



## **ADDENDUM 1**

### **PRE-RENOVATION DESIGNATED SUBSTANCES SURVEY AND HAZARDOUS MATERIALS SURVEY**

**SPADINA HOUSE MUSEUM – STONE GARAGE  
285 SPADINA ROAD  
TORONTO, ON**

**Prepared for:**  
**City of Toronto**  
Corporate Real Estate Management  
55 John Street, 2<sup>nd</sup> Floor  
Toronto, ON M5V 3C6

**Attention:** Inder Bhamra | Environmental Coordinator

ECOH Management Inc.  
Project Number: 27831

September 14, 2023

## ADDENDUM 1

### PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY

CITY OF TORONTO

SPADINA HOUSE MUSEUM – STONE GARAGE | 285 SPADINA ROAD | TORONTO, ON

ECOH PROJECT NUMBER: 27831

SEPTEMBER 2023

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## 1. INTRODUCTION

ECOH Management Inc. (ECOH) was retained by the City of Toronto to conduct supplementary asbestos bulk sampling at the Spadina House Museum – Stone Garage, located at 285 Spadina Road, Toronto, Ontario, (the “Project Area”). The objectives of the supplementary survey were to collect samples of blow-in insulation and exterior stucco wall for analysis for potential asbestos-content due to a revised scope of work and planned renovations to the facility 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.

Mr. Andrew Walsh of ECOH performed the supplementary assessment on August 4, 2023.

This supplementary survey / addendum report is intended to be read and interpreted in conjunction with the findings and recommendations of the ***Pre-Renovation Designated Substances and Hazardous Materials Survey, Spadina House Museum – Stone Garage, 285 Spadina Road, Toronto, ON report, prepared by ECOH (ECOH Project No. 26974), dated June 20, 2023.*** Samples collected during the current assessment are supplementary to samples collected during the previous assessment of the Project Area.

## 2. SUPPLEMENTARY TESTING

Materials previously outside of the scope of work during the original assessment were collected and submitted to a laboratory to determine asbestos content. Suspect asbestos-containing materials collected and submitted for analysis included blow-in attic insulation and exterior stucco wall finishes.

The findings and discussions presented herein are supplemental to those presented in the original report, dated June 20, 2023.

## 3. FINDINGS AND DISCUSSION

Refer to Table 1 for sample details and laboratory analysis results for samples collected during this assessment. Laboratory analysis results for asbestos sampling completed during this assessment are presented in Appendix I (Results of Bulk Sample Analysis for Asbestos).

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## 3.1 Asbestos

The following materials within the Project Area were sampled during the current assessment and analysed for asbestos content:

| TABLE 1: Summary of Asbestos Analysis of Bulk Samples |   |                       |               |
|---|---|-----------------------|---------------|
| Sample Number   | Sample Location   | Sample Description    | Results       |
| 27831-ASB-01A   | Garage - Attic  | Blown-in Insulation   | None-Detected |
| 27831-ASB-01B   | Garage - Attic  | Blown-in Insulation   | None Detected |
| 27831-ASB-01C   | Garage - Attic  | Blown-in Insulation   | None Detected |
| 27831-ASB-01D   | Garage - Attic  | Blown-in Insulation   | None Detected |
| 27831-ASB-01E   | Garage - Attic  | Blown-in Insulation   | None Detected |
| 27831-ASB-02A   | Garage - Exterior   | Exterior Stucco White | None Detected |
|   |   | Grey Mortar           | None Detected |
| 27831-ASB-02B   | Garage - Exterior   | Exterior Stucco White | None Detected |
|   |   | Exterior Stucco Grey  | None Detected |
|   |   | Grey Mortar           | None Detected |
| 27831-ASB-02C   | Garage - Exterior   | Exterior Stucco White | None Detected |
|   |   | Grey Mortar           | None Detected |
| 27831-ASB-02D   | Garage - Exterior   | Exterior Stucco White | None Detected |
|   |   | Grey Mortar           | None Detected |
| 27831-ASB-02E   | Garage - Exterior   | Exterior Stucco       | None Detected |
|   |   | Grey Mortar           | None Detected |
|   | Shading indicates sample result positive for asbestos (if applicable) |                       |               |

## 4. 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 as well as applicable guidance documents for mould including the Environmental Abatement Council of Canada (EACC), *EACC Mould Abatement Guidelines* – Edition 3 (2015). Based upon review of historical reports, as well as analytical results and observations of this assessment, ECOH offers the following for your consideration:

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## **4.1 Asbestos**

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

- As asbestos-containing materials (ACM) are present within the Project Area as per previous assessments, ECOH recommends that all workers have asbestos awareness and respirator training before commencing work. Asbestos awareness training will provide on-site workers the understanding of asbestos-related health and safety issues; the ability to recognize ACM and any situation that may present a potential asbestos exposure, and' the ability to respond appropriately to an inadvertent disturbance of ACM in the work area.
- No additional ACM were identified during this assessment. Refer to the previous report dated June 20, 2023, for recommendations regarding removal and disturbance of ACM.

## **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 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

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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.

### **ECOH**

Environmental Consulting

Occupational Health



**Steve Bizi**

**Senior Project Manager**

### **APPENDICES**

**Appendix I:** Results of Bulk Sample Analysis for Asbestos

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# APPENDIX I

## Results of Bulk Sample Analysis for Asbestos

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# EMSL Canada Inc.

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<http://www.EMSL.com> / [torontolab@emsl.com](mailto:torontolab@emsl.com)

EMSL Canada Order: 552311958

Customer ID: 55ECOH45

Customer PO: 27831

Project ID:

**Attention:** Andrew Walsh  
ECOH Management, Inc.  
75 Courtneypark Drive West  
Unit 1  
Mississauga, ON L5W 0E3

**Project:** 27831 285 Spadina Road

**Phone:** (905) 795-2800

**Fax:** (905) 795-2870

**Received Date:** 08/04/2023 3:52 PM

**Analysis Date:** 08/14/2023

**Collected Date:** 08/04/2023

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| Sample  | Description                           | Appearance                          | Non-Asbestos                   |                          | Asbestos      |
|---|---------------------------------------|-------------------------------------|--------------------------------|--------------------------|---------------|
|   |                                       |                                     | % Fibrous                      | % Non-Fibrous            | % Type        |
| 27831-ASB- 01 A<br><small>552311958-0001</small>              | Blown in Insulation -<br>Garage Attic | Gray<br>Fibrous<br>Homogeneous      | 60% Cellulose<br>20% Min. Wool | 20% Non-fibrous (Other)  | None Detected |
| 27831-ASB- 01 B<br><small>552311958-0002</small>              | Blown in Insulation -<br>Garage Attic | Gray<br>Fibrous<br>Homogeneous      | 75% Cellulose<br>5% Min. Wool  | 20% Non-fibrous (Other)  | None Detected |
| 27831-ASB- 01 C<br><small>552311958-0003</small>              | Blown in Insulation -<br>Garage Attic | Gray<br>Fibrous<br>Homogeneous      | 75% Cellulose<br>5% Min. Wool  | 20% Non-fibrous (Other)  | None Detected |
| 27831-ASB- 01 D<br><small>552311958-0004</small>              | Blown in Insulation -<br>Garage Attic | Brown<br>Fibrous<br>Homogeneous     | 85% Cellulose                  | 15% Non-fibrous (Other)  | None Detected |
| 27831-ASB- 01 E<br><small>552311958-0005</small>              | Blown in Insulation -<br>Garage Attic | Brown<br>Fibrous<br>Homogeneous     | 85% Cellulose                  | 15% Non-fibrous (Other)  | None Detected |
| 27831-ASB- 02<br>A-Stucco<br><small>552311958-0006</small>    | Exterior Stucco -<br>Garage           | White<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>A-Mortar<br><small>552311958-0006A</small>   | Exterior Stucco -<br>Garage           | Gray<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>B-Stucco 1<br><small>552311958-0007</small>  | Exterior Stucco -<br>Garage           | Gray<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>B-Stucco 2<br><small>552311958-0007A</small> | Exterior Stucco -<br>Garage           | White<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>B-Mortar<br><small>552311958-0007B</small>   | Exterior Stucco -<br>Garage           | Gray<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>C-Stucco<br><small>552311958-0008</small>    | Exterior Stucco -<br>Garage           | White<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>C-Mortar<br><small>552311958-0008A</small>   | Exterior Stucco -<br>Garage           | Gray<br>Non-Fibrous<br>Homogeneous  |                                | 100% Non-fibrous (Other) | None Detected |
| 27831-ASB- 02<br>D-Stucco<br><small>552311958-0009</small>    | Exterior Stucco -<br>Garage           | White<br>Non-Fibrous<br>Homogeneous |                                | 100% Non-fibrous (Other) | None Detected |

Initial report from: 08/14/2023 15:53:33



# EMSL Canada Inc.

2756 Slough Street Mississauga, ON L4T 1G3

Tel/Fax: (289) 997-4602 / (289) 997-4607

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EMSL Canada Order: 552311958

Customer ID: 55ECOH45

Customer PO: 27831

Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

| Sample                    | Description                 | Appearance                          | Non-Asbestos |                          | Asbestos      |
|---------------------------|-----------------------------|-------------------------------------|--------------|--------------------------|---------------|
|                           |                             |                                     | % Fibrous    | % Non-Fibrous            | % Type        |
| 27831-ASB- 02<br>D-Mortar | Exterior Stucco -<br>Garage | Gray<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-fibrous (Other) | None Detected |
| 552311958-0009A           |                             |                                     |              |                          |               |
| 27831-ASB- 02<br>E-Stucco | Exterior Stucco -<br>Garage | White<br>Non-Fibrous<br>Homogeneous |              | 100% Non-fibrous (Other) | None Detected |
| 552311958-0010            |                             |                                     |              |                          |               |
| 27831-ASB- 02<br>E-Mortar | Exterior Stucco -<br>Garage | Gray<br>Non-Fibrous<br>Homogeneous  |              | 100% Non-fibrous (Other) | None Detected |
| 552311958-0010A           |                             |                                     |              |                          |               |

Analyst(s)

Michelle Bautista (6)

Marzan Regaspi (10)

Matthew Davis or other approved signatory  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. 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. Markham, ON NVLAP Lab Code 600317-0

Initial report from: 08/14/2023 15:53:33





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# Asbestos Chain of Custody

## EMSL Order Number (Lab Use Only):

552311958

EMSL CANADA, INC.  
2756 SLOUGH STREET  
MISSISSAUGA, ON L4T 1G3  
PHONE: (289) 997-4602  
FAX: (289) 997-4609

|  |                                    |  |                        |
|--|------------------------------------|--|------------------------|
| Company: <b>ECOH</b>   |                                    | EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different<br>If Bill to is Different note instructions in Comments**   |                        |
| Street: <b>75 Courtneypark Dr. W., Unit 1</b>  |                                    | Third Party Billing requires written authorization from third party  |                        |
| City: <b>Mississauga</b>   | State/Province: <b>Ontario</b>     | Zip/Postal Code: <b>L5W 0E3</b>  | Country: <b>Canada</b> |
| Report To (Name): <b>Andrew Walsh</b>  |                                    | Fax #: <b>905-795-2870</b>   |                        |
| Telephone #: <b>905-795-2800</b>   |                                    | Email Address: <b>awalsh@ecoh.ca, sbizi@ecoh.ca</b>  |                        |
| Project Name/Number: <b>27831 285 Spadina Road</b>   |                                    |  |                        |
| Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email   |                                    | Purchase Order: <b></b> U.S. State Samples Taken: <b></b>  |                        |
| Turnaround Time (TAT) Options* - Please Check  |                                    |  |                        |
| <input type="checkbox"/> 3 Hours <input type="checkbox"/> 6 Hours <input type="checkbox"/> 24 Hrs <input type="checkbox"/> 48 Hrs <input type="checkbox"/> 3 Days <input type="checkbox"/> 4 Days <input checked="" type="checkbox"/> 5 Days <input type="checkbox"/> 10 Days  |                                    |  |                        |
| *For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.   |                                    |  |                        |
| <b>PCM - Air</b><br><input type="checkbox"/> NIOSH 7400<br><input type="checkbox"/> w/ OSHA 8hr. TWA<br><b>PLM - Bulk (reporting limit)</b><br><input checked="" type="checkbox"/> PLM EPA 600/R-93/116 (<1%)<br><input type="checkbox"/> PLM EPA NOB (<1%)<br>Point Count<br><input checked="" type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)<br>Point Count w/Gravometric<br><input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%)<br><input type="checkbox"/> NYS 198-1 (friable in NY)<br><input type="checkbox"/> NYS 198-1 NOB (non-friable-NY)<br><input type="checkbox"/> NIOSH 9002 (<1%) |                                    | <b>TEM - Air</b><br><input type="checkbox"/> AHERA 40 CFR, Part 763<br><input type="checkbox"/> NIOSH 7402<br><input type="checkbox"/> EPA Level II<br><input type="checkbox"/> ISO 10312<br><b>TEM - Bulk</b><br><input type="checkbox"/> TEM EPA NOB<br><input type="checkbox"/> NYS NOB 198.4 (non-friable-NY)<br><input type="checkbox"/> Chatfield SOP<br><input type="checkbox"/> TEM Mass Analysis-EPA 600 sec 2.5<br><b>TEM - Water: EPA 100.2</b><br>Fibres > 10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking<br>All Fibre Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking |                        |
|  |                                    | <b>TEM-Dust</b><br><input type="checkbox"/> Microvac - ASTM D 5755<br><input type="checkbox"/> Wipe - ASTM D6480<br><input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167)<br><b>Soil/Rock/Vermiculite</b><br><input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity)<br><input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity)<br><input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity)<br><input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity)<br><input type="checkbox"/> EPA Protocol (Semi-Quantitative)<br><input type="checkbox"/> EPA Protocol (Quantitative)<br><b>Other:</b>        |                        |
| <input checked="" type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group  |                                    |  |                        |
| Samplers Name: <b>Andrew Walsh</b>   |                                    | Samplers Signature: <b>AW</b>  |                        |
| Sample #   | Sample Description                 | Volume/Area (Air)<br>HA # (Bulk)   | Date/Time<br>Sampled   |
| 27831-ASB- 01 A  | Blown in Insulation - Garage Attic | Bulk   | August 4, 2023         |
| 27831-ASB- 01 B  | Blown in Insulation - Garage Attic | Bulk   | August 4, 2023         |
| 27831-ASB- 01 C  | Blown in Insulation - Garage Attic | Bulk   | August 4, 2023         |
| 27831-ASB- 01 D  | Blown in Insulation - Garage Attic | Bulk   | August 4, 2023         |
| 27831-ASB- 01 E  | Blown in Insulation - Garage Attic | Bulk   | August 4, 2023         |
| 27831-ASB- 02 A  | Exterior Stucco - Garage           | Bulk   | August 4, 2023         |
| 27831-ASB- 02 B  | Exterior Stucco - Garage           | Bulk   | August 4, 2023         |
| 27831-ASB- 02 C  | Exterior Stucco - Garage           | Bulk   | August 4, 2023         |
| Client Sample # (s): <b>27831-ASB-01A - 02E</b>  |                                    | Total # of Samples: <b>10</b>  |                        |
| Relinquished (Client): <b>Andrew Walsh</b> Date: <b>August 4, 2023</b>   |                                    | Time: <b>3:52</b>  |                        |
| Received (Lab): <b>Lab 55/600</b> Date: <b>08/04/23</b>  |                                    | Time: <b>3:52 pm</b>   |                        |
| Comments/Special Instructions:   |                                    |  |                        |

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**EMSL Order Number** (Lab Use Only):EMSL CANADA, INC.  
2756 SLOUGH STREET  
MISSISSAUGA, ON L4T 1G3  
PHONE: (289) 997-4602  
FAX: (289) 997-4609

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

| Sample #        | Sample Description      | Volume/Area (Air)<br>HA # (Bulk) | Date/Time<br>Sampled |
|-----------------|-------------------------|----------------------------------|----------------------|
| 27831-ASB- 02 D | Exterior Stucco -Garage | Bulk                             | August 4, 2023       |
| 27831-ASB- 02 E | Exterior Stucco -Garage | Bulk                             | August 4, 2023       |