



# HAZARDOUS MATERIALS ASSESSMENT Province House Annex 180 Richmond Street, Charlottetown, PE

**Prepared For:** 

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

April 6, 2023

**ALL-TECH Project No.: PE22400** 

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

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

#### **EXECUTIVE SUMMARY**

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for Province House Annex located at 180 Richmond Street 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 buildings 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.

Other hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix V.

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 for Management Plan Province House Annex					
Hazardous Description / Materials Comments Safe Handling Requ		Safe Handling Requirements	Disposal Requirements		
ASBESTOS	ACM drywall joint compound	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH Division and all other	Regulatory approval from PEIELJ		
	ACM transite hardboard	pertinent sections of the Occupational Health and Safety Act R.S.P.E.I.	Disposal at approved facility such as EPWMF in Wellington, PEI		
LEAD PAINT	- White paint on pipes  - Brown door paint (basement)  - White door paint (2 <sup>nd</sup> level)  White wall paint (3 <sup>rd</sup> level)	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I	Regulatory approval from PEIELJ  Additional analysis required for TCLP for disposal purposes, if required.		
MERCURY	- fluorescent lamp tubes mercury containing thermostat	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.		
Presumed in the following building components:  SILICA  Poured or precast concrete Brick & mortar Stone		Trained personnel in the safe handling of silica dust and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I	Regulatory approval from PEIELJ		

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

Larry Koughan, CET, CRSP

Project Principal

**ALL-TECH Environmental Services Limited** 

# Table of Contents

SI	TE / CI	LIEN	IT INFORMATION	1
1	INT	ΓRΟΙ	DUCTION	1
	1.1	SL	JRVEY OBJECTIVES	1
	1.2	BA	ACKGROUND BUILDING INFORMATION	2
2	REC	GUL	ATIONS & GUIDELINES	2
	2.1	AS	SBESTOS	3
	2.2	LE		3
	2.3	PC	OLYCHLORINATED BIPHENYLS (PCB's)	4
3	ME	THC	DDOLOGY	4
	3.1	AS	SBESTOS	5
	3.2	LE	EAD	5
	3.3	PC	OLYCHLORINATED BIPHENYLS	5
4	ASS	SESS	SMENT FINDINGS	5
	4.1	AS	SBESTOS	5
	4.1	1	Texture Coat Finishes	5
	4.1	2	Pipe Insulation	6
	4.1	3	Duct Insulation	5
	4.1	.4	Mechanical Equipment Insulation	7
	4.1	5	Plaster	7
	4.1	.6	Drywall Joint Compound	7
	4.1	7	Vinyl Sheet Flooring	3
	4.1	.8	Vinyl Floor Tiles	3
	4.1	.9 (	Ceiling Tiles	3
	4.1	.10	Other Materials	Э
	4.1	11	Excluded Asbestos Materials	9
	4.2	LE	EAD-BASED PAINTS	)
	4.3	PC	OLYCHLORINATED BIPHENYLS (PCB's)	2
	4.3	3.1	Lighting Lamp Ballasts	2
	4.3	3.2	Transformers1	2
	4.4	SII	LICA1	2
	4.5	М	IERCURY1	2
	4.5	5.1	Lighting1	2
	4.5	5.2	Mercury Containing Devices	3

5 SUMMA	RY OF HAZARDOUS MATERIALS	13
6 ON-GOIN	NG MANAGEMENT & MAINTENANCE	14
6.1 Asb	estos	14
6.2 Lea	d	15
6.3 Me	rcury	15
6.4 Silic	ca	15
7 DISCLAIN	MER	15
Appendix I Appendix II Appendix III Appendix IV Appendix V	· · · · · · · · · · · · · · · · · · ·	

## SITE / CLIENT INFORMATION

Project No: PE22400

Assessment Date: December 2022

Client Name: PEI Department of Transportation & Infrastructure

Address: Province House Annex

180 Richmond 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 Province House Annex located at 180 Richmond Street 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	Government offices			
Number of Floors	4 floors plus basement			
Total Area	Approximately 1,058 m <sup>2</sup>			
Year of Construction	1872			
Structure	Wood			
Exterior Cladding	Brick			
HVAC	NA			
Roof	Not assessed			
Flooring	Vinyl sheet flooring; carpet			
Interior Walls Plaster; drywall				
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				
<ul> <li>Occupational Health and Safety Act R.S.P.E.I. 1988, Cap. O-1.01 G         Regulations – Part 49 (Including any amendments to May 2021).</li> <li>Guide to Asbestos Management, Workers Compensation Board of P         Environmental Protection Act Chapter E-9 Waste Management Regulation</li> <li>Edward Island</li> <li>Transportation of Dangerous Goods Act (TDGA)</li> </ul>				
LEAD	<ul> <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>			
PCB's	<ul> <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 to concentration 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) 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 all three buildings. 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 9revised), 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 structures. Laboratory analysis certificates are presented in Appendix I.

A total of twenty-seven (27) bulk material samples were collected within the building during the survey. Some of these samples such as plasters, floor coverings and adhesives and drywall and joint compounds were separated and a total of forty (40) samples were analyzed. Of the 40 samples analyzed, five (5) were 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 items sampled and ACM materials identified are itemized in each sub-section below.

#### 4.1.1 Texture Coat Finishes

main and upper levels. Some fiberglass insulated pipe

	Texture coat finishes were not observed or reported during the assessment.	
4.1	.2 Pipe Insulation	
	No exposed pipes were noted or reported throughout the	

## 4.1.3 Duct Insulation

noted in the basement level.

|--|

## 4.1.4 Mechanical Equipment Insulation

Accessible insulation within boiler jacket and boiler gasket sampled and found to be non-asbestos containing.





#### 4.1.5 Plaster

Plaster walls and ceiling were noted and sampled in various random locations throughout the building. Representative sampling was completed on each floor of the building.

A total of eleven (11) plaster samples were 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.

A total of eight (8) joint compound samples were collected during the assessment. Two samples sampled in the basement level were found to contain 1.5% -2.1% Chrysotile asbestos. One sample on the third floor was found to contain 1.4% Chrysotile asbestos

All other samples collected were reported as non asbestos containing.





## 4.1.7 Vinyl Sheet Flooring

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
PH-24	Dark grey vinyl sheet flooring	Room 311	None Detected	84.24 R-3U VSF
PH-25	Tan colour vinyl sheet flooring with yellow mastic and floor levelling compound	Room 400	None Detected in all layers	AP.OS VSF W.J.Yt

# 4.1.8 Vinyl Floor Tiles

No vinyl floor tiles	were observed or reported

# 4.1.9 Ceiling Tiles

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

The ceiling tiles were observed as like materials throughout.

Three fissure design ceiling tiles were collected during the assessment. None of the samples were found to contain asbestos.





#### 4.1.10 Other Materials

Transite hardboard samples were collected from the walls and ceiling in the basement level areas. The material was found be contain 25% - 30% Chrysotile asbestos.





A light heat shield was sampled in the kitchen area on the first floor. The material was analyzed and reported as a non-asbestos material.



A parging cement sample was collected on the chimney in the basement storage area. The material was analyzed and reported as a non-asbestos material.



#### 4.1.11 Excluded Asbestos Materials

The following is a list of materials which may contain asbestos and was 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 none (9) 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 table below.

Laboratory analysis certificate is presented in Appendix II.

Sample No.:	Colour / Substrate Description	Location	Lead Content (%)	Photo
PB-01	White paint on pipe	1 <sup>st</sup> floor Room 109	0.14	28-01 11/4-14-14-14-14-14-14-14-14-14-14-14-14-14
PB -02	Green wall paint	1 <sup>st</sup> floor Room 109	0.0083	PB-02 P-109 WAII GALLA
PB -03	Brown door trim paint	Basement computer room	26	

PB -04	Off-white wall paint	Basement computer room	< 0.0084	PB-CB PH WAND
PB -05	Off-white wall paint	2 <sup>nd</sup> floor Room 210	< 0.0073	PB-05 White Paint R210
PB -06	White door paint	2 <sup>nd</sup> floor Room 204	0.57	PB-06 White Point R204
PB -07	Blue grey wall paint	2 <sup>nd</sup> floor Room 204	< 0.0079	PB-07 Blut glug Will Paint and Floor
PB -08	White ceiling paint	3 <sup>rd</sup> floor Room 300	0.29	BB-CS SIMILARIANA Liver by Street
PB -09	White wall paint	4 <sup>th</sup> floor Room 406	< 0.0087	NA

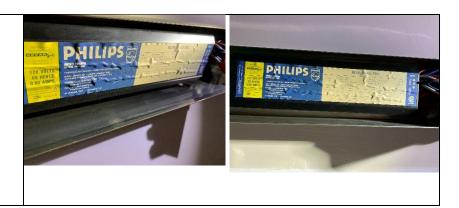
# 4.3 POLYCHLORINATED BIPHENYLS (PCB's)

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

Photo 1 – Philips RQM Lamp Ballasts. Ballast marked as non-PCB's.



#### 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:

- Stone
- Plasters
- Mortar and brick

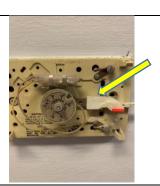
## 4.5 MERCURY

## 4.5.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

## 4.5.2 Mercury Containing Devices

Mercury containing thermostats ampules were reported within the building.



# 5 SUMMARY OF HAZARDOUS MATERIALS

A summary of the Hazardous Materials identified within the buildings 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.

Other hazardous materials identified through sampling or visual assessment are noted in section 4 and are summarized in Appendix V.

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 for Management Plan Province House Annex					
Hazardous Materials	Description / Comments	Safe Handling Requirements	Disposal Requirements			
ASBESTOS	ACM drywall joint compound	Licensed contractor to obtain work permit prior to handling from PEI Dept. of WCB/OSH Division and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I.	Regulatory approval from PEIELJ  Disposal at approved facility such as EPWMF in Wellington, PEI			
	ACM transite hardboard					

LEAD PAINT	- White paint on pipes - Brown door paint (basement) - White door paint (2 <sup>nd</sup> level) White wall paint (3 <sup>rd</sup> level)	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I	Regulatory approval from PEIELJ  Additional analysis required for TCLP for disposal purposes, if required.
MERCURY	- fluorescent lamp tubes mercury containing thermostat	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:  Poured or precast concrete Brick & mortar Stone	Trained personnel in the safe handling of silica dust and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I	Regulatory approval from PEIELJ

# **6 ON-GOING MANAGEMENT & MAINTENANCE**

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

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 March 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.

#### 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 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.

## 6.4 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 per 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.

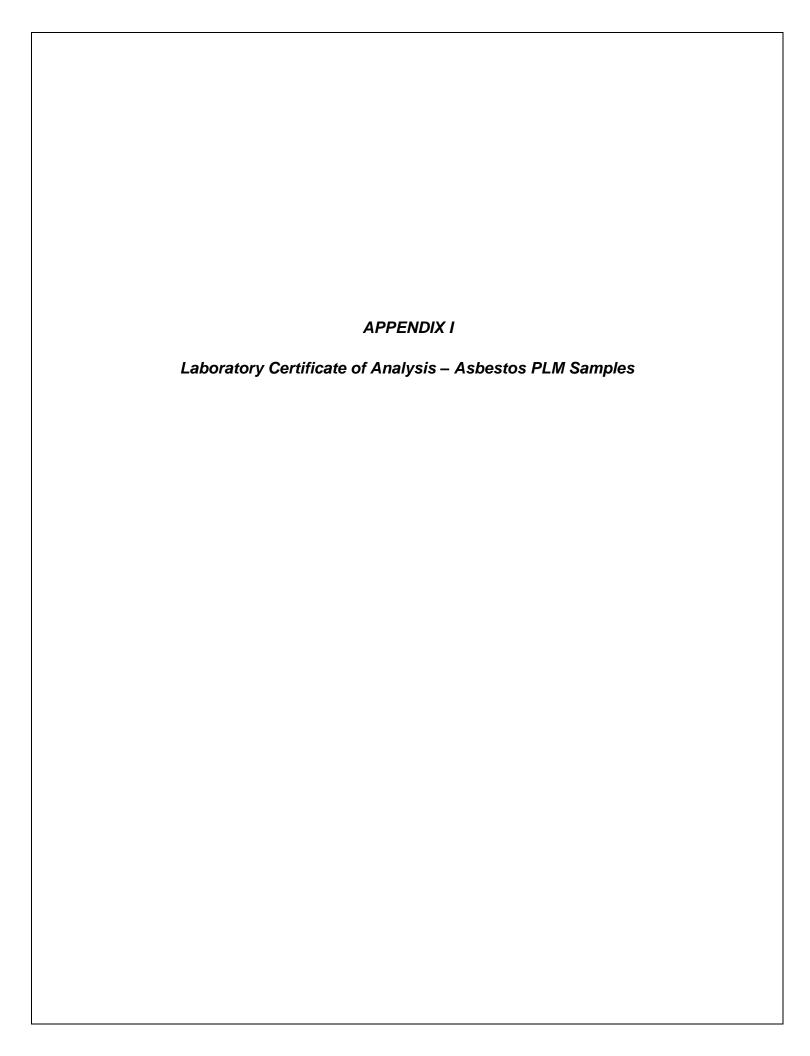
The recommendations in this report have been made in the context of existing industry accepted guidelines which were in place at the date of this report.

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 ALL-TECH
ENVIRONMENTAL SERVICES LIMITED





Client: ALL131

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

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date:

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400

12/20/2022

## PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540093 Analyst Observation: Grey Plaster Location: 1st Floor Rm 104

Client No.: PH-01 Client Description: Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 2 Hair 98

Lab No.: 7540094 Analyst Observation: Grey Plaster Location: 1st Floor Rm 105

Client No.: PH-02 Client Description: Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 5 Hair 95

Lab No.: 7540095 Analyst Observation: Grey Plaster Location: 1st Floor Rm 107

Client No.: PH-03 Client Description: Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 5 Hair 9

Lab No.: 7540096 Analyst Observation: Tan Insulation Location: 1st Floor Rm 106

Client No.: PH-04 Client Description: Lift Heat Shield Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 Fibrous Glass None Detected

**Lab No.:** 7540097 **Analyst Observation:** Green Insulation **Location:** Basement Furnace Rm

Client No.: PH-05 Client Description: Ceiling Hard Board Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

30 Chrysotile None Detected 70

Lab No.: 7540098 Analyst Observation: Grey Cement Product Location: Basement Furnace Rm

Client No.: PH-06 Client Description: Wall Hard Board Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

25 Chrysotile None Detected 7

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

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Analyst: Aidan Becker

Dated: 12/21/2022 11:12:17

Signature:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 1 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

12/20/2022

674524 - PLM

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109

Redford NS R4A 275

\_\_\_\_\_

Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 Project No.: PE22400

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540099 Analyst Observation: Tan Joint Compound Location: Basement Storage Rm

Client No.: PH-07 Client Description: Drywall Joint Compound Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC 2.1 Chrysotile None Detected 97.

Lab No.: 7540100 Analyst Observation: Dk Grey Cementitious Location: Basement Storage

Client No.: PH-08 Client Description: Chimney Parging Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Lab No.: 7540100(L2) Analyst Observation: Red Brick Location: Basement Storage

Client No.: PH-08 Client Description: Chimney Parging Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Lab No.: 7540100(L3)Analyst Observation: Lt Grey PlasterLocation: Basement Storage

Client No.: PH-08 Client Description: Chimney Parging Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 1

Lab No.: 7540100(L4)Analyst Observation: White PlasterLocation: Basement Storage

Client No.: PH-08 Client Description: Chimney Parging Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540101 Analyst Observation: Brown Insulation Location: Basement Furnace Rm

Client No.: PH-09 Client Description: Boiler Insulation Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

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

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Signature:
Analyst:
Aidan Becker

Dated: 12/21/2022 11:12:17

\_\_\_\_

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 2 of 10



Client: ALL131

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

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date:

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

> Project No.: PE22400

12/20/2022

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Location: Basement Furnace Rm Lab No.: 7540102 **Analyst Observation:** White Gasket

Client No.: PH-10 Client Description: Boiler Gasket **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material: 100 Fibrous Glass None Detected None Detected

Lab No.: 7540103 **Analyst Observation:** Tan Joint Compound **Location:** Basement Comp

Client No.: PH-11 **Client Description:** Joint Compound **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected **PC 1.5** Chrysotile

Lab No.: 7540104 **Analyst Observation:** Grey Plaster **Location:** Bathroom R-210

Client No.: PH-12 **Client Description:** Wall Plaster **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

2 Hair 97.5 **PC** 0.50 Chrysotile

**Lab No.:** 7540104(L2) **Analyst Observation:** White Plaster Location: Bathroom R-210

Client No.: PH-12 **Client Description:** Wall Plaster **Facility:** 

Percent Non-Asbestos Fibrous Material: Percent Asbestos: Percent Non-Fibrous Material:

None Detected None Detected

**Lab No.:** 7540104(L3) **Analyst Observation:** White Texture Location: Bathroom R-210

Client No.: PH-12 Client Description: Wall Plaster **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected

Lab No.: 7540105 **Analyst Observation:** Lt Grev Plaster **Location:** Bathroom R-211

Client Description: Wall Plaster Client No.: PH-13 **Facility:** 

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 None Detected

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

12/14/2022 Date Received:

12/20/2022 Date Analyzed:

Bealer Signature:

Aidan Becker Analyst:

Dated: 12/21/2022 11:12:17

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

12/20/2022

674524 - PLM

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109

Redford NS R4A 275

Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 Project No.: PE22400

## PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540105(L2) Analyst Observation: White Plaster Location: Bathroom R-211

Client No.: PH-13 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540105(L3) Analyst Observation: White Texture Location: Bathroom R-211

Client No.: PH-13 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Lab No.: 7540106 Analyst Observation: White Plaster Location: Corridor 209

Client No.: PH-14 Client Description: Plaster Ceiling Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

**Lab No.:** 7540107 **Analyst Observation:** Grey Plaster **Location:** 2nd Fl Vault 209

Client No.: PH-15 Client Description: Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 2 Hair 9

Lab No.: 7540107(L2)Analyst Observation: White PlasterLocation: 2nd Fl Vault 209

Client No.: PH-15 Client Description: Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Client No.: PH-16 Client Description: DJC Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

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

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Signature: ABellic

Analyst: Aidan Becker

Dated: 12/21/2022 11:12:17 Page 4 of 10

Approved By:

Trail the following

Frank E. Ehrenfeld, III Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/20/2022

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400

Client: ALL131

#### PLM BULK SAMPLE ANALYSIS SUMMARY

.....

Lab No.: 7540109 Analyst Observation: White Ceiling Tile Location: Corridor 208

Client No.: PH-17 Client Description: CT Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 60 Cellulose 2

20 Fibrous Glass

Lab No.: 7540110 Analyst Observation: White Joint Compound Location: R-204

Client No.: PH-18 Client Description: DJC Facility:

<u>Percent Asbestos:</u> <u>Percent Non-Asbestos Fibrous Material:</u> <u>Percent Non-Fibrous Material:</u>

None Detected None Detected 100

Lab No.: 7540111 Analyst Observation: White Ceiling Tile Location: 3rd Fl Rm 309

Client No.: PH-19 Client Description: 12x12 CT Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 100 Cellulose None Detected

**Lab No.:** 7540112 **Analyst Observation:** White Plaster **Location:** 3rd Fl Rm 309

Client No.: PH-20 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

**Lab No.:** 7540113 **Analyst Observation:** Grey Plaster **Location:** 3rd Fl Rm 302

Client No.: PH-21 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 2 Hair 98

**Lab No.:** 7540113(L2) **Analyst Observation:** White Plaster **Location:** 3rd Fl Rm 302

Client No.: PH-21 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

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

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Signature: Bellic

Analyst: Aidan Becker

Dated: 12/21/2022 11:12:17

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 5 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400

12/20/2022

Report Date:

Client: ALL131

#### PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540113(L3) Analyst Observation: White Joint Compound Location: 3rd Fl Rm 302

Client No.: PH-21 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540113(L4) Analyst Observation: White Texture Location: 3rd Fl Rm 302

Client No.: PH-21 Client Description: Wall Plaster Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 10

Lab No.: 7540114 Analyst Observation: White Joint Compound Location: R-311

Client No.: PH-22 Client Description: DJC Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

PC 1.4 Chrysotile None Detected 98.0

Lab No.: 7540115 Analyst Observation: White Ceiling Tile Location: 3rd Level R-308

Client No.: PH-23 Client Description: 2x4 CT Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 60 Cellulose 2

20 Fibrous Glass

**Lab No.:** 7540116 **Analyst Observation:** Dk Grey Vinyl Sheet Flooring **Location:** R-311

Client No.: PH-24 Client Description: VSF Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540117 Analyst Observation: Tan Vinyl Sheet Flooring Location: R-400

Client No.: PH-25 Client Description: VSF Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected 30 Cellulose 70

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

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Signature: Belle

Analyst: Aidan Becker

Dated: 12/21/2022 11:12:17

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Client: ALL131

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

Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date:

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400

12/20/2022

## PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540117(L2) Analyst Observation: Yellow Mastic Location: R-400

Client No.: PH-25 Client Description: VSF Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540117(L3) Analyst Observation: Grey Leveling Compound Location: R-400

Client No.: PH-25 Client Description: VSF Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540118 Analyst Observation: Off-White Joint Compound Location: Corridor 401

Client No.: PH-26 Client Description: Wall Joint Compound Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

Lab No.: 7540119 Analyst Observation: Off-White Joint Compound Location: R-406

Client No.: PH-27 Client Description: Joint Compound Facility:

Percent Asbestos: Percent Non-Asbestos Fibrous Material: Percent Non-Fibrous Material:

None Detected None Detected 100

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

Bealer

Date Received: 12/14/2022

Date Analyzed: 12/20/2022

Signature:
Analyst:
Aidan Becker

Dated: 12/21/2022 11:12:17 Page 7 of 10

Approved By:

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/20/2022

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 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 ir our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

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

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

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.

Dated: 12/21/2022 11:12:17 Page 8 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/20/2022

20 Duke St., Suite 109 Report No.: 674524 - PLM

Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 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 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, 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.

Dated: 12/21/2022 11:12:17 Page 9 of 10



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Report Date: 12/20/2022

674524 - PLM

Report No.:

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109

Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 Project No.: PE22400

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.

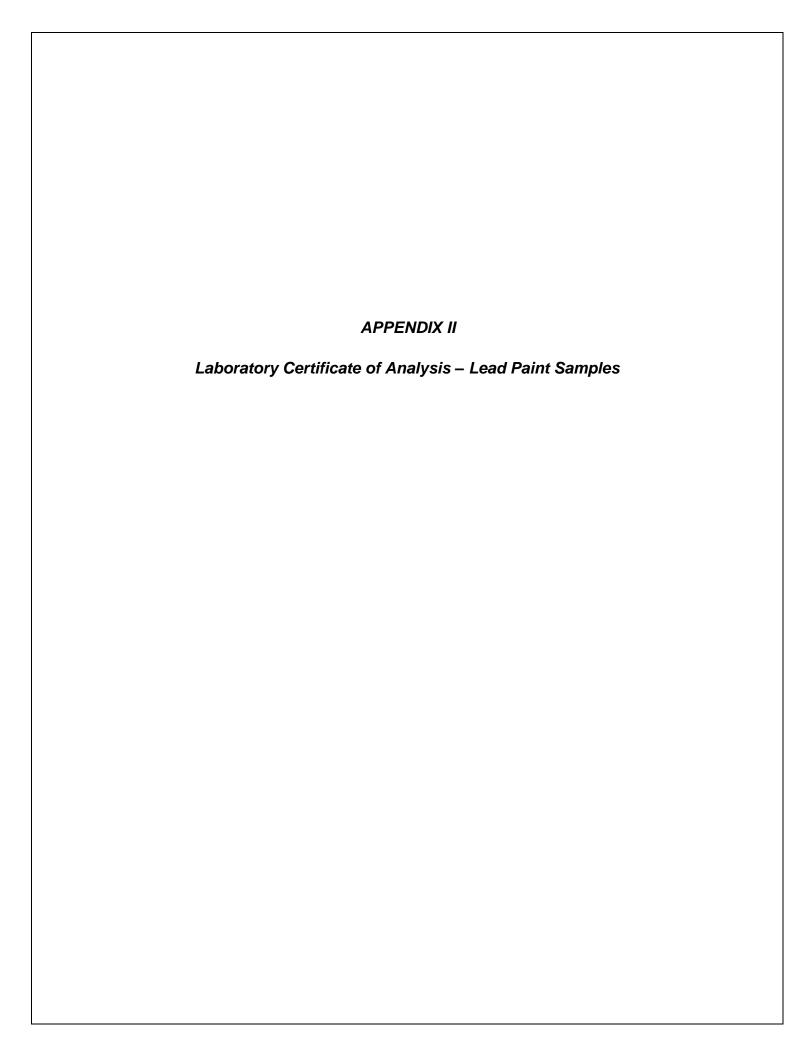
New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM 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 that 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.

Dated: 12/21/2022 11:12:17 Page 10 of 10

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





Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date:

> 20 Duke St., Suite 109 Report No.: 674519 - Lead Paint Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400 Client: ALL131

## LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7540056 **Description:** White Paint Result (% by Weight): 0.14 Client No.: PB-01 **Location:** 1st Floor Rm 109 **Result (ppm):** 1400

Comments:

12/21/2022

**Lab No.:** 7540057 **Description:** Green Paint Result (% by Weight): 0.0083

Client No.: PB-02 **Location:** 1st Floor Rm 109 Result (ppm): 83

Comments: \*\*\*

Lab No.: 7540058 **Description:** Brown Door Paint Result (% by Weight): 26 Result (ppm): 260000 Comments: \*\*\* Client No.: PB-03 **Location:** Basement Computer Rm

**Lab No.:** 7540059 **Description:** Off-White Paint **Result (% by Weight):** <0.0084

Client No.: PB-04 **Location:** Basement Computer Rm Result (ppm): <84

Comments: \*\*\*

**Description:** Off-White Paint **Result (% by Weight):** <0.0073 **Lab No.:** 7540060

Client No.: PB-05 Location: Rm 210 2nd Level **Result (ppm):** <73

Comments:

**Lab No.:** 7540061 **Description:** White Door Paint Result (% by Weight): 0.57 **Location:** Rm 204 2nd Level Client No.: PB-06

**Result (ppm):** 5700 Comments:

**Lab No.:** 7540062 **Description:** Blue Grey Wall Paint **Result (% by Weight):** <0.0079

Client No.: PB-07 **Location:** Rm 204 2nd Level Result (ppm):

**Comments:** 

**Description:** White ceiling paint Result (% by Weight): 0.29 Lab No.: 7540063

3rd Level Rm 300 Client No.: PB-08 **Location:** Result (ppm):

Comments: \*\*\*

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

12/14/2022 Date Received: Approved By:

12/21/2022 Date Analyzed:

Signature: Chad Shaffer Analyst:

Dated: 12/21/2022 2:06:11 Page 1 of 4

Frank E. Ehrenfeld, III

Laboratory Director



Email: customerservice@iatl.com

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/21/2022

20 Duke St., Suite 109 Report No.: 674519 - Lead Paint
Bedford NS B4A 2Z5 Project: Province House Annex

Client: ALL131 Project No.: PE22400

## LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7540064 Description: White Wall Paint Result (% by Weight): <0.0087

Client No.: PB-09 Location: 3rd Level Rm 408 Result (ppm): <87

Comments: \*\*\*

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

Date Received: 12/14/2022

Dated: 12/21/2022 2:06:11

Date Analyzed: 12/21/2022

Signature:

Analyst: Chad Shaffer

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 2 of 4



Email: customerservice@iatl.com

#### **CERTIFICATE OF ANALYSIS**

Client: ALL-TECH Environmental Services Limited Report Date: 12/21/2022

20 Duke St., Suite 109 Report No.: 674519 - Lead Paint
Bedford NS B4A 2Z5 Project: Province House Annex

Project No.: PE22400

Client: ALL131

# Appendix to Analytical Report:

**Customer Contact:** 

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

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

iATL Customer Service: customerservice@iatl.com iATL Office Manager: wchampion@iatl.com iATL Account Representative: Semih Kocahasan Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Paint

**Exceptions Noted:** See Following Pages

#### General Terms, Warrants, Limits, Qualifiers:

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

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

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

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 Apendix B.

Reporting Limit (RL) based upon Lowest Standard Determined (LSD) in accordance with AIHA-ELLAP policies.

LSD=0.2 ppm MDL=0.006% by weight. RL= 0.010% by weight (based upon 100 mg sampled).

#### **Disclaimers / Qualifiers:**

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

Dated: 12/21/2022 2:06:11 Page 3 of 4



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

#### CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited

20 Duke St.,Suite 109 Bedford NS B4A 2Z5

Client: ALL131

Report Date: 12/21/2022

Report No.: 674519 - Lead Paint
Project: Province House Annex

Project No.: PE22400

\* Insufficient sample provided to perform QC reanalysis (<200 mg)

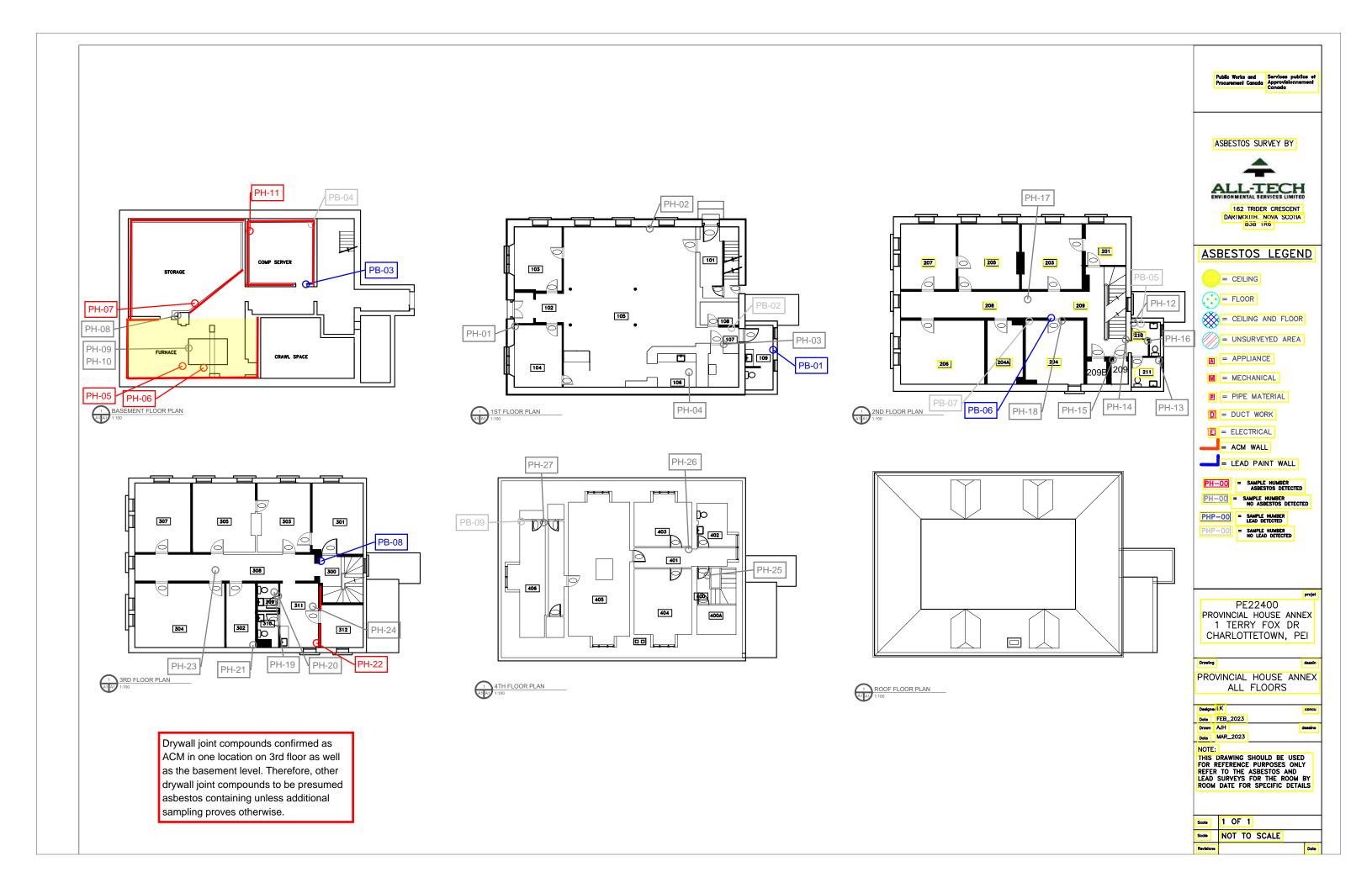
\*\* Not enough sample provided to analyze (<50 mg)

\*\*\* Matrix / substrate interference possible.

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

Dated: 12/21/2022 2:06:11 Page 4 of 4







	Province	e House	e Annex (Basem	ent) - Sum	mary of a	ACM	Cond	ditions	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	Basement furnace room	PH-05 PH-06	Transite hardboard ceiling Transite hardboard wall	Chrysotile 30% Chrysotile 25%	83 m2	NF	В	Good	5	PH-06 What burkers Un W Prover for Prover for
	Basement storage	PH-07	Drywall joint compound	Chrysotile 2.1%	57 m2	F	В	Good	5	Bit oy Congr Dam Bits

LEGEND	_EGEND						
Sample N	lumber Identifiers		Units				
PH-##	actual sample number		EA	Each			
VPH-##	visually identified same as this sample number		m	meters			
		-	m2	square metres			
			m3	cubic metres			

Chrysotile 1.5%

49 m2

F

В

Good

5

Basement computer server room

PH-11

Drywall joint compound

	ASSSESSMENT CODES						
ACCESS		CONDITION					
Α	Accessible to all building occupants	GOOD	ACM is completely covered and/or exhibits no evidence of damage or deterioration				
В	Accessible to maintenance and operations staff without a ladder	FAIR	Minor penetrating damage to ACM (cuts, tears, nicks, deterioration, or delamination).				
С	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						

ACTIO	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.						

### Province House Annex (1st floor) - Summary of ACM Conditions Report (2022) Friable **Estimated Action Code** (F) Asbestos Type & Volume or Room No. Description Sample No. **Material description** Non-Condition (refer to **Photo** Access Content (%) friable legend) Area (NF) Drywall joint compound Chrysotile 1.4% VPH-22 F В 5 Good

<sup>\*\*</sup> All other drywall areas treated as presumed asbestos containing or have additional testing completed in those areas at the time of planned work\*\*

LEGEND	LEGEND						
Sample No	umber Identifiers		Units				
PH-##	actual sample number		EA	Each			
VPH-##	VPH-## visually identified same as this sample number		m	meters			
			m2	square metres			
			m3	cubic metres			

	ASSSESSMENT CODES							
ACCESS		CONDITION						
Α	Accessible to all building occupants	GOOD	ACM is completely covered and/or exhibits no evidence of damage or deterioration					
В	Accessible to maintenance and operations staff without a ladder	FAIR	Minor penetrating damage to ACM (cuts, tears, nicks, deterioration, or delamination).					
С	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 CO	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.							

### Province House Annex (2nd floor) - Summary of ACM Conditions Report (2022) Friable **Estimated Action Code** (F) Asbestos Type & Volume or Room No. Description Sample No. **Material description** Non-Condition (refer to **Photo** Access Content (%) friable legend) Area (NF) Drywall joint compound Chrysotile 1.4% VPH-22 F В 5 Good

<sup>\*\*</sup> All other drywall areas treated as presumed asbestos containing or have additional testing completed in those areas at the time of planned work\*\*

LEGEND	LEGEND						
Sample No	umber Identifiers		Units				
PH-##	actual sample number		EA	Each			
VPH-##	VPH-## visually identified same as this sample number		m	meters			
			m2	square metres			
			m3	cubic metres			

	ASSSESSMENT CODES							
ACCESS		CONDITION						
Α	Accessible to all building occupants	GOOD	ACM is completely covered and/or exhibits no evidence of damage or deterioration					
В	Accessible to maintenance and operations staff without a ladder	FAIR	Minor penetrating damage to ACM (cuts, tears, nicks, deterioration, or delamination).					
С	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 CO	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.							

## Province House Annex (3rd floor) - Summary of ACM Conditions Report (2022)

	riotinos riodes rumex (era rios), sammary er resin contantiene respert (2022)									
Room No.	Description	Sample No.	Material description	Asbestos Type & Content (%)	Estimated Volume or Area	Friable (F) Non- friable (NF)		Condition	Action Code (refer to legend)	Photo
311	Office	PH-22	Drywall joint compound	Chrysotile 1.4%	-	F	В	Good	5	Dyc Banil

<sup>\*\*</sup> All other drywall areas treated as presumed asbestos containing or have additional testing completed in those areas at the time of planned work\*\*

LEGEND	LEGEND					
Sample Number Identifiers						
PH-## actual sample number						
VPH-##	visually identified same as this sample number					

Units					
EA	Each				
m	meters				
m2	square metres				
m3	cubic metres				

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

ACTION CO	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.									

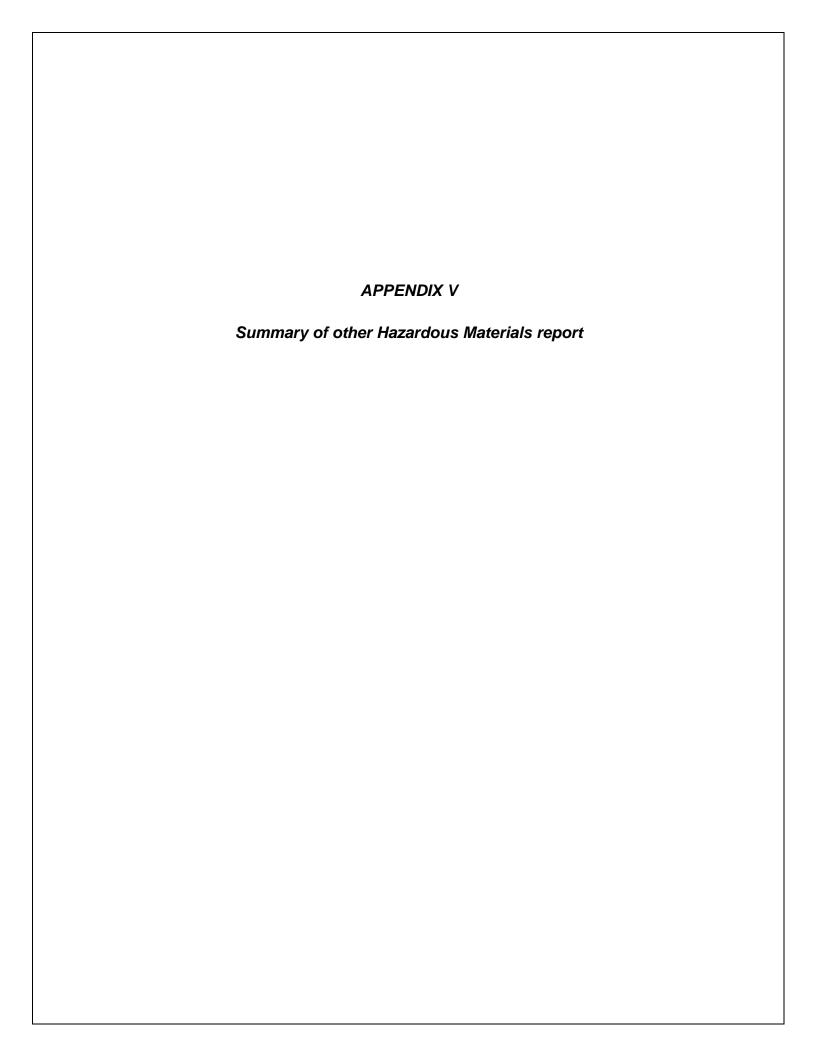
### **Province House Annex (4th floor) - Summary of ACM Conditions Report (2022)** Friable **Estimated Action Code** (F) Asbestos Type & Volume or Room No. Description Sample No. **Material description** Non-Condition (refer to **Photo** Access Content (%) friable legend) Area (NF) Drywall joint compound Chrysotile 1.4% VPH-22 F В 5 Good

<sup>\*\*</sup> All other drywall areas treated as presumed asbestos containing or have additional testing completed in those areas at the time of planned work\*\*

LEGEND	EGEND						
Sample No	umber Identifiers		Units				
PH-##	actual sample number		EA	Each			
VPH-##	visually identified same as this sample number		m	meters			
			m2	square metres			
			m3	cubic metres			

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

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.							



# Province House Annex - Summary of other Hazardous Materials Report (2022)

### Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
109	1st floor	PB-01	White paint on pipe	0.14	all like surfaces treated as lead based paints	PB-O1 White Faut g-107
Computer server rm	Basement	PB-03	Brown paint on door trim	26	all like painted surfaces treated as lead based paints	Para os Para o
204	2nd level	PB-06	White surface paint	0.57	all like painted surfaces treated as lead based paints	PB-06 White Paint Rao4

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
300	3rd level	PB-08	White ceiling paint	0.29	all like painted surfaces treated as lead based paints	B-OR METERS 3" Inch Case Line 1 1 2 Aug. 4 4 38

## Silica

Room No.	Location	Location Sample No. Material		Comments	Photo
NA	Exterior	NA	Brick and mortars; plasters; stone		

## Mercury

Room No.	Location	Sample No.	Material	Comments	Photo
NA		NA	Mercury filled thermostats	all like thermostats considered mercury filled.	