# HAZARDOUS MATERIALS SURVEY AND 2023 REASSESSMENT 62 TEMPLETON STREET, OTTAWA, ON



Project No.: Z2021102HZ / CCC-230252-00

Prepared for:

University of Ottawa

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Date:

X date, 2023

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# **REASSESSMENT SURVEY 2023**

This building is unoccupied and has been since the previous reassessment in 2022. There are no changes to the quantity, condition or location of any previously identified Hazardous Building Materials including asbestos.

# **EXECUTIVE SUMMARY**

McIntosh Perry Limited **(MPL)** was retained by the University of Ottawa, to complete a Hazardous Materials Survey for the residence building located at 62 Templeton Street in Ottawa, Ontario. The survey was conducted on September 9<sup>th</sup>, 2020. **This Reassessment Survey was conducted on x date, 2023.** 

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of polychlorinated biphenyls (PCBs), radioactive materials, ozone-depleting substances (ODSs), other halocarbons and mould.

Based on the assessment conducted by MPL, the following asbestos-containing materials (ACMs) were identified or suspected to be present in the building:

Material DescriptionFriable?LocationType of AsbestosTexture CoatYesSpecific Areas OnlyChrysotileTransite PanelNoSpecific Areas OnlyChrysotileBrick/Stone Mortar-Specific Areas OnlySuspected

**Table A: Summary of Asbestos-Containing Materials Identified** 

Note: Please refer to the complete report for specific details and recommendations.

All repairs or removal of ACMs must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos-containing waste must also be handled and disposed of according to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey should be assumed to contain asbestos until proven otherwise by analytical testing;

Sub-trades working with or in close proximity to asbestos-containing material should be informed of its presence;

Given that ACMs have been identified and will likely remain in place, an Asbestos Management Plan is therefore required, and an inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities.

Based on the assessment conducted by MPL, the following Designated Substances and Hazardous Materials were identified or suspected to be present in the building:

Table B: Summary of Designated Substances & Hazardous Materials Identified

Material Description	Location
Lead Paint	Throughout Building
Mercury Vapour	Specific Equipment
PCB's	Specific Equipment
Silica	Throughout Building
Ozone Depleted Substances	Specific Equipment
Above Ground Storage Tank	Specific Areas Only
Radioactive Materials	Specific Equipment

Note: Please refer to the complete report for specific details and recommendations.

Designated Substances area regulated under Ontario Regulation 490/09 — Designated Substances, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to Ontario Regulation 490/09, the following guidelines must also be adhered to when conducting work activities that involve disturbance of the above-mentioned materials:

- Guideline: Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour
- Guideline: Silica on Construction Projects issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.
- Environmental Abatement Council of Canada (EACC) Lead Abatement Guidelines.

Prior to any renovations or demolition activities within the building, designated substances and hazardous materials must be decommissioned by a licensed contractor such that they are contained and not released to the environment during decommissioning as per O. Reg. 347/09- made under the Environmental Protection Act.

Any suspect building materials encountered that were not assessed as part of this survey should be assumed to contain designated substances until proven otherwise by analytical testing.

This report should be made available to contractors tendering on any renovation or demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

This executive summary is not to be used alone. This report should be reviewed in its entirety.

McINTOSH PERRY iii

# McINTOSH PERRY

X date, 2023

**University of Ottawa** 

141 Louis-Pasteur Private Ottawa, Ontario K1N 1E3

Attention: Martine Bergeron, Senior Specialist, Occupational Health and Safety

Re: 62 Templeton Street in Ottawa, Ontario

Hazardous Materials Survey and 2023 Reassessment

McIntosh Perry Limited Reference No. Z2021102HZ / CCC-230252-00

# 1.0 INTRODUCTION

In accordance with your instructions, McIntosh Perry Limited (MPL) carried out a Hazardous Materials Survey and 2023 Reassessment at the residence building located at 62 Templeton Street in Ottawa, Ontario. The site is situated on the east side of the intersection of Henderson Ave and Templeton St. The survey of the building was conducted on September 9<sup>th</sup>, 2020. **The Reassessment Survey was conducted on x date, 2023.** 

via email: martine.bergeron@uottawa.ca

The purpose of the survey was to determine the presence of building materials containing Designated Substances and other hazardous materials, as defined under the Ontario Occupational Health and Safety Act. Designated Substances are eleven chemical agents prescribed under Ontario Regulation 490/09. In addition, a visual assessment was conducted for the presence of PCBs, radioactive materials, ODSs, other halocarbons and mould.

MPL completed the following,

- Visual review of the building to identify materials which could contain Designated Substances and hazardous materials;
- Bulk sampling and analysis of building materials suspected of containing asbestos (if required);
- Bulk sampling and analysis of representative paints and finishes suspected of containing lead (if required);
- Review of previously completed Hazardous Materials Survey(s) and historical building record(s); and,
- Recommendations for appropriate action where required.

# 2.0 PROPERTY DESCRIPTION

The subject building is a bungalow, with a finished basement and a converted attic. The subject building was constructed in 1930 and covers approximately 2,906 square feet. The subject building was observed to be constructed with a concrete foundation, wood frame construction with aluminium siding and metal roof. The interior walls were made of wood, drywall and plaster. The floors were generally a combination of vinyl floor tiles, hardwood flooring, ceramic tiles and some carpeted areas.

# 3.0 FINDINGS & RECOMMENDATIONS

# **Designated Substances**

# 3.1 Asbestos

# **Findings**

A total of thirty-three (33) bulk samples were collected during the survey and sent to an accredited laboratory for analysis. A summary of potential asbestos-containing samples collected along with the sample location, type and friability are presented in Table 1.

The Laboratory Certificates of Analysis for asbestos are included in Appendix C.

<u>Table 1:</u>
Asbestos Laboratory Results

Sample ID	Location	Material	Type and Content	Friability
BS 1.1	1 <sup>st</sup> floor – Main Room	Ceiling Texture Coat	None Detected	N/A
BS 1.2	1 <sup>st</sup> floor – Main Room	Ceiling Texture Coat	None Detected	N/A
BS 1.3	1 <sup>st</sup> floor – Main Room	Ceiling Texture Coat	None Detected	N/A
BS 2.1	Pacamont Stairs	VFT (12"x12"-Grey, White and Black)	None Detected	N/A
D3 2.1	Basement Stairs	Mastic (Yellow/Clear)	None Detected	N/A
DC 2.2	Basement Stairs	VFT (12"x12"-Grey, White and Black)	None Detected	N/A
BS 2.2		Mastic (Yellow/Clear)	None Detected	N/A
DC 2.2	Basement Stairs	VFT (12"x12"-Grey, White and Black)	None Detected	N/A
BS 2.3		Mastic (Yellow/Clear)	None Detected	N/A
BS 3.1	Basement kitchen	Blue/Green Tile Grout (Beige)	None Detected	N/A
DC 2.2	2.2 Bereit Hilling	Blue/Green Tile Grout (Beige)	None Detected	N/A
BS 3.2	Basement kitchen	Mortar (Grey)	None Detected	N/A
BS 3.3	Basement kitchen	Blue/Green Tile Grout (White)	None Detected	N/A
BS 4.1	Basement kitchen	White Tile Grout (Beige)	None Detected	N/A
BS 4.2	Basement kitchen	White Tile Grout (Beige)	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 4.3	Basement kitchen	White Tile Grout (White)	None Detected	N/A
BS 5.1	Basement hallway	Ceiling Texture Coat	None Detected	N/A
BS 5.2	Basement hallway	Ceiling Texture Coat	None Detected	N/A
BS 5.3	Basement hallway	Ceiling Texture Coat	None Detected	N/A
	Basement	VFT (12"x12"- Brown)	2% Chrysotile	Non- Friable
BS 6.1	Basement	Mastic (Tan)	None Detected	N/A
	Basement	Mastic (Yellow)	None Detected	N/A
			Positive Stop –	Non-
	Basement	VFT (12"x12"- Brown)	Not Analyzed	Friable
BS 6.2	Basement	Mastic (Tan)	None Detected	N/A
	Basement	Mastic (Yellow)	None Detected	N/A
		VET (42", 42", D )	Positive Stop –	Non-
	Basement	VFT (12"x12"- Brown)	Not Analyzed	Friable
BS 6.3	Basement	Mastic (Tan)	None Detected	N/A
	Basement	Mastic (Yellow)	None Detected	N/A
	Basement – Front Room	VSF (Grey/Brown)	None Detected	N/A
BS 7.1	Basement – Front Room	Mastic (Yellow)	None Detected	N/A
DC 7.3	Basement – Front Room	VSF (Grey/Brown)	None Detected	N/A
BS 7.2	Basement – Front Room	Mastic (Yellow)	None Detected	N/A
DC 7.2	Basement – Front Room	VSF (Grey/Brown)	None Detected	N/A
BS 7.3	Basement – Front Room	Mastic (Yellow)	None Detected	N/A
BS 8.1	Front Entrance	Drywall Joint Compound	None Detected	N/A
BS 8.2	Front Entrance	Drywall Joint Compound	None Detected	N/A
BS 8.3	First Floor - Bathroom	Drywall Joint Compound	None Detected	N/A
BS 8.4	Basement Stairs	Drywall Joint Compound	None Detected	N/A
BS 8.5	Basement Stairs	Drywall Joint Compound	None Detected	N/A
BS 9.1	2 <sup>nd</sup> floor - Stairs	Plaster	None Detected	N/A
DC 0 2	Basement – Laundry	Plaster (Skim Coat)	None Detected	N/A
BS 9.2	Room	Plaster (Base Coat)	None Detected	N/A
BS 9.3	Front Entrance	Plaster	None Detected	N/A
BS 9.4	Basement Hallway	Plaster	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 9.5	Basement – Laundry Room	Plaster	None Detected	N/A
BS 9.6	2 <sup>nd</sup> Floor - Stairs	Plaster	None Detected	N/A
BS 9.7	Basement - Hallway	Plaster	None Detected	N/A

N/A - Not Applicable;

Please refer to Appendix E – Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable), and recommended actions.

The following building materials (if present) were investigated for asbestos content:

# 3.1.1 Fireproofing

No fireproofing was observed throughout the subject building.

# 3.1.2 Mechanical Pipe Insulation

#### 3.1.2.1 Mechanical Pipe Straight Insulation

No mechanical pipe straight insulation was observed throughout the subject building.

#### 3.1.2.2 Mechanical Piping Elbows/Fittings Insulation

No mechanical pipe elbows/fittings insulation was observed throughout the subject building.

# 3.1.2.3 Mechanical Piping Hangers Insulation

No mechanical pipe hanger insulation was observed throughout the subject building.

#### 3.1.2.4 HVAC Duct Insulation

No HVAC duct insulation was observed throughout the subject building.

#### 3.1.2.5 Other Mechanical Insulation

No other mechanical insulation was observed throughout the subject building.

#### 3.1.3 Flexible Duct Connector

No flexible duct connectors were observed throughout the subject building.

#### 3.1.4 Heat Shield or Heat Shield Insulation

No heat shield insulation was observed throughout the subject building.

VFT - Vinyl Floor Tiles;

VSF- Vinyl Sheet Flooring;

Stop Positive – Material considered being asbestos-containing as per O. Reg. 278/05.

#### 3.1.5 Texture Finishes

Ceiling texture coat was observed on the 1<sup>st</sup> floor in the Main Room. The laboratory analytical results of texture coat samples collected indicate that this material does not contain asbestos.

Previously identified texture coat was observed on the basement ceiling. The laboratory analytical results indicate that this material contains **2% Chrysotile asbestos.** This material was since removed during flood remediation work done by Xpertek in October of 2020. However, a small quantity of remanent texture coat was observed on the basement ductwork and walls during the 2022 reassessment.

Since texture coat is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis until proven otherwise.

#### 3.1.6 Plaster

Ceiling/Wall plaster was observed throughout the subject building. The laboratory analytical results of the plaster samples collected indicate that this material does not contain asbestos.

#### 3.1.7 Grey Sheeting

No grey sheeting was observed throughout the subject building.

# 3.1.8 Drywall Joint Compound

Drywall joint compound was observed throughout the subject building. The laboratory analytical results indicate this material does not contain asbestos.

#### 3.1.9 Ceiling Tiles

No ceiling tiles were observed throughout the subject building.

#### 3.1.10 Vinyl Floor Tiles

Vinyl floor tiles were observed and sampled within the subject building as follows:

- Vinyl floor tiles (12"x12"-Brown) were observed and sampled in the basement. The laboratory analytical results of the vinyl floor tile samples collected indicate that this material contains 2% Chrysotile asbestos. The associated mastic (Tan and Yellow) was determined not to contain asbestos. This material was since removed during flood remediation work done by Xpertek in October of 2020.
- Vinyl floor tiles (12"x12"-Grey, White and Black) were observed and sampled in the basement stairs. The laboratory analytical results of vinyl floor tile samples collected indicate that this material does not contain asbestos. The associated mastic (Yellow/Clear) was also determined not to contain asbestos.

# 3.1.11 Vinyl Sheet Flooring

Vinyl sheet flooring (Grey/Brown) was observed and sampled in the basement front room. The laboratory analytical results of the samples collected indicate that this material does not contain asbestos. The associated mastic (Yellow) was also determined not to contain asbestos.

#### 3.1.12 Brick/Stone Mortar

To avoid damage and compromising the integrity of brick/stone mortar, no bulk samples of the roofing materials were collected. Prior to removal and/or replacement, brick/stone mortar should be examined and tested for asbestos content. Brick/stone mortar should be considered to contain asbestos until bulk samples and analysis until proven otherwise.

# 3.1.13 Parquet Flooring

No parquet flooring was observed throughout the subject building.

#### 3.1.14 Concrete Block Mortar

No concrete block mortar was observed throughout the subject building.

#### 3.1.15 Ceramic Wall / Floor Tile Grout

Ceramic floor tile grout (beige/white) associated with the blue and green tiles were observed and sampled in the basement kitchen. The laboratory analytical results of the ceramic floor tile grout samples collected indicate that this material does not contain asbestos. The associated mortar was also determined not to contain asbestos.

Ceramic floor tile grout (beige/white) associated with the white tiles were observed and sampled in the basement kitchen. The laboratory analytical results of the ceramic floor tile grout samples collected indicate that this material does not contain asbestos. The associated mortar was also determined not to contain asbestos.

#### 3.1.16 Transite (Asbestos Cement)

No transite materials were observed throughout the subject building.

# 3.1.17 Caulking

No caulking materials were observed throughout the subject building.

# 3.1.18 Cementitious Coating

No cementitious coating finishes were observed throughout the subject building.

#### 3.1.19 Glazing

No glazing materials suspected of containing asbestos were observed throughout the subject building.

#### 3.1.20 Fire Doors

No fire doors were observed within the subject building.

#### 3.1.21 Roofing Material

To avoid damage and compromising the integrity of the roofing material, no bulk samples of the roofing materials were collected. Prior to removal and/or replacement, roofing materials should be examined and tested for asbestos content. Roofing materials should be considered to contain asbestos until bulk samples and analysis until proven otherwise.

#### **Recommendations**

- Materials identified to contain asbestos that are in good condition and do not pose a risk to workers or
  occupants can be managed in place. Prior to renovation/demolition activities that may disturb the
  ACMs, these materials must be removed following appropriate Type 1/2/3 asbestos abatement work
  procedures as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg. 347;
- Please refer to Appendix E Asbestos-Containing Materials Checklist for material conditions, quantities (where applicable), and recommended actions;
- Prior to renovation/demolition of materials which are assumed to be asbestos-containing (suspect
  materials which were not sampled, i.e., roofing materials and brick/stone mortar), these materials
  must either be tested for asbestos content or removed following appropriate asbestos abatement work
  procedures (Type 1/2/3) as detailed in O. Reg. 278/05 and disposed of as asbestos waste under O. Reg.
  347;
- All repairs or removal of asbestos-containing materials must be conducted according to Ontario Regulation 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations - made under the Occupational Health and Safety Act. Asbestos-containing waste must also be handled and disposed of according to Ontario Regulation 347/90 as amended – made under the Environmental Protection Act. Any suspect building materials encountered that were not assessed as part of this survey should be assumed to contain asbestos until proven otherwise by analytical testing;
- Sub-trades working with or in close proximity to asbestos-containing material should be informed of its presence; and
- Given that ACMs have been identified and will likely remain in place, an Asbestos Management Plan is
  therefore required and an inventory of ACMs must be kept on site. All ACMs must be routinely
  inspected to ensure no damage has occurred, and the inventory must be updated once in each 12month period and as may be required based on expected changing site conditions, abatement and/or
  renovation activities.

# **3.2** Lead

**Findings** 

#### 3.2.1 Paint Finishes

A total of two (2) paint samples from the subject building were collected and analyzed for lead content. Results of bulk sampling testing, including testing previously completed by others, are summarized in Table 2 and the laboratory certificate of analysis can be found in Appendix C.

<u>Table 2:</u>
Lead Sampling Locations and Laboratory Results

Sample I.D.	Location	Material	Colour	Lead Concentration Weight by Conc. (%)			
PB1	Second Floor Kitchen	Wall Paint	White	<0.0080			
PB2	Basement Laundry Room	Wall Paint	Off-White	0.51			
	Previously Identified Lead Paint						
246-1-LBP-	Exterior	Door, Roof, Window	Green	0.22			
050907-01	Exterior	and Door Frames	Green	0.22			
246-1-LBP-	First Floor Kitchen	Walls and Cabinets	White	0.03			
050907-02	FIISt Floor Kitchell	vvalis and Cabinets	vviiite	0.03			
246-B-LBP-	Basement kitchen	Walls, Doors and	White	0.14			
050907-03	basement kitchen	Frames	vviiite	0.14			
246-B-LBP-	Laundry Boom	Walls and Shelves	Agua Pluo	0.56			
050907-04	Laundry Room	vvalis aliu sileives	Aqua Blue	0.56			
246-B-LBP-	Laundry Boom	Concrete	Yellow	0.04			
050907-05	Laundry Room	Concrete	Tellow	0.04			
246-1-LBP-	Side Entrance	Walls and Frames	Beige	<0.01			
050907-06	Side Elitratice	vvalis aliu Frailles	Deige	<0.01			

The paint finishes highlighted in blue in the above table were determined to contain low concentrations of lead which are less than or equal to 0.1%. These paint finishes were observed to be in good condition, except for select areas which were observed in poor condition.

The paint finishes highlighted in pink in the above table are considered lead-containing paints or surface coatings with concentrations greater than 0.1% lead by weight. These paint finishes were observed to be in good condition, except for select areas which were observed in poor condition.

All remaining paints tested were below the laboratory limit of detection for lead. However, all other paints throughout the subject building that are not mentioned in this report must be considered lead-containing unless sampling and analysis prove otherwise.

The Laboratory Certificate of Analysis for the paint sample is also included in Appendix C.

#### 3.2.2 Battery Packs

No battery packs were identified within the subject building.

Lead may also be present in the following materials in the building:

- Solder used on copper domestic water lines;
- Solder used in bell fittings for cast iron pipes;
- Solder used in electrical equipment;
- Ceramic tile glaze; and
- Concrete and mortar products, etc.

#### **Recommendations**

Paints identified to contain lead that are in poor condition must be immediately repaired and/or stabilized following a minimum Type 1/2 lead abatement procedures as per OMOL "Lead on Construction Project" dated April 2011.

Paints identified to contain lead that are in good condition and do not pose a risk to workers or occupants can be managed in place.

Detailed worker protection protocols are outlined in the OMOL Guideline "Lead on Construction Projects" dated April 2011. Generally, the removal of lead-based paint with the use of a chemical gel or paste or a power tool equipped with a HEPA filter is considered a Type 1 operation. The removal of lead-based paint by scraping or sanding using non-powered hand tools is considered a Type 2 operation. The removal of lead-based paint using abrasive blasting or power tools without a HEPA filter is considered a Type 3 operation and requires the most stringent worker protection protocols (similar to asbestos). Furthermore, high temperature cutting or welding would also require Type 3 Operations under the Guideline for Lead on Construction Projects. If this type of work is required, it may be prudent to chemically remove the lead paint in selected locations prior to performing any high temperature cutting or welding.

All lead materials that are removed must follow the Ministry of Labour and Environmental Abatement Council of Canada Lead Guidelines.

Please refer to Appendix F —Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions should be taken as required during major renovations and demolition projects to ensure that workers' exposure levels to airborne lead do not exceed 0.05 mg/m3. This can be achieved by:

- o providing workers with proper training;
- o providing the workers with respiratory protection;
- o wetting the surface of the materials to prevent dust emissions; and,
- o providing workers with hygiene facilities to properly wash prior to exiting the work area.

Sub-trades working with or in close proximity to lead-based paint should be informed of its presence.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347/90 as amended — made under the Environmental Protection Act. Lead waste generated may also be subject to Leachate Criteria (Schedule 4) of this regulation.

# 3.3 Mercury

### **Findings**

#### 3.3.1 Thermostat Switches

No thermostats containing liquid mercury were observed throughout the subject building.

### 3.3.2 Fluorescent Light Tubes

Fluorescent light fixtures were observed throughout the subject building.

# 3.3.3 Pressure Gauges and Float Switches

No pressure gauges containing liquid mercury were identified throughout the subject building.

#### *Recommendations*

Please refer to Appendix F – Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions must be taken to prevent mercury liquid/vapours from becoming airborne during building demolition. Mercury exposure is regulated under Ontario Regulation 490/09, Designated Substances - made under the Occupational Health and Safety Act." Prior to renovations to the building, all mercury-containing fluorescent light tubes must be removed and stored in a safe, secure location and/or properly disposed of in accordance with R.R.O. 1990, Regulation 347 General – Waste Management, made under the Environmental Protection Act.

#### 3.4 Silica

# **Findings**

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles located throughout the structures. Free crystalline silica ( $\alpha$ -Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

#### **Recommendations**

Please refer to Appendix F –Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Precautions should be taken as required during major renovations and demolition projects on concrete (i.e. coring through concrete slabs, demolition of masonry, etc.) to ensure that workers' exposure levels to airborne silica do not exceed 0.05 mg/m<sup>3</sup>.

This can be achieved by:

- providing workers with proper training;
- providing the workers with respiratory protection;
- o wetting the surface of the materials to prevent dust emissions; and,
- o providing workers with facilities to properly wash prior to exiting the work area.

Demolition work that is likely to impact silica-containing materials should be carried out in accordance with the requirement detailed in the Ontario Ministry of Labour document entitled "Guideline: Silica on Construction Projects," dated April 2011.

# **Other Hazardous Materials**

# 3.5 Polychlorinated Biphenyls (PCBs)

#### **Findings**

# 3.5.1 Light Ballasts

The subject building is illuminated by fluorescent lights. At the time of the site visit, MPL could not safely assess the light ballasts. As such, PCB-containing ballasts may be present within the building.

#### 3.5.2 Transformers

No PCB-containing electrical transformers were observed throughout the subject building.

#### **Recommendations**

Please refer to Appendix F – Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

Prior to any renovations, all light ballasts containing or suspected of containing PCBs that will be affected by the work, must be decommissioned by a licensed contractor such that PCBs are contained and not released to the environment during decommissioning and properly disposed of.

# 3.6 Ozone Depleting Substances (ODSs) and Other Halocarbon

#### **Findings**

A visual assessment for equipment potentially containing ODSs and other halocarbons was conducted. Equipment containing ODSs or other halocarbons, such as refrigerators, were observed throughout the subject building.

#### **Recommendations**

Please refer to Appendix F – Hazardous Materials Checklist for equipment conditions, approximate quantities (where applicable), and recommended actions.

Under the management of a licensed contractor, equipment containing R-134a does not represent a significant threat to human health or the environment however, a licensed contractor must decommission equipment such that CFCs are contained and not released to the environment during servicing or operation.

# 3.7 Radioactive Materials

#### **Findings**

A visual assessment of the subject building was conducted to determine if any electrical components containing radioactive materials were present. Smoke detectors were observed throughout the subject building which contain small quantities of radioactive material.

#### *Recommendations*

Please refer to Appendix F – Hazardous Materials Checklist for equipment conditions, quantities (where applicable), and recommended actions.

The radioactive sources in smoke alarms are sealed and contained within a metal case inside the smoke detector and must not be damaged or tampered with. These materials do not pose a hazard as long as they remain contained and properly disposed of at the time of removal or replacement.

Prior to any renovations or demolition of the building, all equipment containing radioactive materials must be decommissioned by a licensed contractor such that radioactive materials are contained and not released to the environment during decommissioning as per O.Reg. 347/09.

# 3.8 Underground and Above Ground Storage Tanks (USTs and ASTs)

# **Findings**

A visual survey of the subject building was conducted to determine if any USTs and ASTs were present. One (1) diesel storage tank was observed in the basement of the subject building.

#### **Recommendations**

Prior to any demolition in the subject building, all USTs and ASTs equipment must be decommissioned by a licensed contractor such that any substances that are contained are not released into the environment during decommissioning.

# 3.9 Mould

# **Findings**

#### 3.9.1 Mould

A visual survey of the subject building was conducted to determine if any mould was present. Approximately 20 square feet of mould growth on the 1st Floor washroom ceiling was observed.

# 3.9.2 Water Damage

A visual survey of the subject building was conducted to determine if any water damage was present. No areas affected by water damage were observed throughout the subject building.

# Recommendations

Suspected mould-stained building materials were observed throughout the subject building and should be replaced/repaired as part of regular maintenance. The underlying cause of the suspected mould growth should be identified and repaired.

This report should be made available to contractors tendering on any renovation or demolition work. In turn, all contractors requesting tenders from subcontractors shall furnish this report to subcontractors.

# 4.0 GENERAL CONSIDERATIONS AND LIMITATIONS

The information presented in this report is based on information provided by others, direct visual observation made by personnel with **McIntosh Perry Limited (MPL)**, and the results of laboratory testing as identified herein.

It should be noted that there might be designated substances in locations not visible during our investigation. In the event such material is encountered during demolition operations in the building, this material should be tested and dealt with accordingly.

The findings detailed in this report are based upon the information available at the time of preparation of the report. No investigative method eliminates the possibility of obtaining imprecise or incomplete information. Professional judgement was exercised in gathering and analyzing the information obtained and in the formulation of our conclusions and recommendations.

MPL does not certify or warrant the environmental status of the property nor the building on the property.

Please note that the passage of time affects the information provided in the report. Environmental conditions of a site can change. Opinions relating to the site conditions are based upon information that existed at the time that the conclusions were formulated.

The client expressly agrees that it has entered into this agreement with MPL, both on its own behalf and as agent on behalf of its employees and principals.

The client expressly agrees that MPL's employees and principals shall have no personal liability to the client in respect of a claim, whether in contract, tort and/or any other cause of action in law. Accordingly, the client expressly agrees that it will bring no proceedings and take no action in any court of law against any of MPL's employees or principals in their personal capacity.

We trust that we have detailed our findings clearly and that we have satisfactorily addressed the scope of work you require at this time. In the event you wish us to review our findings with you, or require our services further in this regard, please do not hesitate to contact our office.

Yours truly,

#### **MCINTOSH PERRY LIMITED**

Jane Zhang, M.Sc.
Hazardous Materials, EH&S Technician
Hazardous Materials/ Environmental Health & Safety

John Tufts, B.Sc.
Project Manager
Hazardous Materials/ Environmental Health & Safety

# **APPENDIX A**

**Regulatory Requirements** 

# REGULATORY REQUIREMENTS

In Ontario, there is a total of eleven Designated Substances. These substances have been regulated under Ontario Regulation 490/09 — *Designated Substances*, made under the Ontario Health and Safety Act, which applies to controlling designated substances in the workplace.

In addition to the Ontario Regulation 490/09 noted above, the following were observed for this survey:

<u>Guideline: Lead on Construction Projects</u>, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour

<u>Guideline: Silica on Construction Projects</u> issued on April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

<u>The Occupational Health and Safety Act</u> (OHSA), R.S.O. 1990, c.O.1, s.30 (1) specifies that: "Before beginning a project, the owner shall determine whether any Designated Substances are present at the project site and shall prepare a list of all Designated Substances that are present at the site.

Section 30 of <u>The Act</u> requires that the list of Designated Substances be provided to prospective contractors and subcontractors who may do work on a site and come into contact at the site with Designated Substances.

The Ministry of Labour has designated the following substances:

Acrylonitrile

Arsenic

Asbestos

Benzene

Coke Oven Emissions

• Ethylene Oxide

Isocyanates

Lead

Mercury

Silica

Vinyl Chloride

Ontario Regulation 278/05 (O. Reg. 278/05), the Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations, made under the <u>Occupational Health and Safety Act (OHSA)</u>, requires owners of a building to identify asbestos-containing materials (ACMs) prior to potential disturbance of the materials.

In addition, an owner of a building is required to have an Asbestos Management Plan if ACMs (friable or non-friable) are present in the building and are to remain in place. An inventory of ACMs must be kept on site. All ACMs must be routinely inspected to ensure no damage has occurred, and the inventory must be updated once in each 12-month period and as may be required based on expected changing site conditions, abatement and/or renovation activities. Removal of all ACMs is required prior to building demolition.

In addition to the Designated Substances, the building was also surveyed for the presence of other hazardous materials such as polychlorinated biphenyls (PCBs), radioactive materials, ozone-depleting substances (ODSs), other halocarbons, and mould.

We understand that this survey has been conducted to comply with the regulatory requirements of Ontario Regulation 278/05.

# **APPENDIX B**

**Survey Methodology & Background Information** 

# **SURVEY METHODOLOGY**

For the purpose of this survey, not all Designated Substances or suspect hazardous materials were sampled. Selective sampling was carried out only for substances that were suspected to be present or those deemed to have a likely source of origin in the survey areas.

Materials that were homogeneous in nature and/or similar in appearance to other materials tested were considered to be of similar composition. The likelihood of ACMs being present in inaccessible areas, such as above gypsum board ceilings or behind gypsum wallboards, was determined by assessing the presence of asbestos-containing systems in adjacent areas. Equipment such as boilers, motors, blowers, electrical panels, fire doors, etc., must be de-energized or disassembled to examine internal components or materials. These items should be considered to contain hazardous materials until proven otherwise.

During the survey, representative samples of suspect building materials were collected and sent to CALA accredited independent laboratory for analysis. The Laboratory Certificate of Analysis is attached in Appendix C.

Other potential hazardous materials were identified by visual observation and/or by reviewing Material Safety Data Sheets (MSDS) and/or safety labels where available.

# **Investigated Areas**

The survey included all accessible areas and ceiling space within 62 Templeton Street, as required under our scope of work. No destructive investigations were performed as part of this survey. Photographs of the areas investigated can be found in Appendix D.

The assessment was directed at the interior structure and finishes of the building. It did not consider current or past owner or occupant articles throughout the building (i.e. contents, furniture, etc.) and did not report on possible contaminants in the soil under and surrounding the building or contents of vessels, drums, etc., that may be concealed.

# **Sampling and Assessment Methodologies**

Sampling was conducted as part of this assessment. Results for asbestos and lead samples can be found in the Findings & Recommendation Section 3.0.

A historical review of previous designated substance survey reports and abatement reports were examined as part of this survey. The reports are listed as follows,

Designated Substance Report by CM3 Environmental (dated October 2017, reference # TLW 1561);

#### **Asbestos**

#### **Background Information on Asbestos**

Asbestos is a generic name that has been given to a group of naturally occurring fibrous minerals. In the past, asbestos was commonly used as a component in building materials such as insulation, fireproofing and acoustic

or decorative panels. Although there are many types of asbestos, Ontario's three main forms of commercial importance are chrysotile, amosite and crocidolite.

An ACM is defined by O. Reg. 278/05 as a material that contains 0.5% or more asbestos by dry weight. ACMs are placed into two general classes, "friable" and "non-friable" ACMs. Friable ACMs are dry materials that can be crumbled, pulverized and reduced to powder by hand pressure. Typical friable ACMs include acoustical or decorative texture coats, fireproofing and thermal insulation. Non-friable ACMs are much more durable as they are held together by a binder such as cement, vinyl or asphalt. Typical non-friable ACMs include floor tiles, fire blankets, roofing materials and cementitious products such as wallboards, pipes or siding.

It has been recognized that hazardous situations may exist in buildings where ACMs are found. This is especially true where asbestos fibres may become airborne due to material ageing, physical damage, water damage or air movement.

In contrast, there is little reason for concern if the asbestos is in good condition, has not been damaged and is not in a location where it is likely to be disturbed.

# Asbestos Survey Methodology

The asbestos survey included identifying potential friable and non-friable asbestos-containing materials throughout the surveyed areas of the subject building.

The likelihood of ACMs being present in inaccessible areas, such as above gypsum wallboard ceilings and walls, was determined by assessing the presence of asbestos-containing materials in adjacent areas.

Fibreglass insulation was not submitted for analysis as it can be identified visually as non-asbestos material.

Building materials suspected of containing asbestos were identified, and representative sampling and laboratory testing of these materials was conducted. The number of bulk material samples collected from a homogeneous area was in accordance with Table 1. O. Reg. 278/05 s. 3 (3) below. Building materials suspected of containing asbestos were collected using wetting techniques and hand-sampling tools.

Table 1 - O. Reg. 278/05 s. 3(3): Minimum Asbestos Bulk Material Sample Requirements

Item	Type of material	Size of the area of homogeneous material	Minimum number of bulk material samples to be collected
	Surfacing material, including, without limitation, material	Less than 90 square metres	3
1.	that is applied to surfaces by spraying, troweling or otherwise, such as acoustical plaster on ceilings and	90 or more square metres but less than 450 square metres	5
	fireproofing materials on structural members	450 or more square metres	7
2.	Thermal insulation, except as described in item 3	any size	3

3.	Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
4.	Other material	Any size	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), confirming the presence and type of asbestos made by dispersion staining optical microscopy. This analytical procedure follows the U.S. Environmental Protection Agency Test Method EPA/600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials, June 1993.

EMSL Canada Inc. (EMSL), an independent laboratory, analyzed all bulk samples for asbestos content. EMSL is an independent laboratory accredited by the National Institute of Standards and Technology/National Voluntary Laboratory Accreditation (NIST/NVLAP) (Lab Code #200877-0).

Vinyl floor tiles were analyzed using the phase light microscopy (PLM) analysis method. However, given the composition of vinyl floor products, the PLM analysis method may be prone to yield false negative analytical results. Therefore, prior to removal or replacement, vinyl floor products previously identified to be negative should undergo additional analysis by Transmission Electron Microscopy (TEM) to confirm asbestos content, if any.

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility.

#### **Evaluation of ACMs Based on Condition**

In evaluating an ACM's condition, the following criteria were applied:

- **Good** Material shows no signs of damage and/or is encapsulated. ACM could remain in place until eventual building demolition or major renovation.
- Fair Material shows signs of minor damage (<5% damage) or otherwise near the end of useful life. This includes minor shrinking, cracking, delamination and/ or other damage. The material should be monitored closely and scheduled to be repaired, encapsulated or removed.
- **Poor** Damage is greater than 5% to any ACM material and is highly recommended to be removed, repaired or encapsulated.

Note: The above evaluation criteria were also applied to other hazardous materials. Please refer to the Asbestos and Hazardous Materials Checklist in Appendix E & F for further details.

#### Lead

# Background Information on Lead

Lead was a common additive in exterior and hard-wearing paint applications. Lead was used to prolong the paint's shelf life and increase its flexibility and durability to wear and weather. Acute exposure to lead by inhalation or ingestion may cause headaches, fatigue, nausea, abdominal cramps and joint pain. Chronic exposures can cause reduced hemoglobin production and reduced lifespan. It has also been known to impact

the body's central and peripheral nervous systems and brain function and has been linked to learning disabilities in children.

Currently, no regulatory limit in Ontario determines what lead concentration constitutes a "lead-containing material." On October 21, 2010, Health Canada, under the *Hazardous Products Act*, stated that the lead content in surface-coating materials, furniture, toys and other articles for children should not exceed 90 mg/kg (0.009%, 90 ppm). However, this is intended for the importation or sale of products within Canada. Therefore, this is not to be misconstrued as a limit established to define a lead-containing material or a limit with respect to lead on construction projects.

The Environmental Abatement Council of Canada (EACC) has also developed the "Lead Guideline for Construction, Renovation, Maintenance or Repair" dated October 2014, which discusses the classification, handling, disturbance and removal of lead-containing materials. For the purpose of this guideline, paints or surface coatings containing less than or equal to 0.1% lead by weight (1000 mg/kg or 1000 ppm) are considered low-level lead paints or surface coatings. If these materials (and their respective surfaces) are disturbed in a non-aggressive manner and performed using adequate dust control procedures, then worker protection from the inhalation of lead is not required.

Furthermore, paints or surface coatings containing greater than 0.1% lead by weight are considered lead-containing paints or surface coatings. If these materials (and their respective surfaces) are disturbed, appropriate lead abatement procedures must always be followed.

Exposure to lead-containing materials is regulated under Ontario Regulation 490/09, *Designated Substances* made under the Occupational Health and Safety Act. Care must be taken to prevent lead-containing particles from becoming airborne during the disturbance of lead-containing surfaces (i.e., during renovation or demolition projects). All lead abatement work must follow procedures outlined in the <u>Guideline Lead on Construction Projects</u>, issued in September 2004 (amended in April 2011) by the Occupational Health and Safety branch of the Ministry of Labour (Type 1-3). Similarly, the lead abatement work procedures outlined in the <u>EACC Lead Guideline for Construction, Renovation, Maintenance or Repair</u> (October 2014) may also be implemented (Class 1-3).

Lead has been used in solder on copper plumbing fixtures, lead conduit pipes, lead-calcium battery plates, ammunition, and nuclear and X-ray shielding devices. However, these materials were not sampled during this investigation but were noted where applicable.

Representative bulk samples of paint and finishes suspected of containing lead were collected to verify lead content in paints. Bulk samples were scraped down to the building base structure, with all possible layers present, placed in sealed plastic bags and labelled, and then submitted to an independent laboratory for analysis. Samples were treated with a dilute nitric acid sample digestion prior to filtration. The analysis utilized for lead detection in filtered samples was inductively coupled plasma optical emission spectrometry (ICP-OES).

# Mercury

# **Background Information on Mercury**

Mercury is known to cause poisoning in humans through inhaling vapours, ingesting contaminated materials or skin absorption through direct contact with the liquid.

Precautions must be taken to prevent mercury vapours from becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under the Revised O. Reg. 490/09 as amended – Regulation respecting Mercury – made under the Occupational Health and Safety Act; and under O. Reg. 558, which amended O. Reg. 347/90 (General - Waste Management), mercury is classified as a Schedule 2(b) Hazardous Waste Chemical. Its hazardous waste number is U151.

Mercury is found in thermostats, temperature and pressure gauges, fluorescent lamps and batteries. Mercury in products can be released to the environment through breakage or disposal at the end of a useful life. Improper disposal of these mercury products poses a health and environmental risk to everyone. In addition, the disposal of mercury-containing products can create wastes that are often classified as hazardous. Wastes that leach mercury in concentrations exceeding Ontario Regulation 347/90 (General - Waste Management) limits are also considered hazardous.

The mercury in thermostats switch contains approximately 3-4 grams of mercury in a glass ampoule, typically attached to a metal coil. Mercury-containing switches have been used in thermostats for over 40 years.

Mercury is an essential component in fluorescent lamps and HID lamps. The mercury is in a vapour form, and the phosphor coating is on the lamp tube. Estimates of the mercury content contained in compact, 4-foot, and 8-foot lamps are 10 mg, 23 mg, and 46 mg, respectively.

Most fluorescent lamps qualify as hazardous waste when removed from service and are prohibited from disposal in the solid waste stream. Fluorescent lamps would be classified as 146T on your facility Generator Registration Report under O. Reg. 347/90 - General Waste Management, as amended by O. Reg. 558/00. Under this regulation, if the leachate results exceed 0.1 milligrams of mercury per litre for a given waste, the facility must treat the waste as hazardous. Most fluorescent and HID lamps will exceed the leachate toxicity limit; therefore, these wastes must be registered and treated as hazardous waste or sent for recycling.

# **Silica**

# **Background Information on Silica**

Silica is expected to be present in building materials such as concrete, brick, mortar and ceramic tiles throughout the structures. Free crystalline silica (②-Quartz) may be a component in ceiling tiles and gypsum board. Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the building.

Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* - made under the Occupational Health and Safety Act.

# **Polychlorinated Biphenyls (PCBs)**

# **Background Information on PCBs**

Polychlorinated Biphenyls (PCBs) were commonly used as a dielectric insulating fluid in electrical equipment such as transformers, capacitors, and fluorescent and HID lamp ballasts. The production of PCBs in North America started in 1929 and was banned at the beginning of 1979. After 1981, no manufacturers produced fluorescent and HID lamps with PCB-containing ballasts.

PCBs are not designated substances under the Occupational Health and Safety Act.

# PCB Regulations (SOR/2008-273)

The PCB Regulations (the Regulations) set specific deadlines for ending the use of PCBs in concentrations at or above 50 mg/kg, eliminating all PCBs and equipment containing PCBs currently in storage and limiting the time PCBs can be stored before being destroyed. The Regulations also establish sound practices for the better management of the remaining PCBs in use (i.e. those with a content of less than 50 mg/kg) until their eventual elimination to prevent contamination of dielectric fluids and dispersion of PCBs in small quantities into other liquids.

# **Ozone Depleting Substances (ODSs) and Other Halocarbons**

# **Background Information on ODSs**

Within Ontario, the general use of ozone-depleting substances (ODSs) and other halocarbons is controlled through Regulation 463/10 of the <u>Environmental Protection Act</u>. The production of ODSs in hydrochlorofluorocarbons (HCFCs) and chlorofluorocarbons (CFCs) ceased in Canada in 1993 due to their ozone-depleting characteristics. The importation of CFCs into Canada ceased in 1997, and a total ban was placed on their use in 2010. The use of these materials is still permitted in existing equipment, but equipment must be serviced by a licensed contractor such that CFCs are contained and not released to the environment during servicing or operation.

#### **Radioactive Materials**

Two types of smoke detectors are common in buildings (residential, institutional, commercial, industrial, etc). Photoelectric-type smoke detectors detect smoke using an optical sensor, whereas ionization-type smoke detectors use an ionization chamber containing radioactive material. The ionization type is cheaper and is particularly common in older buildings. A typical modern detector contains about 1.0 microcurie of the radioactive element americium, a decrease from 3 microcurie in 1978. The use of sealed radioactive material sources in fire detection systems is still permitted and regulated by the Canadian Nuclear Safety Commission and the Canadian Nuclear Safety Act. The radioactive sources in smoke alarms are sealed and contained within a metal case inside the smoke detector and must not be damaged or tampered with.

# **Mould & Water Damage**

Mould growth inside buildings is due to excess moisture caused by leakages, condensation or capillary movement of water into the building. Toxic moulds such as *Stachybotrys chartarum* and some species of *Aspergillus* spp. are greenish-black, wet and slimy moulds that grow on soaking, wet cellulose-based materials. They are often found near water leaks or where drying is very slow and can form after flooding if insufficient cleanup and drying occur. They will generally not occur if materials are kept dry.

MPL conducted a general visual assessment for any apparent signs of visible mould and/or water damage. Based on our visual observations, the following guidelines were used in providing our recommendations for remedial action where required:

- Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation,
- The Canadian Construction Association (CCA) Mould Guidelines for the Canadian construction industry (CCA document 82-2004)
- Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines.

# **Other Designated Substances**

Select Designated Substances (acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, benzene, or vinyl chloride) are not expected to be present in the building in the matrix or sufficient quantities to cause an exceedance of Ministry of Labour exposure guidelines. As such, no sampling was conducted for these materials.

# **Vinyl Chloride**

Vinyl chloride (monomer) is likely to be present in stable form within poly vinyl-chloride (PVC) piping and conduits and as a component of interior finishes. Such building materials are not considered hazardous in their current matrix/composition.

# **Acrylonitrile**

Acrylonitrile or ACN (vinyl cyanide) is an explosive, flammable liquid used to manufacture acrylic fibres, rubber-like materials and pesticide fumigants. Acrylonitrile was not noted and would not be expected to be present in the project-specific area/surveyed area/subject building.

#### Arsenic

Arsenic is used in metallurgy for hardening copper, lead and alloys, in pigment production, in the manufacture of certain types of glass, in insecticides, fungicides and rodenticides, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing. Arsenic or arsenic compounds were not noted nor expected to be present in the project-specific area/surveyed area/subject building.

#### Benzene

Benzene or benzol is a colourless liquid. It is used as an intermediate in producing styrene, phenol, cyclohexane, and other organic chemicals and in manufacturing detergents, pesticides, solvents, and paint removers. It is also found in gasoline. Benzene may be present in stable form in roofing materials, paints and adhesives located throughout the subject building. Such building materials are not considered hazardous in their current matrix/composition.

#### **Coke Oven Emissions**

Coke oven emission is a benzene-soluble fraction of the total particulate matter of the substances emitted into the atmosphere from metallurgical coke ovens.

# **Ethylene Oxides**

Ethylene oxide is a colourless gas liquefying below 12°C. It is generally used as a fumigant and sterilizing agent for medical equipment. It is generally used as a fumigant and sterilizing agent for medical equipment.

# **Isocyanates**

Isocyanate compounds may be present to stabilize paint finishes, varnishes, polyurethane plastics, synthetic rubbers, foams and adhesives. Such building materials are not considered hazardous in their current matrix/composition.

To reduce the potential for exposure to workers or occupants, any suspect hazardous building material(s) not detailed within this survey due to inaccessibility and/or discovered during renovation/demolition activities must be appropriately assessed and/or tested prior to their disturbance.

# **APPENDIX C**

**Laboratory Analytical Reports** 



# EMSL Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6 Phone/Fax: (343) 882-6076 / (343) 882-6077 http://www.EMSL.com / ottawalab@EMSL.com

EMSL Canada Order 672001606
Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Lab Sample ID:

672001606-0005

Attn: Stefan Holik

McIntosh Perry Consulting Engineers Ltd

115 Walgreen Rd RR 3 Carp, ON K0A 1L0 Phone:

(613) 836-2184

Fax:

Collected: 9/ 9/2020 Received: 9/14/2020

Analyzed:

9/17/2020

Proj: University of Ottawa 0Z2-021101 (62 Templeton) (Ottawa DSS)

# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 1.1 Lab Sample ID: 672001606-0001

Sample Description: 62 Templeton/Texture coat - Main room - First floor

Analyzed Non-Asbestos TEST Date Color **Fibrous** Non-Fibrous Asbestos Comment Tan/White PLM 9/16/2020 100.0% 0.0% None Detected Lab Sample ID: 672001606-0002 Client Sample ID: 1.2

Sample Description: 62 Templeton/Texture coat - Main room - First floor

Analyzed Non-Asbestos
TEST Date Color Fibrous Non-Fibrous Asbestos Comment

PLM 9/16/2020 Tan/White 0.0% 100.0% None Detected

Client Sample ID: 1.3 Lab Sample ID: 672001606-0003

Sample Description: 62 Templeton/Texture coat - Main room - First floor

Analyzed Non-Asbestos **TEST** Date Fibrous Non-Fibrous Comment Color Asbestos PLM Inseparable paint / coating layer included in 9/17/2020 Tan/White 0.0% 100.0% None Detected analysis Lab Sample ID: 672001606-0004 2 1-VFT Client Sample ID:

Sample Description: 62 Templeton/VFT - Grey white and black - Basement stairs

Analyzed Non-Asbestos Comment **TEST** Non-Fibrous Date Color **Fibrous** Asbestos PLM 9/16/2020 Gray/Black 5.0% 95.0% None Detected Client Sample ID: 2.1-Mastic Lab Sample ID: 672001606-0004A

Sample Description: 62 Templeton/VFT - Grey white and black - Basement stairs

 Analyzed
 Non-Asbestos

 TEST
 Date
 Color
 Fibrous
 Non-Fibrous
 Asbestos
 Comment

 PLM
 9/16/2020
 Yellow/Clear
 0.0%
 100.0%
 None Detected

Client Sample ID: 2.2-VFT

Sample Description: 62 Templeton/VFT - Grey white and black - Basement stairs

Analyzed Non-Asbestos Date Fibrous Non-Fibrous Comment **TEST** Color **Asbestos** PLM 9/16/2020 Gray/Black 5.0% 95.0% None Detected Client Sample ID: Lab Sample ID: 672001606-0005A

Sample Description: 62 Templeton/VFT - Grey white and black - Basement stairs

 Analyzed
 Non-Asbestos

 TEST
 Date
 Color
 Fibrous
 Non-Fibrous
 Asbestos
 Comment

 PLM
 9/16/2020
 Yellow/Clear
 0.0%
 100.0%
 None Detected



# **EMSL** Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6 Phone/Fax: (343) 882-6076 / (343) 882-6077 http://www.EMSL.com / ottawalab@EMSL.com EMSL Canada Order 672001606 Customer ID: 55CTCS25B Customer PO: 0Z2-021101 Project ID: Ottawa DSS

# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

			7.000/11	00/110 1110111			
Client Sample ID:	2.3-VFT					Lab Sample ID:	672001606-0006
Sample Description:	62 Templeton/VFT - Grey	white and black - Bas	ement stairs				
	Analyzed		Non-	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray/White/Black	5.0%	95.0%	None Detected		
Client Sample ID:	2.3-Mastic					Lab Sample ID:	672001606-0006A
Sample Description:	62 Templeton/VFT - Grey	white and black - Bas	ement stairs				
	Analyzed			Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	3.1					Lab Sample ID:	672001606-0007
Sample Description:	62 Templeton/Grout - Blu	e/green tile - Basemen	nt kitchen				
	Analyzed		Non-	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Beige	0.0%	100.0%	None Detected		
Client Sample ID:	3.2-Grout					Lab Sample ID:	672001606-0008
Sample Description:	62 Templeton/Grout - Blu	e/green tile - Basemen	nt kitchen			•	
	, , , , , , , , , , , , , , , , , , , ,	3					
	Analyzed		Non-	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Beige	0.0%	100.0%	None Detected		
Client Sample ID:	3.2-Mortar					Lab Sample ID:	672001606-0008A
Sample Description:	62 Templeton/Grout - Blu	e/green tile - Basemen	nt kitchen				
	Amalumad		Non	Asbestos			
TEST	Analyzed Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	3.3	<del></del>				Lab Sample ID:	672001606-0009
Sample Description:	62 Templeton/Grout - Blu	e/green tile - Basemen	nt kitchen				
	52 Templeton/Ordat - Did	Signoon allo - Daseilleli	it Altoriell				
	Analyzed		Non-	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%	100.0%	None Detected	Color is off-white	
Client Sample ID:	4.1					Lab Sample ID:	672001606-0010
Sample Description:	62 Templeton/Grout - Wh	ite tile - Basement kitcl	hen				
TEST	Analyzed	Color		Asbestos Non Eibrous	Ashaataa	Comment	
TEST PLM	9/16/2020	Color Beige	Fibrous 0.0%	Non-Fibrous 100.0%	Asbestos  None Detected	Comment	
		20190	0.070		None Detected	Lob Someta ID:	672004606 0044
Client Sample ID:	4.2	11-11- D	L			Lab Sample ID:	672001606-0011
Sample Description:	62 Templeton/Grout - Wh	ite tile - Basement kitcl	nen				
	Analyzed		Non-	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	

9/16/2020

Beige

0.0%

100.0%

None Detected

PLM



# **EMSL** Canada Inc.

22 Antares Drive Suite 102 Ottawa, ON K2E 7Z6 Phone/Fax: (343) 882-6076 / (343) 882-6077 http://www.EMSL.com / ottawalab@EMSL.com EMSL Canada Order 672001606 Customer ID: 55CTCS25B Customer PO: 0Z2-021101 Project ID: Ottawa DSS

# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID:	4.3					Lab Sample ID:	672001606-0012
Sample Description:	62 Templeton/Grout - White tile	- Basement kito	:hen				
,,	12 isingistan ordar frinte me						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%	100.0%	None Detected	Color is off-white	
Client Sample ID:	5.1					Lab Sample ID:	672001606-0013
Sample Description:	62 Templeton/Texture coat - Bas	soment hallway					0.200.000.00
oumpie Description.	oz Templeton/Texture coat - bas	sement nanway					
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	White	0.0%	100.0%	None Detected		
Client Semple ID:	F 2					Lah Sampla ID:	672001606-0014
Client Sample ID:	5.2					Lab Sample ID:	0/2001000-0014
Sample Description:	62 Templeton/Texture coat - Bas	sement hallway					
	Analyzed		Non	-Asbestos			
TEST	Analyzed Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	White	0.0%	100.0%	None Detected		
		***************************************		100.070	Trono Dotootou		070004000 0045
Client Sample ID:	5.3					Lab Sample ID:	672001606-0015
Sample Description:	62 Templeton/Texture coat - Bas	sement hallway					
TEOT	Analyzed	0.1		-Asbestos	A . I	0	
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%	100.0%	None Detected		
Client Sample ID:	6.1-VFT					Lab Sample ID:	672001606-0016
Sample Description:	62 Templeton/VFT - Brown - Ba	sement					
	Analyzed			-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Brown	0.0%	98.0%	2% Chrysotile		
Client Sample ID:	6.1-Mastic					Lab Sample ID:	672001606-0016A
Sample Description:	62 Templeton/VFT - Brown - Ba	sement					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Tan	0.0%	100.0%	None Detected		
Client Sample ID:	6.1-Mastic 2					Lab Sample ID:	672001606-0016B
Sample Description:	62 Templeton/VFT - Brown - Ba	sement					
-	,						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Yellow	5.0%	95.0%	None Detected		
Client Sample ID:	6.2-VFT					Lab Sample ID:	672001606-0017
Sample Description:	62 Templeton/VFT - Brown - Ba	comont				•	
p.c _ coonpaon.	oz rempieton/vi i - biowii - ba	SCHICH					
	Analyzed		Non	-Asbestos			

Positive Stop (Not Analyzed)

9/16/2020

PLM



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# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID:	6.2-Mastic					Lab Sample ID:	672001606-0017A
Sample Description:	62 Templeton/VFT - Brown	- Basement					
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/16/2020	Tan	0.0%	100.0%	None Detected		
Client Sample ID:	6.2-Mastic 2					Lab Sample ID:	672001606-0017B
Sample Description:	62 Templeton/VFT - Brown	- Basement					
	Analyzed Non-Asbestos						
TEST	Date					Comment	
PLM	9/16/2020	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	6.3-VFT					Lab Sample ID:	672001606-0018
Sample Description:	62 Templeton/VFT - Brown	- Basement					
	Analyzed		Non-Asbestos				
TEST	Date	Color			Asbestos	Comment	
PLM	9/17/2020			Positi	ive Stop (Not Analyzed)		
Client Sample ID:	6.3-Mastic					Lab Sample ID:	672001606-0018A
Sample Description:	62 Templeton/VFT - Brown	- Basement					
<b>TEOT</b>	Analyzed	0.1		-Asbestos	A.1	0	
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Tan	0.0%	100.0%	None Detected		
Client Sample ID:	6.3-Mastic 2					Lab Sample ID:	672001606-0018B
Sample Description:	62 Templeton/VFT - Brown	- Basement					
TEST	Analyzed Date	Color		-Asbestos Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Yellow	0.0%		None Detected	Comment	
		renow	0.070	100.070	None Detected	1 - 1 - 2 1 - 12	070004000 0040
Client Sample ID:	7.1-VSF					Lab Sample ID:	672001606-0019
Sample Description:	62 Templeton/VSF - Grey/I	prown - Front room	ı - Basement				
	A mali mad		N	Ashastas			
TEST	Analyzed Date	Color		-Asbestos Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray/White	20.0%		None Detected	Common	
			20.070			Lab Sample ID:	672001606-0019A
Client Sample ID:	7.1-Mastic	5	D *			Lau Salliple ID:	012001000-0013A
Sample Description:	62 Templeton/VSF - Grey/l	prown - Front room	ı - Basement				
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	7.2-VSF					Lab Sample ID:	672001606-0020
Sample Description:						0.200.000	
campic Description.	11. 62 Templeton/VSF - Grey/brown - Front room - Basement						
	Analyzed Non-Asbestos						
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray/White	20.0%		None Detected		



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# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID:	7.2-Mastic					Lab Sample ID:	672001606-0020A
Sample Description:	62 Templeton/VSF - Grey/b	prown - Front room	- Basement			•	
	, , , , , , , , , , , , , , , , , , , ,						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	7.3-VSF					Lab Sample ID:	672001606-0021
Sample Description:	62 Templeton/VSF - Grey/b	orown - Front room	- Basement				
	A		N	Autorities			
TEST	Analyzed Date	Color		-Asbestos Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Tan/White	21.0%		None Detected	Comment	
						Lab Sampla ID:	672001606-0021A
Client Sample ID:	7.3-Mastic					Lab Sample ID:	0/2001000-0021A
Sample Description:	62 Templeton/VSF - Grey/b	prown - Front room	- Basement				
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Yellow	0.0%	100.0%	None Detected		
Client Sample ID:	8.1					Lab Sample ID:	672001606-0022
Sample Description:	62 Templeton/DJC						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%	100.0%	None Detected		
Client Sample ID:	8.2					Lab Sample ID:	672001606-0023
Sample Description:	62 Templeton/DJC						
TEOT	Analyzed	Onlan.		-Asbestos	<b>A</b> = <b>b</b> = = <b>d</b> = =	Commont	
TEST PLM	9/17/2020	Color White	Fibrous 0.0%	Non-Fibrous 100.0%	Asbestos  None Detected	Comment	
		vviille	0.070	100.0%	None Detected		
Client Sample ID:	8.3					Lab Sample ID:	672001606-0024
Sample Description:	62 Templeton/DJC						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%		None Detected		
Client Sample ID:	8.4					Lab Sample ID:	672001606-0025
Sample Description:	62 Templeton/DJC						
	oz rempietori/Doo						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%	100.0%	None Detected		
Client Sample ID:	8.5					Lab Sample ID:	672001606-0026
Sample Description:	62 Templeton/DJC						
TEOT	Analyzed	0.1		-Asbestos	Asharta	Commercial	
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	

9/17/2020

White

0.0%

100.0%

None Detected

PLM



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# Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

			FA000/IN		ou		
Client Sample ID:	9.1					Lab Sample ID:	672001606-0027
ample Description:	62 Templeton/Plaster						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray	5.0%	95.0%	None Detected		
Client Sample ID:	9.2-Skim Coat					Lab Sample ID:	672001606-0028
Sample Description:	62 Templeton/Plaster						
	Analyzod		Non	-Asbestos			
TEST	Analyzed Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%		None Detected		
Client Sample ID:	9.2-Base Coat					Lab Sample ID:	672001606-0028A
Sample Description:	62 Templeton/Plaster					Lub Gumpie 15.	0.200.000 0020,4
TEST	Analyzed	0-1		-Asbestos	A = h = = 4 = =	Comment	
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	9.3					Lab Sample ID:	672001606-0029
Sample Description:	62 Templeton/Plaster						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Brown/Gray	15.0%	85.0%	None Detected		
Client Sample ID:	9.4					Lab Sample ID:	672001606-0030
Sample Description:	62 Templeton/Plaster						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	White	0.0%		None Detected		
Client Sample ID:	9.5					Lab Sample ID:	672001606-0031
Sample Description:						Lub Gumpie ID.	072001000-0001
Jampie Description.	62 Templeton/Plaster						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray	0.0%		None Detected		
Client Sample ID:	9.6					Lab Sample ID:	672001606-0032
Sample Description:	62 Templeton/Plaster					•	
	- Tampiotoria lautor						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	9/17/2020	Gray	5.0%	95.0%	None Detected		
Client Sample ID:	9.7					Lab Sample ID:	672001606-0033
Sample Description:	62 Templeton/Plaster						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
-	- <del></del>						



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Customer ID: 55CTCS25B
Customer PO: 0Z2-021101
Project ID: Ottawa DSS

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Analyst(s):				
·	·	·	·	

Jessica Schwartz PLM (12) Jose Sanchez PLM (33)

Reviewed and approved by:

Simon Parent, Laboratory Manager or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples received in good condition unless otherwise noted. This report must not be used to claim product endorsement by NVLAP of any agency or the U.S. Government

Samples analyzed by EMSL Analytical, Inc. Rochester, NY

Initial report from: 09/18/202016:16:18



2756 Slough Street, Mississauga, ON L4T 1G3

Phone/Fax: (289) 997-4602 / (289) 997-4607

http://www.EMSL.com torontolab@emsl.com

Stefan Holik McIntosh Perry Consulting Engineers Ltd 115 Walgreen Rd RR 3 Carp, ON K0A 1L0

Phone: (613) 836-2184

Fax:

Received: 9/15/2020 10:02 AM

EMSL Canada Or

CustomerID:

CustomerPO:

ProjectID:

552011557

55CTCS25B

0Z2-021102

Ottawa DSS

Collected:

Project: University of Ottawa 0Z2-021102 "Ottawa DSS - 62 Templeton"

### Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)\*

Client SampleDescription	Collected Analyzed	Weight	RDL	Lead Concentration
PB 1 552011557-0001	9/18/2020 Site: 62 Templeton - white wall - kitchen	0.2510 g	0.0080 % wt	<0.0080 % wt
PB 2 552011557-0002	9/18/2020 Site: 62 Templeton - off white - laundry room - basement	0.2511 g	0.016 % wt	0.51 % wt

Rowena Fanto, Lead Supervisor or other approved signatory

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Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008% wt based on the minimum sample weight per our SOP. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request. Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 09/22/2020 09:22:01

## **APPENDIX D**

**Site Photographs** 



**Photo 1:** Typical view of finishes observed at 62 Templeton Street.



Photo 2: Typical view of finishes observed at 62 Templeton Street.



Photo 3: View of leadcontaining green
paint observed to be
in poor condition on
the front exterior
door.



**Photo 4:** View of lead-

containing yellow paint observed to be in poor condition on the concrete floor in the basement (photo taken post-flood remediation work by Xpertek in October 2020).



Photo 5:

View of lead-containing aqua blue paint observed to be in poor condition on the walls in the laundry room throughout the basement (photo taken post-flood remediation work by Xpertek in October 2020).



Photo 6:

View of AST observed throughout the basement of the subject building (photo taken postflood remediation work by Xpertek in October 2020).

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**Photo 7:** Typical view of smoke detectors containing radioactive material.

## **APPENDIX E**

**Asbestos-Containing Materials Checklists** 

Floor/Level	Room	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/ Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Estimated Abatement Cost	Comment
1	Throughout Subject Floor	Ceiling Texture Coat	-	Suspected	Friable	Good Condition	Easy	Low	-		Manage in Place	-	
2	Throughout Subject Floor	Ceiling Texture Coat	-	Suspected	Friable	Good Condition	Easy	Low	-		Manage in Place	-	
All	Throughout Subject Building	Brick/Stone Mortar	Grey	Suspected	1	Good Condition	Easy	Low	-		Manage in Place	-	



## **APPENDIX F**

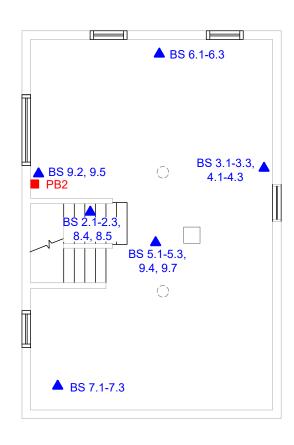
**Hazardous Containing Materials Checklists** 

Floor/Level	Location	DS Type	Component	Colour	Condition	Manufacturer	Ouantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
0	Basement	USTs/ASTs	Diesel Storage Tank	N/A	Good Condition	Unknown	1	С	Confirmed	Manage in Place		
0	Throughout Subject Floor	Lead	Wall Paint	Off- White	Good Condition	-	-	-	Confirmed	Manage in Place		
0	Kitchen	Lead	Walls, Doors and Frames Paint	White	Good Condition	-	-	·	Confirmed	Manage in Place		
0	Laundry Room	Lead	Walls and Shelf Paint	Aqua Blue	Poor Condition	-	5	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	\$600.00	
0	Laundry Room	Lead	Walls and Shelf Paint	Aqua Blue	Good Condition	ī	ı	1	Confirmed	Manage in Place		
0	Laundry Room	Lead	Floor Paint	Yellow	Poor Condition		10	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	\$1,200.00	
0	Laundry Room	Lead	Floor Paint	Yellow	Good Condition	ī	ı	1	Confirmed	Manage in Place		
1	Kitchen	Lead	Wall and Cabinet Paint	White	Good Condition	-	-	-	Confirmed	Manage in Place		
AII	Exterior	Lead	Door Paint	Green	Poor Condition	-	1	SF	Confirmed	Paint must be removed and/or stabilized following Class 1/2 or Type 1/2 lead Procedures as per MOL and EACO Guidelines.	\$600.00	
AII	Exterior	Lead	Door, Roof, Window and Door Frame Paint	Green	Good Condition	-	-	-	Confirmed	Manage in Place		
AII	Throughout Subject Building	Ozone Depleting Substances (ODS)	Air Conditioning Unit	N/A	Good Condition	Comfort Air	-	-	Confirmed	Manage in Place		
All	Throughout Subject Building	Mercury	Fluorescent Light Tubes	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		

Floor/Level	Location	DS Type	Component	Colour	Condition	Manufacturer	Ouantity #	Unit	Suspected/ Confirmed	Recommended Action	Estimated Abatement Cost	Comments
AII	Throughout Subject Building	Radioactive Materials	Smoke Detectors	N/A	Good Condition	Unknown	-	-	Confirmed	Manage in Place		
All	Throughout Subject Building	Polychlorinated Biphenyls (PCBs)	Light Ballast	N/A	Good Condition	Unknown	-	-	Confirmed	Manage in Place		
All	Throughout Subject Building	Silica	Concrete, Mortar, Etc.	N/A	Good Condition	N/A	-	-	Confirmed	Manage in Place		

## **APPENDIX G**

**Site Sampling & Location Plans** 

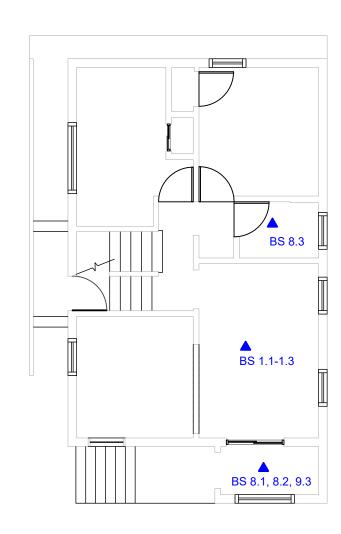


6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3 Tel: 905.856.5200 Fax: 905.695.0221 Toll Free: 1.888.348.8991 www.mcintoshperry.com

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

Legend: ▲Asbestos Bulk Sample □Lead Paint Sample <LOD ■Lead Paint Sample >LOD

UNIVERSITY OF OTTAWA		LOCATIONS EMENT					
PROJECT: 62 TEMPLETON	SCALE: 1:100	DATE: JANUARY 22, 2021	REV. NO.	DESCRIPTION	DATE	BY	APPD.
DESIGNATED SUBSTANCE SURVEY	DRAWN: K.B.	CHECKED: J.T.	DRAWII NUMBE	NG R: A0		REV	/.:



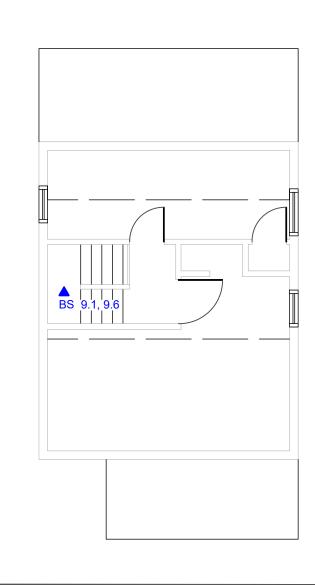
6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3 Tel: 905.856.5200 Fax: 905.695.0221 Toll Free: 1.888.348.8991 www.mcintoshperry.com

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

Legend:

▲Asbestos Bulk Sample □Lead Paint Sample <LOD ■Lead Paint Sample >LOD

UNIVERSITY OF OTTAWA	TITLE:		LOCATIONS D FLOOR					
PROJECT: 62 TEMPLETON	SCALE:	1:100	DATE: JANUARY 22, 2021					
		1.100	OANOAKT EE, EOET	REV. NO.	DESCRIPTION	DATE	BY	APPD.
DESIGNATED SUBSTANCE SURVEY	DRAWN:	K.B.	CHECKED: J.T.	DRAWII NUMBE			RE <sup>1</sup>	V.:



6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3 Tel: 905.856.5200 Fax: 905.695.0221 Toll Free: 1.888.348.8991 www.mcintoshperry.com

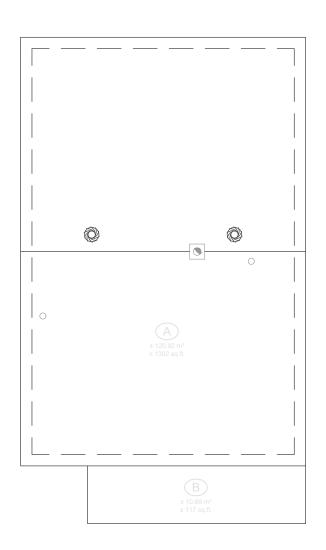
THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

Legend:

▲Asbestos Bulk Sample □Lead Paint Sample <LOD ■Lead Paint Sample >LOD

UNIVERSITY OF OTTAWA	TITLE:		LOCATIONS D FLOOR					
PROJECT: 62 TEMPLETON	SCALE:	1:100	DATE: JANUARY 22, 2021	REV. NO.	DESCRIPTION	DATE	BY	APPD.
DESIGNATED SUBSTANCE SURVEY		K.B.	CHECKED: J.T.	DRAWIN		•	REV	l.:





6240 HIGHWAY 7 SUITE 200 WOODBRIDGE ON L4H 4G3 Tel: 905.856.5200 Fax: 905.695.0221 Toll Free: 1.888.348.8991 www.mcintoshperry.com

THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS, REPORT ALL ERRORS AND OMISSIONS TO THE CONSULTANTS, PRIOR TO PROCEEDING WITH ANY WORKS.

Legend:

▲Asbestos Bulk Sample □Lead Paint Sample <LOD ■Lead Paint Sample >LOD

UNIVERSITY OF OTTAWA	SAMPLE LOCATIONS ROOF							
PROJECT: 62 TEMPLETON	SCALE:	1:100	DATE: JANUARY 22, 2021	REV. NO.	DESCRIPTION	DATE	BY	APPD.
DESIGNATED SUBSTANCE SURVEY	DRAWN:	K.B.	CHECKED: J.T.	DRAWII NUMBE	NG R: A3		REV	1.: