April 07, 2025

Canstar Restorations Ltd.
78 Fawcett Road
Coquitlam, BC
V3K 6V5

EPOCH ENVIRONMENTAL CONSULTING
Unit 100 - 42 Fawcett Road,
Coquitlam, BC V3K 6X9
Office: (604) 553-3370
info@epochenvironmental.ca

Attention: Mr. David Hart

Re: **LIMITED INSPECTION AND RISK ASSESSMENT FOR BUILDING MATERIALS POTENTIALLY CONTAINING ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS**

Site Location: **640 POIRIER STREET, COQUITLAM, BRITISH COLUMBIA**

Work Order: **25-00505-E**

Epoch Environmental Consulting Ltd. (EPOCH) was retained to conduct a limited inspection, bulk sampling, testing, and a risk assessment for suspect asbestos and lead containing building materials at a commercial building located at 640 Poirier Street, Coquitlam, British Columbia.

1.0 EXECUTIVE SUMMARY

1.1 Asbestos Analysis Results Summary

The following building material(s) were identified to be **asbestos-containing.**

Location(s) / Description	Material Type	Work Procedure Risk Level for Abatement	Quantity (Approx.)	Current Risk Exposure
Exterior - Roof - Big Vents Mastic	Mastic	“Moderate Risk”	2 Big Vents	Low

1.2 Lead Containing Paints/Coatings Analysis Results Summary

The following surface paints and/or coatings on ceramic tile/s were identified to be **lead-containing (> 90 ppm).**

Location(s) / Description	Material (Substrate)	Colour	Quantity (Approx.)	Current Risk Exposure
Exterior - Wood Wall Cladding	Wood	Light Grey	3000 SQFT	Low
Exterior - Wood Window Trims	Wood	White	All Wood Window Trims	Low

Location(s) / Description	Material (Substrate)	Colour	Quantity (Approx.)	Current Risk Exposure
Exterior - Metal Window Trims	Metal	White	All Metal Window Trims	Low
Exterior - Back Hand Rails	Metal	Dark Grey	2 Sets	Low
Exterior - Entry Columns	Wood	Dark Grey	3 Entry Sets	Low

Note: The quantity estimates for materials provided are visual estimations only and shall not be used solely for quotation purposes. It is the responsibility of the abatement contractor to provide their own estimations for abatement.

2.0 SCOPE OF WORK

The inspection was limited to the following areas listed below as per the requested scope of work.

Exterior:

- Roofing Shingles and Mastic
- Wall Cladding
- Window Trims
- Hand Rails

3.0 OBSERVATIONS

The following was observed and noted during our inspection:

- Roofing Shingles, Membrane and Mastic on wood substrate was observed on the roof;
- Some vents and chimneys were observed on roof;
- **Mastic around big vents were tested asbestos-contained**;
- Wood Wall Panelling (**lead-containing**) and white concrete (no lead-containing) material was observed on the exterior walls;
- Grey (**lea-containing**) and White (no lead-containing) hand rails were observed; and,
- Metal and Wood window trims (**lead-containing**) were observed around windows.

4.0 ASBESTOS IDENTIFICATION ANALYSIS

Minimum sampling requirements were conducted **within the proposed scope of work** based on WorkSafeBC guideline 20.112 Hazardous Materials – Asbestos. Please refer to the Workers Compensation Board of British Columbia (WorkSafeBC) Safe Work Practices for Handling Asbestos – Bulk material sample collection guide.

Please find attached the following building materials suspected of containing asbestos and asbestos laboratory analysis report (EAC2025-01-530-N) for the building materials sampled at 640 Poirier Street, Coquitlam, British Columbia.

Areas and materials collected for asbestos identification analysis in the building as per scope of work are listed in Table 1.

Table 1: Bulk Sample Asbestos Analysis Results

Sample ID	Sample Location	Material Type	Asbestos Detected	Asbestos Containing
1	Exterior - Back Entry - Roof	Roofing Shingle	NONE Detected	NO
		Layer: Membrane	NONE Detected	NO
2	Exterior - Back Entry - Nail Mastic (Grey)	Mastic	NONE Detected	NO
		Compound	NONE Detected	NO
3	Exterior - Roof Chimney Mastic (Grey)	Mastic	NONE Detected	NO
4	**Exterior - Roof Big Vent Mastic (Black)**	**Mastic**	**Chrysotile - 2%**	**YES**
5	Exterior - North Roof	Roofing Shingle	NONE Detected	NO
		Layer: Membrane	NONE Detected	NO
6	Exterior - South Roof	Roofing Shingle	NONE Detected	NO
		Layer: Membrane	NONE Detected	NO
7	Exterior - Roof Small Vent Mastic (Grey)	Mastic	NONE Detected	NO
8	Exterior - Back Entry - Roof Mastic (Black)	Mastic	NONE Detected	NO
9	Exterior - North Roof Mastic (Black)	Mastic	NONE Detected	NO
10	Exterior - South Roof Mastic (Black)	Mastic	NONE Detected	NO

Asbestos was identified in the Mastic sample collected for analysis at the following location:

- Exterior - Roof Big Vent Mastic (Black)

No asbestos was identified in the Compound sample collected for analysis.

No asbestos was identified in the Layer: Membrane samples collected for analysis.

No asbestos was identified in the Roofing Shingle samples collected for analysis.

Note: The results only relate to the building materials and specific or homogenous areas tested and if any disturbance to other areas or materials is planned within other areas of the building, further inspection and sampling will be required prior to any disturbance of the building materials.

4.1 ASBESTOS RISK ASSESSMENT

Material Type:	Mastic		
Substrate:	Metal		
Sample Number(s):	04		
Location(s):	Exterior – Roof - Big Vent Mastic		
Condition:	Good	Current Exposure Risk:	Low
Accessibility:	High	Approx. Quantity:	Around 2 Big Vents
Friability:	No	Risk Assessment for Abatement:	“Moderate Risk”

The material was observed to be in good condition and does not pose an immediate health or exposure risk to individuals if the material is left undisturbed.

WorkSafeBC “Moderate Risk” asbestos work procedures will be required to remove the **Mastic** as outlined in the Safe Work Practices for Handling Asbestos guidelines, 2023 Publication.

Please note that the quantity estimates for materials provided are visual estimations only and shall not be used solely for quotation purposes. It is the responsibility of the abatement contractor to provide their own estimations for abatement.

Prior to or during demolition of building materials, if any other materials are suspected of asbestos, stop work and notify the appropriate individuals to conduct further sampling, analysis and risk assessment.

If new information becomes available or if any materials were not addressed in this report and is suspected of containing asbestos, EPOCH should be requested to further investigate the matter.

5.0 SURFACE PAINTS AND COATINGS LEAD IDENTIFICATION

Surface paints and coatings were analyzed from the areas listed in Table 2. A licensed X-Ray Fluorescence (XRF) operator, Michael Zhu, (XRF License #: 31722) conducted on-site non-destructive testing of potential lead containing surfaces. The surface paints/coatings were analyzed on April 07, 2025 with a Niton XL2 600 (SN#200274) XRF Lead analyzer, to determine the concentration of lead in paints/coatings. The limit of detection (LOD) for lead in paints/coatings using XRF is 0.01 mg/cm^2 or 10 ppm based on a 60 second reading time. Results are reported with an included variance (+/-). The results only relate to the items tested. Other surfaces other than those tested may contain lead.

Table 2: Lead Paints/Coatings Analysis Results and Risk Assessment

Sample Number	Sample Location	Substrate	Colour	Result (ppm)	Var. +/-	Cond.	Access.[1]	Cur. Exp. Risk[2]	Risk Level for demolition or disturbance of material[3]
LP 1	**Exterior - Wood Wall Cladding**	**Wood**	**Light Grey**	**3767**	**52**	**Good**	**High**	**Low**	**Low-Moderate to Moderate-High**
LP 2	Exterior - White Wall Paint	Concrete	White	<LOD	20	Good	High	Low	Low
LP 3	**Exterior - Wood Window Trims**	**Wood**	**White**	**3052**	**55**	**Good**	**High**	**Low**	**Low-Moderate to Moderate-High**
LP 4	**Exterior - Metal Window Trims**	**Metal**	**White**	**16.8K**	**1.2K**	**Good**	**High**	**Low**	**Low-Moderate to Moderate-High**
LP 5	**Exterior - Back Hand Rails**	**Metal**	**Dark Grey**	**9470**	**345**	**Good**	**High**	**Low**	**Low-Moderate to Moderate-High**
LP 6	Exterior - Back Hand Rails	Metal	White	<LOD	20	Good	High	Low	Low

Sample Number	Sample Location	Substrate	Colour	Result (ppm)	Var. +/-	Cond.	Access.[1]	Cur. Exp. Risk[2]	Risk Level for demolition or disturbance of material[3]
LP 7	Exterior - Front Hand Rails	Metal	Dark Grey	<LOD	34	Good	High	Low	Low
LP 8	**Exterior - Entry Columns**	**Wood**	**Dark Grey**	**19.8K**	**0.2K**	**Good**	**High**	**Low**	**Low-Moderate to Moderate-High**

Health Canada	***Canada Consumer Product Safety Act***	**0.009 % wt. (90 ppm / mg/kg)**
Cal/OSHA	***Lead Exposure (U.S. California Occupational Safety and Health Administration***	**0.06 % wt. (~0.04 mg/cm^2) or 600 ppm / mg/kg**
HUD / EPA	***U.S. Housing and Urban Development / Environmental Protection Agency***	**0.50 % wt. or 1.0 mg/cm^2 or 5000 ppm**

Var. = Variance; Cond. = Condition | <LOD = Below Limit of Detection | K = Multiples of One Thousand (1000)

Bulk or chip samples (excluding ceramic tiles) may be collected and analyzed by a lead-analysis laboratory to determine concentration by laboratory methodologies. Any detectable amount of lead in paints or coatings may pose a health risk when the material is disturbed, depending on the method.

See Table 2 for Summary of Materials tested for lead and their criteria for assessment below.

1 **Accessibility**

- **High** – easily accessible;
- **Moderate** – not easily accessible but within view;
- **Low** – not easily accessible, enclosed or obscured.

2 **Current Exposure Risk**

- **Moderate Risk** – Indicates that "Moderate Risk" must be followed in order to be in proximity to the material; **appropriate Personal Protective Equipment (PPE) is recommended.**
- **Low Risk** – Indicates that "Low Risk" must be followed in order to be within proximity to the material.

3 **Risk Assessment for demolition or removal**

- The Risk Level is determined based on the planned disturbance to the material. Procedures must be followed, sufficient and appropriate engineering controls implemented and associated personal protective equipment must be worn based on safe work procedures as outlined in the WorkSafeBC "*Safe Work Practices for Handling Lead*", 2020 publication.

5.1 REGULATIONS AND/OR GUIDELINES FOR LEAD-CONTAINING PAINTS/COATINGS

- Health Canada and the new ***Canada Consumer Product Safety Act (formerly Canadian Hazardous Product Act (CHPA)***, under the Surface Coating Material Regulations (SOR/2005-109) defines that ***new*** materials containing lead greater than 0.009% wt. (90 ppm or mg/kg) is to be considered lead-containing.

- ***State of California Division of Occupational Safety and Health Administration (Cal/OSHA)*** suggests that removal of lead-containing paint/coating which equals or exceeds 600 ppm or mg/kg (0.06 % wt. or ~0.04 mg/cm^2) requires safe work procedures worker protection (HEPA respirator and coveralls) and an exposure control plan be implemented.

- Lead-based paint is defined as paint or other surface coatings that contain lead equal to or exceeding 0.5 percent (%) by weight (5000 ppm or mg/kg) as per the U.S. Department of ***Housing and Urban Development*** (HUD) and the U.S. Environmental Protection Agency (EPA).

Lead concentrations as low as 90 mg/kg may present a risk to vulnerable people such as pregnant women (or those trying to become pregnant), older workers, and children. Any risk assessment should include the presence of high-risk individuals within the workplace.

5.2 LEAD PAINTS/COATINGS RISK ASSESSMENT

The surface paints/coatings analyzed were identified to range from < LOD (below limit of detection) to 19.8K ppm. The interior painted surfaces were identified to have lead concentrations which exceed guidelines for lead-containing paints and coatings and their removal. However, all paints/coatings outside the inspected area shall also be treated as suspect lead-containing unless tested otherwise.

Examples of risk levels associated with procedures for demolition, removal or disturbance of materials or surfaces/coatings potentially containing lead:

- *Installing or removing sheet metal or bolts that has lead-containing paint (low risk);
- Removing suspect lead-containing surface paints/coatings materials using power tools with (low-moderate risk) or without (moderate-high risk) effective dust collection systems and HEPA filters;
- Manual demolition of lead-containing materials using non-powered hand tools such as crowbar, sledgehammer or similar (moderate risk);
- Scraping or sanding of lead-containing paints (moderate risk);
- Cleaning up and removing lead-containing dust and debris (moderate risk).

Based on the results of the surface paints/coatings analyzed within the identified scope of work and depending on the type of disturbance that may generate airborne or settled dust, the materials may potentially pose a lead exposure risk to workers.

Lead exposure is not to exceed the potential airborne lead concentration for an 8-hour occupational exposure limit (OEL) of 0.05 mg/m^3.

Work procedures must be developed in accordance with WorkSafeBC and inclusive of Part 5.48-5.49 (controlling Exposure), and Part 6.59-6.69 (Lead). EPOCH recommends referencing WorkSafeBC publication, "Safe Work Practices for Handling Lead", 2020. This document will assist with current practices for lead information, products, health hazards, worker protection requirements, safe work procedures, and techniques for lead abatement.

5.3 DISPOSAL OF LEAD-BASED PAINTS/COATINGS

When paints have been identified to be lead-based paints (above 5000 ppm), the paint will require waste characterization for disposal through TCLP Leachability Tests. Additional waste characteristic testing (TCLP) testing is recommended for **lead-based paints** and **high lead concentration ceramic tiles**. The purpose of this test is to determine the TCLP concentration for disposal requirement with respect to "leachability" or "mobility" of paints, or any materials (**excluding metals**). If the lead-containing paints exceed a leaching lead concentration of 5.0 mg/L, the paint and substrate will be classified as Hazardous waste and therefore, will require proper disposal in accordance with the Ministry of Environment.

Based on the lead-based paints/coatings identified **above 5000 ppm**, additional waste characteristic testing by Toxicity Characteristic Leaching Procedure (TCLP) is recommended prior to disposal of lead-based paints/coatings identified at the building. The purpose of this test is to determine the TCLP concentration for disposal requirement with respect to "leachability" or "mobility" of paints/coatings and is required prior to any non-regulated disposal of lead-based paints/coatings. The methodology requires a minimum sample weight of 105 grams for TCLP analysis. If the lead-based paints/coatings exceed a leaching lead concentration of 5.0 mg/L, the paint/coatings and substrate (**excluding metals**) will be classified as hazardous waste and therefore will require disposal in accordance with the Ministry of Environment. If the lead-based paints/coatings do not exceed a leaching lead concentration of 5.0 mg/L, the material may be disposed of as regular construction waste. **This test should be performed prior to any disposal of lead-based painted/coated surfaces, and is not included in this report**. Demolition contractors disposing of painted/coated materials to landfill must ensure that the paints do not exceed Leachate levels. The estimated laboratory cost per sample for TCLP analysis is $225.00. The methodology requires a minimum sample weight of 105 grams for TCLP analysis, and requires invasive or destructive sampling.

6.0 PCB CONTAINING MATERIALS, MERCURY, LEAD, AND OTHER CHEMICALS

A visual inspection of the areas within the scope of work was conducted for the presence of the following materials:

- Wall-mounted thermostats and other equipment suspected of containing mercury;
- Paints or interior/exterior coating, construction material (vent pipes) suspected of containing heavy metals;
- Fluorescent light fixtures suspected of containing PCB ballast;
- Stored chemicals suspected of containing toxic, corrosive, explosive, and flammable content;
- Chlorofluorocarbon (CFC's) in refrigeration equipment.

6.1 Mercury

During our site inspection of the areas within the scope of work, wall-mounted thermostats suspected of containing liquid mercury in the switch mechanisms were not observed.

6.2 PCB Light Ballast

During our site inspection, fluorescent light fixture/s suspected of containing PCBs in the ballast/s were not observed in the area within the scope of work.

6.3 Crystalline Silicates

Silicates can be found in concrete, plaster, mortar, cement, ceramics, stucco and stone materials. If breaking, cutting, drilling, sanding, and /or crushing such materials during demolition, workers shall be made aware of the potential exposure to silica dust and their employers aware of the required WorkSafeBC regulations.

6.4 On-site Chemicals and Other Hazardous Materials

Other hazardous or infectious substances for consideration, such as: rodent droppings and/or carcasses, mould and fungi, bacteria and pigeon guano may cause infectious illnesses and/or respiratory diseases in humans. Unprotected trades or workers performing demolition of the building(s) should consider and take necessary precautions, as per the WorkSafeBC Occupational Health and Safety Regulations, to protect themselves from potential exposure of these contaminants. Workers should wear protective disposable clothing and HEPA equipped respirators when working near or in potential health hazards.

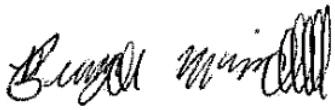
All ozone depleting substances in refrigeration equipment (fridges, freezers, air conditioning units), paints, chemicals and solvents observed within the building(s) and its surrounding property areas shall be properly handled, disposed or recycled at an approved facility as per Ministry of Environment Waste Management Act – Hazardous Waste Regulations.

If you have any questions or require further assistance, please feel free to contact our office.

Sincerely,
EPOCH Environmental Consulting Limited

Michael Zhu, B.ASc
Field Technician, ASB - 10007959
GL250407MZ

Reviewed By



Bryce McNicholl, B.ASc
Manager of Operations, Fraser Valley Region,
ASB - 10002603

Appendix A

Bulk Sample Results - Asbestos

April 07, 2025

Epoch Environmental Consulting Ltd. - Bulk
Michael Zhu
100- 42 Fawcett Road
Coquitlam, British Columbia
Canada

EALABS
EPOCH ANALYTICAL INC
ASBESTOS • LEAD • MOULD ANALYSIS

100 42 Fawcett Road Coquitlam, BC V3K 6X9
Ph: 604 521 6806 info@ealabs.ca

Attention: Michael Zhu

BULK SAMPLE ASBESTOS IDENTIFICATION RESULTS - 640 Poirier Street, Coquitlam, BC V3J 6B1 (E2025-03-64-MZ)

Please find attached the laboratory results for the collected bulk material sample(s) submitted for asbestos identification. Examination of these sample(s) for asbestos content was conducted in accordance to EPA/600/R-93/116 methodology using Polarized Light Microscopy (PLM).

The Limit of Detection (LOD) for the analytical method is <1% and the Limit of Quantitation (LOQ) is 1%. Therefore, samples with low concentration of <1% asbestos content may require further testing by an Asbestos Point Count and/or Transmission Electron Microscopy (TEM) to obtain more precise results. All analysts are derived from calibrated visual estimate unless otherwise noted.

The Client is solely responsible for the use and interpretation of test results. The results relate only to the items tested and the accuracy of the results is limited by methodology, acuity of the sample collector and information provided by the Client. This test report shall not be reproduced, except in full, without the written approval of the laboratory. Reports or copies of same will not be released by Epoch Analytical Inc to any third party without prior written request from the Client. Test reports cannot be modified to satisfy disposal company or waste transfer station policies. Sample(s) not destroyed in the testing will be kept for 30 days before being disposed. The sample(s) not destroyed in the testing will be kept for 30 calendar days before being disposed.

WorkSafeBC's definition of an Asbestos Containing Material (ACM), with the exception of vermiculite insulation, is 0.5%. Vermiculite insulation containing 'any' amount of asbestos is considered an ACM. Specifically, Research Method EPA600/R-04/004 is recommended for the analysis of vermiculite insulation. Asbestos results reported as 'None Detected' indicates no asbestos was identified in the sample submitted to Epoch Analytical Inc.

ACCREDITATIONS

Epoch Analytical Inc Coquitlam is accredited by the Canadian Association for Laboratory Accreditation Program (CALA) for bulk asbestos sample analysis under Testing Accreditation No. CALA lab code A 3533.

If you have any questions or require further assistance, please do not hesitate to contact our office.

Sincerely

EPOCH Analytical Inc.

Leanne Murakami B.A.
Lab Director

CALA
Testing
Accreditation No. 3533

EAC2025-01-530-N

GL 2025-04-07 LL/vz

Client Information:

Epoch Environmental Consulting Ltd. - Bulk
Michael Zhu
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Asbestos Bulk Analysis by Polarized Light Microscopy - EPA/600/R-93/116

Project Name:	Canstar (25-00505-E)	**EA Number:**	EAC2025-01-530-N
Project Number:	E2025-03-64-MZ	**Submitted By:**	Michael Zhu
Project Location:	640 Poirier Street, Coquitlam, BC V3J 6B1	**Date Received:**	2025-04-07
Sampled By:	Michael Zhu	**Time Received:**	1:01 PM
Date Sampled:	2025-04-07	**Date Analyzed:**	2025-04-07
		Date Reported:	2025-04-07

Sample Number	Location	Material	Estimated Asbestos % (Fiber Color)	Non-Asbestos Fibers % (Fiber Color)	Non-Fibrous Materials %
1	Exterior - Back Entry - Roof	Roofing Shingle	NONE Detected	Synthetic Fiber - 20% (Beige)	80%
		Membrane	NONE Detected	Synthetic Fiber - 40% (Beige)	60%
2	Exterior - Back Entry - Nail Mastic (Grey)	Mastic	NONE Detected	Cellulose - 1% (Beige)	99%
		Compound	NONE Detected	Cellulose - 2% (Beige)	98%
3	Exterior - Roof Chimney Mastic (Grey)	Mastic	NONE Detected	Cellulose - 1% (Beige)	99%
4	Exterior - Roof Big Vent Mastic (Black)	Mastic	**Chrysotile - 2% (White)**		98%
5	Exterior - North Roof	Roofing Shingle	NONE Detected	Synthetic Fiber - 20% (Beige)	80%
		Membrane	NONE Detected	Synthetic Fiber - 40% (Beige)	60%
6	Exterior - South Roof	Roofing Shingle	NONE Detected	Synthetic Fiber - 20% (Beige)	80%
		Membrane	NONE Detected	Synthetic Fiber - 40% (Beige)	60%
7	Exterior - Roof Small Vent Mastic (Grey)	Mastic	NONE Detected	Cellulose - 2% (Beige)	98%
8	Exterior - Back Entry - Roof Mastic (Black)	Mastic	NONE Detected	Cellulose - 1% FibreGlass - 1% (Beige)	98%
9	Exterior - North Roof Mastic (Black)	Mastic	NONE Detected	Cellulose - 2% (Beige)	98%
10	Exterior - South Roof Mastic (Black)	Mastic	NONE Detected	Cellulose - 1% Synthetic Fiber - 1% (Beige)	98%

Analyst Notes:

Analyzed and Reviewed By:

Victor Zhang BSc
Lab Analyst

EAC2025-01-530-N

Appendix B

Site Drawing/s

LEGEND

- # NON-ASBESTOS-CONTAINING
- # ASBESTOS-CONTAINING
- LP# NON-LEAD-CONTAINING
- LP# LEAD-CONTAINING

N

EPOCH ENVIRONMENTAL CONSULTING

Unit 100 - 42 Fawcett Road, Coquitlam, BC

Project No: E2025-03-64

Lab No: EAC2025-01-530

Address: 640 Poirier Street, Coquitlam, BC V3J 6B1

Client Job No:	**25-00505-E**
Checked By:	**BM**
Drawn By:	**MZ**
DWG Scale:	**Not to Scale**
Inspection Date:	**April 7, 2025**
Client Name:	**Canstar Restorations Ltd.**

Drawing No.: 1/1

Drawing Title: EXTERIOR - LIMITED FLOOR PLAN & SAMPLING LOCATIONS