PRE-RENOVATION DESIGNATED SUBSTANCES AND HAZARDOUS MATERIALS SURVEY

MULOCK ESTATE – ATTIC
16780 YONGE STREET,
NEWMARKET, ON

Prepared for:
The Town of Newmarket
1275 Maple Hill Court
Newmarket, Ontario L3Y 9E8
Attention: Ray Saeedi

Prepared by:

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ECOH Project No.: 27051-10
September 15, 2022

EXECUTIVE SUMMARY

ECOH Management Inc. (ECOH) was retained by the Town of Newmarket (the Client) to conduct a Pre-Renovation Designated Substances and Hazardous Materials assessment of the Mulock Estate – Attic located at 16780 Yonge Street, in Newmarket, ON. The objectives of the survey were to identify potential environmental considerations associated with the proposed construction work, hereafter referred to as the "Project Area", and provide recommendations, as necessary, to fulfil requirements set forth within the Ministry of Labour (MOL) Codes as well as the Ontario Occupational Health and Safety Act (OHSA). Mohid Aslam of ECOH performed the survey and assessment on September 1, 2022.

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, refer to Appendix I - Results of Bulk Sample Analysis for Asbestos & Lead. Refer to the main body of the report and Appendices II and III for specific details, quantities and locations of Designated Substances and Hazardous Materials in the Project Area.

Table 1: Summary of Findings

Material	Findings
Asbestos	Asbestos-containing materials (ACM) were not identified within the Project Area. *Additional ACM are confirmed to be present outside of the Project Area (i.e., interior areas of the house).*
Lead	No major sources of lead or lead-containing products were identified during the 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.
Guano	During the survey guano was visually identified within the Project Area as follows: • Guano was identified to be scattered throughout the whole attic space (approximately 3000 square feet (SF), and was identified to be abundant (in piles) in the following locations: o Approximately 200 SF of visible guano was identified along the east end of the attic along with debris (wood shavings, etc.).

Table 1: Summary of Findings	
Material	**Findings**
	o Approximately 150 SF of visible guano was identified along the north wall in the west portion of the attic. o Approximately 350 SF of visible guano was identified along the south wall in the west portion of the attic. Additional guano may be present in concealed areas within the Project Area.
Mould	During the survey mould and/or water damage was not visually identified within the Project Area. Additional mould-growth may be present in concealed areas within the Project Area where water damage (caused by condensation or leaks) can occur.
Mercury	Minor quantities are also present as a possible constituent of paints and adhesives.
Silica	Present in all concrete and masonry products.
Other Designated Substances and Hazardous Materials	Acrylonitrile, Arsenic, Benzene, Coke Oven Emissions, Ethylene Oxide, Ozone Depleting Substances, Isocyanates, Polychlorinated Biphenyls (PCBs), 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 OHSA. Asbestos recommendations meet the requirements of the Designated Substance – Regulation respecting *Asbestos on Construction Projects and in Buildings and Repair Operations*, Ontario Regulation (O. Reg.) 278/05. Guano recommendations meet the requirements of Environmental Abatement Council of Canada (EACC) "Mould Abatement Guidelines", Edition 3, 2015 (Appendix B – Procedures for Clean-up of Bird and Bat Droppings) and EACC document "Hygiene Practices for Construction Workers and Infection Control" dated 2021. 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 conclusion are made with regards to ACMs within the Project Area:

- As asbestos-containing materials (ACM) have not been identified within the Project Area, renovation activities can proceed without specific asbestos safety precautions. Work should follow general health and safety construction procedures, including dust suppression methods, proper respiratory protection (minimum of a 1/2 -face respirator) and protective clothing, as appropriate for work being completed.

Lead

Any work involving the disturbance of building materials confirmed to contain lead (e.g. paints, wiring connectors, lead sheeting, electric cable sheathing, and soldering joints on copper piping) should be conducted following recommendations detailed within the MOL document "Guideline - Lead on Construction Projects", dated June 2011 and the Environmental Abatement Council of Canada (EACC) "Lead Guideline – For Construction, Renovation, Maintenance or Repair", 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 1,000 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.,
- Work does not include dust-generating activities such as grinding, cutting or chemical stripping
- 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.

Mould

If required, removal of mould-affected building materials should be completed in accordance with the procedures detailed in the Environmental Abatement Council of Canada (EACC), *Mould Abatement Guidelines* – Edition 3 (2015).

Guano

Guano was identified to be scattered throughout the whole attic space (approximately 3000 SF), and was identified to be abundant (in piles) in the following locations:

- Approximately 200 SF of visible guano was identified along the east end of the attic along with debris (wood shavings, etc.).
- Approximately 150 SF of visible guano was identified along the north wall in the west portion of the attic.
- Approximately 350 SF of visible guano was identified along the south wall in the west portion of the attic.

Clean-up of guano should follow both Section B and Appendix B in the EACC Mould Abatement Guideline. This will include the completion of a project-specific risk assessment to address appropriate clean-up measurements, as well as post abatement corrective measures to prevent return of wildlife.

Mercury

The presence of mercury within paints and adhesives should not be considered a hazard provided the assembled units remain sealed and intact. 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 MOL 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.

TABLE OF CONTENTS

EXECUTIVE SUMMARY……I
1. INTRODUCTIONS..... 1
1.1 Building Description..... 1
1.2 Regulatory Requirements..... 1
2. SURVEY SCOPE OF WORK AND METHODOLOGY 2
2.1 General Approach 2
2.2 Records Review 2
2.3 Survey Drawings 2
2.4 Asbestos Survey Methodology 2
2.5 Mould Assessment 3
2.6 Survey of Other Hazardous Materials..... 3
3. FINDINGS 3
3.1 Asbestos 3
3.2 Asbestos Cement Products (Non-Friable) 4
3.3 Acoustic Ceiling Tiles (Friable) 5
3.4 Vinyl Floor Tiles (VFT) (Non-Friable) 5
3.5 Vinyl Sheet Flooring (VSF) (Potentially-Friable)..... 5
3.6 Drywall Joint Compound (DJC) (Non-Friable)..... 5
3.7 Plaster (Non-Friable) 5
3.8 Mastics (Non-Friable) 5
3.9 Caulking (Non-Friable) 5
3.10 Other Materials (Non-Friable) 5
3.11 Lead 5
3.12 Mercury 6
3.13 Silica 6
3.14 Mould 6
3.15 Guano 6
3.16 Other Designated Substances and Hazardous Materials..... 7
4. CONCLUSIONS AND RECOMMENDATIONS 7
4.1 Asbestos 7
4.2 Lead 8
4.3 Mercury 8
4.4 Silica 8
4.5 Mould 9
4.6 Guano 9
5. STATEMENT OF LIMITATIONS..... 9
6. CLOSURE.....10

TABLE OF CONTENTS

APPENDICES

Appendix I: Results of Bulk Sample Analysis for Asbestos and Lead
Appendix II: Site Photographs
Appendix III: Hazardous Materials Information

1. INTRODUCTIONS

ECOH Management Inc. (ECOH) was retained by the Town of Newmarket (the Client) to conduct a Pre-Renovation Designated Substances and Hazardous Materials assessment of the Mulock Estate – Attic located at 16780 Yonge Street, in Newmarket, ON. The objectives of the survey were to identify potential environmental considerations associated with the proposed construction activities, hereafter referred to as the "Project Area", and provide recommendations, as necessary, to fulfil requirements set forth within the Ministry of Labour (MOL) Codes as well as the Ontario Occupational Health and Safety Act (OHSA). Mohid Aslam of ECOH performed the survey and assessment on September 1, 2022.

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:

- Mould
- Ozone Depleting Substances (ODS)
- Polychlorinated Biphenyls (PCBs)
- 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 Building Description

The building is a two (2) storey single family residential home plus one (1) basement level.

1.2 Regulatory Requirements

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

Ontario Regulation (O. Reg.) 278/05, Regulation respecting Asbestos on Construction Projects and in Buildings and Repair Operations, controls the disturbance of asbestos materials on construction projects. O. Reg. 347/90, controls the disposal of asbestos waste. The MOL 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 MOL regulations for control of the remaining Designated Substances on construction projects. However, the MOL actively enforces the general duty clause of the OHS 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:

- To ensure familiarity with the facility, the surveyor referred to project drawings (if any) provided by the Client.
- Visual inspections of the Project Area were completed using the following protocol:
  - The survey was limited to the attic located in the west portion of the building.
  - 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 for the Project Area were collected during visual inspections.
  - Observations are detailed for each phase or date of construction and/or major renovation where possible.

2.2 Records Review

As part of the survey, ECOH reviewed the report titled “Assessment of Designated Substances and Hazardous Material”, by ECOH, dated April 22, 2022 (ECOH Project No. 27050-05).

2.3 Survey Drawings

Survey drawings were not prepared as part of this assessment.

2.4 Asbestos Survey Methodology

2.4.1 Asbestos Sampling Strategy and Analytical Methods

Where sampling was required, bulk samples of potential ACM collected for analysis during the designated substances and hazardous materials survey were collected as per the requirements of O. Reg. 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 an ACM. 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 analysed

following the analytical procedure prescribed by the U.S. Environmental Protection Agency (EPA) Test Method EPA/600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials. October 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.

2.4.2 Asbestos Survey Omissions from Scope

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

- The material is inaccessible (i.e., underground piping, between piping systems, etc.).
- There is an inherent danger in sampling the material (i.e., high voltage wires).
- Sampling will compromise the integrity of the building structure or envelope (i.e., window / door caulking).

Therefore, for the purpose of this survey, ECOH has assumed that the following materials, if present, are ACM:

- High voltage wiring
- Underground services or piping
- Gaskets

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

2.5 Mould Assessment

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

2.6 Survey of Other Hazardous Materials

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

3. FINDINGS

3.1 Asbestos

The following outlines the extent to which ACMs 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. Investigations were limited to accessible areas only (i.e. via test cut locations, etc.). If additional

materials beyond those identified in this report are discovered, suspect materials should be assessed and/or tested by a qualified professional to determine asbestos content prior to removal or disturbance.

Table 2: Summary of Analysis of Asbestos Bulk Samples

Sample Number	Sample Location	Sample Description	Results
27051-10-ASB-01A	North Wall	Brick Mortar	None Detected
27051-10-ASB-01B	North Wall	Brick Mortar	None Detected
27051-10-ASB-01C	North Wall	Brick Mortar	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 Texture Finish/Coat (Friable)

Texture finish/coat was not observed within the Project Area at the time of the assessment.

3.1.3 Thermal Mechanical Insulation (Friable)

Mechanical insulations were not observed throughout the Project Area. The following presents a brief description of the mechanical insulations and the systems to which they are applied.

3.1.3.1 Piping Systems

Pipe fittings (which may include elbows, valves, tees, hangers, etc.) were not observed throughout the Project Area during this assessment.

Straight sections of pipe were not observed within the Project Area during this assessment.

Thermal mechanical insulation may be present within concealed conditions of the Project Area.

3.1.3.2 Duct Systems

Ducts were not observed within the Project Area during this assessment.

3.1.3.3 Mechanical Equipment

Mechanical equipment was not observed within the Project Area during this assessment.

3.2 Asbestos Cement Products (Non-Friable)

Asbestos cement products were not observed within the Project Area during this assessment.

3.3 Acoustic Ceiling Tiles (Friable)

Acoustic ceiling tiles were not observed within the Project Area during this assessment.

3.4 Vinyl Floor Tiles (VFT) (Non-Friable)

VFT were not observed within the Project Area during this assessment.

3.5 Vinyl Sheet Flooring (VSF) (Potentially-Friable)

VSF was not observed within the Project Area during this assessment.

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

DJC was not observed within the Project Area during this assessment.

3.7 Plaster (Non-Friable)

Plaster was not observed within the Project Area during this assessment.

3.8 Mastics (Non-Friable)

Mastics were not observed within the Project Area during this assessment.

3.9 Caulking (Non-Friable)

Caulking was not observed withing the Project Area during this assessment.

3.10 Other Materials (Non-Friable)

Other materials observed within the Project Area as follows:

- Three (3) samples of brick mortar associated with the exterior facing walls in the attic were collected (27051-10–ASB–01A–C) and determined by laboratory analysis to be non-asbestos.

3.11 Lead

Although no regulations exist in Ontario to define a lead-based paint or lead-containing material, guidelines indicate that paint containing 0.5% lead concentration by dry weight (i.e. concentrations of lead at or above 0.5%, or 5,000 parts per million (ppm)) is considered to be a lead-based paint or lead-containing material.

Paints or surface coatings that contain concentrations of lead greater than 0.1% by dry weight (1,000 ppm), and less than 0.5% by dry weight (5,000 ppm), is considered to be a "lead-containing paint or surface coating".

Paints or surface coatings that contain concentrations of lead at, or below, 0.1% by dry weight (1,000 ppm) is considered to be a "low-level lead paint or surface coating".

Laboratory results for bulk lead in paint samples collected during this assessment are attached to this report in Appendix I. Please refer to Table 3 below for a summary of the bulk sample analysis results for lead.

Table 3: Summary of Analysis of Lead Bulk Samples

Sample Number	Sample Location	Sample Description	Results
26916-Pb-01	North Wall	Brick Mortar	<40 mg/Kg
	- shading indicates lead-containing material (if applicable)		

No major sources of lead-containing or lead-based products were observed during this assessment or ECOH's previous assessment. 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.

3.12 Mercury

Mercury is present in minor quantities throughout the Project Area as a possible constituent of paints and adhesives.

3.13 Silica

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

3.14 Mould

Mould and/or water damage was not observed within the Project Area during this survey.

3.15 Guano

Guano was identified during this survey in the following areas within the Project Area:

- Attic
  - Guano was identified to be scattered throughout the whole attic space (approximately 3000 SF), and was identified to be abundant (in piles) in the following locations:
    - Approximately 200 SF of visible guano was identified along the east end of the attic along with debris (wood shavings, etc.).
    - Approximately 150 SF of visible guano was identified along the north wall in the west portion of the attic.

    - Approximately 350 SF of visible guano was identified along the south wall in the west portion of the attic.
  - Guano and debris was observed to be on top of fibreglass insulation as well as within small cavities and underneath insulation including confined spaces.

Additional guano may be present in concealed areas within the Attic.

3.16 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, ODS, PCBs, 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.

For general information on all Designated Substances and Hazardous Materials, refer to Appendix III for Hazardous Materials Information.

4. CONCLUSIONS AND RECOMMENDATIONS

The following recommendations meet the requirements of the OHSA. Asbestos recommendations meet the requirements of the Designated Substance – Regulation respecting *Asbestos on Construction Projects and in Buildings and Repair Operations*, Ontario Regulation (O. Reg.) 278/05. Guano recommendations meet the requirements of Environmental Abatement Council of Canada (EACC) "Mould Abatement Guidelines", Edition 3, 2015 (Appendix B – Procedures for Clean-up of Bird and Bat Droppings) and EACC document "Hygiene Practices for Construction Workers and Infection Control" dated 2021. Based upon review of historical reports, as well as analytical results and observations of this assessment, ECOH offers the following for your consideration:

4.1 Asbestos

Based on survey results, the following conclusion are made with regards to ACMs within the Project Area:

- As asbestos-containing materials (ACM) have not been identified within the Project Area, renovation activities can proceed without specific asbestos safety precautions. Work should follow general health and safety construction procedures, including dust suppression methods, proper respiratory protection (minimum of a 1/2 -face respirator) and protective clothing, as appropriate for work being completed.
- During the project, if 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 contain lead (e.g. paints, wiring connectors, lead sheeting, electric cable sheathing, and soldering joints on copper piping) should be conducted following recommendations detailed within the MOL document "Guideline - Lead on Construction Projects", dated June 2011 and the Environmental Abatement Council of Canada (EACC) "Lead Guideline – For Construction, Renovation, Maintenance or Repair", 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 1,000 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.,
- Work does not include dust-generating activities such as grinding, cutting or chemical stripping
- 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

The presence of mercury paints and adhesives should not be considered a hazard provided the assembled units remain sealed and intact. 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.

Any work involving the disturbance of materials that may contain silica should be conducted following recommendations detailed in the MOL document *Guideline - Silica on Construction Projects*, dated April 2011.

4.5 Mould

If required, removal of mould-affected building materials should be completed in accordance with the procedures detailed in the Environmental Abatement Council of Canada (EACC), *Mould Abatement Guidelines* – Edition 3 (2015).

4.6 Guano

Removal of Guano should be completed in accordance with the procedures detailed in the Environmental Abatement Council of Canada (EACC) "Mould Abatement Guidelines", Edition 3, 2015 (Appendix B – Procedures for Clean-up of Bird and Bat Droppings) and EACC document "Hygiene Practices for Construction Workers and Infection Control" dated 2021.

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 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 Client. 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 us at 905-795-280

ECOH
Environmental Consulting
Occupational Health

Prepared by:

Mohid Aslam, B.Sc.
Environmental Scientist

Reviewed by:

Mahir Bholat, B.Sc.
Senior Project Manager

APPENDIX I

Results of Bulk Sample Analysis for Asbestos and Lead

EMSL Canada Inc.

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

EMSL Canada Order 552213402
Customer ID: 55ECOH45
Customer PO: 27051-10
Project ID:

Attn: Mohid Aslam
ECOH Management, Inc.
75 Courtneypark Drive West
Unit 1
Mississauga, ON L5W 0E3

Proj: 27051-10 Mulock Estate

Phone: (905) 795-2800
Fax: (905) 795-2870
Collected: 9/ 1/2022
Received: 9/01/2022
Analyzed: 9/07/2022

Test Report: Asbestos Analysis of Bulk Materials for Ontario Regulation 278/05 via EPA600/R-93/116 Method

Client Sample ID: 27051-10-ASB-01A ***Lab Sample ID:*** **552213402-0001**
Sample Description: Brick Mortar - North Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	9/07/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27051-10-ASB-01B ***Lab Sample ID:*** **552213402-0002**
Sample Description: Brick Mortar - North Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	9/07/2022	Gray	0.0%	100.0%	None Detected	

Client Sample ID: 27051-10-ASB-01C ***Lab Sample ID:*** **552213402-0003**
Sample Description: Brick Mortar - North Wall

TEST	Analyzed Date	Color	Non-Asbestos Fibrous	Non-Asbestos Non-Fibrous	Asbestos	Comment
PLM	9/07/2022	Gray	0.0%	100.0%	None Detected	

Analyst(s):

Elizabeth Mierzynski PLM (1)
Kira Ramphal PLM (2)

Reviewed and approved by:

Matthew Davis or other approved signatory
or Other Approved Signatory

None Detected = <0.1%. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This 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. Estimation of uncertainty available upon request. This report is a summary of multiple methods of analysis, fully compliant reports are available upon request. A combination of PLM and TEM analysis may be necessary to ensure consistently reliable detection of asbestos. This report must not be used to claim product endorsement by NVLAP of any agency or the U.S. Government.

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

Initial report from: 09/07/202212:09:09

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

EMSL Canada Or	552213396
CustomerID:	55ECOH45
CustomerPO:	27051-10
ProjectID:	

Attn: **Mohid Aslam**
ECOH Management, Inc.
75 Courtneypark Drive West
Unit 1
Mississauga, ON L5W 0E3

Phone: (905) 795-2800
Fax: (905) 795-2870
Received: 9/1/2022 03:53 PM
Collected: 9/1/2022

Project: **27051-10 Mulock Estate**

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

Client Sample	*Description*	*Collected*	*Analyzed*	*Weight*	*RDL*	*Lead*	*Concentration*
27051-10-Pb-01		9/1/2022	9/2/2022	0.5008 g	40 mg/Kg	<40 mg/Kg	
552213396-0001	Site: Brick Mortar - North Wall						

Rowena Fanto, Lead Supervisor
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.
* Analysis following Lead in Soil/Solids by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 40 mg/kg based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. Definitions of modifications are available upon request.

Samples analyzed by EMSL Canada Inc. Mississauga, ON AIHA-LAP, LLC - ELLAP #196142

Initial report from 09/07/2022 09:22:51

OrderID: 552213402

EMSL CANADA, INC.

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 552213402

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

Company: ECOH		EMSL-Bill to: ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 75 Courtneypark Dr. W., Unit 1			
City: Mississauga	State/Province: Ontario	Zip/Postal Code: L5W 0E3	Country: Canada
Report To (Name): Mohid Aslam		Fax # : 905-795-2870	
Telephone #: 905-795-2800		Email Address:	maslam@ecoh.ca, mbholat@ecoh.ca
Project Name/Number: 27051-10 Mulock Estate			
Please Provide Results: ☐ Fax ☑ Email	Purchase Order:	U.S. State Samples Taken:	

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours ☐ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☑ 3 Days ☐ 4 Days ☐ 5 Days ☐ 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.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☑ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☑ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravometric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198-1 (friable in NY)
- ☐ NYS 198-1 NOB (non-friable-NY)
- ☐ NIOSH 9002 (<1%)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Anaylsis-EPA 600 sec 2.5

TEM - Water: EPA 100.2
- Fibres > 10µm ☐ Waste ☐ Drinking
- All Fibre Sizies ☐ Waste ☐ Drinking

TEM-Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☑ **Check For Positive Stop - Clearly Identify Homogenous Group**

Samplers Name: Mohid Aslam | Samplers Signature:

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
27051-10-ASB- 01 A	Brick Mortar - North Wall	Bulk	September 1, 2022
27051-10-ASB- 01 B	Brick Mortar - East Wall	Bulk	September 1, 2022
27051-10-ASB- 01 C	Brick Mortar - West Wall	Bulk	September 1, 2022

RECEIVED EMSL CANADA INC. TORONTO 2022 SEP -1

Client Sample # (s): 27051-10-ASB-01A - 01C Total # of Samples: 3

Relinquished (Client): Mohid Aslam Date: September 1, 2022 Time: 3:53

Received (Lab): LAB 55 /NC Date: 09/01/22 Time: 3:53 pm

Comments/Special Instructions: Standard TAT

/DB

OrderID: 552213396

EMSL CANADA, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

EMSL Order Number *(Lab Use Only)*: 552213396

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

Company: ECOH		EMSL-Bill to: ☑ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 75 Courtneypark Dr. W., Unit 1			
City: Mississauga	State/Province: Ontario	Zip/Postal Code: L5W 0E3	Country: Canada
Report To (Name): Mohid Aslam		Telephone #: 905-795-2800	
Email Address: maslam@ecoh.ca, mbholat@ecoh.ca		Fax #: 905-795-2870	Purchase Order:
Project Name/Number: 27051-10 Mulock Estate		Please Provide Results: ☐ Fax ☑ Email	
U.S. State Samples Taken:		CT Samples: ☐ Commercial/Taxable	☐ Residential/Tax Exempt

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☐ 48 Hour ☑ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide*

Matrix	Method	Instrument	Reporting Limit	Check
Chips ☐ % by wt. ☐ mg/cm² ☑ ppm	SW846-7000B	Flame Atomic Absorption	0.01%	☐
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	☐
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	☐
	NIOSH 7300 modified	ICP-AES/ICP-MS	0.5 µg/filter	☐
Wipe* ASTM ☐ non-ASTM ☐ *if no box is checked, non-ASTM Wipe is assumed	SW846-7000B	Flame Atomic Absorption	10 µg/wipe	☐
	SW846-6010B or C	ICP-AES	1.0 µg/wipe	☐
TCLP	SW846-1311/7000B/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-1131/SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	☐
Soil	SW846-7000B	Flame Atomic Absorption	40 mg/kg (ppm)	☑
	SW846-6010B or C	ICP-AES	2 mg/kg (ppm)	☐
Wastewater Unpreserved ☐	SM3111B/SW846-7000B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
Preserved with HNO_3 pH <2 ☐	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	EPA200.7	ICP-AES	0.020 mg/L (ppm)	☐
Drinking Water Unpreserved ☐	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
Preserved with HNO_3 pH <2 ☐	EPA 200.8	ICP-MS	0.0031mg/L (ppm)	☐
TSP/SPM Filter	40 CFR Part 50 (2013)	ICP-MS	1.2 µg/filter	☐
Other:				☐

Name of Sampler: Mohid Aslam | Signature of Sampler:

Sample #	Location	Volume/Area	Date/Time Sampled
27051-10-Pb- 01	Brick Mortar - North Wall	N/A	September 1, 2022

RECEIVED EMSL CANADA, INC. TORONTO 2022 SEP 1 PM 3:53

Client Sample # (s):	27051-10-Pb-01			Total # of Samples:	1
Relinquished (Client):	Mohid Aslam	Date:	September 1, 2022	Time:	
Received (Lab):	LAB 55 INC	Date:	09/01/22	Time:	3:53 pm

Comments/Special Instructions: standard TAT

/DB

OrderID: 552213396

EMSL CANADA, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

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 #	Location	Volume/Area	Date/Time Sampled

***Comments/Special Instructions:**

APPENDIX II

Site Photographs

SITE PHOTOGRAPHS

Client Name:	Project Location:	Project No.
Town of Newmarket	Mulock Estate – Attic 16780 Yonge Street, Newmarket, ON	27051-10

Photo No. 1.

Date:

September 1, 2022

Location:

Attic

Description:

Representative view of east end of attic.

Photo No. 2.

Date:

September 1, 2022

Location:

Attic

Description:

Example of guano and debris (wood shavings) along east end of attic.

Client Name:	Project Location:	Project No.
Town of Newmarket	Mulock Estate – Attic 16780 Yonge Street, Newmarket, ON	27051-10

Photo No. 3.

Date:

September 1, 2022

Location:

Attic

Description:

Example of guano and debris (wood shavings) along east end of attic.

Photo No. 4.

Date:

September 1, 2022

Location:

Attic

Description:

Representative view of north facing wall in west end of attic.

Client Name:	Project Location:	Project No.
Town of Newmarket	Mulock Estate – Attic 16780 Yonge Street, Newmarket, ON	27051-10

Photo No. 5.

Date:

September 1, 2022

Location:

Attic

Description:

Example of guano and debris along north wall in west end of attic.

Photo No. 6.

Date:

September 1, 2022

Location:

Attic

Description:

Representative view of south facing wall in west end of attic.

Client Name:	Project Location:	Project No.
Town of Newmarket	Mulock Estate – Attic 16780 Yonge Street, Newmarket, ON	27051-10

Photo No. 7.

Date:

September 1, 2022

Location:

Attic

Description:

Example of guano and debris close to south wall in west end of attic.

Photo No. 8.

Date:

September 1, 2022

Location:

Attic

Description:

Representative photos showing the debris (including guano) spread throughout the attic space (total of approx. 3000 SF). Guano and debris observed to be on top of fibreglass insulation as well as within small cavities and underneath insulation.

APPENDIX III

Hazardous Materials Information

ACRYLONITRILE

Acrylonitrile is a synthetic chemical used in the manufacturing of plastics, paints and adhesives, including acrylonitrile-butadiene-styrene (ABS) piping. Acrylonitrile is hazardous as a gas, a vapour, a mist, a particulate or a liquid. Acrylonitrile-based products in solid form are non-toxic unless these products are burned or caused to create dust. Dust suppression and personal protection procedures should be implemented during the demolition of products that may contain Acrylonitrile.

ARSENIC

Arsenic is a naturally occurring element. It has historically been used in insecticides, paints and pigments, adhesives, and in the manufacture of integrated circuits. Arsenic is also present in wood that has been treated with chromated copper arsenate (also known as pressure treated, Tanalith and CCA wood). Arsenic gas, liquid, vapours and particulates are harmful if ingested, inhaled, or absorbed through the skin. Arsenic in painted finishes, adhesives, circuits and wood is generally non-hazardous provided the material is not burned or caused to create dust. Dust suppression and personal protection procedures should be implemented during the demolition of products that may contain Arsenic.

ASBESTOS

Asbestos is a naturally occurring mineral that was added to various materials to add fire, heat and chemical resistance, strength and texture. Asbestos may be present in fireproofing, surfacing materials (e.g. plaster, drywall joint compound, textured finishes), mechanical insulations, vinyl floor tiles, asbestos cement products, ceiling tiles, mastics and caulking, as well as many other miscellaneous building materials. Asbestos is hazardous as a particulate if it is inhaled. Precautionary methods for the safe removal of asbestos-containing materials are detailed in Ontario Regulation (O. Reg.) 278/05, and include the use of site isolation techniques, dust suppression and personal protection equipment.

BENZENE

Benzene is naturally present in crude oil and is found in hydraulic oils and fuels. Additionally, benzene is an industrial solvent and is used in the manufacture of plastics, paints, adhesives, rubber, resins, detergents and lubricants. Benzene is harmful if inhaled (as a mist, vapour or gas) or ingested. The removal and disposal of petroleum-based products such as hydraulic oils and fuels (gasoline, diesel, heating oil, etc.) must be completed by certified persons and in accordance with applicable regulations. Dust suppression and personal protection procedures should be implemented during the removal of solid products that may contain Benzene.

COKE OVEN EMISSIONS

Coke Oven Emissions are mixtures of coal and coke particles, vapours, gases, and tars that are released during the production of coke from coal. Coke Oven Emissions contain other hazardous materials including lead, benzene and arsenic. Coke is used to extract metals from ore, to synthesize calcium carbide and to manufacture graphite and electrodes. Exposure to Coke Oven Emissions may occur during the production of coke or while using coke during the above noted processes.

ETHYLENE OXIDE

Ethylene Oxide is a flammable gas used in the production of textiles, detergents, polyurethane foam, antifreeze, solvents, medicinal products and adhesives. Ethylene Oxide is hazardous as a gas, vapour or mist if inhaled or as a liquid if contact is made with the skin. Ethylene Oxide gas is also highly reactive and flammable. Solid finished products with which Ethylene Oxide was manufactured are non-toxic unless these products are burned or caused to create dust. Dust suppression and personal protection procedures should be implemented during the removal of products that may contain Ethylene Oxide.

FECAL WASTE

Animal fecal waste poses serious health risks in both the spread of zoonotic diseases (those diseases which are transferred from animals to humans) and the presence of noxious ammonia. Examples of zoonotic diseases include influenza, rabies, cat scratch fever, hookworm, and

ringworm. Toxoplasmosis, a parasitic disease caused by the fungus *Histoplasma capsulatum,* can be transferred to human through animal feces and is known to cause severe birth defects or stillbirth in the case of infected pregnant women. Dust suppression and personal protection procedures should be implemented during the removal of animal feces and/or bird and bat guano.

ISOCYANATES

Isocyanates are used in the manufacturing of all polyurethane products. They may be present in polyurethane foams, paints and coatings. Isocyanates are harmful as vapours, mists, particulates or liquids. Solid finished products with which isocyanates were manufactured are non-toxic unless these products are burned or caused to create dust. Dust suppression and personal protection procedures should be implemented during the removal of products that may contain Isocyanates.

LEAD

Lead is a malleable metal with a variety of applications. Lead may be present in paint, in wiring connectors and electric cable sheathing, in piping and solder joints, in ceramic products (including floor tiles), in baffling, in batteries and in equipment designed to protect from radioactivity. The use of lead in paint was gradually phased out during the mid-1970s. Although no regulations exist in Ontario, the USA Housing and Urban Development (HUD) and the EPA's Toxic Substance Control Act define lead-based paint as paint that has lead equal to or exceeding 0.5 percent by weight. Lead is harmful if ingested or inhaled; direct skin contact with lead should be avoided. Materials known or suspected to be lead-containing should not be burned or caused to create dust.

MERCURY

Mercury is a naturally occurring metal that is a liquid at room temperature. Liquid mercury is used in batteries, paints and adhesives, thermostats, thermometers, barometers, monometers, and as a catalyst in the production of polymers. Mercury gas is present in fluorescent light tubes. Mercury that is contained in assembled units does not pose a health hazard provided the assembled units remain intact. Mercury vapours are toxic if inhaled or ingested. Mercury in all forms may be hazardous and attempts should be made to avoid direct skin contact with this material. Disposal of mercury-containing assembled units should be conducted in accordance with applicable regulations. Mercury-containing paints and adhesives should be conducted using dust suppression and personal protection procedures.

MOULD

Moulds and fungi are ubiquitous, found 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. The presence of mould does not always mean that health problems will occur. However, for some people the inhalation of the mould, fragments of the moulds, or spores can lead to health problems or make certain health conditions worse.

In addition, many of these moulds make "mycotoxins". Mycotoxins are metabolites or by-products from the moulds that have been identified as being toxic to humans. These toxins can slowly wear down the immune system and can lead to allergic or respiratory problems.

In general, the most commonly reported symptoms include:

- runny nose or nasal congestion
- fatigue
- eye irritation
- headaches
- cough or congestion
- difficulty concentrating
- aggravation of asthma.

Moulds can also exacerbate (make worse) the symptoms of allergies including wheezing, chest tightness, shortness of breath as well as nasal congestion and eye irritation. People who are immuno-suppressed or recovering from surgery are usually more susceptible to health problems from moulds.

OZONE DEPLETING SUBSTANCES (ODS)

ODS are chemicals that breakdown in the stratosphere and release chlorine or bromine, which destroy the stratospheric ozone layer. Most of these substances are also greenhouse gases. ODS are used as foam blowing agents, solvents, fire extinguishing agents and refrigerants for air conditioning and refrigeration applications.

O. Reg. 184/94 *Refrigerants* require that refrigeration equipment with a total capacity of 22 kilowatts and a minimum of one compressor (with some exceptions for chillers) cannot be refilled with a chlorofluorocarbon as of January 1, 2009, and that all refrigeration equipment containing chlorofluorocarbons with a total capacity of 22 kilowatts and a minimum of one compressor must be removed from service by January 1, 2012.

POLYCHLORINATED BIPHENYLS (PCBS)

PCBs are a group of man-made chemicals. They were widely used in many different products, including electrical equipment, surface coatings, inks, adhesives, flame-retardants, paints, industrial processes, and in the manufacture and recycling of carbonless copy paper until research revealed that they pose risks to human health, wildlife and the natural environment.

The commercial production of PCBs started in 1929 but their use has been banned or severely restricted in many countries since the 1970s and 80s because of the possible risks to human health and the environment.

RADIOACTIVE SMOKE DETECTORS

Smoke detectors are found in both residential and commercial properties and may use one or both systems of smoke detection; ionization smoke detection and photoelectric smoke detection. Ionization smoke detectors use a small amount of radioactive source, americium-241, as a key component of smoke detection. Americium-241 emits alpha particles and low-energy gamma rays. A sensor detects the flow of alpha particles radiating from the source material, when the flow of alpha particles is blocked by smoke particles, the alarm is activated.

When smoke detectors are used in accordance with manufacturer instructions and are not tampered with, they pose no radiation health risk. According to the Canadian Nuclear Association, ionization smoke detectors do not pose a health risk to the public or to waste disposal workers and may be disposed of as household waste.

SILICA

Silica is a component of sand, quartz and granite. It is present in brick, concrete, cement mortar, topsoil and asphalt. Silica is hazardous as a particulate when it is inhaled and may cause skin irritation if direct skin contact is made. Products containing Silica are not hazardous provided the particle size is not small enough to be inhaled. Demolition of Silica-containing building materials should be conducted following recommendations detailed within the Ministry of Labour Guideline, "*Silica on Construction Projects*", dated April 2011. This involves the use of general safety precautions such as appropriate dust suppression methods and proper personal protective equipment.

UREA FORMALDEHYDE FOAM INSULATION (UFFI)

UFFI was developed in Europe in the 1950s as an improved means of insulating difficult-to-reach cavities in house walls. It is typically made at a construction site from a mixture of urea-formaldehyde resin, a foaming agent and compressed air. When the mixture is injected into the wall, urea and formaldehyde unite and "cure" into an insulating foam plastic. In the insulating process, a slight excess of formaldehyde was often added to ensure complete "curing" with the urea to produce the urea-formaldehyde foam. That excess was given off during the curing, almost entirely within a day or two of injection. Properly installed, UFFI might not have resulted in any problem. Unfortunately, however, UFFI was sometimes improperly installed or used in locations where it should not have been.

Formaldehyde gas is an irritant and is a toxic gas in significant concentrations. Symptoms of overexposure to formaldehyde include irritation to eyes, nose and throat; persistent cough and respiratory distress; skin irritation; nausea; headache; and dizziness.

VINYL CHLORIDE MONOMER

Vinyl chloride monomer is a colourless, flammable gas that is used in the manufacturing of Polyvinyl Chloride (PVC). PVC is a plastic that is used to make containers, pipes and conduits, flooring and latex paint. Trace amounts of this material would be expected on PVC piping and conduit as a by-product of the manufacturing process. As a component of PVC, vinyl chloride monomer is non-hazardous unless it is burned or caused to create dust. During the demolition of products that may contain vinyl chloride monomer dust suppression and personal protection procedures should be implemented.