Environmental Consulting
Occupational Health

# PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY

## TORONTO WATER OFFICES
## 95 THE ESPLANADE
## TORONTO, ON

**Prepared for:**
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**ECOH Project No.:** **29001**
**January 10, 2025**

# EXECUTIVE SUMMARY

**ECOH Management Inc. (ECOH)** was retained by the City of Toronto to conduct a Pre-Renovation Designated Substances and Hazardous Materials assessment at the Toronto Water Offices, located at 95 The Esplanade, in Toronto, ON. The objectives of the survey were to identify potential environmental considerations associated with areas of the building to be impacted by the planned renovations to the interior offices of the facility, hereafter referred to as the "Project Area", and provide recommendations, as necessary, to fulfil requirements set forth within the Ministry of Labour Codes as well as the Ontario Occupational Health and Safety Act. Joey Huynh of ECOH performed the survey and assessment on December 20, 2024.

This executive summary provides a brief overview of the key survey findings and associated recommendations. Detailed information regarding the findings and recommendations are discussed in the body of the report.

## FINDINGS

Table 1 presents a brief outline of ECOH's findings within the Project Area. For analytical results for asbestos and lead, refer to Appendix II - Results of Bulk Sample Analysis for Asbestos & Lead. Refer to the main body of the report and Appendix I for specific details, quantities and locations of Designated Substances and Hazardous Materials in the Project Area.

**Table 1: Summary of Findings**

| Material | Findings |
|---|---|
| Asbestos | No asbestos-containing materials (ACM) were observed to be present within the Project Area.<br>Additional asbestos-containing materials may be present within concealed conditions of the Project Area. |
| Lead | No major sources of lead or lead-containing products were identified during the survey; however, lead may be present in:<br>• Internal batteries associated with emergency lighting system,<br>• Ceramic tile glazing,<br>• Wiring connectors and electric cable sheathing, and<br>• Solder joints on copper piping. |
| Mould | Mould-growth was not observed to be present at the time of the assessment. |
| Mercury | Minor quantities may be present as a possible constituent of paints and adhesives. |
| Polychlorinated Biphenyls (PCBs) | PCBs were not observed to be present within the Project Area. |
| Silica | Present in all concrete and masonry products. |

| Table 1: Summary of Findings | |
|---|---|
| **Material** | **Findings** |
| Other Designated Substances and Hazardous Materials | Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxide, Mould, Ozone Depleting Substances, Isocyanates, Urea Formaldehyde Foam Insulation (UFFI) and Vinyl Chloride Monomer were not noted in significant quantities or forms, if at all. |

## RECOMMENDATIONS

The following recommendations meet the requirements of the Occupational Health and Safety Act. Asbestos recommendations meet the requirements of the Designated Substance – Regulation respecting *Asbestos on Construction Projects and in Buildings and Repair Operations*, Ontario Regulation 278/05. Based upon review of historical reports, as well as analytical results and observations of this assessment, ECOH offers the following for your consideration.

**Asbestos**

Based on survey results, the following conclusions are made with regards to asbestos-containing materials (ACMs) within the Project Area:

- As the materials present in the Project Area anticipated for disturbance are non-asbestos containing, removal or disturbance of these materials does not require asbestos safety procedures. However, general health and safety precautions including, in part, the use of dust suppression techniques and appropriate respiratory protection.
- During project work, if any additional materials are found beyond those which are described in this report or described in the existing inventory of asbestos-containing materials (i.e., materials not previously identified, or materials that are not homogenous to those previously identified, or materials that become revealed during the work), additional testing for asbestos-content should be completed immediately and prior to disturbance of the material. Alternatively, these materials can be assumed to contain asbestos, and the appropriate level of asbestos safety precautions must be implemented.

**Lead**

The removal of assumed or confirmed lead-containing construction materials (i.e., lead concentrations >0.1% or 1000ppm) should be completed in accordance with the recommendations of the Environmental Abatement Council of Canada (EACC), *EACC Lead Guideline for Construction, Renovation, Maintenance or Repair*, October 2014, which incorporates the Ontario Ministry of Labour Document, *Guideline Lead on Construction Projects*, April 2011.

Materials containing even trace amounts of lead should be removed without grinding, cutting, torching, or chemical stripping. Additionally, workers should employ general safety precautions such as appropriate dust suppression methods and proper personal protective equipment.

**Mercury**

Avoid direct skin contact with mercury and avoid inhalation of mercury vapour. Dispose of mercury following requirements of the Canada Environmental Protection Act, the Transportation of Dangerous Goods Act and provincial legislative requirements that may be applicable.

**Silica**

Cutting, grinding, or demolition of materials containing silica should be completed using general health and safety precautions including the use of dust suppression techniques and appropriate respiratory protection.

During major renovations, removal of materials containing silica should be removed following recommendations detailed within the Ministry of Labour document, *Guideline - Silica on Construction Projects*, dated, April 2011.

This executive summary provides a brief overview of the study findings. It is not intended to substitute for reading the complete report, nor does it discuss specific issues documented in the report.

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# 1. INTRODUCTIONS

**ECOH Management Inc. (ECOH)** was retained by the City of Toronto to conduct a Pre-Renovation Designated Substances and Hazardous Materials assessment at the Toronto Water Offices, located at 95 The Esplanade, in Toronto, ON. The objectives of the survey were to identify potential environmental considerations associated with areas of the building to be impacted by the planned renovations to the interior offices of the facility, hereafter referred to as the "Project Area", and provide recommendations, as necessary, to fulfil requirements set forth within the Ministry of Labour Codes as well as the Ontario Occupational Health and Safety Act. Joey Huynh of ECOH performed the survey and assessment on December 20, 2024.

The survey included an investigation for the presence of Designated Substances including:

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

And for Hazardous Materials including:

- Polychlorinated Biphenyls (PCB)s
- Mould
- Ozone Depleting Substances (ODS)
- Other Hazardous Materials

The following report details the project scope of work, regulatory requirements, survey and analytical methodologies, survey findings and recommendations, and survey statement of limitations.

## 1.1 Regulatory Requirements

A Designated Substances and Hazardous Materials Report is completed to fulfil the Owner's requirements under Section 30 of the Ontario Occupational Health and Safety Act. Prior to tendering project work in a building, the building owner must provide this report to contractors tendering on the work.

Ministry of Labour Regulation 278/05, *Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations*, controls the disturbance of asbestos materials on construction projects. Ministry of Environment Regulation, R.R.O. 347, controls the disposal of asbestos waste. The Ministry of Labour has also issued guidelines for the control of Lead and Silica on construction projects, these entitled, *Guideline - Lead on Construction Projects* and *Guideline - Silica on Construction Projects*.

There are no specific Ministry of Labour regulations for control of the remaining Designated Substances on construction projects. However, the Ministry of Labour actively enforces the general duty clause of the Occupational Health and Safety Act which protects workers and

provides guidance on exposure monitoring, permissible exposure levels, medical monitoring, etc., for all Designated Substances in an occupational setting.

# 2. SURVEY SCOPE OF WORK AND METHODOLOGY

## 2.1 General Approach

Details of the survey methodology, as was applied to this facility, are as follows:

- Visual inspections of the Project Area (as denoted on the project drawings) were completed using the following protocol:
  - All Accessible areas (i.e., above false ceilings or within solid ceilings and walls where access hatches were available)
  - The survey did not include demolition of building systems or finishes to visually assess concealed conditions.
- Reporting the findings of visual inspections is completed using the following protocol:
  - Details of specific observations are reported for each room in which observations were collected during visual inspections.

## 2.2 Records Review

As part of this survey, ECOH reviewed the following reports:

- *95_Esplanade_MECH_50%_SUBMISSION,* prepared for the City of Toronto by Arcadis Professional Services (Canada) Inc., dated November 19, 2024.
- *95_The Esplanade_Electrical_50%_Submission,* prepared for the City of Toronto by Arcadis Professional Services (Canada) Inc., dated November 19, 2024.
- *2024.11.18_ISSUED FOR 50% DESIGN SUBMISSION,* prepared for the City of Toronto by Arcadis Professional Services (Canada) Inc., dated November 19, 2024.
- *Survey for Designated Substances and Hazardous Materials, City of Toronto Inspection Services*, 95 The Esplanade, Toronto, Ontario, prepared for the City of Toronto by ECOH Management Inc., dated November 14, 2014. ECOH Project No. 15170-B38.

## 2.3 Asbestos Survey Methodology

### 2.3.1 Asbestos Survey Omissions from Scope

When conducting an asbestos survey, it is standard practice to assume that certain building materials potentially contain asbestos. Depending on the material, this assumption is undertaken for one or more of the following reasons:

1. The material is inaccessible (i.e., underground piping).
2. There is an inherent danger in sampling the material (i.e., high voltage wires, mechanical control centre units).

3. Sampling will compromise the integrity of the building structure or envelope (i.e., roofing felts).

Therefore, for the purpose of this survey, ECOH assumed the following materials (if present) are asbestos-containing:

- Fire doors
- High voltage wiring
- Mechanical packing and gaskets
- Underground services or piping

In addition, no identification was made of asbestos products used in manufacturing processes or operations (i.e., manufacturing equipment, laboratories, etc.).

### 2.3.2 Asbestos Sampling Strategy and Analytical Methods

Bulk samples of potential asbestos-containing materials were collected for analysis during the survey. As per the requirements of Ontario Regulation 278/05, multiple samples (ranging from 1 to 7 depending on quantity and type of material) are required to confirm the absence of asbestos. Only one positive result (i.e., confirming the presence of asbestos) is required to classify a material as asbestos-containing. Therefore, ECOH's sampling strategy involves the collection of sufficient numbers of samples to meet regulatory requirements, followed by instructions to the laboratory to cease analysis when one sample within a series has already proven positive for asbestos. Sampling required a small volume of material to be removed either from a damaged section of suspect material or cut from intact material and then repaired by sealing with tape to prevent fibre release. The collected samples were placed in plastic bags and sealed during shipment to an independent laboratory. A formal chain of custody procedure was maintained between ECOH and the sub-contract laboratory during sample transport. Samples were then analyzed following the analytical procedure prescribed by the Regulation 278/05, U.S. Environmental Protection Agency Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials. June 1993. Although not required by provincial regulation, all laboratories used by ECOH are accredited under the U.S. National Voluntary Laboratory Accreditation Program (NVLAP) to ensure consistent, accurate and defendable results.

Where possible, ECOH has used existing analytical data, rather than collect and analyze additional bulk samples. Although historical sample information is used to confirm the presence of asbestos in suspect materials, historical samples are not used in defining materials as non-asbestos. Historical sample results were only used if the surveyor, based on his/her experience, could clearly associate the sample information with the material present at the Site.

The collection of samples was performed with sufficient frequency to obtain a general pattern of asbestos use within the building. Due to building renovations or modifications that may have occurred in the past, the consistency of the application of asbestos materials may not be uniform throughout the entire facility. It is important to note that without sampling every wall,

pipe section, ceiling tile, etc., it is not possible to identify the asbestos content in every material present in the building. For this reason, similar materials to those already sampled elsewhere in the building were visually identified as being the same as those samples without additional analysis.

The Chain of Custody and the Certificate of Analysis, which details analytical results referenced in the findings section, for all bulk sampling is presented within Appendix II - Results of Bulk Sample Analysis for Asbestos & Lead.

The recommendations in this report take into consideration the condition and accessibility of the asbestos material as well as other factors such as water damage, vibration, air movement and general activities in the area.

Where ACM is found to be in GOOD condition and not likely to deteriorate or fall, the general recommendation is to re-evaluate the condition of the material on an annual basis. This recommendation is subject to change if the material is located in a manner that persons untrained in asbestos awareness could physically damage it.

Where the ACM is found to be damaged, a recommendation to have the material repaired, removed, encased, or encapsulated is offered. The recommendation will also indicate which asbestos safety precautions (i.e., Type 1, Type 2 or Type 3) should be undertaken when performing the remedial work.

## 2.4 Mould Assessment

A visual mould assessment of the facility was carried out during this survey included a visual assessment and sampling, if required, but did not include intrusive investigation (i.e., test-cuts).

## 2.5 Survey of Other Hazardous Materials

Materials suspected of containing Designated Substances and Hazardous Materials, other than asbestos, were identified by appearance, age, and knowledge of historic applications in building construction and equipment design.

# 3. FINDINGS

## 3.1 Asbestos

The following is a brief discussion of the extent to which asbestos-containing materials (ACM) were identified in the Project Area. The discussion is organized under the headings of materials that are generally suspected of containing asbestos. Please refer to Table 2 for sample details and laboratory analysis results.

**Table 2: Summary of Analysis of Asbestos Bulk Samples**

| Sample Number | Sample Location | Sample Description | Results |
|---|---|---|---|
| 29001-ASB-01A | Lower Floor (Loc. 1-01) | Drywall Joint Compound Wall | None Detected |

| Table 2: Summary of Analysis of Asbestos Bulk Samples | | | |
|---|---|---|---|
| **Sample Number** | **Sample Location** | **Sample Description** | **Results** |
| 29001-ASB-01B | Lower Floor (Loc. 1-01) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-01C | Lower Floor (Loc. 1-01) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-01D | Upper Floor (Loc. 1-02) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-01E | Upper Floor (Loc. 1-02) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-01F | Pump Room (Loc. 1-09) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-01G | Electrical Room (Loc. 1-09) | Drywall Joint Compound Wall | None Detected |
| 29001-ASB-02A | Kitchen (Loc. 1-04) | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks | None Detected |
| 29001-ASB-02B | Kitchen (Loc. 1-04) | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks | None Detected |
| 29001-ASB-02C | Kitchen (Loc. 1-04) | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks | None Detected |
| 29001-ASB-03A | Lower Floor (Loc. 1-01) | Baseboard Mastic | None Detected |
| 29001-ASB-03B | Lower Floor (Loc. 1-01) | Baseboard Mastic | None Detected |
| 29001-ASB-03C | Lower Floor (Loc. 1-01) | Baseboard Mastic | None Detected |
| 29001-ASB-04A | Lower Floor (Loc. 1-01) | Carpet Mastic | None Detected |
| 29001-ASB-04B | Upper Floor (Loc. 1-02) | Carpet Mastic | None Detected |
| 29001-ASB-04C | Upper Floor (Loc. 1-02) | Carpet Mastic | None Detected |
| 29001-ASB-05A | Entrance (Loc. 1-03) | Ceramic Tile Grout | None Detected |
| 29001-ASB-05B | Entrance (Loc. 1-03) | Ceramic Tile Grout | None Detected |
| 29001-ASB-05C | Entrance (Loc. 1-03) | Ceramic Tile Grout | None Detected |
| 29001-ASB-06A | Exterior (Loc. 0-00) | Grey Door Caulking | None Detected |
| 29001-ASB-06B | Exterior (Loc. 0-00) | Grey Door Caulking | None Detected |
| 29001-ASB-06C | Exterior (Loc. 0-00) | Grey Door Caulking | None Detected |
| 29001-ASB-07A | Kitchen (Loc. 1-04) | White Sink Caulking | None Detected |
| 29001-ASB-07B | Kitchen (Loc. 1-04) | White Sink Caulking | None Detected |

| Table 2: Summary of Analysis of Asbestos Bulk Samples | | | |
|---|---|---|---|
| **Sample Number** | **Sample Location** | **Sample Description** | **Results** |
| 29001-ASB-07C | Kitchen (Loc. 1-04) | White Sink Caulking | None Detected |
| 29001-ASB-08A | Kitchen (Loc. 1-04) | Sink Mastic | None Detected |
| 29001-ASB-08B | Kitchen (Loc. 1-04) | Sink Mastic | None Detected |
| 29001-ASB-08C | Kitchen (Loc. 1-04) | Sink Mastic | None Detected |
| | - shading indicates sample result positive for asbestos (if applicable) | | |

### 3.1.1 Spray Applied Fireproofing or Thermal Insulation (Friable)

Spray applied fireproofing was not observed within the Project Area at the time of the assessment.

### 3.1.2 Thermal Mechanical Insulation (Friable)

Various non-asbestos mechanical insulations are present within the Project Area. The following presents a brief description of the mechanical insulations and the systems to which they are applied. Thermal mechanical insulation may be present within concealed conditions of the Project Area (i.e., above fixed ceilings, within wall cavities, pipe chases, etc.) and may not be denoted on Survey Drawings included as Appendix III.

#### 3.1.2.1 Piping Systems

Pipe fittings (which may include elbows, valves, tees, hangers, etc.) observed throughout the Project Area were observed to be not insulated or insulated with non-asbestos materials (e.g., fibreglass, foam, etc.).

Straight sections of pipe observed throughout the Project Area were observed to be not insulated or insulated with non-asbestos materials (e.g., fiberglass, foam, etc.).

#### 3.1.2.2 Duct Systems

Ducts observed throughout the Project Area were observed to be not insulated or insulated with non-asbestos materials (e.g., fiberglass, foam, etc.).

#### 3.1.2.3 Mechanical Equipment

Mechanical equipment observed throughout the Project Area were observed to be not insulated or insulated with non-asbestos materials (e.g., fiberglass, foam, etc.).

## 3.2 Asbestos Cement Products (Non-Friable)

Asbestos cement products were not observed within the Project Area at the time of the assessment.

## 3.3 Acoustic Ceiling Tiles (Friable)

Acoustic ceiling tiles – 2'x4' short random fissures and pinpricks were observed within the Project Area. This material was composed of fiberglass and not expected to contain asbestos.

## 3.4 Vinyl Floor Tiles (Non-Friable)

Vinyl floor tiles were not observed within the Project Area at the time of the assessment.

## 3.5 Vinyl Sheet Flooring (Potentially-Friable)

Vinyl sheet flooring 3 – light grey with dark grey streaks was observed within the Project Area. Three (3) representative samples of this material were collected (29001-ASB-02A-C) and determined by laboratory analysis to be non-asbestos.

## 3.6 Drywall Joint Compound (DJC) (Non-Friable)

Drywall with joint compound was observed on walls and ceilings throughout the Project Area. Seven (7) representative samples of joint compound were collected (29001-ASB-01A-G) and determined by laboratory analysis to be non-asbestos.

This material was also previously sampled (15170-B38-01A-G & 15170-B38-02A-D) and determined by laboratory analysis to be non-asbestos.

## 3.7 Grout (Non-Friable)

Ceramic tiles with grout were observed within the Project Area. Three (3) representative samples of the grout were collected (29001-ASB-05A-C) and determined by laboratory analysis to be non-asbestos.

## 3.8 Plaster (Non-Friable)

Plaster was not observed within the Project Area at the time of the assessment.

## 3.9 Mortar (Non-Friable)

Mortar was not observed within the Project Area at the time of the assessment.

## 3.10 Mastic (Non-friable)

Three (3) distinct applications of mastic were observed within the Project Area:

- Baseboard mastic. Three (3) representative samples of this material were collected (29001-ASB-03A-C) and determined by laboratory analysis to be non-asbestos.
- Carpet mastic. Three (3) representative samples of this material were collected (29001-ASB-04A-C) and determined by laboratory analysis to be non-asbestos.
- Sink mastic. Three (3) representative samples of this material were collected (29001-ASB-08A-C) and determined by laboratory analysis to be non-asbestos.

## 3.11 Firestop/Caulking (Non-Friable)

Three (3) distinct applications of caulking were observed within the Project Area:

- Grey caulking on windows and doors. Three (3) representative samples of this material were collected (29001-ASB-06A-C) and determined by laboratory analysis to be non-asbestos.
- White caulking on sink. Three (3) representative samples of this material were collected (29001-ASB-07A-C) and determined by laboratory analysis to be non-asbestos.

## 3.12 Lead

Samples of any suspected lead-containing surface coatings were collected and submitted for laboratory analysis by Flame Atomic Absorption Spectroscopy (bulk samples) during this survey. A result from either sample exceeding 1000ppm lead content indicates the material is lead-containing. All laboratories used by ECOH are accredited under the U.S. EPA National Environmental Lead Laboratory Accreditation Program (NLLAP) and/or American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) to ensure consistent, accurate and defensible results.

Please refer to Table 3 for sample details and laboratory analysis results for paints scheduled for potential disturbance. For the laboratory chain of custody and the certificate of analysis, refer to Appendix II - Results of Bulk Sample Analysis for Asbestos & Lead.

**Table 3: Summary of Analysis for Lead Samples**

| Sample Number | Location | Description | Analytical Results |
|---|---|---|---|
| 29001-Pb-01 | Lower Floor (Loc. 1-01) | Light Green Paint on Wall | <5 ppm |
| 29001-Pb-02 | Lower Floor (Loc. 1-01) | Teal Paint on Wall | 8 ppm |
| 29001-Pb-03 | Upper Floor (Loc. 1-02) | Light Grey Paint on Wall | <5 ppm |
| 29001-Pb-04 | Upper Floor (Loc. 1-02) | Yellow Paint on Wall | <5 ppm |
| 29001-Pb-05 | Entrance (Loc. 1-03) | Ceramic Tile grout | <5 ppm |
| | - shading indicates sample result positive for lead (if applicable) | | |

No major sources of lead or lead-containing products were observed during this survey. However, lead may be present in:

- Internal batteries associated with emergency lighting system,
- Ceramic tile glazing,
- Wiring connectors and electric cable sheathing, and
- Solder joints on copper piping.

## 3.13 Mercury

Mercury may be present in minor quantities throughout the Project Area in the following forms:

- As a possible constituent of paints and adhesives.

## 3.14 Silica

Free crystalline silica, in the form of common construction sand, is present in all concrete and masonry products within the Project Area.

## 3.15 Mould

Mould-affected building materials were not identified within the Project Area at the time of assessment.

## 3.16 Ozone Depleting Substances (ODS)

Ozone depleting substances may be present in refrigeration and cooling units.

## 3.17 Polychlorinated Biphenyls (PCBs)

Fluorescent light ballasts were not observed within the Project Area.

## 3.18 Other Designated Substances and Hazardous Materials

The following Designated Substances and Hazardous Materials were not noted in significant quantities or forms, if at all, during this survey; Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxide, Isocyanates, Urea Formaldehyde Foam Insulation (UFFI), and Vinyl Chloride Monomer.

If present on site in insignificant quantities or forms, these Designated Substances and Hazardous Materials would not be expected to pose an immediate or potential risk to human health. Adequate worker protection should be achieved when implementing general health and safety precautions during general demolition or renovation activities.

# 4. CONCLUSIONS AND RECOMMENDATIONS

The following recommendations meet the requirements of the Occupational Health and Safety Act. Asbestos recommendations meet the requirements of the Designated Substance – Regulation respecting *Asbestos on Construction Projects and in Buildings and Repair Operations*, Ontario Regulation 278/05. Based upon review of historical reports, as well as analytical results and observations of this assessment, ECOH offers the following recommendations.

## 4.1 Asbestos

Based on survey results, the following conclusions are made with regards to asbestos-containing materials (ACMs) within the Project Area:

- As the materials present in the Project Area anticipated for disturbance are non-asbestos containing, removal or disturbance of these materials does not require asbestos safety procedures. However, general health and safety precautions including, in part, the use of dust suppression techniques and appropriate respiratory protection.

  During project work, if any additional materials are found beyond those which are described in this report or described in the existing inventory of asbestos-containing materials (i.e., materials not previously identified, or materials that are not homogenous to those previously identified, or materials that become revealed during the work), additional testing for asbestos-content should be completed immediately and prior to disturbance of the material. Alternatively, these materials can be assumed to contain asbestos, and the appropriate level of asbestos safety precautions must be implemented.

## 4.2 Lead

Any work involving the disturbance of building materials confirmed to be lead-containing or containing trace amounts of lead should be conducted following recommendations detailed within the Ministry of Labour document Guideline - *Lead on Construction Projects*, dated April 2011, and the Environmental Abatement Council of Canada (EACC) *Lead Guideline*, dated October 2014.

Renovation, demolition or general construction work involving the removal of non-lead-based paints (i.e., trace concentrations of lead below 0.1%, or 1000 ppm, by dry weight) can be completed without lead specific safety precautions provided that:

- Work does not include 'fume generating activities' (heat producing) such as welding, torching, burning, high temperature cutting, etc.,
- Dust levels are maintained below 3 mg/m$^3$, and
- General health and safety construction procedures are implemented, which would include dust suppression methods, proper respiratory protection (minimum of a 1/2-face respirator) and protective clothing, as is appropriate for the work being completed.

## 4.3 Mercury

Avoid direct skin contact with mercury and avoid inhalation of mercury vapour. Dispose of mercury following requirements of the Canada Environmental Protection Act, the Transportation of Dangerous Goods Act and provincial legislative requirements that may be applicable.

## 4.4 Silica

Cutting, grinding, or demolition of materials containing silica should be completed using general health and safety precautions including the use of dust suppression techniques and appropriate respiratory protection, as is appropriate for the work being completed.

Removal of building materials containing silica should be completed following recommendations detailed within the Ministry of Labour document, *Guideline - Silica on Construction Projects*, dated, April 2011.

# 5. STATEMENT OF LIMITATIONS

Due to the nature of building construction, and on-going building activities, some limitations exist to the thoroughness of a building assessment. The field observations, measurements and analysis are considered sufficient in detail and scope to form a reasonable basis for the findings and conclusions presented in this report. The observations, results and conclusions drawn by ECOH Management Inc. (ECOH) are limited to the specific scope of work for which ECOH was retained and are based solely on information generated as a result of the specific scope of work authorized by the City of Toronto. Only those items that are capable of being observed and are reasonably obvious to ECOH personnel or have been identified to ECOH by other parties, can be reported. ECOH has exercised a degree of thoroughness and competence that is consistent with the profession during the execution of this assessment. ECOH considers the opinions and information as they are presented in this report to be factual at the time of the assessment. The conclusions are limited to the specific locations of where testing and/or observations were completed during the course of the assessment.

It is important to note that work was completed with the utmost care and our extensive expertise in carrying out assessments. ECOH believes that the information collected during the assessment concerning the Work Area is reliable. No other warranties are implied or expressed. ECOH, to the best of its knowledge, believes this report to be accurate, however, ECOH cannot guarantee the completeness or accuracy of information supplied to ECOH by third parties. It should also be noted that any investigation regarding the presence of hazardous materials in the work area is based on interpretation of conditions determined at specific sampling locations, and conditions may vary between sampling locations.

ECOH is an Environmental Consulting Company and as such any results or conclusions presented in this report should not be construed as legal advice. The material in this report reflects ECOH's professional interpretation of information available at the time of report preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. ECOH accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. Should additional information become available that suggests other environmental issues of concern beyond that described in this report, ECOH retains the right to review this information and modify conclusions and recommendations presented in this report accordingly.

# 6. CLOSURE

We trust this report meets your requirements. If you have any question, please contact the undersigned at 905-795-2800.

**ECOH**
Environmental Consulting
Occupational Health

**Prepared by:**

**Joey Huynh, B.Sc. (Hons.)**
**Senior Environmental Scientist**

**Reviewed by:**

**Steve Bizi**
**Senior Project Manager**

# APPENDIX I

## Hazardous Materials Room by Room Inventory Sheet

APPENDIX I - HAZARDOUS MATERIALS ROOM BY ROOM INVENTORY SHEET

| | | | |
|---|---|---|---|
| Building Address | 95 The Esplanade, Toronto | Date(s) of Current Assessment: | December 20, 2024 |
| Building Name | Toronto Water Offices | Organization completing Asbestos Reassessment: | ECOH Inc. |

Summary of Findings

| Location Number | Location Name | Building System | Material Observed | Potential Hazardous Material | Sample ID | Asbestos Type/Content | Quantity | Condition | Notes/Required Action |
|---|---|---|---|---|---|---|---|---|---|
| 0-00 | Exterior | Windows | Door and Window Caulking | Asbestos | 29001-ASB-06A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 0-00 | Exterior | Wall | N/A | N/A | N/A | N/A | N/A | N/A | |
| 0-00 | Exterior | Roof | N/A | N/A | N/A | N/A | N/A | N/A | Multi-storey facility, roof is not City of Toronto property. |
| 1-01 | Lower Open Office Area | Floor | Carpet Mastic | Asbestos | 29001-ASB-04A | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-01 | Lower Open Office Area | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 (None Detected) | N/A | N/A | |
| 1-01 | Lower Open Office Area | Wall | Drywall Joint Compound | Asbestos | 29001-ASB-01A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-01 | Lower Open Office Area | Wall | Baseboard Mastic | Asbestos | 29001-ASB-03A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-01 | Lower Open Office Area | Wall | Paint - Light Green | Lead | 29001-Pb-01 | <5 ppm | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-01 | Lower Open Office Area | Wall | Paint - Teal | Lead | 29001-Pb-02 | 8 ppm | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-01 | Lower Open Office Area | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-02 | Upper Open Office Area | Floor | Carpet Mastic | Asbestos | 29001-ASB-04B,C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-02 | Upper Open Office Area | Wall | Drywall Joint Compound | Asbestos | 15170-B38-01G 15170-B38-02D | None Detected | N/A | N/A | Sampled during ECOH 2014 Reassessment Survey |
| 1-02 | Upper Open Office Area | Wall | Drywall Joint Compound | Asbestos | 29001-ASB-01D, E | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-02 | Upper Open Office Area | Wall | Paint - Light Grey | Lead | 29001-Pb-03 | <5 ppm | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-02 | Upper Open Office Area | Wall | Paint - Yellow | Lead | 29001-Pb-04 | <5 ppm | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-02 | Upper Open Office Area | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-03 | Entrance | Floor | Ceramic Tile | Asbestos | 29001-ASB-05A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-03 | Entrance | Floor | Ceramic Tile | Lead | 29001-Pb-05 | <5 ppm | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-03 | Entrance | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-03 | Entrance | Ceiling | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-04 | Kitchen | Floor | Vinyl Sheet Flooring 2 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | Grey with black streaks, jute backing **Not Observed** |

| Location Number | Location Name | Building System | Material Observed | Potential Hazardous Material | Sample ID | Asbestos Type/Content | Quantity | Condition | Notes/Required Action |
|---|---|---|---|---|---|---|---|---|---|
| 1-04 | Kitchen | Floor | Vinyl Sheet Flooring 3 | Asbestos | 29001-ASB-02A-C | None Detected | N/A | N/A | Light grey with dark grey streaks<br>Sampled during ECOH 2024 DSS |
| 1-04 | Kitchen | Wall | Drywall Joint Compound | Asbestos | 15170-B38-02B | None Detected | N/A | N/A | Sampled during ECOH 2014 Reassessment Survey |
| 1-04 | Kitchen | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-04 | Kitchen | Other | White Sink Caulking | Asbestos | 29001-ASB-07A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-04 | Kitchen | Other | Sink Mastic | Asbestos | 29001-ASB-08A-C | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-05 | Office | Floor | Carpet Mastic | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-04A-C (None Detected) | N/A | N/A | |
| 1-05 | Office | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-05 | Office | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-06 | Hub Room | Floor | Vinyl Sheet Flooring 2 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | Grey with black streaks, jute backing<br>**Not Observed** |
| 1-06 | Hub Room | Floor | Vinyl Sheet Flooring 3 | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-02A-C (None Detected) | N/A | N/A | Light grey with dark grey streaks |
| 1-06 | Hub Room | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-06 | Hub Room | Ceiling | N/A | N/A | N/A | N/A | N/A | N/A | no false ceiling observed |
| 1-08 | Electrical Room | Floor | Vinyl Sheet Flooring 2 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | Grey with black streaks, jute backing<br>**Not Observed** |
| 1-08 | Electrical Room | Floor | Vinyl Sheet Flooring 3 | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-02A-C (None Detected) | N/A | N/A | Light grey with dark grey streaks |
| 1-08 | Electrical Room | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-08 | Electrical Room | Wall | Drywall Joint Compound | Asbestos | 29001-ASB-01G | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-08 | Electrical Room | Ceiling | N/A | N/A | N/A | N/A | N/A | N/A | no false ceiling observed |
| 1-09 | Pump Room | Floor | Vinyl Sheet Flooring 2 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | Grey with black streaks, jute backing<br>**Not Observed** |
| 1-09 | Pump Room | Floor | Vinyl Sheet Flooring 3 | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-02A-C (None Detected) | N/A | N/A | Light grey with dark grey streaks |
| 1-09 | Pump Room | Wall | Drywall Joint Compound | Asbestos | 15170-B38-01D-G | None Detected | N/A | N/A | Sampled during ECOH 2014 Reassessment Survey |
| 1-09 | Pump Room | Wall | Drywall Joint Compound | Asbestos | 29001-ASB-01F | None Detected | N/A | N/A | Sampled during ECOH 2024 DSS |
| 1-09 | Pump Room | Ceiling | N/A | N/A | N/A | N/A | N/A | N/A | no false ceiling observed |

APPENDIX I - HAZARDOUS MATERIALS ROOM BY ROOM INVENTORY SHEET

| Location Number | Location Name | Building System | Material Observed | Potential Hazardous Material | Sample ID | Asbestos Type/Content | Quantity | Condition | Notes/Required Action |
|---|---|---|---|---|---|---|---|---|---|
| 1-11a-d | Offices | Floor | Carpet Mastic | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-04A-C (None Detected) | N/A | N/A | |
| 1-11a-d | Offices | Wall | Drywall Joint Compound | Asbestos | 15170-B38-02C | None Detected | N/A | N/A | Sampled during ECOH 2014 Reassessment Survey |
| 1-11a-d | Offices | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-12 | Photocopy Area | Floor | Vinyl Sheet Flooring 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | Grey-green, jute backing **Not Observed** |
| 1-12 | Photocopy Area | Floor | Vinyl Sheet Flooring 3 | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-02A-C (None Detected) | N/A | N/A | Light grey with dark grey streaks |
| 1-12 | Photocopy Area | Wall | Drywall Joint Compound | Asbestos | 15170-B38-02A | None Detected | N/A | N/A | Sampled during ECOH 2014 Reassessment Survey |
| 1-12 | Photocopy Area | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |
| 1-13 | Closet | Floor | Carpet Mastic | Asbestos | Not Sampled | Visually Consistent with 29001-ASB-04A-C (None Detected) | N/A | N/A | |
| 1-13 | Closet | Wall | Drywall Joint Compound | Asbestos | Not Sampled | Visually consistent with 15170-B38-01,02 & 29001-ASB-01A-G (None Detected) | N/A | N/A | |
| 1-13 | Closet | Ceiling | Ceiling Tiles 1 | Asbestos | Not Sampled | Visually Non-ACM | N/A | N/A | 2 x 4 Short random fissure & pinpricks, fibreglass |

| *Surveyor's Field Notes* |
|---|
| |
| |
| |
| |
| |

# APPENDIX II

## Results of Bulk Sample Analysis for Asbestos & Lead

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# Laboratory Analysis Report

To:

**Joey Huynh**
ECOH Management Inc.
75 Courtney Park Drive West
Unit 1
Mississauga, Ontario
L5W 0E3

**EMC LAB REPORT NUMBER:** A113334
**Job/Project Name:** 95 The Esplanade – DSS
**Analysis Method:** Polarized Light Microscopy – EPA 600
**Date Received:** Dec 24/24 **Date Analyzed:** Jan 3/25
**Analyst:** Fabio Anunciacao
**Reviewed By:** Malgorzata Sybydlo

**No. of Phases Analyzed:** 28
**Job No:** 29001
**Number of Samples:** 28
**Date Reported:** Jan 3/25

| Client's Sample ID | Lab Sample No. | Description/Location | Sample Appearance | SAMPLE COMPONENTS (%) | | | |
|---|---|---|---|---|---|---|---|
| | | | | Asbestos Fibres | | Non-asbestos Fibres | Non-fibrous Material |
| 29001-ASB-01A | A113334-1 | Drywall joint compound on wall – lower floor | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01B | A113334-2 | Drywall joint compound on wall – lower floor | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01C | A113334-3 | Drywall joint compound on wall – lower floor | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01D | A113334-4 | Drywall joint compound on wall – upper floor | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01E | A113334-5 | Drywall joint compound on wall – upper floor | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01F | A113334-6 | Drywall joint compound on wall – pump room | White, joint compound | **ND** | | | 100 |
| 29001-ASB-01G | A113334-7 | Drywall joint compound on wall – electrical room | White, joint compound | **ND** | | | 100 |
| 29001-ASB-02A | A113334-8 | Vinyl sheet flooring 3 – light grey with dark grey streaks – kitchen | Grey, vinyl flooring | **ND** | | 10 | 90 |
| 29001-ASB-02B | A113334-9 | Vinyl sheet flooring 3 – light grey with dark grey streaks – kitchen | Grey, vinyl flooring | **ND** | | 10 | 90 |
| 29001-ASB-02C | A113334-10 | Vinyl sheet flooring 3 – light grey with dark grey streaks – kitchen | Grey, vinyl flooring | **ND** | | 10 | 90 |
| 29001-ASB-03A | A113334-11 | Baseboard mastic – lower floor | Yellow, mastic | **ND** | | | 100 |
| 29001-ASB-03B | A113334-12 | Baseboard mastic – lower floor | Yellow, mastic | **ND** | | | 100 |

**EMC LAB REPORT NUMBER:** A113334
**Client's Job/Project Name/No.:** 29001
**Analyst:** Fabio Anunciacao

| Client's Sample ID | Lab Sample No. | Description/Location | Sample Appearance | SAMPLE COMPONENTS (%) | | | |
|---|---|---|---|---|---|---|---|
| | | | | Asbestos Fibres | | Non-asbestos Fibres | Non-fibrous Material |
| 29001-ASB-03C | A113334-13 | Baseboard mastic – lower floor | Yellow, mastic | **ND** | | | 100 |
| 29001-ASB-04A | A113334-14 | Carpet mastic – lower floor | Off white and colourless, mastic | **ND** | | | 100 |
| 29001-ASB-04B | A113334-15 | Carpet mastic – upper floor | Off white and colourless, mastic | **ND** | | | 100 |
| 29001-ASB-04C | A113334-16 | Carpet mastic – upper floor | Off white and colourless, mastic | **ND** | | | 100 |
| 29001-ASB-05A | A113334-17 | Ceramic tile grout – entrance vestibule | Grey, cementitious material | **ND** | | | 100 |
| 29001-ASB-05B | A113334-18 | Ceramic tile grout – entrance vestibule | Grey, cementitious material | **ND** | | | 100 |
| 29001-ASB-05C | A113334-19 | Ceramic tile grout – entrance vestibule | Grey, cementitious material | **ND** | | | 100 |
| 29001-ASB-06A | A113334-20 | Grey door caulking – entrance vestibule | Grey, caulking | **ND** | | | 100 |
| 29001-ASB-06B | A113334-21 | Grey door caulking – entrance vestibule | Beige, caulking | **ND** | | | 100 |
| 29001-ASB-06C | A113334-22 | Grey door caulking – entrance vestibule | Grey, caulking | **ND** | | | 100 |
| 29001-ASB-07A | A113334-23 | White sink caulking – kitchen | White, caulking | **ND** | | | 100 |
| 29001-ASB-07B | A113334-24 | White sink caulking – kitchen | White, caulking | **ND** | | | 100 |
| 29001-ASB-07C | A113334-25 | White sink caulking – kitchen | White, caulking | **ND** | | | 100 |

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# Laboratory Analysis Report

**EMC LAB REPORT NUMBER:** A113334
**Client's Job/Project Name/No.:** 29001
**Analyst:** Fabio Anunciacao

| Client's Sample ID | Lab Sample No. | Description/Location | Sample Appearance | SAMPLE COMPONENTS (%) | | | |
|---|---|---|---|---|---|---|---|
| | | | | Asbestos Fibres | | Non-asbestos Fibres | Non-fibrous Material |
| 29001-ASB-08A | A113334-26 | Sink mastic – kitchen | White, mastic | **ND** | | | 100 |
| 29001-ASB-08B | A113334-27 | Sink mastic – kitchen | White, mastic | **ND** | | | 100 |
| 29001-ASB-08C | A113334-28 | Sink mastic – kitchen | White, mastic | **ND** | | | 100 |

**Note:**
1. Bulk samples are analyzed using Polarized Light Microscopy (PLM) and dispersion staining techniques. The analytical procedures are in accordance with EPA 600/R-93/116 method.
2. The results are only related to the samples analyzed. **ND** = None Detected (no asbestos fibres were observed), **NA** = Not Analyzed (analysis stopped due to a previous positive result).
3. This report may not be reproduced, except in full without the written approval of EMC Scientific Inc. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. Government.
4. The Ontario Regulatory Threshold for asbestos is 0.5%. The limit of quantification (LOQ) is 0.5%.

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# CHAIN OF CUSTODY AND ASBESTOS ANALYSIS REQUEST FORM

EMC Lab Report No: A113334

| | | | | | |
|---|---|---|---|---|---|
| Contact Name: | Joey Huynh | Phone: | 416-371-6377 | Job/Project Name: | 95 The Esplanade - DSS |
| Company: | ECOH Management Inc. | Fax No: | 905-795-2800 | Job/Project No: | 29001 |
| Address: | 75 Courtney Park West | Email: | juynh@ecoh.ca<br>sbizi@ecoh.ca<br>arachmadsyah@ecoh.ca | Special Instructions: | **Stop Positive Analyzed all Layers if applicable** |
| City, Province Postal Code: | Mississauga, Ontario | Please select (✔): ( ) Fax Results (✔) Email Results | | *All results will also be sent by mail.* | |

| Sample ID | Description/Location | Date Sampled | Sample Type | Air Volume (L) | Turnaround Time (✔) | | | | Analysis Requested * | SP ** | For Lab Use |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 4hr | 24 hr | 48 hr | STD | | | |
| 29001-ASB-01A | Drywall Joint Compound on Wall – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01B | Drywall Joint Compound on Wall – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01C | Drywall Joint Compound on Wall – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01D | Drywall Joint Compound on Wall – Upper Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01E | Drywall Joint Compound on Wall – Upper Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01F | Drywall Joint Compound on Wall – Pump Room | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-01G | Drywall Joint Compound on Wall – Electrical Room | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-02A | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-02B | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-02C | Vinyl Sheet Flooring 3 – Light Grey with Dark Grey Streaks – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-03A | Baseboard Mastic – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-03B | Baseboard Mastic – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-03C | Baseboard Mastic – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29001-ASB-04A | Carpet Mastic – Lower Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-04B | Carpet Mastic – Upper Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-04C | Carpet Mastic – Upper Floor | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-05A | Ceramic Tile Grout – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-05B | Ceramic Tile Grout – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-05C | Ceramic Tile Grout – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-06A | Grey Door Caulking – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-06B | Grey Door Caulking – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-06C | Grey Door Caulking – Entrance Vestibule | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-07A | White Sink Caulking – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-07B | White Sink Caulking – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-07C | White Sink Caulking – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-08A | Sink Mastic – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-08B | Sink Mastic – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |
| 29001-ASB-08C | Sink Mastic – Kitchen | December 20, 2024 | Asbestos Bulk | N/A | | | | ✔ | EPA-600/R-93/116 | ✔ | |

| | |
|---|---|
| Sample Collected by: Joey Huynh, Abia Rachmadsyah | **Total Number of Samples Submitted: 28** |
| Relinquished by: Abia Rachmadsyah Date/Time: October 23, 2024 | Received by: Date/Time: |
| Relinquished by: Date/Time: | Received at lab by: AA Date/Time: DEC 23/24 4p |
| Authorized by Client (Signature): _____ | Print Name: Date: |
| Sample Shipped by: Date/Time: | Shipped *via*: ( ) Courier by _____, (✔) Drop off, ( ✔ ) Other _____ |
| Sample Condition upon Receipt at Lab ( ✔ ): ( ✔ ) Acceptable, ( ) Unacceptable (Explain): _____ | |

* Please indicate if sample to be analyzed by layer **(PLM-L)** or homogenized **(PLM-H)** when applicable.

** SP – STOP POSITIVE please indicate if required

CADUCEON ENVIRONMENTAL LABORATORIES

Client committed. Quality assured. Proudly Canadian.

# CERTIFICATE OF ANALYSIS

## Final Report

**C.O.C.:** -

**REPORT No: 24-039383 - Rev. 0**

**Report To:**
EMC Scientific Inc.
5800 Ambler Dr. #100
Mississauga, ON L4W 4J4

**CADUCEON Environmental Laboratories**
2378 Holly Lane
Ottawa, ON K1V 7P1

**Attention: Alister Haddad**

DATE RECEIVED: 2024-Dec-24
DATE REPORTED: 2024-Dec-31
SAMPLE MATRIX: Paint Chips

CUSTOMER PROJECT: 95 The Esplanade - DSS
P.O. NUMBER: 29001

| Analyses | Qty | Site Analyzed | Authorized | Date Analyzed | Lab Method | Reference Method |
|---|---|---|---|---|---|---|
| ICP/OES (Solid) | 5 | OTTAWA | APRUDYVUS | 2024-Dec-30 | D-ICP-02 | EPA 6010 |

R.L. = Reporting Limit
NC = Not Calculated
Test methods may be modified from specified reference method unless indicated by an *

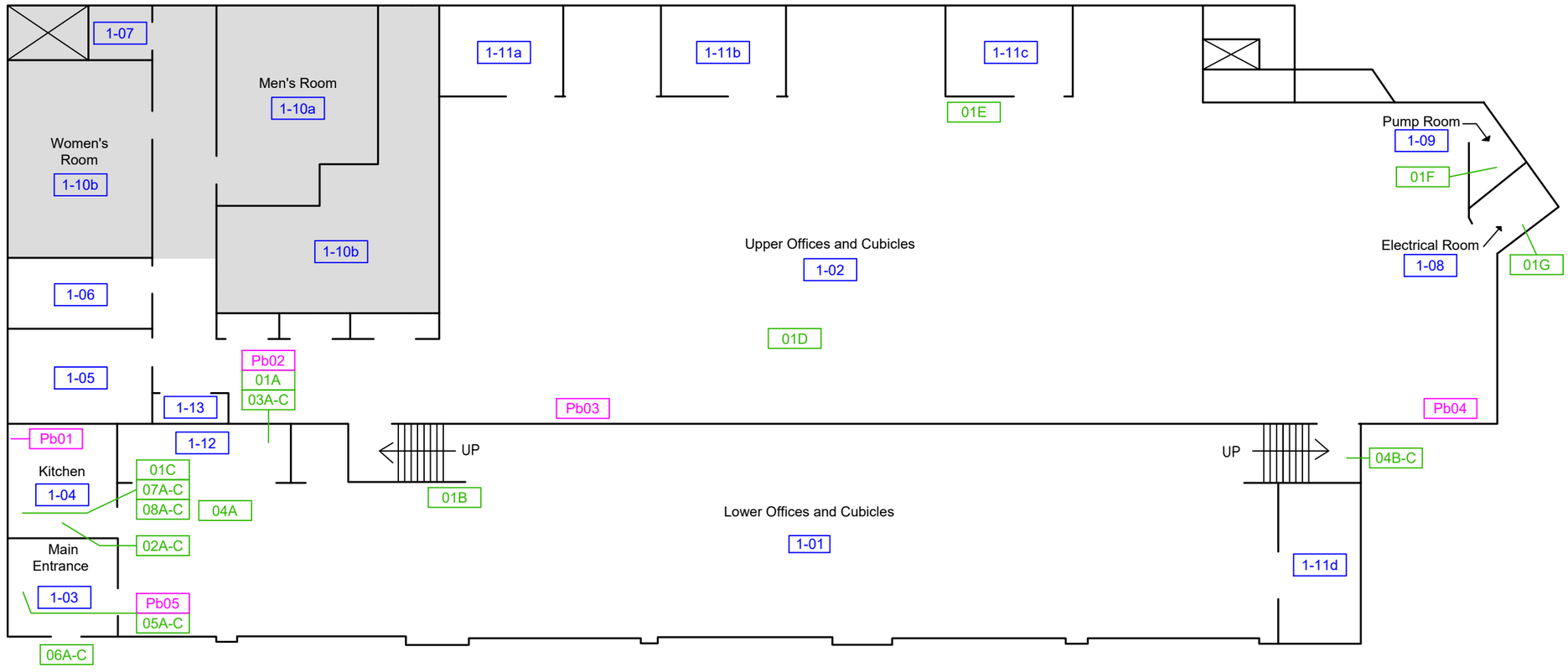
| Client I.D. | Sample I.D. | Date Collected | Parameter: Lead |
|---|---|---|---|
| | | Units | ppm |
| | | R.L. | 5 |
| | | | - |
| 29001-Pb-01 Light green on wall - lower floor | 24-039383-1 | 2024-Dec-20 | <5 |
| 29001-Pb-02 Teal on wall - lower floor | 24-039383-2 | 2024-Dec-20 | 8 |
| 29001-Pb-03 Light grey on wall - upper floor | 24-039383-3 | 2024-Dec-20 | <5 |
| 29001-Pb-04 Yellow on wall - upper floor | 24-039383-4 | 2024-Dec-20 | <5 |
| 29001-Pb-05 - Ceramic tile grout - entrance vestibule | 24-039383-5 | 2024-Dec-20 | <5 |

M. Dubien

**Michelle Dubien**
**Data Specialist**

# APPENDIX III

Drawings




## Legend

| | |
|---|---|
| 1-01 | Location Numbers |
| 01A | Asbestos Bulk Sample Location (29001-ASB-xx) |
| Pb01 | Lead Bulk Sample Location (29001-Pb-xx) |
| | Outside of Project Scope |

The drawing does not illustrate locations of drywall joint compound, plaster, window caulking or roofing materials, for reasons discussed in Section 6 of the Standard Operating Procedure for Asbestos Reassessment Surveys. Please refer to the Asbestos Reassessment Survey Form in Appendix I for information regarding the locations and asbestos-content of these materials.

All information relating to room size and location is approximate and for visual aid only. ECOH does not guarantee the drawing to be complete, absolute, accurate or current. The drawing should not be used by any party in lieu of obtaining architectural drawings.

# Figure 1

Ground Floor Plan

**BUILDING NAME:**
Senior Housing Co-op Building -
City of Toronto Inspection Services

**LOCATION:**
95 The Esplanade,
Toronto, Ontario

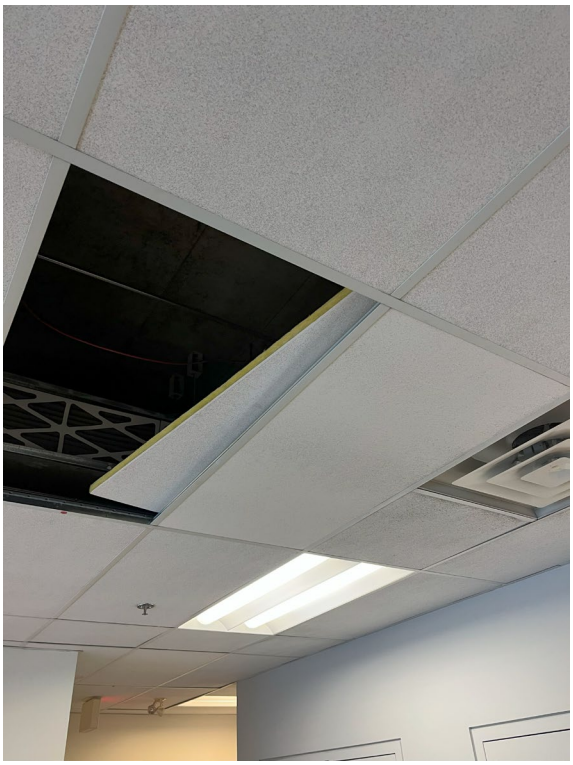
**PROJECT:**
Pre-Renovation Designated Substances Survey

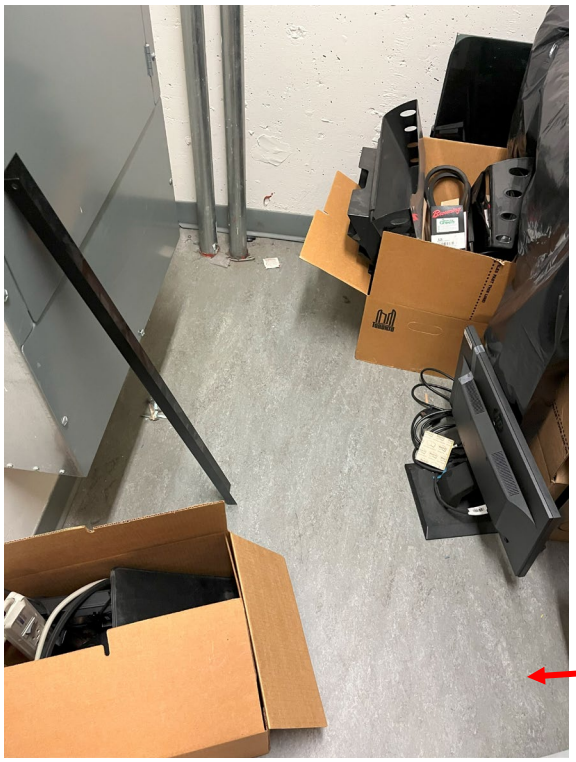
| | | | |
|---|---|---|---|
| **CLIENT:** City of Toronto | | | |
| **PROJECT NUMBER:** 29001 | **DATE:** Jan. 2025 | **DRW BY:** EM | |
| **CAD FILE:** FIG1 P29001 95 The Esplanade | **SCALE:** Not to Scale | **CHK BY:** JH | |

# APPENDIX IV

## Site Photographs

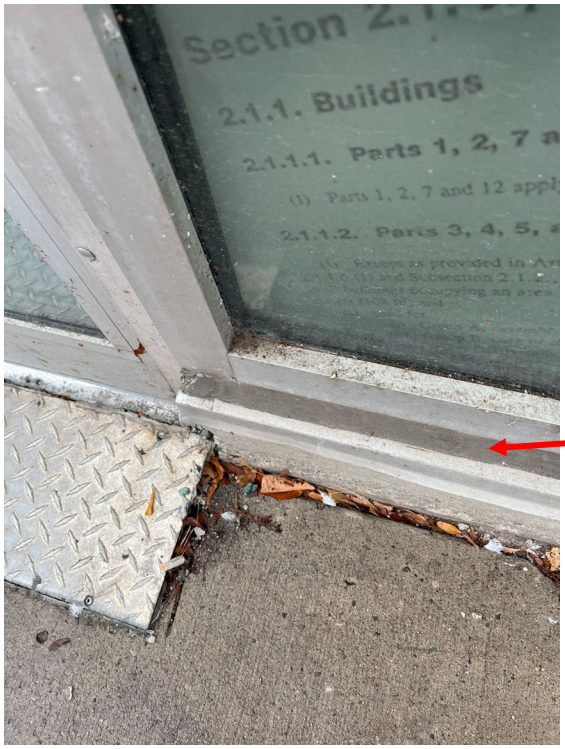
| **Client Name:** | **Site Location:** | **Project No.** |
|---|---|---|
| City of Toronto | Toronto Water Offices<br>95 The Esplanade, Toronto, Ontario | 29001 |

| **Photo No. 1.** | |
|---|---|
| **Date:**<br>December 20, 2024 |  |
| **Location:**<br>Throughout Project Area | |
| **Description:**<br><br>Non-asbestos fiberglass ceiling tiles (CT1). | |

| **Photo No. 2.** | |
|---|---|
| **Date:**<br>December 20, 2024 |  |
| **Location:**<br>Electrical Room (Loc. 1-08) | |
| **Description:**<br><br>Non-asbestos vinyl sheet flooring (VSF3). | |

| **Client Name:** | **Site Location:** | **Project No.** |
|---|---|---|
| City of Toronto | Toronto Water Offices<br>95 The Esplanade, Toronto, Ontario | 29001 |

| **Photo No. 3.** |
|---|
| **Date:**<br>December 20, 2024 |
| **Location:**<br>Building Exterior (Loc. 0-00) |
| **Description:**<br><br>Non-asbestos grey window caulking. |




| **Photo No. 4.** |
|---|
| **Date:**<br>December 20, 2024 |
| **Location:**<br>Kitchen (Loc. 1-04) |
| **Description:**<br><br>Non-asbestos sink mastic. |