<i>Safe Handling Requirements</i>	<i>Disposal Requirements</i>
ASBESTOS	Asbestos containing floor coverings (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 Disposal at approved facility such as EPWMF in Wellington, PEI
LEAD	-Grey exterior siding paint. -Black door trim paint. -Green paint on metal pipe. -Cream color paint on concrete walls. -Grey paint on concrete floor. -Tan paint on door and trim.	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 R.S.P.E.I.</i>	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
MERCURY	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.
SILICA	Presumed in the following building components: <ul style="list-style-type: none"> • Poured or pre-cast concrete (slab); block walls • Masonry and mortar 	Trained personnel in the safe handling of silica dust and all other pertinent sections of the <i>Occupational Health and Safety Act R.S.P.E.I.</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, caulking, mastics).

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.

6.4 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.

6.5 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.



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

Client: ALL131

Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531340
Client No.: CG-01

Percent Asbestos:
None Detected

Analyst Observation: Blue Floor Tile
Client Description: 12'x12' Blue Speckle Floor Tile

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Room Beside Loading Dock
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7531340(L2)
Client No.: CG-01

Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: 12'x12' Blue Speckle Floor Tile

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Room Beside Loading Dock
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7531341
Client No.: CG-02

Percent Asbestos:
40 Chrysotile

Analyst Observation: Red Vinyl Sheet Flooring
Client Description: Red Vinyl Sheet Flooring/Yellow Vinyl Sheet Flooring 2nd Layer/Tan Vinyl SL

Percent Non-Asbestos Fibrous Material:
None Detected

Location:
Facility:

Percent Non-Fibrous Material:
60

Lab No.: 7531341(L2)
Client No.: CG-02

Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: Red Vinyl Sheet Flooring/Yellow Vinyl Sheet Flooring 2nd Layer/Tan Vinyl SL

Percent Non-Asbestos Fibrous Material:
None Detected

Location:
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7531341(L3)
Client No.: CG-02

Percent Asbestos:
None Detected

Analyst Observation: Yellow Vinyl Sheet Flooring
Client Description: Red Vinyl Sheet Flooring/Yellow Vinyl Sheet Flooring 2nd Layer/Tan Vinyl SL

Percent Non-Asbestos Fibrous Material:
None Detected

Location:
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7531341(L4)
Client No.: CG-02

Percent Asbestos:
None Detected


Analyst Observation: Grey Leveling Compound
Client Description: Red Vinyl Sheet Flooring/Yellow Vinyl Sheet Flooring 2nd Layer/Tan Vinyl SL

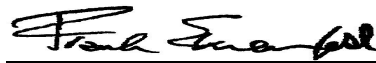
Percent Non-Asbestos Fibrous Material:
3 Cellulose

Location:
Facility:

Percent Non-Fibrous Material:
97

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

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Michael Moore

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

Client: ALL131


Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400


PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531342 Client No.: CG-03 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: DOT Office Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531343 Client No.: CG-04 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound Ceiling <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Hallway Outside Oumo Room Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531343(L2) Client No.: CG-04 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Drywall Client Description: Drywall Joint Compound Ceiling <u>Percent Non-Asbestos Fibrous Material:</u> 2 Fibrous Glass	Location: Hallway Outside Oumo Room Facility: <u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7531344 Client No.: CG-05 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 1st Floor Bathroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531345 Client No.: CG-06 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Plaster Client Description: Ceiling Plaster <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Office Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531346 Client No.: CG-07 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Tile Client Description: 12'x12' Ceiling Tile <u>Percent Non-Asbestos Fibrous Material:</u> 60 Mineral Wool 20 Cellulose	Location: Office Facility: <u>Percent Non-Fibrous Material:</u> 20

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

Date Received: 11/28/2022
Date Analyzed: 12/02/2022

Signature: 
Analyst: Michael Moore

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: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400


Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531347 Client No.: CG-08	Analyst Observation: White Ceiling Tile Client Description: Fibrous Ceiling Tile	Location: Office Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 80 Cellulose	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7531348 Client No.: CG-09	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Water Pump Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531349 Client No.: CG-10	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Water Pump Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531350 Client No.: CG-11	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Water Pump Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531351 Client No.: CG-12	Analyst Observation: Blue Floor Tile Client Description: 12'x12' Blue Floor Tile	Location: Office Beside Water Pump Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531351(L2) Client No.: CG-12	Analyst Observation: Yellow Mastic Client Description: 12'x12' Blue Floor Tile	Location: Office Beside Water Pump Room Facility:
<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: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Michael Moore

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


Client: ALL131


Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531352 Client No.: CG-13	Analyst Observation: White Ceiling Tile Client Description: 12'x12' Ceiling Tile	Location: Warehouse Office Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Mineral Wool 30 Cellulose	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7531353 Client No.: CG-14	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Corridor Right Side Of The Garage Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531353(L2) Client No.: CG-14	Analyst Observation: White Wrap Client Description: Pipe Parging	Location: Corridor Right Side Of The Garage Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 80 Cellulose	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7531354 Client No.: CG-15	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Storage Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531355 Client No.: CG-16	Analyst Observation: Grey Pipe Material Client Description: Pipe Parging	Location: Storage Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7531356 Client No.: CG-17	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound Wall	Location: Workshop Facility:
<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: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Michael Moore

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

Client: ALL131

Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531356(L2)	Analyst Observation: White Joint Compound	Location: Workshop
Client No.: CG-17	Client Description: Drywall Joint Compound Wall	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7531357	Analyst Observation: White Joint Compound	Location: Workshop
Client No.: CG-18	Client Description: Drywall Joint Compound Ceiling	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100


Lab No.: 7531358	Analyst Observation: Tan/Grey Fibrous	Location: Workshop
Client No.: CG-19	Client Description: Hardboard	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	10 Fibrous Glass	90


Lab No.: 7531358(L2)	Analyst Observation: White Caulk	Location: Workshop
Client No.: CG-19	Client Description: Hardboard	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7531358(L3)	Analyst Observation: Yellow Mastic	Location: Workshop
Client No.: CG-19	Client Description: Hardboard	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	None Detected	100

Lab No.: 7531359	Analyst Observation: White Ceiling Tile	Location: Top Of Stairs Landing
Client No.: CG-20	Client Description: Ceiling Tile	Facility:
<u>Percent Asbestos:</u>	<u>Percent Non-Asbestos Fibrous Material:</u>	<u>Percent Non-Fibrous Material:</u>
<i>None Detected</i>	50 Mineral Wool 30 Cellulose	20

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

Date Received: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Michael Moore

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

Client: ALL131

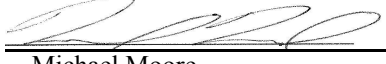
Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

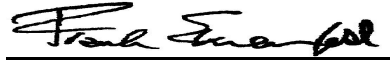
PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531360 Client No.: CG-21 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Floor Tile Client Description: 12'x12' White Floor Tile <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Of Stairs Landing Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531360(L2) Client No.: CG-21 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Yellow Mastic Client Description: 12'x12' White Floor Tile <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Of Stairs Landing Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531360(L3) Client No.: CG-21 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Mastic Client Description: 12'x12' White Floor Tile <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Top Of Stairs Landing Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531361 Client No.: CG-22 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Office Upstairs Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531362 Client No.: CG-23 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Tile Client Description: 24'x48' Ceiling <u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 30 Mineral Wool	Location: Upstairs Office Facility: <u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7531363 Client No.: CG-24 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Floor Tile Client Description: 12'x12' White Floor Tile <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Office Facility: <u>Percent Non-Fibrous Material:</u> 100

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

Date Received: 11/28/2022
Date Analyzed: 12/02/2022

Signature: 
Analyst: Michael Moore

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


Client: ALL131

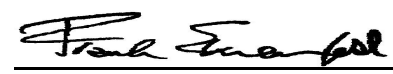
Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531363(L2) Client No.: CG-24	Analyst Observation: Yellow Mastic Client Description: 12'x12' White Floor Tile	Location: Office Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531363(L3) Client No.: CG-24	Analyst Observation: Black Mastic Client Description: 12'x12' White Floor Tile	Location: Office Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531364 Client No.: CG-25	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound	Location: Upstairs Storage Room Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531365 Client No.: CG-26	Analyst Observation: Off-White Joint Compound Client Description: Drywall Joint Compound	Location: Upstairs Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7531366 Client No.: CG-27	Analyst Observation: White Ceiling Tile Client Description: 24'x48 Ceiling Tile	Location: Upstairs Bathroom Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 30 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7531367 Client No.: CG-28	Analyst Observation: Blue Floor Tile Client Description: 12'x12' Dark Blue Floor Tile	Location: Water Pump House Facility:
<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: 11/28/2022
Date Analyzed: 12/02/2022
Signature: 
Analyst: Michael Moore

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: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7531367(L2)
Client No.: CG-28

Percent Asbestos:
None Detected

Analyst Observation: Yellow Mastic
Client Description: 12'x12' Dark Blue Floor Tile

Percent Non-Asbestos Fibrous Material:
None Detected

Location: Water Pump House
Facility:

Percent Non-Fibrous Material:
100

Lab No.: 7531367(L3)
Client No.: CG-28

Percent Asbestos:
None Detected

Analyst Observation: Brown Coating
Client Description: 12'x12' Dark Blue Floor Tile

Percent Non-Asbestos Fibrous Material:
None Detected


Location: Water Pump House
Facility:

Percent Non-Fibrous Material:
100

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

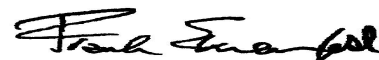
Date Received: 11/28/2022

Date Analyzed: 12/02/2022

Signature: 

Analyst: Michael Moore

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

Client: ALL131

Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

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 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.

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited
20 Duke St., Suite 109
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Client: ALL131

Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
Project No.: PE22400

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.

- 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 gänge, 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, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA 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/1198_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.

CERTIFICATE OF ANALYSIS

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

Report Date: 12/2/2022
Report No.: 673394 - PLM
Project: Coast Guard Building
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

Client: ALL131

Report Date: 12/5/2022
Report No.: 673357 - Lead Paint
Project: Coast Guard Building
Project No.: PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530905	Description: Grey Paint	Result (% by Weight): 0.96
Client No.: CGP-01	Location: Exterior	Result (ppm): 9600
		Comments:

Lab No.: 7530906	Description: Black	Result (% by Weight): 0.25
Client No.: CGP-02	Location: Door Trims	Result (ppm): 2500
		Comments: *

Lab No.: 7530907	Description: Green Paint	Result (% by Weight): 0.94
Client No.: CGP-03	Location: On Straight Pipe	Result (ppm): 9400
		Comments:

Lab No.: 7530908	Description: Cream Color	Result (% by Weight): 0.12
Client No.: CGP-04	Location: Wall	Result (ppm): 1200
		Comments:

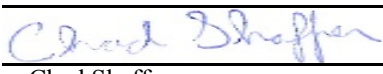
Lab No.: 7530909	Description: Grey Paint	Result (% by Weight): 0.15
Client No.: CGP-05	Location: Floor	Result (ppm): 1500
		Comments:

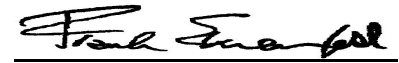
Lab No.: 7530910	Description: Grey Wall Paint	Result (% by Weight): <0.0087
Client No.: CGP-06	Location: Rm Beside Loading Dock	Result (ppm): <87
		Comments:

Lab No.: 7530911	Description: Blue Door Paint	Result (% by Weight): <0.0087
Client No.: CGP-07	Location: Rm Beside Loading Dock	Result (ppm): <87
		Comments: ***

Lab No.: 7530912	Description: Yellow Wall Paint	Result (% by Weight): <0.0074
Client No.: CGP-08	Location: Storage Rm	Result (ppm): <74
		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

CERTIFICATE OF ANALYSIS

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

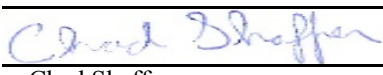
Client: ALL131

Report Date: 12/5/2022
Report No.: 673357 - Lead Paint
Project: Coast Guard Building
Project No.: PE22400


LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7530913 Client No.: CGP-09	Description: Tan Trims And Doors Location: Storage Rm	Result (% by Weight): 0.070 Result (ppm): 700 Comments: *
Lab No.: 7530914 Client No.: CGP-10	Description: Lt Red Paint Location: Corridor Outside Boiler	Result (% by Weight): <0.0060 Result (ppm): <60 Comments: ***
Lab No.: 7530915 Client No.: CGP-11	Description: Lt Blue Paint Location: Workshop	Result (% by Weight): <0.0077 Result (ppm): <77 Comments: ***
Lab No.: 7530916 Client No.: CGP-12	Description: Lt Blue Paint Location: Upstairs	Result (% by Weight): <0.0074 Result (ppm): <74 Comments: ***
Lab No.: 7530917 Client No.: CGP-13	Description: Dk Blue Paint Location: Stairs	Result (% by Weight): <0.0079 Result (ppm): <79 Comments:
Lab No.: 7530918 Client No.: CGP-14	Description: Teal Door Trims Location: Upstairs	Result (% by Weight): <0.016 Result (ppm): <160 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

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.: 673357 - Lead Paint
Project: Coast Guard Building
Project No.: PE22400

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 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.

CERTIFICATE OF ANALYSIS

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

Report Date: 12/5/2022
Report No.: 673357 - Lead Paint
Project: Coast Guard Building
Project No.: PE22400

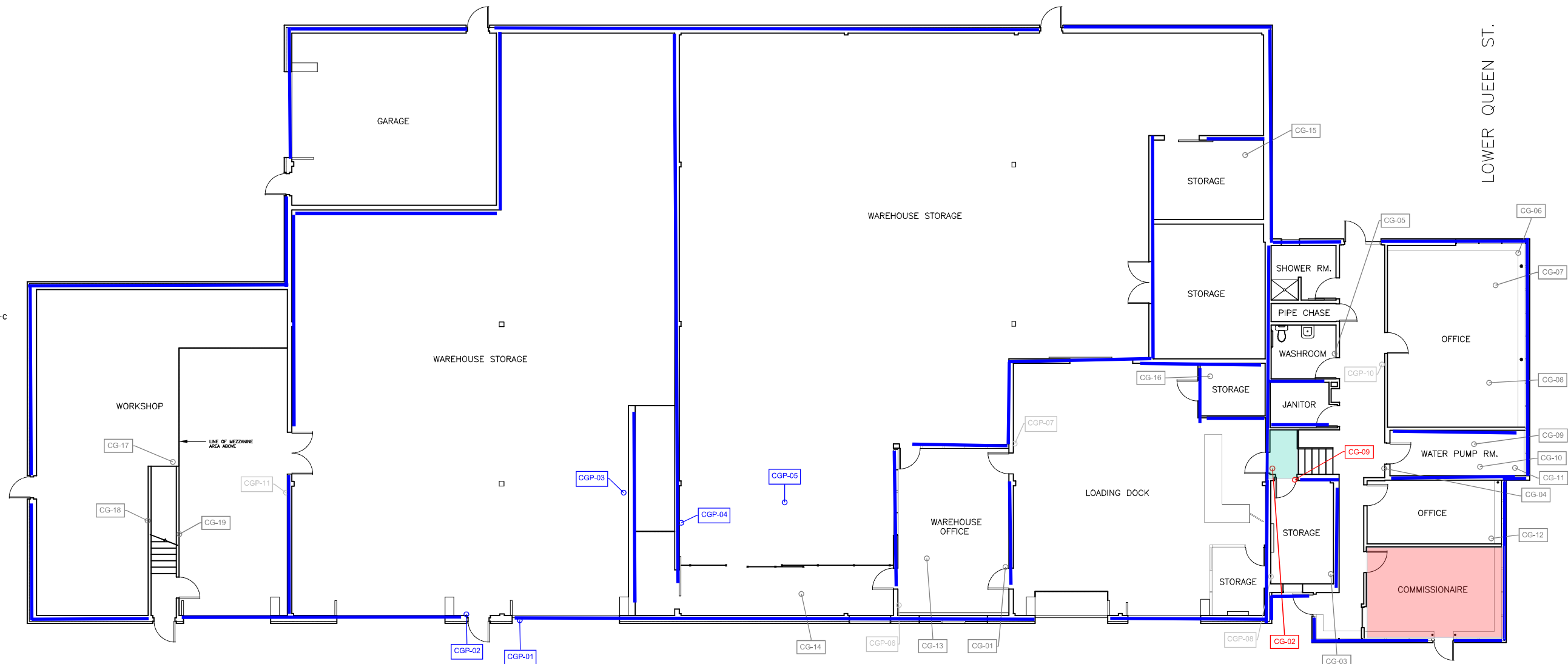
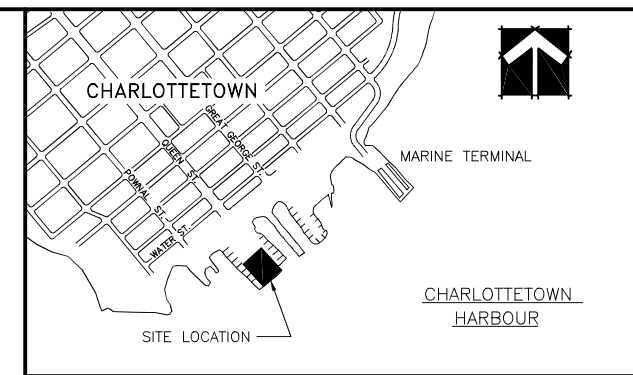
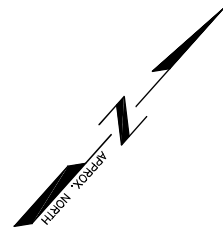
Client: ALL131

* 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



MAIN FLOOR – STORES BLDG.
SCALE : 1:100
0m 1m 2m 3m 4m 5m 6m 7m 8m 9m 10m

LEGEND

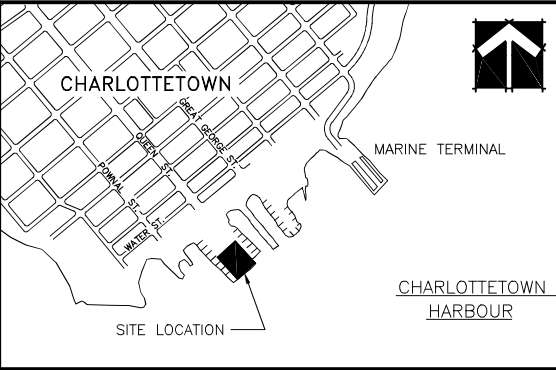
- = ACM ceiling
- = ACM flooring
- = ACM ceiling & floor
- = Unsurveyed area
- M = ACM mechanical insulation
- P = ACM pipe insulation
- └─┘ = ACM wall
- └─┘ = Lead paint wall
- B = PCB lamp ballast
- ### = Sample #
Asbestos detected
- P-### = Sample #
Lead paint detected

revisions	date
<div><div>A</div><div>C</div></div>	<div><div>A</div><div>B</div><div>C</div></div>
A detail no. no. du detail B location drawing no. sur dessin no. C drawing no. dessin no.	

project
**ARCHITECTURAL BASEPLAN
COAST GUARD BASE
CHARLOTTETOWN
QUEEN'S CO. PEI**

drawing
**MAIN FLOOR PLAN
STORES BLDG.
AREA MEASUREMENT**

C



LEGEND

- = ACM ceiling
- = ACM flooring
- = ACM ceiling & floor
- = Unsurveyed area
- M = ACM mechanical insulation
- P = ACM pipe insulation
- └─┘ = ACM wall
- └─┘ = Lead paint wall
- B = PCB lamp ballast
- ## = Sample #
Asbestos detected
- P-## = Sample #
Lead paint detected

revisions

date

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C	B location drawing no. sur dessin no.	B C
	C drawing no. dessin no.	

project

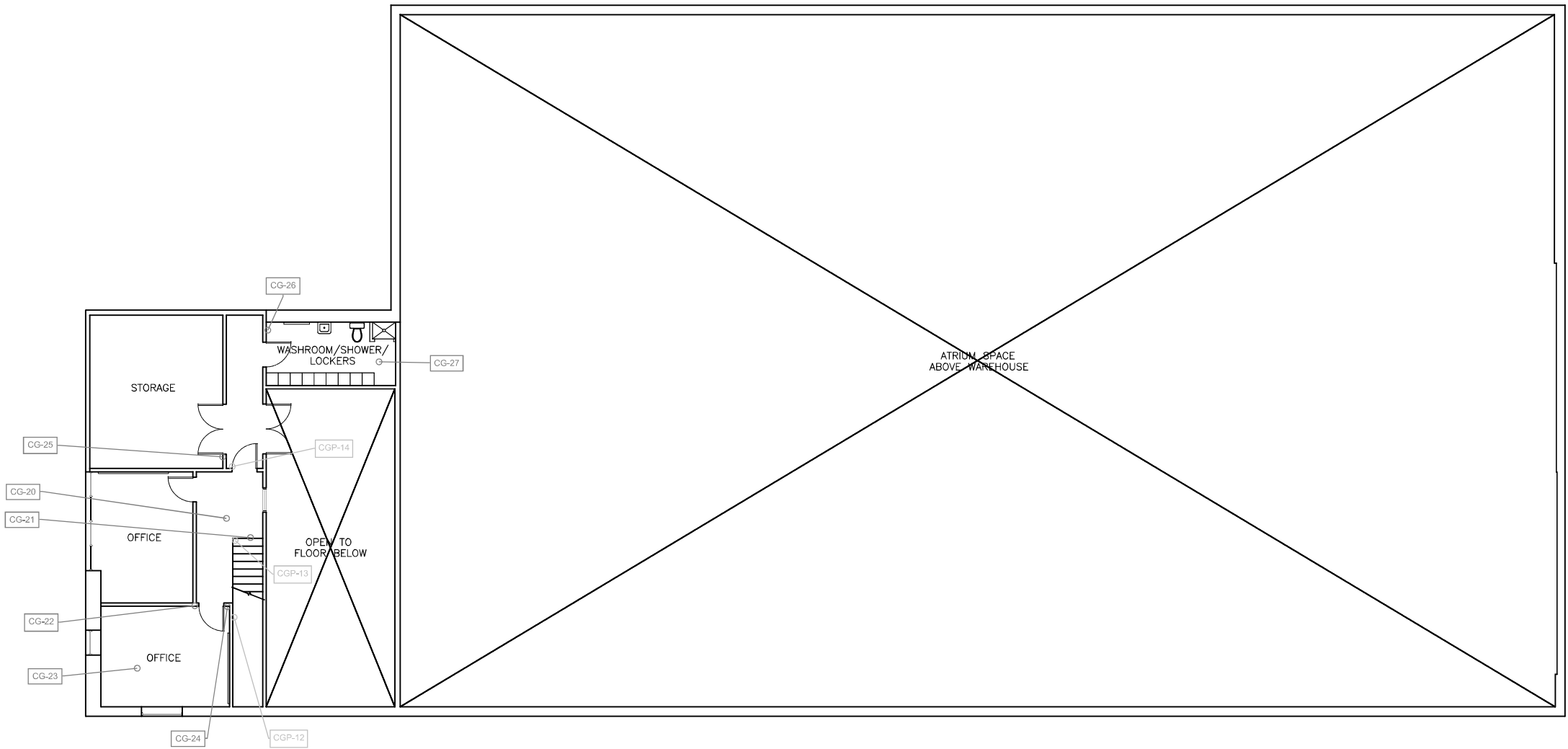
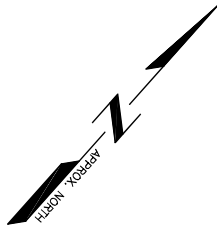
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ARCHITECTURAL BASEPLAN
COAST GUARD BASE
CHARLOTTETOWN
QUEEN'S CO. PEI

drawing

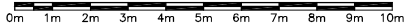
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MEZZANINE FLOOR PLAN
STORES BLDG.
AREA MEASUREMENT

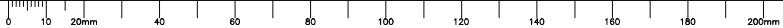


MEZZANINE LEVEL – STORES BLDG.

SCALE : 1:100




C



APPENDIX IV

Summary of ACM conditions report

Coast Guard Building - 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
NA	Main level entry	CG-02	Red vinyl sheet flooring	Chrysotile 40%	1.86 m2	F	A	Fair	3	

LEGEND

Sample Number Identifiers

CG-##	actual sample number
VCG-##	visually identified same as this sample number

Units

EA	Each
m	meters
m2	square metres
m3	cubic metres

ASSESSMENT CODES

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

ACTION CODES



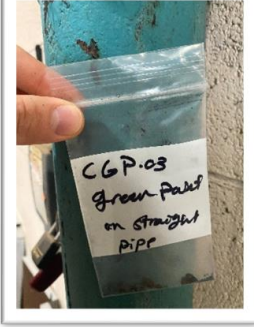
1	Immediate Clean-up of Debris that is likely to be disturbed.	4	ACM repair
2	ACM Removal required for compliance.	5	Continued management and surveillance.
3	Proactive ACM Removal.		

APPENDIX V

Summary of other Hazardous Materials report

Coast Guard Building - Summary of other Hazardous Materials Report (2022)

Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments		Photo
NA	Exterior siding	CGP-01	Grey paint on exterior metal siding	0.96			
NA	Door and trim	CGP-02	Black door and trim paint	0.25			
NA	Warehouse	CGP-03	Green paint on metal pipe	0.94			

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments		Photo
NA	Warehouse	CGP-04	Cream colour paint on concrete wall	0.12			
NA	Warehouse	CGP-05	Grey floor paint on concrete	0.15			
NA	Storage room	CGP-09	Tan colour paint on door trim	0.7			

Silica

Room No.	Location	Sample No.	Material	Comments	Photo
NA	Exterior	NA	Concrete slab and floors; Concrete block walls; Plaster		

Mercury

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
Room No.	Location	Sample No.	Material		Comments	Photo
NA	Office	NA	Thermostats			