RFP 505 PANORAMA RIDGE DEMOLITION AND REMEDIATION ADDENDUM #1

Date of Addendum: Monday, June 16, 2025

NOTICE TO ALL POTENTIAL RESPONDENTS

The Request for Proposals (RFP) is modified as set forth in this Addendum. The original RFP Documents and any previously issued addenda remain in full force and effect, except as modified by this Addendum, which is hereby made part of the RFP. Respondents should take this Addendum into consideration when preparing and submitting its Proposal.

PROPOSAL SUBMITTAL DEADLINE

The Proposal submittal deadline remains the same and is not changed by this Addendum.

1.0 – RFP

Item	Section	Description of Change
2.0	Project Goals and Objectives	Remove the following language in the fourth sentence of the first paragraph: “As the dwelling was constructed in 1994, no asbestos abatement will be required.”
2.0	Project Goals and Objectives	Add the following language after the fourth sentence of the first paragraph: “see Appendix C – Pre-Demolition Hazardous Material Survey”.
10.0	Reference Documents	Add the following language on the fourth line of the first paragraph. “Appendix C – Pre-Demolition Hazardous Material Survey.”

2.0 – QUESTIONS AND ANSWERS

The following questions and answers are provided as a matter of information to clarify issues raised about the RFP. To the extent that changes to the RFP are required based on the questions received, the RFP has been modified as noted above in the RFP section of this Addendum.

Item	Questions and Answers
2.1	Question: Is there a hazmat report or confirmation that the building does not contain asbestos. Answer: Yes, there is a Pre-Demolition Hazardous Materials Survey which did determine the presence of asbestos in the mastic applied to the windows please see attached Appendix C – Pre-Demolition Hazardous Material Survey. Sentence “As dwelling was constructed in 1994, no asbestos abatement will be required” is henceforth removed with this addendum as per section 1.0.

END OF ADDENDUM

Apex EHS Services Inc.
Unit 2A 1445 McGill Road, Kamloops, BC V2C 6K7
Phone: 250-868-0667 Email: apex@apexehs.ca

Pre-Demolition Hazardous Materials Survey Report

City of Quesnel

505 Panorama Ridge, Quesnel, BC

June 13, 2025

Apex File Number: COQU25-001

EXECUTIVE SUMMARY

Apex EHS Services (Apex) was retained by City of Quesnel to undertake a Pre-Demolition Hazardous Materials survey at the residential building located at 505 Panorama Ridge, Quesnel, BC. This survey was conducted for due diligence and regulatory compliance purposes as required by Section 20.112 of the BC Occupational Health and Safety (WorkSafeBC) Regulation.

As per BC Assessment, we understand as per the client, the building may have been constructed prior 1990, a period where hazardous materials were incorporated into building finishes and structures.

WorkSafeBC defines Hazardous Materials as:

- asbestos-containing material,
- lead or any other heavy metal, or
- toxic, flammable or explosive material

Other hazardous materials included in this assessment comprised ozone depleting substances (ODS), crystalline silica, mould growth and radioactive materials.

FINDINGS

Hazardous Material	Type / Location
Asbestos-containing Building Materials (ACMs)	Asbestos was identified within the following materials: • Grey mastic (S04) applied to windows within the Debris Pile (Loc. 1); and, • Black mastic (S05) applied to windows within the Debris Pile (Loc. 1).
Lead in Paints	Lead was not identified within any of the paint samples collected.
Lead products	Glazing applied to surface finish of ceramic tile within the Debris Pile (Loc.1) is assumed to contain lead.
Mercury	Products containing mercury were not identified.
Polychlorinated Biphenyls (PCBs)	Products containing PCBs were not identified.
Crystalline Silica	Drywall, asphalt, concrete, cement, ceramic tile, brick, masonry and mortar within the Debris Pile (Loc.1) are assumed to contain crystalline silica.
Ozone Depleting Substances	Ozone depleting substances were not identified.
Radioactive Materials	Radioactive materials were not identified.
Mould	No significant areas of suspect visible mould were identified.
Flammable and Explosive Materials	Flammable and explosive materials were not identified.
Fire Damaged Debris	A significant amount of partially combusted residue was noted throughout the Debris Pile (Loc.1). This residue can be contaminated by dioxins, furans, polyaromatic hydrocarbons (PAHs) PCBs carbon and oxygen centred radicals. Exposure to these contaminants through inhalation, ingestion, skin contact and absorption through mucous membranes (nose, throat and eyes) can cause serious adverse health effects.

RECOMMENDATIONS

- Due to the presence of asbestos-containing window mastic debris, the Debris Pile (Loc. 1) should be treated as an asbestos-contaminated environment. Entry into the debris pile should be limited to workers following moderate risk asbestos work procedures (1/2 face respirator with p-100 filters, Tyvek suit, rubber boots, wash-up station). All porous contents should be disposed of as asbestos waste. Non-porous contents may be decontaminated by wet wiping and/or HEPA vacuuming following asbestos work procedures.
- Safe work practices must be followed when handling materials which have been impacted by the fire. Personal protective equipment including impervious coveralls, gloves, respiratory protection and eye protection should be worn and workers must thoroughly decontaminate after handling these materials
- All asbestos-containing material must be removed using safe work procedures and practices prior to/ in conjunction with demolition activities.
- An asbestos risk assessment must be performed by a qualified professional prior to demolition work occurring to determine the exposure risk to workers and other persons.
- Proper procedures and documentation such as safe work practices, an exposure control plan, and/or other controls must be developed prior to disturbing materials that contain crystalline silica and lead glazing.
- If a suspect hazardous material not identified in this report is discovered during demolition work, this material must not be disturbed until a qualified person has collected a sample (if required) and determined whether the material is hazardous.
- A copy of this report must be posted on site.
- A visual assessment must be conducted by a qualified person and a written report must be prepared confirming the removal or safe containment of all hazardous materials identified in this report prior to commencement of demolition work.

Table of Contents

Attachments

1.0 INTRODUCTION

Apex EHS Services (Apex) were retained by City of Quesnel to undertake a Pre-Demolition Hazardous Materials survey (HMS) at 505 Panorama Ridge, Quesnel, BC. This survey was conducted for due diligence and regulatory compliance purposes as required by Section 20.112 of the BC Occupational Health and Safety (WorkSafeBC) Regulation.

As per BC Assessment, we understand as per the client, the building may have been constructed prior 1990, a period where hazardous materials were incorporated into building finishes and structures.

WorkSafeBC defines Hazardous Materials as:

- asbestos-containing material,
- lead or any other heavy metal, or
- toxic, flammable or explosive material

Other hazardous materials included in this assessment comprised ozone depleting substances (ODS), crystalline silica, mould growth and radioactive materials.

The HMS was conducted by Bryant Lowe (WorkSafeBC Asbestos Certificate Number 10007181) of Apex on June 11 & 12, 2025. The objective of the HMS was to identify specified hazardous building materials in preparation for building demolition, which were determined by systematic visual assessment, selective sampling and laboratory analysis. Specific methodology employed during the HMS is included in Appendix 1. The regulatory framework pertaining to hazardous materials is included in Appendix 2. The terms of reference for this report are included in Appendix 7.

2.0 LIMITATIONS

This HMS was limited to construction materials and components. The analytical results of visually homogenous materials were extrapolated throughout the structure dependant on visual indications or other available information on estimated phases of construction. Some materials such as painted drywall surfaces and plaster finishes cannot be extrapolated with certainty. No below-grade water drainage or plumbing systems or sub-surface investigation of materials was included in the scope of this HMS.

Limited destructive testing was completed to the extent practicable. It's not possible to comprehensively evaluate all hidden spaces such as behind wall surfaces, within pipe chases and chimneys during a survey with removing all finishes that cover such areas. As such, if hidden suspect asbestos materials are identified during demolition work, these should not be disturbed until further evaluation can be made.

Materials assumed not to contain asbestos during this HMS included wood and wood composite materials, fiberglass, carpet, synthetic plastics, metals and concrete.

3.0 FINDINGS

Sample location drawings are included in Appendix 3. Photographs of hazardous materials are included in Appendix 4.

Hazardous material sample results and visually identified hazardous materials are shown in tables 1 to 3. Laboratory analytical results are included in Appendix 5. Asbestos health effects and WorkSafeBC asbestos risk assessment requirements are included in Appendix 6.

Table 1 - Asbestos

Sample #	Material	Description	Location	Asbestos Content / Type	Approximate Quantity (Square Feet)*
S01(a-g)	Drywall Joint Compound	Applied to Drywall Debris	Debris Pile (Loc.1)	Not Detected	-
S02(a-e)	Texture Coat	Present as Debris	Debris Pile (Loc.1)	Not Detected	-
S03(a-c)	Brick Mortar	Applied to Bricks, Present as Debris	Debris Pile (Loc.1)	Not Detected	-
S04(a-c)	**Window Mastic**	**Grey, Applied to Windows**	**Debris Pile (Loc.1)**	**0.5-5% / Chrysotile**	**300**
S05(a-c)	**Window Mastic**	**Black, Applied to Windows**	**Debris Pile (Loc.1)**	**0.5-5% / Chrysotile**	**300**
S06	Vinyl Sheet Flooring	Blue and White Pattern, Present as Debris	Debris Pile (Loc.1)	Not Detected	-
S07	Asphalt Shingle	Brown and Black, Present as Debris	Debris Pile (Loc.1) & Shed (Loc. 1)	Not Detected	-
S08	Asphalt Shingle	Grey and Black, Present as Debris	Debris Pile (Loc.1)	Not Detected	-

Asbestos-containing materials are bolded.

*Quantities are an estimate and should not be used as an exact measurement.

Ceiling insulation within the Shed (Loc. 2) was observed to be fiberglass insulation therefore can be treated as non-asbestos containing material.

Table 2 - Lead Paint			
Sample #	**Substrate / Colour**	**Location**	**Lead Content (%)**
L01	Drywall / Burnt Paint	Debris Pile (Loc.1)	<0.0085%
L02	Drywall / Beige	Debris Pile (Loc.1)	<0.0085%
L03	Wood Trim / Off-white	Debris Pile (Loc.1)	<0.0085%
L04	Wood Paneling / Off-White	Shed (Loc.2)	<0.0085%
L05	Wood Trim / White	Shed (Loc.2)	<0.0085%
L06	Drywall / Off-White	Debris Pile (Loc.1)	<0.0085%

Lead was not identified within any of the paint samples collected.

Table 3 – Other Hazardous Materials	
Material	**Locations**
Mercury	Products containing mercury were not identified.
Polychlorinated Biphenyls (PCBs)	Products containing PCBs were not identified.
Crystalline Silica	Drywall, asphalt, concrete, cement, ceramic tile, brick, masonry and mortar within the Debris Pile (Loc.1) are assumed to contain crystalline silica.
Ozone Depleting Substances	Ozone depleting substances were not identified.
Radioactive Materials	Radioactive materials were not identified.
Mould	No significant areas of suspect visible mould were identified.
Flammable and Explosive Materials	Flammable and explosive materials were not identified.
Fire Damaged Debris	A significant amount of partially combusted residue was noted throughout the Debris Pile (Loc.1). This residue can be contaminated by dioxins, furans, polyaromatic hydrocarbons (PAHs) PCBs carbon and oxygen centred radicals. Exposure to these contaminants through inhalation, ingestion, skin contact and absorption through mucous membranes (nose, throat and eyes) can cause serious adverse health effects.
Mercury	Products containing mercury were not identified.

4.0 RECOMMENDATIONS

- Due to the presence of asbestos-containing window mastic debris, the Debris Pile (Loc. 1) should be treated as an asbestos-contaminated environment. Entry into the debris pile should be limited to workers following moderate risk asbestos work procedures (1/2 face respirator with p-100 filters, Tyvek suit, rubber boots, wash-up station). All porous contents should be disposed of as asbestos waste. Non-porous contents may be decontaminated by wet wiping and/or HEPA vacuuming following asbestos work procedures.
- Safe work practices must be followed when handling materials which have been impacted by the fire. Personal protective equipment including impervious coveralls, gloves, respiratory protection and eye protection should be worn and workers must thoroughly decontaminate after handling these materials
- All asbestos-containing material must be removed using safe work procedures and practices prior to/ in conjunction with demolition activities.
- An asbestos risk assessment must be performed by a qualified professional prior to demolition work occurring to determine the exposure risk to workers and other persons.
- Proper procedures and documentation such as safe work practices, an exposure control plan, and/or other controls must be developed prior to disturbing materials that contain crystalline silica and lead glazing.
- If a suspect hazardous material not identified in this report is discovered during demolition work, this material must not be disturbed until a qualified person has collected a sample (if required) and determined whether the material is hazardous.
- A copy of this report must be posted on site.
- A visual assessment must be conducted by a qualified person and a written report must be prepared confirming the removal or safe containment of all hazardous materials identified in this report prior to commencement of demolition work.

5.0 CLOSURE

Authored By:

Bryant Lowe, B.Sc.
Hazardous Materials Technician
For Apex EHS Services Ltd.
Telephone: 236-425-5244
Email: blowe@apexehs.ca

Reviewed By:

Matt Summers, B.Sc., EP(OHS)
Project Manager
For Apex EHS Services Ltd.
Telephone: 236-425-5244
Email: msummers@apexehs.ca

Appendix 1 – Methodology

ASBESTOS-CONTAINING MATERIALS (ACMs)

An initial walk-through inspection was conducted throughout the structure and observations were made of the wall, ceiling, floor, and other materials including any machinery or equipment to make a preliminary determination if asbestos could be present.

To confirm or discount the presence of asbestos, representative bulk samples were collected. The sample location in the building was identified with a unique sample number. The number of representative bulk samples collected was consistent with recognized industry standards and principles of good occupational hygiene practice. The approximate quantity, location and sample locations of suspect ACMs were recorded.

Surveys are conducted and samples are collected in accordance with the WorkSafeBC Guideline to Section 20.112 of the BC Occupational Health and Safety Regulation and outlined in Safe Work Practices for Asbestos. Flooring mastic/adhesive and leveling compounds are only sampled and analyzed if present on the underside of flooring samples (vinyl floor tile and vinyl sheet flooring).

Bulk samples were submitted for analysis in accordance with PLM: Bulk Asbestos Building Materials EPA 600 R 93 / 116. 1993. The asbestos analysis was completed using a stop positive approach. Stop positive means samples in a homogenous material sample set were analyzed consecutively and when a sample was identified as asbestos-containing, further sample analysis within that sample set was not completed.

A homogenous material is defined by the US EPA as material that is uniform in texture and appearance, was installed at one time, and is unlikely to consist of more than one type or formulation of material. The homogenous materials are determined by visual examination and available information on the phases of construction and prior renovations.

Samples containing $\geq$0.5% asbestos were identified as asbestos-containing materials. The labs measurement of uncertainty is 0.5%, the decision rule is to ignore the measurement of uncertainty if 0.5-1% of asbestos is detected. Vermiculite insulation was identified as being an asbestos-containing material if any trace of asbestos was found. The labs measurement of uncertainty is 0.5%, the decision rule is to ignore the measurement of uncertainty if any trace of asbestos is detected within vermiculite insulation.

LEAD PAINTED MATERIALS

During the walk-through inspection a visual review of the painted surfaces was conducted for paints and coatings. Apex personnel collected representative bulk samples from the building structure. The number of representative bulk samples collected was consistent with recognized industry standards and principles of good occupational hygiene practice.

Bulk samples were submitted for lead analyses in accordance with ASTM D3335-85A "Standard Method to Test for Low Concentrations of Lead in Paint by Atomic Absorption Spectrophotometry". Chain-of-custody protocol was observed during handling and transportation of the bulk samples.

Samples containing any detectable amounts of lead were identified as lead paints.

OTHER HAZARDOUS MATERIALS

Lead products, mercury-containing thermostats, mercury-containing fluorescent tube/lamps, potentially flammable materials and potentially explosive materials were confirmed or discounted by visual inspection only, no samples were collected.

If the building was constructed prior to 1980, all fluorescent light ballasts were assumed to potentially contain PCBs unless additional information was provided. All smoke detectors were assumed to contain small quantities of radioactive materials unless additional information was provided. If present, Drywall, asphalt roofing material, concrete, cement, ceramic tile, brick, masonry and mortar were assumed to contain crystalline silica.

The potential presence of ODS in refrigeration equipment and fire suppression systems was determined by visual inspection of manufactures labels and maintenance records only.

This survey included a visual inspection of surface materials for larger areas of suspect visible mould (>10 square feet) only. Samples were not collected to confirm the presence of mould growth nor was an intrusive inspection performed for mould growth.

Appendix 2 – Regulatory Framework

1. BC Occupational Health and Safety Regulation
2. Safe Work Practices for Handling Asbestos, WorkSafeBC, 2020
3. Hazardous Waste Regulation, BC Ministry of Environment and Climate Change Strategy
4. Ozone Depleting Substances and other Halocarbons Regulation, B.C. Reg. 220 / 2006, Environmental Management Act.
5. PCB Regulations, SOR / 2008-273, Canadian Environmental Protection Act.
6. Safe Work Practices for Handling Lead, WorkSafeBC, 2020
7. Transportation of Dangerous Goods Regulations SOR / 2008-34, Transportation of Dangerous Goods Act.

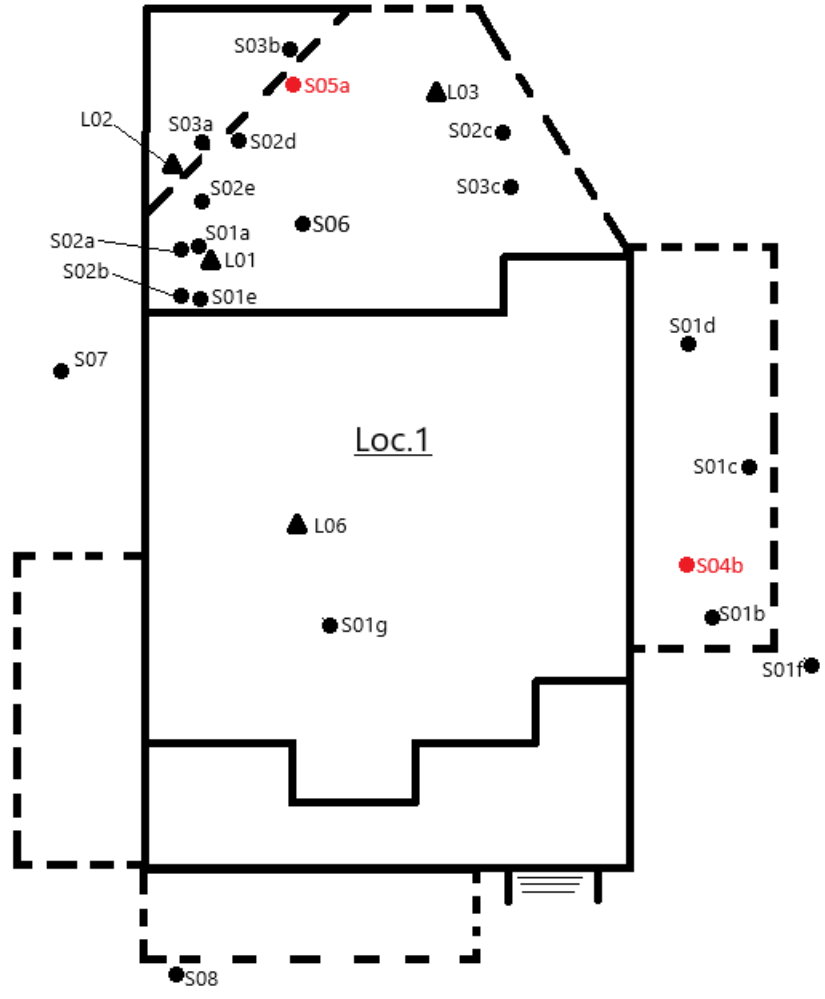
Appendix 3 – Drawing

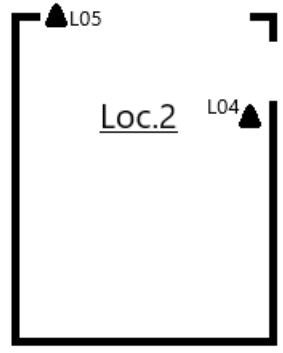
APEX EHS SERVICES

N

Locations
1. Debris Pile
2. Shed

Approximate Edge of Debris





LEGEND	PROJECT NAME: Pre-Demolition Hazardous Materials Survey Report	DATE: June 13, 2025
● Asbestos Sample Location - Positive Result ▲ Lead Sample Location	PROJECT ADDRESS: 505 Panorama Ridge, Quesnel, BC	PROJECT NO.: COQU25-001 SCALE: NTS
	CLIENT: City of Quesnel	DRAWN BY: HT

NOTE: DRAWING IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.

Appendix 4 – Photographs

	Asbestos was not identified within the drywall joint compound (S01) present as debris within the Debris Pile (Loc. 1).
	Asbestos was not identified within the texture coat (S02) present as debris within the Debris Pile (Loc. 1).
	Asbestos was not identified within the brick mortar (S03) applied to bricks and present as debris within the Debris Pile (Loc. 1).

	Asbestos was identified within the grey window mastic (S04) applied to windows within the Debris Pile (Loc. 1).
	Asbestos was identified within the black window mastic (S05) applied to windows within the Debris Pile (Loc. 1).
	Asbestos was not identified within the blue and white pattern vinyl sheet flooring (S06) present as debris within the Debris Pile (Loc. 1).

	Asbestos was not identified within the brown and black asphalt shingles (S07) present as debris within the Debris Pile (Loc. 1) and present on the roof of the Shed (Loc. 2).
	Asbestos was not identified within the grey and black asphalt roof shingles (S08) present as debris within the Debris Pile (Loc. 1).
	Lead was not identified within the off-white paint (L03) applied to wood panelling within the Shed (Loc. 2). Lead was not identified within the white paint (L03) applied to wood trim within the Shed (Loc. 2).

Appendix 5 – Analytical Results

Apex EHS Services Inc.
1519 Keehn Road, Kelowna, BC, V1X 5T5
Phone:250-868-0667 Email:apex@apexehs.ca

ASBESTOS ANALYSIS REPORT

Client:	City of Quesnel	**Apex Report No.:**	COQU25-001
Project Location:	505 Panorama Ridge, Quesnel, BC	**Client Project No:**	-
Samples Received:	24	**Client Project Name:**	-
Samples Analyzed:	21	**Date Reported:**	2025/06/13
		Date Analyzed:	2025/06/13

Notes:

Sample No.	Lab No.	Sample Description	Client Sample ID	Result
S01a	143432	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01b	143433	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01c	143434	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01d	143435	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01e	143436	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01f	143437	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S01g	143438	Single - White Compound	Drywall Joint Compound / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02a	143439	1st Layer - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02a	143439	2nd Layer - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02b	143440	1st Layer - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02b	143440	2nd Layer - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: C. Gauthier **Reviewer:** M. Summers

Apex EHS Services Inc.

1519 Keehn Road, Kelowna, BC, V1X 5T5

Phone:250-868-0667 Email:apex@apexehs.ca

Sample No.	Lab No.	Sample Description	Client Sample ID	Result
S02c	143441	Single - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02d	143442	Single - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S02e	143443	Single - White Compound	Texture Coat / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S03a	143444	Single - Grey Compound, Granular	Brick Mortar / Location 1	Asbestos Fibres Not Detected 0.5-5% Mica 95-99.5% Non-Fibrous
S03b	143445	Single - Grey Compound, Granular	Brick Mortar / Location 1	Asbestos Fibres Not Detected 0.5-5% Mica 95-99.5% Non-Fibrous
S03c	143446	Single - Grey Compound, Granular	Brick Mortar / Location 1	Asbestos Fibres Not Detected 0.5-5% Mica 95-99.5% Non-Fibrous
S04a	143447	Single - Grey Mastic	Window Mastic (Grey) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S04b	143448	1st Layer - Grey Mastic	Window Mastic (Grey) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S04b	143448	2nd Layer - Black Mastic, Fibrous	Window Mastic (Grey) / Location 1	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S04c	143449	-	Window Mastic (Grey) / Location 1	Stop Positive - Sample Not Analyzed
S05a	143450	Single - Black Mastic, Fibrous	Window Mastic (Black) / Location 1	0.5-5% Chrysotile Asbestos 95-99.5% Non-Fibrous
S05b	143451	-	Window Mastic (Black) / Location 1	Stop Positive - Sample Not Analyzed
S05c	143452	-	Window Mastic (Black) / Location 1	Stop Positive - Sample Not Analyzed
S06	143453	1st Layer - Blue & White Vinyl	Vinyl Sheet Flooring (Blue & White) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S06	143453	2nd Layer - White Foam	Vinyl Sheet Flooring (Blue & White) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: C. Gauthier **Reviewer: M. Summers**

Apex EHS Services Inc.

1519 Keehn Road, Kelowna, BC, V1X 5T5

Phone:250-868-0667 Email:apex@apexehs.ca

Sample No.	Lab No.	Sample Description	Client Sample ID	Result
S06	143453	3rd Layer - Grey Compound, Fibrous	Vinyl Sheet Flooring (Blue & White) / Location 1	Asbestos Fibres Not Detected 60-70% Cellulose Fibres 0.5-5% Glass Fibres 25-39.5% Non-Fibrous
S07	143454	1st Layer - Black Compound, Brown & Black Granules	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S07	143454	2nd Layer - Black Compound, Fibrous	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 30-40% Glass Fibres 60-70% Non-Fibrous
S07	143454	3rd Layer - Black Compound	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S07	143454	4th Layer - Black Compound, Black, Grey, & Brown Granules	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S07	143454	5th Layer - Black Compound, Fibrous	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 30-40% Glass Fibres 60-70% Non-Fibrous
S07	143454	6th Layer - Black Compound	Asphalt Shingle (Brown & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S08	143455	1st Layer - Black Compound, Black, Grey, & Brown Granules	Asphalt Shingle (Grey & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous
S08	143455	2nd Layer - Black Compound, Fibrous	Asphalt Shingle (Grey & Black) / Location 1	Asbestos Fibres Not Detected 30-40% Glass Fibres 60-70% Non-Fibrous
S08	143455	3rd Layer - Black Compound	Asphalt Shingle (Grey & Black) / Location 1	Asbestos Fibres Not Detected 99.5-100% Non-Fibrous

Samples analyzed in accordance with US EPA 600/R-93/116 by Polarized Light Microscopy and Apex EHS Services SOP: ASB-1
American Industrial Hygiene Association (AIHA) BAPAT Program Laboratory Number 224210
Quantification of ≥0.5% by volume is possible with this method.
Apex EHS Services will not accept any responsibility as to the manner of interpretation or application of these results.

Authorized by:

Amanda Copp, M.Sc., EP.
Laboratory Manager

CALA Testing Accreditation No. 1005048

Method: US EPA 600/R-93/116 by Polarized Light Microscopy

Analyst: C. Gauthier Reviewer: M. Summers

Apex EHS Services Inc.
1519 Keehn Road, Kelowna, BC, V1X 5T5
Phone:250-868-0667 Email:apex@apexehs.ca

LEAD ANALYSIS REPORT

Client:	City of Quesnel	**Apex Report No.:**	COQU25-001
Project Location:	505 Panorama Ridge, Quesnel, BC	**Client Project No:**	-
Samples Received:	6	**Client Project Name:**	-
Samples Analyzed:	6	**Date Reported:**	2025/06/13

Sample No.	Lab No.	Client Sample ID	Weight (g)	Lead Concentration
L01	27119	Burnt on Drywall / Location 1	0.2482 g	<0.0085 % wt
L02	27120	Beige on Drywall / Location 1	0.2493 g	<0.0085 % wt
L03	27121	Off-White on Wood Trim / Location 1	0.2479 g	<0.0085 % wt
L04	27122	Off-White on Wood Paneling / Location 2	0.2496 g	<0.0085 % wt
L05	27123	White on Wood Trim / Location 2	0.2499 g	<0.0085 % wt
L06	27124	Off-White on Drywall / Location 1	0.2492 g	<0.0085 % wt

Samples analyzed in accordance with EPA Method 200.7/7000B and Apex EHS Services SOP of Lead Paint Analysis by FAAS.
American Industrial Hygiene Association (AIHA) ELPAT Program Laboratory Number 224210.
Reporting limit is 0.0085 % wt based on the minimum required sample weight per Apex SOP.
Apex EHS Services will not accept any responsibility as to the manner of interpretation of these results.

Authorized by:

Amanda Copp, M.Sc., EP.
Laboratory Manager

Appendix 6 – Asbestos Health Effects & Risk Assessment Requirements

Health Hazards from Asbestos Exposure

Exposure to any type of asbestos increases the risk of cancer of the lung, larynx, and ovary, as well as mesothelioma (cancer of the lining around the outside of the lungs), and non-malignant lung and pleural disorders, including asbestosis, pleural plaques and pleural effusions.[1] There have also been positive associations between asbestos exposure and cancer of the pharynx, stomach, and colorectum.[2] Asbestos has been labelled a Group 1 carcinogen, a known human carcinogen, by the International Agency for Research on Cancer.[2]

Exposure occurs when asbestos fibres become airborne and workers inhale those fibres. Asbestos fibres are commonly small enough to be inhaled deep into the lungs. It is known that cutting, breaking, drilling, or abrading asbestos-containing materials can release asbestos fibres into the air.

When exposure to asbestos is combined with cigarette smoking, it presents a much greater risk of developing lung cancer.

WorkSafeBC Asbestos Risk Assessment Requirements

The Occupational Health and Safety Regulations (OHSR) contains legal requirements that must be met by all workplaces under the inspectional jurisdiction of WorkSafeBC. The includes most workplaces in B.C., except mines and federally charted workplaces such as banks, interprovincial and international transportation, telephone systems, and radio, television, and cable services.

Section 6.6 of the OHSR under subsection (3), that before a work activity that involves working with or in proximity to asbestos-containing material begins, the employer must ensure that a qualified person assesses the work activity and classifies it as a low-risk work activity, a moderate risk work activity or a high-risk work activity.

The WorkSafeBC Occupational Health and Safety Guidelines section G6.6-1 outlines the risk assessment process. Section G6.8 of the Guidelines outlines ten common renovation and demolition scenarios for handling and removing asbestos-containing materials during demolition and renovation. These can be found on the WorkSafeBC website at:

https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines

[1] Canadian Centre for Occupational Health and Safety. Asbestos: Health Effects. 2012. Available from: http://www.ccohs.ca/oshanswers/chemicals/asbestos/effects.html

[2] International Agency for Research on Cancer. Monograph 100C: Asbestos (Chrysotile, amosite, crocidolite, tremolite, actinolite, and anthophyllite). 2012. Available from: http://monographs.iarc.fr/ENG/Monographs/vol100C/mono100C-11.pdf

Appendix 7 – Terms of Reference

- This report has been prepared in accordance with generally accepted consulting practices and the level of care for hazardous materials and occupational health and safety consulting services. No other warranty, expressed or implied, is made.
- This report should be read in conjunction with all other communication between Apex EHS Services and the client with respect to the subject site.
- This report has been prepared in response to the specific objectives of the client as stated when Apex EHS Services was retained to carry out this project.
- This report has been prepared for the sole use of the client and no other party may rely on this report or any component of this report.
- This report remains the copyright of Apex EHS Services.
- Apex EHS Services accepts no responsibility for any damages to a third party resulting from the use of this report.
- This report is based on the conditions observed at the date of the assessment and is limited specifically to the areas defined in the report.
- Apex EHS Services has relied on any information provided by the client regarding the subject site and has assumed this information is accurate and truthful.
- This report in written or digital format must not be altered in any way by the client.