ALL-TECH
ENVIRONMENTAL SERVICES LIMITED

HAZARDOUS MATERIALS ASSESSMENT
O'Leary Veterinary Clinic
45 East Dr, O'Leary,
Prince Edward Island

Prepared For:

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

April 17, 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 Mona Wilson Health Centre located at 55 McGill Avenue 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 started in December 2022 with additional work and follow ups complete in January 2022. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

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

A summary of the Hazardous Materials identified within the building is provided below in Table A based on our assessment as well as safe handling requirements. Areas identified with visually same ACM materials are outlined in Appendix III Site drawing with ACM locations.

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

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

Other asbestos containing floor coverings may be present under existing newer existing floors as identified in rooms 106, 108 and 109. Therefore, if demolition of major construction is required, have destructive testing completed to evaluate for additional ACM floorings.

Upon review of this report and based on any planned work, renovations or demolition, a full scope of work should be developed. This scope of work will be dependent upon which materials need to be disturbed or removed prior to the renovations. Should ACM not require disturbance or removal, then those identified shall remain in place and be part of the Management Plan.

TABLE A Summary of Hazardous Materials for Management Plan O'Leary Veterinary Clinic			
Hazardous Materials	***Description / Comments***	***Safe Handling Requirements***	***Disposal Requirements***
ASBESTOS	Asbestos containing floor coverings. (vinyl sheet floorings)	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
	Asbestos containing drywall joint compound		
	Asbestos containing hardboard cladding on exterior perimeter of the building		
LEAD PAINT	Brown paint on exterior window trim	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
	Green paint on basement floor		
	Grey paint on basement floor		
SILICA	Presumed in the following building components: • Poured or pre-cast concrete (main level floors; basement foundation and floors) • Interior concrete block walls • Exterior brick 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
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.

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:	O’Leary Veterinarian Clinic 45 East Drive O’Leary, PE

1 INTRODUCTION

ALL-TECH Environmental Services Limited was contracted by the PEI Department of Transportation & Infrastructure (DTI) to conduct a hazardous material assessment for the O’Leary Veterinary Clinic located at 45 East Drive in O’Leary, Prince Edward Island.

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

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

The on-site assessment was conducted in December 2022. During the assessment hazardous materials including asbestos and lead (paint) were sampled. In addition, lamp ballasts and electrical transformers were visually assessed for Polychlorinated Biphenyls (PCBs) and reported if identified.

1.1 SURVEY OBJECTIVES

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

1.2 BACKGROUND BUILDING INFORMATION

TABLE 1 BUILDING FRAMEWORK	
Building Use	Former veterinary office
Number of Floors	1 floor plus basement
Total Area	Approximately 409 m^2
Year of Construction	1977
Structure	Wood, concrete
Exterior Cladding	Brick
HVAC	Not insulated
Roof	Flat membrane (not assessed)
Flooring	Vinyl sheet flooring, vinyl floor tiles , cement
Interior Walls	Drywall; concrete block
Ceilings	Acoustic ceiling tiles

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 for the on-going management of any hazardous materials identified. Where visual identification of asbestos containing materials and lead based paints were suspected but unable to be determined, samples were collected and sent to an approved laboratory for analysis.

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

3.1 ASBESTOS

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

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

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

3.2 LEAD

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

3.3 POLYCHLORINATED BIPHENYLS

During the assessment, suspect PCB containing light ballasts were examined for PCB identification or by recording serial numbers for reference. Ballasts were inspected and manufacturers name, date and serial numbers were recorded when visible. The manufacturers identification numbers were then compared to Environment Canada's "Identification of Lamp Ballasts Containing PCB's," Report EPS 2/CC/2 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-six (26) bulk material samples were collected within the building during the survey. Some of these samples such as tile floor coverings were separated and a total of thirty-two (32) samples were analyzed. Of the 32 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.

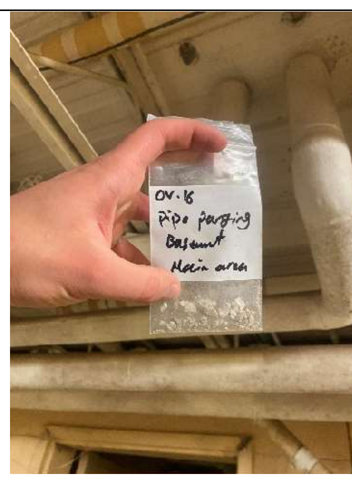
4.1.1 Texture Coat Finishes

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

4.1.2 Pipe Insulation

Parging cement was noted and sampled in various locations throughout the building. A total of thirteen (13) parging cement samples were collected and none were found to be asbestos containing.

Straight sections of pipe are insulated with fibreglass insulation as identified through visual observations (see P2).



P1- Parging cement on pipe fittings


P2 – Straight runs fiberglass insulation

4.1.3 Duct Insulation

Duct insulation was either non-insulated or some sections covered with fiberglass insulation.	 

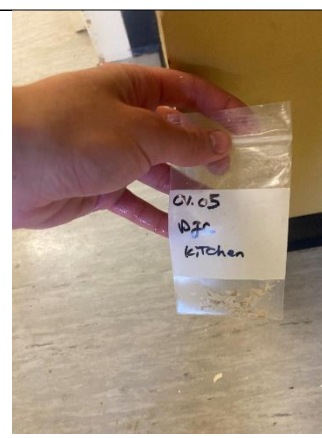
4.1.4 Mechanical Equipment Insulation

Mechanical systems were not insulated.	 

4.1.5 Plaster

No plaster finishes were observed or reported.	

4.1.6 Drywall Joint Compound

Drywall joint compound walls and ceilings were noted and sampled in various random locations throughout the building. Representative sampling was completed within the building. A total of four (4) joint compound samples were collected during the assessment. ***Two of the samples were found to contain 1.3 - 1.4% chrysotile asbestos.***	

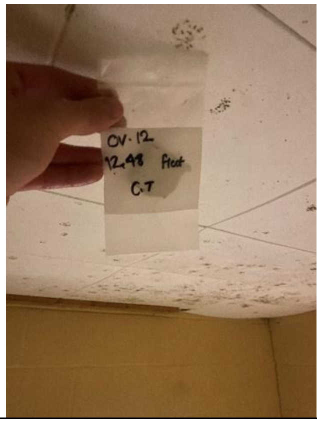
4.1.7 Vinyl Sheet Flooring

Sample No.:	Flooring Description	Location	Asbestos Type / Content (%)	Photo
OV-03	a) Grey vinyl sheet flooring with b) Tan mastic c) Grey levelling compound	Main lobby	a) None Detected b) None Detected c) None Detected	
OV-06	Yellow / tan vinyl sheet flooring	Kitchen (under kitchen cabinet)	**20% Chrysotile**	
OV-25	a) Red vinyl sheet flooring with b) Off-white mastic c) Red / brown vinyl sheet flooring	Main lobby	a) None Detected b) None Detected **c) 10% Chrysotile**	

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 the office area locations on the main level of the building. Fissure design ceiling tiles were observed as like materials random representative sampling was completed within the office areas. A total of three (3) ceiling tiles were collected during the assessment. One of the ceiling tiles was reported with 0.25% chrysotile and 0.25% amosite asbestos. This percentage would not be considered as an ACM. The other samples were all reported as none detected.	
Plain fixed ceiling tiles were also noted and sampled in back storage room 114. Visible mould was observed on the ceiling tiles at the time of the assessment. The tile was analyzed as a non-asbestos containing material.	

4.1.10 Other Building Materials

Grey hardboard transite panel was observed and sampled from the exterior cladding of the building. The material was analyzed and found to contain **20% Chrysotile Asbestos**.	
Sprayed fireproofing material was observed and sampled within the basements boiler room. The fireproofing was analyzed as a non-asbestos containing material.	

4.1.11 Excluded Asbestos Materials

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

- Roofing felts and tar

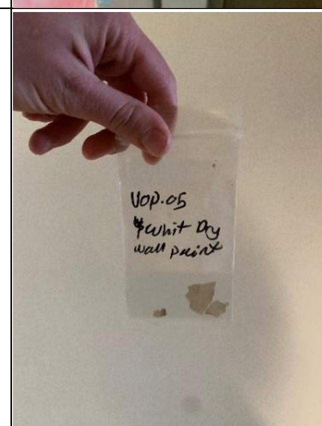
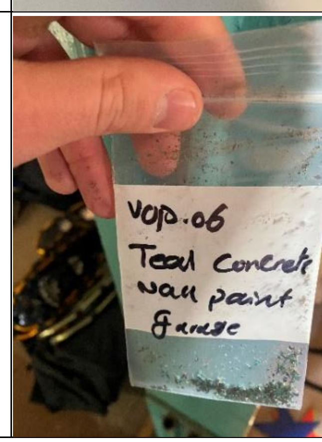
4.2 LEAD-BASED PAINTS

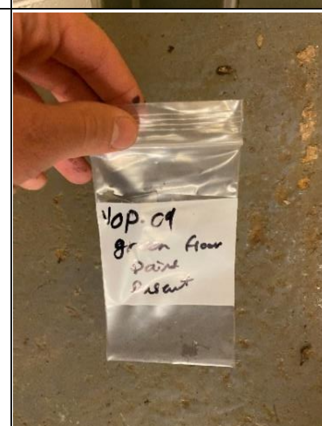
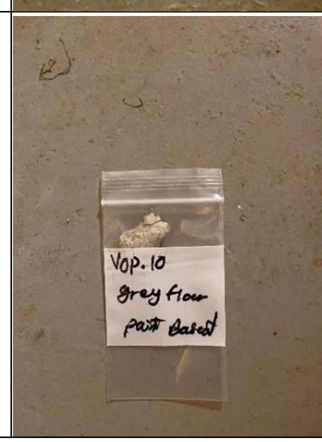
Based on the age of the buildings, lead based paints were sampled. A total of ten (10) painted surface coatings were sampled within the building and sent to the laboratory for analysis for lead in paint.

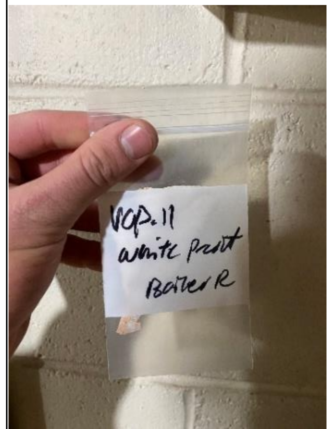
Based on the assessment findings, three (3) of the paint layers sampled exceeded CEPA guidelines of 0.06 percent by weight for surface coating materials. Exceedances are noted in bold red in table below.

Laboratory analysis certificate is presented in Appendix II.

Sample No.:	Colour / Substrate Description	Location	Lead Content (%)	Photo
OVP-01	Brown paint / Window trims	Exterior	**0.16**	
OVP-02	Yellow paint / Walls	Throughout interior	0.022	

OVP-03	White paint / Door trims	Throughout interior	<0.0080	
OVP-04	Grey paint / Door trims	Throughout interior	<0.0069	
OVP-05	White paint / Drywall	Throughout interior	0.011	
OVP-06	Teal wall paint / concrete	Garage	0.043	

OVP-07	Red paint / Concrete floor	Fridge room	<0.0062	
OVP-08	Green paint / Door trim	Fridge room	<0.0034	
OVP-09	Green paint / Concrete floor	Basement	**0.084**	
OVP-10	Grey paint / Concrete floor	Basement	**0.13**	

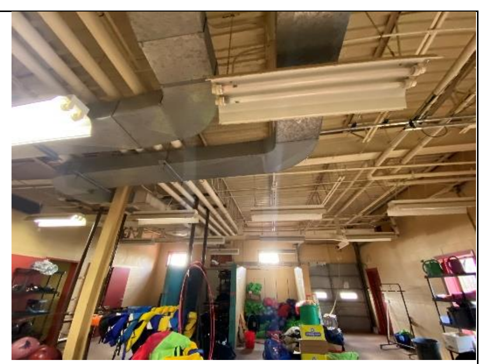
OVP-11	White paint / Brick and concrete	Boiler room	0.055	
OVP-12	Yellow paint / Brick walls	Basement	<0.0080	

4.3 POLYCHLORINATED BIPHENYLS (PCB's)

Newer in-lay light fixtures were observed in the corridors of the building. Other lights present were non ballast containing. 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 – Sylvania Lamp Ballasts – Serial No.: B232IUNVHP-B. Ballast marked as No PCB's. Photo 2 – Typical light fixtures for these ballasts.	 Photo 1	 Photo 2

4.3.2 Transformers

Electrical transformers were not found or reported during the assessment.

4.4 SILICA

Crystalline silica is a presumed component of the following materials:

- Poured or pre-cast concrete (main level floors; basement foundation and floors)
- Interior concrete block walls
- Exterior brick and mortar

4.5 MERCURY

4.5.1 Lighting

Mercury vapour is present in fluorescent lamp tubes.

4.5.2 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. 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.

Other asbestos containing floor coverings may be present under existing newer existing floors as identified in rooms 106, 108 and 109. Therefore, if demolition of major construction is required, have destructive testing completed to evaluate for additional ACM floorings.

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
O'Leary Veterinary Clinic

Hazardous Materials	*Description / Comments*	*Safe Handling Requirements*	*Disposal Requirements*
ASBESTOS	Asbestos containing floor coverings. (vinyl sheet floorings) Asbestos containing drywall joint compound Asbestos containing hardboard cladding on exterior perimeter of the building	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
LEAD PAINT	Brown paint on exterior window trim Green paint on basement floor Grey paint on basement floor	TDG – manifest Trained personnel in the safe handling of lead coated surfaces and all other pertinent sections of the *Occupational Health and Safety Act* R.S.P.E.I	Regulatory approval from PEIELJ Additional analysis required for TCLP for disposal purposes, if required.
SILICA	Presumed in the following building components: • Poured or pre-cast concrete (main level floors; basement foundation and floors) • Interior concrete block walls • Exterior brick 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
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.

6 ON-GOING MANAGEMENT & MAINTENANCE

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

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

6.1 Asbestos

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

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

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

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

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

6.2 Lead

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

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

6.3 Silica

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

6.5 Mercury

Do not break lamps or separate liquid mercury from components. Recycle and reclaim mercury from fluorescent lamps and thermostats when taken out of service. Mercury is classified as a hazardous waste and must be disposed of in accordance with applicable regulations.

7 DISCLAIMER

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

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

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

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

Larry G. Koughan, CET, CRSP
Senior Project Consultant

ALL-TECH
ENVIRONMENTAL SERVICES LIMITED

CANADIAN SOCIETY OF SAFETY ENGINEERING
MEMBER

APPENDIX I

Laboratory Certificate of Analysis – Asbestos PLM Samples

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

CERTIFICATE OF ANALYSIS

Client:	ALL-TECH Environmental Services Limited	Report Date:	12/20/2022
	20 Duke St.,Suite 109	Report No.:	674525 - PLM
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
		Project No.:	PE22400
Client:	ALL131		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540120
Client No.: OV-01
Analyst Observation: White/Grey Ceiling Tile
Client Description: 24x48 Fissure Ceiling Tile
Location: Main Lobby
Facility:

Percent Asbestos:
PC 0.25 *Chrysotile*
PC 0.25 *Amosite*

Percent Non-Asbestos Fibrous Material:
45 Cellulose
15 Fibrous Glass

Percent Non-Fibrous Material:
39.5

Lab No.: 7540121
Client No.: OV-02
Analyst Observation: White/Grey Joint Compound
Client Description: Drywall Joint Compound
Location: Main Lobby
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Layers not separable.

Lab No.: 7540122
Client No.: OV-03
Analyst Observation: Grey Floor Tile
Client Description: Blue Vinyl Sheet Flooring
Location: Room Beside Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7540122(L2)
Client No.: OV-03
Analyst Observation: Tan Mastic
Client Description: Blue Vinyl Sheet Flooring
Location: Room Beside Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7540122(L3)
Client No.: OV-03
Analyst Observation: Grey Leveling Compound
Client Description: Blue Vinyl Sheet Flooring
Location: Room Beside Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
3 Cellulose
1 Hair

Percent Non-Fibrous Material:
96

Lab No.: 7540123
Client No.: OV-04
Analyst Observation: White/Grey Ceiling Tile
Client Description: 24x48 Ceiling Tile
Location: Kitchen
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
45 Cellulose
20 Fibrous Glass

Percent Non-Fibrous Material:
35

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

Date Received:	12/14/2022	Approved By:	Frank E. Ehrenfeld, III
Date Analyzed:	12/20/2022		Laboratory Director
Signature:			
Analyst:	David Hayes		

iATL INTERNATIONAL ASBESTOS TESTING LABORATORIES

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:	12/20/2022
	20 Duke St.,Suite 109	Report No.:	674525 - PLM
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540124
Client No.: OV-05
Analyst Observation: White/Grey Joint Compound
Client Description: Drywall Joint Compound
Location: Kitchen
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
***PC 1.4** Chrysotile*	None Detected	98.6

Layers not separable.

Lab No.: 7540125
Client No.: OV-06
Analyst Observation: Tan Vinyl Sheet Flooring
Client Description: Yellow Vinyl Sheet Flooring
Location: Under Kitchen Cabinet
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
***20** Chrysotile*	None Detected	80

Mastic not analyzed, attached to ACM

Lab No.: 7540126
Client No.: OV-07
Analyst Observation: White Drywall
Client Description: Drywall Joint Compound
Location: Tire Room 102
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
None Detected	2 Cellulose	98

Lab No.: 7540126(L2)
Client No.: OV-07
Analyst Observation: White Joint Compound
Client Description: Drywall Joint Compound
Location: Tire Room 102
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
***PC 0.75** Chrysotile*	None Detected	99.25

Lab No.: 7540127
Client No.: OV-08
Analyst Observation: White Drywall
Client Description: Drywall Joint Compound
Location: Back Corridor
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
None Detected	1 Cellulose	99

Lab No.: 7540127(L2)
Client No.: OV-08
Analyst Observation: White Joint Compound
Client Description: Drywall Joint Compound
Location: Back Corridor
Facility:

Percent Asbestos:	Percent Non-Asbestos Fibrous Material:	Percent Non-Fibrous Material:
***PC 1.3** Chrysotile*	None Detected	98.7

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

Date Received:	12/14/2022	Approved By:	Frank Ehrenfeld
Date Analyzed:	12/20/2022		Frank E. Ehrenfeld, III
Signature:	David Hayes		Laboratory Director
Analyst:	David Hayes		

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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	Report Date:	12/20/2022
		Report No.:	674525 - PLM
		Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540128
Client No.: OV-09
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Fridge Room 112
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; 5 Cellulose
Percent Non-Fibrous Material: 85

Lab No.: 7540129
Client No.: OV-10
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Kitchen
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 15 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 85

Lab No.: 7540130
Client No.: OV-11
Analyst Observation: White/Grey Ceiling Tile
Client Description: 24x48 Ceiling Tile
Location: Back Corridor
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 70 Cellulose; 1 Fibrous Glass
Percent Non-Fibrous Material: 29

Lab No.: 7540131
Client No.: OV-12
Analyst Observation: White/Tan Ceiling Tile
Client Description: 12x48 Flat Ceiling Tile
Location: Room 114
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 90 Cellulose
Percent Non-Fibrous Material: 10

Lab No.: 7540132
Client No.: OV-13
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Garage
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 90

Lab No.: 7540133
Client No.: OV-14
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Garage
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 90

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: David Hayes
Analyst: David Hayes

Approved By: Frank E. Ehrenfeld
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	Report Date:	12/20/2022
		Report No.:	674525 - PLM
		Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540134
Client No.: OV-15
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Garage
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 90

Lab No.: 7540135
Client No.: OV-16
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Basement Main Area
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 90

Lab No.: 7540136
Client No.: OV-17
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Basement Main Area
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass; Trace Cellulose
Percent Non-Fibrous Material: 90

Lab No.: 7540137
Client No.: OV-18
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Hot Water Tank Room
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Cellulose; 10 Fibrous Glass
Percent Non-Fibrous Material: 80

Lab No.: 7540138
Client No.: OV-19
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Hot Water Tank Room
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Cellulose; 10 Fibrous Glass
Percent Non-Fibrous Material: 80

Lab No.: 7540139
Client No.: OV-20
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Hot Water Tank Room
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Cellulose; 10 Fibrous Glass
Percent Non-Fibrous Material: 80

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: David Hayes
Analyst: David Hayes

Approved By: Frank E. Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

iATL International Asbestos Testing Laboratories

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: 12/20/2022
Report No.: 674525 - PLM
Project: O'Leary Vet Clinic
Project No.: PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540140
Client No.: OV-21
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Boiler
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 10 Cellulose, 10 Fibrous Glass
Percent Non-Fibrous Material: 80

Lab No.: 7540141
Client No.: OV-22
Analyst Observation: Brown Insulation
Client Description: Spray Fire Proofing
Location: Boiler
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 90 Cellulose
Percent Non-Fibrous Material: 10

Lab No.: 7540142
Client No.: OV-23
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Boiler
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 5 Cellulose, 5 Fibrous Glass
Percent Non-Fibrous Material: 90

Lab No.: 7540143
Client No.: OV-24
Analyst Observation: Grey Insulation
Client Description: Pipe Parging
Location: Boiler
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: 15 Cellulose, 5 Fibrous Glass
Percent Non-Fibrous Material: 80

Lab No.: 7540144
Client No.: OV-25
Analyst Observation: Red Floor Tile
Client Description: Red Vinyl Sheet Flooring
Location: Main Lobby
Facility:

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

Lab No.: 7540144(L2)
Client No.: OV-25
Analyst Observation: Off-White Mastic
Client Description: Red Vinyl Sheet Flooring
Location: Main Lobby
Facility:

Percent Asbestos: *None Detected*
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 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: David Hayes
Analyst: David Hayes

Approved By: Frank E. Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

9000 Commerce Parkway Suite B
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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	Report Date:	12/20/2022
		Report No.:	674525 - PLM
		Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7540144(L3)
Client No.: OV-25
Analyst Observation: Red/Brown Vinyl Sheet Flooring
Client Description: Red Vinyl Sheet Flooring
Location: Main Lobby
Facility:

Percent Asbestos: ***10 Chrysotile***
Percent Non-Asbestos Fibrous Material: 3 Cellulose
Percent Non-Fibrous Material: 87

Lab No.: 7540145
Client No.: OV-26
Analyst Observation: Dk Grey Cement Product
Client Description: Hard Board
Location: Outside Below Brick Wall
Facility:

Percent Asbestos: ***20 Chrysotile***
Percent Non-Asbestos Fibrous Material: None Detected
Percent Non-Fibrous Material: 80

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: David Hayes
Analyst: David Hayes

Approved By: Frank E. Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

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CERTIFICATE OF ANALYSIS

Client:	ALL-TECH Environmental Services Limited	Report Date:	12/20/2022
	20 Duke St.,Suite 109	Report No.:	674525 - PLM
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
		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.

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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.:	674525 - PLM
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
		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.

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CERTIFICATE OF ANALYSIS

Client:	ALL-TECH Environmental Services Limited 20 Duke St.,Suite 109 Bedford NS B4A 2Z5	Report Date:	12/20/2022
		Report No.:	674525 - PLM
		Project:	O'Leary Vet Clinic
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.
**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

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

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other 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.

APPENDIX II

Laboratory Certificate of Analysis – Lead Paint Samples

iATL INTERNATIONAL ASBESTOS TESTING LABORATORIES

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:	12/21/2022
	20 Duke St.,Suite 109	Report No.:	674510 - Lead Paint
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
		Project No.:	PE22400
Client:	ALL131		

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7539849 **Description:** Brown Window Paint **Result (% by Weight):** 0.16
Client No.: OVP-01 **Location:** Exterior **Result (ppm):** 1600
Comments:

Lab No.: 7539850 **Description:** Yellow Wall Paint **Result (% by Weight):** 0.022
Client No.: OVP-02 **Location:** Inside **Result (ppm):** 220
Comments:

Lab No.: 7539851 **Description:** White Paint **Result (% by Weight):** <0.0080
Client No.: OVP-03 **Location:** Door Trims **Result (ppm):** <80
Comments: ***

Lab No.: 7539852 **Description:** Grey Paint **Result (% by Weight):** <0.0069
Client No.: OVP-04 **Location:** Door Trims **Result (ppm):** <69
Comments: ***

Lab No.: 7539853 **Description:** White Paint **Result (% by Weight):** 0.011
Client No.: OVP-05 **Location:** Drywall **Result (ppm):** 110
Comments:

Lab No.: 7539854 **Description:** Teal Concrete Wall Paint **Result (% by Weight):** 0.043
Client No.: OVP-06 **Location:** Garage **Result (ppm):** 430
Comments:

Lab No.: 7539855 **Description:** Red Paint Floor **Result (% by Weight):** <0.0062
Client No.: OVP-07 **Location:** Fridge Rm **Result (ppm):** <62
Comments:

Lab No.: 7539856 **Description:** Green Door Trim **Result (% by Weight):** <0.0034
Client No.: OVP-08 **Location:** Fridge Rm **Result (ppm):** <34
Comments: ***

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

Date Received: 12/14/2022
Date Analyzed: 12/21/2022
Signature: Chad Shaffer
Analyst: Chad Shaffer

Approved By: Frank E. Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

iATL INTERNATIONAL ASBESTOS TESTING LABORATORIES

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CERTIFICATE OF ANALYSIS

Client:	ALL-TECH Environmental Services Limited	Report Date:	12/21/2022
	20 Duke St.,Suite 109	Report No.:	674510 - Lead Paint
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

LEAD PAINT SAMPLE ANALYSIS SUMMARY

Lab No.: 7539857
Client No.: OVP-09
Description: Green Floor Paint
Location: Basement
Result (% by Weight): 0.084
Result (ppm): 840
Comments:

Lab No.: 7539858
Client No.: OVP-10
Description: Grey Floor Paint
Location: Basement
Result (% by Weight): 0.13
Result (ppm): 1300
Comments:

Lab No.: 7539859
Client No.: OVP-11
Description: White Paint
Location: Boiler Rm
Result (% by Weight): 0.055
Result (ppm): 550
Comments:

Lab No.: 7539860
Client No.: OVP-12
Description: Yellow Paint
Location: Basement
Result (% by Weight): <0.0080
Result (ppm): <80
Comments:

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

Date Received: 12/14/2022
Date Analyzed: 12/21/2022
Signature: Chad Shaffer
Analyst: Chad Shaffer

Approved By: Frank E. Ehrenfeld
Frank E. Ehrenfeld, III
Laboratory Director

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CERTIFICATE OF ANALYSIS

Client:	ALL-TECH Environmental Services Limited	Report Date:	12/21/2022
	20 Duke St.,Suite 109	Report No.:	674510 - Lead Paint
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
		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 in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

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

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

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

Information Pertinent to this Report:

Analysis by ASTM D3335-85a by AAS

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

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

Regulatory limit is 0.5% lead by weight (EPA/HUD guidelines). Recommend multiple sampling for all samples less than regulatory limit for confirmation.
All results are based on the samples as received at the lab. iATL assumes that appropriate sampling methods have been used and that the data upon which these results are based have been accurately supplied by the client.
Method Detection Limit (MDL) per EPA Method 40CFR Part 136 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

CERTIFICATE OF ANALYSIS

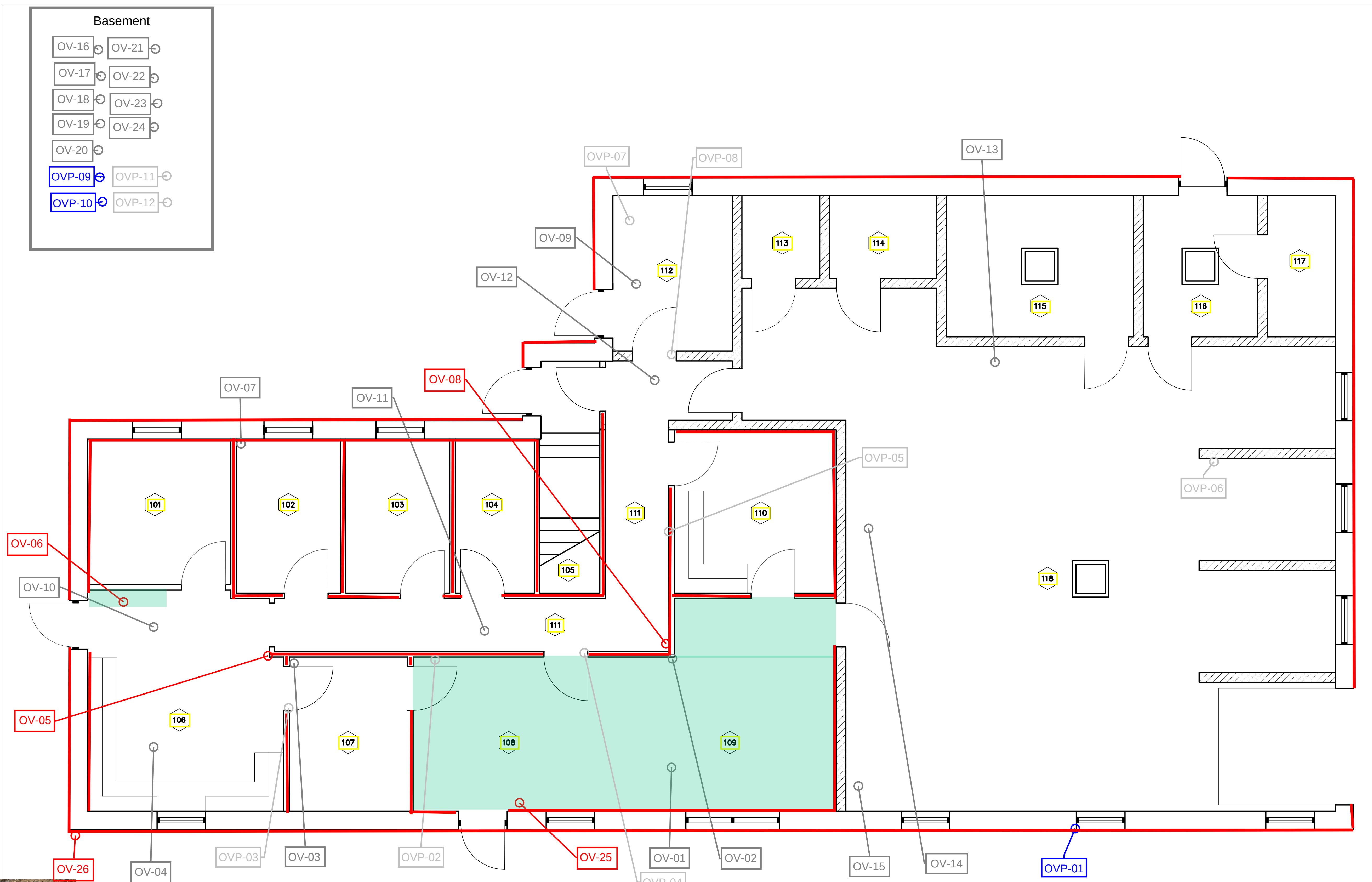
Client:	ALL-TECH Environmental Services Limited	Report Date:	12/21/2022
	20 Duke St.,Suite 109	Report No.:	674510 - Lead Paint
	Bedford NS B4A 2Z5	Project:	O'Leary Vet Clinic
Client:	ALL131	Project No.:	PE22400

* 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).

APPENDIX III

Site Drawings with sample locations and ACM locations



ACM transite panel around exterior perimeter

Public Works and Procurement Canada

Services publics et Approvisionnement Canada

ASBESTOS SURVEY BY

ALL-TECH ENVIRONMENTAL SERVICES LIMITED
162 TRIDER CRESCENT
DARTMOUTH, NOVA SCOTIA
B3B 1R6

ASBESTOS LEGEND

= CEILING
= FLOOR
= CEILING AND FLOOR
= UNSURVEYED AREA
A = APPLIANCE
M = MECHANICAL
P = PIPE MATERIAL
D = DUCT WORK
E = ELECTRICAL
= ACM WALL
= LEAD PAINT WALL
OV-00 = SAMPLE NUMBER ASBESTOS DETECTED
OV-00 = SAMPLE NUMBER NOT ASBESTOS DETECTED
OVP-00 = SAMPLE NUMBER LEAD DETECTED
OVP-00 = SAMPLE NUMBER NOT LEAD DETECTED

projet

PE22400
WEST PRINCE
VETERINARY CLINC
1622 O'LEARY RD
O'LEARY, PEI

Drawing | dessin

O'LEARY VET CLINC
LOWER FLOOR

Designed LK | concu
Date FEB_2023
Drawn AJH | dessine
Date MAR_2023

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

Scale 1 OF 1
Scale NOT TO SCALE
Revisions | Date

APPENDIX IV

Summary of ACM conditions report

O'Leary Veterinary Clinic - Summary of ACM Conditions Report (2022)

Room No.	Description	Sample No.	Material description	Asbestos Type & Content (%)	Estimated Volume or Area	Friable (F) Non-friable (NF)	Access	Condition	Action Code (refer to legend)	Photo
101	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
102	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
103	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
104	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
106	Kitchen	OV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
		OV-06	Yellow / tan vinyl sheet flooring	Chrysotile 20%	1.9 m2	F	A	Good	5	
107	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
108	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
		VOV-25	Red / brown vinyl sheet flooring (under existing floor)	Chrysotile 10%	17.6 m2	F	A	Good	5	

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
109	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
		OV-25	Red / brown vinyl sheet flooring (under existing floor)	Chrysotile 10%	21 m2	F	A	Good	5	
110	Office	VOV-05	Drywall joint compound	Chrysotile 1.4%	--	F	A	Good	5	
111	Corridor	OV-08	Drywall joint compound	Chrysotile 1.3%	--	F	A	Good	5	
NA	Exterior	OV-26	Transite hardboard	Chrysotile 20%	35.3 m2	NF	A	Fair	5	

*** All drywall areas treated as presumed asbestos containing or have additional testing completed in those areas at the time of planned work***

LEGEND

Sample Number Identifiers	
OV-##	actual sample number
VOV-##	visually identified same as this sample number

Units	
EA	Each
m	meters
m2	square metres
m3	cubic metres
PACM	presumed asbestos containing material

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

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

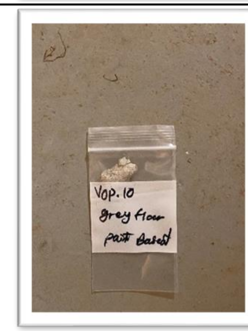
ACTION CODES			
1	Immediate Clean-up of Debris that is likely to be disturbed.	**4**	ACM repair
2	ACM Removal required for compliance.	**5**	Continued management and surveillance.
3	Proactive ACM Removal.		

APPENDIX V

Summary of other Hazardous Materials report

O'Leary Veterinary Clinic - Summary of Hazardous Materials Report (2022)

Lead Paint

Room No.	Location	Sample No.	Paint colour / substrate	Lead Content (%)	Comments	Photo
NA	Exterior	OVP-01	Brown paint / Exterior windows	**0.16**	All like painted exterior windows to be treated as lead based paints	
NA	Basement	OVP-09	Green paint / Basement floor	**0.84**		
NA	Basement	OVP-10	Grey paint / Basement floor	**0.13**		

Silica					
Room No.	**Location**	**Sample No.**	**Material**	**Comments**	**Photo**
NA	Interior / exterior	NA	•Poured or pre-cast concrete (main level floors; basement foundation and floors) •Interior concrete block walls •Exterior brick and mortar