T. HARRIS
ENVIRONMENTAL MANAGEMENT
since 1979

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

HAZARDOUS MATERIALS SURVEY
ARTHUR ARENA & AQUATICS CENTRE
156 & 158 Domville Street
Arthur, Ontario

May 3rd, 2024

Prepared for:
Jerry Idialu – Director of Finance/Treasurer
Township of Wellington-North
7490 Sideroad 7 West
P.O. Box 125
Kenilworth, ON
N0G 2E0

T. Harris Environmental Management Inc.
931 Commissioners Road East, Suite 100
London, Ontario
N5Z 3H9

Project No: L24-03848-14

T. HARRIS
ENVIRONMENTAL MANAGEMENT
since 1979

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

TABLE OF CONTENTS

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

APPENDICES

T. HARRIS
ENVIRONMENTAL MANAGEMENT
since 1979

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

EXECUTIVE SUMMARY

T. Harris Environmental Management Inc. (THEM) was retained by the Township of Wellington-North to conduct a Hazardous Materials Survey, including Designated Substances, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs), for the Arthur Arena and Community Centre located at 158 Domville Street and the attached Aquatics Centre located at 156 Domville Street in Arthur, Ontario. The objective of this study was to determine whether any hazardous building materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, were present in the above noted buildings. The survey was conducted on April 23rd, 2024.

Based on the investigation conducted by T. Harris Environmental Management, through available records, interviews and a site review, the following were identified:

- Asbestos-containing materials (ACM) observed in the Arthur Arena are detailed in Table I. Asbestos-containing materials observed were assigned a Priority rating. Materials assigned Priority 1 are highly recommended to be removed, repaired or encapsulated. Materials identified as Priority 2 may remain in place until system upgrading or renovations. Materials assigned Priority 3 may remain in place until the building is demolished.

- No ACMs were identified in the Aquatics Centre, and none are suspected present based on the age of construction (2006).

TABLE I
Summary of Asbestos-Containing Materials
Arthur Arena & Community Centre
158 Domville Street, Arthur, Ontario
April 23rd, 2024

Location	Material	Quantity	Priority	Type(s) of Asbestos	Friable (Y/N)	Photo
Bar/Freezer Room (Location 105)	12" Beige Vinyl Floor Tiles	~ 200 ft^2	2	Chrysotile	No	P1
Coat Room (Location 107)	12" Beige Vinyl Floor Tiles	~ 120 ft^2	2	Chrysotile	No	P2
Office (Location 108)	12" Beige Vinyl Floor Tiles	~ 160 ft^2	2	Chrysotile	No	--
Office (Location 110)	12" Beige Vinyl Floor Tiles	~ 140 ft^2	2	Chrysotile	No	--
Concession Stand (Location 123)	12" Beige Vinyl Floor Tiles	~ 6 ft^2	2	Chrysotile	No	P3

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

- A summary of the paints and their associated lead concentrations can be found in Table II. The cream wall paint and white ceiling paint sampled from the Arena were found to be low-level lead paints. No lead was detected in the light blue wall paint in the Arena or either of the paints sampled from the Aquatics Centre. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings in the Arena.

TABLE II
Summary of Lead Bulk Sampling Results
Arthur Arena & Community Centre & Aquatics Centre
156 & 158 Domville Street, Arthur, Ontario
April 23rd, 2024

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
Arena and Community Centre				
LD-A-01	Auditorium Storage Room (Location 102)	Cream Wall Paint	0.036	--
LD-B-01	Kitchen (Location 104)	White Ceiling Paint	0.027	--
LD-C-01	2nd Floor Auditorium (Location 202)	Light Blue Wall Paint	<0.0086	--
Aquatics Centre				
LD-A-01	Boys Change Room	Light Blue Wall Paint	<0.0081	--
LD-B-01	Compressor Room	Aqua Blue Wall Paint	<0.0082	--

- Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline (α-Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

- Liquid mercury may be present within wall mounted thermostatic control switches. Mercury vapour is suspected to be present within fluorescent light tubes.

Based on the aforementioned findings for the survey conducted, THEM recommends the following:

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

- Non-friable ACM assigned a Priority 1 must be removed and/or repaired immediately following applicable asbestos abatement procedures. Non-friable ACM assigned a Priority 2 can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material. In the event the non-friable ACM is removed, Type 1 operations apply (provided that the material is wetted down and removed using non-powered handheld tools) as outlined in Ontario Regulation 278/05, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations* – made under the Ontario Occupational Health and Safety Act.

- Respiratory protection equipment worn by contractors conducting asbestos abatement activities should be selected based on Table 2 Respirators found in Ontario Regulation 278/05.

- In the event all ACM within the building is not removed, an asbestos management program must be implemented according to Ontario Regulation 278/05.

- Paints identified to have concentrations of lead and observed in poor condition should be removed and/or stabilized following applicable lead abatement procedures. Prior to any renovations or demolition activities that may disturb materials identified to contain lead of any concentration, precautions must be taken as described in Ontario Regulation 213/91, *Construction Projects* – made under the Occupational Health and Safety Act. This may include conducting an assessment of the potential exposure of airborne lead by a qualified person. 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 guideline "*Lead on Construction Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- Precautions must be taken to prevent mercury vapours becoming airborne during renovations or building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

- All waste material must be handled and disposed of according to R.R.O. 1990, Reg. 347: *General - Waste Management*, as amended – made under the Ontario Environmental

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Protection Act. Lead and/or Mercury waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

- Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried with silica containing materials should be conducted following the guideline "*Silica on Construction Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in R.R.O. 1990, Reg. 347: *General - Waste Management*, as amended. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

- All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

- Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

- Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

This survey satisfies requirements of the Occupational Health and Safety Act with regards to the presence/absence of hazardous materials identified within this report. This executive summary is not to be used alone and the report should be reviewed in its entirety.

Should you have any questions or comments regarding this survey, please do not hesitate to contact our office.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

1.0 INTRODUCTION

T. Harris Environmental Management Inc. was retained by the Township of Wellington-North to conduct a Hazardous Materials Survey, including Designated Substances, for the Arthur Arena and Community Centre located at 158 Domville Street in Arthur, Ontario and the attached Aquatics Centre located at 156 Domville Street. The survey was conducted on April 23rd, 2024.

The objective of this survey was to determine whether hazardous materials, including Designated Substances, as defined under the Ontario Occupational Health and Safety Act, Mould, Polychlorinated Biphenyls (PCBs) and Chlorofluorocarbons (CFCs) were present within the buildings surveyed. The survey included a review of the entire building for the presence and extent of hazardous materials, evaluation of the type of hazardous materials and degree of possible exposure, and assessment of requirements for any further investigation or remedial action, if necessary.

Identification of suspect asbestos materials was performed by means of bulk sampling and laboratory analysis. Testing for lead in paint was conducted using bulk sampling. Other hazardous materials, if present, were identified by visual inspection only. These included mercury in gauges and light fixtures, polychlorinated biphenyls (PCBs) in coolant oils of transformers and fluorescent light fixture ballasts, and silica in cement. Recommendations based on our findings are made in Section 5.0.

This report documents our findings as noted during our site inspection. Individual assessments were made to identify Designated Substances and their condition, as well as requirements for special treatment such as control programs or specialized removal and disposal techniques.

2.0 ONTARIO REGULATIONS AND GUIDELINES FOR SURVEY

Ontario Regulation 490/09, *Designated Substances* – made under the Ontario Health and Safety Act, applies to controlling designated substances in the workplace. This regulation may not be all encompassing for each of the Designated Substances and other associated Ontario Regulations may apply.

The management and abatement of asbestos-containing materials must be conducted according to Ontario Regulation 278/05 amended by O. Reg. 450/19, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations* – made under the Occupational

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Health and Safety Act. Asbestos-containing waste must be handled and disposed of according to R.R.O., 1990, Regulation 347: *General - Waste Management*.

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

- Lead on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

- Silica on Construction Projects, issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

Polychlorinated biphenyls (PCBs) are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however as selected materials were reviewed for PCB content during this survey the following legislation applies: R.R.O., 1990, Regulation 362: *Waste Management - PCB's* – made under the Environmental Protection Act and SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999.

Applicable legislation and/or guidelines for other materials identified (not listed above) as part of the survey are included where applicable.

All waste materials are regulated by R.R.O., 1990, Regulation 347: *General - Waste Management*, as amended – made under the Ontario Environmental Protection Act.

3.0 SURVEY METHODOLOGY

Not all designated substances or suspect hazardous materials were sampled. Sampling was carried out only for those compounds that were known to be present or those deemed to have a likely source of origin in the buildings under study.

All sample analyses were performed by an independent laboratory and the Laboratory Certificates of Analysis attached in Appendix III. Materials similar in appearance or texture to other materials tested were considered to be of similar composition. When inaccessible areas such as behind walls and above plaster ceilings were encountered during the survey, inferences were drawn based upon findings in adjacent spaces. Other designated substances and listed hazardous materials, if present, were identified by observation only.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

The survey, as proposed, included the inspection of all accessible areas specified by the client.

3.1 ASBESTOS-CONTAINING MATERIALS

Asbestos is a general name for several varieties of highly fibrous silicate materials. Commercially significant types include: Chrysotile, Amosite and Crocidolite. The combination of a variety of favourable characteristics made asbestos popular for wide industrial use, including: fibrous structure, low heat conductivity, high electrical resistance, chemical inertness, strength, flexibility and effectiveness as a reinforcing or binding agent when combined with cement or plastic.

Products with bound asbestos pose no danger of releasing airborne fibres unless cut, sawn, ground or sanded. One measure of the potential hazard of a product is its friability. The friability of asbestos containing materials (ACM) is a measure of the ease with which the material can be ground or pulverized by hand pressure. Knowledge of the friability of ACM may theoretically indicate the ease with which fibres can be released into the air.

The accredited survey inspector(s) were responsible for inspecting, assessing and recording the location, condition and type of all suspect friable and non-friable ACM in the project area. Each individual room and space was surveyed. Homogeneous sampling areas of ACM were determined. A homogeneous area is defined as an application of ACM that is uniform in colour, texture, identical in every respect, and is unlikely to consist of more than one type or formulation of material. Materials installed at different times, on different floors, or in special areas such as mechanical rooms are assigned to separate sampling areas.

3.1.1 Asbestos Bulk Sampling

Sampling of suspected asbestos-containing building materials observed within the surveyed area was conducted as per the requirements of Table 1 found within Ontario Regulation 278/05. A summary of the sample requirements can be found in Table III below.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

TABLE III
Asbestos Bulk Sampling Requirements

Type of material	Size of area of homogeneous material	Minimum # of bulk material samples to be collected
Surfacing material, including without limitation material that is applied to surfaces by spraying, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	<90 sq metres	3
	>90 sq metres but <450 sq. metres	5
	>450 sq metres	7
Thermal insulation, except as described in item 3	Any size	3
Thermal insulation patch	<2 linear metres or 0.5 sq metres	1
Other material	Any size	3

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

According to O. Reg. 278/05, asbestos-containing material means material that contains 0.5 percent or more asbestos by dry weight. If analysis establishes that a bulk material sample contains 0.5 percent or more asbestos by dry weight, then it is not necessary to analyze other bulk material samples taken from the same area of homogenous material, the entire area of homogenous material is deemed to be asbestos-containing material.

Destructive testing was not performed. Therefore, in the event asbestos-containing materials are discovered as part of the survey, inferences have been drawn for inaccessible spaces (i.e., above plaster ceilings with no access panels) based upon findings in adjacent spaces. Similarly, motors, blowers, electrical panels, etc., were not de-energized or disassembled to examine concealed conditions. Such items should be considered to have asbestos as a component until proven otherwise.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Boilers were frequently constructed (i.e., lined, bedded, etc.) with asbestos refractory materials. Demolition and/or renovations to existing boiler units which may elicit a disturbance of suspect ACM should necessitate prior investigation to determine for the presence of ACM. In addition, fire doors that may be present in the surveyed areas were not tested intrusively and therefore should be considered to contain ACM until proven otherwise. Further examples of such assumptions include: elevator brakes, roofing felts and mastics, caulking, high voltage wiring, mechanical packing and gaskets, and underground services or piping.

3.1.2 Assessment

Materials identified to contain asbestos were assessed on the relative possibility of fibre release into the air due to a combination of their condition and accessibility. Priorities have been established for remedial action based on these combinations, and are given below.

Priority 1 (One)

Asbestos-containing material highly recommended to be removed, repaired or encapsulated.

Priority 2 (Two)

Asbestos-containing material could remain in place until system upgrading or renovations are to occur.

Priority 3 (Three)

Asbestos-containing material could remain in place until eventual building demolition.

3.2 LEAD-CONTAINING MATERIALS

Paints/surface coatings observed in the surveyed areas were tested for lead content. Other building materials not tested for lead content (i.e., mortar, concrete) should be considered lead-containing until proven otherwise.

Currently in Ontario, there is no regulation that provides a definition of what the percent of lead in paint must be in order to be considered “lead-based paint”. The Surface Coating Materials Regulations (SOR/2005-109) made under the Canada Consumer Product Safety Act specifies that the concentration of total lead present in a surface coating material must not be more than

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

600 mg/kg. The Surface Coatings Materials Regulations came into effect on April 19th, 2005 and was amended in November of 2010, which lowered the acceptable concentration of total lead present in a surface coating material to less than 90 mg/kg (SOR/2010-224). This lead content applies to any paint and/or surface coatings of products advertised, sold or imported into Canada. Coatings applied to furniture, pencils, artists' brushes, toys and articles that are intended for children would fall under the jurisdiction of this regulation. However, these levels are not specifically intended to determine what constitutes a "lead-based paint", it is merely a regulation to protect consumers of coated materials. Therefore, this regulation does not apply to construction projects where lead-based coatings may be disturbed during the course of renovations or construction.

To date, there is no simple correlation between the concentration of lead in paints/surface coatings and the resulting airborne lead levels that may be emitted if the coated material was to be disturbed or removed. However, the Environmental Abatement Council of Canada (EACC) "*Lead Guideline for Construction, Renovation, Maintenance or Repair*", published October 2014 (herein referred to as 'EACC Guideline'), outlines "virtually safe" lead levels for paints or surface coatings. Paints or coatings containing less than or equal to 0.1% lead by weight[1] are considered low-level lead paints or coatings. If these paints or coatings are disturbed in a manner, which uses normal dust control procedures, and does not exceed the particulate not otherwise specified (PNOS) time-weighted average (TWA) of 0.05 mg/m^3 set in Ontario Regulation 490/09, then worker protection from the inhalation of lead is not required. Projects that meet these guidelines must still adhere to general health and safety precautions, such as prohibiting eating, smoking, drinking or chewing gum in the work area. These projects must also implement dust suppression techniques and provide facilities for workers to wash their hands and face. Additionally, the Occupational Health and Safety branch of the Ministry of Labour (MOL) provides classifications of the types of specific lead operations, which are based on presumed airborne lead concentrations to which the worker will be exposed. The classifications are provided in the MOL publication, "*Guideline: Lead on Construction Projects*", published in September 2004 and revised in April 2011 (herein referred to as 'MOL Guideline'). The levels of airborne lead expected to be present in a work area is related to the types of work operations being used to disturb or remove the coatings; it is not a function of the percentage of lead within the coating. Based on this MOL Guideline, all paints/surface coatings are to be considered lead-containing unless they are tested and contain undetectable lead concentrations.

[1] WHMIS reporting limit for lead in a safety data sheet or material safety data sheet.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Lead is also suspected to be a component in solder on plumbing fixtures throughout the building. Representative samples of solder joints suspected to contain lead were not collected. Other suspect lead-containing materials such as lead sheeting, conduit, pipes and lead-calcium battery plates were not sampled during this investigation, but were noted where applicable.

3.2.1 Bulk Sampling for Lead in Paints

To verify lead content in paints, representative bulk samples of paints were retrieved for laboratory analysis for lead content. Paint samples were scraped down to the building base structure, with all possible layers present, then submitted to an independent laboratory. Samples were treated with a dilute nitric acid sample digestion prior to filtration. Analysis utilized for lead detection in filtered samples was Flame Atomic Absorption Spectroscopy (F.A.A.S.).

3.3 SILICA-CONTAINING MATERIALS

Silica occurs naturally as crystalline or amorphous material. Crystalline silica is significantly more toxic than amorphous silica.

Silica may be present in the project area in two forms: i) amorphous-diatomaceous earth in pipe fittings and other insulation materials; and ii) free crystalline (α-Quartz) in ceiling tiles, concrete, cement, brick, ceramic tiles, terra cotta block and hard plaster finishes. Testing for silica in these materials was not conducted, but its presence was noted.

3.4 MERCURY-CONTAINING MATERIALS

Mercury may be a component in paints and can also be present as a liquid in thermometers, thermostats, and other mechanical equipment switches. Mercury vapour is present in fluorescent lamps.

3.5 ARESENIC-CONTAINING MATERIALS

Arsenic is used in metallurgy for hardening copper, lead and alloys; in pigment production, in the manufacture of certain types of glass, in insecticides and fungicides and in rodent poisons, as a by-product in the smelting of copper ores, and as a dopant material in semiconductor manufacturing.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

3.6 ACRYLONITRILE

Acrylonitrile (ACN) (also known as vinyl cyanide) is an explosive, flammable liquid used in the manufacture of acrylic fibres, rubber-like materials and pesticide fumigants.

3.7 BENZENE

Benzene, or Benzol, is a colourless liquid. It is used as an intermediate in the production of styrene, phenol, cyclohexane, and other organic chemicals, in the manufacture of detergents, pesticides, solvents, and paint removers. It is also found in gasoline.

3.8 COKE OVEN EMISSIONS

Not applicable to this project area.

3.9 ETHYLENE OXIDE

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

3.10 ISOCYANATES

Isocyanates (HDI, MDI and TDI) are used in the production of polyurethane and as an elastomer in casting compounds, mastic, and textile coatings (IPDI).

3.11 VINYL CHLORIDE

Vinyl Chloride, also known as chloroethylene, is a colourless gas but is handled as a liquid under pressure. It is used in the production of polyvinyl chloride resins and in organic synthesis.

3.12 NON-DESIGNATED SUBSTANCES

3.12.1 PCB-containing Materials

PCBs are not recognized as a Designated Substance, as outlined in the Ontario Occupational Health and Safety Act, however, a review of a number of representative and accessible fluorescent light ballasts suspected to contain PCBs were included in the survey. In addition, accessible building hydraulic equipment (i.e., elevators/lifts) or electrical transformers observed

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

during the survey were visually reviewed. No sampling of materials for PCB content was conducted as a part of this survey. In addition, no other materials were reviewed/inspected as a part of this survey unless specified by the client. Thus, the following materials should be assumed, if present onsite, to contain PCBs until proven otherwise: cable insulation, thermal insulation materials (i.e., foam, felt), adhesives/tapes, plastics, caulking, lead-based paints and, various types of electrical equipment (i.e., voltage regulators, switches, bushings, electromagnets).

Polychlorinated biphenyl-containing ballasts reviewed were identified by model number, serial number, and date code, as listed in *Environment of Canada Identification of Lamp Ballasts Containing PCBs - Report EPS 2/CC/2 (revised), August 1991*.

3.12.2 Mould

Fungi, also called mould or mildew, are microbiological organisms that can live and reproduce and potentially cause health problems in indoor environments. They are chlorophyll-lacking plant-like organisms that are unicellular (e.g., yeast) or grow in a multinucleate mass (e.g., bread mould), subsist on decomposed organic matter or nutrition from living hosts, and reproduce by production of spores 3 to 200 μm in size. Mould growth inside buildings is due to excess moisture caused by leakages, condensation, or capillary movement of water into the building. They will generally not occur if materials are kept dry.

The presence of mould spores in indoor environments may not be significant in terms of the causation of fungal infestation since most micro-organism contamination does not become a problem until it becomes disturbed and is distributed into the ventilation system or air within the building. In other words, there may be little hazard if micro-organisms do not multiply or do not accumulate to harmful levels, if there is no means for micro-organisms to become airborne, or, if aerosolized micro-organisms do not reach susceptible receptors.

Fungi or moulds which are typically found on building materials that have become damaged due to moisture problems can cause or exacerbate allergic type symptoms in occupants who have a history of hypersensitivity diseases (e.g., asthma). Thus, people suffering from respiratory disorders or severe allergies may be at greater risk for developing health problems associated with exposures to fungi found in water damaged areas. Such people may need to be removed from the affected areas until remediation and clearance testing, if required, is completed. However, any decisions regarding medical removal must be based on recommendations made

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

by an occupational medicine specialist trained in symptomatology related to this type of exposure.

In order to define risk for areas that are suspected or confirmed to be contaminated with mould, the extent of water damage, and/or visible mould growth on building materials must be considered. THEM recommends the following criteria presented in Table IV for determining risk levels (hazard categories) and associated remediation protocols. This criterion is based on the "*Institute of Inspection Cleaning and Restoration Certification (IICRC) S520 Standard and Reference for Professional Mould Remediation"* and *"Environmental Abatement Council of Canada (EACC) Mould Abatement Guidelines 2015, Edition 3".*

TABLE IV
Recommended Water Damage/Mould Risk Management Levels

Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection[1] and/or Moisture Measurements	Summary of General Recommended Remediation Requirements
0	No visible signs of mould growth, no evidence of category 2 or 3 water damage and no health complaints.	No remediation required; however, in some situations structural drying may be required.
1	Small Areas (Source Containment)	- Work can be conducted by in-house staff trained in water damage/mould remedial techniques or by qualified environmental contractor. - Personnel conducting the work should be wearing the appropriate PPE. - No critical barriers required. - Contaminated building materials can be contained with polyethylene sheeting and duct tape and removed.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Hazard Category	Mould/Water Damage Present in Accessible Areas, Based on Visual Inspection[1] and/or Moisture Measurements	Summary of General Recommended Remediation Requirements
2	Moderate Areas (Local Containment)	- Work should be conducted by a qualified environmental contractor. - Personnel conducting the work should be wearing the appropriate PPE. - A polyethylene enclosure should be erected to isolate mould contaminated materials. - A decontamination chamber may be required. - The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.
3	Extensive Areas (Full Scale Containment)	- Work should be conducted by a qualified environmental contractor. - Personnel conducting the work should be wearing the appropriate PPE. - The mould contaminated room and/or building section should be isolated with critical barriers. - Building materials within the remediation area that cannot be cleaned effectively must be sealed off with polyethylene barriers. - A decontamination unit is required. - The following procedures should be followed during cleaning activities: HEPA vacuum, clean with a solution that contains a surfactant, HEPA vacuum, clean with a solution that contains a surfactant and a final HEPA vacuum. A disinfectant (that at minimum has a Health Canada DIN Number) should be applied to the remediation area following cleaning.

Note 1: May or may not include destructive testing.

3.12.3 Ozone Depleting Substances

Ozone depleting substances such as fluorocarbons are commonly used as cooling agents in refrigeration equipment such as ice makers, refrigerators, chilled water drinking fountains, compressors and air conditioners. Commercial chlorofluorocarbon (CFC) production began with R–12 in 1931, R–11 in 1932, R–114 in 1933 and R–113 in 1934. The first hydrochlorofluorocarbon (HCFC) refrigerant, R–22 was produced in 1936. By 1963, these five products accounted for 98% of the total production of the organic fluorine industry.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Almost 50 years passed between the introduction of CFCs and recognition of their harm to the environment when released to the atmosphere. Specific concerns are related to their depletion of stratospheric ozone and to possible climate change by their action as greenhouse gases. The high stability of CFCs enables them to deliver ozone–depleting chlorine to the stratosphere.

The project area was visually inspected for refrigeration equipment and where possible, fluorocarbon content was determined by looking at appliance tags.

4.0 FINDINGS

The following includes observations for any hazardous materials identified within the area surveyed. The survey focused on building materials and as such there may be Designated Substances in equipment that was present within the surveyed area.

4.1 ASBESTOS

Samples of suspect ACMs were collected at various locations throughout the surveyed area. The samples were submitted to EMSL Canada for the determination of asbestos content using the polarized light microscopy (PLM) method of detection. Laboratory Certificates of Analysis detailing results of bulk samples collected during this assessment are attached in Appendix III of this report with results summarized in Table V below. Samples found to be asbestos-containing are shaded.

TABLE V
Summary of Asbestos Bulk Sampling Results
Arthur Arena and Community Centre
158 Domville Street, Arthur, Ontario
April 23rd, 2024

Sample ID	Location	Description	Asbestos Content
ACT-A-01	Auditorium Storage Room (Location 102)	2’ x 4’ Acoustic Ceiling Tile w/ fissures and pinholes and writing on the back of tiles	None Detected
ACT-A-02	Auditorium Storage Room (Location 102)	2’ x 4’ Acoustic Ceiling Tile w/ fissures and pinholes and writing on the back of tiles	None Detected
ACT-A-03	Auditorium Storage Room (Location 102)	2’ x 4’ Acoustic Ceiling Tile w/ fissures and pinholes and writing on the back of tiles	None Detected

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Sample ID	Location	Description	Asbestos Content
ACT-B-01	Auditorium Storage Room (Location 102)	2' x 4' Acoustic Ceiling Tile w/ fissures and pinholes	None Detected
ACT-B-02	Auditorium Storage Room (Location 102)	2' x 4' Acoustic Ceiling Tile w/ fissures and pinholes	None Detected
ACT-B-03	Auditorium Storage Room (Location 102)	2' x 4' Acoustic Ceiling Tile w/ fissures and pinholes	None Detected
ACT-C-01	Arena Lobby (Location 124)	2' x 4' Acoustic Ceiling Tile w/ deep gouges and pinholes	None Detected
ACT-C-02	Arena Lobby (Location 124)	2' x 4' Acoustic Ceiling Tile w/ deep gouges and pinholes	None Detected
ACT-C-03	2nd Floor Auditorium (Location 202)	2' x 4' Acoustic Ceiling Tile w/ deep gouges and pinholes	None Detected
DJC-A-01	Coat Room (Location 107	Drywall Joint Compound	None Detected
DJC-A-02	Coat Room (Location 107	Drywall Joint Compound	None Detected
DJC-A-03	Coat Room (Location 107	Drywall Joint Compound	None Detected
VFT-A-01	Auditorium Women's Washroom (Location 115)	12" Beige Mottled Vinyl Floor Tile	None Detected
		Black Mastic	None Detected
VFT-A-02	Auditorium Women's Washroom (Location 115)	12" Beige Mottled Vinyl Floor Tile	None Detected
		Black Mastic	None Detected
VFT-A-03	Auditorium Women's Washroom (Location 115)	12" Beige Mottled Vinyl Floor Tile	None Detected
		Black Mastic	None Detected

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Sample ID	Location	Description	Asbestos Content
VFT-B-01	**Bar/Freezer Room (Location 105)**	**12" Beige Vinyl Floor Tile w/ Brown and White Streaks**	**4% Chrysotile**
		Black Mastic	None Detected
VFT-B-02	**Bar/Freezer Room (Location 105)**	**12" Beige Vinyl Floor Tile w/ Brown and White Streaks**	**ANR**
		Black Mastic	None Detected
VFT-B-03	**Bar/Freezer Room (Location 105)**	**12" Beige Vinyl Floor Tile w/ Brown and White Streaks**	**ANR**
		Black Mastic	None Detected
VFT-C-01	2nd Floor Auditorium Kitchen (Location 203)	Yellow Mastic	None Detected
		12" Blue Mottled Pattern Vinyl Floor Tile	None Detected
		Black Mastic	None Detected
VFT-C-02	2nd Floor Auditorium Kitchen (Location 203)	Yellow Mastic	None Detected
		12" Blue Mottled Pattern Vinyl Floor Tile	None Detected
		Black Mastic	None Detected
VFT-C-03	2nd Floor Auditorium Kitchen (Location 203)	Yellow Mastic	None Detected
		12" Blue Mottled Pattern Vinyl Floor Tile	None Detected
		Black Mastic	None Detected

ANR – Analysis Not Required – Material known to be asbestos-containing.

The following building materials (if present) were investigated for asbestos content. Representative samples were collected of suspect asbestos-containing materials and analyzed for asbestos content using the PLM method of detection, unless otherwise noted. Results of analysis are summarized in Table V with Laboratory Certificates of Analysis presented in Appendix III. For information regarding the specific location and condition of asbestos-containing materials, refer to Table VII and the Floor Plans presented in Appendix II.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

No asbestos-containing materials were observed within the Aquatics Centre and none were suspected present based on the age of the building (2006).

4.1.1 Fireproofing

No fireproofing was observed in the surveyed building.

4.1.2 Texture Finishes

No texture finishes were observed within the surveyed building.

4.1.3 Mechanical Insulation

No suspect asbestos-containing mechanical insulation was observed within the surveyed building. Piping and duct, where insulated were observed to be fiberglass.

4.1.4 Plaster

No plaster was observed within the surveyed building.

4.1.5 Ceiling Tiles

Three visually distinct types of ceiling tiles were observed within the Arena. Samples were collected as follows:

- Samples ACT-A-01/02/03 were collected of 2’ x 4’ acoustic ceiling tiles with fissures and pinholes and writing on the back. No asbestos was detected in the samples.

- Samples ACT-B-01/02/03 were collected of 2’ x 4’ acoustic ceiling tiles with fissures and pinholes and no writing on the back. No asbestos was detected in the samples.

- Samples ACT-C-01/02/03 were collected of 2’ x 4’ acoustic ceiling tiles with deep gouges and pinholes. No asbestos was detected in the samples.

4.1.6 Vinyl Floor Tiles

Three (3) visually distinct types of vinyl floor tiles were observed within the surveyed building. Samples were collected as follows:

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

- Samples VFT-A-01/02/03 were collected of 12" beige mottled pattern vinyl floor tiles from the auditorium washroom (Location 115). A black/beige/yellow mastic layer was also analyzed. No asbestos was detected in the samples.

- Samples VFT-B-01/02/03 were collected of 12" beige vinyl floor tiles with brown and white streaks from the Auditorium Bar/Freezer Room (Location 105). A black mastic layer was also analyzed. The floor tiles were found to contain 4% Chrysotile asbestos. No asbestos was detected in the mastic layer.

- Samples VFT-C-01/02/03 were collected of 12" blue mottled pattern vinyl floor tiles from the 2nd Floor Auditorium (Location 202). The floor tiles appeared to be installed in a double layer and the samples were collected from the bottom layer of flooring. Yellow and black mastic layers were also analyzed. No asbestos was detected in the samples.

Asbestos-containing vinyl floor tiles are a non-friable material and were observed to be in good condition and assigned a Priority 2.

4.1.7 Vinyl Sheet Flooring

No vinyl sheet flooring was observed within the surveyed building.

4.1.8 Drywall Joint Compound

Samples DJC-A-01/02/03 were collected of drywall joint compound. No asbestos was detected in the samples.

4.1.9 Transite (Board/Ceiling Tile/Pipe)

No Transite materials were observed within the surveyed building.

4.1.10 Vermiculite

No vermiculite insulation was observed within the surveyed building.

4.1.11 Caulking

Caulking observed appeared to be silicone based and not suspected to contain asbestos.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

4.1.12 Roofing Materials

Roofing materials such as shingles on sloped roofs and felt and sealers on flat roofs may contain asbestos. These items are typically not sampled as it may damage the integrity of the materials, resulting in leaks. It is normal practice during the tender process to request alternative pricing in the event that the roofing material is found to contain asbestos. These items should be tested for the presence of asbestos immediately prior to demolition of roofing or other building components to minimize potential damage to structures below.

4.1.13 Other

Heat Shields

Asbestos-containing "heat shields" are often present on small incandescent light fixtures. Work on and/or disturbance of these fixtures should assume such content until proven otherwise.

4.2 LEAD

Three (3) samples of suspect lead-based paint were collected from the Arena and two (2) samples were collected from the Aquatics Centre. The samples were submitted to an independent laboratory, EMSL Canada Inc., for analysis. Results of the laboratory analysis are listed in Table VI below. The Laboratory Certificate of Analysis is attached in Appendix III.

TABLE VI
Summary of Lead Bulk Sampling Results
Arthur Arena & Community Centre & Aquatics Centre
156 & 158 Domville Street, Arthur, Ontario
April 23rd, 2024

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
Arena and Community Centre				
LD-A-01	Auditorium Storage Room (Location 102)	Cream Wall Paint	0.036	--
LD-B-01	Kitchen (Location 104)	White Ceiling Paint	0.027	--
LD-C-01	2nd Floor Auditorium (Location 202)	Light Blue Wall Paint	<0.0086	--

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Sample ID	Location	Sample Description	Lead Concentration by Weight (%)	Photograph
Aquatics Centre				
LD-A-01	Boys Change Room	Light Blue Wall Paint	<0.0081	--
LD-B-01	Compressor Room	Aqua Blue Wall Paint	<0.0082	--

The cream wall paint and white ceiling paint sampled from the Arena were found to be low-level lead paints. No lead was detected in the light blue wall paint in the Arena or either of the paints sampled from the Aquatics Centre. Lead is suspected to be present as a component in pipes and in solder used in pipe fittings in the Arena.

4.3 SILICA

Silica may be present in the building in insulation materials. 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.

4.4 MERCURY

Fluorescent light tubes identified within the building are suspected to contain mercury vapour.

4.5 ARSENIC

No source was identified.

4.6 ACRYLONITRILE

No source was identified.

4.7 BENZENE

No source was identified.

4.8 COKE OVEN EMISSIONS

Not applicable for the building.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

4.9 ETHYLENE OXIDE

No source was identified.

4.10 ISOCYANATES

No source was identified.

4.11 VINYL CHLORIDE

No source was identified.

4.12 NON-DESIGNATED SUBSTANCES

4.12.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

No suspect PCB-containing transformers were noted in the areas of the building under study.

4.12.2 Mould

Ceiling tiles with minor water staining were observed sporadically throughout the building.

4.12.3 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following summarizes hazardous building materials identified within the surveyed area.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

5.1 ASBESTOS

Asbestos-containing materials observed in the surveyed area are detailed in Table VII. Asbestos materials observed were assigned a Priority rating. Materials assigned Priority 1 are highly recommended to be removed, repaired or encapsulated. Materials identified as Priority 2 may remain in place until system upgrading or renovations. Materials assigned Priority 3 may remain in place until the building is demolished.

TABLE VII
Summary of Asbestos-Containing Materials
Arthur Arena & Community Centre
158 Domville Street, Arthur, Ontario
April 23rd, 2024

Location	Material	Quantity	Priority	Type(s) of Asbestos	Friable (Y/N)	Photo
Bar/Freezer Room (Location 105)	12" Beige Vinyl Floor Tiles	~ 200 ft^2	2	Chrysotile	No	P1
Coat Room (Location 107)	12" Beige Vinyl Floor Tiles	~ 120 ft^2	2	Chrysotile	No	P2
Office (Location 108)	12" Beige Vinyl Floor Tiles	~ 160 ft^2	2	Chrysotile	No	--
Office (Location 110)	12" Beige Vinyl Floor Tiles	~ 140 ft^2	2	Chrysotile	No	--
Concession Stand (Location 123)	12" Beige Vinyl Floor Tiles	~ 6 ft^2	2	Chrysotile	No	P3

Non-friable ACM assigned a Priority 1 must be removed and/or repaired immediately following applicable asbestos abatement procedures. Non-friable ACM assigned a Priority 2 can remain in place until major system upgrading, maintenance or demolition which could result in disturbance of this material. In the event the non-friable ACM is removed, Type 1 operations apply (provided that the material is wetted down and removed using non-powered handheld tools) as outlined in Ontario Regulation 278/05, *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations* – made under the Ontario Occupational Health and Safety Act.

Respiratory protection equipment worn by contractors conducting asbestos abatement activities should be selected based on Table 2 Respirators found in Ontario Regulation 278/05.

In the event all ACM within the building is not removed, an asbestos management program must be implemented according to Ontario Regulation 278/05.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Vinyl floor products were analyzed using the phase light microscopy (PLM) method of detection as required by Ontario Regulation 278/05. However, given the composition of vinyl floor products, the PLM analysis method is often prone to yielding false negative analysis results. Therefore, it may be prudent that the Transmission Electron Microscopy (TEM) analysis method (in addition to the PLM) be used to determine the asbestos content in the vinyl floor products.

5.2 LEAD

Ontario Regulation 490/09, as amended by O. Reg. 189/19, *Designated Substances* – made under OHSA states that airborne levels of lead particles should not exceed 0.05 mg/m^3. Any demolition or stripping work should be performed under controlled conditions according to the Ontario Ministry of Labour guideline "*Lead on Construction Projects*", dated April 2011.

The disposal of construction waste containing lead is controlled by Ontario Regulation 347, *General Waste Management* – made under the Ontario Environmental Protection Act. Leachate tests for lead in construction waste must not exceed 5 mg/L in order to be disposed of at a local landfill without treatment.

5.3 SILICA

Silica may be present in building materials in two forms: i) amorphous-diatomaceous earth (commonly found in insulation materials); and ii) free crystalline (α-Quartz) (commonly found in ceiling tiles and gypsum board). Silica (including free crystalline silica) may also be a component of concrete and brick surfaces noted in the investigated areas.

Precautions must be taken to prevent silica-containing particles from becoming airborne during the disturbance of silica-containing surfaces, such as during renovation or demolition projects. Exposure to airborne silica is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act. All work being carried out with silica-containing materials should be conducted following the guideline "*Silica on Construction Projects*", issued April 2011 by the Occupational Health and Safety branch of the Ministry of Labour.

5.4 MERCURY

Mercury vapour is present in tubes of fluorescent light fixtures. If these tubes are removed, they should be disposed of properly or recycled.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Precautions must be taken to prevent mercury vapours from becoming airborne during building demolition. Exposure to airborne mercury is regulated under Ontario Regulation 490/09, *Designated Substances* – made under the Occupational Health and Safety Act.

5.5 NON-DESIGNATED SUBSTANCES

5.5.1 PCB

At the time of removal or replacement of fluorescent light ballasts, the ballasts should be inspected for PCB content. All PCB materials must be handled and stored as outlined in the Revised Regulation of Ontario 362/90. In addition, requirements outlined in the federal regulation SOR/2008-273 – made under the Canadian Environmental Protection Act, 1999 must be adhered to as well.

Proper removal, handling and storage of PCB-containing materials must follow Ontario Regulation 362, as amended by 232/11, *Waste Management - PCBs* and Ontario Regulation 347, *General Waste Management*, as well as Federal Regulations SOR/2008-27, *PCB Regulations* and SOR/97-109, *PCB Waste Export Regulations* – made under the Canadian Environmental Protection Act.

Ontario Regulation 347 designates PCB waste (containing PCBs at a concentration of more than fifty parts per million (ppm) by weight) as a hazardous waste and states that no person shall dispose of PCB waste by land disposal. In Ontario, the Ministry of Environment (MOE) puts the onus on the owner to perform a leachate test as per Leachate Criteria Testing (Schedule 4) of Ontario Regulation 347, on all waste that may be hazardous and in turn handle the waste according to the test results. Leachate tests for PCBs must not exceed 0.3 mg/L (TCLP) in order to be disposed of at a local landfill without treatment.

Releasing PCBs into the environment is prohibited under the Canadian Environmental Protection Act. This prohibition applies to all PCBs, without exception, at all times. The prohibition on release applies to all quantities at a concentration of 2 mg/kg or more for liquids and 50 mg/kg or more for solids. The mixing or diluting of PCBs or products containing PCBs with any other product is prohibited with any other product except to destroy the PCBs or recover them to destroy them in an authorized facility.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

5.5.2 Ozone Depleting Substances

Chlorofluorocarbons (CFCs) are organic compounds that contain carbon, chlorine, and fluorine atoms. These compounds are likely to be found as coolants in refrigeration and air conditioners which are suspected to be present within the building. All applicable regulations and/or industry standards should be adhered to prior to removal or repair of systems that are suspected to contain CFCs.

5.6 GENERAL

Prior to performing construction, renovations or demolition, the Occupational Health and Safety Act requires an inventory of all Designated Substances to be submitted to the general contractor who in turn must submit the same list to all their subtrades. Submission of this report to all parties will satisfy this requirement.

All waste material must be handled and disposed of according to the Revised Regulation of Ontario 347, as amended – made under the Environmental Protection Act. In the event lead and/or Mercury waste may be generated as part of renovation or demolition activities, the waste may be subject to Leachate Criteria (Schedule 4) of this regulation.

Building material(s) that are not detailed within this survey due to inaccessibility during the time of the survey and/or are uncovered during renovation/demolition activities, notably materials that are suspected to contain asbestos, should be properly assessed by qualified person prior to their disturbance.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

6.0 LIMITATIONS

In this statement of limitations, the "Client" refers to the persons or entities to whom this report is addressed. "THEM" refers to T. Harris Environmental Management Inc. The "Contract" refers to any general, or project-specific written agreement, including project-specific scope of work documents, executed between THEM and the Client pertaining to the subject matter of this report.

This report is subject to the limitations set out below and any other limitations set out in the body of this report or in the Contract between THEM and the Client.

The investigation and assessment described in this report were conducted in accordance with the Contract agreed upon by the Client in a manner consistent with a reasonable level of care and skill normally exercised by members of the occupational hygiene consulting profession currently practising under similar conditions in the Province of Ontario and observing the code of ethics of the Canadian Registration Board of Occupational Hygiene (CRBOH) and the American Board of Industrial Hygiene (ABIH).

In preparing this report, THEM has relied on information provided by others, including without limitation, information concerning the history and operation of the site, and test results and analyses of other consultants, independent laboratories, or testing services. Except as expressly stated in this report, THEM has not made any independent verification of such information. Findings cannot be extended to portions of the site, which were unavailable for direct observation.

The assessment in this report has been made in the context of regulations which were in force and effect at the time of the assessment and which are specified in this report. The assessment did not take into account any regulations, which were not in effect at the date of the assessments, or any guideline or standard not specified in this report. Regulatory standards do not exist for all materials of a potentially hazardous nature.

The collection of any samples at the site (including the location of samples and the analytical parameters applied to the samples) was undertaken in accordance with the Contract agreed upon by the Client, based upon the information provided to THEM by the Client concerning existing site conditions. Conditions between sample locations (if any) may differ from those indicated in this report.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

This report is intended solely for the use or uses specified in this report and/or the Contract. Use of this report for purposes other than those set out in this report and/or the Contract will be at the sole risk of the Client.

Copying of this report except as may be reasonably required for internal use by the Client and any distribution of this report to persons other than the Client in whole or in part, is not permitted without the express written permission of THEM.

This report is for the sole use of the Client. THEM makes no representation or warranty, either expressed or implied, to any third party with regard to this report and the work referred to in this report and expressly disclaims any, and accepts no duty of care to any third party or any responsibility or liability whatsoever to any third party for any loss, expenses, damages (direct, consequential or contingent), fines, penalties, or other harm that may be suffered or incurred by any third party as a result of any use of, any reliance placed upon, or any decision made or actions taken based upon this report or the work referred to herein.

In no event shall THEM be liable for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, or use, incurred by either the client or any third party, whether in an action in tort or contract, even if THEM has been advised of the possibility of such damages. THEM's liability for damages shall in no event exceed the limit of available insurance coverage.

If new information concerning the subject matter of this report arises, THEM should be contacted to re-evaluate the conclusions of this report and to provide amendments as required.

Sincerely,

T. HARRIS ENVIRONMENTAL MANAGEMENT INC.

Todd Norris, B.Sc., AMRT
Senior Environmental/OH&S Technologist

Joe D'Angelo, B.A. (Envs), AMRT, EP
Project Manager

Greg Balsden, B.Sc., AMRT
Manager – Southwestern Ontario

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

APPENDIX I
SITE PHOTOGRAPHS

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Photograph 1: View of asbestos-containing 12" beige vinyl floor tiles with white and black streaks (VFT-B) in the Bar/Freezer Room (Location 105), assigned a **Priority 2**.

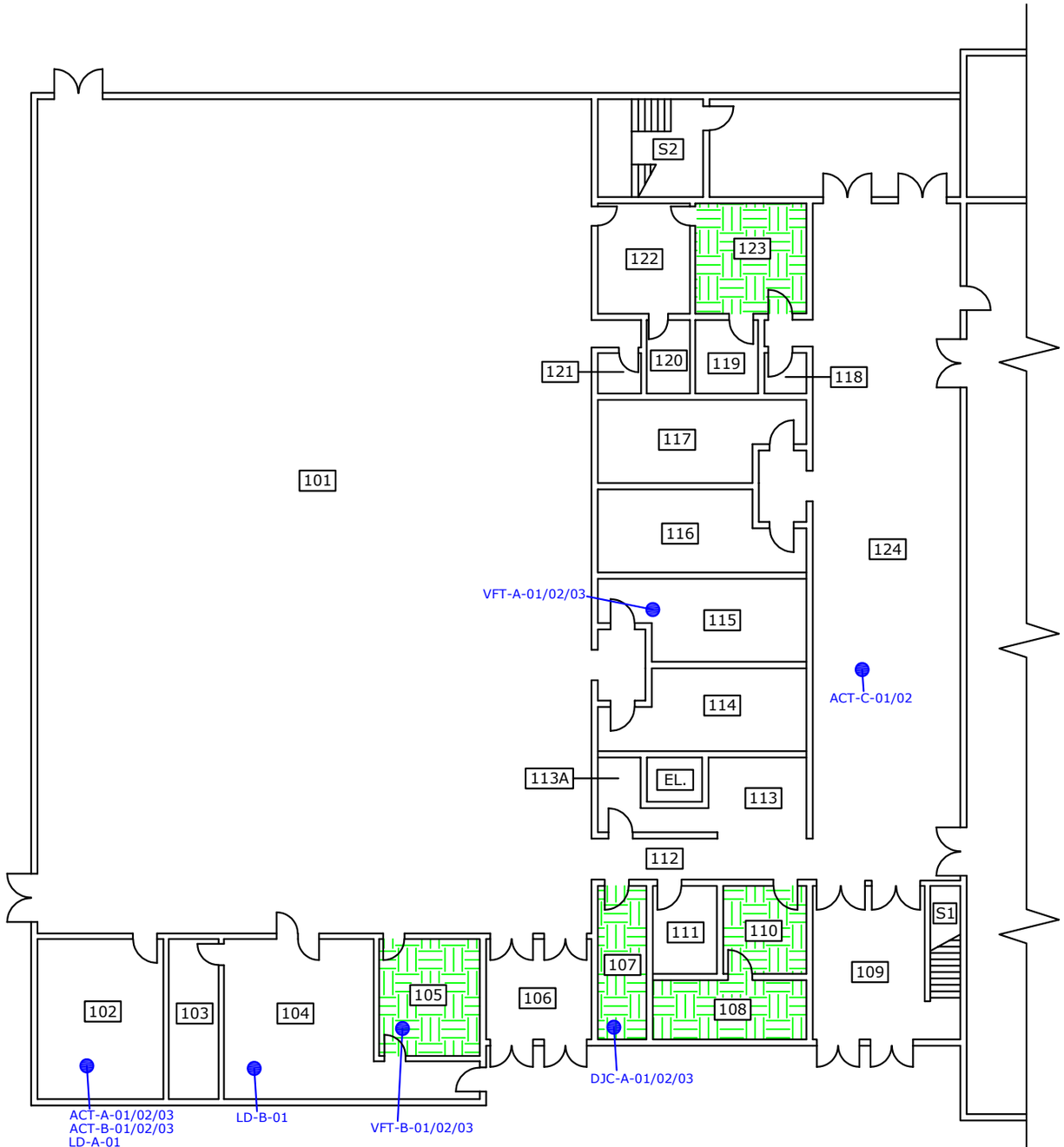
Photograph 2: View of asbestos-containing 12" beige vinyl floor tiles with white and black streaks (VFT-B) in the Coat Room (Location 107), assigned a **Priority 2**.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

Photograph 3: View of six tiles of asbestos-containing 12” beige vinyl floor tiles with white and black streaks (VFT-B) under the sink in the Concession Stank (Location 123), assigned a **Priority 2**.

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

APPENDIX II
SITE PLANS



Legend

Original Drawing Modified by T. Harris Environmental Management Inc.

Asbestos-containing Vinyl Floor Tiles

Sample

Room No.

Notes:

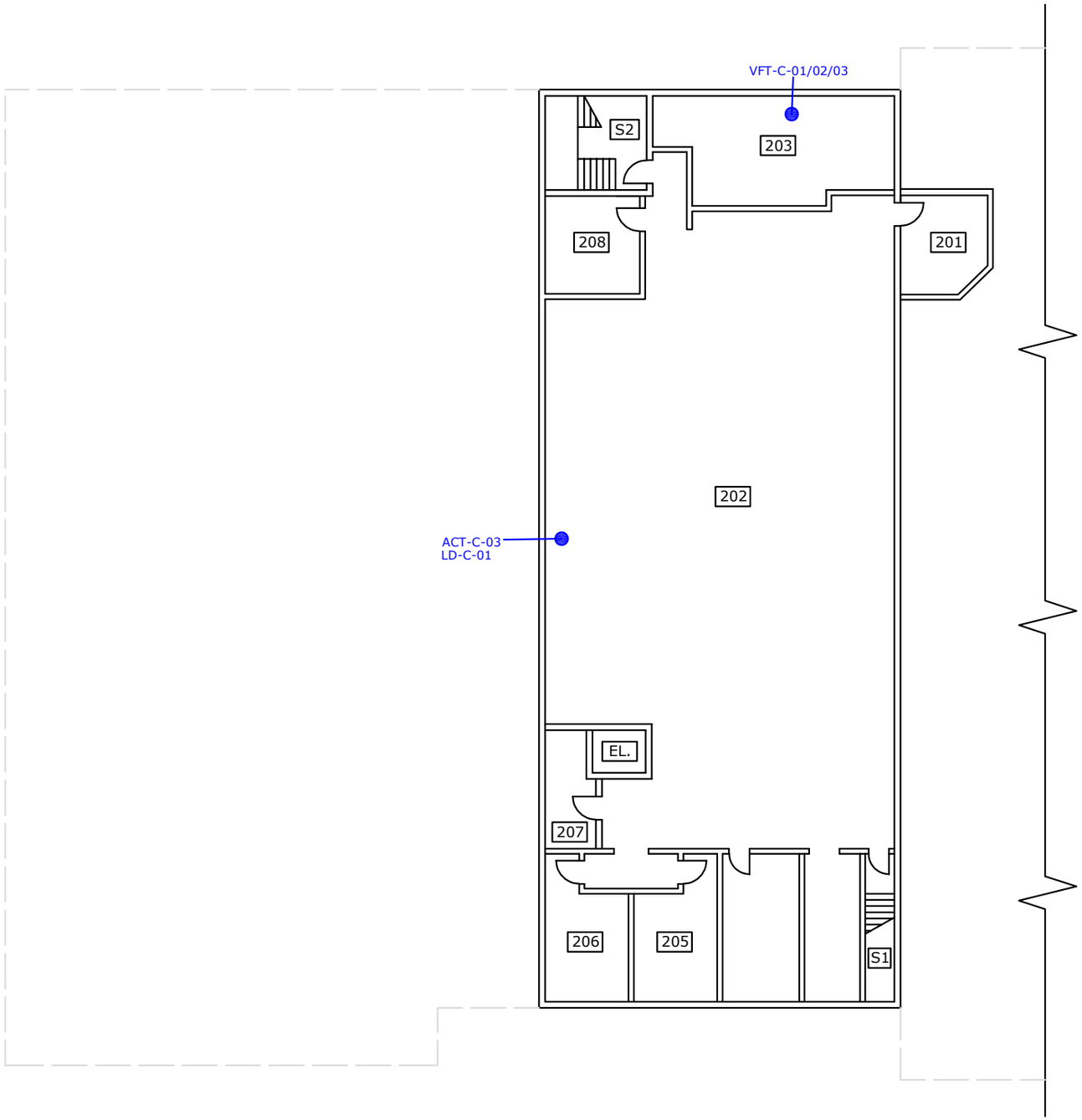
Hatched areas indicate rooms with specific ACMs, and does not indicate the amount of ACM within that room.

T. HARRIS ENVIRONMENTAL MANAGEMENT

Arthur Arena & Community Centre
158 Domville St.
Arthur, Ontario

Main Floor - Lobby/Hall

SCALE:	DATE:	PREPARED BY:
N.T.S.	23/04/24	TN/JD



Legend

Original Drawing Modified by T. Harris Environmental Management Inc.

Asbestos-containing Vinyl Floor Tiles

Sample

Room No.

Notes:

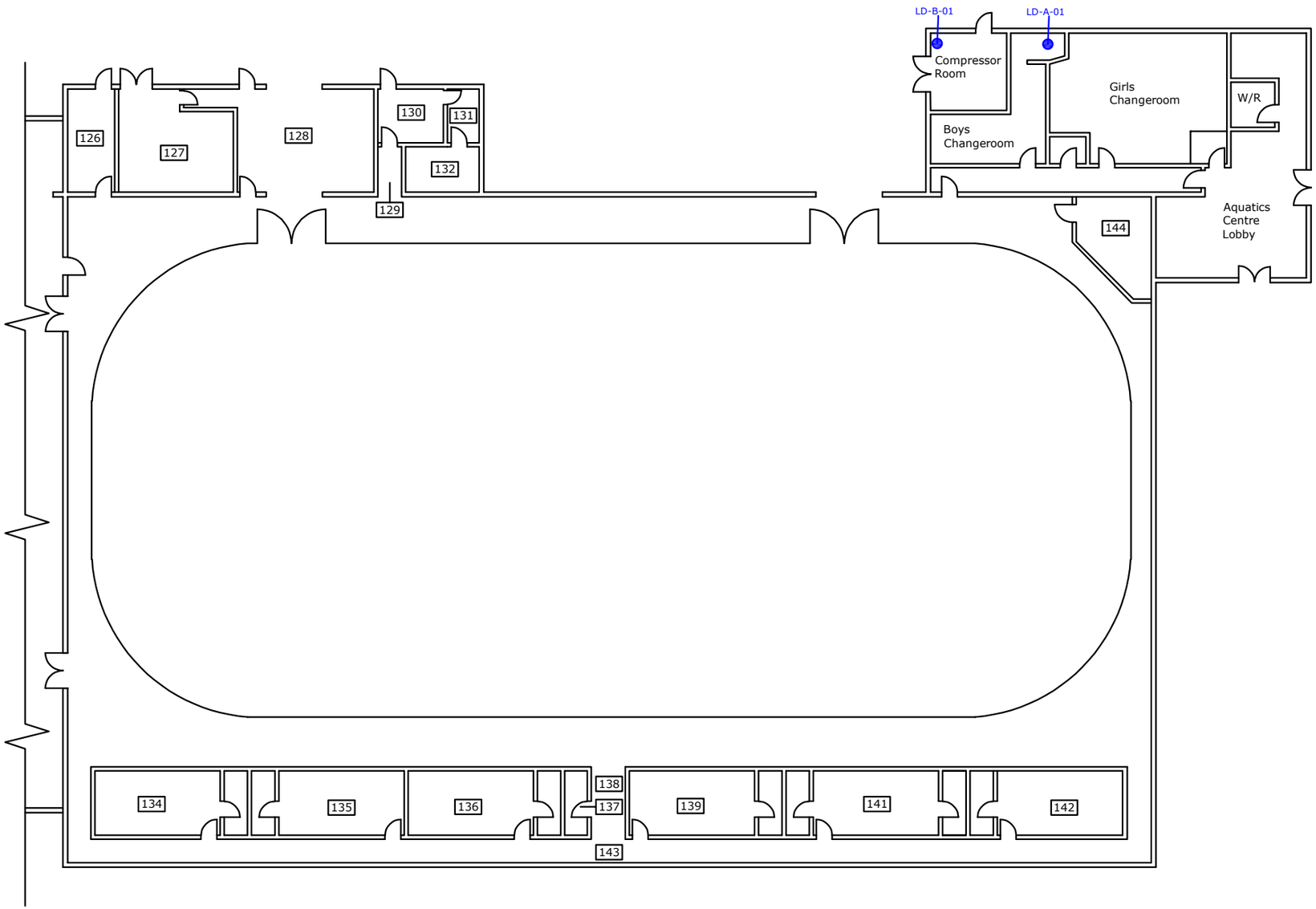
Hatched areas indicate rooms with specific ACMs, and does not indicate the amount of ACM within that room.

T. HARRIS ENVIRONMENTAL MANAGEMENT

Arthur Arena
158 Domville St.
Arthur, Ontario
N0G 1A0

Second Floor

SCALE:	DATE:	PREPARED BY:
N.T.S.	23/04/24	TN/JD



Legend

Original Drawing Modified by T. Harris Environmental Management Inc.

Asbestos-containing Vinyl Floor Tiles

Sample

Room No.

Notes:

Hatched areas indicate rooms with specific ACMs, and does not indicate the amount of ACM within that room.

T. HARRIS ENVIRONMENTAL MANAGEMENT

Arthur Arena
158 Domville St.
Arthur, Ontario
N0G 1A0

Main Floor - Arena

SCALE:	DATE:	PREPARED BY:
N.T.S.	23/04/24	TN/JD

T. HARRIS
ENVIRONMENTAL MANAGEMENT
since 1979

931 Commissioners Road East, Suite 100
London, Ontario N5Z 3H9
Tel. (519) 685-9048
1-888-ASK-THEM

APPENDIX III
LABORATORY CERTIFICATES OF ANALYSIS

EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552406334
Customer ID: 55THAR50A
Customer PO: L24-3848-14
Project ID:

Attn: Greg Balsden
T. Harris Environmental, Inc.
931 Commissioners Rd. E.
Suite 100
London, ON N5Z 3H9

Proj: Arthur Arena (L24-3848-14)

Phone: (519) 685-9048
Fax: (519) 685-1042
Collected: 4/23/2024
Received: 4/25/2024
Analyzed: 4/30/2024

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID: ACT-A-01 ***Lab Sample ID:*** **552406334-0001**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-A-02 ***Lab Sample ID:*** **552406334-0002**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-A-03 ***Lab Sample ID:*** **552406334-0003**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-B-01 ***Lab Sample ID:*** **552406334-0004**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-B-02 ***Lab Sample ID:*** **552406334-0005**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-B-03 ***Lab Sample ID:*** **552406334-0006**

Sample Description: Auditorium Storage Room 102/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-C-01 ***Lab Sample ID:*** **552406334-0007**

Sample Description: Arena Lobby Room 124/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552406334
Customer ID: 55THAR50A
Customer PO: L24-3848-14
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID: ACT-C-02 ***Lab Sample ID:*** **552406334-0008**

Sample Description: Arena Lobby Room 124/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: ACT-C-03 ***Lab Sample ID:*** **552406334-0009**

Sample Description: 2nd Floor Auditorium Room 202/acoustic ceiling tile

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	80.0%	20.0%	None Detected	

Client Sample ID: DJC-A-01 ***Lab Sample ID:*** **552406334-0010**

Sample Description: Coat Room 107/Drywall Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	White	0.0%	100.0%	None Detected	

Client Sample ID: DJC-A-02 ***Lab Sample ID:*** **552406334-0011**

Sample Description: Coat Room 107/Drywall Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	White	0.0%	100.0%	None Detected	

Client Sample ID: DJC-A-03 ***Lab Sample ID:*** **552406334-0012**

Sample Description: Coat Room 107/Drywall Joint Compound

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	White	0.0%	100.0%	None Detected	

Client Sample ID: VFT-A-01-Floor Tile ***Lab Sample ID:*** **552406334-0013**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-A-01-Mastic ***Lab Sample ID:*** **552406334-0013A**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black/Yellow/Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-A-02-Floor Tile ***Lab Sample ID:*** **552406334-0014**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Beige	0.0%	100.0%	None Detected	

EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552406334
Customer ID: 55THAR50A
Customer PO: L24-3848-14
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID: VFT-A-02-Mastic ***Lab Sample ID:*** **552406334-0014A**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black/Yellow/Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-A-03-Floor Tile ***Lab Sample ID:*** **552406334-0015**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-A-03-Mastic ***Lab Sample ID:*** **552406334-0015A**

Sample Description: Women's Washroom Room 115/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Yellow/Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-B-01-Floor Tile ***Lab Sample ID:*** **552406334-0016**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Brown	0.0%	96.0%	**4% Chrysotile**	

Client Sample ID: VFT-B-01-Mastic ***Lab Sample ID:*** **552406334-0016A**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Client Sample ID: VFT-B-02-Floor Tile ***Lab Sample ID:*** **552406334-0017**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024				Positive Stop (Not Analyzed)	

Client Sample ID: VFT-B-02-Mastic ***Lab Sample ID:*** **552406334-0017A**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Client Sample ID: VFT-B-03-Floor Tile ***Lab Sample ID:*** **552406334-0018**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024				Positive Stop (Not Analyzed)	

EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552406334
Customer ID: 55THAR50A
Customer PO: L24-3848-14
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID: VFT-B-03-Mastic ***Lab Sample ID:*** **552406334-0018A**

Sample Description: Bar/Freezer Room 105/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Client Sample ID: VFT-C-01-Mastic 1 ***Lab Sample ID:*** **552406334-0019**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Yellow	0.0%	100.0%	None Detected	

Client Sample ID: VFT-C-01-Floor Tile ***Lab Sample ID:*** **552406334-0019A**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	0.0%	100.0%	None Detected	TEM Recommended

Client Sample ID: VFT-C-01-Mastic 2 ***Lab Sample ID:*** **552406334-0019B**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Client Sample ID: VFT-C-02-Mastic 1 ***Lab Sample ID:*** **552406334-0020**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Yellow/Beige	0.0%	100.0%	None Detected	

Client Sample ID: VFT-C-02-Floor Tile ***Lab Sample ID:*** **552406334-0020A**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	0.0%	100.0%	None Detected	TEM Recommended

Client Sample ID: VFT-C-02-Mastic 2 ***Lab Sample ID:*** **552406334-0020B**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Client Sample ID: VFT-C-03-Mastic 1 ***Lab Sample ID:*** **552406334-0021**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Yellow	0.0%	100.0%	None Detected	

EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com / torontolab@emsl.com

EMSL Canada Order 552406334
Customer ID: 55THAR50A
Customer PO: L24-3848-14
Project ID:

Summary Test Report for Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05

Client Sample ID: VFT-C-03-Floor Tile ***Lab Sample ID:*** **552406334-0021A**

Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Gray	0.0%	100.0%	None Detected	TEM Recommended

Client Sample ID: VFT-C-03-Mastic 2 ***Lab Sample ID:*** **552406334-0021B**

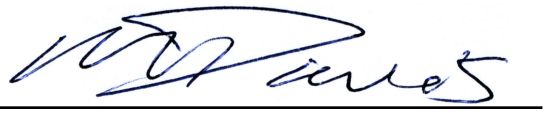
Sample Description: 2nd Floor Kitchen Room 203/vinyl floor tile & black mastic

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	4/30/2024	Black	0.0%	100.0%	None Detected	

Analyst(s):

Nickesh Mistry PLM (10)
Vanessa Gallego PLM (21)

Reviewed and approved by:



Matthew Davis or other approved signatory
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 is a summary report; official reports are available on LabConnect or upon request and 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. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON NVLAP Lab Code 200877-0

Initial report from: 04/30/202418:52:59

EMSL Canada Inc.
2756 Slough Street, Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com torontolab@emsl.com

EMSL Canada Or	552406348
CustomerID:	55THAR50A
CustomerPO:	L24-3848-14
ProjectID:	

Attn: **Greg Balsden**
T. Harris Environmental, Inc.
931 Commissioners Rd. E.
Suite 100
London, ON N5Z 3H9

Phone:	(519) 685-9048
Fax:	(519) 685-1042
Received:	4/25/2024 10:15 AM
Collected:	4/23/2024

Project: **Arthur Arena (L24-3848-14)**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
LD-A-01 *552406348-0001*	4/23/2024	4/26/2024 Site: Auditorium Storage Room 102 Desc: cream wall paint	0.1352 g	0.015 % wt	0.036 % wt
LD-B-01 *552406348-0002*	4/23/2024	4/26/2024 Site: Kitchen Room 104 Desc: white ceiling paint	0.2462 g	0.0081 % wt	0.027 % wt
LD-C-01 *552406348-0003*	4/23/2024	4/26/2024 Site: 2nd Floor Auditorium Room 202 Desc: light blue/grey wall paint	0.2334 g	0.0086 % wt	<0.0086 % wt

Rowena Fanto, Lead Supervisor
or other approved signatory

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

Initial report from 05/01/2024 08:20:36

EMSL Canada Inc.
2756 Slough Street, Mississauga, ON L4T 1G3
Phone/Fax: (289) 997-4602 / (289) 997-4607
http://www.EMSL.com torontolab@emsl.com

EMSL Canada Or	552406344
CustomerID:	55THAR50A
CustomerPO:	L24-3848-15
ProjectID:	

Attn: **Greg Balsden**
T. Harris Environmental, Inc.
931 Commissioners Rd. E.
Suite 100
London, ON N5Z 3H9

Phone:	(519) 685-9048
Fax:	(519) 685-1042
Received:	4/25/2024 10:20 AM
Collected:	4/23/2024

Project: **Arthur Aquatics Centre (L24-3848-15)**

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

Client SampleDescription	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead Concentration*
LD-A-01	4/23/2024	4/25/2024	0.2473 g	0.0081 % wt	<0.0081 % wt
552406344-0001	Site: light blue wall paint Desc: men's changeroom				
LD-B-01	4/23/2024	4/25/2024	0.2449 g	0.0082 % wt	<0.0082 % wt
552406344-0002	Site: aqua blue/green wall paint Desc: compressor room				

Rowena Fanto, Lead Supervisor
or other approved signatory

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

Initial report from 05/01/2024 08:26:45