HAZARDOUS MATERIALS SURVEY AND 2023 REASSESSMENT 161 LAURIER AVE EAST, OTTAWA, ON



Project No.: CCC-221347-00 / CCC-230252-00 Prepared for: University of Ottawa

Prepared by:

McIntosh Perry Limited (MPL)

MPL Contact: John Tufts, Project Manager Hazardous Materials / Environmental Health & Safety E: J.Tufts@McintoshPerry.com

Date: X date, 2023

TABLE OF CONTENTS

REA	SSESSI	MENT SURVEY 2023	I
EXE	Ουτινι	E SUMMARY	II
1.0	INT	RODUCTION	1
2.0	PRC	OPERTY DESCRIPTION	1
3.0	FIN	DINGS & RECOMMENDATIONS	2
D	esignat	ed Substances	2
3.	1 A.	sbestos	2
	3.1.1	Fireproofing	5
	3.1.2	Mechanical Pipe Insulation	5
	3.1.3	Flexible Duct Connector	6
	3.1.4	Heat Shield or Heat Shield Insulation	6
	3.1.5	Texture Finishes	6
	3.1.6	Plaster	6
	3.1.7	Drywall Joint Compound	6
	3.1.8	Ceiling Tiles	7
	3.1.9	Vinyl Floor Tiles	7
	3.1.10	Vinyl Sheet Floor	7
	3.1.11	Brick Mortar	7
	3.1.12	Concrete Block Mortar	7
	3.1.13	Ceramic Wall / Floor Tile Grout	7
	3.1.14	Transite (Asbestos Cement)	8
	3.1.15	Caulking	8
	3.1.16	Cementitious Coating	8
	3.1.17	Concrete	8
	3.1.18	Exterior Stucco	8
	3.1.19	Tar	8
	3.1.20	Fire Doors	8
	3.1.21	Roofing Material	8

Hazardous Materials Survey and 2023 Reassessment 161 Laurier Ave East, Ottawa, ON

3.2	Lead	d		
3.2	2.1	Paint Finishes		
3.2	2.2	Battery Packs		
3.3	Mer	cury12		
3.3	8.1	Thermostat Switches		
3.3	8.2	Fluorescent Light Tubes		
3.3	8.3	Pressure Gauges and Float Switches12		
3.4	Silico	a12		
Other	r Hazal	rdous Materials		
3.5	Poly	chlorinated Biphenyls (PCBs)		
3.5	5.1	Light Ballasts		
3.5	5.2	HID Light Ballasts		
3.5	5.3	Transformers		
3.6	Ozoi	ne Depleting Substances (ODSs) and Other Halocarbon13		
3.7	Rad	ioactive Materials14		
3.8	Underground and Above Ground Storage Tanks (USTs and ASTs)			
3.9	Μοι	Mould14		
3.9	9.1	Mould15		
3.9	9.2	Water Damage15		
4.0	GENEI	RAL CONSIDERATIONS AND LIMITATIONS		

- Appendix A Regulatory Requirements Appendix B – Survey Methodology & Background Information Appendix C – Laboratory Certificate of Analysis Appendix D– Site Photographs Appendix E – Asbestos Containing Materials Checklist Appendix F – Hazardous Containing Materials Checklist
- Appendix G Site Sampling & Location Plans

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 building located at 161 Laurier Avenue East in Ottawa, Ontario. The survey was conducted on July 5th and 7^{th,} 2021. **The Reassessment Survey was completed 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 Description	Friable?	Location	Type of Asbestos
Drywall Joint Compound	-	Throughout Building	Chrysotile
Texture Coat	Yes	Specific Areas Only	Chrysotile
Fire doors	-	Specific Areas Only	Suspected
Roofing Materials	-	Roof	Suspected

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 ACMs should be informed of their presence.

Given that ACMs have been identified and will likely remain in place, an Asbestos Management Plan is required, and an ACMs inventory 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	Specific Areas Only
Low Level Lead Paint	Specific Areas Only
Mercury Vapour	Throughout Building
Ozone Depleted Substances	Specific Equipment
Radioactive Materials	Specific Equipment
Mould	Specific Areas Only

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 materials mentioned above:

- 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) Mould 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 or hazardous materials 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

X date, 2023

K1N 1E3

University of Ottawa 141 Louis-Pasteur Private Ottawa, Ontario via email: martine.bergeron@uottawa.ca

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

Re: 161 Laurier Avenue East, Ottawa, Ontario Hazardous Materials Survey and 2023 Reassessment McIntosh Perry Limited Reference No. CCC-221347-00 / CCC-230252-00

1.0 INTRODUCTION

Under your instructions, McIntosh Perry Limited (MPL) carried out a Hazardous Materials Survey at the former commercial building located at 161 Laurier Avenue East. The survey of the building was conducted on July 5th and 7th, 2021. **The Reassessment Survey was completed 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.

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;
- Bulk sampling and analysis of representative paints and finishes suspected of containing lead; and,
- Recommendations for appropriate action where required.

2.0 PROPERTY DESCRIPTION

The subject building is a 3-storey commercial and residential unit. The subject building was observed to be constructed with a concrete slab floor; shingle roof supported by a wooden frame with beams and columns. The interior walls were gypsum wallboard, plaster and concrete block. Throughout the subject building, ceilings

were observed to be gypsum wallboard with plaster and suspended ceiling tiles or open ceilings in specific areas. The floors were generally concrete, laminate and ceramic tiles with hardwood present in the apartments.

3.0 FINDINGS & RECOMMENDATIONS

Designated Substances

3.1 Asbestos

Findings

A total of seventy-four (74) 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 Certificate of Analysis for asbestos is included in Appendix C.

Sample ID	Location	Material	Type and Content	Friability
BS 1.1	Front Entrance	Floor Tile Grout (White with Brown)	None Detected	N/A
BS 1.2	Front Entrance	Floor Tile Grout (White with Brown)	None Detected	N/A
BS 1.3	Front Entrance	Floor Tile Grout (White with Brown)	None Detected	N/A
BS 2.1	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.2	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.3	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.4	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.5	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.6	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 2.7	1 st Floor	Drywall Joint Compound	None Detected	N/A
BS 3.1	Kitchen	Wall Tile Grout (Orange)	None Detected	N/A
BS 3.2	Kitchen	Wall Tile Grout (Orange)	None Detected	N/A
BS 3.3	Kitchen	Wall Tile Grout (Orange)	None Detected	N/A
BS 4.1	Kitchen	Floor Tile Grout (Red)	None Detected	N/A
BS 4.2	Kitchen	Floor Tile Grout (Red)	None Detected	N/A
BS 4.3	Kitchen	Floor Tile Grout (Red)	None Detected	N/A
BS 5.1	Kitchen	Wall Tile Grout (White)	None Detected	N/A
BS 5.2	Kitchen	Wall Tile Grout (White)	None Detected	N/A
BS 5.3	Kitchen	Wall Tile Grout (White)	None Detected	N/A
BS 6.1	Bathroom	Floor Tile Grout (Blue)	None Detected	N/A

Table 1: Asbestos Laboratory Results

Hazardous Materials Survey and 2023 Reassessment 161 Laurier Ave East, Ottawa, ON

Sample ID	Location	Material	Type and Content	Friability
BS 6.2	Bathroom	Floor Tile Grout (Blue)	None Detected	N/A
BS 6.3	Bathroom	Floor Tile Grout (Blue)	None Detected	N/A
BS 7.1	Bathroom	Wall Tile Grout (White)	None Detected	N/A
BS 7.2	Bathroom	Wall Tile Grout (White)	None Detected	N/A
BS 7.3	Bathroom	Wall Tile Grout (White)	None Detected	N/A
BS 8.1	1 st Floor	Flooring Mastic (White)	None Detected	N/A
BS 8.2	1 st Floor	Flooring Mastic (White)	None Detected	N/A
BS 8.3	1 st Floor	Flooring Mastic (White)	None Detected	N/A
BS 9.1	1 st Floor	Wall Plaster	None Detected	N/A
BS 9.2	1 st Floor	Wall Plaster	None Detected	N/A
BS 9.3	1 st Floor	Wall Plaster	None Detected	N/A
BS 10.1	1 st Floor Dining	Ceiling Texture Coat	None Detected	N/A
BS 10.2	1 st Floor Dining	Ceiling Texture Coat	None Detected	N/A
BS 10.3	1 st Floor Dining	Ceiling Texture Coat	None Detected	N/A
BS 11.1	1 st Floor Bar	Floor Tile Grout (Beige)	None Detected	N/A
BS 11.2	1 st Floor Bar	Floor Tile Grout (Beige)	None Detected	N/A
BS 11.3	1 st Floor Bar	Floor Tile Grout (Beige)	None Detected	N/A
BS 12.1	Basement Dining	Wall Plaster	None Detected	N/A
BS 12.2	Basement Dining	Wall Plaster	None Detected	N/A
BS 12.3	Basement Dining	Wall Plaster	None Detected	N/A
BS 13.1	Basement	Drywall Joint Compound (Grey)	None Detected	N/A
D3 13.1	Basement	Drywall Joint Compound (White)	None Detected	N/A
BS 13.2	Basement	Drywall Joint Compound	None Detected	N/A
BS 13.3	Basement	Drywall Joint Compound	3% Chrysotile	-
BS 13.4	Basement	Drywall Joint Compound	Stop Positive - Not Analyzed	-
BS 13.5	Basement	Drywall Joint Compound	Stop Positive - Not Analyzed	-
BS 13.6	Basement	Drywall Joint Compound	Stop Positive - Not Analyzed	-
BS 13.7	Basement	Drywall Joint Compound	Stop Positive - Not Analyzed	-
BS 14.1	Basement Dining	Ceiling Texture Coat	None Detected	N/A

Hazardous Materials Survey and 2023 Reassessment 161 Laurier Ave East, Ottawa, ON

Sample ID	Location	Material	Type and Content	Friability
BS 14.2	Basement Dining	Ceiling Texture Coat	None Detected	N/A
BS 14.3	Basement Dining	Ceiling Texture Coat	None Detected	N/A
BS 15.1	Basement Office	SCT (2'x4'-White with Small Fissures and Pinholes)	None Detected	N/A
BS 15.2	Basement Office	SCT (2'x4'- White with Small Fissures and Pinholes)	None Detected	N/A
BS 15.3	Basement Office	SCT (2'x4'- White with Small Fissures and Pinholes)	None Detected	N/A
BS 16.1	Basement Room 002	Floor Tile Grout (Orange)	None Detected	N/A
BS 16.2	Basement Room 002	Floor Tile Grout (Orange)	None Detected	N/A
BS 16.3	Basement Room 002	Floor Tile Grout (Orange)		N/A
BS 17.1	Front Exterior	Pebble Dash	None Detected	N/A
BS 17.2	Front Exterior	Pebble Dash	None Detected	N/A
BS 17.3	Front Exterior	Pebble Dash	None Detected	N/A
BS 18.1	Apartment 3 - Kitchen	Vinyl Sheet Flooring (Yellow)	None Detected	N/A
BS 18.2	Apartment 3 - Kitchen	Vinyl Sheet Flooring (Yellow)	None Detected	N/A
BS 18.3	Apartment 3 - Bathroom	Vinyl Sheet Flooring (Yellow)	None Detected	N/A
BS 19.1	Exterior 2 nd Floor	Caulking (Black)	None Detected	N/A
BS 19.2	Exterior 2 nd Floor	Caulking (Black)	None Detected	N/A
BS 19.3	Exterior 2 nd Floor	Caulking (Black)	None Detected	N/A
BS 20.1	Exterior 2 nd Floor	Brick Mortar	None Detected	N/A
BS 20.2	Exterior 2 nd Floor	Brick Mortar	None Detected	N/A
BS 20.3	Exterior 2 nd Floor	Brick Mortar	None Detected	N/A

Sample ID	Location	Material	Type and Content	Friability
BS 21.1	Exterior 2 nd Floor	Pebble Dash	None Detected	N/A
BS 21.2	Exterior 2 nd Floor	Pebble Dash	None Detected	N/A
BS 21.3	Exterior 2 nd Floor	Pebble Dash	None Detected	N/A
BS 22.1	Apartment Stairway	Texture Coat	5% Chrysotile	Friable
BS 22.2	Apartment Stairway	Texture Coat	Stop Positive - Not Analyzed	Friable
BS 22.3	Apartment Stairway	Texture Coat	Stop Positive - Not Analyzed	Friable

N/A – Not Applicable

VFT – Vinyl Floor Tiles

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

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 not 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 potential asbestos-containing heat shield insulation was observed throughout the subject building.

3.1.5 Texture Finishes

The ceiling texture finish was observed throughout the 1st Floor Dining Room. The laboratory analytical results of ceiling texture coat samples collected from the 1st-floor ceiling indicate that this material does not contain asbestos.

The ceiling texture finish was observed in Basement Dining Room. The laboratory analytical results of ceiling texture coat samples collected from the Basement Ceiling indicate that this material does not contain asbestos.

The ceiling/Wall texture finish was observed in Apartment Stairway. The laboratory analytical results of ceiling/wall texture coat samples collected from the Apartment Stairway indicate that this material **contains 5% Chrysotile asbestos**. This material is considered to be friable and was observed to be in good and fair condition.

3.1.6 Plaster

Wall plaster was observed throughout the 1st Floor. The laboratory analytical results of wall plaster samples collected from the 1st-floor indicate that this material does not contain asbestos.

Ceiling/Wall plaster was observed in the basement. The laboratory analytical results of ceiling/wall plaster samples collected from the basement indicate that this material does not contain asbestos.

3.1.7 Drywall Joint Compound

Drywall joint compounds were observed throughout the 1st Floor. The laboratory analytical results of drywall joint compound samples collected from the 1st Floor indicate that this material does not contain asbestos.

Drywall joint compounds were observed throughout the basement. The laboratory analytical results of drywall joint compound samples collected from the basement indicate that this material **contains 3% Chrysotile asbestos**. Since drywall joint compound is a homogeneous material, all areas must be treated as asbestos-containing unless additional bulk sampling and analysis until proven otherwise. This material was observed to be in good condition.

3.1.8 Ceiling Tiles

Suspended ceiling tiles (2' x 4' White with Small Fissures and Pinholes) were observed throughout the basement office. The laboratory analytical results of ceiling tile samples collected from the basement office indicate that this material does not contain asbestos.

3.1.9 Vinyl Floor Tiles

No vinyl floor tiles were observed throughout the surveyed area subject building.

3.1.10 Vinyl Sheet Floor

Vinyl Sheet Flooring (Yellow) was observed throughout the apartment Kitchen and Bathrooms. The laboratory analytical results of the Vinyl Sheet Flooring samples collected from the Kitchen and Bathrooms of apartment 3 indicate that this material does not contain asbestos.

3.1.11 Brick Mortar

Brick mortar was sampled from the *exterior* of the building. Laboratory analytical results indicate that this material does not contain asbestos.

3.1.12 Concrete Block Mortar

No concrete block mortar was observed subject building.

3.1.13 Ceramic Wall / Floor Tile Grout

Ceramic floor tile (White Octagon with Brown edges) grout was sampled from the 1st Floor entrance. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic wall tile (Orange) grout was sampled from the 1st Floor Kitchen. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic floor tile (Red) grout was sampled from the 1st Floor Kitchen. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic wall tile (White) grout was sampled from the 1st Floor Kitchen. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic floor tile (Blue) grout was sampled from the 1st Floor Bathrooms. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic wall tile (White) grout was sampled from the 1st Floor Bathrooms. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic floor tile (Beige) grout was sampled from behind the bar. Laboratory analytical results indicate that this material does not contain asbestos.

Ceramic floor tile (Orange) grout was sampled from behind the bar. Laboratory analytical results indicate that this material does not contain asbestos.

3.1.14 Transite (Asbestos Cement)

No transite materials were observed throughout the subject building.

3.1.15 Caulking

Caulking (Black) was sampled from the 2nd-Floor exterior. Laboratory analytical results indicate that this material does not contain asbestos.

3.1.16 Cementitious Coating

No potential asbestos-containing cementitious coating finishes were observed throughout the subject building.

3.1.17 Concrete

No potential asbestos-containing concrete finishes were observed throughout the subject building.

3.1.18 Exterior Stucco

Stucco (Red painted, small pebbledash) was sampled from the front exterior. Laboratory analytical results indicate that this material does not contain asbestos.

Stucco (Beige, large pebbledash) was sampled from the 2nd-Floor exterior. Laboratory analytical results indicate that this material does not contain asbestos.

3.1.19 Tar

No tar was observed throughout the subject building.

3.1.20 Fire Doors

Fire doors were observed at various locations throughout the subject building. To avoid possible damage, no bulk samples of the internal door insulation materials were collected. Prior to removal and/or replacement, fire doors should be examined and tested for asbestos content. Fire doors should be considered to contain asbestos until bulk samples and analysis until proven otherwise. All fire doors were observed to be in good condition.

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

- ACMs identified to be in poor condition must be repaired/removed immediately, following 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;
- ACMs identified as in fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration. Depending on the type of material and location, these materials should be scheduled for removal if there is a potential risk of exposure to workers and/or occupants;
- 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 any renovation or 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 any renovation or demolition of materials which are assumed to be asbestos-containing (suspect materials which were not sampled, i.e., roofing materials and fire doors), 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 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 ACMs should be informed of their presence; and
- Given that ACMs have been identified and will likely remain in place, an Asbestos Management Plan is
 required, and an ACMs inventory 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.

3.2 Lead

Findings

3.2.1 Paint Finishes

A total of nine (9) paint samples from the subject building were collected and analyzed for lead content. Results of bulk sampling testing are summarized in Table 2, and the Laboratory Certificate of Analysis can be found in Appendix C.

Sample I.D.	Location	Material	Colour	Lead Concentration Weight by Conc. (%)
PB-01	1 st Floor	Wall Paint	Beige	<0.0004
PB-02	1 st Floor	Trim Paint	Dark Beige	<0.00041
PB-03	1 st Floor Bar	Wall Paint	Green	<0.0004
PB-04	Exterior	Wall Paint	Red	0.00098
PB-05	Basement	Wall Paint	White	0.00062
PB-06	Exterior	Trim Paint	Black	0.037
PB-07	Apartment 2	Wall Paint	White	1.2
PB-08	Apartment 3	Trim Paint	Yellow	3.6
PB-09	Apartment Stairwell	Trim Paint	Black	0.66

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

The paint finishes highlighted in blue in the above table was 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 that 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 that 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 to be lead-containing unless sampling and analysis until proven otherwise.

3.2.2 Battery Packs

Lead-containing acid battery packs were observed throughout the subject building. These battery packs were observed on walls and above exits throughout the surveyed 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 is 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 fair condition should be either repaired (where possible) and/or closely monitored for signs of further deterioration.

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, removing the lead-based paint using a chemical gel or paste or a power tool equipped with a HEPA filter is considered a Type 1 operation. Removing 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 removed lead materials must follow the Ministry of Labour and Environmental Abatement Council of Canada (EACC) Lead Guidelines.

Please refer to Appendix F – Hazardous Materials Checklist for material 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:

- providing workers with proper training;
- providing the workers with respiratory protection;
- o wetting the surface of the materials to prevent dust emissions; and,
- 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 the 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 identified throughout the subject building containing 2 to 4 tubes per fixture. Mercury is likely to be present in vapour form in fluorescent light tubes.

3.3.3 Pressure Gauges and Float Switches

No pressure gauges or float switches containing liquid mercury were observed 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, thermostats, and equipment must be removed and stored in a safe, secure location and/or properly disposed of under 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 throughout the structures. Free crystalline silica (α -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, masonry demolition, etc.) to ensure that workers' exposure levels to airborne silica do not exceed 0.05 mg/m³.

This can be achieved by:

- 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 facilities to properly wash prior to exiting the work area.

Any demolition work that is likely to impact silica-containing materials should be carried out under 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

LED and fluorescent lights illuminate the subject building. MPL assessed representative ballasts in the building, identified as non-PCBs content. These light ballasts were observed to be manufactured by Phillips.

3.5.2 HID Light Ballasts

No HID Lamps were observed throughout the subject building.

3.5.3 Transformers

No PCBs 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.

3.6 Ozone Depleting Substances (ODSs) and Other Halocarbon

Findings

A visual assessment for equipment potentially containing ODSs and other halocarbons was conducted. MPL observed equipment such as refrigerators, freezers and air conditioning units which contain or are suspected of containing ODSs or other halocarbons.

Recommendations

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

Under the management of a licensed contractor, equipment containing R-22 and 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 of varying brands throughout the building were observed, which contained 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.

No USTs and ASTs were present throughout the surveyed area.

Recommendations

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

Since no underground and/or above-ground storage tanks (USTs and ASTs) were observed or suspected to be present during the site survey, no further action is required.

3.9 Mould

Findings

3.9.1 Mould

A visual survey of the subject building was conducted to determine if any mould was present. **Select areas** affected by visible mould growth were observed during the 2022 Reassessment.

3.9.2 Water Damage

A visual survey of the subject building was conducted to determine if water damage was present. Select areas were identified throughout the subject building where materials were affected by water damage.

Recommendations

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

Water stained/damaged ceiling observed throughout the basement of the subject building should be replaced as part of regular maintenance, and the underlying cause of the water leakage should be identified and repaired;

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

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 hazardous materials 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 in 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
 Isocyanates
- Arsenic
- AsbestosBenzene

- LeadMercury
- Silica
- Vinyl Chloride
- Ethylene Oxide

Coke Oven Emissions

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 nonfriable) 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 161 Laurier Avenue East, 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 for a group of naturally occurring fibrous minerals. In the past, asbestos was commonly used in building materials such as insulation, fireproofing and acoustic.

or decorative panels. Although there are many types of asbestos, Ontario's three primary 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.

Fiberglass 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 under 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 Requirement

ltem	Type of material	Size of the area of homogeneous material	Minimum number of bulk material samples to be collected
1.	Surfacing material, including, without limitation, material that is applied to surfaces by spraying, troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 square metres 90 or more square metres but less than 450 square metres 450 or more square metres	3 5 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	1
4.	Other material	<u>Any size</u>	3

Preliminary identification of the samples was made using polarized light microscopy (PLM), confirming the presence and type of asbestos caused 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, before removal or replacement, vinyl floor products previously identified as 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 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 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.

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 surfacecoating materials, furniture, toys and other articles for children should not exceed 90 mg/kg (0.009%, 90 ppm). However, this is intended for importing or selling products within Canada. Therefore, this is not to be misconstrued as a limit established to define a lead-containing material or a limitation 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 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 leadcontaining 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</u> <u>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</u>, Renovation, Maintenance or Repair (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 human poisoning 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 removal 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 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 (α -Quartz) may be a component in ceiling tiles and gypsum boards. 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. Sealed radioactive material sources in fire detection systems are 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 stable 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 stable in roofing materials, paints and adhesives 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

Attn:	Lauren Hamilton	Phone:	(613) 836-2184
	McIntosh Perry Consulting Engineers Ltd	Fax:	
	115 Walgreen Rd RR 3	Collected:	7/ 7/2021
	Carp, ON K0A 1L0	Received:	7/08/2021
		Analyzed:	7/15/2021
Proj:	UofO - 161 Laurier (Ottawa DSS)		

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

Client Sample ID:	BS 1.1					Lab Sample ID:	672101180-0001
Sample Description:	Front entrance/Tile Grout						
TFOT	Analyzed	0.1		-Asbestos	A - b 4	Commont	
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	BS 1.2					Lab Sample ID:	672101180-0002
Sample Description:	Front entrance/Tile Grout						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0%		None Detected	oonnent	
				100.070		l ab Cample ID:	672101180-0003
Client Sample ID:	BS 1.3					Lab Sample ID:	672101180-0003
Sample Description:	Front entrance/Tile Grout						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	BS 2.1					Lab Sample ID:	672101180-0004
Sample Description:	1st Floor/Drywall Joint Comp	ound					
	ist i loon brywaii oonit oonip	Journa					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0%	100.0%	None Detected		
Client Sample ID:	BS 2.2					Lab Sample ID:	672101180-0005
Sample Description:	1st Floor/Drywall Joint Comp	ound					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0%	100.0%	None Detected		
Client Sample ID:	BS 2.3					Lab Sample ID:	672101180-0006
Sample Description:	1st Floor/Drywall Joint Comp	ound					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0%	100.0%	None Detected		
Client Sample ID:	BS 2.4					Lab Sample ID:	672101180-0007
Sample Description:	1st Floor/Drywall Joint Comp	ound					
	Analyzed			-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0%	100.0%	None Detected		



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

1	EMSL Canada Order Customer ID:	672101180
	Customer ID:	55CTCS25B
	Customer PO:	CCC-221347
	Customer PO: Project ID:	Ottawa DSS
	-	

			EPA600/R-93/116	Method		
Client Sample ID:	BS 2.5				Lab Sample ID:	672101180-0008
Sample Description:	1st Floor/Drywall Joint Compo	und				
	Analyzed		Non-Asbestos		• • •	
TEST PLM	Date 7/14/2021	Color White	Fibrous Non-Fibroι 0.0% 100.0%	None Detected	Comment	
		vvriite	0.0% 100.0%			
Client Sample ID:	BS 2.6				Lab Sample ID:	672101180-0009
Sample Description:	1st Floor/Drywall Joint Compo	und				
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrou	s Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 2.7				Lab Sample ID:	672101180-0010
Sample Description:	1st Floor/Drywall Joint Compo	und				
· · · · ·						
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrou	s Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 3.1				Lab Sample ID:	672101180-0011
Sample Description:	Tile grout, kitchen wall, orange	•				
TFOT	Analyzed	0.1	Non-Asbestos	. A . I	Commont	
TEST PLM	Date 7/14/2021	Color Orange	Fibrous Non-Fibrou	s Asbestos None Detected	Comment	
		·····	0.070 100.070		Lab Camala ID.	672404490 0042
Client Sample ID:	BS 3.2				Lab Sample ID:	672101180-0012
Sample Description:	Tile grout, kitchen wall, orange)				
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrou	s Asbestos	Comment	
PLM	7/14/2021	Orange	0.0% 100.0%	None Detected		
Client Sample ID:	BS 3.3				Lab Sample ID:	672101180-0013
Sample Description:	Tile grout, kitchen wall, orange)				
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrou		Comment	
PLM	7/14/2021	Orange	0.0% 100.0%	None Detected		
Client Sample ID:	BS 4.1				Lab Sample ID:	672101180-0014
Sample Description:	Tile grout, kitchen floor, red					
	Anahmad		Non-Asbestos			
TEST	Analyzed Date	Color	Fibrous Non-Fibrou	s Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 4.2	·····			Lab Sample ID:	672101180-0015
Sample Description:	Tile grout, kitchen floor, red					
	The groat, monen hoor, red					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrou	s Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		



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

			EPA600/R-93/116 Meth	od		
Client Sample ID:	BS 4.3				Lab Sample ID:	672101180-0016
Sample Description:	Tile grout, kitchen floor, red					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 5.1				Lab Sample ID:	672101180-0017
Sample Description:	Tile grout, kitchen wall, white					
	Analyzed		Non-Asbestos		0	
TEST PLM	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 5.2				Lab Sample ID:	672101180-0018
Sample Description:	Tile grout, kitchen wall, white					
TFOT	Analyzed	Calar	Non-Asbestos	Asbestos	Commont	
TEST PLM	Date 7/14/2021	Color White	Fibrous Non-Fibrous 0.0% 100.0%	None Detected	Comment	
		VVIIILE	0.0% 100.0%			
Client Sample ID:	BS 5.3				Lab Sample ID:	672101180-0019
Sample Description:	Tile grout, kitchen wall, white					
TEST	Analyzed Date	Color	Non-Asbestos Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected	Comment	
		· · · · · · · · · · · · · · · · · · ·	0.070 100.070			
Client Sample ID:	BS 6.1				Lab Sample ID:	672101180-0020
Sample Description:	Tile grout, bathroom floor, blue					
	Analizad					
TEST	Analyzed Date	Color	Non-Asbestos Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected	oonment	
					l ab Cample ID:	
Client Sample ID:	BS 6.2				Lab Sample ID:	672101180-0021
Sample Description:	Tile grout, bathroom floor, blue					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		
		,			Lab Sample ID:	672101180-0022
Client Sample ID:	BS 6.3				Lan Sample ID:	072101100-0022
Sample Description:	Tile grout, bathroom floor, blue					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 7.1	· · · · · ·			Lab Sample ID:	672101180-0023
Sample Description:						512101100-0025
Sample Description:	Tile grout, bathroom wall, white					
	Analyzed		Non-Asbestos			
	Analyzeu					
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	



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

EMSL Canada Order Customer ID:	r 672101180
Customer ID:	55CTCS25B
Customer PO:	CCC-221347
Customer PO: Project ID:	Ottawa DSS

			EPA600/R-93/116 Met	hod		
Client Sample ID:	BS 7.2				Lab Sample ID:	672101180-0024
Sample Description:	Tile grout, bathroom wall, white					
	Analyzed		Non-Asbestos		_	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 7.3				Lab Sample ID:	672101180-0025
Sample Description:	Tile grout, bathroom wall, white					
	Analyzed		Non-Asbestos		. .	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 8.1				Lab Sample ID:	672101180-0026
Sample Description:	1st floor/Flooring mastic					
	Analyzed		Non-Asbestos		. .	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 8.2				Lab Sample ID:	672101180-0027
Sample Description:	1st floor/Flooring mastic					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 8.3				Lab Sample ID:	672101180-0028
Sample Description:	1st floor/Flooring mastic					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	0.0% 100.0%	None Detected		
Client Sample ID:	BS 9.1				Lab Sample ID:	672101180-0029
Sample Description:	1st floor wall/Plaster					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 9.2				Lab Sample ID:	672101180-0030
	BS 9.2 1st floor wall/Plaster				Lab Sample ID:	672101180-0030
•					Lab Sample ID:	672101180-0030
•			Non-Asbestos		Lab Sample ID:	672101180-0030
•	1st floor wall/Plaster	Color	Non-Asbestos Fibrous Non-Fibrous	Asbestos	Lab Sample ID: Comment	672101180-0030
Sample Description: TEST	1st floor wall/Plaster Analyzed	Color Gray		Asbestos None Detected	·	672101180-0030
Sample Description: TEST	1st floor wall/Plaster Analyzed Date		Fibrous Non-Fibrous		·	672101180-0030 672101180-0031
Sample Description: TEST PLM Client Sample ID:	1st floor wall/Plaster Analyzed Date 7/14/2021 BS 9.3		Fibrous Non-Fibrous		Comment	
Sample Description: TEST PLM Client Sample ID:	1st floor wall/Plaster Analyzed Date 7/14/2021		Fibrous Non-Fibrous		Comment	
Sample Description: TEST PLM Client Sample ID:	1st floor wall/Plaster Analyzed Date 7/14/2021 BS 9.3		Fibrous Non-Fibrous		Comment	
Client Sample ID: Sample Description: TEST PLM Client Sample ID: Sample Description: TEST	1st floor wall/Plaster Analyzed Date 7/14/2021 BS 9.3 1st floor wall/Plaster		Fibrous Non-Fibrous 0.0% 100.0%		Comment	



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

672101180 55CTCS25B
55CTCS25B
CCC-221347
Ottawa DSS

			EPA600/R-93/116 Me	ethod		
Client Sample ID:	BS 10.1				Lab Sample ID:	672101180-0032
Sample Description:	1st floor ceiling/Texture coat					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	30.0% 70.0%	None Detected		
Client Sample ID:	BS 10.2				Lab Sample ID:	672101180-0033
Sample Description:	1st floor ceiling/Texture coat					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	40.0% 60.0%	None Detected		
Client Sample ID:	BS 10.3				Lab Sample ID:	672101180-0034
Sample Description:	1st floor ceiling/Texture coat					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	White	40.0% 60.0%	None Detected		
Client Sample ID:	BS 11.1				Lab Sample ID:	672101180-0035
Sample Description:	Bar floor/Grout					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Tan	0.0% 100.0%	None Detected		
Client Sample ID:	BS 11.2				Lab Sample ID:	672101180-0036
Sample Description:	Bar floor/Grout					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/14/2021	Tan	0.0% 100.0%	None Detected		
Client Sample ID:	BS 11.3				Lab Sample ID:	672101180-0037
Sample Description:	Bar floor/Grout					
	Analyzed		Non-Asbestos		_	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan	0.0% 100.0%	None Detected		
Client Sample ID:	BS 12.1				Lab Sample ID:	672101180-0038
Sample Description:	Basement/Plaster					
	Analyzed		Non-Asbestos		_	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 12.2				Lab Sample ID:	672101180-0039
Sample Description:	Basement/Plaster					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		



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

		E	EPA600/R-9	93/116 Meth	nod		
Client Sample ID:	BS 12.3					Lab Sample ID:	672101180-0040
Sample Description:	Basement/Plaster						
	Analyzed			sbestos		_	
TEST	Date	Color		Ion-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	BS 13.1-Drywall					Lab Sample ID:	672101180-0041
Sample Description:	Basement/Drywall Joint Co	mpound					
	Analyzed			sbestos		0	
TEST PLM	Date 7/15/2021	Color	15.0%	lon-Fibrous 85.0%	Asbestos	Comment	
	//15/2021	Gray	15.0%	85.0%	None Detected		
Client Sample ID:	BS 13.1-Joint Compound					Lab Sample ID:	672101180-0041A
Sample Description:	Basement/Drywall Joint Co	mpound					
TEST	Analyzed	Color		sbestos Ion-Fibrous	Asbestos	Comment	
PLM	Date 7/15/2021	White	Fibrous N 0.0%	100.0%	None Detected	Comment	
		Wille	0.078	100.070	None Delected		
Client Sample ID:	BS 13.2					Lab Sample ID:	672101180-0042
Sample Description:	Basement/Drywall Joint Co	mpound					
	Analysis		No. A				
TEST	Analyzed Date	Color		sbestos Ion-Fibrous	Asbestos	Comment	
PLM	7/15/2021	White	0.0%	100.0%	None Detected	oonninent	
				100.070			
Client Sample ID:	BS 13.3					Lab Sample ID:	672101180-0043
Sample Description:	Basement/Drywall Joint Co	mpound					
	Analyzed		Non-A	sbestos			
TEST	Date	Color		Ion-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan/White	0.0%	97.0%	3% Chrysotile		
Client Sample ID:	BS 13.4					Lab Sample ID:	672101180-0044
Sample Description:						Lab Gample ID.	072101100-0044
Sample Description.	Basement/Drywall Joint Co	mpouna					
	Analyzed		Non-A	sbestos			
TEST	Date	Color		Ion-Fibrous	Asbestos	Comment	
PLM	7/15/2021	-			e Stop (Not Analyzed)		
Client Sample ID:	BS 13.5					Lab Sample ID:	672101180-0045
Sample Description:		mound				Las campio iD.	
campic bescription.	Basement/Drywall Joint Co	npounu					
	Analyzed		Non-A	sbestos			
TEST	Date	Color		Ion-Fibrous	Asbestos	Comment	
PLM	7/15/2021			Positiv	e Stop (Not Analyzed)		
Client Sample ID:	BS 13.6					Lab Sample ID:	672101180-0046
Sample Description:	Basement/Drywall Joint Co	mound					
2	Dasement/Drywall Joifit CO	npounu					
	Analvzed		Non-A	sbestos			
TEST	Analyzed Date	Color		sbestos Ion-Fibrous	Asbestos	Comment	



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

EMSL Canada Order Customer ID:	r 672101180
Customer ID:	55CTCS25B
Customer PO:	CCC-221347
Customer PO: Project ID:	Ottawa DSS

					04		
Client Sample ID:	BS 13.7					Lab Sample ID:	672101180-0047
Sample Description:	Basement/Drywall Joint Con	npound					
TEST	Analyzed Date	Color		-Asbestos Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	000	FIDIOUS		e Stop (Not Analyzed)	comment	
						Lab Camala ID:	
Client Sample ID:	BS 14.1					Lab Sample ID:	672101180-0048
Sample Description:	Basement ceiling/Texture Co	bat					
	Analyzed		Non	Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan	0.0%	100.0%	None Detected		
Client Sample ID:	BS 14.2					Lab Sample ID:	672101180-0049
Sample Description:	Basement ceiling/Texture Co	bat					
	0						
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan	0.0%	100.0%	None Detected		
Client Sample ID:	BS 14.3					Lab Sample ID:	672101180-0050
Sample Description:	Basement ceiling/Texture Co	bat					
TEST	Analyzed	Color		-Asbestos Non-Fibrous	Achastas	Comment	
PLM	Date 7/15/2021	Tan	0.0%	100.0%	Asbestos None Detected	Comment	
			0.070				
Client Sample ID:	BS 15.1					Lab Sample ID:	672101180-0051
Sample Description:	Basment office/Suspended (Ceiling Tile					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan/White	80.0%	20.0%	None Detected		
Client Sample ID:	BS 15.2					Lab Sample ID:	672101180-0052
Sample Description:	Basment office/Suspended (Ceilina Tile					
		3					
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Tan/White	80.0%	20.0%	None Detected		
Client Sample ID:	BS 15.3					Lab Sample ID:	672101180-0053
Sample Description:	Basment office/Suspended (Ceiling Tile					
TEOT	Analyzed	0.01		Asbestos	A	Comment	
TEST PLM	Date 7/15/2021	Color Tan/White	Fibrous 80.0%	Non-Fibrous 20.0%	Asbestos	Comment	
			00.0%	20.0 /0	None Detected		
Client Sample ID:	BS 16.1					Lab Sample ID:	672101180-0054
Sample Description:	Basement room 002/Tile Gro	out					
	Analyzed		Non	-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Brown	0.0%		None Detected		



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

1	EMSL Canada Order	672101180
	Customer ID:	55CTCS25B
	Customer PO:	CCC-221347
	EMSL Canada Order Customer ID: Customer PO: Project ID:	Ottawa DSS

			EPA600/R	-93/116 Met	hod		
Client Sample ID:	BS 16.2					Lab Sample ID:	672101180-0055
Sample Description:	Basement room 002/Tile Grou	t					
	Analyzed			-Asbestos		- .	
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Brown	0.0%	100.0%	None Detected		
Client Sample ID:	BS 16.3					Lab Sample ID:	672101180-0056
Sample Description:	Basement room 002/Tile Grou	t					
	Applyzod		Non	-Asbestos			
TEST	Analyzed Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Brown	0.0%		None Detected		
Client Sample ID:	BS 17.1					Lab Sample ID:	672101180-0057
Sample Description:	Ext front/Pebble Dash					Lub Gumpie ib.	
bumple beschption.	EXTITOTI/PEDDIE Dasti						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray/Red	0.0%	100.0%	None Detected		
Client Sample ID:	BS 17.2					Lab Sample ID:	672101180-0058
Sample Description:	Ext front/Pebble Dash						
	Analyzed			-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray/Red	0.0%	100.0%	None Detected		
Client Sample ID:	BS 17.3					Lab Sample ID:	672101180-0059
Sample Description:	Ext front/Pebble Dash						
	A I			A - 1			
TEST	Analyzed Date	Color		-Asbestos Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray/Red	0.0%		None Detected	Comment	
Client Sample ID:	BS 18.1					Lab Sample ID:	672101180-0060
Sample Description:	Apartments/Vinyl Sheet Floori	22				Lab Gample ID.	072101100-0000
oumple Description.	Apartments/virtyi Sheet Floor	ng					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Beige	15.0%	85.0%	None Detected		
Client Sample ID:	BS 18.2					Lab Sample ID:	672101180-0061
Sample Description:	Apartments/Vinyl Sheet Floori	ng					
		-					
	Analyzed			-Asbestos			
TEST	Date	Color		Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Beige	15.0%	85.0%	None Detected		
Client Sample ID:	BS 18.3					Lab Sample ID:	672101180-0062
Sample Description:	Apartments/Vinyl Sheet Floori	ng					
TEQT	Analyzed	Color		-Asbestos	Achastas	Comment	
TEST PLM	Date 7/15/2021	Color Beige	15.0%	Non-Fibrous 85.0%	Asbestos None Detected	Comment	
	1/10/2021	Deige	15.0%	00.0%			



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

1	EMSL Canada Order Customer ID:	672101180
	Customer ID:	55CTCS25B
	Customer PO:	CCC-221347
	Customer PO: Project ID:	Ottawa DSS
	-	

			EPA600/R-93/116 Met	hod		
Client Sample ID:	BS 19.1				Lab Sample ID:	672101180-0063
Sample Description:	Ext 2nd Floor/Caulking, Black					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Black	0.0% 100.0%	None Detected		
Client Sample ID:	BS 19.2				Lab Sample ID:	672101180-0064
Sample Description:	Ext 2nd Floor/Caulking, Black					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Black	0.0% 100.0%	None Detected		
Client Sample ID:	BS 19.3				Lab Sample ID:	672101180-0065
Sample Description:	Ext 2nd Floor/Caulking, Black					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Black	0.0% 100.0%	None Detected		
Client Sample ID:	BS 20.1				Lab Sample ID:	672101180-0066
Sample Description:	Ext 2nd Floor/Brick Mortar					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 20.2				Lab Sample ID:	672101180-0067
Sample Description:	Ext 2nd Floor/Brick Mortar					
	Analyzed		Non-Asbestos		a <i>i</i>	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 20.3				Lab Sample ID:	672101180-0068
Sample Description:	Ext 2nd Floor/Brick Mortar					
	Analyzed		Non-Asbestos		. .	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 21.1				Lab Sample ID:	672101180-0069
Sample Description:	Ext 2nd Floor/Pebble Dash					
	Analyzed		Non-Asbestos		a	
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		
Client Sample ID:	BS 21.2				Lab Sample ID:	672101180-0070
Sample Description:	Ext 2nd Floor/Pebble Dash					
	Analyzed		Non-Asbestos			
TEST	Date	Color	Fibrous Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0% 100.0%	None Detected		



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

EMSL Canada Order Customer ID: Customer PO:	672101180 55CTCS25B
Customer PO:	CCC-221347
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:	BS 21.3					Lab Sample ID:	672101180-0071
Sample Description:	Ext 2nd Floor/Pebble Dash						
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	Gray	0.0%	100.0%	None Detected		
Client Sample ID:	BS 22.1					Lab Sample ID:	672101180-0072
Sample Description:	Apartment hallway/Texture Co	at					
	Analyzed			-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021	White	0.0%	95.0%	5% Chrysotile		
Client Sample ID:	BS 22.2					Lab Sample ID:	672101180-0073
Sample Description:	Apartment hallway/Texture Co	at					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021			Positiv	e Stop (Not Analyzed)		
Client Sample ID:	BS 22.3					Lab Sample ID:	672101180-0074
Sample Description:	Apartment hallway/Texture Co	at					
	Analyzed		Non	-Asbestos			
TEST	Date	Color	Fibrous	Non-Fibrous	Asbestos	Comment	
PLM	7/15/2021			Positiv	e Stop (Not Analyzed)		

Analyst(s):

Daniel Denora PLM (7) Kevin Ream PLM (62)

Reviewed and approved by:

Ewa Krupinska, Laboratory Manager or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. 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. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. Estimation of uncertainty available upon request. This report is a summary of multiple methods of analysis, fully compliant reports are available upon request. A combination of PLM and TEM analysis may be necessary to ensure consistently reliable detection of asbestos. 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. Plymouth Meeting, PA NVLAP Lab Code 200699-0, Philadelphia ALL-292, VA 3333000315, AIHA-LAP, LLC IHLAP #178659

Initial report from: 07/15/202115:16:23

Test Report:EPAMultiTests-7.32.2.D Printed: 7/15/2021 03:16PM



Attn: Lauren Hamilton McIntosh Perry Consulting Engineers Ltd 115 Walgreen Rd RR 3 Carp, ON K0A 1L0

Phone: (613) 836-2184 Fax:

The following analytical report covers the analysis performed on samples submitted to EMSL Canada Inc. on 7/9/2021. The results are tabulated on the attached data pages for the following client designated project:

U of O - 161 LAURIER

The reference number for these samples is EMSL Order #552111031. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (289) 997-4602.

Approved By:

Rowena Fanto, Lead Supervisor

Samples analyzed by EMSL Canada Inc., Mississauga, ON AIHA-LAP, LLC Accred. #196142

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the AIHA, unless specifically indicated. The final results are not field blank corrected. The laboratory is not responsible for final results calculated using air volumes that have been provided by non-laboratory personnel. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

7/16/2021



Attn: Lauren Hamilton **McIntosh Perry Consulting Engineers Ltd** 115 Walgreen Rd RR 3 Carp, ON K0A 1L0

Phone: Received: 7/9/2021 10:51 AM Collected: 7/7/2021

Fax:

ProjectID: (613) 836-2184

Project: U of O - 161 LAURIER

		Analytical	Results				
Client Sample Description	PB-01 BEIGE, 1ST FLOOR WALLS		Collected:	7/5/2021 Lab) ID:	552111031-0	0001
Method	Parameter	Result	RL Units	Prep Date & An		Analysi Date & Ana	
METALS							
3050B/6010D	Lead	ND	0.00040 % wt	7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-02 DARK BEIGE, 1ST FLOOR TRIM		Collected:	7/5/2021 Lab	D:	552111031-0	0002
Method	Parameter	Result	RL Units	Prep Date & An		Analysi Date & Ana	
METALS							
3050B/6010D	Lead	ND	0.00041 % wt	7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-03 GREEN, BAR WALL		Collected:	7/5/2021 Lab) ID:	552111031-0	0003
Method	Parameter	Result	RL Units	Prep Date & An		Analysi Date & Ana	
METALS							
3050B/6010D	Lead	ND	0.00040 % wt	7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-04 RED, EXTERIOR		Collected:	7/5/2021 Lab) ID:	552111031-0	0004
Method	Parameter	Result	RL Units	Prep Date & An		Analysi Date & Ana	
METALS							
3050B/6010D	Lead	0.00098	0.00041 % wt	7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-05 WHITE, BASEMENT		Collected:	7/5/2021 Lab	D:	552111031-0	0005
Method	Parameter	Result	RL Units	Prep Date & An		Analysi Date & Ana	
METALS							
3050B/6010D	Lead	0.00062	0.00040 % wt	7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-06		Collected:	7/5/2021 Lab	D:	552111031-0	0006
	BLACK, EXTERIOR TRIM						
Method	BLACK, EXTERIOR TRIM	Result	RL Units	Prep Date & An		Analysi Date & Ana	



Attn: Lauren Hamilton **McIntosh Perry Consulting Engineers Ltd** 115 Walgreen Rd RR 3 Carp, ON K0A 1L0

Phone: Received: 7/9/2021 10:51 AM Collected: 7/7/2021

Fax:

ProjectID: (613) 836-2184

Project: U of O - 161 LAURIER

Client Sample Description	PB-06 BLACK, EXTERIOR TRIM		Colle	cted:	7/5/2021	Lab	ID:	552111031-0	0006
Method	Parameter	Result	RL	Units		Prep Date & An	alyst	Analys Date & An	
METALS									
3050B/6010D	Lead	0.037	0.00041	% wt		7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-07 APARTMENT 2, WHITE PAINT	г	Colle	cted:	7/7/2021	Lab	ID:	552111031-0	0007
Method	Parameter	Result	RL Units			Prep Date & An	alyst	Analysis Date & Analyst	
METALS									
3050B/6010D	Lead	1.2 D	0.0020	% wt		7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-08 APARTMENT 3, YELLOW TRI	М	Colle	cted:	7/7/2021	Lab	ID:	552111031-0	0008
Method	Parameter	Result	RL Units			Prep Date & An	alyst	Analysis Date & Analyst	
METALS									
3050B/6010D	Lead	3.6 D	0.0041	% wt		7/13/2021	PB	7/13/2021	PB
Client Sample Description	PB-09 BLACK, APARTMENT HALLW	AY TRIM	Colle	cted:	7/7/2021	Lab	ID:	552111031-0	0009
Method	Parameter	Result	RL	Units		Prep Date & An	alyst	Analys Date & An	
METALS									

MDL - method detection limit

J - Result was below the reporting limit, but at or above the MDL

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit (Analytical)

D - Dilution Sample required a dilution which was used to calculate final results

APPENDIX D

Site Photographs

McINTOSH PERRY



- CCC-221347-00 / CCC-230252-00
- Photo 1: View of asbestoscontaining drywall joint compound observed in the basement hallway

Photo 2: View of asbestoscontaining texture coat observed in the apartment stairway







CCC-221347-00 / CCC-230252-00

Photo 3: View of leadcontaining white wall paint observed in the apartments

Photo 4: View of leadcontaining black trim paint observed in the apartment stairwell





CCC-221347-00 / CCC-230252-00

Photo 5: View of waterdamaged plaster ceiling observed in the basement dining area

Photo 6: View of lead acid battery pack observed throughout the building



Photo 7: View of smoke detectors with radioactive material present throughout the building.

Photo 8: View of asbestoscontaining texture coat present on walls observed in fair condition in the hallway of the subject building during the 2022 Reassessment.

Photo 9: View of suspect mould observed in Unit 2 of the subject building during the 2022 Reassessment.





APPENDIX E

Asbestos-Containing Materials Checklists

McINTOSH PERRY

161 Laurier Ave., Ottawa, Ontario Hazardous Materials Survey and 2023 Reassessment Appendix E - Asbestos Containing Materials Checklist

Floor/Level	Location	Type of ACM	Description	Asbestos Confirmed/ Suspected	Friable/Non-Friable	Damaged/Deteriorated	Accessibility	Level of Work Near Material	Approx. Quantity	Unit	Recommended Action	Comments
0	Basement	Drywall Joint Compound	White	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place	
All	Throughout Building	Drywall Joint Compound	White	Confirmed	-	Good Condition	Easy	Low	-	-	Manage in Place	
1	Apartment Stairwell	Wall Texture Coat	White	Confirmed	Friable	Good Condition	Easy	Low	350	SF	Manage in Place	
1	Apartment Stairwell	Wall Texture Coat	White	Confirmed	Friable	Fair Condition	Easy	Low	1	SF	Monitor Condition of Material. Consider Removal or Repair.	
1	Specific Locations	Fire Doors	-	Suspected	-	Good Condition	Easy	Low	-	-	Manage in Place	
Roof	Roof	Roofing Materials	-	Suspected	-	Good Condition	Moderate	Low	-	-	Manage in Place	

McINTOSH PERRY

CCC-221347-00 / CCC-230252-00

APPENDIX F

Hazardous Containing Materials Checklists

McINTOSH PERRY

161 Laurier Ave., Ottawa, ON Hazardous Materials Survey and 2023 Reassessment Appendix F - Hazardous Containing Materials Checklist

Approx. Quantity Recommended Manufacturer Suspected/ Confirmed Component Comments Floor/Level Condition Location DS Type Colour Action Unit Good Throughout Manage in Place All White Confirmed Lead **Battery Pack** -Building Condition Manage in Place. If affected by renovation/demolition, must be Throughout Smoke/Heat Good С All Radioactive Materials White 5 Confirmed decommissioned by a licenced Building Detector Condition contactor as disposed of in accordance with O. Reg 347. Should be replaced as part of regular Poor **Dining Area** Water Damage **Ceiling Paint** Beige 5 SF Confirmed 0 Condition maintenance. Good Door, Trim and SF Confirmed 1 Stairwell Lead Black 20 Manage in Place Frame Paint Condition Good Manage in Place 2 Apartments Lead Wall Paint White Confirmed Condition Must be removed following Level I Poor mould remediation procedures, as 2 Mould Drywall N/A 2 SF Confirmed Apartment 2 Condition per EACC Guidelines Door, Trim and Good Confirmed Apartment 3 10 SF 2 Lead Yellow Manage in Place Frame Paint Condition Throughout Fluorescent Light Good N/A Confirmed Manage in Place 1 Mercury Level Tubes Condition Throughout Concrete, Mortar, Good Manage in Place Silica N/A 1 Confirmed -Condition Level Etc. Manage in Place. If affected by renovation/demolition, must be Ozone Depleting Good Beverage-Kitchen Refrigerator Silver С Confirmed decommissioned by a licenced R404A 1 1 Substances (ODS) Condition Air contactor as disposed of in accordance with O. Reg 347.

MCINTOSH PERRY

CCC-221347-00 / CCC-230252-00

161 Laurier Ave., Ottawa, ON Hazardous Materials Survey and 2023 Reassessment Appendix F - Hazardous Containing Materials Checklist

Floor/Level	Location	DS Type	Component	Colour	Condition	Manufacturer	Approx. Quantity	Unit	Suspected/ Confirmed	Recommended Action	Comments
1	Kitchen	Ozone Depleting Substances (ODS)	Freezer	Silver	Good Condition	ColdTech	1	С	Confirmed	Manage in Place. If affected by renovation/demolition, must be decommissioned by a licenced contactor as disposed of in accordance with O. Reg 347.	R-404
1	Bar	Ozone Depleting Substances (ODS)	Refrigerator	Black	Good Condition	Beverage- Air	2	С	Confirmed	Manage in Place. If affected by renovation/demolition, must be decommissioned by a licenced contactor as disposed of in accordance with O. Reg 347.	R134A
0	Basement	Ozone Depleting Substances (ODS)	lce Making Machine	Silver	Good Condition	Manitowoc	1	С	Confirmed	Must be decommissioned by a licensed contractor as disposed of in accordance with O.Reg. 347.	R-404A
0	Basement	Ozone Depleting Substances (ODS)	Freezer	White	Good Condition	Larkin & Keeprite	2	С	Confirmed	Manage in Place. If affected by renovation/demolition, must be decommissioned by a licenced contactor as disposed of in accordance with O. Reg 347.	Unknown
0	Basement	Ozone Depleting Substances (ODS)	Refrigerator	White	Good Condition	Coldmatic	1	С	Confirmed	Manage in Place. If affected by renovation/demolition, must be decommissioned by a licenced contactor as disposed of in accordance with O. Reg 347.	Unknown

CCC-221347-00 / CCC-230252-00

MCINTOSH PERRY

161 Laurier Ave., Ottawa, ON Hazardous Materials Survey and 2023 Reassessment Appendix F - Hazardous Containing Materials Checklist

Approx. Quantity Recommended Manufacturer Suspected/ Confirmed Component Floor/Level Condition Comments Location DS Type Colour Action Unit Manage in Place. If affected by renovation/demolition, must be Ozone Depleting Good Refrigerator decommissioned by a licenced 2 White 2 С Confirmed R-134A Apartment Substances (ODS) Condition contactor as disposed of in accordance with O. Reg 347. Manage in Place. If affected by renovation/demolition, must be Ozone Depleting Air Conditioning Good С decommissioned by a licenced 2 Roof N/A 1 Confirmed Unknown Substances (ODS) Unit Condition contactor as disposed of in accordance with O. Reg 347. Manage in Place. If affected by renovation/demolition, must be Ozone Depleting Good Refrigerator decommissioned by a licenced 3 White С Confirmed R-134A Apartment 1 Substances (ODS) Condition contactor as disposed of in accordance with O. Reg 347.

CCC-221347-00/CCC-230252-00

MCINTOSH PERRY

APPENDIX G

Site Sampling & Location Plans

McINTOSH PERRY

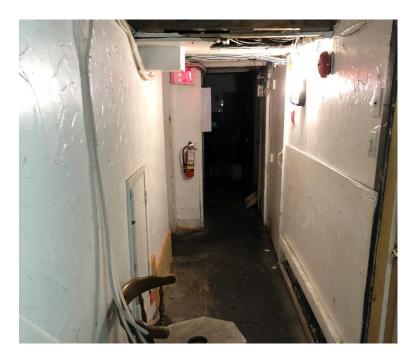


Photo 1: View of asbestoscontaining drywall joint compound observed in the basement hallway

Photo 2: View of asbestoscontaining texture coat observed in the apartment stairway





Photo 3: View of lead containing white wall paint observed in the apartments

Photo 4: View of lead containing black trim paint observed in the apartment stairwell

Mcintosh Perry



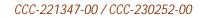


Photo 5: View of water damaged plaster ceiling observed in the basement dining area



Photo 6: View of lead acid battery pack observed throughout the building



- Photo 7: View of smoke detectors with radioactive material present throughout the building.
- Photo 8: View of asbestoscontaining texture coat present on walls observed in fair condition in the hallway of the subject building during the 2022 Reassessment.

Photo 9: View of suspect mould observed in Unit 2 of the subject building during the 2022 Reassessment.



