



HAZARDOUS MATERIALS ASSESSMENT Tyne Valley Youth Centre, 61 Bideford Road, Tyne Valley, PE

Prepared For:

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

March 28, 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 Tyne Valley Youth Centre located at 61 Bideford Road in Tyne Valley, 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 3 based on our assessment as well as safe handling requirements.

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

TABLE A Summary of Hazardous Materials Tyne Valley Youth Centre					
Hazardous Materials	Description / Comments	Safe Handling Requirements	Disposal Requirements		
LEAD	Grey floor paint in Boiler room	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	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 pre-cast concrete (slab) • Masonry and mortar	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

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SITE / CLIENT INFORMATION

Project No: PE22400

Assessment Date: December 2022

Client Name: PEI Department of Transportation & Infrastructure

Address: Tyne Valley Youth Centre

61 Bideford Road, Tyne Valley, 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 Tyne Valley Youth Centre located at 61 Bideford Road in Tyne Valley, 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	Youth outreach and group home			
Number of Floors	1 floor			
Total Area	Approximately 641.5 m ²			
Year of Construction	1989			
Structure	Wood, concrete			
Exterior Cladding	Brick / block			
HVAC	Mechanical ventilation (fiberglass insulation)			
Roof	Metal			
Flooring	Vinyl floor tile, Concrete			
Interior Walls	Drywall; concrete			
Ceilings	Drywall			

2 REGULATIONS & GUIDELINES

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

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

2.1 ASBESTOS

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

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

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

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

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

2.2 LEAD

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

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

PEIELJ has established guidelines that restrict hazardous materials from municipal landfills and Construction and Demolition (C&D) waste disposal sites which potentially may migrate / leach into groundwater and cause adverse environmental impacts. Lead coated surfaces may leach from their base materials into soil and subsequent groundwater. PEIELJ has established guidelines that materials

containing 1000 mg/kg or 0.1% lead by weight shall be classified as lead-based paints. If materials are found to be above this guideline and require removal and disposal, then the materials must undergo leachate testing to assess total 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 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 structure. Laboratory analysis certificates are presented in Appendix I.

A total of twenty (20) bulk material samples were collected within the building during the survey. Some of these samples such as tile floor coverings, drywall and pipe insulations were separated and a total of twenty-three (23) samples were analyzed. Of the 23 samples analyzed, none were found to be asbestos containing.

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

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

4.1.1 Texture Coat Finishes

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

4.1.2 Pipe Insulation

Pipe parging cement is present on pipe fittings as identified through various samples within the boiler room. A total of three (3) parging cement samples were collected and none were found to contain asbestos.

Straight sections of pipe are insulated with fibreglass insulation.







Straight run fiberglass insulation

4.1.3 Duct Insulation

No insulated ducts were observed or reported.

4.1.4 Mechanical Equipment Insulation

Mechanical insulation is either uninsulated or insulated with fiberglass.



Fiber Glass insulation above ceiling in boiler room.

4.1.5 Plaster

Plaster finishes were noted and sampled in various random locations throughout the building. Representative sampling was completed within the building.

A total of five (5) plaster finishes were collected during the assessment. None were found to be asbestos containing.



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 five (5) joint compound samples were collected during the assessment. None were found to be asbestos containing.



4.1.7 Vinyl Sheet Flooring

No suspect vinyl sheet floor coverings were noted or reported.

4.1.8 Vinyl Floor Tiles

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
TY-01	12"x12" Brown floor tile with black mastic	Common Areas	None Detected in tile or mastic	Ty-or NXXD Brown F.T
TY-02	12"x12" Yellow speckled floor tile	Office	None Detected	TY-OP IRYTH USEIGW SPECKING F. TOFFICE
TY-03	12"x12" Pink floor tile	TV Room	None Detected	T9-03 R*12 Pink FT TV. Room

TY-04	12"x12" Red floor tile	TV room	None Detected	T. Y- 04 laria Res FT TV Room
TY-09	12"x12" White speckled floor tile with tan mastic	Common area	None Detected in tile or mastic	T.y-09 12×12 Wh.tr sack F.T
TY-12	12"x12" Cream floor tile with black mastic	Bedroom	None Detected in tile or mastic	Ty-12 Ciron Flance

TY-14	12"x12" Blue floor tile	Kitchen	None Detected	Ty-14 Bye F.T. K.+Chen
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4.1.9 Ceiling Tiles

No acoustic ceiling tiles were noted or reported at the time of the assessment.

4.1.10 Excluded Asbestos Materials

Based on sample results and the age of the building, roofing compounds are not anticipated to be asbestos containing.

4.2 LEAD-BASED PAINTS

Based on the age of the buildings, lead based paints were sampled. A total of four (4) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

Based on the assessment findings, one (1) 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
TYP-01	Tan paint / Wood door trim	Main Entrance	0.010	TIP 01 Tan Door Trims
TYP-02	Grey paint / Concrete wall	Open areas	0.0066	TYP.02 Bred (Tan concerte paint
TYP-03	Grey paint / Concrete floor	Boiler Room	0.078	MP 03 grey fur point Builor

TYP-04	Red Paint / Door	Boiler Room	0.020	Typ.04 Red Oour Boiler R
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4.3 POLYCHLORINATED BIPHENYLS (PCB's)

Newer in-lay light fixtures were observed throughout the building. Based on the age of the building and through visual observations, it was determined that the ballasts observed on site are non-PCB containing.

No electrical transformers were 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

4.3 MERCURY

4.6.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

4.3.2 Mercury Containing Devices

No mercury containing thermostats ampules were reported.

5 SUMMARY OF HAZARDOUS MATERIALS

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

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

TABLE 3 Summary of Hazardous Materials Tyne Valley Youth Centre						
Hazardous Materials	Description / Comments	Disposal Requirements				
LEAD	Grey floor paint in Boiler room	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	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 pre-cast concrete (slab) • Masonry and mortar	Trained personnel in the safe handling of silica dust and all other pertinent sections of the Occupational Health and Safety Act R.S.P.E.I	Regulatory approval from PEIELJ			

6 ON-GOING MANAGEMENT & MAINTENANCE

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

6.1 Lead

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

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

6.2 Silica

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

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.

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.

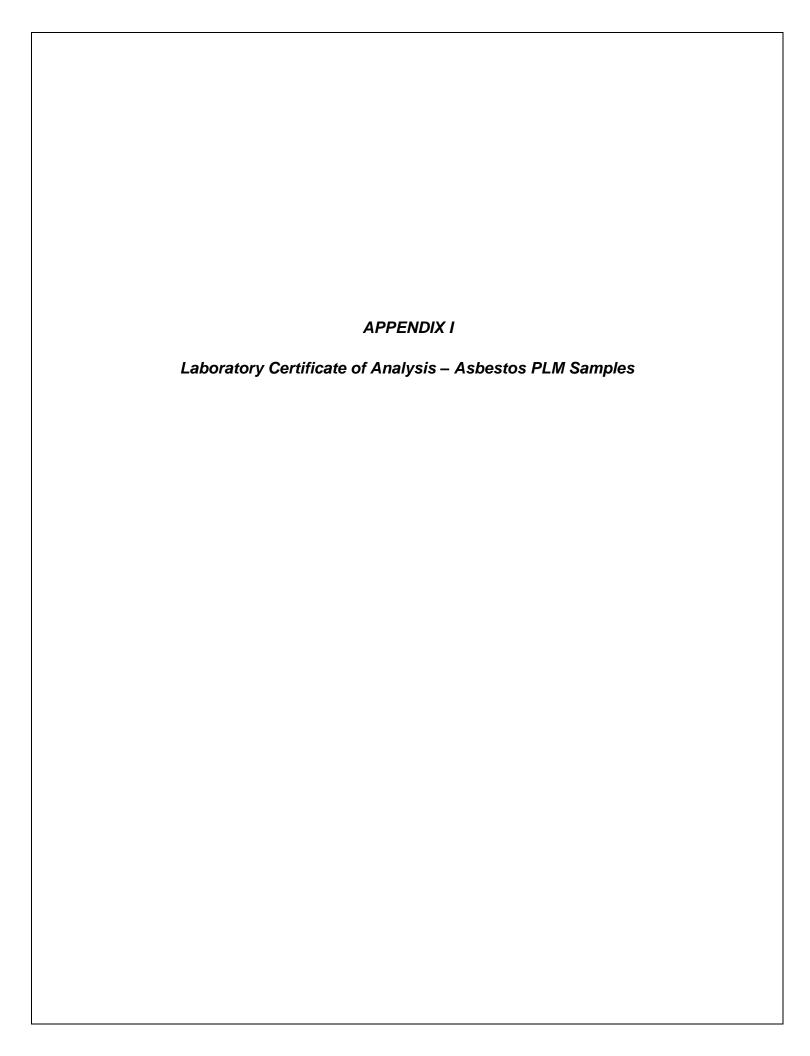
Should you have any questions or concerns pertaining to this report, please contact the undersigned directly.

Lange.





Larry G. Koughan, CET, CRSP Senior Project Consultant





Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

12/22/2022

674725 - PLM

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Project No.: PE22400 Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7541739 Analyst Observation: Brown Floor Tile Location: Client Description: 12x12 Brown Floor Tile Client No.: TY-01 **Facility:**

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

None Detected 100 None Detected

Lab No.: 7541739(L2) Analyst Observation: Black Mastic Location: Client No.: TY-01 Client Description: 12x12 Brown Floor Tile **Facility:**

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

1 Cellulose None Detected

Lab No.: 7541740 **Analyst Observation:** Tan Floor Tile Location: Office

Client No.: TY-02 Client Description: 12x12 Yellow Speckled Floor Tile **Facility:**

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

None Detected 100 None Detected

Lab No.: 7541741 **Analyst Observation:** Red Floor Tile Location: TV Room

Client No.: TY-03 **Client Description:** 12x12 Pink Floor Tile **Facility:**

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

None Detected None Detected

Note: No mastic present

Lab No.: 7541742 **Analyst Observation:** Lt Red Floor Tile Location: TV Room Client No.: TY-04 Client Description: 12x12 Red Floor Tile **Facility:**

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

None Detected 100 None Detected

Note: No mastic present

Lab No.: 7541743 **Analyst Observation:** Grey Insulation Location: Boiler Room

Client No.: TY-05 **Client Description:** Pipe Parging **Facility:**

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

10 Cellulose 84

Page 1 of 7

6 Fibrous Glass

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

12/16/2022 Date Received:

12/22/2022 Date Analyzed:

Note: No mastic present

None Detected

Signature: Ellen Smith Analyst:

Dated: 12/23/2022 3:11:30

Approved By:

Frank E. Ehrenfeld, III Laboratory Director



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: 12/22/2022

Report No.: 674725 - PLM

Project: Tynevally Youth Centre

Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7541744 Analyst Observation: Grey Insulation Location: Boiler Room

Client No.: TY-06 Client Description: Pipe Parging Facility:

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

None Detected 13 Cellulose

7 Fibrous Glass

Lab No.: 7541745 Analyst Observation: Grey Insulation Location: Boiler Room

Client No.: TY-07 Client Description: Pipe Parging Facility:

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

None Detected 13 Cellulose 80

7 Fibrous Glass

Lab No.: 7541746 Analyst Observation: White Joint Compound Location: Boiler Room Ceiling

Client No.: TY-08 Client Description: Drywall Joint Compound Facility:

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

None Detected None Detected 100

Note: No drywall present.

Lab No.: 7541747 Analyst Observation: Lt Tan Floor Tile Location:

Client No.: TY-09 Client Description: 12x12 White Speck Floor Tile Facility:

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

None Detected None Detected 100

Lab No.: 7541747(L2)

Analyst Observation: Tan Mastic

Location:

Client No.: TY-09 Client Description: 12x12 White Speck Floor Tile Facility:

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

None Detected 1 Cellulose 99

Lab No.: 7541748 Analyst Observation: Off-White Joint Compound Location: Room Beside GYM

Client No.: TY-10 Client Description: Drywall Joint Compound Facility:

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

None Detected None Detected 100

Note: No drywall present.

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

Date Received: 12/16/2022

Date Analyzed: 12/22/2022

Signature:

Analyst: Ellen Smith

Dated: 12/23/2022 3:11:30

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 2 of 7



Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Report Date:

Report No.:

12/22/2022

674725 - PLM

Client: ALL-TECH Environmental Services Limited

20 Duke St., Suite 109

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Project No.: PE22400 Client: ALL131

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7541749 **Analyst Observation:** White Joint Compound **Location:** GYM Ceiling

Client Description: Drywall Joint Compound Client No.: TY-11 **Facility:**

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

None Detected None Detected

Note: No drywall present.

Lab No.: 7541750 **Analyst Observation:** Lt Tan Floor Tile **Location:** Bedroom Client No.: TY-12 **Facility:**

Client Description: 12x12 Cream Floor Tile

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

None Detected None Detected

Lab No.: 7541750(L2) **Analyst Observation:** Black Mastic Location: Bedroom

Facility: Client No.: TY-12 **Client Description:** 12x12 Cream Floor Tile

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

1 Cellulose None Detected

Lab No.: 7541751 Analyst Observation: Off-White Joint Compound **Location:** Bathroom

Client No.: AC-13 Client Description: Drywall Joint Compound **Facility:**

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

None Detected None Detected

Note: No drywall present.

Lab No.: 7541752 **Analyst Observation:** Lt Blue Floor Tile Location: Kitchen

Client Description: 12x12 Blue Floor Tile Client No.: AC-14 **Facility:**

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

None Detected None Detected

Lab No.: 7541753 **Analyst Observation:** White Plaster Location: Kitchen

Client No.: AC-15 Client Description: Wall Plaster **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.

12/16/2022 Date Received:

12/22/2022 Date Analyzed:

Note: No mastic present

Signature:

Ellen Smith Analyst:

Dated: 12/23/2022 3:11:30

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 3 of 7



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: 12/22/2022

20 Duke St., Suite 109 Report No.: 674725 - PLM

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

> Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Location: Bathroom Lab No.: 7541754 **Analyst Observation:** White Joint Compound

Client Description: Drywall Joint Compound **Facility:** Client No.: AC-16

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

None Detected None Detected

Note: No drywall present. **Lab No.:** 7541755 **Analyst Observation:** White Plaster Location: Bedroom

Client No.: AC-17 Client Description: Wall Plaster **Facility:**

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

None Detected None Detected

Lab No.: 7541756 **Analyst Observation:** White Plaster Location: Bedroom

Client No.: AC-18 Client Description: Wall Plaster **Facility:**

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

None Detected None Detected

Lab No.: 7541757 **Analyst Observation:** White Plaster Location: Bedroom

Client No.: AC-19 Client Description: Wall Plaster **Facility:**

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

None Detected None Detected

Analyst Observation: White Plaster **Lab No.:** 7541758 **Location:** Bedroom

Client No.: AC-20 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.

12/16/2022 Date Received:

12/22/2022 Date Analyzed:

Signature: Ellen Smith

Analyst:

Dated: 12/23/2022 3:11:30

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 4 of 7



Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/22/2022

20 Duke St., Suite 109 Report No.: 674725 - PLM

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Project No.: PE22400

Client: ALL131

Appendix to Analytical Report

Customer Contact:

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

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

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

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com 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: 12/23/2022 3:11:30 Page 5 of 7



Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/22/2022

20 Duke St., Suite 109 Report No.: 674725 - PLM

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Project No.: PE22400

Client: ALL131

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

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

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

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

Disclaimers / Qualifiers:

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

- 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/I198 8 02 2.pdf)

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

1) Analytical Step/Method: Initial Screening by PLM, EPA 600R-93/116

Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

Dated: 12/23/2022 3:11:30 Page 6 of 7



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: 12/22/2022

20 Duke St., Suite 109 Report No.: 674725 - PLM

Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

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.

Requirements/Comments. Minimum 30g · Of the Sample. Analysis of Shiks 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.

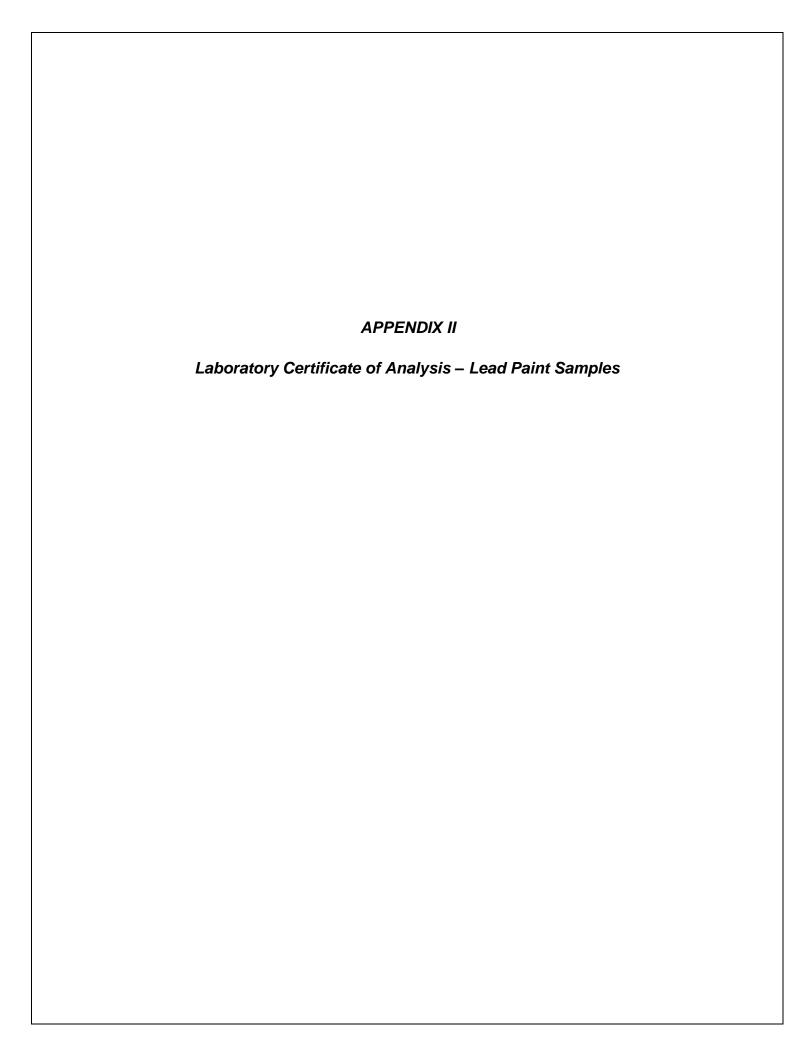
New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM 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: 12/23/2022 3:11:30 Page 7 of 7

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





Lab No.:

7541431

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.: 674707 - Lead Paint Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Project No.: PE22400 Client: ALL131

Description: Tan Paint

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Client No.: TYP-01 **Location:** Door Trim Result (ppm): Comments: * **Lab No.:** 7541432 **Description:** Grey/Tan Paint **Result (% by Weight):** <0.0066 Client No.: TYP-02 **Location:** Concrete Result (ppm): <66 Comments:

Lab No.: 7541433 **Description:** Grey Floor Paint Result (% by Weight): 0.078 Client No.: TYP-03 **Location:** Boiler Rm Result (ppm): **Comments:**

Result (% by Weight): <0.020 Lab No.: 7541434 **Description:** Red Door Paint Location: Boiler Rm Client No.: TYP-04 Result (ppm): < 200

Comments: *

Result (% by Weight): <0.010

12/22/2022

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

12/16/2022 Date Received: 12/22/2022

Dated: 12/23/2022 12:29:16

Date Analyzed:

Signature:

Mark Stewart Analyst:

Approved By:

Frank E. Ehrenfeld, III Laboratory Director

Page 1 of 3



Email: customerservice@iatl.com

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date: 12/22/2022

20 Duke St., Suite 109 Report No.: 674707 - Lead Paint
Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Client: ALL131 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 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.

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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**.

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Email: customerservice@iatl.com

12/22/2022

CERTIFICATE OF ANALYSIS

Client: ALL-TECH Environmental Services Limited Report Date:

20 Duke St.,Suite 109 Report No.: 674707 - Lead Paint
Bedford NS B4A 2Z5 Project: Tynevally Youth Centre

Client: ALL131 Project No.: PE22400

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

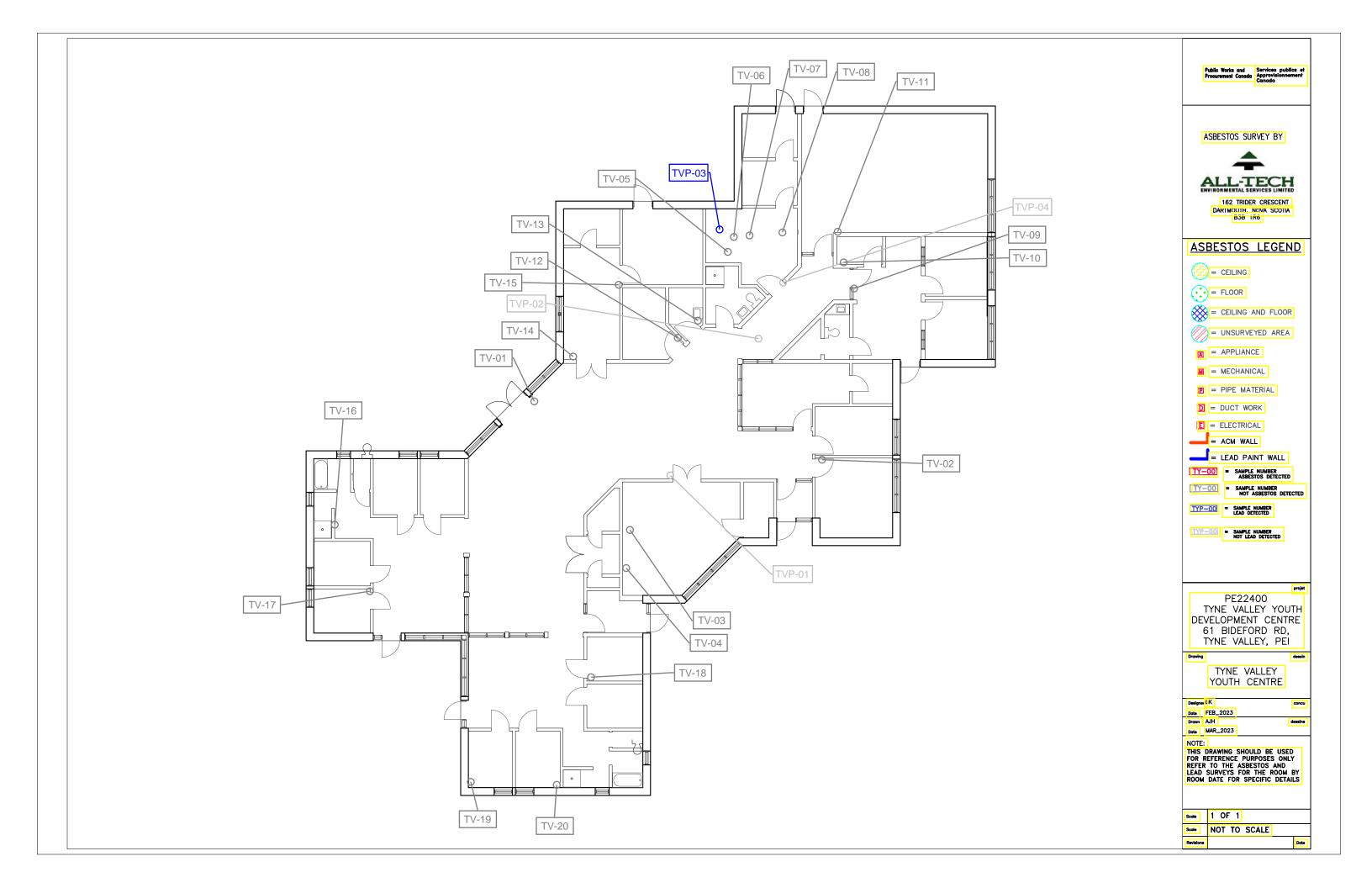
** Not enough sample provided to analyze (<50 mg)

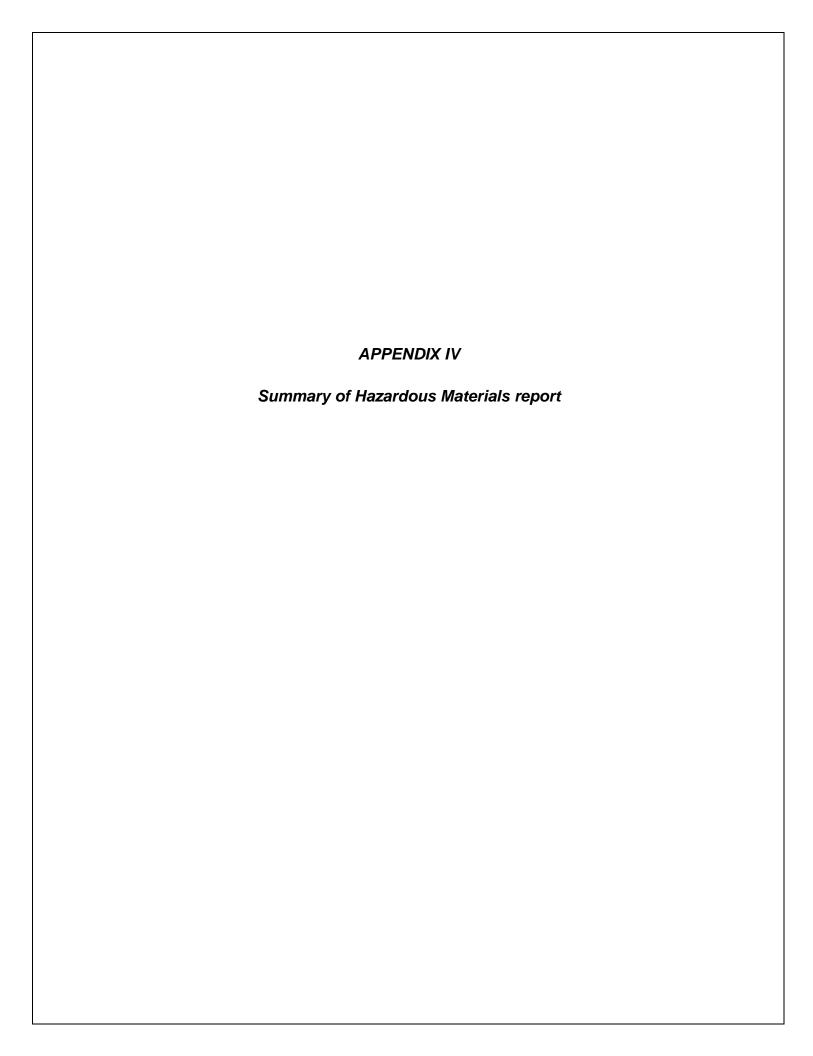
*** Matrix / substrate interference possible.

< 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: 12/23/2022 12:29:17 Page 3 of 3







Tyne Valley Youth Centre - Summary of Hazardous Materials Report (2022)

Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
NA	Boiler room	TYP-03	Grey floor paint on concrete	0.078		MP 03 Grey Flur point Bailter

Silica

Room No.	Location	Sample No.	Material	Comments	Photo
NA	Exterior	NA	Concrete slab; concrete floors		