

**DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS REPORT**  
**Building D, Algonquin College Ottawa Campus**  
**706 Wajashk Private, Ottawa, Ontario**



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**Ottawa, Ontario**

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**March 2026**

**CM3 Project: TC1738**

## EXECUTIVE SUMMARY

CM3 Environmental Inc. (CM3) was commissioned by Algonquin College to conduct a designated substances and hazardous materials survey for the building located at 706 Wajashk Private located in Ottawa, Ontario. This work was completed in order to comply with Ontario Regulation 278/05 “*Designated Substances - Asbestos on Construction Projects and in Buildings and Repair Operations*” (O. Reg. 278). A Designated Substance Survey (DSS) is also required under Section 30 of the **Occupational Health and Safety Act** in order to identify designated substances that may be present within the proposed project areas.

### General Findings and Recommendations

CM3’s general findings and recommendations are summarized in the following table:

Executive Summary Table		
Designated Substance	Findings	Recommendations
<b>Acrylonitrile</b>	Possibly present in stable form in paints and adhesives.	No concerns.
<b>Arsenic</b>	Possibly present in stable form in paints and adhesives.	No concerns.
<b>Asbestos</b>	<p>Asbestos was confirmed to be present in the following building materials submitted for analysis:</p> <p>Vinyl Floor Tiles (12” x 12” – Red/Orange),</p> <p>Vinyl Floor Tiles (12”x12” – Beige with Black Streaks),</p> <p>Vinyl Floor Tiles (12”x12” – Beige with Brown Streaks),</p> <p>Covebase Mastic,</p> <p>Brown Mastic,</p> <p>Grey Ceiling Plaster</p>	<p>Ensure that all asbestos containing materials that have the potential to be damaged during renovation or demolition activities are removed following the actions outlined in O.Reg. 278.</p> <p>Routine surveillance of asbestos containing materials as per O. Reg. 278.</p>

	<p>Drywall Joint Compound,                   Aircell Pipe Insulation (Straights);                  and,                   Parging Cement Pipe Elbows.</p> <p>The roof is a flat roof system. According to available information the roof areas have been replaced between 2005 and 2018. It is unlikely that asbestos is present in recently installed roof systems.</p>	
<b>Benzene</b>	<p>Likely present in stable form in roofing asphalt, paints, and adhesives.</p>	No concerns.
<b>Coke Oven Emissions</b>	<p>None identified.</p>	No concerns.
<b>Ethylene Oxides</b>	<p>None identified.</p>	No concerns.
<b>Isocyanates</b>	<p>None identified.</p>	No concerns.
<b>Lead</b>	<p>Interior beige paint found on block walls was found to be lead-containing.</p> <p>Please refer to the main report body for sampling details.</p> <p>Lead may be present in solder joints, glazing on ceramic finishes and on all copper piping throughout the original phase of construction.</p>	<p>It is recommended that if materials containing lead are to be disturbed, then procedures outlined in the ministry of labour “Guideline – Lead on Construction Projects” should be followed.</p>
<b>Mercury</b>	<p>Mercury vapour is assumed to be present within fluorescent light tubes bulbs that are located in the subject building.</p> <p>Mercury may also be found in stable form in paints and adhesives.</p>	<p>If work on mercury containing materials is likely to produce mercury dust or fumes, for example during welding, torch cutting, grinding, sanding or sandblasting, then proper precautions should be followed.</p>

	Liquid mercury was observed in thermostats located in the following locations.	Prior to demolition, all fluorescent light tubes should be packaged and removed by a licensed contractor.
<b>Silica</b>	Crystalline silica is assumed to be present in the building within the acoustic ceiling tiles, drywall/drywall joint compound, plaster and concrete structures such as walls, floors and stairs.	During renovation or demolition ensure that work areas are well ventilated, wash stations are present for worker protection and that the maximum allowable airborne concentration for all silica forms is not exceeded. All work should be completed following the Ministry of Labour "Guideline – Silica on Construction Projects".
<b>Vinyl Chloride</b>	Likely present in stable form in pipes and interior finishes.	No concerns.
<b>PCBs</b>	PCB's can be found in equipment such as transformers, capacitors, electromagnets, heat transfer units, hydraulic engine and fluorescent lamp ballasts. Fluorescent lamp ballasts may contain minor quantities of PCBs (23.6 g).	Prior to any renovation or demolition, all ballasts should be compared to the information outlined in the 1991 Environment Canada publication "Identification of Lamp Ballasts Containing PCBs" and removed/disposed of accordingly
<b>ODSs</b>	ODS's can be found in applications such as refrigerants in heat pumps, refrigerators, freezers and air conditioners (A/C).	Prior to handling and/or disposal, a licensed technician should remove all base building CFCs, in accordance with the Federal Halocarbon Regulation, 2003.  Non-base building units (i.e. window A/Cs, refrigerators, and freezers) should be relocated or reused rather than destroyed. If the units will not be relocated, then a licensed technician should remove the refrigerants.
<b>UFFI</b>	No evidence of UFFI was observed during the site investigation.	No concerns.
<b>Droppings</b>	No evidence of droppings was observed during the site investigation.	No concerns.

<b>Visible Mould</b>	No visible mould growth was observed during the site investigation.	No concerns.
<b>Radioactivity</b>	A direct source of radioactivity was not observed.	No concerns.

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## 1 INTRODUCTION

### 1.1 Site Background

The subject facility is a single storey Food Services building located at 706 Wajashk Private, in Ottawa, Ontario. The building is heated by a combination of electric baseboards and forced air gas furnaces.

The facility was originally constructed in 1969 and has served as the food services/cafeteria building for Algonquin College since. The building consists of various dining lounges, kitchens, cafeteria, offices, loading bay, storage rooms, mechanical room, mechanical penthouse and basement electrical rooms.

### 1.2 Regulatory Framework

Under Section 30 of the Occupational Health and Safety Act (OHSA), a project “owner shall determine whether any designated substances are present at the project site and shall prepare a list of all designated substances that are present”. Ontario regulation 490/09 “Designated Substances” (O. Reg. 490/09) lists the designated substances as defined by OHSA. The following is a list of substances regulated by O. Reg 490/09.

- Acrylonitrile
- Arsenic
- Asbestos
- Benzene
- Coke Oven Emissions
- Ethylene Oxide
- Isocyanates
- Lead
- Mercury
- Silica
- Vinyl Chloride

Of the aforementioned designated substances, asbestos is further regulated by Ontario Regulation 278/05, “*Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations*”.

The following Hazardous Building Materials are not Designated Substances regulated by O. Reg. 490/09, but could pose a significant risk to health and safety of workers, occupants, and the environment are included as part of this report. The Ministry of Labour (MOL) recognizes them as workplace hazards and enforces worker protection under the General Duty Clause 25(2) (h) of the OHSA. Clause 25(2) (h) states that the employers are required to “take every precaution reasonable in the circumstances for the protection of a worker”. In such cases the MOL will refer to industry standards and guidelines for the safe handling and management of such materials.

- Polychlorinated Biphenyls (PCBs) - SOR/2008-273
- Ozone Depleting Substances (ODSs) - Federal Halocarbon Regulation 2003, SOR/2003-289
- UFFI - Under the Hazardous Products Act (R.S. C. H-3, S.1)
- Droppings
- Visible Mould
- Radioactivity

Where applicable, regulations pertaining to removal / abatement, and/or disposal of hazardous materials are provided in section 8.0 Recommendations.

### **1.3 Scope of Work**

The scope of this project was to determine the location, condition, quantity and type of hazardous materials present in the building. The surveyors included building structural components, finishes, mechanical and electrical systems. For the purposes of this project, only the substances referenced in section 1.2 are reported.

The designated substances mentioned above may be present in partial and non-accessed areas and concealed spaces (i.e. wall and ceiling cavities). Furthermore, materials located within wall cavities and below flooring finishes could not be observed in order to determine their condition. In addition, CM3 would extrapolate quantities based on quantities observed in fully accessible locations.

This designated substance survey report has been prepared using the information during the site reconnaissance and analytical data.

### **1.4 Participants**

The assessment was performed by Andrew Mckeown and Gaurav Gaurav of CM3 on December 2<sup>nd</sup>, 2024. The surveyors were provided keys by the college facilities department and left unaccompanied throughout the assessment.

All suspect asbestos samples were submitted under chain of custody to EMSL Canada Inc. for analysis. Samples were analyzed by polarized light microscopy with dispersion staining, following USEPA method 600/R-93/116.

Suspect lead-containing paint samples were sent to Paracel Laboratories Ltd. in Ottawa, Ontario for lead content analysis by ICP-OES.

### **1.5 Limitations**

The survey does not refer to substances that may be present in the day-to-day usage for other specialized equipment or areas in buildings (i.e. portable equipment, lead shields, fume hoods,

etc.). There is a possibility that materials may exist which could not be reasonably identified within the scope of this assessment, or which were not apparent during previous site visits.

The scope did not include personal items or equipment (owner or occupant), buried or underground services or areas requiring significant demolition to assess. Wall and ceiling cavities were accessed wherever possible. Destructive investigative techniques were not employed.

## 1.6 Terminology

### 1.6.1 List of Acronyms & Abbreviations

TERM	DESCRIPTION	TERM	DESCRIPTION
<b>ACM</b>	Asbestos Containing Material	<b>MDL</b>	Method Detection Limit
<b>CFC</b>	Chlorofluorocarbon	<b>NS</b>	No Standard
<b>cm<sup>2</sup></b>	Centimeters squared	<b>ODS</b>	Ozone Depleting Substances
<b>CAEAL</b>	Canadian Association of Environmental Analytical Laboratories	<b>PCBs</b>	Polychlorinated Biphenyls
<b>CM3</b>	CM3 Environmental Inc.	<b>Pb</b>	Lead
<b>DUP</b>	Duplicate	<b>PLM</b>	Polorized Light Microscopy
<b>EPA</b>	Environmental Protection Agency	<b>ppm</b>	Parts Per Million
<b>ESA</b>	Environmental Site Assessment	<b>ppb</b>	Parts Per Billion
<b>ESI</b>	Environmental Site Inspection	<b>PVC</b>	Polyvinyl Chloride
<b>GW</b>	Groundwater	<b>QA/QC</b>	Quality Assurance/Quality Control
		<b>RPD</b>	Relative Percent Difference
<b>Hg</b>	Mercury	<b>T</b>	Metric Tonnes
<b>Ha</b>	Hectare	<b>TEM</b>	Transmission Electron Microscopy
<b>HID</b>	High Intensity Discharge	<b>TWAEL</b>	Time-Weighted Average Exposure Level
		<b>µg/g</b>	Micrograms/gram
<b>m</b>	Metre	<b>µg/L</b>	Micrograms/Litre
<b>mg/kg</b>	Milligrams per kilogram	<b>u/g</b>	Underground
<b>m</b>	Metre	<b>UFFI</b>	Urea Formaldehyde Foam Insulation

### 1.6.2 Glossary of Terms

**Adjacent Property** – Any properties that are contiguous or adjoining to the property being assessed.

**Approved** – Used in reference to a substance or system that has been investigated by a testing agency, accredited by the Standards Council of Canada, or is acceptable to the authority having

jurisdiction and has been found to comply with specific requirements and is identified with an authorized marking of the testing agency, as appropriate.

**Asbestos Containing Material (ACM)** – In Ontario, any building material containing that contains 0.5% or more asbestos is recognized as ACM.

**Client** – Algonquin College including representatives of Algonquin College.

**Commercial Property** – any property where the primary activities of the land use is commercial (e.g., shopping mall) and not residential or manufacturing. This does not include operations where food is grown.

**Contaminant** – A substance that causes or may cause an adverse effect.

**Contamination** – The presence in soil, surface water, groundwater, air, or structures of a substance of concern, or a condition, in concentrations above appropriate pre-established criteria.

**Criteria** – Limits or levels for substances of concern that are established by regulating bodies.

**Canadian Standards Association (CSA)** – The Canadian Standards Association (CSA) is a membership association serving industry, government, consumers and other interested parties in Canada and the global marketplace. A leading developer of standards and codes, CSA enhances public safety, improves quality of life, preserves the environment and facilitates trade.

**Dangerous Goods** – Under the Transportation of Dangerous Goods Act (TDG) a dangerous good is a product, substance or organism included by its nature or by the regulations in any of the classes listed in the schedule of the ACT (Part 2 of the Transportation of Dangerous Goods Act).

**Dangerous Goods Carrier** – Under the Transportation of Dangerous Goods Act a carrier is a licensed transporter of dangerous goods. A transporter is a hauling firm that picks up properly packaged and labeled hazardous wastes from generators and transports it to designated facilities for treatment, storage, or disposal. Transporters are subject to TDG hazardous waste regulations.

**Delineation** – The physical and chemical assessment of all affected media at a site in three dimensions (length, width and depth) to the applicable criteria by sampling and analysis to determine the contaminant impact boundaries in a minimum of four horizontal directions.

**Designated Substance** – Any material that is designated as such in Ontario Regulation 490/09 of the Ontario Occupational Health and Safety Act.

**Detection Limit** – The smallest concentration or amount of a substance that can be reported as present in a sample with a specified degree of certainty by a definite complete analytical procedure.

**Environment** – The components of the earth and includes

- (i) air, land, and water;
- (ii) the layers of the atmosphere;
- (iii) organic and inorganic matter and living organisms;
- (iv) the interacting natural systems that include components referred to in subclasses (i) to (iii); and
- (v) may refer to, the socio-economic, environmental health, cultural and other items referred to in the definition of environmental effect.

**Environmental Audit** – a systematic process of objectively obtaining and evaluating evidence regarding a verifiable assertion about an environmental matter to ascertain the degree of correspondence between the assertion and established criteria, and then communicating the results to the client. A verifiable assertion is a declaration or statement about specific subject matter that is supported by documented data.

**Exposure** – The amount of a physical or chemical agent that reaches a target or receptor through ingestion, dermal adsorption, and inhalation.

**Exposure Pathway** – The course a chemical or physical agent takes from a source to an exposed population or organism; it describes a unique mechanism by which an individual or population is exposed to chemicals or physical agents at or originating from a site.

**Hazardous Material** – A material that may, upon exposure, constitute an identifiable risk to human health or the natural environment. Hazardous material criteria are established with regard to appropriate regulatory requirements.

**Ingestion** – An exposure type whereby chemical substances enter the body through the mouth and into the gastrointestinal system.

**Inhalation** – The intake of a substance by receptors through the respiratory tract system.

**Lead (Pb)** – An inorganic substance that is hazardous to health if breathed or swallowed. Its use in gasoline, paints, and plumbing compounds has been restricted or eliminated by federal laws and regulations. Lead is a criteria pollutant that is regulated under provincial legislation and the National Pollution Release Inventory.

**Mercury (Hg)** – An inorganic substance that can accumulate in the environment and that is highly toxic to humans if breathed or swallowed.

**Monitoring** – Measurement of concentrations of chemicals in environmental media or in tissues of humans and other biological receptors/organisms over time.

**Mould** – A type of fungus that grows in damp, warm environments, forming multicellular structures called hyphae and reproducing through airborne spores. It can thrive indoors or outdoors and may cause health issues such as allergies, respiratory problems, or exposure to harmful mycotoxins.

**Municipality** – A city, an incorporated town, a municipality of a county or district or village commissioners. Environmental Act.

**Ozone Depleting Substance (ODS)** – A family of man-made compounds that includes, but are not limited to, chlorofluorocarbons (CFCs), bromofluorocarbons (halons), methyl chloroform, carbon tetrachloride, methyl bromide, and hydrochlorofluorocarbons (HCFCs). These compounds have been shown to deplete stratospheric ozone, and therefore are typically referred to as ODSs.

**Pathway** – Any specific route by which a potential receptor or individual may be exposed to an environmental hazard, such as the release of a chemical material.

**Polychlorinated Biphenyls (PCBs)** – A family of 209 congeners of structurally similar chemicals which are known to suppress the immune system, disturb behaviour and reproduction, contribute to population declines in wildlife, have toxic effects on the developing nervous systems and on liver enzymes, act as a cancer promoter, and cause birth defects.

**ppb** (parts per billion): An amount of substance in a billion parts of another material.

**ppm** (parts per million): An amount of substance in a million parts of another material; also expressed by mg/kg or ml/L.

**Property** – Land and any improvements to land consisting of any physical object attached to the land with some degree of permanence, including buildings and other fixtures. The terms “property” and “site” are used interchangeably.

**Property Owner** – the owner of a property by legal title. The property owner referred to in this report is Algonquin College.

**Remediation** – The management of a contaminated site to prevent minimize, or mitigate damage to human health or the environment. Remediation may include both direct physical actions (e.g., removal, destruction, and containment of contaminants) and institutional controls (e.g., zoning designations or orders).

**Residential Property** – Any property where the primary activity of the land use is residential or recreational activity.

**Risk** – The chance of injury or loss, defined as a measure of the probability and severity of an adverse effect to health, property, the environment, or other things of value.

**Risk Assessment** – A set of scientific methods for defining and estimation the probability and magnitude of undesired effects to receptors resulting from a specific event, such as a human action, a natural catastrophe, or an exposure to a substance.

**Storage** – The holding of a substance for a temporary period at the end of which it is intended to be processed, used, transported, treated or disposed of.

**Urea Formaldehyde Foam Insulation (UFFI)** - A type of foamed in-place insulation that releases formaldehyde gas. Under the *Hazardous Products Act updated in 1985* the use of UFFI was banned in Canada.

These definitions were based on those obtained from the Canadian Council of Ministers of the Environment, Canadian Standards Association, Environment Canada, U.S. EPA, Transport Canada dictionaries and Federal and Provincial Agencies.

## 2 ASBESTOS

Asbestos is a generic term describing a number of naturally occurring fibrous metamorphic minerals of the hydrous magnesium silicate variety that differ in chemical composition and are suitable for use as non-combustible, non-conducting and chemically resistant materials. The different types of asbestos which may be found in building materials are Chrysotile, Amosite, Tremolite, Actinolite or Anthophyllite.

They belong to two major mineral groups, Serpentine and Amphiboles. Serpentine minerals are flexible and curly whereas amphibole fibres tend to be straight with a fine fibre density that increases the likelihood of becoming and remaining airborne when disturbed. Chrysotile is a Serpentine and Amosite, Crocidolite, Tremolite, Actinolite, and Anthophyllite are Amphiboles.

The physical characteristics and chemical properties of asbestos made it very useful for a wide variety of products to strengthen them, provide heat or electrical insulation, offer fire or chemical resistance, and/or to absorb sound.

The main pathway for exposure to asbestos is inhalation. When inhaled in significant quantities, asbestos fibres can cause asbestosis (a scarring of the lungs which makes breathing difficult), mesothelioma (a rare cancer of the lining of the chest or abdominal cavity) and lung cancer.

As outlined in Ontario Regulation 278/05 “Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations”, any building material containing 0.5% or more asbestos (by weight) is recognized as an asbestos containing material (ACM).

The intent of the Regulation is to reduce worker exposure to asbestos. As such the regulation puts requirements on all stakeholders including building owners and managers to be aware of the presence, if any, of asbestos in their buildings and thus potential work areas. This is generally prescribed by having an “inventory” on hand of all ACM, also referred to as a survey. The regulation also details many other facets of the asbestos industry including removal procedures, health and safety requirements, training, etc. Any personnel working in or around asbestos should have, at a minimum, a basic understanding of the Regulation.

ACMs are categorized as friable or non-friable in order to show how easily they may release asbestos fibres when disturbed.

A material that is friable is one which can be crumbled, pulverized or powdered by hand pressure. If a friable ACM is damaged or disturbed, it presents an inhalation risk because asbestos fibres are more easily released into the air. Examples of friable materials include sprayed fireproofing on structural steelwork, thermal insulation on mechanical systems, or textured finishes.

A non-friable asbestos product is one in which the asbestos fibres are bound or locked into the product matrix, so that the fibres are not readily released. Such a product would present a risk for fibre release only when it is subject to significant abrasion through activities such as sanding or cutting with electric power tools. Examples of non-friable asbestos products include vinyl asbestos floor tiles, acoustic ceiling tiles, and asbestos cement products.

Where suspect-ACMs could not be sampled, in order to maintain the integrity of the building component (i.e. roofing membranes, exterior finishes), these materials are referred to as Presumed Asbestos-Containing Materials (PACMs). PACMs are treated as though they are ACMs until laboratory analysis proves otherwise. Typically, samples are collected and submitted for analysis on a project-by-project basis.

## 2.1 Target Materials

Asbestos was used widely in construction materials including but not limited to:

- Insulation (i.e., pipe runs, boilers, pipe fittings, and gaskets);
- Spray-on coating/fireproofing;
- Cement products including cement sheets and exterior shingles and fences;
- Drywall joint compound filler;
- Plasters and decorative interior finishes;
- Acoustical ceiling tiles;
- Roofing felts and shingles;
- Vinyl floor tiles and sheet flooring; and,
- Mastics, tars, glues, and caulking.

In order to fully assess the potential presence/absence for the above materials CM3 personnel employ a methodical room-by-room field procedure. This procedure requires the inspector to observe and note the following building components as is part of our QA/QC program:

- Floor
- Wall
- Ceiling
- Structure
- Mechanical/Electrical
- Other
- Exterior

## **2.2 Analytical Procedure**

Suspect materials were primarily assessed by visual inspection. On the basis of this inspection, select samples were collected from discrete locations using industry-accepted, safe sampling techniques that include the pre-wetting of materials and concealment of materials after collection.

The number of samples collected is based on the suspect building materials present and the sampling criteria outlined in Table 1 “Bulk Materials Samples” of Ontario Regulation 278/05.

All suspect asbestos samples were submitted under chain of custody to EMSL Canada Inc. for analysis. Samples were analyzed by polarized light microscopy with dispersion staining, following USEPA method 600/R-93/116.

The laboratory analytical reports are presented in APPENDIX A.

## **2.3 Reporting & Risk Assessment**

CM3 provides all building information, methodology, laboratory results, and findings within the report. All information respecting detailed findings, quantities, access issues, conditions, and action items are reported.

### **2.3.1 Assessment of Condition**

#### **Spray Applied Fireproofing, Insulation, and Texture Finishes**

To evaluate the condition of ACM spray applied as fireproofing, thermal insulation, or texture, decorative or acoustic finishes, the following criteria are applied:

**GOOD** - Surface of material shows no significant signs of damage, deterioration or delamination. Up to 1 percent visible damage to surface is allowed within range of GOOD. Evaluation of sprayed fireproofing requires the surveyor to be familiar with the irregular surface texture typical of sprayed asbestos products. GOOD condition includes un-encapsulated or unpainted fireproofing or texture finishes, where no delamination or damage is observed, and encapsulated fireproofing or texture finishes where the encapsulation has been applied after the damage or fallout occurred.

**POOR** - Sprayed materials show signs of damage, delamination or deterioration. More than 1 percent damage to surface of ACM spray.

In observation areas where damage exists in isolated locations; both GOOD and POOR condition may be reported. The extent or percentage of each condition will be recorded on the survey or re-assessment form. FAIR condition is not utilized in the evaluation of the sprayed fireproofing, sprayed insulation, or texture coat finishes.

The evaluation of ACM spray applied as fireproofing, non-mechanical thermal insulation, or texture, decorative or acoustic finishes which are present above ceilings, may be limited by the number of observations made, and by building components such as ducts or full height walls

(walls that may rise to the underside of the floor above or roof deck) that obstruct the above ceiling observations. Persons entering the ceiling are advised to be watchful for ACM DEBRIS prior to accessing or working above ceilings in areas of buildings with ACM regardless of the reported condition.

### **Mechanical Insulation**

The evaluation of the condition of mechanical insulation (on boilers, breaching, ductwork, piping, tanks, equipment etc.) utilizes the following criteria:

**GOOD** - Insulation is completely covered in jacketing and exhibits no evidence of damage or deterioration. No insulation is exposed. Includes conditions where the jacketing has minor surface damage (i.e., scuffs or stains), but the jacketing is not penetrated.

**FAIR** - Minor penetrating damage to jacketed insulation (cuts, tears, nicks, deterioration or delamination) or undamaged insulation that has never been jacketed. Insulation is exposed but not showing surface disintegration. The extent of missing insulation ranges should be minor to none.

**POOR** - Original insulation jacket is missing, damaged, deteriorated or delaminated. Insulation is exposed and significant areas have been dislodged. Damage cannot be readily repaired.

The evaluation of mechanical insulation may be limited by the number of observations made and building components such as ducts or full height walls that obstruct observations. It is not possible to observe each foot of mechanical insulation from all angles.

### **Non-friable and Potentially Friable Materials**

Non-friable materials generally have little potential to release airborne fibres, even when damaged by mechanical breakage. However, some non-friable materials, i.e., exterior asbestos cement products, may have deteriorated so that the binder no longer effectively contains the asbestos fibres. In such cases of significantly deteriorated non-friable material, the material should be treated as a friable product.

### **Debris from Friable ACM**

The presence of fallen ACM is noted separately from the presumed friable ACM source (sprayed fireproofing, thermal insulation, texture, decorative or acoustic finishes or mechanical insulation) and is referred to as DEBRIS.

### **Debris from Damaged Non-Friable ACM**

The presence of fallen ACM from damaged non-friable ACM is also reported separately from the non-friable ACM source. Only fallen non-friable ACM that has become friable is reported as DEBRIS.

The identification of the exact location or presence of DEBRIS on the top of ceiling tiles is limited by the number of observations made and the presence of building components such as ducts or full height walls that obstruct observations. Workers are advised to be watchful for the presence of DEBRIS prior to accessing or working in proximity to mechanical insulation or above ceilings in areas of buildings with ACM regardless of the reported presence or absence of DEBRIS.

### **2.3.2 Evaluation of Accessibility**

The accessibility of building materials known or suspected of being ACM is rated according to the following criteria:

**ACCESS (A)** - Areas of the building within reach (from floor level) of all building users. Includes areas such as gymnasiums, workshops, and storage areas where activities of the building users may result in disturbance of ACM not normally within reach from floor level.

**ACCESS (B)** - Frequently entered maintenance areas within reach of maintenance staff, without the need for a ladder. Includes: areas within reach from a fixed ladder or catwalk, i.e., tops of equipment, mezzanines, frequently entered pipe chases, tunnels and service areas.

**ACCESS (C) EXPOSED** - Areas of the building above 8'-0" where use of a ladder is required to reach the ACM. Only refers to ACM that is exposed to view, from the floor or ladder, without the removal or opening of other building components such as ceiling tiles, or service access door or hatch. Does not include infrequently accessed service areas of the building.

**ACCESS (C) CONCEALED** - Areas of the building that require the removal of a building component, including lay-in ceilings and access panels into solid ceiling systems. Includes rarely entered crawl spaces, attic spaces, etc. Observations will be limited to the extent visible from the access points.

**ACCESS (D)** - Areas of the building behind inaccessible solid ceiling systems, walls or mechanical equipment, etc. where demolition of the ceiling, wall or equipment, etc. is required to reach the ACM. Evaluation of condition and extent of ACM is limited or impossible, depending on the surveyor's ability to visually examine materials in ACCESS D.

### **2.3.3 Action Matrix and Definitions**

Immediately clean-up DEBRIS that is likely to be disturbed.

Remove, repair or enclose friable ACM in POOR or FAIR condition whose continued deterioration will result in DEBRIS that is likely to be disturbed.

The following factors are also considered in making site-specific recommendations for compliance with the regulation and the practical implementation of the Asbestos Management Plan:

i) ACM in POOR condition is not routinely repairable. If an abatement action is necessary, removal is the recommended action (enclosure is a viable option in unusual circumstances).

ii) Mechanical insulation in FAIR condition can be repaired or removed based on the following general recommendations applied on a case-by-case basis (Note: Either repair or removal are legally acceptable options for the treatment of ACM found in FAIR condition):

Repair ACM mechanical insulation found in FAIR condition in ACCESS (B) or ACCESS (C EXPOSED) areas.

Remove ACM mechanical insulation found in FAIR condition in ACCESS (B) and ACCESS (C EXPOSED) areas, where future damage to the ACM is likely to occur.

Remove ACM mechanical insulation found in FAIR condition with ACCESS (A) to eliminate the potential for re-damaging ACM by all building users.

iii) ACM in GOOD condition present in ACCESS (A) can be managed by surveillance, as long as it is not disturbed by future renovation, maintenance or demolition. However, pro-active removal of the ACM in ACCESS (A) should be considered where damage is possible by ongoing occupant activity (accidental or intentional).

iv) Non-friable or manufactured products are considered in the action matrix as follows:

Non-friable or manufactured products reported in POOR condition or friable DEBRIS resulting from the deterioration of non-friable ACM are treated as friable materials and the appropriate Action, depending on accessibility, is determined from the Action Matrix for friable ACM.

For non-friable or manufactured products reported in GOOD condition, Action 7 (surveillance) is recommended regardless of Accessibility.

v) Remove all ACM from a particular area where small quantities of asbestos are present and removal will negate the need for the use of the Asbestos Management Plan in that area.

With these principles in mind, the following Action Matrix Tables establish the recommended asbestos control action. Note that factors not included in the above discussion, such as an owner's policy decision to remove material, knowledge of upcoming maintenance, etc., may result in a recommendation that differs from this table. The ACTIONS are described in full following the table.

<b>Table 1: Action Matrix</b>				
ACCESS	CONDITION			
	GOOD	FAIR	POOR	DEBRIS
(A)	ACTION 5/7	ACTION 5/6	ACTION 3	ACTION 1
(B)	ACTION 7	ACTION 6/5	ACTION 3	ACTION 1
(C) EXPOSED	ACTION 7	ACTION 6	ACTION 4	ACTION 2
(C) CONCEALED	ACTION 7	ACTION 7	ACTION 4	ACTION 2
(D)	ACTION 7	ACTION 7	ACTION 7	ACTION 7

Note 1 If material in ACCESS (A)/GOOD condition is not removed ACTION 7 is required.

Note 2 If material in ACCESS (A)/FAIR condition is not removed ACTION 6 is required.

<b>Table 1: Action Matrix</b>				
ACCESS	CONDITION			DEBRIS
	GOOD	FAIR	POOR	

Note 3 Remove ACM in ACCESS (B)/FAIR condition if ACM is likely to be disturbed.

### Action Definitions

#### ACTION 1 - Immediate Clean-Up of DEBRIS that is Likely to Be Disturbed

Restrict access that is likely to cause a disturbance of the ACM DEBRIS and clean up ACM DEBRIS immediately. Utilize correct asbestos procedures. This action is required for compliance with regulatory requirements. The surveyor should immediately notify the Asbestos Coordinator of this condition.

#### ACTION 2 - Type 2 Precautions for Entry into Areas with ACM DEBRIS

At locations where ACM DEBRIS can be isolated in lieu of removal or cleaned up, use appropriate means to limit entry to the area. Restrict access to the area to persons utilizing Type 2 asbestos precautions. The precautions will be required until the ACM DEBRIS has been cleaned up, and the source of the DEBRIS has been stabilized or removed.

#### ACTION 3 - ACM Removal Required for Compliance

Remove ACM for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work.

#### ACTION 4 - Type 2 Precautions for Access into Areas Where ACM is present and Likely to be disturbed by Access

Use Type 2 asbestos precautions when entry or access into an area is likely to disturb the ACM. ACTION 4 must be used until the ACM is removed (Use ACTION 1 or 2 if DEBRIS is present).

#### ACTION 5 - Proactive ACM Removal

Remove ACM in lieu of repair, or at locations where the presence of asbestos in GOOD condition is not desirable.

#### ACTION 6 - ACM Repair

Repair ACM found in FAIR condition, and not likely to be damaged again or disturbed by normal use of the area or room. Upon completion of the repair work treat ACM as material in GOOD condition and implement ACTION 7. If ACM is likely to be damaged or disturbed, during normal use of the area or room, implement ACTION 5.

#### ACTION 7 - Routine Surveillance

Institute routine surveillance of the ACM. Trained workers or contractors must use appropriate asbestos precautions (Type 1, Type 2 or Type 3) during disturbance of the remaining ACM.

## **2.4 Findings**

The presence of asbestos was primarily assessed by visual inspection, on-site sampling and review of previous reports. All suspect ACMs were collected from discrete random locations throughout the building in accordance with O.Reg 278/05 and submitted to EMSL Canada Inc. for asbestos content analysis via polarised light microscopy (PLM).

### **2.4.1 Exterior Finishes**

The exterior finishes were observed to consist of brick masonry and poured concrete foundation. There are no concerns with regards to asbestos-containing exterior finishes; therefore, no samples were collected.

The roof is a flat roof system. According to available information the roof areas have been replaced between 2005 and 2018. It is unlikely that asbestos is present in recently installed roof systems.

### **2.4.2 Flooring**

The interior floor finishes throughout the building were observed to consist of poured concrete, carpet, ceramic tiles, sheet vinyl flooring and various applications of vinyl floor tiles.

The following vinyl floor tiles and associated mastic were previously sampled by others and confirmed to be asbestos containing:

- 12"x12" Red/Orange Vinyl Floor Tiles
- 12"x12" Beige with Black Streaks Vinyl Floor Tiles

Vinyl floor tiles are considered a non-friable asbestos-containing material.

12"x12" beige with black streaks vinyl floor tiles were observed in GOOD to POOR condition throughout the building. Approximately 6 tiles were observed to be damaged/chipped in Room D117.

12"x12" red/orange vinyl floor tiles were observed in GOOD to POOR condition throughout the building. Approximately 2 tiles were observed to be damaged in Room D108.

12"x12" beige with brown streaks were confirmed via laboratory analysis to contain 3% Chrysotile asbestos and were observed in GOOD condition at the time of the assessment.

No samples of ceramic tile adhesive or carpet mastic were collected as destructive sampling techniques were not employed. Project-specific sampling is required on a project-by-project basis.

No other suspect asbestos-containing floor finishes were observed.

### **2.4.3 Interior Finishes**

The interior wall finishes throughout the building were observed to consist of drywall, concrete block, plywood panels, ceramic tiles, brick masonry and prefabricated partition walls. Drywall joint compound was previously sampled by others and was confirmed to be an asbestos-containing material.

Drywall joint compound was previously sampled by others and confirmed to be asbestos-containing and is considered a non-friable asbestos-containing material and was observed in GOOD to POOR condition at the time of the assessment. Drywall joint compound was observed in POOR condition in Rooms D112 and D117. Approximately <math>1\text{m}^2</math> of drywall was observed in POOR condition in each area.

Drywall joint compound throughout the offices in D105A-G was observed to be a newer application and is unlikely to contain asbestos

Due to the random nature of trowelled on surfacing materials such as drywall joint compound all drywall joint compound should be considered an asbestos-containing material, it is recommended to conduct project specific sampling on a project-by-project basis.

Brown cove base mastic was confirmed via laboratory analysis to contain 1% Chrysotile asbestos. Covebase mastic is considered a non-friable asbestos-containing material and was observed in GOOD condition at the time of the assessment.

No samples of ceramic tile adhesive were collected as destructive sampling techniques were not employed. Projective-specific sampling is required on a project-by-project basis.

### **2.4.4 Ceiling Finishes**

The ceiling finishes throughout the building were observed to consist of drywall, plaster, concrete and various applications of acoustic ceiling tiles. Siporex was observed to be present in ceiling spaces above suspended grid systems throughout the building.

Ceiling plaster was previously sampled by others and confirmed to be an asbestos-containing material. Ceiling plaster is considered a non-friable asbestos-containing material and was observed in GOOD condition at the time of the assessment.

Drywall joint compound ceiling finishes were previously sampled by others and confirmed to be an asbestos-containing material. Drywall joint compound is considered a non-friable asbestos-containing material and was observed in GOOD condition at the time of the assessment.

2'x4' ceiling tiles described as "fissured" were previously sampled by others and confirmed to be a non-asbestos material.

The acoustic ceiling tiles observed were date stamped with a 1996 manufacture date or later. 2'x4' fibreboard acoustic ceiling tiles were observed in kitchen areas. There are no concerns with regards to asbestos content in the acoustic ceiling tiles or concrete finishes observed.

#### **2.4.5 Thermal Systems Insulation**

Mechanical pipes throughout the building were observed to be insulated with non-asbestos applications of fibreglass insulation. Aircell insulation and parging cement elbows were observed in the ceiling space of Room 101D. Ductwork throughout the building was observed to be insulated with non-asbestos applications of fibreglass.

Three samples of parging cement fittings (PAR-01A-C) were collected from pipe fittings in the ceiling space of Room 101D and submitted for asbestos content analysis. Analytical results indicate **55% Chrysotile asbestos** was detected in sample PAR-01A. Positive stop procedures were implemented, and no further samples were analyzed. Parging cement pipe fittings are considered a friable asbestos-containing material and observed to be in POOR condition at the time of the assessment. One elbow fitting was observed to be damaged in the ceiling space of Room 101D with five other elbows observed to be covered with tape.

Three samples of Aircell insulation (AC-01A-C) were collected from pipe straights in the ceiling space of Room 101D in the cafeteria and submitted for asbestos content analysis. Analytical results indicate **45% Chrysotile asbestos** was detected in sample AC-01A. Positive stop procedures were implemented, and no further samples were analyzed. Aircell insulation is considered a friable asbestos-containing material and was observed to be in GOOD condition at the time of the assessment.

Previously identified silver parging cement elbows located in the mechanical penthouse (D200) were observed to be removed and replaced with fibreglass and PVC pipe fittings on mechanical pipes throughout.

Based on observations, and the nature of building construction additional asbestos-containing insulation is expected to be present on pipe systems located in concealed areas such as wall cavities, pipe chases, and ceiling spaces.

### **3 LEAD**

Lead is a naturally occurring metal element and is the most common metal found in the environment. Pure metallic lead was primarily used to make products such as electric storage batteries, ammunition, solder, radiation shields, pipes and sheaths for electric cables. The most common organic lead compounds are tetraethyl (TEL) and tetra methyl (TML) lead that were used as anti-knock agents in gasoline. Inorganic lead compounds such as lead oxides, chromates, carbonates and nitrates are commonly found in insecticides, pigments, paints, frits, glasses, plastics and rubber compounds.

When testing was deemed necessary, paint chip samples were submitted to a third-party laboratory (Paracel Laboratories) for the determination of lead content. Analysis was conducted by the laboratory following EPA 6020 – Digestion, ICP-MS. Results were reported by the laboratory as micrograms per grams (ug/g). For the purposes of our assessment, any paint containing lead at a concentration of 0.5% by weight (i.e. 5,000ug/g, or 5,000ppm) or greater is lead-based paint (LBP). These paints represent the greatest potential exposure if disturbed. Paints confirmed to contain lead at a concentration of at least 0.009% by weight (i.e. 90ug/g, or 90ppm) but less than 0.5% by weight are considered lead-containing paints (LCP). These paints may present an exposure hazard depending on the type of work activities (i.e. degree of disturbance) and length of exposure. Paint with lead concentrations below 0.009% by weight are not considered to be lead-containing and represent little to no lead exposure hazard.

Please note lead may be present in solder joints, cast iron piping joints and on copper piping in the building.

A variety of paints were observed throughout the building. One additional paint chip sample was collected during the assessment.

<b>Sample ID</b>	<b>Colour</b>	<b>Sample Location</b>	<b>Concentration (ppm)</b>	<b>Classification</b>
PS-01	Beige	Block Walls, D114	287	LCP

Note 1 LCP – Lead Containing Paint

Note 2 LBP – Lead Based Paint

Note 3 NC – No Concerns

Analytical results are provided in Appendix A.

#### **4 SILICA**

Silica occurs naturally as crystalline or amorphous material. It is normally found in concrete, mortar, acoustic ceiling tiles, and stucco finishes. Crystalline silica is more toxic than amorphous silica, and therefore, is only regulated under the Occupational Health and Safety Act. The TWael of a work to silica dust is to be maintained at the lowest practical level with a view to achieving an ambient air concentration lower than 0.10 mg/m<sup>3</sup> of air for quartz and tripoli, and 0.05 mg/m<sup>3</sup> of air for cristobalite and tridynite.

Silica is expected to be present in the concrete building materials, acoustic ceiling tiles, plaster and drywall joint compound. No sampling was completed for silica analysis.

#### **5 MERCURY**

Mercury may be commonly found in thermostats, fluorescent lamp tubes and High Intensity Discharge (HID) light bulbs. Mercury or mercury vapour within light fixtures, thermometers, thermostats and electrical switches poses no risks to workers or occupants provided that the mercury containers remain intact and undisturbed.

The TWael of a worker to mercury compounds is to be maintained at the lowest practical level and not to exceed an eight-hour average concentration of 0.05 mg/m<sup>3</sup> of air for all mercury except alkyl mercury oxide for which a concentration of 0.01 mg/m<sup>3</sup> of air should not be exceeded.

Mercury vapor is expected to be present within fluorescent lighting identified throughout the building. Mercury may also be used as a preservative in paints.

## **6 ARSENIC**

Arsenic can be found in paint on roofing flashings, floors, walls and on the underside of the concrete ground floor structures in old buildings. The Time-Weighted Average Exposure Limits (TWael) of a worker exposed to airborne arsenic is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 10 mg/m<sup>3</sup> of air.

Considering the age of the building, arsenic could be present in the above listed materials. However, there is a low probability of finding arsenic-based coatings and minor amounts of this metal did not justify that the sampling be performed in the present assessment.

## **7 OTHER DESIGNATED SUBSTANCES**

### **7.1 ACRYLONITRILE**

Acrylonitrile is used to produce polymers such as acrylonitrile-butadiene-styrene (ABS) resins. These polymers are used in the manufacturing of a wide range of commercial products (i.e., automotive parts, clothing, carpets, etc.).

Workers are typically exposed to acrylonitrile at manufacturing facilities that produce the aforementioned products through inhaling its vapour, direct skin contact, or through ingestion. Although, acrylonitrile may be present in some of the building materials, including adhesives and coatings, the chemical will likely be bonded in the polymer form. Therefore, it is not expected that an adverse exposure to acrylonitrile will occur unless the building materials are heated to extreme temperatures.

The TWael of a worker exposed to airborne acrylonitrile is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 4.3 mg/m<sup>3</sup> of air (2 ppmv).

In its hardened polymer form, acrylonitrile is not expected to release emissions that would exceed the allowable limits. Pure acrylonitrile was not identified within the subject building.

### **7.2 BENZENE**

Benzene is typically found in petroleum-based products such as gasoline and diesel fuels, asphalt and other hydrocarbon-based products. Based on the age of the subject building it is unlikely that benzene is present in the paints, adhesives, roofing materials. Furthermore, over time, the benzene compound typically volatilizes out of the products and is released into the ambient air. Therefore, it is likely that only trace levels of benzene exist in the building.

Health effects of benzene exposure include irritation of eyes, skin, respiratory system, dizziness, and nausea. Benzene is classified as potential human carcinogens.

The TWAEL of a worker exposed to airborne benzene is to be maintained at the lowest practical level with a view to achieving an ambient air concentration lower than 3.2 mg/m<sup>3</sup> of air (1 ppmv) and not exceed an eight-hour average concentration of 16 mg/m<sup>3</sup> of air (5 ppmv).

Direct sources of benzene emissions were not identified within the building.

### **7.3 COKE OVEN EMISSIONS**

Coke oven emissions are the exhaust released during the burning process of coke (pure carbon). This process was not observed and is not expected to take place within this building; therefore, it is unlikely that coke oven emission concentrations will exceed the maximum allowable TWAELV of 0.15mg/m<sup>3</sup> for occupants in the structure.

### **7.4 ETHYLENE OXIDE**

Ethylene oxides are used in production of many foams, adhesives, and paints. Over time, ethylene oxide will volatilize out of these materials and may be present in trace amounts in the ambient air in the building. It is not expected that ethylene oxide levels will become hazardous to occupants in the structure.

Processes that may release ethylene oxide to ambient air were not identified within the subject building.

### **7.5 ISOCYANATES**

Isocyanates are raw materials from which all polyurethane products are made. Over time, isocyanates may volatilize out of these materials but will only be present in trace amounts.

Health effects of isocyanate exposure include irritation of skin and mucous membranes, chest tightness, and difficult breathing. Isocyanates include compounds classified as potential human carcinogens and known to cause cancer in animals. The main effects of hazardous exposures are occupational asthma and other lung problems, as well as irritation of the eyes, nose, throat, and skin.

The TWAEL of a worker exposed to isocyanate dust is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 0.2 µmoles/m<sup>3</sup> of air (0.005 ppmv).

Manufactured products under normal conditions do not typically pose a health risk. However, sawing or scraping uncured polyurethane that still contains some unreacted-NCO groups will release isocyanate dust. Uncured polyurethanes were not identified within the subject building.

### **7.6 VINYL CHLORIDE**

Vinyl Chloride is found in many applications such as PVC pipes and fittings.

The TWAEL of a worker exposed to vinyl chloride emission is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 5.2 mg/m<sup>3</sup> of air (1 ppmv).

Vinyl chloride in the PVC compound is bound in a solid matrix that is unlikely to become airborne. Vinyl chloride emissions are not likely to exceed the prescribed limits within the subject building.

## **7.7 POLYCHLORINATED BIPHENYLS (PCBs)**

Chlorobiphenyls (PCB's) can be found in equipment such as transformers, capacitors, electromagnets, heat transfer unit, hydraulic engine and fluorescent lamp ballasts. Two federal Canadian Environmental Protection Act (CEPA) regulations apply to the use and storage of PCB's. The Chlorobiphenyls Regulation (SOR/2008-273) limits the quantity of out of service PCB materials that can be stored at a facility for more than 6 months to 1 kg of PCB. There are also several government policies and guidelines that outline safe practices for the handling and storage of PCB containing material. Fluorescent lamp ballasts may contain minor quantities of PCBs (23.6 g). No out of service ballasts were observed and it is unlikely that the above quantity would ever be exceeded.

Random suspect fluorescent lamp ballasts were inspected during the site reconnaissance and compared to the information outlined in the 1991 Environment Canada publication "Identification of Lamp Ballasts Containing PCBs". No PCB containing ballasts were observed. However, due to the overall quantity of ballast it was impractical to inspect all ballasts during this assessment; therefore, it is possible that PCB containing ballasts are present within the building.

## **7.8 OZONE DEPLETING SUBSTANCES (ODSs)**

ODSs have been widely used in many industrial, commercial and residential applications. They can be found in applications such as refrigerants in heat pumps, refrigerators, freezers and air conditioners (A/C); blowing agents for plastics, foam product and insulation; cleaning agents for metals, electronic equipment and components; and as dry-cleaning fluids.

Ontario Regulation 463/10 "Ozone Depleting Substances and Other Halocarbons", made under the Environmental Protection Act, outlines definitions for what chemical substances constitute an ODS. The regulation also defines the requirements for sale, transfer, handling, labelling and worker training.

Sources of ODSs in the building were primarily movable contents, or non-base building such as A/Cs, refrigerators, chillers, and freezers, and several hand-held portable fire extinguishers.

## **7.9 UREA FORMALDEHYDE FOAM INSULATION (UFFI)**

UFFI was developed in Europe in the 1950's as an improved means of insulating difficult to reach cavities in house walls. It was typically injected through 1cm to 2cm diameter holes drilled in interior or exterior walls. During the 1970's when concerns about energy efficiency led to efforts to improve insulation in Canada, UFFI became an important insulation product for existing

buildings. Most installations occurred between approximately 1970 and Dec. 1980. The use of UFFI was then banned by the Canadian Hazardous Products Act.

Interior and exterior spaces were inspected to identify if UFFI was present. No holes indicative of the possible injection of UFFI were identified in the interior or exterior walls of the building.

## **7.10 DROPPINGS**

Bird and animal droppings may present a health risk. The most serious health risks arise from disease organisms that grow in the nutrient rich accumulations of bird and animal droppings. Fungal diseases are associated with bird, bat and animal droppings. The two most common diseases associated with bird and bat droppings are histoplasmosis and cryptococcosis.

No significant presence of droppings were observed, however there may be droppings within concealed spaces.

## **7.11 VISIBLE MOULD**

Moulds and fungi are ubiquitous in nature and are necessary for the breakdown of leaves, wood and other plant debris. These micro-organisms can enter a building directly or by their spores being carried in by the air, people, or contents, etc.

Mould need three things to grow: moisture, food source, and optimum temperatures. The key factor is moisture. In modern buildings, moisture is present as the result of:

- Flooding;
- Leaks in the roof or plumbing;
- Sealed buildings that do not allow excess moisture to escape;
- Sources such as cooking facilities, showers, etc.; or,
- Excess humidity.

This assessment has been performed to determine presence of visible mould growth and is limited in its nature. No sampling (air, bulk, lift, etc.) was completed as part of this assessment. A visual inspection of interior surfaces in the subject building was completed by CM3 to identify areas where apparent mould was most likely to proliferate (i.e., areas where water damage/staining was visible on building material surfaces). An intrusive assessment was not completed as part of this investigation. Assessing potential health risks to potential building occupants was beyond the scope of our investigation.

Material observed with black staining and/or a textured and discoloured appearance is described as apparent or suspect mould propagation. No water staining and suspect mould propagation were observed at this time.

## **7.12 RADIOACTIVITY**

Ionization smoke detectors contain a small amount of a radioactive isotope, usually Americium-241. Americium-241 emits alpha particles, a type of ionizing radiation. Alpha particles are high-energy, but they can be stopped by a few centimeters of air or a thin sheet of paper, making them safe for use in this context when contained. The presence of ionization smoke detectors was not observed.

Radon is a naturally occurring radioactive gas produced by the decay of uranium in soil, rock, and water. There are no concerns regarding radioactive materials.

## **8 RECOMMENDATIONS**

This report must be provided to contractors prior to conducting demolition or renovation work at the Site. A copy of the survey must be immediately available at the Site whenever workers are present. Further, contractors shall have an exposure control plan in place for each designated substance identified in this report as being in way of the planned work.

If suspect asbestos or other hazardous materials are identified during the project that are not discussed and reported within this document then work must stop, until further assessment is completed.

CM3 provides the following recommendations based on the information provided by Algonquin College, our observations, the regulatory framework, and the Statement of Limitations provided in Section 17 of this report.

### **8.1 Asbestos**

Disturbance of friable and non-friable asbestos is regulated by Ontario Regulation 278/05.

Prior to renovation or demolition, the project owner must ensure that any ACMs that have the potential to be disturbed are removed or enclosed. Workers conducting this activity must be adequately trained and supplied with sufficient personal protective equipment. In addition, the maximum allowable airborne fibre concentration for asbestos should not be approached or exceeded.

Based on site observations, the ACM action matrix, and lab findings CM3 provides the following recommendations for the asbestos containing materials identified within the subject building.

#### **1. ACTION 3 - ACM Removal Required for Compliance**

Remove damaged ACMs for compliance with regulatory requirements. Utilize asbestos procedures appropriate to the scope of the removal work provided by a consultant.

#### **2. ACTION 5 Proactive ACM Removal**

- Remove ACM in lieu of repair, or at locations where the presence of asbestos in GOOD condition is not desirable.

### 3..ACTION 7 Routine Surveillance:

- Maintain updated asbestos management records.
- Routine surveillance of ACMs.
- Annual reassessment, as per Ontario Regulation 278/05.

The Regulation defines work classification based on the type of material being handled, the condition of the material and quantity of material being handled. In general terms they are referenced as the following:

Type 1 measures and procedures, or low risk work, and requires basic engineering controls and worker protection (e.g., perimeter tape, drop sheets, etc.).

Type 2 measures and procedures, or moderate risk work, and requires upgraded engineering controls and worker protection (e.g., enclosures, wash stations, etc.).

Type 3 measures and procedures, or high risk work, and requires maximum engineering controls and worker protection (e.g., enclosures, showers, multi stage decontamination, etc.).

## 8.2 Lead

If work on lead containing materials is likely to produce lead dust or fumes, for example during welding, torch cutting, grinding, sanding or sandblasting, then proper precautions should be followed. As best industry practice, CM3 recommends that the Ministry of Labour “Guideline for Lead on Construction Projects” be followed when working with potential lead hazards.

The Time-Weighted Average Exposure Limits (TWAEL) of a worker to lead is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 0.05 mg/m<sup>3</sup> of air for non-tetraethyl lead and 0.10 mg/m<sup>3</sup> of air in the case of tetraethyl lead.

Waste generated from demolition activities that contain lead, such as lead-based paint undergo Toxicity Characteristic Leaching Procedure testing in order to classify the waste. If the concentration of lead exceeds that of the leachate quality criteria then waste must be classified as hazardous and must be disposed of at a landfill that accepts hazardous waste in accordance with O. Reg 347, as amended.

Similar to the asbestos Regulation, the guideline outlines suggestions for worker protection, protective equipment, and defines the different work classifications for working on materials that contain lead.

The guideline defines work classification based on the type of material being handled, the condition of the material and quantity of material being handled. In general terms they are referenced as the following:

Type 1 measures and procedures, or low risk work, and requires basic engineering controls and worker protection (e.g., perimeter tape, drop sheets, etc.).

Type 2 measures and procedures, or moderate risk work, and requires upgraded engineering controls and worker protection (e.g., enclosures, wash stations, etc.).

Type 3 measures and procedures, or high-risk work, and requires maximum engineering controls and worker protection (e.g., enclosures, showers, multi stage decontamination, etc.).

### **8.3 Silica**

Silica occurs naturally as crystalline material in concrete and cement. Crystalline silica is significantly more toxic than amorphous silica. Therefore, for health reasons, only crystalline varieties are regulated under Ontario Regulation 490/09 as one of the designated substances. Silica dust can be generated through such processes such as blasting, grinding, crushing or sandblasting silica-containing material. Silica is often found contained within concrete walls, stairs and ramps. Therefore, appropriate respiratory protection and ventilation must be utilized during construction and demolition. As best industry practice CM3 recommends that the ministry of Labour "Guideline for Silica on Construction Projects" is followed when dealing with potential silica hazards.

Similar to the asbestos Regulation, the guideline outlines suggestions for worker protection, protective equipment, and defines the different work classifications for working on materials that contain silica.

The guideline defines work classification based on the type of material being handled, the condition of the material and quantity of material being handled. In general terms they are referenced as the following:

Type 1 measures and procedures, or low risk work, and requires basic engineering controls and worker protection (e.g., perimeter tape, drop sheets, etc.).

Type 2 measures and procedures, or moderate risk work, and requires upgraded engineering controls and worker protection (e.g., enclosures, wash stations, etc.).

Type 3 measures and procedures, or high-risk work, and requires maximum engineering controls and worker protection (e.g., enclosures, showers, multi-stage decontamination, etc.).

### **8.4 Mercury**

If mercury (Hg) is removed or relocated, work must be completed in accordance with Ontario Regulation 490/09. Recycling of fluorescent light tubes should be performed by a contractor. If removed, fluorescent tubes must be recycled.

Mercury may also be present as a preservative in paints.

The TWAEEL of a worker to mercury is to be maintained at the lowest practical level and not exceed an eight-hour average concentration of 0.025 mg/m<sup>3</sup> of air for all forms of mercury except alkyl compounds which is 0.01 mg/m<sup>3</sup> of air. If work on mercury containing materials is likely to produce mercury dust or fumes, for example during welding, torch cutting, grinding, sanding or sandblasting, then proper precautions should be followed.

### **8.5 PCBs**

During any lighting refit or during routine maintenance the old ballast should be inspected for PCBs. Any ballasts found to contain PCBs should be stored separately on a temporary basis until they can be disposed of by a licensed waste hauler.

### **8.6 ODSs**

If any ODS containing non-base building equipment is to be removed for disposal, all ozone depleting refrigerants must be removed by an individual, licensed to perform such work in accordance with the Ozone Depleting Substance Regulation 1998 SOR/99-7 under the Canadian Environmental Protection Act, prior to the disposal of any ozone depleting substance-containing equipment.

### **8.7 Radioactivity**

Eastern Ontario is recognized as a region with variable radon levels due to its geological composition, which includes uranium-rich rock formations. To ensure the health and safety of building occupants, it is prudent to assess (e.g. sampling) and address potential radon risks.

Proactively managing radon risks will help safeguard the health of building occupants and comply with best practices in indoor air quality management

## **9 STATEMENT OF LIMITATIONS**

This report has been prepared and the work referred to in this report has been undertaken by CM3 Environmental Inc. for Algonquin College. It is intended for the sole and exclusive use of Algonquin College and their authorized agents for the purpose(s) set out in this report. Any use of, reliance on or decision made based on this report by any person other than Algonquin College for any purpose, or by Algonquin College for a purpose other than the purpose(s) set out in this report, is the sole responsibility of such other person or Algonquin College and CM3 Environmental Inc. make no representation or warranty to any other person with regard to this report and the work referred to in this report and they accept no duty of care to any other person or any liability or responsibility whatsoever for any losses, expenses, damages, fines, penalties or other harm that may be suffered or incurred by any other person as a result of the use of, reliance on, any decision made or any action taken based on this report or the work referred to in this report.

Any conclusions or recommendations made in this report reflect CM3 Environmental Inc.'s judgment based on the following limited investigations: visual site inspection(s) on the date(s) set

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out in this report; examination of public records; and interviews with individuals having information about the site. While efforts have been made to substantiate information provided by third parties, CM3 Environmental Inc. makes no representation or warranty as to its completeness or accuracy.

This report has been prepared for specific application to this site. Unless otherwise stated, the findings cannot be extended to previous or future site conditions; portions of the site which were unavailable for direct investigation; subsurface locations which were not investigated directly; or chemical parameters, materials or analysis which were not addressed. Substances other than those addressed by the investigation described in this report may exist within the site; and substances addressed by the investigation may exist in areas of the site not investigated or in quantities not ascertained.

Nothing in this report is intended to constitute or provide a legal opinion. CM3 Environmental Inc. makes no representation as to the requirements of or compliance with environmental laws, rules, regulations or policies established by federal, provincial or local government bodies. Revisions to the regulatory standards referred to in this report may be expected over time. As a result, modifications to the findings, conclusions and recommendations in this report may be necessary.

Other than by Algonquin College and their authorized agents and as set out herein, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of CM3 Environmental Inc.

# **APPENDIX A**

## **Analytical Results**

**Designated Substances and Hazardous Building Report**

**Building D**

**706 Wajashk Private**

**Client: Algonquin College**

**CM3 Project Number: TC1738**

## Certificate of Analysis

**CM3 Environmental Inc.**

5710 Akins Road  
Ottawa, ON K2S 1B8  
Attn: Taylor Collins

Client PO: Algonquin College - Building D  
Project: TC1738  
Custody:

Report Date: 21-Jan-2025  
Order Date: 15-Jan-2025

**Order #: 2503330**

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

Parcel ID	Client ID
2503330-01	PS-01 - Beige Block Wall - Room D114

Approved By:



Mark Foto, M.Sc.  
Laboratory Director

Any use of these results implies your agreement that our total liability in connection with this work, however arising shall be limited to the amount paid by you for this work, and that our employees or agents shall not under circumstances be liable to you in connection with this work

Certificate of Analysis  
Client: **CM3 Environmental Inc.**  
Client PO: **Algonquin College - Building D**

Report Date: 21-Jan-2025  
Order Date: 15-Jan-2025  
Project Description: **TC1738**

**Analysis Summary Table**

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	17-Jan-25	20-Jan-25

**Qualifier Notes:**

*Sample Qualifiers :*

1 : Complete separation of paint from substrate not possible for this sample and a small amount of substrate has been included in the paint digestion.

*QC Qualifiers :*

QR-04 : Duplicate results exceeds RPD limits due to non-homogeneous matrix.

**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: CM3 Environmental Inc.  
 Client PO: Algonquin College - Building D

Report Date: 21-Jan-2025  
 Order Date: 15-Jan-2025  
 Project Description: TC1738

### Sample Results

Lead					Matrix: Paint	
Parcel ID	Client ID	Sample Date	Units	MDL	Result	
2503330-01	PS-01 - Beige Block Wall - Room D114	15-Jan-25	ug/g	5	287 [1]	

### Laboratory Internal QA/QC

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Matrix Blank</b>									
Lead	ND	5	ug/g						
<b>Matrix Duplicate</b>									
Lead	70.1	5	ug/g	123			54.40	50	QR-04
<b>Matrix Spike</b>									
Lead	44.3	5.00	ug/g	ND	88.1	70-130			



Parcel ID: 2503330



Parcel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
---------------------------------------	------------------------------------

Client Name: CM3 Environmental Inc.	Project Ref: <u>Algerium College - Building D</u>	Page <u>1</u> of <u>1</u>
Contact Name: <u>Taylor, Andrew</u>	Quote #: CM3 Rates	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 5710 Akins Road, Stittsville, ON	PO #: <u>TC1738</u>	
Telephone: 613-838-2323	E-mail: <u>Taylor Andrew</u> @CM3environmental.com	

<input type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19    Other Regulation <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other: _____		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis																	
Sample ID/Location Name		Matrix	Air Volume	# of Containers	Sample Taken		Lead	Mercury												
					Date	Time														
1	PS-01 - Beige Block Wall - Room D114	P	/	1	Jan 25		<input checked="" type="checkbox"/>													
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Comments:		Method of Delivery: <u>Walkin</u>	
Relinquished By (Sign): <u>A McKean</u>	Received at Depot: <u>RB 1636</u>	Received at Lab: <u>JM</u>	Verified By: <u>JM</u>
Relinquished By (Print): <u>Andrew McKean</u>	Date/Time: <u>Jan 15 4h</u>	Date/Time: <u>Jan 16 25 1009</u>	Date/Time: <u>Jan 16-25 1243</u>
Date/Time: <u>15-1-25</u>	Temperature: _____ °C	Temperature: _____	pH Verified: <input type="checkbox"/> By: _____



# EMSL Canada Inc.

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

EMSL Canada Order 672500177  
Customer ID: 55CMTE42  
Customer PO: TC1738  
Project ID:

**Attn:** Taylor Collins Phone: (613) 838-2323  
CM3 Environmental Inc. Fax:  
5710 Akins Rd Collected:  
Stittsville, ON K2S 1B8 Received: 1/15/2025  
Analyzed: 1/22/2025  
**Proj:** Algonquin College-Building D

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

**Client Sample ID:** AC-01A **Lab Sample ID:** 672500177-0001  
**Sample Description:** Room D101D/Air Cell Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	Gray/Silver	30.0%	25.0%	45% Chrysotile	

**Client Sample ID:** AC-01B **Lab Sample ID:** 672500177-0002  
**Sample Description:** Room D101D/Air Cell Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025					Positive Stop (Not Analyzed)

**Client Sample ID:** AC-01C **Lab Sample ID:** 672500177-0003  
**Sample Description:** Room D101D/Air Cell Pipe Insulation

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025					Positive Stop (Not Analyzed)

**Client Sample ID:** PAR-01A **Lab Sample ID:** 672500177-0004  
**Sample Description:** Room D101D/Parging Cement Elbow Fittings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	Gray	0.0%	45.0%	55% Chrysotile	

**Client Sample ID:** PAR-01B **Lab Sample ID:** 672500177-0005  
**Sample Description:** Room D101D/Parging Cement Elbow Fittings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025					Positive Stop (Not Analyzed)

**Client Sample ID:** PAR-01C **Lab Sample ID:** 672500177-0006  
**Sample Description:** Room D101D/Parging Cement Elbow Fittings

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025					Positive Stop (Not Analyzed)

**Client Sample ID:** VFT-01A-Vinyl Floor Tile **Lab Sample ID:** 672500177-0007  
**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	White	0.0%	100.0%	None Detected	



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EMSL Canada Order 672500177  
Customer ID: 55CMTE42  
Customer PO: TC1738  
Project ID:

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

**Client Sample ID:** VFT-01A-Mastic **Lab Sample ID:** 672500177-0007A

**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	Black	0.0%	100.0%	None Detected	

**Client Sample ID:** VFT-01B-Vinyl Floor Tile **Lab Sample ID:** 672500177-0008

**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	White	0.0%	100.0%	None Detected	

**Client Sample ID:** VFT-01B-Mastic **Lab Sample ID:** 672500177-0008A

**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	Black	0.0%	100.0%	None Detected	

**Client Sample ID:** VFT-01C-Vinyl Floor Tile **Lab Sample ID:** 672500177-0009

**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	White	0.0%	100.0%	None Detected	

**Client Sample ID:** VFT-01C-Mastic **Lab Sample ID:** 672500177-0009A

**Sample Description:** Room D106B/12x12 White Vinyl Floor Tile with Grey Streaks

TEST	Analyzed Date	Color	Non-Asbestos		Asbestos	Comment
			Fibrous	Non-Fibrous		
PLM	1/22/2025	Brown	0.0%	100.0%	None Detected	



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EMSL Canada Order 672500177  
Customer ID: 55CMTE42  
Customer PO: TC1738  
Project ID:

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

**Analyst(s):**

Cam Lin Murphy-Andrews PLM (2)  
Ewa Krupinska PLM (6)

**Reviewed and approved by:**

Ewa Krupinska, Laboratory Manager  
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This is a summary report; official reports are available on LabConnect or upon request and relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Canada Inc. Ottawa, ON NVLAP Lab Code 201040-0

Initial report from: 01/22/2025 13:28:17

# **APPENDIX B**

## **Photographic Log**

**Designated Substances and Hazardous Building Report**

**Building D**

**706 Wajashk Private**

**Client: Algonquin College**

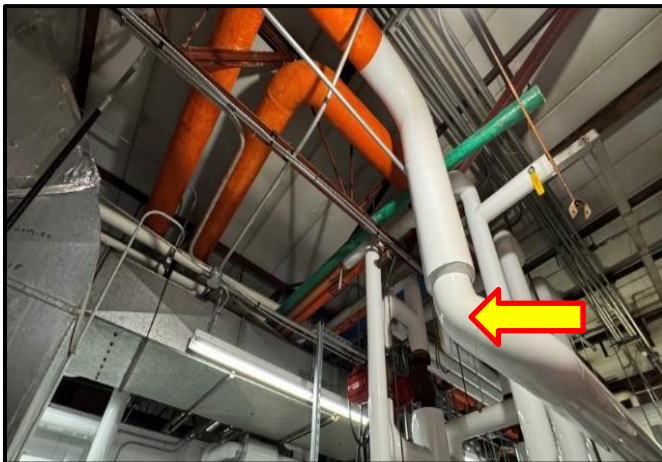
**CM3 Project Number: TC1738**



Photograph 1: Typical view of the exterior of the building.



Photograph 2: View of damaged asbestos-containing 12"x12" beige vinyl floor tiles with black streaks observed in Room D117.



Photograph 3: View of the non-asbestos fiberglass and PVC mechanical pipe fittings observed to in Mechanical Penthouse D200.



Photograph 4: View of damaged asbestos-containing 12"x12" red vinyl flooring tiles observed in Room D108.



Photograph 5: View of asbestos-containing ceiling plaster observed in Room D106.



Photograph 6: Typical view of mercury containing fluorescent lighting observed throughout the building.



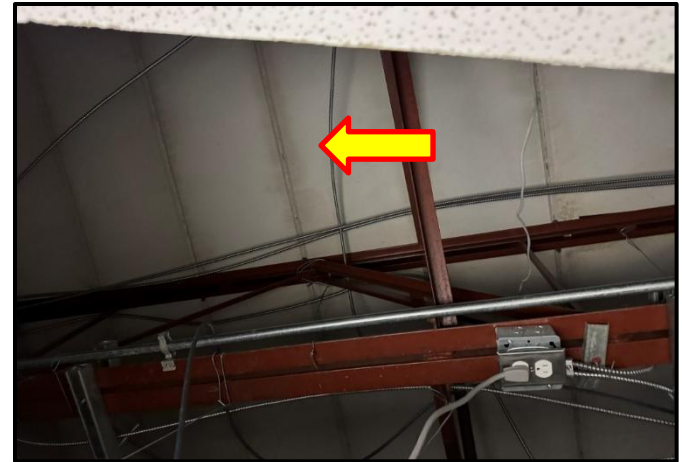
Photograph 7: View of damaged asbestos-containing paring cement mechanical pipe fitting observed in the ceiling space of Room D101D.



Photograph 8: View of asbestos-containing aircell pipe insulation observed on mechanical pipe straight runs in the ceiling of Room D101D.



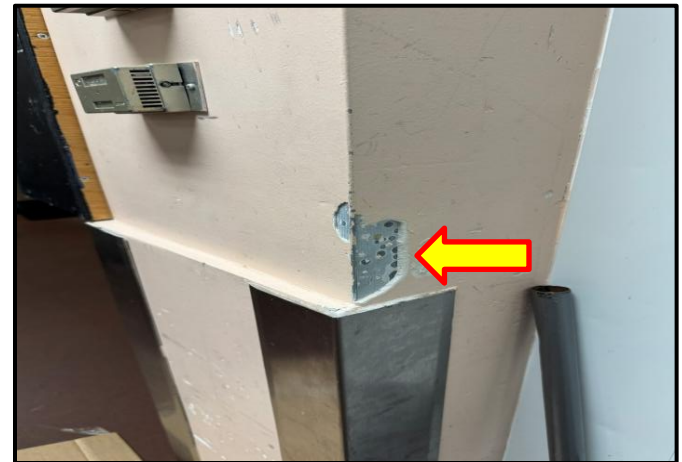
Photograph 9:View of non-asbestos containing fiberglass insulation observed on mechanical pipe straight runs throughout the building.



Photograph 10:View of presumed ACM siporex observed above ceiling spaces throughout the building.



Photograph 11:View of lead-containing beige paint observed on block walls in Room D114.



Photograph 12:View of damaged asbestos-containing drywall in Room 112.

# **APPENDIX C**

## **Database Room by Room**

**Designated Substances and Hazardous Building Report**

**Building D**

**706 Wajashk Private**

**Client: Algonquin College**

**CM3 Project Number: TC1738**

Campus	Building	Floor	Room Number	Room Description	Location	Material Description	Approximate Quantity (m2)	Condition	Friability	Accessibility	Laboratory	Asbestos Type (%)	Report Reference	Sample ID	Photo Log Reference	Change Log
Ottawa	D	0	D001		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D001		Wall	Brick Masonry, Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D001		Ceiling	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D002		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D002		Wall	Concrete Block, Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D002		Ceiling	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D003		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D003		Wall	Brick Masonry, Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	0	D003		Ceiling	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101A		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101A		Wall	Drywall Joint Compound	24m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101A		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101A		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101A		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101B		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101B		Wall	Drywall Joint Compound	24m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101B		Wall	Prefabricated partition walls	N/A	N/A	N/A	N/A	Negative	N/A				
Ottawa	D	1	D101B		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101B		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101C		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101C		Wall	Drywall Joint Compound	24m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101C		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101C		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101C		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101C		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101D		Carpet	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	Negative	N/A				
Ottawa	D	1	D101D		Wall	Drywall Joint Compound	40m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101D		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101D		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101D		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D101D		Mechanical	Aircell Insulation	Approx. 12 linear m	Good	Friable	Moderately-Accessible	Positive	45% Chrysotile	2024 DSR Building D	AC-01A-C	Photograph 8	
Ottawa	D	1	D101D		Mechanical	Parging Cement Elbows	6 Fittings	Good, Poor	Friable	Moderately-Accessible	Positive	55% Chrysotile	2024 DSR Building D	PAR-01A-C	Photograph 7	
Ottawa	D	1	D101E		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101E		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101E		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	Negative	N/A				
Ottawa	D	1	D101F		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101F		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101F		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101G		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101G		Wall	Prefabricated partition wall	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D101G		Ceiling	2'x2' Ceiling Tiles (Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102		Wall	Drywall Joint Compound	100m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102A		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102A		Wall	Drywall Joint Compound	60m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102A		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102B		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102B		Wall	Drywall Joint Compound	10m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102B		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102C		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102C		Wall	Drywall Joint Compound	60m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102C		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102D		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102D		Wall	Drywall Joint Compound	16m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102D		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102E			N/A - Inaccessible										
Ottawa	D	1	D102F		Floor	12"x12" Vinyl Tiles (White with grey streaks)	N/A	N/A	N/A	N/A	Negative	N/A	2024 DSR Building D	VFT-01A-C		
Ottawa	D	1	D102F		Wall	Drywall Joint Compound	12m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102F		Ceiling	2'x4' Ceiling Tiles (pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102G		Floor	12"x12" New Vinyl Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D102G		Wall	Drywall Joint Compound	20m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D102G		Ceiling	2'x4' Ceiling Tiles (Textured)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D103		Floor	Ceramic Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D103		Wall	Ceramic Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D103		Ceiling	Drywall Joint Compound	N/A	N/A	N/A	N/A	Negative	N/A	2024 PSDSR Accessibility	DJC-01A-E		
Ottawa	D	1	D104		Floor	Ceramic Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D104		Wall	Ceramic Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D104		Ceiling	Drywall Joint Compound	N/A	N/A	N/A	N/A	Negative	N/A	2024 PSDSR Accessibility	DJC-01A-E		
Ottawa	D	1	D105		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105A		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105A		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				

Campus	Building	Floor	Room Number	Room Description	Location	Material Description	Approximate Quantity (m2)	Condition	Friability	Accessibility	Laboratory	Asbestos Type (%)	Report Reference	Sample ID	Photo Log Reference	Change Log
Ottawa	D	1	D105A		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105B		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105B		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105B		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105C		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105C		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105C		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105D		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105D		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105D		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105E		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105E		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105E		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105F		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105F		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105F		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105G		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105G		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105G		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105H		Floor	Sheet Vinyl (Grey New)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105H		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D105H		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D106		Floor	12"x12" Vinyl Tiles (Red/Orange)	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D106		Wall	Drywall Joint Compound	80m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D106		Ceiling	Plaster	30m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory		Photograph 5	
Ottawa	D	1	D106A		Floor	12"x12" Vinyl Tiles (Red/Orange)	8m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D106A		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D106A		Ceiling	Plaster	10m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D106B		Floor	12"x12" Vinyl Tiles (Beige)	N/A	N/A	N/A	N/A	Negative	N/A	2026 PSDSR CM3	VFT-01A-C		
Ottawa	D	1	D106B		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D106B		Wall	Drywall Joint Compound	N/A	N/A	N/A	N/A	Negative	N/A	2026 PSDSR CM3	DJC-01A-C		
Ottawa	D	1	D106B		Ceiling	Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D106B		Other	Sprayed Fireproofing	N/A	N/A	N/A	N/A	Negative	N/A	InAir Inventory			
Ottawa	D	1	D108		Floor	12"x12" Vinyl Tiles (Pink with white streaks)	N/A	N/A	N/A	N/A	Negative	N/A	2026 PSDSR CM3	VFT-03A-C		
Ottawa	D	1	D108		Floor	12"x12" Vinyl Tiles (Red/Orange)	20m2	Good/Poor	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory		Photograph 4	
Ottawa	D	1	D108		Wall	Drywall Joint Compound	80m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D108		Ceiling	Drywall Joint Compound	40m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D108A		Floor	12"x12" Vinyl Tiles (Beige with brown streaks)	6m2	Good	Non-friable	Accessible	Positive	2% Chrysotile	2026 PSDSR CM3	VFT-04A-C		
Ottawa	D	1	D108A		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D108A		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D108A		Ceiling	Drywall Joint Compound	16m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D108B		Floor	Ceramic Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D108B		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D108B		Wall	Drywall Joint Compound	20m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D108B		Ceiling	Drywall Joint Compound	16m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D109		Floor	12"x12" Vinyl Tiles (White with grey streaks)	N/A	N/A	N/A	N/A	Negative	N/A	2024 DSR Building D	VFT-01A-C		
Ottawa	D	1	D109		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D109		Ceiling	2'x4' Ceiling Tiles (Small and Large Pinholes)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111		Floor	Carpet	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111		Wall	Drywall Joint Compound	60m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D111		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111A		Floor	Carpet	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111A		Wall	Drywall Joint Compound	40m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D111A		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111B		Floor	Carpet	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111B		Wall	Drywall Joint Compound	60m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D111B		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111C		Floor	12"x12" Vinyl Tiles (Beige/Brown)	N/A	N/A	N/A	N/A	No ACM	N/A	2014 PSDSR InAir			
Ottawa	D	1	D111C		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D111C		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D111D		Floor	12"x12" Vinyl Tiles (Beige/Brown)	N/A	N/A	N/A	N/A	Negative	N/A	2014 PSDSR InAir			
Ottawa	D	1	D111D		Wall	Drywall Joint Compound	20m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D111D		Ceiling	2'x4' Ceiling Tiles (Pinholes and Fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D112		Floor	Sheet Vinyl (Red)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D112		Wall	Drywall Joint Compound	100m2	Good,Poor	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory		Photograph 12	
Ottawa	D	1	D112		Ceiling	2'x4' Fibreboard Tiles	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113		Floor	Sheet Vinyl (Red)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D113		Ceiling	2'x4' Ceiling Tiles (Fibreboard)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113A		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113A		Wall	Drywall Joint Compound	4m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D113A		Ceiling	Drywall Joint Compound	2m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D113B		Floor	12"x12" Vinyl Floor Tiles (Beige/Brown)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113B		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			

Campus	Building	Floor	Room Number	Room Description	Location	Material Description	Approximate Quantity (m2)	Condition	Friability	Accessibility	Laboratory	Asbestos Type (%)	Report Reference	Sample ID	Photo Log Reference	Change Log
Ottawa	D	1	D113B		Ceiling	2'x4' Ceiling Tiles (Fibreboard)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D113C		Floor	12"x12" Vinyl Tiles (Beige/Brown)	N/A	N/A	N/A	N/A	Negative	N/A				
Ottawa	D	1	D113C		Wall	Drywall Joint Compound	20m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D113C		Ceiling	2'x4' Ceiling Tiles (Pinholes and fissures)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114		Floor	Pourec Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114		Wall	Concrete Block, Plywood	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D114A		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114A		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114A		Ceiling	Drywall Joint Compound	4m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D114B		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114B		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D114B		Ceiling	Drywall Joint Compound	15m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D115		Floor	Sheet Vinyl (Red)	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D115		Wall	Drywall Joint Compound	30m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D115		Ceiling	Drywall Joint Compound	20m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D116		Floor	Sheet Vinyl (Red)	N/A	N/A	Non-friable	N/A	No ACM	N/A				
Ottawa	D	1	D116		Wall	Drywall Joint Compound	16m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D116		Ceiling	Drywall Joint Compound	4m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D117		Floor	12"x12" Vinyl Tiles (Beige with black streaks)	Approx. 8 damaged tiles	Poor	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory		Photograph 2	
Ottawa	D	1	D117		Wall	Drywall Joint Compound	16m2	Good, Poor	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D117		Ceiling	Drywall Joint Compound	4m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D118		Floor	Carpet	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D118		Wall	Drywall Joint Compound	60m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D118		Ceiling	Drywall Joint Compound	N/A	N/A	N/A	N/A	Negative	N/A	InAir Inventory			
Ottawa	D	1	D118A		Floor	12"x12" Vinyl Tiles (Beige with black streaks)	8m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D118A		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	1	D118A		Wall	Drywall Joint Compound	20m2	N/A	N/A	N/A	Negative	N/A	InAir Inventory			
Ottawa	D	1	D118A		Ceiling	Drywall Joint Compound	8m2	Good	Non-friable	Moderately-Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D119		Floor	Sheet Vinyl (Red)	N/A	N/A	N/A	N/A	Negative	N/A	InAir Inventory			
Ottawa	D	1	D119		Wall	Drywall Joint Compound	100m2	Good	Non-friable	Accessible	Positive	Chrysotile	InAir Inventory			
Ottawa	D	1	D119		Ceiling	2'x4' Ceiling Tiles (Fibreglass)	N/A	N/A	N/A	N/A	Negative	N/A				
Ottawa	D	2	D200		Floor	Poured Concrete	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	2	D200		Wall	Concrete Block	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D	2	D200		Ceiling	Siporex	Throughout	Good	Non-friable	Moderately-Accessible	Presumed A	N/A			Photograph 10	
Ottawa	D	2	D200		Mechanical	Fibreglass, PVC	N/A	N/A	N/A	N/A	No ACM	N/A				
Ottawa	D		Throughout		Miscellaneous	Brown Covebase Mastic	Throughout	Good	Non-friable	Accessible	Positive	1% Chrysotile	2026 PSDSR CM3	CBM-01A-C		
Ottawa	D		Throughout		Ceiling	Siporex	Throughout	Good	Non-friable	Moderately-Accessible	Presumed A	N/A				

# **APPENDIX D**

## **Drawings**

**Designated Substances and Hazardous Building Report**

**Building D**

**706 Wajashk Private**

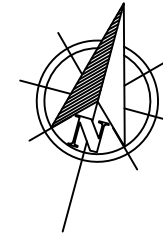
**Client: Algonquin College**

**CM3 Project Number: TC1738**



**FACILITIES MANAGEMENT DEPARTMENT**  
**FACILITIES DEVELOPMENT**  
 1385 WOODROFFE AVENUE | G-BUILDING | OTTAWA | ONTARIO | K2G | 1V8 TEL: 613-727-4728, EXT. 7710

**BUILDING D - LOWER LEVEL FLOOR PLAN**  
 NOT TO SCALE



- LEGEND**
- ASBESTOS BULK SAMPLE LOCATION 2024
  - ▲ LEAD BULK SAMPLE LOCATION 2024

**NOTES:**  
 - NO ASBESTOS-CONTAINING MATERIAL WAS OBSERVED.



**cm3**  
 environmental  
 5710 AKINS ROAD, OTTAWA, ON  
 K2S 1B8

**ALGONQUIN**  
 COLLEGE  
 ALGONQUIN COLLEGE

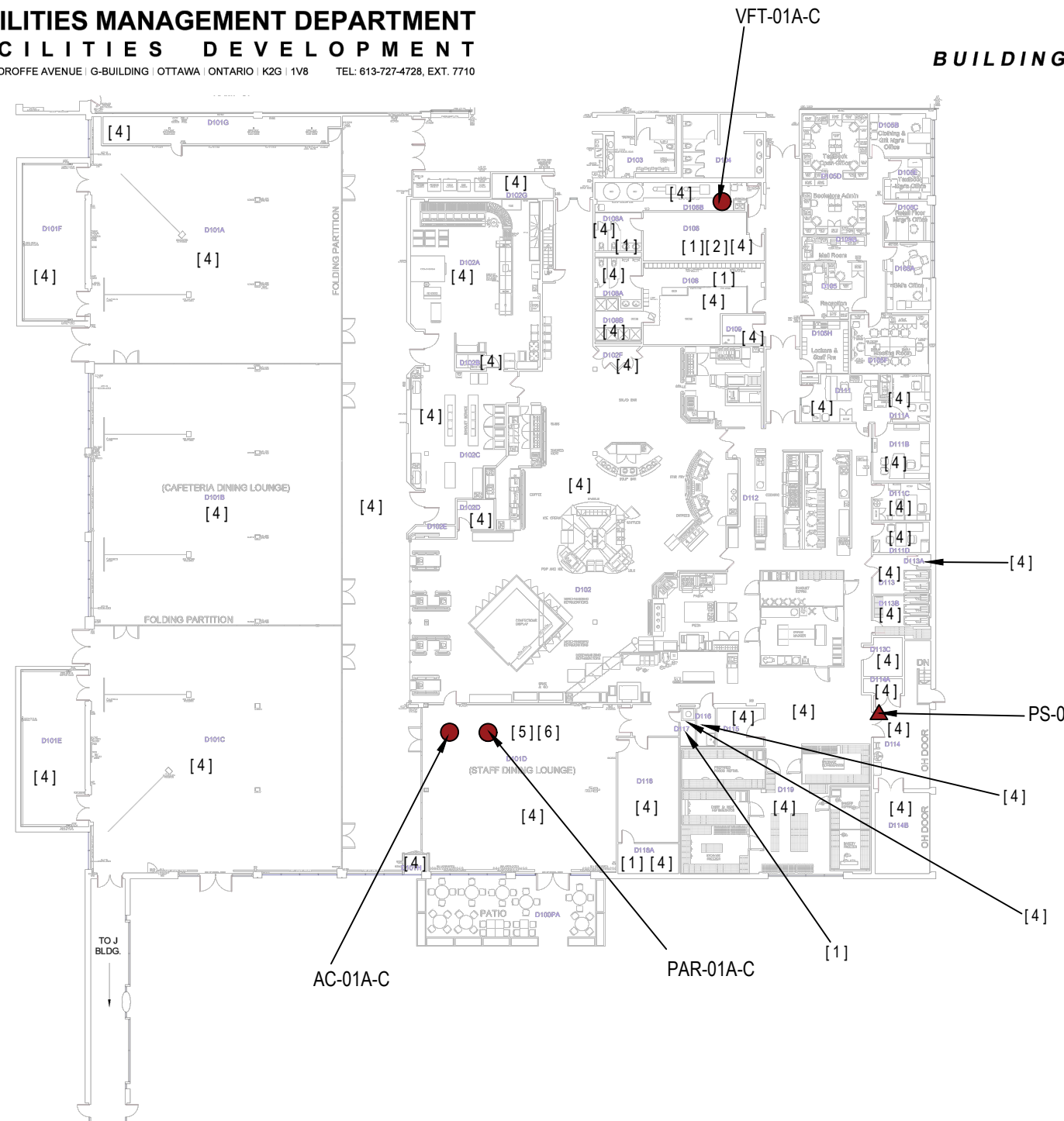
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS REPORT - BUILDING D  
 ALGONQUIN COLLEGE - WOODROFFE  
 OTTAWA, ONTARIO  
 LOWER LEVEL FLOOR PLAN

Project:	TC1738	Drawn By:	GG
Date:	MARCH 2026	Reviewed By:	TC
Scale:	N.T.S.	Figure:	1

THIS DRAWING IS FOR INFORMATION PURPOSES ONLY. NOT ALL STRUCTURES, UTILITIES OR SITE FEATURES ARE SHOWN. THIS DRAWING IS THE PROPERTY OF CM3 ENVIRONMENTAL LOANED TO THE RECIPIENT WHO AGREES THAT IT SHALL NOT BE GIVEN OUT, COPIED OR DUPLICATED FOR THE USE OF ANOTHER BUT SHALL BE USED ONLY BY THE RECIPIENT FOR THE PURPOSE TO WHICH IT REFERS.



**BUILDING D - 1st. FLOOR PLAN**  
NOT TO SCALE



- LEGEND**
- ASBESTOS BULK SAMPLE LOCATION 2024
  - ▲ LEAD BULK SAMPLE LOCATION 2024
- POSITIVE FOR ASBESTOS (>0.5%)**
- [1] VINYL FLOOR TILE
  - [2] CEILING PLASTER
  - [4] DRYWALL JOINT COMPOUND
  - [5] AIRCELL PIPE INSULATION
  - [6] PARGING PIPE ELBOW

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**ALGONQUIN**  
COLLEGE  
ALGONQUIN COLLEGE

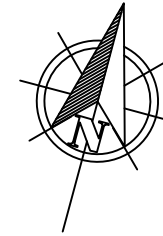
DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS REPORT - BUILDING D  
ALGONQUIN COLLEGE - WOODROFFE  
OTTAWA, ONTARIO  
FIRST FLOOR PLAN

Project:	TC1738	Drawn By:	GG
Date:	MARCH 2026	Reviewed By:	TC
Scale:	N.T.S.	Figure:	2

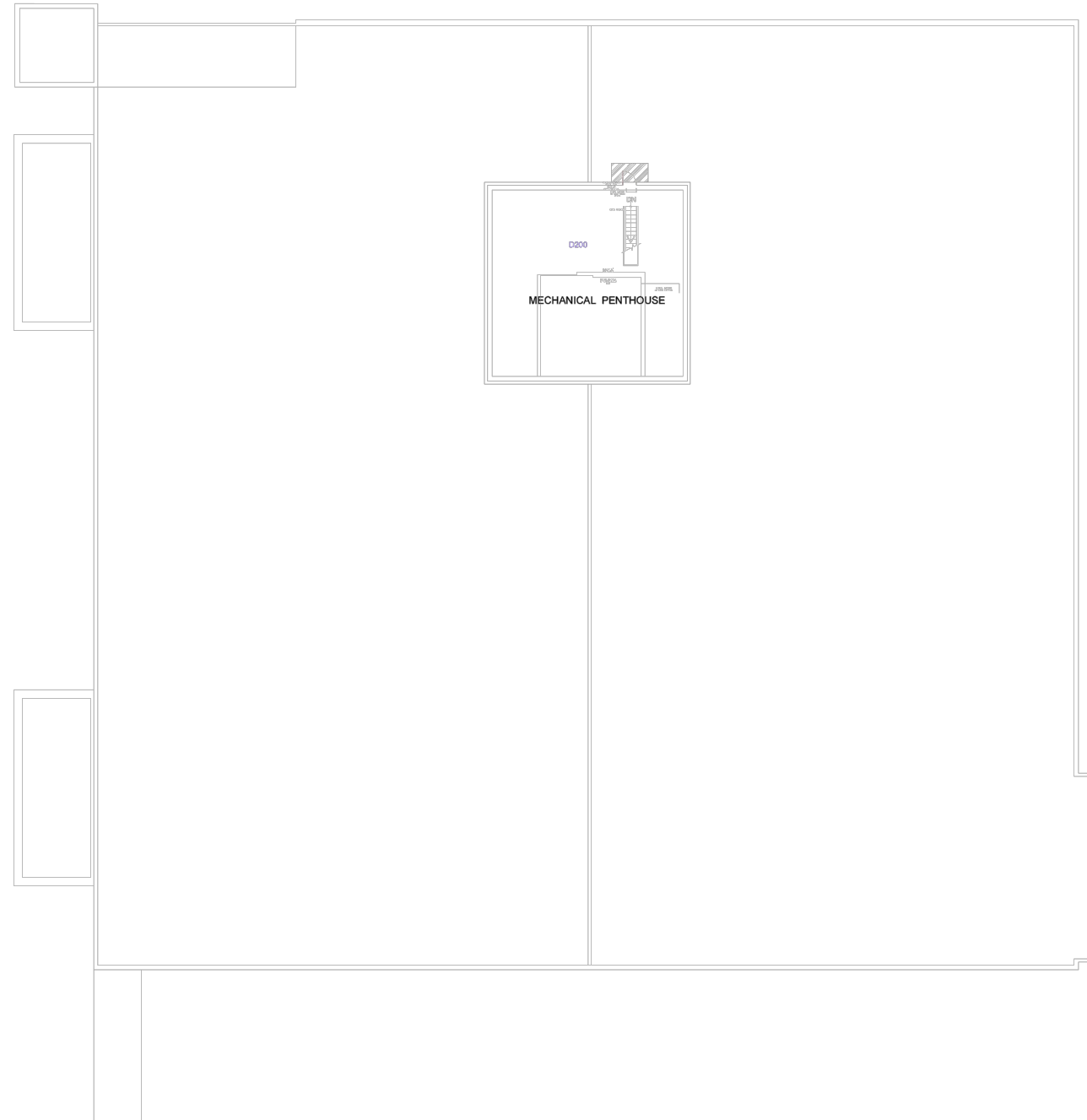
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**BUILDING D - 2nd. FLOOR PLAN**  
 NOT TO SCALE



- LEGEND**
- ASBESTOS BULK SAMPLE LOCATION 2024
  - ▲ LEAD BULK SAMPLE LOCATION 2024

**NOTES:**  
 - NO ASBESTOS-CONTAINING MATERIAL WAS OBSERVED.

5710 AKINS ROAD, OTTAWA, ON  
 K2S 1B8

ALGONQUIN COLLEGE

DESIGNATED SUBSTANCE AND HAZARDOUS MATERIALS REPORT - BUILDING D

ALGONQUIN COLLEGE - WOODROFFE  
 OTTAWA, ONTARIO

SECOND LEVEL FLOOR PLAN

Project:	TC1738	Drawn By:	GG
Date:	MARCH 2026	Reviewed By:	TC
Scale:	N.T.S.	Figure:	3

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