Designated Substance Assessment
in accordance with
ONTARIO REGULATION 490/09
DESIGNATED SUBSTANCES

April 27, 2024

Sampling Address:
St. Lawrence Co-Op Daycare - 230 The Esplanade
Toronto, ON.,
M5A 4J6

Prepared For:
St. Lawrence Co-Op Daycare

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File #: 24-3029-DSS

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CONTENTS

EXECUTIVE SUMMARY 3
DISCLAIMER 5
1.0 METHOD & SCOPE OF WORK 6
2.0 BACKGROUND INFORMATION ON APPLICABLE SUBSTANCES 7
- 2.1 Asbestos 7
- 2.2 Lead 7
- 2.3 Mercury 7
- 2.4 Silica 8
- 2.5 Benzene 9
- 2.6 Polychlorinated Biphenyls (PCBs) 9
- 2.7 Ozone Depleting Substances 9

3.0 REVIEW OF GUIDELINES 10
- 3.1 General 10
- 3.2 Asbestos 12
- 3.3 Lead 13
- 3.4 Mercury 15
- 3.5 Silica 15
- 3.6 Benzene 17
- 3.7 Polychlorinated Biphenyls (PCBs) 17
- 3.8 Ozone Depleting Substances 18

4.0 OBSERVATIONS 19
- 4.1 Asbestos 21
- 4.2 Lead 21
- 4.3 Mercury 21
- 4.4 Silica 21
- 4.5 Benzene 21
- 4.6 Polychlorinated Biphenyls (PCBs) 21
- 4.7 Ozone Depleting Substances 21

5.0 TESTING CRITERIA 22
- 5.1 Asbestos 22
- 5.2 Lead 23

6.0 LABORATORY SAMPLING RESULTS 24
- 6.1 Asbestos 24
- 6.2 Lead 25

7.0 DISCUSSION & CONCLUSIONS 26
8.0 RECOMMENDATIONS 28

APPENDIX A & C: Asbestos Laboratory Results - Lab Report No: 2418032 & 2418329

APPENDIX B: Lead Laboratory Results - Lab Report No: 2418055

EXECUTIVE SUMMARY

The Healthy Abode Inc. was retained by St. Lawrence Co-Op Daycare for the purpose of conducting a Designated Substance Survey, in accordance with Ontario Regulation 490/09 Designated Substances, at St. Lawrence Co-Op Daycare - 230 The Esplanade, Toronto, ON., M5A 4J6 (the site, the building, the unit).

This investigation and sampling was conducted by Vincenzo Sampieri and Elizabeth Mavroudis of The Healthy Abode Inc. on April 27, 2024 (daycare) and May 1, 2024 (underground parking garage). Access to the building was provided by the manager.

This commercial daycare centre is a single story, ground floor, above a parking garage. The daycare appears to have been built in the 1980s. The scope of this report is limited by the current renovation project scope of work.

The HVAC system is forced air. The supply registers / runs did not appear to be wrapped at the time of testing, if duct / boot wrap is noted it is to be considered to be asbestos containing unless tested and proven otherwise.

The original construction is drywall construction

Asbestos:
For complete laboratory sampling analysis of asbestos samples taken for the purpose of this project please see section 6.1 of this report.

No asbestos detected.

Lead Paint:
For complete laboratory sampling analysis of lead samples taken for the purpose of this project please see section 6.2 of this report.

There is the presence of lead in the representative paint sample(s).

The levels of lead in the representative drywall, block and trim paint samples are <1000 PPM,

If these materials (and the surfaces to which they are applied) are disturbed in a non-aggressive manner, performed using normal dust control procedures and are completed so that the TWA for PNOS is not exceeded, then worker protection from the inhalation of lead is not required. General health and safety precautions must still be implemented, which may include, in part, prohibiting eating, drinking, smoking and chewing in the work area, implementing dust suppression techniques and washing facilities for workers to wash hands and face. (EACO Lead Guideline).

The focus of the DSS was concentrated on materials present in these areas.

The purpose of the DSS is to report on the presence or suspected presence of readily accessible designated substances and hazardous materials which may be impacted during the proposed demolition of the building and to provide recommendations, if required, to remove and manage these materials in accordance with provincial or federal regulations and guidelines. **The designated substances and hazardous materials investigated during this DSS are asbestos-containing materials (ACM), lead, mercury, silica, benzene, polychlorinated biphenyls (PCBs), and ozone depleting substances.** The remaining designated substances, consisting of acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, and vinyl chloride, are not expected to be present in this type of building, however were noted if observed.

The Ontario *Occupational Health and Safety Act* requires that a list of all “designated substances” at a project site be provided to all bidders at the tendering stage and that the “constructor” for a project shall ensure that each prospective contractor and subcontractor for the project has received a copy of the list before entering into a contract.

In addition, legal requirements which apply to health and safety on construction projects are set out in the *Ontario Occupational Health and Safety Act* and regulations made under the Act. The *Occupational Health and Safety Act* specifies, in general terms, the duties of employers and others to protect workers from health and safety hazards on the job. These

duties include taking all reasonable precautions to protect the health and safety of workers and acquainting a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any hazardous materials. The *Regulation for Construction Projects*, O. Reg. 213/91 (amended to O. Reg. 85/04), applies to all construction projects, and requires the use of appropriate personal protection equipment, training in the use of protective equipment and the provision of adequate washing facilities. Other regulatory requirements (and guidelines) which apply to control of exposure to designated substances are referenced in Sections 3.0 and 4.0 of this report.

The *Occupational Health and Safety Act,* in accordance with ONTARIO REGULATION 490/09 DESIGNATED SUBSTANCES allows for certain toxic substances to be especially designated. This means that specific regulations are constructed for the control of these substances in the workplace. Accordingly, each *Designated Substance Regulation* outlines a set of required steps to control exposure of workers to the substance.

A regulation will apply if the following conditions are met:
- the substance is present;
- exposure is likely if the worker can come in contact with the substance in any form (i.e. solid, liquid, dust, gas, vapour, fume or mist)

DISCLAIMER

As it pertains to both the testing and visual inspection of this property, the scope of the Designated Substance Survey is limited to the readily accessible areas of the property and is based on the condition of the property at the precise time and date of the sampling and on the laboratory analysis of the samples collected. Designated Substances can exist in inaccessible and non-visible areas such as behind walls.

It is understood *The Healthy Abode Inc.* and the laboratory are not insurers and that the visual observations, laboratory analysis and report shall not be construed as a guarantee or warranty of any kind. The client agrees to hold *The Healthy Abode Inc.* and their respective officers, agents and employees harmless from and against any and all liabilities, demands, claims, and expenses incident thereto for injuries to persons and for loss of, damage to, destruction of property, cost of repairing or replacing, or consequential damage arising out of or in connection with this inspection and testing.

If suspected asbestos containing materials and/or lead containing materials not identified in this report are encountered during demolition activities, the work should stop immediately and the material tested to confirm the presence or absence of asbestos and/or lead.

This report is prepared for the sole use of the client. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility and at the sole risk of the third party. This report must be considered in it's entirety.

This report is based on data and information collected based solely on site conditions encountered at the time of the assessment date. Conditions may vary beyond the locations tested, and may vary over time.

The data reports and the findings, observations and conclusions expressed in this report are limited by the Scope of Work.

The Healthy Abode Inc. will not be responsible for any real or perceived decrease in property value, its saleability or ability to gain financing through the reporting of information in this report. The Healthy Abode Inc.'s reports present professional opinions and findings of a scientific and technical nature. While attempts were made to relate the data and findings to applicable environmental laws, regulations, industry standards or guidelines, the report shall not be construed to offer legal opinion or representations as to the requirements of, nor compliance with, environmental laws, rules, regulations or policies of federal, provincial or local governmental agencies. Any use of this report constitutes acceptance of this disclaimer and the limits of The Healthy Abode Inc.'s liability.

1.0 METHOD & SCOPE OF WORK

The purpose of the DSS is to report on the presence or suspected presence of readily accessible designated substances and hazardous materials which may be impacted during the proposed demolition of the building and to provide recommendations, if required, to remove and manage these materials in accordance with provincial or federal regulations and guidelines.

Site work was completed in accordance with the current regulations made under the Ontario Occupational Health and Safety Act, R.S.O. 1990 (as amended) and other standards, guidelines and practices applicable to this location.

The designated substances and hazardous materials investigated during this DSS are asbestos-containing materials (ACM), lead, mercury, silica, benzene, polychlorinated biphenyls, and ozone depleting substances. The remaining designated substances, consisting of acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates, and vinyl chloride, are not expected to be present in this type of building, however were noted if observed.

SITE VISIT AND TESTING: **April 27, 2024**
Inspection:
- readily available information was gathered regarding the building including age, type of structure, presence of renovated areas or additions
- the building systems reviewed as part of this investigation included primarily architectural aspects, although where readily accessible mechanical and structural systems were also reviewed
- the areas surveyed were visually inspected in order to identify readily-accessible areas for the presence of designated substances used in building construction materials
- for materials suspected of being asbestos containing materials **ACM**, bulk samples were collected in accordance with O. Reg 278/05 sampling protocols to be analyzed by a laboratory. Homogenous materials sampling was utilized during the course of the investigation, meaning that bulk material sampling was completed on homogenous materials that are uniform in color, texture, and installation or construction date.
- for materials suspected of containing **lead paint**, representative samples were collected to be analyzed by a laboratory
- a review of potential **mercury**-containing equipment installed at the site was completed as part of the survey, such that any mercury-containing switches, thermostats (switch bulbs), mercury containing lamps (include fluorescent bulbs) and pressure-sensing devices were noted, if observed
- the site was visually assessed for materials suspected of containing **silica**, and these materials are noted in this report
- the site was visually assessed for materials suspected of containing **benzene**, and these materials are noted in this report
- the site was visually assessed for the presence of **polychlorinated biphenyls** (PCBs) such as in fluorescent light ballasts. PCB containing materials were noted, if observed
- a review of **ozone depleting substances** such as refrigeration and air conditioning units was completed to verify the presence of ozone depleting substances, if observed

Laboratory analysis:
- obtaining representative bulk samples of materials suspected of containing asbestos and lead paint. The Healthy Abode Inc. uses PARACEL LABORATORIES - CALA Accredited Laboratory - 1262, NVLAP Accredited Laboratory Lab Codes 200812-0 and 200863-0
- laboratory analysis of bulk samples for asbestos content and analysis of paint chip samples for lead content;
- For the purpose of this DSS **24 samples (stop positive placed on laboratory report)** were collected in order to test for asbestos and **3 paint chips** were collected in order to test for lead

Reports:
- Lab report(s) - analysis of bulk samples taken during inspection
- The Healthy Abode Inc. report - report outlining the findings of the inspection and analysis of the laboratory results

2.0 BACKGROUND INFORMATION ON APPLICABLE SUBSTANCES

2.1 Asbestos:
Asbestos has been widely used in buildings, both in friable applications such as pipe wrap and acoustic texture material and in non-friable manufactured products such as floor tile and cement board. The use of asbestos in friable applications was curtailed around the mid-1970s and, as such, many buildings constructed prior to 1975 contain some form of friable construction material with an asbestos content. The use of asbestos in certain non-friable materials continued beyond the mid-1970s, such as brake pads.

In Ontario, asbestos is regulated by Ontario Regulation 490/09 - *Designated Substances.* Control of exposure to asbestos is governed in Ontario by Regulation 278/05 - *Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*. Disposal of asbestos waste (friable and non-friable materials) is governed by Ontario Regulation 278/05 and by Ontario Regulation 347, Waste Management - General. O. Reg. 278/05 classifies asbestos work operations into three types (Type 1, Type 2 and Type 3, as shown in 4.0 - Review of Guidelines Section of this report) and specifies procedures to be followed in conducting asbestos abatement work.

2.2 Lead:
Lead is a heavy metal that can be found in construction materials such as paints, coatings, mortar, concrete, solder, packings, sheet metal, caulking, glazed ceramic products and cable splices. Lead has been used historically in exterior and interior paints. “Lead-based paint” is defined in federal legislation in the United States as paint which contains 0.5 percent by weight (5,000 PPM) or more lead. In Canada, the lead content of paints and other liquid coatings on furniture, household products, children’s products and surfaces (exterior and interior) of any building frequented by children was restricted to 0.5% by 1976.

The *Surface Coating Materials Regulations* made under the *Hazardous Products Act*, published in the Canada Gazette Vol. 139, No. 9 published on May 4, 2005 currently restricts the maximum total lead content requirement to 600 mg/kg (0.06 percent weight/weight or 600 parts per million) for surface coating materials (i.e. paints) used in or around a house or other premises attended by children or pregnant women.

In Ontario, lead is regulated by Ontario Regulation 490/09 - *Designated Substances.* The Ministry of Labour *Guideline, Lead on Construction Projects*, September 2004, provides guidance in the measures and procedures that should be followed when handling lead-containing materials during construction projects. In the guideline, lead-containing construction materials are classified into three groups (Type 1, Type 2 and Type 3, as shown in 4.0 - Review of Guidelines Section of this report) and specified procedures to be followed in lead safe handling activities.

2.3 Mercury:
Mercury has been used in electrical equipment such as alkaline batteries, high intensity discharge (HID) lights, “silent switches” and in instruments such as thermometers, manometers and barometers, pressure gauges, float and level switches and flow meters. Mercury-containing lamps, the bulk of which are 1.22 m (four feet) fluorescent lamps contain between 7 and 40 mg of mercury each. Mercury compounds have also been used by many manufactures historically as additives in latex paint to protect the paint from mildew and bacteria during production and storage.

The intentional addition of mercury to Canadian-produced consumer paints for interior use was prohibited in 1991. Mercury may have remained in paints after 1991, however, as a result of impurities in the paint ingredients or cross-contamination due to other manufacturing processes. The *Surface Coating Materials Regulations* made under the *Hazardous Products Act*, published in the Canada Gazette Vol. 139, No. 9 published on May 4, 2005 sets a maximum total mercury concentration of 10mg/kg (0.001 percent weight/weight) for all surface coating materials (including paint.)

Mercury containing thermostats and silent light switches are mercury tilt switches which are small tubes with electrical contacts at one end of the tube. A mercury tilt switch is usually present when no switch is visible. Mercury switches often have the word “TOP” stamped on the upper end of the switch, which is visible after removing the cover plate. If mercury switches are to be removed, the entire switch should be removed and placed into a suitable container for storage and disposal.

No special requirements exist in Ontario for disposal of small quantities (i.e. less than 30) of waste light tubes. Larger quantities of waste light tubes (>30) generated during renovations or building demolition and waste mercury from equipment must either be recycled or disposed of in accordance with the requirements of O. Reg. 347 - *Waste Management General*.

Waste mercury in amounts less than 5 kg (per month) are exempt from the generator registration requirements prescribed by O. Reg. 347 - Waste Management - General. Waste mercury from mercury switches or gauges should, however, be properly collected and shipped to a recycling facility or disposed of as a hazardous waste. Removal of mercury-containing equipment (e.g. switches, gauges, controls etc.) should be carried out in a manner which prevents spillage and exposure to workers.

In Ontario, mercury is regulated by Ontario Regulation 490/09 - *Designated Substances.* The measures and procedures in the Ministry of Labour *Guideline - Lead in Construction Projects* for control of exposure of lead from paint applications during construction activities will also serve to control potential exposure to mercury in paint.

2.4 Silica:
Silica (SiO2) is a compound resulting from the combination of one atom of silicon with two atoms of oxygen. It is the second most common mineral in the earth's crust and is a major component of sand, rock and mineral ores. Silica exists in several forms, of which crystalline silica is of most concern. The best-known and most abundant type of crystalline silica is quartz. Other forms of crystalline silica include cristobalite, tridymite, and tripoli.

In construction, worker exposure to silica is of particular concern because silica is the primary component of many construction materials. Some commonly used construction materials containing silica include: abrasives used for blasting, brick, refractory brick, concrete, concrete block, cement, mortar, granite, sandstone, quartzite, slate, gunite, mineral deposits, rock and stone, sand, fill dirt, top soil and asphalt containing rock or stone.

Many construction activities can generate airborne silica-containing dust, however, in construction abrasive blasting generates the most dust.

In Ontario, silica is regulated by Ontario Regulation 490/09 - *Designated Substances.* The Ministry of Labour *Guideline, Silica on Construction Projects*, April 2011, provides guidance in the measures and procedures that should be followed when handling silica-containing materials during construction projects. In the guideline, silica-containing construction materials are classified into three groups (Type 1, Type 2 and Type 3, as shown in 4.0 - Review of Guidelines Section of this report) and specified procedures to be followed in lead safe handling activities.

2.5 Benzene:
According to the World Health Organization, human exposure to benzene has been associated with a range of acute and long-term adverse health effects and diseases, including cancer and aplastic anaemia. Exposure can occur occupationally and domestically as a result of the ubiquitous use of benzene-containing petroleum products, including motor fuels and solvents. Active and passive exposure to tobacco smoke is also a significant source of exposure. Benzene is highly volatile, and exposure occurs mostly through inhalation.

Benzene has been detected at high levels in indoor air. Although some of this exposure might be from building materials (paints, adhesives, etc.), most is from cigarette smoke in both homes and public spaces. Levels of benzene are higher in homes with attached garages than in those with detached garages. Levels are increased in homes close to petrol filling stations. Benzene may be released to indoor air from unflued oil heating and from the use of benzene- containing consumer products in residences. People spending more time indoors, such as children, are likely to have higher exposure to benzene.

"Aromatic" compounds make up about 35% of fuel oil, such as benzene, toluene, and xylene.The standard for **benzene** is 5 parts per billion (ppb).

In Ontario, benzene is regulated by Ontario Regulation 490/09 - *Designated Substances.* The previous Ontario Regulation was RRO 1990, Regulation 839 - Designated Substance - Benzene.

2.6 Polychlorinated Biphenyls (PCBs):

Polychlorinated biphenyls, commonly known as chlorobiphenyls or PCBs, are industrial chemicals which were synthesized and commercialized in North America in 1929. They were used in the manufacturing of electrical equipment, heat exchangers, hydraulic systems, and several other specialized applications up to the late 1970s. They were never manufactured in Canada but were widely used in this country.

The import, manufacture, and sale (for re-use) of PCBs were made illegal in Canada in 1977 and release to the environment of PCBs was made illegal in 1985. However, Canadian legislation has allowed owners of PCB equipment to continue using PCB equipment until the end of its service life. The storage of PCBs has been regulated since 1988. Handling, transport and destruction of PCBs are also regulated, mostly under provincial regulations.

In residential and commercial buildings, PCBs are often present in lighting ballasts and other electrical equipment including small capacitors (in washing machines, hair dryers, neon tubes, dishwashers and power supply units) and circuit breakers. In larger industrial facilities PCBs may be present in transformers, heat transfer fluids and voltage regulators.

Environment Canada has therefore repealed the *Chlorobiphenyls Regulations* and the *Storage of PCB Material Regulations* on September 5, 2008 and made the *PCB Regulations* under the *Canadian Environmental Protection Act*, 1999 (CEPA 1999) that set specific dates for the destruction of PCBs in service and in storage.

In Ontario, waste management of PCBs is governed by Ontario Regulation 232/11, which is the amended Reg. 362 of R.R.O. 1990 - *Waste Management - PCBs.*

2.6 Ozone Depleting Substances:

Certain chemicals (such as chlorofluorocarbons, hydrochlorofluorocarbons and halons) are recognized as ozone-depleting substances (ODS) because they breakdown in the stratosphere and release chlorine or bromine, which destroy the stratospheric ozone layer. Most ODS are also greenhouse gases.

The most common uses of ozone-depleting substances are as refrigerants in commercial, home and vehicle air conditioners and refrigerators, foam blowing agents, solvents, aerosol spray propellants, fire extinguishing agents and chemical reactants.

Control, handling, sale, disposal, transport and transfer of ozone depleting substances is governed in Ontario by Regulation 463/10 - *Ozone Depleting Substances and Other Halocarbons*.

3.0 REVIEW OF GUIDELINES

3.1 GENERAL:

Duties of Employers:
The Occupational Health and Safety Act (OHSA) sets out, in very general terms, the duties of employers and others to protect workers from health and safety hazards on the job. These duties include:

- taking all reasonable precautions to protect the health and safety of workers [clause 25(2)(h)]
- ensuring that equipment, materials and protective equipment are maintained in good condition [clause 25(1)(b)]
- providing information, instruction and supervision to protect worker health and safety [clause 25(2)(a)]
- acquainting a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent [clause 25(2)(d)].

In addition, section 30 of the OHSA deals with the presence of designated substances on construction projects. Since asbestos, lead, mercury and silica are a designated substances (O. Reg. 490/09), compliance with the OHSA and its Regulations will require some action to be taken where there is a asbestos, lead, mercury and/or silica hazard on a construction project.

Duties of Owners:
Section 30 requires the owner of a project to determine if asbestos, lead, mercury and/or silica is present on a project and, if it is, to so inform all potential contractors as part of the bidding process. In a similar way, contractors who receive this information are to pass it onto other contractors and subcontractors who are bidding for work on the project. If the owner or any contractor fails to comply with this requirement, they will be liable for any loss or damages that result from a contractor subsequently discovering that asbestos, lead, mercury and/or silica is present.

Workplace Hazardous Materials Information System. (R.R.O. 1990, Reg. 860):
The Workplace Hazardous Materials Information System (WHMIS) Regulation applies to all workplaces covered by the OHSA. Any employer or constructor who uses WHMIS controlled products is required to comply with the WHMIS Regulation (Reg. 860) regarding the requirements for labels, material safety data sheets, and worker education and training.

The Ministry of Labour is responsible for the administration and enforcement of both federal and provincial WHMIS legislation.

Regulation for Construction Projects (O. Reg. 213/91):
The Regulation for Construction Projects (O. Reg. 213/91) applies to all construction projects. Although asbestos, lead, mercury and/or silica is not mentioned specifically, the following sections of the O. Reg. 213/91 would apply to situations where there is the potential for workers to be exposed to any one of these hazards:

Clause 14
(5) A competent person shall perform tests and observations necessary for the detection of hazardous conditions on a project.
Section 21
(1) A worker shall wear such protective clothing and use such personal protective equipment or devices as are necessary to protect the worker against the hazards to which the worker may be exposed.
(2) A worker's employer shall require the worker to comply with subsection (1).
(3) A worker required to wear personal protective clothing or use personal protective equipment or devices shall be adequately instructed and trained in the care and use of the clothing, equipment or device before wearing or using it.
Section 30
Workers who handle or use substances likely to endanger their health shall be provided with washing facilities with clean water, soap and individual towels.

Section 46
(1) A project shall be adequately ventilated by natural or mechanical means,
(a) if a worker may be injured by inhaling a noxious dust or fume;
(2) If it is not practicable to provide natural or mechanical ventilation in the circumstances described in clause (1) (a), respiratory protective equipment suitable for the hazard shall be provided and be used by the workers.
Section 59
If the dissemination of dust is a hazard to a worker, the dust shall be adequately controlled or each worker who may be exposed to the hazard shall be provided with adequate personal protective equipment.

3.2 ASBESTOS
SUMMARY OF APPLICATION AND CLASSIFICATION OF TYPE 1, 2 AND 3 OPERATIONS
ONTARIO REGULATION 278/05 DESIGNATED SUBSTANCE
-ASBESTOS ON CONSTRUCTION PROJECTS AND IN BUILDINGS AND REPAIR OPERATIONS, January 2011

* for complete Asbestos information - Control of exposure to asbestos is governed in *Ontario Regulation 278/05 Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations.* Disposal of asbestos waste (friable and non-friable materials) is governed by Ontario Regulation 278/05 and by Ontario Regulation 347, *Waste Management - General*. O. Reg. 278/05 classifies asbestos work operations into three types (Type 1, 2 and 3, as shown below) and specifies procedures to be followed in conducting asbestos abatement work.

Application

2. (1) This Regulation applies to,
(a) every project, its owner, and every constructor, employer and worker engaged in or on the project;
(b) the repair, alteration or maintenance of a building, the owner of the building, and every employer and worker engaged in the repair, alteration or maintenance;
(c) every building in which material that may be asbestos-containing material has been used, and the owner of the building;
(d) the demolition of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles, and every employer and worker engaged in the demolition; and
(e) subject to subsection (3),
(i) work described in subsection (2) in which asbestos-containing material is likely to be handled, dealt with, disturbed or removed, and
(ii) every employer and worker engaged in the work. O. Reg. 278/05, s. 2 (1).

CLASSIFICATION OF WORK

Type 1, Type 2 and Type 3 operations

12. (1) For the purposes of this Regulation, operations that may expose a worker to asbestos are classified as Type 1, Type 2 and Type 3 operations. O. Reg. 278/05, s. 12 (1).

(2) **The following are Type 1 operations:**
1. Installing or removing ceiling tiles that are asbestos-containing material, if the tiles cover an area less than 7.5 square metres and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
2. Installing or removing non-friable asbestos-containing material, other than ceiling tiles, if the material is installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
3. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
i. the material is wetted to control the spread of dust or fibres, and
ii. the work is done only by means of non-powered hand-held tools.
4. Removing less than one square metre of drywall in which joint-filling compounds that are asbestos-containing material have been used. O. Reg. 278/05, s. 12 (2).

(3) **The following are Type 2 operations:**

1. Removing all or part of a false ceiling to obtain access to a work area, if asbestos-containing material is likely to be lying on the surface of the false ceiling.
2. The removal or disturbance of one square metre or less of friable asbestos-containing material during the repair, alteration, maintenance or demolition of all or part of machinery or equipment or a building, aircraft, locomotive, railway car, vehicle or ship.
3. Enclosing friable asbestos-containing material.
4. Applying tape or a sealant or other covering to pipe or boiler insulation that is asbestos-containing material.
5. Installing or removing ceiling tiles that are asbestos-containing material, if the tiles cover an area of 7.5 square metres or more and are installed or removed without being broken, cut, drilled, abraded, ground, sanded or vibrated.
6. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if,
    i. the material is not wetted to control the spread of dust or fibres, and
    ii. the work is done only by means of non-powered hand-held tools
7. Removing one square metre or more of drywall in which joint filling compounds that are asbestos-containing material have been used.
8. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material if the work is done by means of power tools that are attached to dust-collecting devices equipped with HEPA filters.
9. Removing insulation that is asbestos-containing material from a pipe, duct or similar structure using a glove bag.
10. Cleaning or removing filters used in air handling equipment in a building that has sprayed fireproofing that is asbestos-containing material.
11. An operation that,
    i. is not mentioned in any of paragraphs 1 to 10,
    ii. may expose a worker to asbestos, and
    iii. is not classified as a Type 1 or Type 3 operation. O. Reg. 278/05, s. 12 (3).

(4) **The following are Type 3 operations:**

1. The removal or disturbance of more than one square metre of friable asbestos-containing material during the repair, alteration, maintenance or demolition of all or part of a building, aircraft, ship, locomotive, railway car or vehicle or any machinery or equipment.
2. The spray application of a sealant to friable asbestos-containing material.
3. Cleaning or removing air handling equipment, including rigid ducting but not including filters, in a building that has sprayed fireproofing that is asbestos-containing material.
4. Repairing, altering or demolishing all or part of a kiln, metallurgical furnace or similar structure that is made in part of refractory materials that are asbestos-containing materials.
5. Breaking, cutting, drilling, abrading, grinding, sanding or vibrating non-friable asbestos-containing material, if the work is done by means of power tools that are not attached to dust-collecting devices equipped with HEPA filters.
6. Repairing, altering or demolishing all or part of any building in which asbestos is or was used in the manufacture of products, unless the asbestos was cleaned up and removed before March 16, 1986. O. Reg. 278/05, s. 12 (4).

(5) Work on ceiling tiles, drywall or friable asbestos-containing material is classified according to the total area on which work is done consecutively in a room or enclosed area, even if the work is divided into smaller jobs. O. Reg. 278/05, s. 12 (5).

3.3 LEAD
SUMMARY OF CLASSIFICATION OF LEAD-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE - LEAD ON CONSTRUCTION PROJECTS, April 2011

CANADIAN SURFACE COATING MATERIALS REGULATIONS (SOR/2016-193)

* for complete Guideline, see Ontario Ministry of Labour *Guideline: Lead on Construction Projects & CANADIAN SURFACE COATING MATERIALS REGULATIONS (SOR/2016-193)*

(SOR/2016-193) Lead content and test method — 2 (1) A surface coating material must not contain more than 90 mg/kg total lead when a dried sample is tested in accordance with a method that conforms to good laboratory practices.

Lead can be present on construction projects in two distinct ways:

1. It can be found in construction materials, such as paints, coatings, mortar, concrete, solder, and sheet metal.
2. It can be present at a construction site in existing structures, building components, and where lead was previously used in a manufacturing process.

Construction activities of particular concern include:

1. abrasive blasting of structures coated with lead-based paints
2. application or removal of lead-containing paints
3. welding, burning, or high temperature cutting of lead-containing coatings or materials
4. removal of lead-containing dust using an air mist extraction system
5. removal of lead-containing mortars using an electric or pneumatic cutting device.

CONTROLLING THE LEAD HAZARD

Lead may affect the health of workers if it is in a form that may be inhaled (i.e. airborne particles) or ingested. In order for lead to be a hazard by inhalation, lead particles that are small enough to be inhaled must get into the air. There are three types of particles: dust, fume and mist. Lead dust consists of solid particles created through processes such as blasting, sanding, grinding, and electric or pneumatic cutting. Lead fumes are produced when lead or lead- contaminated materials are heated to temperatures above 500 degrees C, such as welding, high temperature cutting, and burning operations. The heating causes a vapour to be given off and the vapour condenses into solid fume particles. Mists are made up of liquid droplets suspended in air. The spray application of lead-based paint can generate a high concentration of lead- containing mist.

The strategy for controlling airborne lead hazard can therefore be broken down into three basic approaches:

1. prevent lead from getting into the air
2. remove lead present in the air
3. if present in the air, prevent workers from inhaling it.

To prevent the ingestion of lead, workers should exercise good work and hygiene practices.

To avoid the ingestion, inhalation and unintentional transfer of lead from contaminated areas, it is essential to have the following control methods in place:

1. engineering controls
2. work practices and hygiene practices
3. protective clothing and equipment
4. training.

CLASSIFICATION OF WORK

It is the classification of the work that determines the appropriate respirators, measures and procedures that should be followed to protect the worker from lead exposure. In this guideline, lead-containing construction operations are classified into three groups, Type 1, Type 2, and Type 3 operations, and can be thought of as being of low, medium and high risk. Some groups, Type 2 and Type 3, are further subdivided. From Type 1 to Type 3 operations, the corresponding respirator requirements, and measures and procedures become increasingly stringent.

The classification of typical lead-containing construction tasks is based on presumed airborne concentrations obtained from the U.S. Occupational Safety and Health Administration (OSHA), the Ontario Ministry of Labour, and published research studies. The classification of Type 1, Type 2, or Type 3 operations are grouped based on the following concentrations of airborne lead:

Type 1 Operations	Type 2 Operations - Type 2a	Type 2 Operations - Type 2b	Type 3 Operations - Type 3a	Type 3 Operations - Type 3b
< 0.05 mg/m3	>0.05 to 0.50 mg/m3	>0.50 to 1.25 mg/m3	>1.25 to 2.50 mg/m3	> 2.50 mg/m3

TYPE 1 OPERATIONS

1. Application of lead-containing coatings with a brush or roller.
2. Removal of lead-containing coatings with a chemical gel or paste and fibrous laminated cloth wrap.
3. Removal of lead-containing coatings or materials using a power tool that has an effective* dust collection system equipped with a HEPA filter.
4. Installation or removal of lead-containing sheet metal.
5. Installation or removal of lead-containing packing, babbit or similar material.
6. Removal of lead-containing coatings or materials using non-powered hand tools, other than manual scraping or sanding.

7 Soldering.

* Effective implies that the dust collection system should be capable of controlling airborne lead concentration levels to below 0.05 mg/m3. Employers should follow manufacturer's recommendations and maintenance specifications for optimal function.

TYPE 2 OPERATIONS

TYPE 2a OPERATIONS

1. Welding or high temperature cutting of lead-containing coatings or materials outdoors. This operation is considered a Type 2a operation only if it is short-term, not repeated, and if the material has been stripped prior to welding or high temperature cutting. Otherwise, it will be considered a Type 3a operation.
2. Removal of lead-containing coatings or materials by scraping or sanding using non- powered hand tools.
3. Manual demolition of lead-painted plaster walls or building components by striking a wall with a sledgehammer or similar tool.

TYPE 2b OPERATIONS

1. Spray application of lead-containing coatings.

TYPE 3 OPERATIONS

TYPE 3a OPERATIONS

1. Welding or high temperature cutting of lead-containing coatings or materials indoors or in a confined space.
2. Burning of a surface containing lead.
3. Dry removal of lead-containing mortar using an electric or pneumatic cutting device.
4. Removal of lead-containing coatings or materials using power tools without an effective dust collection system equipped with a HEPA filter.
5. Removal or repair of a ventilation system used for controlling lead exposure.
6. Demolition or cleanup of a facility where lead-containing products were manufactured.
7. An operation that may expose a worker to lead dust, fume or mist that is not a Type 1, Type 2, or Type 3b operation.

TYPE 3b OPERATIONS

1. Abrasive blasting of lead-containing coatings or materials.
2. Removal of lead-containing dust using an air mist extraction system.

Employers, supervisors, and workers should be able to recognize and classify lead-containing operations in order to provide appropriate respirators, measures and procedures. Respirator requirements are listed in Table 1 for Type 1, Type 2, and Type 3 operations.

3.4 MERCURY
SUMMARY OF HAZARDOUS PRODUCTS ACT - SURFACE COATING MATERIALS REGULATIONS
Canada Gazette, Vol. 139, No. 9 - May 4, 2005

CANADIAN SURFACE COATING MATERIALS REGULATIONS (SOR/2016-193)

* for Recommended Default Guideline, see Ontario Ministry of Labour *Guideline: Lead on Construction Projects*

No special requirements exist in Ontario for disposal of small quantities (i.e. less than 30) of waste light tubes. Larger quantities of waste light tubes (>30) generated during renovations or building demolition and waste mercury from equipment must either be recycled or disposed of in accordance with the requirements of O. Reg. 347 - *Waste Management General*.

Waste mercury in amounts less than 5 kg (per month) are exempt from the generator registration requirements prescribed by O. Reg. 347 - Waste Management - General. Waste mercury from mercury switches or gauges should, however, be properly collected and shipped to a recycling facility or disposed of as a hazardous waste. Removal of mercury-containing equipment (e.g. switches, gauges, controls etc.) should be carried out in a manner which prevents spillage and exposure to workers.

Mercury content and test method — 5 A surface coating material must not contain more that 10 mg/kg total mercury when a dried sample is tested in accordance with a method that conforms to good laboratory practices.

The measures and procedures in the Ministry of Labour *Guideline - Lead in Construction Projects* for control of exposure of lead from paint applications during construction activities will also serve to control potential exposure to mercury in paint.

3.5 SILICA
SUMMARY OF CLASSIFICATION OF SILICA-CONTAINING CONSTRUCTION TASKS
MOL GUIDELINE, SILICA ON CONSTRUCTION PROJECTS, April 2011

* for complete Guideline, see Ontario Ministry of Labour *Guideline: Silica on Construction Projects*

In construction, worker exposure to silica is of particular concern because silica is the primary component of many construction materials. Some commonly used construction materials containing silica include:

1. abrasives used for blasting
2. brick, refractory brick
3. concrete, concrete block, cement, mortar
4. granite, sandstone, quartzite, slate
5. gunite
6. mineral deposits
7. rock and stone
8. sand, fill dirt, top soil
9. asphalt containing rock or stone.

Many construction activities can generate airborne silica-containing dust. In construction, abrasive blasting generates the most dust. Exposure to silica from abrasive blasting can result if the abrasive contains silica and/or if the material being blasted contains silica.

CONTROLLING THE SILICA HAZARD

In order for silica to be a hazard, silica-containing dust particles that are small enough to be inhaled (i.e., respirable) must get into the air. The strategy for controlling the silica hazard can therefore be broken down into three basic approaches:
1. prevent silica dust from getting into the workplace air
2. remove silica dust present in the air
3. if present, prevent workers from inhaling the dust.

To avoid the inhalation of silica, it is essential to have the following control methods in place:
4. engineering controls
5. work practices and hygiene practices
6. respirators and personal protective equipment
7. training.

CLASSIFICATION OF WORK

In the Guideline, silica-containing construction operations are classified into three groups - Type 1 (low-risk), Type 2 (medium-risk) and Type 3 (high-risk) based on presumed airborne concentrations of respirable crystalline silica in the form of cristobalite, tridymite, quartz and tripoli shown below.

	Type 1 Operations	Type 2 Operations	Type 3 Operations
Cristobalite and Tridymite	>0.05 to 0.50 mg/m3	>0.50 to 2.50 mg/m3	>2.5 mg/m3
Quartz and Tripoli	>0.10 to 1.0 mg/m3	>1.0 to 5.0 mg/m3	>5.0 mg/m3

Note: The Classification of silica-containing construction tasks is based on presumed concentrations of respirable crystalline silica, as shown above.

The following section lists the typical construction operations that generate silica-containing dust:

TYPE 1 OPERATIONS

1. The drilling of holes in concrete or rock that is not part of a tunnelling operation or road construction.
2. Milling of asphalt from concrete highway pavement.
3. Charging mixers and hoppers with silica sand (sand consisting of at least 95 per cent silica) or silica flour (finely ground sand consisting of at least 95 per cent silica).
4. Any other operation at a project that requires the handling of silica-containing material in a way that may result in a worker being exposed to airborne silica.
5. Entry into a dry mortar removal or abrasive blasting area while airborne dust is visible for less than 15 minutes for inspection and/or sampling.
6. Working within 25 metres of an area where compressed air is being used to remove silica-containing dust outdoors.

TYPE 2 OPERATIONS

1. Removal of silica containing refractory materials with a jackhammer.
2. The drilling of holes in concrete or rock that is part of a tunnelling or road construction.
3. The use of a power tool to cut, grind, or polish concrete, masonry, terrazzo or refractory materials.
4. The use of a power tool to remove silica containing materials.
5. Tunnelling (operation of the tunnel boring machine, tunnel drilling, tunnel mesh installation).
6. Tuck point and surface grinding.
7. Dry mortar removal with an electric or pneumatic cutting device.
8. Dry method dust cleanup from abrasive blasting operations.
9. The use of compress air outdoors for removing silica dust.
10. Entry into area where abrasive blasting is being carried out for more than 15 minutes.

TYPE 3 OPERATIONS

1 Abrasive blasting with an abrasive that contains ≥ 1 per cent silica.
2 Abrasive blasting of a material that contains ≥ 1 per cent silica.

Employers, supervisors, and workers should be able to recognize and correctly classify the types of operations carried out in the workplace, in order to select appropriate respirators, and implement appropriate measures and procedures. Respirator requirements are listed in Table 1 of Ontario Ministry of Labour *Guideline: Silica on Construction Projects* (**Table 1: Respirator Requirements, pp 15)** for Type 1, Type 2, and Type 3 operations.

3.6 BENZENE
ONTARIO REGULATION 490/09, AMENDING REG. 839 OF R.R.O. 1990
MINISTRY OF LABOUR - CURRENT OCCUPATIONAL EXPOSURE LIMITS, REG 833

* for complete benzene information, see ONTARIO REGULATION 490/09, AMENDING REG. 839 OF R.R.O. 1990

Benzene is prescribed as a designated substance. R.R.O. 1990, Reg. 839, s. 2.

3. (1) Subject to subsection (3), this Regulation applies to every employer and worker at a workplace where a worker is likely to inhale, absorb or come into contact with benzene or a product containing benzene during its transportation or transfer, or during the manufacture, processing, use, handling or storage of benzene or a product containing benzene. R.R.O. 1990, Reg. 839, s. 3 (1).

(2) Subject to subsection (3), an employer to whom this Regulation applies shall take every precaution reasonable in the circumstances to ensure that every worker who is not an employee of the employer but who is working in the workplace of the employer and is exposed to benzene and whose health is likely to be affected thereby is protected and the worker shall comply with the requirements of the employer. R.R.O. 1990, Reg. 839, s. 3 (2).

(3) Subsection (2) and sections 4 to 17 do not apply to,

(a) an employer or to the workers of an employer who primarily carries on the business of construction; or

(b) the delivery of gasoline by a gasoline pump into the fuel tank of a motor vehicle, motor boat or other water craft or into a portable container at a service station or other premises. R.R.O.1990, Reg. 839, s. 3 (3)

3.7 POLYCHLORINATED BIPHENYLS (PCBs)
ONTARIO REGULATION 232/11, AMENDING REG. 362 OF R.R.O. 1990
(WASTE MANAGEMENT-PCBs), June 2, 2011

* for complete PCBs information, see ONTARIO REGULATION 232/11, AMENDING REG. 362 OF R.R.O. 1990

“PCB” means any monochlorinated or polychlorinated biphenyl or any mixture of them or any mixture that contains one or more of them; (“BPC”)

“PCB materials” means materials containing PCBs at a concentration of more than fifty parts per million by weight whether the material is liquid or not; (“matières contenant des BPC”)

“PCB waste” means PCB equipment, PCB liquid or PCB material, but does not include,

(a) PCB material or PCB equipment after it has been decontaminated pursuant to guidelines issued by the Ministry of the Environment or instructions issued by the Director,

(b) PCB equipment that is,

(i) an electrical capacitor that has never contained over one kilogram of PCBs,

(ii) electrical, heat transfer or hydraulic equipment or a vapour diffusion pump that is being put to the use for which it was originally designed or is being stored for such use by a person who uses such equipment for the purpose for which it was originally designed, or

(iii) machinery or equipment referred to in subclause (c) (i), or

(c) PCB liquid that,

(i) is at the site of fixed machinery or equipment, the operation of which is intended to destroy the chemical structure of PCBs by using the PCBs as a source of fuel or chlorine for purposes other than the destruction of PCBs or other wastes and that is subject to an environmental compliance approval issued in respect of an activity mentioned in subsection 9 (1) of the Act after the 1st day of January, 1981 specifying the manner in which PCB liquid be processed in the machinery or equipment, or

(ii) is in PCB equipment referred to in subclause (b) (ii). (“déchets de BPC”) R.R.O. 1990, Reg. 362, s. 1; O. Reg. 232/11, s. 1.

2. PCB waste is designated as a waste. R.R.O. 1990, Reg. 362, s. 2.

3. (1) Every site containing PCB waste and PCB related waste but not containing other wastes is classified as a PCB waste disposal site. R.R.O. 1990, Reg. 362, s. 3 (1).

(2) In subsection (1),

“PCB related waste” means waste containing low levels of PCBs or waste arising from a spill or clean up of PCB liquid or PCB waste. R.R.O. 1990, Reg. 362, s. 3 (2).

4. (1) Every operator of a waste disposal site shall keep records of all PCB waste held by the operator after the 15th day of January, 1982. R.R.O. 1990, Reg. 362, s. 4 (1).

(2) The records referred to in subsection (1) shall include,

(a) the methods and times at which the PCB waste is received and delivered to and from the site; and

(b) where PCB waste is transported to and from the site, the location from or to which it is transported and the person by whom it is transported,

with respect to any delivery, receipt or transport of PCB waste after the 15th day of January, 1982, and,

(c) a description of the nature and quantities of the PCB waste;

(d) the location of the waste disposal site; and

(e) the methods of storage of the PCB waste,

with respect to all PCB wastes at the waste disposal site. R.R.O. 1990, Reg. 362, s. 4 (2).

(3) Every operator of a waste disposal site shall report to the Director the information required to be recorded under subsection (2),

(a) by telephone immediately, and in writing within three days, after a PCB waste first comes on the site; and

(b) in writing within thirty days after any other PCB waste is taken to or from the site. R.R.O. 1990, Reg. 362, s. 4 (3).

(4) A record of a PCB waste transfer submitted to the Ministry under section 23, 24 or 25 of Regulation 347 of the Revised Regulations of Ontario, 1990 satisfies the requirements of clauses (2) (b), (c) and (d) with respect to the PCB waste referred to in that record. R.R.O. 1990, Reg. 362, s. 4 (4).

1. Subclause (c) (i) of the definition of "PCB waste" in section 1 of Regulation 362 of the Revised Regulations of Ontario, 1990 is amended by striking out "with respect to which a certificate of approval has been issued under section 9" and substituting "that is subject to an environmental compliance approval issued in respect of an activity mentioned in subsection 9 (1)"

3.8 OZONE DEPLETING SUBSTANCES
ONTARIO REGULATION 463/10 -
OZONE DEPLETING SUBSTANCES AND OTHER HALOCARBONS, December 7, 2010

* for complete Ozone Depleting Substances information, see ONTARIO REGULATION 463/10

Transfer, transport, storage or disposal of ozone depleting substances as waste

38. (1) Nothing in this Regulation prohibits the transfer or transport of a class 1 ozone depleting substance or class 2 ozone depleting substance that is waste or any thing that contains a class 1 ozone depleting substance or class 2 ozone depleting substance that is waste to or by a waste management system or to or from a waste disposal site as permitted under the Act.

(2) Nothing in this Regulation prohibits the storage or disposal of a class 1 ozone depleting substance or class 2 ozone depleting substance that is waste or any thing that contains a class 1 ozone depleting substance or class 2 ozone depleting substance that is waste at a waste disposal site as permitted under the Act.

Disposal of fire extinguishing equipment and containers

39. (1) A person shall not dismantle, destroy, recycle, incinerate or dispose of by depositing in a dump or landfilling site fire extinguishing equipment that is designed to contain halon in a quantity of more than three kilograms unless a notice has been affixed to the equipment under section 12 and the equipment is dismantled, destroyed, recycled, incinerated or disposed of by depositing in a dump or landfilling site in a manner authorized under the Act.

(2) A person shall not dismantle, destroy, recycle, incinerate or dispose of by depositing in a dump or landfilling site a container referred to in section 11 unless a notice has been affixed to the container under section 12 and the container is dismantled, destroyed, recycled, incinerated or disposed of by depositing in a dump or landfilling site in a manner authorized under the Act.

Disposal of portable fire extinguisher designed to contain less than three kilograms of halon

40. A person may dismantle, destroy, recycle, incinerate or dispose of by depositing in a dump or landfilling site a portable fire extinguisher designed to contain halon in a quantity of three kilograms or less in a manner authorized under the Act.

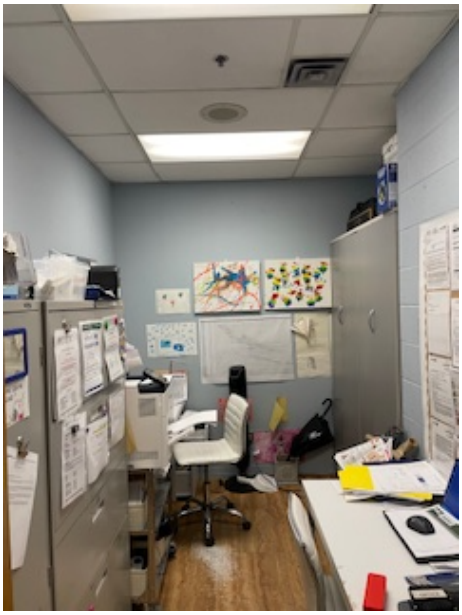
Disposal of refrigeration equipment and containers

41. (1) A person shall not dismantle, destroy, recycle, incinerate or dispose of by depositing in a dump or landfilling site refrigeration equipment or a container that has contained a refrigerant unless a notice has been affixed to the equipment or container under section 32 and the equipment or container is dismantled, destroyed, recycled, incinerated or disposed of by depositing in a dump or landfilling site in a manner authorized under the Act.

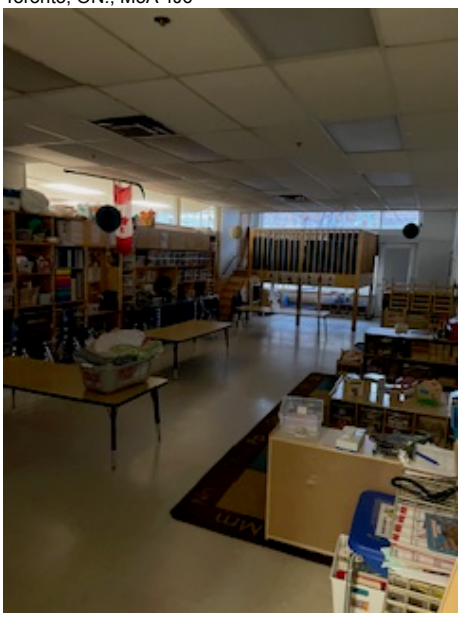
(2) This section does not apply to dismantling that takes place in the course of the manufacture of a product that is or that contains refrigeration equipment.

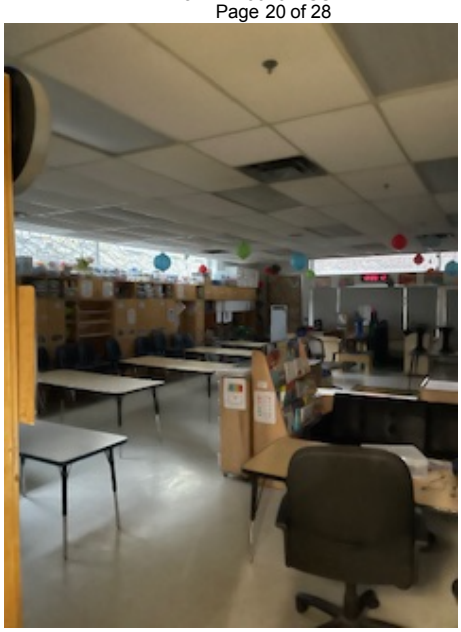
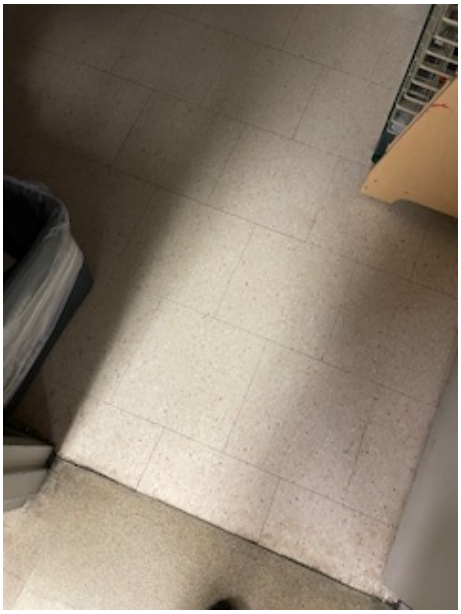
4.0 OBSERVATIONS

Site Observations:
On **April 27, 2024**, at the time of our inspection and sampling, the following observations were noted:
*for detailed findings and lab analysis see section 6.0 and Appendix A and B.






4.1 Asbestos
As it pertains to asbestos, a total of **24 representative samples** were taken.

No asbestos detected.

4.2 Lead
As it pertains to lead in paint, three representative paint chip samples were taken.

On the main floor, a representative sample was taken from the drywall wall paint (M001-LP) and contains 9 PPM.
On the main floor, a representative sample was taken from the block wall paint (M002-LP) and contains <5 PPM.
On the main floor, a representative sample was taken from the door trim paint (M003-LP) and contains 10 PPM.

4.3 Mercury
Mercury containing thermostat was not noted at the time of inspection. Any florescent bulbs may contain mercury.

4.4 Silica
Regarding silica, areas of concern both indoors and outdoors include concrete patio stones, asphalt, brick, cinder block, mortar, and concrete. Additionally, silica may be present in ceramic and stone materials commonly found in washrooms, kitchens, and surrounding fireplaces.

4.5 Benzene
As it pertains to benzene, no benzene contain substances were noted at the time of inspection. (i.e. oil storage tank).

4.6 Polychlorinated Biphenyls (PCBs)
As it pertains to PCBs, light ballasts may contain PCBs.

4.7 Ozone Depleting Substances
As it pertains to ozone depleting substances, no indoor air conditioning unit were noted at the time of testing. Any air conditioning units contain refrigerant. No other refrigerant containing materials were noted at the time of inspection.

5.0 TESTING CRITERIA

5.1 Asbestos

Ontario Regulation 278/05 outlines the definition, application and requirements for asbestos containing material and asbestos containing buildings in Ontario. This regulation also outlines the requirements for management, handling and testing of asbestos containing material (ACM).

According to O. Reg 278/05 **"asbestos-containing material" means material that contains 0.5 per cent or more asbestos by dry weight.** "Friable (asbestos containing) material" means material that, (a) when dry, can be crumbled, pulverized or powdered by hand pressure, or (b) is crumbled, pulverized or powdered. Friable asbestos containing material is considered to be more dangerous than non-friable asbestos containing material.

O. Reg 278/05 bulk material samples chart (below) indicated the number of required samples.

BULK MATERIAL SAMPLES

**Table taken from Ontario Regulation 278/05, Subsection 3 (3)*

Item	Type of material	Size of 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, by troweling or otherwise, such as acoustical plaster on ceilings and fireproofing materials on structural members	Less than 90 square metres	3
		90 or more square metres, but less than 450 square metres	5
		450 or more square metres	7
2	Thermal insulation, except as described in item 3	Any size	3
3	Thermal insulation patch	Less than 2 linear metres or 0.5 square metres	1
4	Other material	Any size	3

5.2 Lead

ONTARIO REGULATION - MINISTRY OF LABOUR GUIDELINE - LEAD ON CONSTRUCTION PROJECTS

The Ministry of Labour (MOL) currently does not have criteria for the classification of lead-based paint. Therefore, under these circumstances, The Healthy Abode Inc. considers all painted surfaces with any detectable presence of lead to be lead containing.

Ontario Regulation 490/09 specifies the occupational exposure limit (OEL) for elemental lead at 0.05 mg/m3 calculated as an 8 hour/daily and a 40 hour/weekly time-weighted average (TWA) limit. Despite the fact that O. Reg 490/09 does not generally apply to a construction project, employers still have a general duty and responsibility under Part III, Section 25(2)(h) of the Act to protect workers. Thus, if the contracted personnel retained to conduct the work are required to perform operations where significant levels of airborne dust containing lead may be generated, then measures must be taken by the contractor to ensure that the OEL for lead is not exceeded and that all reasonable regulatory and health and safety precautions are taken. The MOL Guideline, Lead on Construction Projects, provides a classification system to assist with determining the required control measures necessary, based on the proposed weekly activity.

EACO Lead Guideline For Construction, Renovation, Maintenance or Repair, Oct 2014

5.3 “De minimis” or “virtually safe” Lead Level of Paints and Coatings
For the purpose of this guideline:

- Paints or surface coatings containing less than of equal to 0.1% lead by weight (1000 PPM) are considered low-level lead paints or surface coatings. If these materials (and the surfaces to which they are applied) are disturbed in a non-aggressive manner, performed using normal dust control procedures and are competed so that the TWA for PNOS is not exceeded, then worker protection from the inhalation of lead is not required. General health and safety precautions must still be implements.
- Paints or surface coatings containing greater than 0.1% lead by whether (1000 PPM) but less than 0.5% lead by weights (5000 PPM) are considered lead-containing paints or surface coatings. Tasks performed that disturb these materials must be competed in accordance with the Classifications of Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively , a hygiene or exposure assessment can be performed to determine procedures that are required.
- Regardless of lead content in paints or surface coatings, tasks that create an aggressive disturbance of coatings such as torching/welding, abrasive blasting must always be completed in accordance with the procedures listed in the Classifications of Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively, a hygiene or exposure assessment can be performed to determine procedures that are required.
- Construction operations involving lead-based paints or surface coatings (i.e concentrations equal to or greater than 0.5% lead by weight (5000 PPM)) must always be completed in accordance with the procedures listed in the Classifications of Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively , a hygiene or exposure assessment can be performed to determine procedures that are required.

CANADIAN SURFACE COATING MATERIALS REGULATIONS (SOR/2016-193)

According to the Canadian Surface Coating Materials Regulations (SOR/2016-193), *Lead content and test method* ***2 (1)*** *A surface coating material must not contain more than 90 mg/kg total lead when a dried sample is tested in accordance with a method that conforms to good laboratory practices.* NOTE: regarding unit of measurement, 1 milligram/kilogram (mg/kg) = 1 parts per million (PPM.)

United States, Environmental Protection Agency, EPA - RRP

The Environmental Protection Agency (EPA) in the United States considers <0.5% or <5000 parts per million to be a safe level of lead in paint.

6.0 LABORATORY SAMPLING RESULTS

6.1 Asbestos

Total: 24 samples (stop positive placed on laboratory report)
For reference for findings see - Appendix A & C- attached report from PARACEL - COC No: 2418032 & 2418329
Material Quantity is approximate.
Condition: Good, Average or Poor
Access: High: accessible to anyone; Mod: accessible with a ladder only; Low: enclosed in a building material

Sample #	Sample Quantity	Location	Material	Material Quantity	Condition	Friable Y/N	Access	% of Asbestos and Type
M001, M002, M003-AB	1/3, 2/3, 3/3	Main floor - representative, inc. kitchen, bathroom girls, bathroom boys	Drywall joint compound	<1000 ft2	avg	Y	high	None detected
M004, M005, M006-AB	1/3, 2/3, 3/3	Main floor - representative	Acoustic ceiling tiles	<5000 ft2	avg	Y	mod	None detected
M007, M008, M009-AB	1/3, 2/3, 3/3	Main floor - representative	Cinder block	<5000 ft2	avg	Y	high	None detected
M010, M011, M012-AB	1/3, 2/3, 3/3	Main floor - representative, inc. pre-school class #1, #2, #3	VCT floor tile - beige	<1000 ft2	avg	N	high	None detected
M013, M014, M015-AB	1/3, 2/3,	Main floor - representative, inc. pre-school class #1, #2, #3	Mastic adhesive	<1000 ft2	avg	N/Y	low	None detected
M016, M017, M018-AB	1/3, 2/3, 3/3	Main floor - kitchen	VCT floor tile - grey	<1000 ft2	avg	N	high	None detected
B019, B020, B021-AB	1/3, 2/3, 3/3	Basement - parking garage, level #1 ceiling	Spray insulation	<1000 ft2	avg	Y	mod	None detected
B022, B023, B024-AB	1/3, 2/3, 3/3	Basement - parking garage, level #1 ceiling	Oldest layer, insulation	<1000 ft2	avg	Y	low	None detected

6.2 Lead (in paint)

Total: 3 samples

For reference for findings see - Appendix B - attached report from PARACEL - Chain of Custody Number: 2418055
Material Quantity is approximate.
Condition: Good, Average or Poor

Access: High: accessible to anyone; Mod: accessible with a ladder only; Low: enclosed in a building material

Sample #	Location	Material	Material Quantity	Condition	Access	Quantity of Lead Paint
M001-LP	Main floor - representative, inc. kitchen	Drywall wall paint	<1000 ft2	avg	high	9 PPM
M002-LP	Main floor - representative	Block wall paint	<1000 ft2	avg	high	<5 PPM
M003-LP	Main floor - representative, inc. Classroom #3	Trim paint	<100 linear feet	avg	high	10 PPM

7.0 DISCUSSION & CONCLUSIONS

Under the *Occupational Health and Safety Act,* in accordance with ONTARIO REGULATION 490/09 DESIGNATED SUBSTANCES at the present time there are eleven (11) designated substances. Of the eleven (11) designated substances, two (2) have been deemed applicable to St. Lawrence Co-Op Daycare - 230 The Esplanade, Toronto, ON., M5A 4J6. The two (2) designated substances that have been deemed applicable are Lead, and Silica.

In addition to these above mentioned designated substances this survey also noted the presence or potential presence of both Polychlorinated Biphenyls (PCBs) and Ozone Depleting Substances.

Of the additional designated substances, namely, mercury, benzene, acrylonitrile, arsenic, coke oven emissions, ethylene oxide, isocyanates and vinyl chloride regulated under O. Reg 490/09, none of these materials were expected to constitute significant components and/or portions of building materials and/or architectural finishes observed on site.

Asbestos
Of the **24 samples** collected for the purpose of detecting asbestos containing materials, 0 types of materials contain asbestos.

- **NOTE: There may be asbestos duct wrap on the inner wall HVAC duct runs / there may be asbestos boot wrap on forced air registers. If duct wrap / boot wrap is noted, it is considered friable. Removal is considered either a type 2 (<1m2, O. Reg 278/05, s.12 (3).2.) or type 3 (>1m2, O. Reg 278/05, s.12 (4).1.) asbestos operation depending on quantity and removal method. If the material will not be removed, but enclosed instead it is considered a type 2 operation, O. Reg 278/05, s.12 (3).3.**

If suspected asbestos-containing materials not identified in this report are encountered during demolition activities, the work should stop immediately and the material tested to confirm the presence or absence of asbestos. This would be executed in order to provide recommendations on the applicable work procedures a prescribed under O. Reg 278/05. O. Reg 278/05 must be followed for the removal of asbestos containing material

Lead
As it pertains to lead in paint, three representative paint chip samples were taken.

On the main floor, a representative sample was taken from the drywall wall paint (M001-LP) and contains 9 PPM.
On the main floor, a representative sample was taken from the block wall paint (M002-LP) and contains <5 PPM.
On the main floor, a representative sample was taken from the door trim paint (M003-LP) and contains 10 PPM.

The Ministry of Labour (MOL) currently does not have criteria for the classification of lead-based paint. Therefore, under these circumstances, The Healthy Abode Inc. considers all painted surfaces with any detectable presence of lead to be lead containing.

According to EACO Lead Guideline For Construction, Renovation, Maintenance or Repair, Oct 2014
5.3 “De minimis” or “virtually safe” Lead Level of Paints and Coatings
For the purpose of this guideline:
- Paints or surface coatings containing less than of equal to 0.1% lead by weight (1000 PPM) are considered low-level lead paints or surface coatings. If these materials (and the surfaces to which they are applied) are disturbed in a non-aggressive manner, performed using normal dust control procedures and are competed so that the TWA for PNOS is not exceeded, then worker protection from the inhalation of lead is not required. General health and safety precautions must still be implements.
- Paints or surface coatings containing greater than 0.1% lead by whether (1000 PPM) but less than 0.5% lead by weights (5000 PPM) are considered lead-containing paints or surface coatings. Tasks performed that disturb these materials must be competed in accordance with the Classifications of Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively , a hygiene or exposure assessment can be performed to determine procedures that are required.
- Regardless of lead content in paints or surface coatings, tasks that create an aggressive disturbance of coatings such as torching/welding, abrasive blasting must always be completed in accordance with the procedures listed in the Classifications of Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively, a hygiene or exposure assessment can be performed to determine procedures that are required.
- Construction operations involving lead-based paints or surface coatings (i.e concentrations equal to or greater than 0.5% lead by weight (5000 PPM)) must always be completed in accordance with the procedures listed in the Classifications of

Work Operations (in Section 7) and corresponding procedures (in Section 8). Alternatively , a hygiene or exposure assessment can be performed to determine procedures that are required.

According to the Canadian Surface Coating Materials Regulations (SOR/2016-193), *Lead content and test method* ***2 (1)*** *A surface coating material must not contain more than 90 mg/kg total lead when a dried sample is tested in accordance with a method that conforms to good laboratory practices.* NOTE: regarding unit of measurement, 1 milligram/kilogram (mg/kg) = 1 parts per million (PPM.)

The Environmental Protection Agency (EPA) in the United States considers <0.5% or <5000 parts per million to be a safe level of lead in paint.

MOL Guideline, Lead on Construction Projects, provides a classification system to assist with determining the required control measures necessary, based on the proposed weekly activity.

There is a possibility that lead-containing solder is present on domestic water pipes in the building. During demolition or demolition activities, inaccessible lead-containing materials may be uncovered. All bulk lead-containing materials should be extracted and sent to a recycling facility. If the recycling of the lead is not practical then it must be dispose of in an approved landfill as lead waste.

Mercury
Mercury containing thermostat was not noted at the time of inspection. Any florescent bulbs may contain mercury.

Silica
Regarding silica, areas of concern both indoors and outdoors include concrete patio stones, asphalt, brick, cinder block, mortar, and concrete. Additionally, silica may be present in ceramic and stone materials commonly found in washrooms, kitchens, and surrounding fireplaces.

Benzene
As it pertains to benzene, no benzene contain substances were noted at the time of inspection. (i.e. oil storage tank).

Polychlorinated Biphenyls (PCBs)
As it pertains to PCBs, light ballasts may contain PCBs.

Ozone Depleting Substances
As it pertains to ozone depleting substances, an indoor air conditioning unit was not at the time of testing. Any air conditioning units contain refrigerant. No other refrigerant containing materials were noted at the time of inspection.

8.0 RECOMMENDATIONS

The Occupational Health and Safety Act (OHSA) sets out, in very general terms, the duties of employers and others to protect workers from health and safety hazards on the job. These duties include:

- taking all reasonable precautions to protect the health and safety of workers [clause 25(2)(h)]
- ensuring that equipment, materials and protective equipment are maintained in good condition [clause 25(1)(b)]
- providing information, instruction and supervision to protect worker health and safety [clause 25(2)(a)]
- acquainting a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent [clause 25(2)(d)].

As it pertains specifically to Asbestos, Lead, Mercury, Silica and Benzene, all five of these substances are regulated by Ontario Regulation 490/09 - Designated Substances. In addition to O. Reg 490/09, the specific Ontario Guidelines, Regulations and Requirements are listed below:

* Ontario Occupational Health and Safety Act, *Ontario Regulation 278/05 Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*

* Ontario Ministry of Labour - *Guideline: Lead on Construction Projects*

* Note: The measures and procedures in the Ministry of Labour *Guideline - Lead in Construction Projects* for control of exposure of lead from paint applications during construction activities will also serve to control potential exposure to mercury in paint

* Canadian Surface Coating Materials Regulations (SOR/2016-193) (lead and mercury)

* EACO Lead Guideline For Construction, Renovation, Maintenance or Repair, Oct 2014

* Ontario Ministry of Labour *Guideline: Silica on Construction Projects*

* Benzene, Amending Reg. 839 of R.R.O. 1990, Ministry of Labour - Current Occupational Exposure Limits, REG 833

* For Waste: Ontario Regulation 347 - *Waste Management General* is to be followed

For Polychlorinated Biphenyls (PCBs) and Ozone Depleting Substances the specific Ontario Guidelines, Regulations and Requirements are listed below:

* ONTARIO REGULATION 232/11, AMENDING REG. 362 OF R.R.O. 1990

* ONTARIO REGULATION 463/10 - OZONE DEPLETING SUBSTANCES AND OTHER HALOCARBONS, December 7, 2010

It is recommended that you have these documents on site for reference and follow all necessary and outlined procedures and protocols.

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Certificate of Analysis

The Healthy Abode Inc.

151 Bowie Avenue
Toronto, ON M6E 2R1
Attn: Angelina Sampieri

Client PO: 230 Esplanade, Toronto, ON M5A 4J6
Project: 24-3029-DSS
Custody: 75011 74992

Report Date: 2-May-2024
Order Date: 29-Apr-2024

Order #: 2418032

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
2418032-01	M001
2418032-02	M002
2418032-03	M003
2418032-04	M004
2418032-05	M005
2418032-06	M006
2418032-07	M007
2418032-08	M008
2418032-09	M009
2418032-10	M010
2418032-11	M011
2418032-12	M012
2418032-13	M013
2418032-14	M014
2418032-15	M015
2418032-16	M016
2418032-17	M017
2418032-18	M018

Approved By:

Emma Diaz

Senior Analyst

Certificate of Analysis

Report Date: 02-May-2024

Client: The Healthy Abode Inc.

Order Date: 29-Apr-2024

Client PO: 230 Esplanade, Toronto, ON M5A 4J6

Project Description: 24-3029-DSS

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Friability	Colour	Description	Asbestos Detected	Material Identification	% Content
2418032-01	27-Apr-24	Friable	White	Drywall Joint Compound	No	**Client ID: M001**	
						Non-Fibers	100
Comments:							
2418032-02	27-Apr-24	Friable	White	Drywall Joint Compound	No	**Client ID: M002**	
						Non-Fibers	100
Comments:							
2418032-03	27-Apr-24	Friable	White	Drywall Joint Compound	No	**Client ID: M003**	
						Non-Fibers	100
Comments:							
2418032-04	27-Apr-24	Friable	Grey	Ceiling Tile	No	**Client ID: M004**	
						Cellulose	40
						MMVF	30
						Non-Fibers	30
Comments:							
2418032-05	27-Apr-24	Friable	Grey	Ceiling Tile	No	**Client ID: M005**	
						Cellulose	40
						MMVF	30
						Non-Fibers	30
Comments:							
2418032-06	27-Apr-24	Friable	Grey	Ceiling Tile	No	**Client ID: M006**	
						Cellulose	40
						MMVF	30
						Non-Fibers	30
Comments:							
2418032-07	27-Apr-24	Friable	Grey	Cinder Block	No	**Client ID: M007**	
						Non-Fibers	100
Comments:							

Certificate of Analysis

Client: The Healthy Abode Inc.

Client PO: 230 Esplanade, Toronto, ON M5A 4J6

Report Date: 02-May-2024

Order Date: 29-Apr-2024

Project Description: 24-3029-DSS

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Friability	Colour	Description	Asbestos Detected	Material Identification	% Content
2418032-08	27-Apr-24	Friable	Grey	Cinder Block	No	**Client ID: M008**	
						Non-Fibers	100
Comments:							
2418032-09	27-Apr-24	Friable	Grey	Cinder Block	No	**Client ID: M009**	
						Non-Fibers	100
Comments:							
2418032-10	27-Apr-24	Non-Friable	Beige	Tile	No	**Client ID: M010**	
						Non-Fibers	100
Comments:							
2418032-11	27-Apr-24	Non-Friable	Beige	Tile	No	**Client ID: M011**	
						Non-Fibers	100
Comments:							
2418032-12	27-Apr-24	Non-Friable	Beige	Tile	No	**Client ID: M012**	
						Non-Fibers	100
Comments:							
2418032-13	27-Apr-24	Non-Friable	Yellow	Mastic	No	**Client ID: M013** [AS-IM-CA]	
						Non-Fibers	100
Comments:							
2418032-14	27-Apr-24	Non-Friable	Yellow	Mastic	No	**Client ID: M014** [AS-IM-CA]	
						Non-Fibers	100
Comments:							
2418032-15	27-Apr-24	Non-Friable	Yellow	Mastic		**Client ID: M015** [AS-IM-NA]	
						not analyzed	
*Comments: *All three mastic samples in 1 bag. Not enough material left.*							
2418032-16	27-Apr-24	Non-Friable	Grey	Tile	No	**Client ID: M016**	
						Non-Fibers	100

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Order #: 2418032

Certificate of Analysis

Client: The Healthy Abode Inc.

Client PO: 230 Esplanade, Toronto, ON M5A 4J6

Report Date: 02-May-2024

Order Date: 29-Apr-2024

Project Description: 24-3029-DSS

Asbestos, PLM Visual Estimation **MDL - 0.5%**

Paracel ID	Sample Date	Friability	Colour	Description	Asbestos Detected	Material Identification	% Content
Comments:							
2418032-17	27-Apr-24	Non-Friable	Grey	Tile	No	**Client ID: M017**	
						Non-Fibers	100
Comments:							
2418032-18	27-Apr-24	Non-Friable	Grey	Tile	No	**Client ID: M018**	
						Non-Fibers	100
Comments:							

* MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation	Analysis Date
Asbestos, PLM Visual Estimation	AppE to SubE of 40CFR Part763 and EPA/600/R-93/116	1 - Mississauga	CALA 3762	2-May-24

Mississauga Lab: 15 - 6800 Kitimat Rd Mississauga, Ontario, L5N 5M1

Qualifier Notes

Sample Qualifiers :

AS-IM-CA: Insufficient material, analysed per client request. Analysing less material than recommended by the reference method may or may not limit the sensitivity and reliability of quantitation.

AS-IM-NA: Insufficient material, not analysed. Analysing less material than recommended by the reference method may or may not limit the sensitivity and reliability of quantitation.

Work Order Revisions | Comments

None

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2418032

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va, Ontario K1G 4J8
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racel@paracellabs.com

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Page 1 of 2

Client Name:	Project Reference: 24 - 3029 - DSS
Contact Name: the healthy abode The Healthy Abode Inc. 151 Bowie Ave. Toronto ON. M6E 2R1 647-889-2254 angelina@thehealthyabode.ca	Quote #: 230 Esplanade
Address:	PO #: Toronto ON
Telephone:	Email Address: M5A 4J6

Turnaround Time:
☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ☑ 3 Day
☐ Regular
Date Required: _____

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☑ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☑ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 2418032

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	M001	Apr 27/24		DK	Main Kitchen Drywall Wall	1/3 ☐
2	M002			↓	" Bath Girls " Ceiling	2/3 ☐
3	M003				" " Boys " "	3/3 ☐
4	M004			HA	Main throughout Acoustic Ceiling tile	1/3 ☐
5	M005			↓	" " " "	2/3 ☐
6	M006			HA	Main throughout ~~Cider Block~~ Cinder Block	3/3 ☐
7	M007				" " " "	1/3 ☐
8	M008			↓	" " " "	2/3 ☐
9	M009			tile	Main Preschool Class #1 VCT tile Floor Beige	3/3 ☐
10	M010				" " " #2 " " " "	1/3 ☐
11	M011			↓	" " " #3 " " " "	2/3 ☐
12	M012					3/3 ☐

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments: HA HOMOGENIZE ALL

Method of Delivery: United

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):		Date/Time: Apr 29/24 8:00	Date/Time: Apr 29/24 10:55
Date/Time:	Date/Time:		

PARACEL LABORATORIES LTD.

Paracel ID: 2418032

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acel@paracellabs.com

Chain of Custody
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Page 2 of 2

Client Name:	Project Reference: 24-3029 - DS
Contact Name: the healthy abode The Healthy Abode Inc. 151 Bowie Ave. Toronto,ON. M6E 2R1 647-889-2254 angelina@thehealthyabode.ca	Quote #: 230 Esplanade
Address:	PO #: Toronto ON
Telephone:	Email Address: M5A 4J6

Turnaround Time:
- ☐ Immediate
- ☐ 4 Hour
- ☐ 8 Hour
- ☐ 1 Day
- ☐ 2 Day
- ☑ 3 Day
- ☐ Regular

Date Required: _____

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☑ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☑ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 2418032

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?
1	MO3	Apr 29/24		mastic	Main Preschool Class #1 VCT mastic	3 ☐
2	MO4			↓	" " " #2 " "	3 ☐
3	MO5			↓	" " " #3 " "	3 ☐
4	~~Duplicate~~ MO6			tile	Main Kitchen VCT tile Grey	3 ☐
5	MO7			↓	" " " " "	3 ☐
6	MO8					☐
7						☐
8						☐
9						☐
10						☐
11						☐
12						☐

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments: HA HOMOGENIZE ALL

Method of Delivery: Untea

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):			
Date/Time:	Date/Time:	Date/Time: Apr 29/24 8.00	Date/Time: Apr 29/24 10.55

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Certificate of Analysis

The Healthy Abode Inc.

151 Bowie Avenue
Toronto, ON M6E 2R1
Attn: Angelina Sampieri

Client PO: 230 Esplanade, Toronto, ON M5A 4J6
Project: 24-3029-DSS
Custody: 72377

Report Date: 1-May-2024
Order Date: 29-Apr-2024

Order #: 2418055

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2418055-01	M001 Main Kitchen Drywall Paint
2418055-02	M002 Main Throughout Block Paint
2418055-03	M003 Main Classroom #3 Poor Wood Paint

Approved By:

Milan Ralitsch, PhD
Senior Technical Manager

Certificate of Analysis

Report Date: 01-May-2024

Client: The Healthy Abode Inc.

Order Date: 29-Apr-2024

Client PO: 230 Esplanade, Toronto, ON M5A 4J6

Project Description: 24-3029-DSS

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	30-Apr-24	30-Apr-24

Qualifier Notes:

None

Sample Data Revisions

None

Work Order Revisions/Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.

Certificate of Analysis

Client: The Healthy Abode Inc.

Client PO: 230 Esplanade, Toronto, ON M5A 4J6

Report Date: 01-May-2024

Order Date: 29-Apr-2024

Project Description: 24-3029-DSS

Sample Results

Lead

Matrix: Paint

Paracel ID	Client ID	Sample Date	Units	MDL	Result
2418055-01	M001 Main Kitchen Drywall Paint	26-Apr-24	ug/g	5	9
2418055-02	M002 Main Throughout Block Paint	26-Apr-24	ug/g	5	<5
2418055-03	M003 Main Classroom #3 Poor Wood Paint	26-Apr-24	ug/g	5	10

Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Matrix Blank									
Lead	**ND**	**5**	**ug/g**						
Matrix Duplicate									
Lead	**ND**	**5**	**ug/g**	**ND**			**NC**	**50**	
Matrix Spike									
Lead	52.6	5.00	ug/g	ND	105	70-130			

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Paracel ID: 2418055

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№ 72377

Client Name:	Project Ref: 24-3029 -555	Page 1 of 1
Contact Name: The Healthy Abode Inc.	Quote #: 230 Esplanade	**Turnaround Time**
Address: 461 Bathurst Ave, Toronto, ON M5T 2R1	PO #: Toronto ON	☐ 1 day ☐ 3 day ☐ 2 day ☐ Regular
647-889-2254 angelina@thehealthyabode.ca	E-mail: M5A 4J6	Date Required:
Telephone:		

☐ REG 153/04 ☐ REG 406/19

☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/Other
☐ Table ___
For RSC: ☐ Yes ☐ No

Other Regulation

☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun: ___
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken Date	Sample Taken Time	Required Analysis: Lead		
1	M01 main kitchen Drywall Paint	P			Apr. 26/24		✓	Grey	
2	M002 " Throughout Block "	P					✓	White	
3	M003 " Classrooms Drywall "	P					✓	Grey	
4									
5									
6									
7									
8									
9									
10									

Comments:

Method of Delivery: Uber

Relinquished By (Sign):	Received at Depot: GR	Received at Lab: C-Ply	Verified By: C-Ply
Relinquished By (Print):	Date/Time: Apr 29/24 8:00	Date/Time: 04/29/24 14:00	Date/Time: 04/29/24 14:47
Date/Time:	Temperature: °C	Temperature: °C	pH Verified: ☐ By:

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Certificate of Analysis

The Healthy Abode Inc.

151 Bowie Avenue
Toronto, ON M6E 2R1
Attn: Angelina Sampieri

Client PO: 230 The Esplanade, Toronto, ON M5A 4J6
Project: 24-3029-DSS
Custody: 74972

Report Date: 2-May-2024
Order Date: 2-May-2024

Revised Report

Order #: 2418329

This Certificate of Analysis contains analytical data applicable to the following samples as submitted :

Paracel ID	Client ID
2418329-01	B019
2418329-02	B020
2418329-03	B021
2418329-04	B022
2418329-05	B023
2418329-06	B024

Approved By

Emma Diaz
Senior Analyst

Certificate of Analysis

Client: **The Healthy Abode Inc.**

Client PO: **230 The Esplanade, Toronto, ON M5A 4J6**

Report Date: 2-May-2024
Order Date: 2-May-2024

Project Description: 24-3029-DSS

Asbestos, PLM Visual Estimation **MDL- 0.5%**

Paracel ID	Sample Date	Friability	Colour	Description	Asbestos Detected	Material Identification	% Content
2418329-01	01-May-24	Friable	White	Insulation	No	**Client ID: B019**	
						MMVF	95
						Non-Fibers	5
2418329-02	01-May-24	Friable	White	Insulation	No	**Client ID: B020**	
						MMVF	95
						Non-Fibers	5
2418329-03	01-May-24	Friable	White	Insulation	No	**Client ID: B021**	
						MMVF	95
						Non-Fibers	5
2418329-04	01-May-24	Friable	Yellow	Insulation	No	**Client ID: B022**	
						MMVF	95
						Non-Fibers	5
2418329-05	01-May-24	Friable	Yellow	Insulation	No	**Client ID: B023**	
						MMVF	95
						Non-Fibers	5
2418329-06	01-May-24	Friable	Yellow	Insulation	No	**Client ID: B024**	
						MMVF	95
						Non-Fibers	5

MMVF: Man Made Vitreous Fibers: Fiberglass, Mineral Wool, Rockwool, Glasswool

PARACEL LABORATORIES LTD.

Order #: 2418329

Certificate of Analysis

Client: **The Healthy Abode Inc.**

Client PO: **230 The Esplanade, Toronto, ON M5A 4J6**

Report Date: 2-May-2024
Order Date: 2-May-2024

Project Description: 24-3029-DSS

Analysis Summary Table

Analysis	Method Reference/Description	Lab Location	Lab Accreditation	Analysis Date
Miss - Asbestos, Visual Estimation		1 - Mississauga	CALA 3762	2-May-2024

Mississauga Lab: 15 - 6800 Kitimat Rd Mississauga, Ontario, L5N 5M1

Work Order Revisions | Comments

Revision-1: This report includes updated Sample IDs, as per COC.

PARACEL LABORATORIES LTD.

2418329

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paracel@paracellabs.com

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№ 74972

Page 1 of 1

Client Name:	Project Reference: ~~23~~24-3029 -DSS
Contact Name: the healthy abode The Healthy Abode Inc. 151 Bowie Ave. Toronto,ON. M6E 2R1 647-889-2254 angelina@thehealthyabode.ca	Quote #: 230 The Esplanade Toronto ON M5A 4J6
Address:	PO #:
Telephone:	Email Address:

Turnaround Time:
☐ Immediate ☐ 1 Day
☐ 4 Hour ☐ 2 Day
☐ 8 Hour ~~☐ 3 Day~~ ☐ Regular
Date Required: May 2/24

ASBESTOS & MOLD ANALYSIS

Matrix: ☐ Air ☑ Bulk ☐ Tape Lift ☐ Swab ☐ Other **Regulatory Guideline:** ☑ ON ☐ QC ☐ AB ☐ SK ☐ Other:

Analyses: ☐ Microscopic Mold ☐ Culturable Mold ☐ Bacteria GRAM ☐ PCM Asbestos ☑ PLM Asbestos ☐ Chatfield Asbestos ☐ TEM Asbestos

Paracel Order Number: 2418329

	Sample ID	Sampling Date	Air Volume (L)	Analysis Required	Asbestos - Bulk: Identify Distinct Building Materials to Be Analyzed (if not specified, all materials identified will be analyzed) *	Positive Stop?	
1	~~Boot~~ B019	May1/24		Inso	Basement Parking Garage level #1 Spray Insulation	3/3 ☐	4
2	~~B022~~ B020			↓	" " " " " "	3/3 ☐	
3	~~B023~~ B021					☐	
4	~~Boot~~ B022			Inso	Basement Parking Garage level #1 Offset layer Insulation	3/3 ☐	4
5	~~B025~~ B023			↓	" " " " " "	3/3 ☐	
6	~~B26~~ B024					☐	
7						☐	
8						☐	
9						☐	
10						☐	
11						☐	
12						☐	

Yellow

* If left blank, all distinct materials identified in the samples will be analyzed and reported separately as per EPA 600/R-93/116. Additional charges will apply.

Comments: HA HOMOGENIZE A#1

Method of Delivery: United

Relinquished By (Sign):	Received at Depot:	Received at Lab:	Verified By:
Relinquished By (Print):			
Date/Time:	Date/Time:	Date/Time: May 2/24 8:00	Date/Time: May 2/24 9:54