### Limited Hazardous Materials Investigation 8801 East Saanich Road, North Saanich, BC



Prepared for

### **Canadian Food Inspection Agency**

8801 East Saanich Road North Saanich, BC V8L 1H3

Island EHS Project # 38686

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### **Executive Summary**

Island EHS was engaged by the Canadian Food Inspection Agency to carry out a non-destructive limited hazardous materials investigation at 8801 East Saanich Road, North Saanich, BC. This investigation was conducted prior to renovation of the building. The building was occupied at the time of the investigation. This investigation was carried out on January 5, 2022, additional sample for an expanded scope of work was carried out on February 4, 2022. This investigation is intended to identify the locations and types of hazardous materials that are present in the renovation areas of the building.

The building was constructed in 1950 and is a single-storey, wood-framed building on a concrete foundation. All accessible areas of the renovation area were inspected. Invasive sampling was not carried out.

The following hazardous materials were reviewed:

Material	Description	Recommendation
Asbestos	Vinyl Floor Tile	Moderate risk work procedures
		If the scope of the renovation changes, and/or unidentified materials are encountered, work must stop until the material is identified and assessed
Lead	Lead containing paints were identified on exterior surfaces of the building	Personal protective equipment during renovation Lead exposure control plan Lead in Air monitoring
Silica	Assumed to be present in concrete, acoustic wall board, acoustic ceiling tile and drywall joint compound	Personal protective equipment during renovation Silica exposure control plan
Mercury	Fluorescent light tubes and mercury containing thermostats were observed in the renovation area	Remove for proper disposal if impacted by renovation
Hantavirus - Rodent Droppings	Rodent droppings were not observed in the renovation area	No action necessary
Arsenic	Pressure treated wood not observed in the renovation area	No action necessary
Radioactive Materials	Smoke detectors were not observed in the renovation area	No action necessary
Mould	Water staining was observed – which may be conducive for mould growth	Personal protective equipment during renovation Mould exposure control plan
PCBs	Fluorescent light fixtures were observed in the renovation area	Remove for proper disposal if impacted by renovation
Ozone Depleting Substances	Older refrigerators are present in the renovation area	Remove for proper disposal if impacted by renovation
Urea Formaldehyde Foam Insulation	None observed in the renovation area	No action necessary
Above Ground Storage Tanks (AGST)	None observed in the renovation area	No action necessary
Leachable Lead	Painted surface concentration tested exceed the 100 ppm threshold	Consult with waste disposal facility. Leachate testing may be required
Other Hazardous Materials	Synthetic Insulation observed	Remove for proper disposal if impacted by renovation Personal protective equipment during renovation



Note: Renovation or demolition activities will require protective measures. Materials may be encountered during work activities that are not identified in this report. If this happens, work must stop in those areas until the materials are properly identified.



### **Table of Contents**

Executive Su	ummary	2
	duction	
	ırdous Materials	
2.1 Ma	aterials Subject to WorkSafeBC Regulations	6
	Asbestos	
	Lead	7
	Silica	
	Mercury	
	Hantavirus	
	Arsenic	
	Radioactive Materials	
	aterials Subject to WorkSafeBC Guidelines	
	Mould	
	aterials Controlled by Environmental Regulations	
	Polychlorinated Biphenyls	
	Ozone Depleting Substances	
	Urea Formaldehyde Foam Insulation	
	Fuel Oil Storage Tanks	
	achable Metals	
	her Materialslts and Recommendations	
	bestos	
	ad	
	achable Metals	
	ica	
	ercury	
	antavirus (and other Animal Droppings)	
	senic	
	adioactive Materials	
	ould	
	lychlorinated Biphenyls	
	zone Depleting Substances	
	ea Formaldehyde Foam Insulation	
	el Oil Storage Tanks	
	her Materials	
	atement Clearance Documentation	
	ure	
Appendix 1	Photographs	
Appendix 2	Laboratory Results	
Appendix 3	Sample Locations	
Appendix 4	Stantec – Mould Assessment and Remediation Plan	
	The state of the s	



### 1.0 Introduction

Island EHS was engaged to carry out a non-destructive limited hazardous materials investigation at 8801 East Saanich Road, North Saanich, BC, on behalf of the Canadian Food Inspection Agency. This investigation was conducted prior to renovation of the building. The building was occupied at the time of the investigation. This investigation was carried out on January 5, 2022, additional sample for an expanded scope of work was carried out on February 4, 2022.

The building was constructed in 1950 and is a single-storey, wood-framed building on a concrete foundation. Interior finishes noted in the renovation area include: vinyl sheet floor, vinyl floor tile, finished drywall, acoustic wall board, acoustic ceiling tile, rubber baseboards, wood panelling, and painted trim. Exterior finishes noted in the renovation area include: painted wood siding, and asphalt shingle roofing. The attic was inspected and was found to contain rockwool and fibreglass insulation.

As per the client the current renovation plans are to fix interior finishes damaged by a water leak in rooms 12 and 13, and to remediate the flood affected areas of building 12 for the presence of mould. This remediation will impact wall and floor finishes throughout the flood impacted areas. (Flood impacted areas denoted in the sample locations map.) Renovations in building 12 will include the removal of select wall, floor, and ceiling finishes.

(Should the scope of the renovation change, additional sampling may be required).

Visual identification of hazardous materials was carried out. Representative samples of building materials were collected for asbestos testing. Paint samples were collected for determination of lead content. Due to the destructive nature of the sampling, a composite sample of building materials was unable to be collected for leachable lead testing at this time.



### 2.0 Hazardous Materials

Hazardous materials are present in a large number of common building materials. These materials must be managed effectively to prevent exposure to workers and other persons, or they must be removed. In situations where work activities such as renovations and demolition will affect hazardous materials they must be removed prior to the start of work or appropriate control measures need to be implemented to ensure that workers are not exposed, and that contamination is not spread throughout the work and adjacent areas.

WorkSafeBC has established regulations regarding the handling and management of a number of hazardous materials along with guidelines for other hazardous materials. Other materials are regulated by environmental laws.

Materials that must comply with WorkSafeBC regulations include:

- 1. Asbestos
- 2. Lead
- 3. Silica
- 4. Mercury

- 5. Hantavirus6. Arsenic
- 7. Radioactive materials

Materials that WorkSafeBC has established guidelines for include:

1. Mould

Materials that must comply with environmental regulations:

- Polychlorinated biphenyls
- 2. Ozone depleting substances
- 4. Urea formaldehyde foam insulation
- Fuel oil storage tanks
- 3. Leachable metals

WorkSafeBC regulation section 20.112(b) requires that this report be on site during any renovation, construction or demolition work.

### 2.1 Materials Subject to WorkSafeBC Regulations

### 2.1.1 Asbestos

Asbestos is a generic term used to describe a group of naturally occurring fibrous minerals divided on the basis of their mineralogical properties into; <a href="mailto:serpentines">serpentines</a> (snake-like or "S"-shaped); and <a href="mailto:amphiboles">amphiboles</a> ("needle-like"). Three (3) types of asbestos were used commercially and were commonly encountered here in B.C. - Chrysotile (white), Amosite (brown) and Crocidolite (blue). Other forms of asbestos, which typically had little commercial value or use include Actinolite, Anthophyllite and Tremolite. (These forms of asbestos also belong to the amphibole family and may be found in Vermiculite insulation).

Asbestos is a very common component of building materials. Most asbestos containing materials went out of use in the early 1980s. However, WorkSafeBC has determined that buildings constructed up to and within the 1990s may still contain asbestos and must be inspected prior to the start of renovation or demolition activities.

Asbestos becomes a hazard when it is disturbed and airborne dust is created. Caution must be taken to ensure that asbestos containing materials are not disturbed. Asbestos exposure is known to have a number of health effects including asbestosis, lung cancer and mesothelioma.



Asbestos has been used in approximately 3000 manufactured products, due to the fire resistant properties, high tensile strength, chemical degradation resistance, high electrical resistance and strong insulating properties. Common sources of asbestos containing materials in residential structures include:

- Floor products (sheet flooring and floor tiles)
- Drywall filler compounds
- Plasters (usually in buildings constructed prior to 1930)
- Textured ceiling applications
- Duct tape (on heating system ducting and around forced air registers)
- Vermiculite
- Caulking and putties (on windows and doors and in levelling compounds)
- Cement products (siding and shingles as well as underground drainage pipes)
- Roofing felts and papers
- Pipe insulation (on piping, boilers and hot water tanks)

WorkSafeBC defines an asbestos containing material as one containing 0.5% or more asbestos by weight. Vermiculite is considered to be asbestos containing if any asbestos is present. WorkSafeBC has designated asbestos as an ALARA substance. This means that exposures to this material must be kept "as low as reasonably achievable". Section 5.54 of the Occupational Health and Safety Regulation states that employers are required to develop and implement an exposure control plan when workers may be exposed to airborne concentrations of asbestos greater than 50% of the exposure limit.

All asbestos waste must be handled, transported and disposed of in accordance with current Ministry of Environment and Climate Change Strategy regulations.

### 2.1.2 Lead

Lead is a naturally occurring, blueish-grey metal that is soft, malleable, corrosion-resistant and easily melted. (The melting point is 327°C). It can be found in a wide variety of consumer and industrial products, from electrical equipment, x-ray equipment, vehicle batteries, decorate glass, extruded ammunition, pigments and coatings to storage containers for nuclear waste.

There are two (2) types of lead: organic and inorganic. Organic lead is less common and has different properties and health effects than inorganic lead. Because of the elimination of organic lead in British Columbia (phased out in the 1970s and banned since 1990, except for certain applications (i.e. – non-road vehicles), exposure to organic lead is less of a concern. Therefore, the following refers to inorganic lead exposure in the workplace.

Lead has been commonly used in paints and coatings. Coatings manufactured prior to 1970 are likely to contain high concentrations of lead. In the late 1970s, Canada restricted the concentration of lead in consumer paints to 5000 ppm. These restrictions did not apply to exterior paints. The acceptable level of lead in consumer paints was last reduced by the Federal government in 2010 to a concentration of 90 ppm. Lead can still be added to certain classes of paint, if the display panel carries a warning. Lead in paint concentration is not regulated when used in commercial or industrial worksites.

Lead becomes a hazard when painted surfaces are disturbed and airborne dust is created. Caution must be taken to ensure that lead containing materials are not disturbed. Lead exposure is known to have a number of health effects including damage to the central and peripheral nervous systems. It also affects the uptake of oxygen in the blood and can accumulate in bones. Lead is toxic to both male and female reproductive system and can have damaging effects to a



developing fetus. Lead exposures can also occur when lead products are touched and lead contamination is ingested (eaten).

Lead is used in plumbing fixtures. Flashings and other products found on roofs may be made of pure lead. Lead has also been used in solders. This may be found on plumbing lines as well as on electrical equipment.

WorkSafeBC has designated lead as an ALARA substance. This means that exposures to this material must be kept "as low as reasonably achievable". An employer must not permit workers to engage in a work activity or lead process that may expose workers to lead dust, fumes or mist unless a risk assessment has first been completed by a qualified person. If the risk assessment indicates potential for lead exposure, an exposure control plan meeting the requirements of Section 5.54 of the Occupational Health and Safety Regulation must be developed.

Waste materials with lead based paint on them may have special disposal requirements (See Section 2.3.5). Lead paint that has been removed from building materials requires leachate testing to determine the appropriate method of disposal.

### 2.1.3 Silica

"Silica" is the commonly used term for the chemical compound silicon dioxide  $(Si0_2)$ . It is the second most common mineral on earth and makes up nearly all of what we call "sand" and "rock." It is found almost everywhere. It appears in two (2) main forms - amorphous and crystalline. Amorphous silica is not generally considered to be a significant hazard. Crystalline silica is known to have a number of health effects including silicosis. The definition of respirable crystalline silica (RCS) includes the quartz, crystalline silica and cristobalite. (The form most likely to cause serious problems for worker health is quartz).

Crystalline silica is present in a number of common building materials. These include:

- Plasters
- Cement
- Sand/gravel
- Brick and Masonry
- Stucco
- Drywall Filler Compounds
- Granite
- Tile and tile grout

RCS becomes a hazard when it is disturbed and airborne dust is created. Caution must be taken to ensure that silica containing materials are not disturbed.

A worker may develop any of three (3) types of silicosis, depending on the concentrations of silica dust and the duration of exposure:

- Chronic silicosis—develops after 10 or more years of exposure to crystalline silica at relatively low concentrations
- Accelerated silicosis—develops 5 to 10 years after initial exposure to crystalline silica at high concentrations
- Acute silicosis—develops within a few weeks, or 4 to 5 years, after exposure to very high concentrations of crystalline silica

Initially, workers with silicosis may have no symptoms; however, as the disease progresses, a worker may experience shortness of breath; severe cough and/or weakness. These symptoms can worsen over time and lead to death.

The WorkSafeBC Occupational Health & Safety Regulation 8-hour time-weighted exposure limit for respirable crystalline silica is 0.025 mg/m³. In addition (similar to asbestos and lead), as



crystalline silica is considered to be a carcinogen, all reasonable precautions must be taken to reduce exposure to levels that are as low as reasonably achievable (ALARA). Likewise, an employer must not permit workers to engage in a work activity or silica process that may expose workers to respirable crystalline silica dust unless a risk assessment has first been completed by a qualified person. If the risk assessment indicates potential for RCS exposure, an exposure control plan meeting the requirements of Section 5.54 of the Occupational Health and Safety Regulation must be developed.

### 2.1.4 Mercury

Mercury is a metal that is liquid at room temperatures and vaporizes at low temperatures. Mercury has a number of industrial uses. It is also found in thermostats, thermometers and inside fluorescent light tubes.

Mercury has a significant toxic effect on the central nervous system and can cause disease and even death. Mercury becomes a hazard when it is released into the environment. Significant concentrations of mercury can be present at room temperature because it vaporizes at low temperatures. This can occur when mercury thermometers or thermostat bulbs are broken or when fluorescent light tubes are broken.

WorkSafeBC has designated mercury as an ALARA substance. This means that exposures to this material must be kept "as low as reasonably achievable". Section 5.54 of the Occupational Health and Safety Regulation states that employers are required to develop and implement an exposure control plan when workers may be exposed to airborne concentrations of mercury greater than 50% of the exposure limit.

All mercury waste requires disposal in accordance with current Ministry of Environment and Climate Change Strategy requirements.

### 2.1.5 Hantavirus

Hantavirus is associated with Hantavirus Pulmonary Syndrome. This disease is contracted by coming into contact with the droppings or urine of infected rodents. It can also be contracted by being bitten or scratched by infected rodents.

WorkSafeBC states that employers are required to develop and implement an exposure control plan when workers may be exposed to potentially contaminated rodent droppings.

It should be noted that diseases are associated from contact with other animal droppings, most notably Histoplasmosis, from contact with infected bird droppings.

Any (potentially) hantavirus-contaminated waste should be treated/sprayed with a disinfectant (i.e. 10 percent chlorine bleach) and doubled bagged in plastic and sealed. (The plastic double-bagged waste should ideally be handled in a manner which is puncture-proof). Once treated and appropriately sealed, there are no special disposal requirements for waste containing infected animal droppings. It can be disposed of with regular construction waste, or household garbage.

### 2.1.6 Arsenic

Arsenic is a metal that is sometimes used in pesticides. It is also found in pressure treated wood products.



Exposures can occur when arsenic containing materials are disturbed and dust becomes airborne. Sawdust from cutting pressure treated wood or burning these materials can result in significant airborne arsenic concentrations. Workers should use the appropriate PPE when cutting pressure treated wood.

Disposal of arsenic waste must be in accordance with current Ministry of Environment and Climate Change Strategy requirements.

### 2.1.7 Radioactive Materials

Radioactive materials are commonly found in smoke detectors. A small amount of radioactive materials (<sup>241</sup>Americium) is sealed in a metal case inside smoke detectors. This metal case must remain undisturbed to prevent exposure to radioactive materials.

Some ceramic tiles and forms of granite have also been found to contain radioactive materials. Radon is a naturally occurring gas created during the decay of other radioactive materials. It is not considered a significant concern on Lower Vancouver Island.

Waste smoke detectors must be disposed of in accordance with Canadian Nuclear Safety Commission requirements.

### 2.2 Materials Subject to WorkSafeBC Guidelines

### 2.2.1 Mould

Mould is prevalent throughout our environment. It occurs naturally with mould spores being present everywhere. Mould is nature's way of breaking down and recycling materials. Mould spores require moisture and a food source to begin growing. Water leaks (even very minor leaks) and moisture accumulation are usually sufficient for mould to begin growing.

Exposure to mould spores most often results in allergy type responses in susceptible individuals. These are similar in nature to "hay fever" and can include runny eyes and noses and throat irritation. In more extreme cases, exposure to mould spores can result in "pneumonia-like" responses.

WorkSafeBC has not established exposure levels for airborne mould spores. WorkSafeBC does provide guidelines for dealing with mould contamination. These guidelines are included in the Indoor Air Quality regulation guidelines, section 4.79 and the Canadian Construction Association document, "Mould Guidelines for the Canadian Construction Industry," CCA82-2004.

There are no special disposal requirements for mould waste.

### 2.3 Materials Controlled by Environmental Regulations

### 2.3.1 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are regulated by both Provincial and Federal regulations. Fluorescent light ballasts containing PCBs must be treated as PCB waste and stored and disposed of in accordance with current regulations. Fluorescent light fixtures removed during demolition, construction or maintenance activities must be inspected for the presence of PCBs.



Each ballast identified as containing PCBs must be sent to a licenced facility in accordance with current regulatory requirements.

### 2.3.2 Ozone Depleting Substances

Ozone depleting substances (ODS) and chlorofluorocarbons are commonly found in older refrigerators and air conditioning units. They are sometimes found in fire suppression systems. Environmental regulations restrict the release of these compounds into the environment.

When systems or equipment contains ODS are set for disposal all the ODS must be collected for recycling or disposal by a licenced contractor.

### 2.3.3 Urea Formaldehyde Foam Insulation

Urea formaldehyde foam insulation (UFFI) was used as a retrofit insulation in older buildings. The expanding foam would be sprayed into wall and ceiling cavities to provide additional insulation in older buildings. It was most commonly used in residential settings.

Over time, in the presence of moisture, the insulation can break down and release formaldehyde gas. This insulating material was banned in 1978. Many older buildings contain UFFI.

There are no special disposal requirements for UFFI waste.

### 2.3.4 Fuel Oil Storage Tanks

Fuel oil storage tanks (above and below ground) are found in many houses and commercial buildings. The tanks can corrode and leak as they age. Spills often occur during tank filling and create contamination.

Tanks in use must be monitored to ensure that spillage and contamination does not occur. Tanks no longer in use must be removed for disposal and the surrounding soil checked for contamination.

### 2.3.5 Leachable Metals

The BC Ministry of Environment and Climate Change Strategy regulates the disposal of some waste materials based on the leachability of metals and other compounds from the waste. Testing may have to be carried out on materials removed from the building before they can be sent for disposal. This will depend on where the waste is being sent.

Within the Capital Regional District, disposal of painted waste materials at the Hartland landfill requires toxicity characteristic leaching procedure (TCLP) to determine leachable lead concentrations prior to acceptance as construction waste.

### 2.3.6 Other Materials

A number of hazardous materials may be present in a building that will be affected by renovations or demolition. These can include:

Propane or butane cylinders 

• Toxic or corrosive products



- Paint
- Solvents

• Other flammable materials



### 3.0 Results and Recommendations

The renovation area was inspected for the presence of a variety of hazardous materials. WorkSafeBC requirements specify that precautions are necessary when handling these materials. The necessary precautions will depend on the disposition of each hazardous material.

Materials identified as being present in areas that are not affected by the renovations do not need to be removed from the building at this time.

Trained qualified contractors need to be hired to carry out remedial work on hazardous materials. All general demolition work should be carried out by workers wearing respirators and disposable coveralls.

Copies of this report must be provided to contractors engaged to work in the building.

Notices of Project must be submitted in accordance to WorkSafeBC requirements.

Materials may be encountered during work activities that are not identified in this report. If this happens, work must stop in those areas until the materials are properly identified.

### 3.1 Asbestos

A total of twelve (12) representative bulk samples of such materials as drywall joint compound, vinyl floor tile, insulation, and acoustic wall board were collected from the renovation area on January 5, 2022. An additional seven (17) representative bulk samples of drywall joint compound, sheet vinyl flooring and acoustic ceiling tile were collected on February 4, 2022 following an expanded scope of work. The following asbestos containing materials were identified:

**Table 1: Summary of Asbestos Containing Materials** 

Location	Description	Asbestos Type & Percentage	Approximate Quantity	Removal Requirements
Room 13	Vinyl floor tile	3% Chrysotile	<50 sq. ft.	Moderate risk work procedures

\*Quantities of identified asbestos containing materials are an estimate of observable asbestos-containing materials. Concealed or inaccessible materials may not have been included in this estimate. It is the responsibility of the abatement contractor to ensure accurate measurements.

Photographs of all samples analyzed are attached in **Appendix 1**. Results of sample analysis are attached in **Appendix 2**. Floor plans showing sample locations are attached in **Appendix 3**.

Stantec – Mould Assessment and Remediation Plan for CFIA Sidney Building 12 (Dec 20, 2021) found asbestos containing vinyl floor tile present in the Sprinkler room of building 12. Asbestos containing mastic was also noted on the underside of an unspecified sink in the flood affected area. Any sinks being removed by the flood remediation should be considered to have asbestos containing insulation on the underside and be removed for proper disposal using glove bag work procedures.

All efforts were made to determine all potential layers of flooring material; however, due to the non-destructive nature of this survey additional layers of flooring may still exist. If discovered the material should be tested for the presence of asbestos. A visual inspection of accessible areas within the attic space was conducted and no vermiculite insulation was observed. This material may still exist in areas not inspected beneath insulation or within false ceilings, it may also exist within wall cavities and around chimneys. If discovered the material should be tested for the presence of asbestos.



The Capital Regional District requires Hazardous Materials Survey and Bulk Analysis Reports to be less than a year old from the time of analysis for asbestos containing material. Please contact the CRD's information line, at <a href="mailto:infoline@crd.bc.ca">infoline@crd.bc.ca</a> or 250-360-3030, if you have any questions. At their discretion, they will accept data older than one year dependent on applicable circumstances.

Prior to the performance of any work that may disturb asbestos containing materials it is a regulatory requirement that a qualified person perform a Risk Assessment. This requirement is in compliance with the WorkSafeBC Occupational Health & Safety Regulation *Part 6 "Substance Specific Requirements"*; specifically Section 6.6 subsections (1), (2), (3), & (4).

Prior to commencement of any work involving the disturbance of asbestos containing materials, a Notice of Project (NOP) for Work involving Asbestos must be submitted to WorkSafeBC a minimum of 48 hours prior to the work commencing. In conjunction with the NOP, the Contractor must also submit a copy of this report / any bulk sample analysis results, a site specific Risk Assessment; and site-specific work procedures.

The removal of **asbestos containing vinyl floor tile** should be conducted using **Moderate Risk** asbestos abatement procedures. These procedures must be utilized by a qualified contractor and include as a minimum requirement:

- HEPA filtered half face respiratory protection and disposable Tyvek coveralls:
- Application of water to the asbestos debris materials being disturbed;
- Isolation of the work area;
- Air monitoring as per WorkSafeBC requirements.

Asbestos cement piping was sometimes used for perimeter drains, storm drains and sewer lines. Bell & spigot gasket piping may contain asbestos gaskets. Knob and tube wiring insulation may also contain asbestos. These products may be encountered on the site.

### 3.2 Lead

The currently allowable level of lead in paint is set by Health Canada under the Canada Consumer Protection Act, Surface Coating Materials Regulation (SOR 2005-09). Under this regulation the maximum allowable concentration of lead in paint sold to consumers is 0.009% (90  $\mu$ g/g). WorkSafeBC considers paint which contains lead at concentrations greater than 0.009% to present a potential health hazard, if it is removed incorrectly. Lead testing was carried out on two (2) paint samples collected from drywall, and exterior wood siding. One of the two paint sample results was determined to be lead-containing paint, with a concentration greater than 90  $\mu$ g/g found. All samples determined to be lead-containing are bolded in Table 2, below.

Table 2: Summary of Lead in Paint

Location	Description	Lead Content (µg/g)	Health Canada Definition for Lead-Containing Paint (μg/g)
Building 12 – Hallway Outside Room 13	White Paint	<60	00
Building 12 – Exterior Siding	White Paint	2210	90

 $\mu g/g = micro grams per gram.$ 

<sup>\*</sup>substrate/matrix interference possible



<sup>&</sup>lt; = result is less than the limit of detection.

Any untested painted surfaces are presumed lead-containing unless sampled and found to be non-lead containing. Lead may be present as solder on any remaining plumbing systems and may be present on other fixtures such as flashings or roof vents.

WorkSafeBC regulation requires that an employer not permit workers to engage in a work activity that may expose workers to lead dust, fumes or mist unless a risk assessment has first been completed by a qualified person. If the risk assessment indicates potential for lead exposure, an exposure control plan meeting the requirements of Section 5.54 of the Occupational Health and Safety Regulation must be in place and implemented prior to commencing work. The Regulation also requires that lead in air samples be collected at the beginning of work tasks to ensure proper control methods are employed to control lead dust exposures.

Prior to commencement of any work involving the disturbance of lead containing materials, a Notice of Project (NOP) for Work involving Lead must be submitted to WorkSafeBC a minimum of 48 hours prior to the work commencing. In conjunction with the NOP, the Contractor must also submit a copy of this report / any lead paint bulk sample analysis results, a site specific Risk Assessment; and site-specific work procedures.

In order to control worker exposure to lead paint particulate, any demolition, cutting, burning, grinding, sanding or other disturbance of identified lead painted surfaces should be conducted following appropriate safe work procedures. Procedures will vary depending on the nature of the work but should consider, as a minimum, the following:

- Use of Half face respirators equipped with P100 class filters, disposable Tyvek™ or equivalent coveralls and work gloves;
- Segregation of the work area by the use of barrier tape and warning placards;
- Use of drop sheets and tarps to prevent spread of lead-containing dust;
- Use of HEPA filter equipped vacuum cleaner(s);
- Thorough washing before eating, drinking or smoking;
- Application of water to the materials being disturbed;
- Filing of a "Notice of Project" with WorkSafeBC prior to significant disturbance of leadcontaining paint; and,
- Air monitoring during disturbance of lead-containing paint

Under the BC Hazardous Waste Regulation materials with identified lead-based paint destined for disposal at a licensed landfill facility must be tested for leachability to determine if they should be handled as a hazardous waste.

### 3.3 Leachable Metals

The BC Ministry of Environment and Climate Change Strategy regulates the disposal of some waste materials based on the leachability of metals and other compounds from the waste.

Under the BC Hazardous Waste Regulation materials with lead paint concentrations over 0.01 wt. % (100ppm) destined for disposal at a licensed landfill facility must be tested for leachability to determine if they should be handled as a hazardous waste. (If lead paint is present on metal components, those components may be recycled as metal waste, and therefore, leachate analysis would not be required).

Exterior painted surface concentrations tested exceed the 100 ppm lead threshold limit for disposal. Consult the waste disposal facility for disposal requirements prior to disposal. Prior to



demolition it is the responsibility of the client or the contractor to have samples collected by a qualified person and analyzed using the toxicity characteristic leachate procedure (TCLP).

### 3.4 Silica

Silica testing was not carried out, but this material will be present in concrete, acoustic wall board, acoustic ceiling tile and possibly in drywall joint compounds.

Precautions must be put in place during demolition and renovation activities to ensure that workers are not exposed to silica containing dust and debris. WorkSafeBC regulation requires that contractors working with silica-based containing materials have a Silica Exposure Control Plan in place including site specific work procedures prior to work commencing.

In order to control worker exposure to silica dust, any abrasive blasting, jackhammering, chipping, drilling, cutting, sawing or other disturbance of identified concrete, plaster or drywall walls or cementitious products should be conducted following appropriate safe work procedures. Procedures will vary depending on the nature of the work but should consider, as a minimum, the following:

- Use of Half-face respirators equipped with P100 class filters, disposable Tyvek™ or equivalent coveralls and work gloves;
- Continuous application of water spraying to materials being disturbed;
- Use of drop sheets and tarps to prevent spread of silica-containing dust;
- Use of HEPA filter equipped vacuum(s);
- HEPA equipped negative air unit for dust suppression purposes (recommended); and
- Air monitoring as per WorkSafeBC requirements.

### 3.5 Mercury

Fluorescent lights were observed in the renovation area. Used light tubes and compact fluorescent bulbs must be sent for proper disposal.

Mercury containing thermostats were also observed in the renovation area. Care must be taken to ensure that the glass bulb containing mercury is not damaged. All thermostats taken out of service must be sent for proper disposal or recycling.

### 3.6 Hantavirus (and other Animal Droppings)

Rodent faeces were not observed in the renovation area. If encountered, it is recommended that all personnel conducting work in this area wear, at a minimum, half face respirator fitted with HEPA filtered P100 cartridges, disposable suits and impermeable gloves and eye protection and that use of HEPA filtered negative air cabinets and HEPA filtered vacuums be employed.

WorkSafeBC regulation requires that contractors handling/cleaning animal and rodent feces have a Hantavirus Exposure Control Plan in place including site specific work procedures prior to work commencing.

### 3.7 Arsenic

Pressure treated wood was not observed in the renovation area. If encountered, the material should be discarded as landfill waste, or recycled responsibility, and not burned.



### 3.8 Radioactive Materials

Smoke detectors were not observed in the renovation area. If encountered, smoke detectors must be sent for disposal in accordance with Canadian Nuclear Safety Commission requirements when they are taken out of service.

### 3.9 Mould

Mould was not observed in the renovation area; however, damp conditions following water intrusion may be conducive for mould growth. If mould is encountered, precautions must be taken to ensure that workers are not exposed to mould spores.

Fungal contamination may be present within wall or ceiling cavities. During demolition activities, precautions must be taken to ensure that workers are not exposed to potential mould spores which would include, as a minimum, half face respirator fitted with HEPA filtered P100 cartridges, disposable suits and impermeable gloves and eye protection and that use of HEPA filtered negative air cabinets and HEPA filtered vacuums be employed.

### 3.10 Polychlorinated Biphenyls

Fluorescent light fixtures were not observed in the renovation area. If ballast containing PCBs are present, they must be transported to an acceptable waste storage facility when they are taken out of service.

### 3.11 Ozone Depleting Substances

Older refrigerators were observed in the renovation area. These may contain chlorofluorocarbons. If encountered, this material must be removed for recycling or disposal when the units are taken out of service.

### 3.12 Urea Formaldehyde Foam Insulation

Urea Formaldehyde Foam Insulation was not observed in the renovation area. This material is not suspected of being present.

### 3.13 Fuel Oil Storage Tanks

Fuel oil storage tanks (above ground) were not observed during the investigation.

The identification of the presence of (any) underground tanks was not included within the scope of this investigation.

### 3.14 Other Materials

Synthetic fibre insulation exists throughout the attic, crawl spaces and wall cavities. Removal of these materials should be conducted wearing proper respiratory protection and protective clothing including impermeable gloves, eye protection and half-face respiratory protection equipped with P-100 particulate filters.



Owner's contents were not assessed.

### 3.15 Abatement Clearance Documentation

In order to comply with BC Workers Compensation Board Occupational Health & Safety Regulation Part 20.112(8) a qualified person (Island EHS) must conduct a final inspection after all of the hazardous materials identified in this report have been safely contained or removed. Once all of the hazardous materials have been removed and the final inspection has been completed a written clearance letter can be provided.

Should asbestos abatement be undertaken by unqualified persons (i.e. homeowners), the work area will require aggressive air clearance sampling. This air sampling will extend to any adjacent areas that have not been isolated from the hazard and potential contamination. Clearance letters, required to document removal of asbestos for issuance of building permits and contractors hired to work in the space, will not be granted subject to failure of this testing. The owner/client is responsible for the additional fees incurred for these services.

### 4.0 Closure

This document was prepared for the exclusive use of our client. All conclusions and recommendations are based upon conditions at the site at the time of this investigation. All conclusions and recommendations are based upon professional opinions. These opinions are in accordance with accepted industrial hygiene assessment standards and practices and comply with current WorkSafeBC requirements.

All conclusions and recommendations made in this report are based on conditions at the time of inspection. Changes may occur over time that will require a re-evaluation of the site.

All work was carried out based on the Scope of Work that was agreed upon with the client prior to the start of work, constraints imposed by the client and availability of access to the site. A Stage 1 Preliminary Site Investigation was not part of the scope of work.

No warranty or guarantee, whether expressed or implied, are made with respect to the data or the reported findings, observations, and conclusions, which are based solely upon site conditions at the time of the investigation.

This report may not be used, relied upon, copied, published, or quoted by any party without the written consent of Island EHS. Other parties reading this report must independently verify the completeness and accuracy of this report and its contents.

This report is not intended as a Scope of Work for tender or bidding purposes. Any use of this report in that fashion is at the sole discretion and liability of the Owner.

**SIMR** 

Brian Ross Occupational Hygiene Technologist/Lab Analyst Field Investigation & Report & Update

Ashlee McGiffin Senior Occupational Hygienist Report Review

Johle Wiff



### **Appendix 1**

**Photographs** 





Sample: Location: 38686 - 1 Building 12 – Room 13,

Ceiling

Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 2

Location: Building 12 – Room 13, Wall Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 3

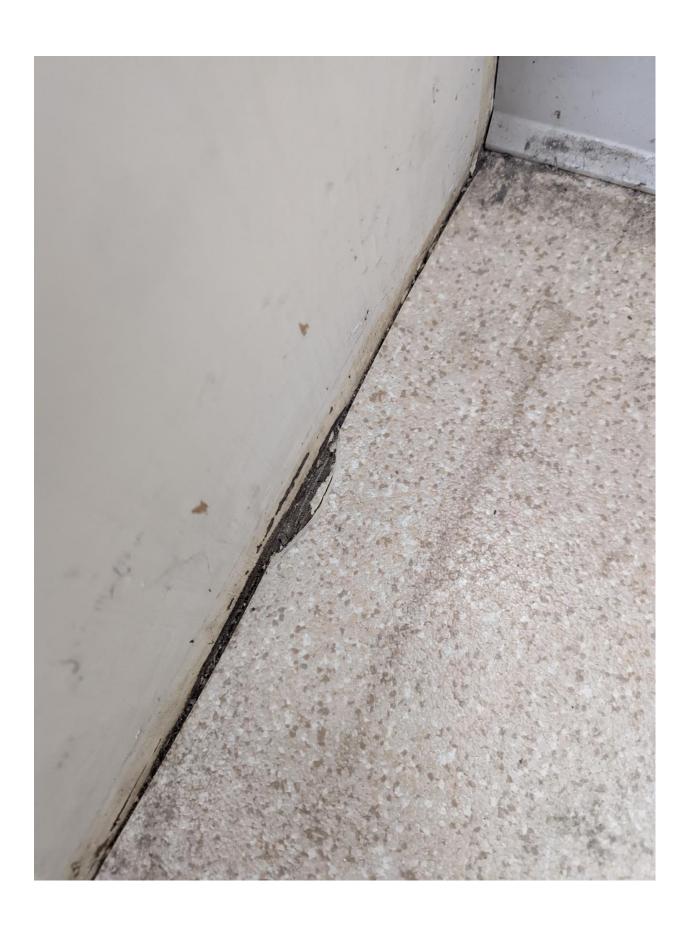
Location: Building 12 – Room 13, Wall Description: Drywall Joint Compound

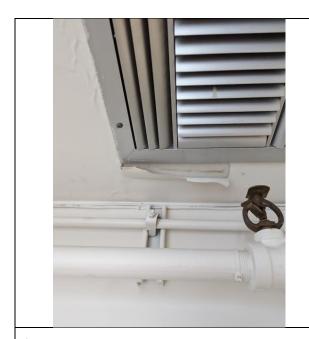
Asbestos: None Detected

Sample: 38686 - 4

Location: Building 12 – Hallway, Wall Description: Drywall Joint Compound

Asbestos: None Detected





Sample: 38686 - 5

Location: Building 12 – Hallway, Ceiling Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 6

Location: Building 12 – Room 12, Wall Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 7

Location: Building 12 – Room 12,

Ceiling

Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 8

Location: Building 12, Room 12
Description: Acoustic Wall Board
Asbestos: None Detected





Location: Building 12, Room 12
Description: Acoustic Wall Board
Asbestos: None Detected



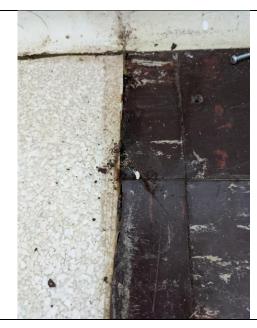
Sample: 38686 - 10

Location: Building 12, Room 12
Description: Acoustic Wall Board
Asbestos: None Detected



Sample: 38686 - 11 Location: Building 12 - Attic

Description: Insulation
Asbestos: None Detected



Sample: 38686 - 12

Location: Building 12, Room 13

Description: Vinyl Floor Tile Asbestos: 3% Chrysotile



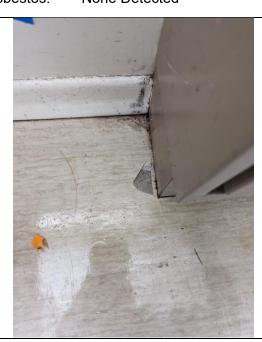


Location: Building 12 – South Lab Description: Sheet Vinyl Flooring None Detected



Sample: 38686 - 14

Location: Building 12 – North Lab Description: Sheet Vinyl Flooring None Detected



Sample: 38686 - 15

Location: Building 12 – Tissue Culture

Transfer Room

Description: Sheet Vinyl Flooring Asbestos: None Detected



Sample: 38686 - 16

Location: Building 12 – Stairwell

**Entrance Foyer** 

Description: Sheet Vinyl Flooring Asbestos: None Detected



Sample:

38686 - 17

Building 12 – Tissue Culture Location:

Area

Description: Sheet Vinyl Flooring Asbestos: None Detected



Sample: 38686 - 18

Building 12 – Sprinkler Room Location: Drywall Joint Compound Description:

Asbestos: None Detected



38686 - 19 Sample:

Location: Building 12 - Tissue Culture

Transfer Room

**Drywall Joint Compound** Description:

Asbestos: None Detected



Sample: 38686 - 20

Location: Building 12 – Tissue Culture

Area

**Drywall Joint Compound** Description:

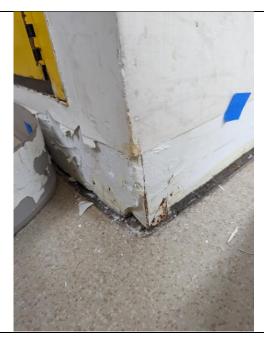
Asbestos: None Detected



Sample: 38686 - 21

Building 12 – North Lab Location: **Drywall Joint Compound** Description:

Asbestos: None Detected



Sample: 38686 - 22

Building 12 – South Lab Drywall Joint Compound Location: Description:

None Detected Asbestos:



Sample: 38686 - 23

Building 12 – Centrifuge Room Drywall Joint Compound Location:

Description: None Detected Asbestos:

Sample: 38686 - 24

Building 12 – West Hall Drywall Joint Compound Location: Description:

None Detected Asbestos:



Sample: 38686 - 25

Location: Building 12 – Stairwell

**Entrance Foyer** 

Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 26

Location: Building 12 – Electrical Room Description: Drywall Joint Compound

Asbestos: None Detected



Sample: 38686 - 27

Location: Building 12 – East Hall Description: Acoustic Ceiling Tile None Detected



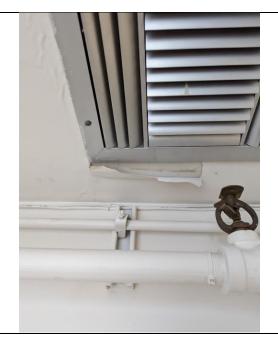
Sample: 38686 - 28

Location: Building 12 – Washroom Description: Acoustic Ceiling Tile None Detected



Sample: 38686 - 29

Location: Building 12 – Washroom Description: Acoustic Ceiling Tile None Detected



Sample: 38686 – Pb1

Location: Hall Outside Room 13

Description: White Paint Lead Content: <60 ppm



Sample: 38686 – Pb2

Location: Exterior of Building 12

Description: White Paint Lead Content: 2210 ppm

### Appendix 2

**Laboratory Results** 





201 - 990 Hillside Avenue Victoria, B.C. V8T 2A1 Tel: 778-406-0933 E-Mail: admin@islandehs.ca

> Jos: Project: Client: Client PO#:

38686 8801 East Saanich Rd Canadian Food Inspection Agency

Submitted By: Date Received: Analyst:

Brian Ross 2022-01-05 VS/JH/BR

SP	#	Location	Material	Analysis Date	Layer	Layer Description	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
z	1	Building 12 - Room 13, Drywall Joint Ceiling Compound	Drywall Joint Compound	2022-01- 06	1	White chalky	40.0	None Detected	0.0	Non-fibrous	100.0
					2	Beige fibrous	0.09	None Detected	0.0	Cellulose	100.0
z	2	Building 12 - Room 13, Drywall Joint Wall Compound	Drywall Joint Compound	2022-01- 06	-1	Paint	30.0	None Detected	0.0	Non-fibrous	100.0
					2	White chalky	40.0	None Detected	0.0	Non-fibrous	100.0
					m	Beige fibrous	30.0	None Detected	0.0	Cellulose	100.0
z	т	Building 12 - Room 13, Drywall Joint Wall Compound	Drywall Joint Compound	2022-01- 06	н	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
					2	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
					е	Beige fibrous	20.0	None Detected	0.0	Cellulose	100.0
					4	Drywall	40.0	None Detected	0.0	Non-fibrous	0.09
										Cellulose	40.0
z	4	Building 12 - Hallway, Wall	Drywall Joint Compound	2022-01- 06	1	Paint	30.0	None Detected	0.0	Non-fibrous	100.0
					2	White chalky	70.0	None Detected	0.0	Non-fibrous	100.0



201 - 990 Hillside Avenue Victoria, B.C. V8T 2A1 Tel: 778-406-0933 E-Mail: admin@islandehs.ca

 Job:
 38686

 Project:
 8801 Ea

 Client:
 Canadia

38686 8801 East Saanich Rd Canadian Food Inspection Agency

Submitted By: Date Received: Analyst:

Brian Ross 2022-01-05 VS/JH/BR

ð	ent	Client PO#:									
SP	#	Location	Material	Analysis Date	Layer	Description	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
z	D.	Building 12 - Hallway, Ceiling	Drywall Joint Compound	2022-01- 06	H	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
					7	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
					m	Beige fibrous	20.0	None Detected	0.0	Cellulose	100.0
					4	Drywall	40.0	None Detected	0.0	Non-fibrous	0.09
										Cellulose	40.0
z	9	Building 12 - Room 12, Drywall Joint Wall Compound	Drywall Joint Compound	2022-01- 06	1	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
					2	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
					m	Beige fibrous	20.0	None Detected	0.0	Cellulose	100.0
					4	Drywall	40.0	None Detected	0.0	Non-fibrous	0.09
										Cellulose	40.0
z	7	Building 12 - Room 12, Drywall Joint Ceiling Compound	Drywall Joint Compound	2022-01- 06	1	Paint	30.0	None Detected	0.0	Non-fibrous	100.0
					2	White chalky	70.0	None Detected	0.0	Non-fibrous	100.0
z	ω	Building 12 - Room 12	Acoustic Wall Board	2022-01- 06	1	Paint	10.0	None Detected	0.0	Non-fibrous	100.0
					7	Beige fibrous	0.06	None Detected	0.0	Non-fibrous	30.0
										Cellulose	40.0



201 - 990 Hillside Avenue Victoria, B.C. V8T 2A1 Tel: 778-406-0933 E-Mail: admin@islandehs.ca

Job: Project: Client: Client P	Job: Project: Client: Client PO#:	38686 8801 Ea: Canadia	38686 8801 East Saanich Rd Canadian Food Inspection Agency	·	Submitted By: Date Received: Analyst:		B (1)	Brian Ross 2022-01-05 VS/JH/BR		
SP	# Location	Material	Analysis Date Layer	Description	\	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
									Glass	30.0
z	9 Building 12 - Room 12	Acoustic Wall Board	2022-01- 1 06	Paint		10.0	None Detected	0.0	Non-fibrous	100.0
			2	Beige fibrous		0.06	None Detected	0.0	Non-fibrous	30.0
									Cellulose	40.0
									Glass	30.0
z	10 Building 12 - Room 12	Acoustic Wall Board	2022-01- 1 06	Paint		10.0	None Detected	0.0	Non-fibrous	100.0
			2	Beige fibrous		0.06	None Detected	0.0	Non-fibrous	30.0
									Cellulose	40.0
									Glass	30.0
z	11 Building 12 - Attic	Insulation	2022-01- 1 06	Yellow fibrous mass		70.0	None Detected	0.0	Glass	100.0
			2	Brown and black paper	er	30.0	None Detected	0.0	Non-fibrous	25.0
									Cellulose	75.0
z	12 Building 12 - Room 13	Vinyl Floor Tile	2022-01- 1 06	Brown tile		0.66	Chrysotile	3.0	Non-fibrous	97.0
			7	Black mastic		1.0	None Detected	0.0	Non-fibrous	100.0

38686

Submitted By:

**Brian Ross** 

Project: Client: Client PC	:#C	8801 Eas Canadiar	st Saanich Rd n Food Inspec	tion Age:	ency	Date Received: Analyst:			2022-01-05 VS/JH/BR		
# dS	Location	Material	Analysis Date	Layer	Description	١	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
13	Building 12 - South Lab	Sheet Vinyl Flooring	2022-02-	Н	Beige flooring		70.0	None Detected	0.0	Non-fibrous	100.0
				2	Beige fibrous		30.0	None Detected	0.0	Non-fibrous	30.0
										Cellulose	70.0
14	Building 12 - North Lab	Sheet Vinyl Flooring	2022-02- 10	н	Beige flooring		0.06	None Detected	0.0	Non-fibrous	100.0
				2	Beige adhesive		10.0	None Detected	0.0	Non-fibrous	100.0
15	Building 12 - Tissue Culture Transfer Room	Sheet Vinyl Flooring	2022-02-	Н	Beige flooring		30.0	None Detected	0.0	Non-fibrous	100.0
				2	Grey foam		65.0	None Detected	0.0	Non-fibrous	100.0
				m	Grey adhesive/ce	ment	5.0	None Detected	0.0	Non-fibrous	100.0
16	Building 12 - Stairwell Entrance Foyer	Sheet Vinyl Flooring	2022-02- 10	н	Beige marbled flo	oring	95.0	None Detected	0.0	Non-fibrous	95.0
										Synthetic	5.0
				2	Yellow adhesive		5.0	None Detected	0.0	Non-fibrous	100.0
17	Building 12 - Tissue Culture Area	Sheet Vinyl Flooring	2022-02- 10	н	Beige flooring		70.0	None Detected	0.0	Non-fibrous	100.0
				2	Grey fibrous		20.0	None Detected	0.0	Non-fibrous	20.0
										Synthetic	80.0
	# # #   14   14   15   15   17   17   17   17   17   17	6	iding 12 - South Sheet Vinyl Fle Ilding 12 - North Lab Sheet Vinyl Fle Ilding 12 - Tissue Sheet Vinyl Fle Ilding 12 - Stairwell Sheet Vinyl Fle Irrance Foyer Ilding 12 - Tissue Sheet Vinyl Fle	iding 12 - South Sheet Vinyl Fle Ilding 12 - North Lab Sheet Vinyl Fle Ilding 12 - Tissue Sheet Vinyl Fle Ilding 12 - Stairwell Sheet Vinyl Fle Irrance Foyer Ilding 12 - Tissue Sheet Vinyl Fle	iding 12 - South Sheet Vinyl Fle Ilding 12 - North Lab Sheet Vinyl Fle Ilding 12 - Tissue Sheet Vinyl Fle Ilding 12 - Stairwell Sheet Vinyl Fle Itrance Foyer Ilding 12 - Tissue Sheet Vinyl Fle Itrance Foyer Ilding 12 - Tissue Sheet Vinyl Fle Iture Area	seation Material Canadian Food Inspection Age Canadian Footh Inspection Age Inding 12 - South Sheet Vinyl Flooring 2022-02- 1 10 2 2 100 100 100 100 100 100 100 10	R801 East Saanich Rd Canadian Food Inspection Agency cation  Material Sheet Vinyl Flooring 10 2022-02- 1 Beige flooring	cation         Material         Analysis         Analysis           cation         Material         Analysis         Analysis           Idling 12 - South         Sheet Vinyl Flooring         2022-02- 1         Beige flooring           Idling 12 - South         Sheet Vinyl Flooring         2022-02- 1         Beige flooring           Idling 12 - Tissue         Sheet Vinyl Flooring         2022-02- 1         Beige flooring           Iture Transfer Room         2022-02- 1         Beige flooring           Iture Transfer Room         3         Grey adhesive/cement           Idling 12 - Tissue         Sheet Vinyl Flooring         2022-02- 1         Beige marbled flooring           Irance Foyer         10         2         Yellow adhesive           Idling 12 - Tissue         Sheet Vinyl Flooring         2022-02- 1         Beige flooring           Iture Area         2         Yellow adhesive	cation         Material Food Inspection Agency         Date Received: Analyst: Analyst: Analyst: Analyst: South Sheet Vinyl Flooring 2022-02- 1 Beige flooring 12 - South Lab Sheet Vinyl Flooring 2022-02- 1 Beige flooring 12 - South Lab Sheet Vinyl Flooring 2022-02- 1 Beige flooring 2022-02- 1 Beige flooring 2022-03- 1 Beige marbled flooring 2020- 202- 2 Seep adhesive/cement 2020- 2 Seep flooring 2022-03- 1 Beige marbled flooring 2020- 2 Seep flooring 2022- 2 Se	Canadian Food Inspection Agency         Analysis         Analysis         W. of Analysis         Asbestos         22           cation         Material         Analysis         Analysis         Analysis         W. of Analysis         Asbestos         Year Asbestos           cation         Material         Date         Layer         Description         Sample         Minerals           Iding 12 - South         Sheet Vinyl Flooring         2022-02-         1         Beige flooring         70.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring         2022-02-         1         Beige adhesive         10.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring         2022-02-         1         Beige flooring         30.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring         2022-02-         1         Beige flooring         5.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring         2022-02-         1         Beige marbled flooring         5.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring         2022-02-         1         Beige flooring         5.0         None Detected           Iding 12 - Tissue         Sheet Vinyl Flooring	Sheet Viny Flooring   Sheet Viny Flooring

### Island EHS

## Asbestos Bulk Sample Report

Job: Project: Client: Client P	Job: Project: Client: Client PO#:	38686 8801 E Canadi	38686 8801 East Saanich Rd Canadian Food Inspection Agency	d ction Ag		Submitted By: Date Received: Analyst:			Brian Ross 2022-01-05 VS/JH/BR		
SP #	# Location	Material	Analysis Date	Layer	Description	١	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
				ю	Grey adhesive/chalky		10.0	None Detected	0.0	Non-fibrous	100.0
z	18 Building 12 - Sprinkler Room	Drywall Joint Compound	2022-02-	Н	Paint		20.0	None Detected	0.0	Non-fibrous	100.0
				7	White chalky		20.0	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous		30.0	None Detected	0.0	Cellulose	100.0
				4	Drywall		30.0	None Detected	0.0	Cellulose	80.0
										Non-fibrous	20.0
z	19 Building 12 - Tissue Culture Transfer Room	Drywall Joint Compound	2022-02-	Н	Paint		20.0	None Detected	0.0	Non-fibrous	100.0
				2	White chalky		0.09	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous		20.0	None Detected	0.0	Cellulose	100.0
Z	20 Building 12 - Tissue Culture Area	Drywall Joint Compound	2022-02-	1	Paint		20.0	None Detected	0.0	Non-fibrous	100.0
				2	White chalky		20.0	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous		30.0	None Detected	0.0	Cellulose	100.0
				4	Drywall		30.0	None Detected	0.0	Cellulose	80.0
										Non-fibrous	20.0
Z	21 Building 12 - North Lab	Drywall Joint Compound	2022-02-	Н	Paint		20.0	None Detected	0.0	Non-fibrous	100.0

E-Mail: admin@islandehs.ca

### Island EHS

## Asbestos Bulk Sample Report

8801 East Saanich Rd Canadian Food Inspection Agency 38686

Project: Client:

Submitted By: Date Received: Analyst:

Brian Ross 2022-01-05 VS/JH/BR

Clie	Client PO#:			)						
SP	# Location	Material	Analysis Date	Layer	Description	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
				2	White chalky	0.09	None Detected	0.0	Non-fibrous	100.0
				ю	Beige fibrous	20.0	None Detected	0.0	Cellulose	100.0
z	22 Building 12 - South Lab	Drywall Joint Compound	2022-02-	1	White chalky	100.0	None Detected	0.0	Non-fibrous	100.0
z	23 Building 12 - Centrifuge Room	Drywall Joint Compound	2022-02- 10	1	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
				2	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous	30.0	None Detected	0.0	Cellulose	100.0
				4	Drywall	30.0	None Detected	0.0	Cellulose	80.0
									Non-fibrous	20.0
z	24 Building 12 - West Hall	l Drywall Joint Compound	2022-02- 10	П	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
				2	White chalky	80.0	None Detected	0.0	Non-fibrous	100.0
z	25 Building 12 - Stairwell Entrance Foyer	Drywall Joint Compound	2022-02-	П	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
				2	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous	30.0	None Detected	0.0	Cellulose	100.0
				4	Drywall	30.0	None Detected	0.0	Cellulose	80.0
									Non-fibrous	20.0



E-Mail: admin@islandehs.ca 201 - 990 Hillside Avenue Tel: 778-406-0933 Victoria, B.C. V8T 2A1

> 8801 East Saanich Rd Canadian Food Inspection Agency 38686 Project: Client:

Submitted By: Date Received: Analyst:

Brian Ross 2022-01-05 VS/JH/BR

Clier	Client PO#:									
SP	# Location	Material	Analysis Date	Layer	Description	% of Sample	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
z	26 Building 12 - Electrical Room	Drywall Joint Compound	2022-02- 10	н	Paint	20.0	None Detected	0.0	Non-fibrous	100.0
				7	White chalky	20.0	None Detected	0.0	Non-fibrous	100.0
				m	Beige fibrous	20.0	None Detected	0.0	Cellulose	100.0
				4	Drywall	40.0	None Detected	0.0	Cellulose	20.0
									Non-fibrous	80.0
z	27 Building 12 - East Hall Acoustic Ceiling Tile	Acoustic Ceiling Tile	2022-02- 10	1	Paint	2.0	None Detected	0.0	Non-fibrous	100.0
				2	Grey fibrous tile	98.0	None Detected	0.0	Non-fibrous	30.0
									Cellulose	50.0
									Glass	20.0
z	28 Building 12 - Washroom	Acoustic Ceiling Tile	2022-02-	1	Paint	2.0	None Detected	0.0	Non-fibrous	100.0
				2	Grey fibrous tile	98.0	None Detected	0.0	Non-fibrous	30.0
									Cellulose	50.0
									Glass	20.0
z	29 Building 12 - Washroom	Acoustic Ceiling Tile	2022-02- 13	1	Paint	2.0	None Detected	0.0	Non-fibrous	100.0
				2	Grey fibrous tile	98.0	None Detected	0.0	Non-fibrous	30.0



201 - 990 Hillside Avenue Victoria, B.C. V8T 2A1 Tel: 778-406-0933 E-Mail: admin@islandehs.ca

Submitted By:	Date Received:	Analyst:		
38686	8801 East Saanich Rd	Canadian Food Inspection Agency		
Job:	Project:	Client:	Client PO#:	

: •	38686 8801 East Saanich Rd Canadian Food Inspect	38686 8801 East Saanich Rd Canadian Food Inspection Agency	Submitted By: Date Received: Analyst:			Brian Ross 2022-01-05 VS/JH/BR		
Location	Ana Material Date	Analysis Date Layer Description	\	% of Asbestos Sample Minerals	Asbestos Minerals	% Asbestos per Layer	Other Fibres	% Fibres per Layer
							0001111100	0

\* dS

50.0	20.0	
Cellulose	Glass	



Island Environmental Health and Safety
201 - 990 Hillside Avenue
Victoria B.C, V8T 2A1
(778)406-0933
admin@islandehs.ca

### Certificate of Analysis

Client Name	Canadian Food Inspection Agency	Report #	38686
Site Address	8801 East Saanich Road	Report Date	1/6/2022
Collection Date	1/5/2022	PO	
Collected by	BR	Notes	

### Analysis Summary: Lead in Paint

Sample #	Pb1	Result (ug/g)	<60		
Location	Hall Outside Room 13				
Description	White Paint on DW	Comments			
Sample #	Pb2	Result (ug/g)	2210	2	
Location	Exterior of Building 12				
Description	White Paint on Wood	Comments			

### Island Environmental Health & Safety Ltd.

Results in **green** are below the regulatory limit of 90 ug/g
Results in **red** are above the regulatory limit of 90 ug/g
Analysed using ASTM E1645-01 and EPA 7000B



Island Environmental Health and Safety
201 - 990 Hillside Avenue
Victoria B.C, V8T 2A1
(778)406-0933
admin@islandehs.ca

### Certificate of Analysis

Client Name	Canadian Food Inspection Agency	Report #	38686
Site Address	8801 East Saanich Road	Report Date	1/6/2022
Collection Date	1/5/2022	РО	
Technician	BR	Notes	

### **Quality Assurance Report**

	Result	Unit	Limits	Pass/Fail?
Duplicate	100	Rel. % Diff.	80% - 120%	PASS
CRM	85	% recovery	80% - 120%	PASS
QCS	100	% recovery	90% - 110%	PASS
LRB	<0.06	mg/L	<0.242 mg/L	PASS

Duplicate: Paired analysis of a two portions of the same sample. Used to evaluate the variance in the measurement and homogenity of the sample.

Certified Reference Material (CRM): A paint sample of known lead concentration prepared by an external agency. Used as an independent check of method accuracy.

Quality Control Sample (QCS): A blank matrix sample to which a known amount of lead from a second source has been added. Used to verify instrument calibration.

Laboratory Reagent Blank (LRB): A blank matrix containing all reagents used in the analytical procedure.

Used to identify laboratory contamination.

Note: Duplicate sample below limit of quantitation

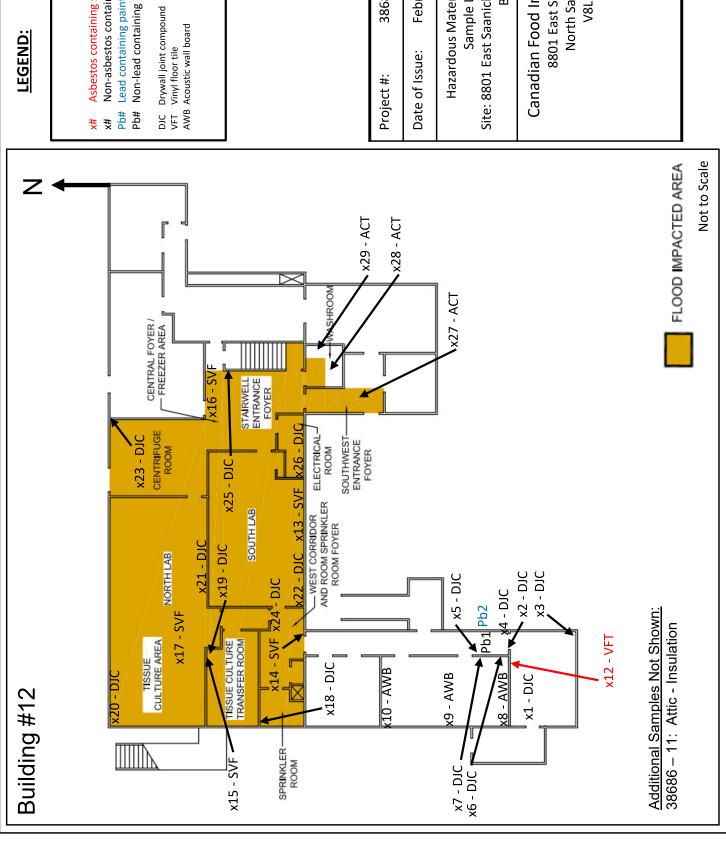
Laura Martin Laboratory Analyst

**End of Report** 

### Appendix 3

**Sample Locations** 





### LEGEND:

- Asbestos containing sample location
- Non-asbestos containing sample location Lead containing paint sample location
- Non-lead containing paint sample location

ACT Acoustic ceiling tile SVF Sheet vinyl floor

38686

February 2022

Hazardous Materials Investigation

Site: 8801 East Saanich Road, North Saanich, Sample Locations

BC

Canadian Food Inspection Agency 8801 East Saanich Road North Saanich, BC V8L 1H3



### Appendix 4

Stantec Mould Assessment and Remediation Plan

