

March 29, 2021



**CLEARVIEW DEMOLITION LTD.**

18960 - 34A Avenue  
Surrey, BC V3Z 1A7

Attention: Mr. Brad Morrison, General Manager

**Ref: CONTRACTOR VERSION - PRE-PROJECT HAZARDOUS BUILDING MATERIALS SURVEY FOR THE SELECTIVE DEMOLITION OF TANKS, VESSELS, AND ASSOCIATED EQUIPMENT AND PIPING AT MAIN BUILDING #100 LOCATED AT WESTERN CLEANWOOD PRESERVERS, 9815 ROBSON ROAD, SURREY, BC**

## **1.0 INTRODUCTION**

Astech Consultants Ltd. (Astech) were retained by Clearview Demolition Ltd. to conduct a Pre-Project Hazardous Building Materials Survey and compile a detailed report on the presence and location of asbestos containing building materials, lead, polychlorinated biphenyls (PCBs), mercury, stored chemicals, and silica to be impacted by the selective demolition of tanks, vessels, and associated equipment and piping at Main Building #100 located at Western Cleanwood Preservers, 9815 Robson Road, Surrey, BC. The subject areas of this report include rooms listed in Section 4.1 below. Prior to initiating the selective demolition project, Western Cleanwood Preservers will be removing and flushing chromated copper arsenate (CCA) and other chemicals from the affected tanks, vessels, associated equipment and piping, and concrete reservoirs.

Astech's survey and report format is designed specifically to satisfy the current applicable regulation from the Workers' Compensation Board of British Columbia (WCB) Occupational Health and Safety Regulation 20.112 regarding hazardous building material assessments by a Qualified Person for buildings and structures.

This survey was conducted on March 18 and 23, 2021 by Tom Farrell and Trevor Shendruk assisted by Cassandra Marshall, Jesse James, and Andrew Henning of Astech. It must be emphasized that this survey was concerned exclusively with the subject areas. The site survey was destructive in nature and thorough in investigating layered floor, wall, and ceiling systems. However, inaccessible areas which would require the actual dismantling of substantial portions of the building in order to gain access were not investigated. No attempt was made to investigate other areas of the building, underground services, or the surrounding property. Therefore, if during work activities, other hazardous materials, asbestos containing materials, or potential asbestos containing materials not included in this report are discovered, work should immediately cease in the affected area. At that time, Astech should be contacted so that they can initiate immediate appropriate action so that there are no undue delays.

## **2.0 BUILDING DESCRIPTION**

The subject building on site is described as a wood-framed industrial building with process area for treating of wood with CCA and office area. According to BC Assessment, the building was originally constructed in 1989. The subject areas of the building have had a few renovations over the years. At the time of survey, the interior and exterior of the building were in fair to good condition.

## 3.0 METHODOLOGY

### 3.1 ASBESTOS CONTAINING MATERIALS

A visual inspection was undertaken in order to determine the type, location, and homogeneous nature of asbestos and potential asbestos containing building materials located at the subject areas. During this inspection, fifty-six (56) bulk samples of potential asbestos containing materials were collected from specific locations of the building. The number of samples collected during this survey are in accordance with the guidelines established by the WCB in their 2020 publication Safe Work Practices for Handling Asbestos, and as indicated by actual site conditions. The samples collected were submitted for analysis at our in-house laboratory in accordance with the WCB Occupational Health and Safety Regulation, utilizing polarized light microscopy, and dispersion staining techniques. Results of laboratory analysis of the samples collected during this survey are attached.

### 3.2 LEAD FINISHES

A visual inspection was undertaken in order to determine the type and location of paints, primers, coatings, and/or glazing finishes suspected of containing lead at the subject areas. During this inspection, two (2) bulk samples of potential lead finishes were collected from specific locations of the building. The samples collected were submitted for analysis at our in-house laboratory in accordance with US EPA methods and the requirements of the WCB Occupational Health and Safety Regulation. Results of laboratory analysis of the samples collected during this survey are attached.

### 3.3 LEAD CONSTRUCTION MATERIALS, PCBs, MERCURY, STORED CHEMICALS, AND SILICA

A visual inspection was undertaken at the subject areas in order to determine the presence of:

- construction materials suspected of containing lead and other heavy metals,
- fluorescent and high intensity discharge (HID) light fixtures suspected of containing PCB ballasts or capacitors,
- thermostats, light tubes/bulbs, and associated equipment suspected of containing mercury,
- stored chemicals suspected of being toxic, flammable, or explosive, and
- building materials suspected of containing silica in crystalline and non-crystalline forms.

## 4.0 INSPECTION RESULTS

### 4.1 ASBESTOS CONTAINING MATERIALS

#### GENERAL NOTE

- **Potential Asbestos Containing Building Materials:** The potential asbestos containing building materials listed below must be considered as asbestos containing until laboratory results determine otherwise. These materials were not sampled at this time as they were either inaccessible or are not to be impacted by project. In order to test the materials destructive testing may be required.

The visual inspection and/or analytical results determined that asbestos containing materials and/or potential asbestos containing materials are located at the following specific locations.

## GROUND FLOOR

### South Tank Area (South Mezzanine Office)

- Non-asbestos floor tiles and non-asbestos floor tile adhesive.
- Non-asbestos cove base and non-asbestos cove base adhesive.
- Non-asbestos filling compound on gypsum board.
- Non-asbestos pipe thread compound at fittings of sprinkler piping.
- No asbestos materials observed.

### South Tank Area (North Mezzanine Office)

- Non-asbestos floor tiles and non-asbestos floor tile adhesive.
- Non-asbestos cove base and non-asbestos cove base adhesive.
- Non-asbestos filling compound on gypsum board.
- Non-asbestos 2' x 4' ceiling tiles.
- No asbestos materials observed.

### South Tank Area (Process Area)

- **Asbestos** containing loose fill vermiculite insulation debris on floor at southeast corner, and on other surfaces from floor to ceiling within a 20 foot radius to the southeast corner.
  - **Asbestos** containing loose fill vermiculite insulation within concrete block walls.
  - **Asbestos** containing grey and dark grey gaskets and packing materials concealed at valves and flanges of mechanical piping systems, tanks, and vessels. **Note:** The beige, blue, green, and black gaskets are non-asbestos.
  - Potential **asbestos** containing mastic on ductwork (see General Note above).
  - Potential **asbestos** containing corrugated paper insulation within fire door (see General Note above).
- Important Note:** The concrete block wall at the southeast corner is damaged and, as listed above, there is **asbestos** containing loose fill vermiculite insulation debris on floor and other surfaces that requires remedial action. As well, the openings in the concrete block walls require sealing with duct tape and adhesive. See **Remedial Action** in Section 5.1 below. In order to alleviate the potential exposure hazard related to the exposed friable **asbestos** containing loose fill vermiculite insulation debris, the debris must be cleaned up and openings in the concrete block must be sealed by a qualified Asbestos Abatement Contractor's trained and authorized personnel in accordance with the WCB Occupational Health and Safety Regulation.
- Non-asbestos filling compound on gypsum board.
  - Non-asbestos wall construction paper.
  - Non-asbestos 2' x 4' ceiling tiles.
  - Non-asbestos pipe thread compounds at fittings of natural gas and mechanical piping.

**North Tank Area (Process Area)**

- **Asbestos** containing loose fill vermiculite insulation within concrete block walls.
- **Asbestos** containing grey and dark grey gaskets and packing materials concealed at valves and flanges of mechanical piping systems, tanks, and vessels. **Note:** The beige, blue, green, and black gaskets are non-asbestos.
- Potential **asbestos** containing paper insulation lining interior of metal exhaust vents to rooftop (see General Note above).
- Potential **asbestos** containing mastic on ductwork (see General Note above).
- Potential **asbestos** containing corrugated paper insulation within fire door (see General Note above).
- Non-asbestos filling compound on gypsum board.
- Non-asbestos 2' x 4' ceiling tiles.
- Non-asbestos pipe thread compounds at fittings of natural gas and mechanical piping.

**Vacuum Pump Room**

- **Asbestos** containing grey and dark grey gaskets and packing materials concealed at valves and flanges of mechanical piping systems. **Note:** The beige, blue, green, and black gaskets are non-asbestos.
- Non-asbestos pipe thread compounds at fittings of mechanical and compressor piping.

**Floor Cavities, Wall Cavities, and Ceiling Spaces**

- **Asbestos** containing loose fill vermiculite insulation within concrete block walls.
- **Asbestos** containing grey and dark grey gaskets and packing materials concealed at valves and flanges of mechanical piping systems, tanks, and vessels. **Note:** The beige, blue, green, and black gaskets are non-asbestos.
- Non-asbestos pipe thread compounds at fittings of natural gas, mechanical, sprinkler, and compressor piping.

**EXTERIOR****Mechanical Systems (adjoining North and South Tank Areas (Process Area))**

- **Asbestos** containing grey and dark grey gaskets and packing materials concealed at valves and flanges of mechanical piping systems, tanks, and vessels. **Note:** The beige, blue, green, and black gaskets are non-asbestos.
- Non-asbestos pipe thread compounds at fittings of sprinkler and mechanical piping.

**Walls**

- **Asbestos** containing loose fill vermiculite insulation within concrete block walls.

**Doors and Windows (at Subject Areas only)**

- Potential **asbestos** containing sealant/putty in window of exterior wood door (see General Note above).
- Non-asbestos sealant in exterior brown metal-framed windows at Mezzanine Offices.

**Rooftop**

- Potential **asbestos** containing roofing membranes, felts, mastics, caulking, sealants, and/or patching compounds (see General Note above).

## 4.2 LEAD

The visual inspection and/or laboratory analytical results determined the following at the subject areas:

- green paint containing 426 parts per million (PPM) of lead was used on interior wood surfaces,
- brown paint containing less than (<) 11 PPM of lead was used on interior wood surfaces, and
- paints and primers considered to be lead containing were used on metal catwalks, stairs, railings, structural steel components, pumps, motors, tanks, vessels, piping systems, supports, hangers, and other metal surfaces.

## 4.3 PCBs

The visual inspection determined that there are fifteen (15) fluorescent and HID light fixtures at the subject areas suspected of having one or more PCB containing ballasts/capacitors. PCB ballast/capacitor identification requires the disassembly of the light fixture in order to locate the manufacturer's identification code.

## 4.4 MERCURY

The visual inspection determined that there are two (2) wall mounted thermostats at the subject areas that contain mercury. There are also numerous fluorescent light tubes at the subject areas that contain mercury.

## 4.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS

The following list of materials were present in and around the subject areas at time of inspection (including items likely to be retained by current occupants):

- a few containers of rodent poison,
- compressors, motors, and hoses bearing petroleum products,
- a few fire extinguishers,
- batteries in emergency lighting and alarm system,
- a few areas with rodent droppings, and
- piping containing natural gas leading to heating equipment.

## 4.6 SILICA

All concrete, cement, gypsum board, and any other cementitious building materials at the subject areas are suspected of containing silica in crystalline and non-crystalline forms.

## 4.7 GYPSUM BOARD

The visual inspection and/or laboratory analytical results determined the following at the subject areas:

- there is non-asbestos filling compound on gypsum board located in the subject areas, and
- there is unfinished gypsum board located in the South Tank Process Area.

## 5.0 RECOMMENDATIONS

### 5.1 ASBESTOS CONTAINING MATERIALS

Prior to the selective demolition of a building or its components, the asbestos (or potential asbestos) containing materials that are directly impacted by the work must first be removed and disposed of by a qualified hazardous materials abatement contractor's trained and authorized personnel. The asbestos and potential asbestos containing materials not impacted by the work and **not requiring remedial action** may remain in place as long as they are in a stable condition in which they are considered to be safely enclosed or encapsulated (**Note:** damaged and/or exposed asbestos containing materials are listed in the **Remedial Action section below**). Workers must be advised in writing of their presence and location so that the asbestos containing materials are not inadvertently disturbed. Removing, enclosing, encapsulating, or otherwise disturbing (e.g. drilling) asbestos or potential asbestos containing materials must be performed by a qualified hazardous materials abatement contractor's trained personnel in accordance with the WCB Occupational Health and Safety Regulation. Disposal of asbestos containing materials must be performed in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

**Remedial Action** is required for the following damaged/exposed asbestos containing materials that, in order to comply with the WCB Occupational Health and Safety Regulation, must be patched and repaired, enclosed, and/or completely removed so as to alleviate the potential for release of airborne asbestos fibres. For repair or removal of damaged/exposed asbestos containing materials, the work must be performed by a qualified hazardous materials abatement contractor in accordance with the WCB Occupational Health and Safety Regulation.

- a) **South Tank Area (Process Area)** - There is exposed friable asbestos containing loose fill vermiculite insulation debris on floor at southeast corner, and on other surfaces from floor to ceiling within a 20 foot radius to the southeast corner that requires cleanup, prior to unprotected trades or other persons conducting work in this area.
- b) **South Tank Area (Process Area)** - The openings in the concrete block walls require sealing with duct tape and adhesive to prevent the further release of asbestos containing loose fill vermiculite insulation, prior to unprotected trades or other persons conducting work in this area.

### 5.2 LEAD

#### Paints/Primers

Where lead (or potential lead) based paints and/or primers are affected by a project, the work must be performed by a qualified contractor in accordance with the WCB Occupational Health and Safety Regulation and their 2020 publication entitled Safe Work Practices For Handling Lead.

Where the base substrate material is to be removed in conjunction with lead paint removal, the base substrate and lead based paints and/or primers should be removed intact by the contractor, in accordance with the contractor's risk assessment and site specific work procedures. The workers conducting the work and workers in close proximity to the work being performed, should be protected with personal protective equipment as determined by the contractor's risk assessment and site specific work procedures.

Lead containing paints which remain attached to **metal building materials** may be transported as normal construction waste to a metal recycling facility. Lead containing paints which remain attached to **concrete, wood, and/or other non-metal building materials** must be labelled as lead based paints (LBP) for transporting to a licensed/approved disposal site or recycling facility. A licensed/approved facility receiving the waste

must be informed of the lead content of these materials and be agreeable to receiving these materials. Prior to acceptance of waste with lead paints at a licensed/approved disposal facility, the contractor generating the waste must ensure that all waste materials containing LBP's are sampled intact, fastened directly to the base substrate, and representative of the waste stream created by demolition. The contractor shall have the representative sample analyzed utilizing a Toxicity Characteristic Leachate Procedure for lead (TCLP lead) test to determine the potential for soil and/or groundwater contamination, if deemed necessary by the site receiving the waste.

If the lead paints are to be separated or removed from the building materials by means of sanding, scraping, abrading, blasting, welding/torch cutting, etc., more stringent work procedures would apply. The removed lead paints, depending on lead concentrations and leachate results, may become a Hazardous Waste and therefore must be disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

### **5.3 PCB CONTAINING BALLASTS/CAPACITORS**

It is recommended that the identification of affected PCB ballasts/capacitors be performed by qualified personnel prior to or in conjunction with the selective demolition of a building, at a time when it becomes feasible to isolate electrical power and disassemble/disconnect the light fixtures. The ballasts/capacitors that are identified as PCB containing must be removed in accordance with the WCB Occupational Health and Safety Regulation and disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

### **5.4 MERCURY**

Where affected by a selective demolition project, the mercury containing thermostats and light tubes must first be removed, and be salvaged, recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

### **5.5 STORED CHEMICALS AND OTHER HAZARDOUS MATERIALS**

#### **Stored Chemicals**

Where affected by a selective demolition project, stored chemicals must first be removed, and be recycled or disposed of, in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation.

#### **Rodent Droppings**

Rodent droppings which can cause infectious disease and/or respiratory disease in humans should be removed as biohazardous waste by a qualified abatement contractor in accordance with the WCB Occupational Health and Safety Regulation, prior to unprotected trades performing work in or conducting selective demolition of a building. In lieu of removing droppings, workers shall wear respirators and protective clothing while in contaminated areas of a building, and while conducting selective demolition of a building.

#### **Natural Gas**

The natural gas must be shut off and purged by Fortis BC or a qualified trades person prior to work that would affect the gas, and prior to building demolition.

## 5.6 SILICA

Where cementitious building materials that are suspected of containing silica in crystalline form are directly impacted by the project (i.e. drilling, cutting, abrading, etc.), the work should be performed in a controlled manner to avoid the release of crystalline silica dust. Cutting, drilling, or otherwise disturbing these building materials must be performed by a qualified contractor's trained personnel in accordance with the WCB Occupational Health and Safety Regulation.

## 5.7 RECYCLABLE GYPSUM BOARD

Where affected by a selective demolition project, the gypsum board with no asbestos finishes (a provincially regulated construction waste) must first be removed by a qualified contractor, and be recycled or disposed of in accordance with the BC Ministry of Environment and Climate Change Strategy - *Environmental Management Act* - Hazardous Waste Regulation. Landfills are issued operational certificates from the BC Ministry of Environment, and for local landfills and others their certificate specifies that gypsum board cannot be accepted for disposal, and therefore local depots offer recycling services.

## 6.0 OWNER'S AND ABATEMENT CONTRACTOR'S RESPONSIBILITIES

### Owner's Responsibilities

For the remediation of hazardous building materials, contract specifications, quality control, and final acceptance of the work remain the responsibility of the Owner. In order to ensure that the Owner has acted in a responsible manner, and to ensure regulatory board compliance, it is recommended that the work and project air monitoring be performed by a qualified and properly insured (with proof of necessary asbestos inclusion rider) Hazardous Materials Abatement Contractor.

### Abatement Contractor's Responsibilities

The Abatement Contractor upon completing the work shall have their "Qualified Person" inspect the worksite in its entirety to confirm that asbestos and other hazardous building materials have been properly removed, then promptly provide the Owner with a signed Letter of Completion.

As well, prior to transport of hazardous waste, the Abatement Contractor shall assist the Owner by completing and submitting the BC Ministry of Environment Waste Generator Number Registration Form (Schedule 5 Form 1), once signed by the Owner, if no BC Generator number exists. If a BC Generator number exists and requires updating for this specific project, the Abatement Contractor shall assist with completing and submitting the update.

Project Documentation should also be provided to the Owner including, but not necessarily limited to, a Notice of Project for work involving Asbestos and/or Lead Paint, Risk Assessment, Exposure Control Plan, and Site Specific Work Procedures, Worker Respirator Fit Test Forms/Logs and Training Acknowledgement Forms, Certification of DOP Testing of HEPA Filtered Equipment used on site, Air Sample Results, Material Safety Data Sheets (MSDS) for products used on site, Transportation Waybills, and Waste Manifest Forms.



## 7.0 APPROXIMATE QUANTITIES FOR HAZARDOUS MATERIALS

The following approximate quantities for hazardous materials are provided as a means to satisfy the requirements of the WCB, and are provided for reference only. Contractors shall be responsible for verifying exact quantities for the purpose of bidding the work.

<b>ASBESTOS CONTAINING MATERIALS</b>	<b>APPROXIMATE QUANTITIES</b>
<b>Confirmed Asbestos Containing Materials</b>	
As per Section 5.1, Cleanup of Asbestos Loose Fill Vermiculite Insulation Debris and Decontaminate All Surfaces from Floor to Ceiling within a 20 foot Radius of the Southeast Corner Debris Pile	1 pile at SE corner and 20 foot radius from SE corner
Seal Openings in Concrete Block Walls with Duct Tape and Adhesive near Southeast Corner	8 lineal feet
Asbestos Grey and Dark Grey Gaskets and Packing Materials Concealed at Valves and Flanges of Mechanical Piping Systems, Tanks, and Vessels	90 locations
<b>Potential Asbestos Containing Materials</b>	
Potential Asbestos Sealant/Putty in Window of Exterior Wood Door	1 door
Potential Asbestos Corrugated Paper Insulation within Firedoors	2 doors
Potential Asbestos Mastic on Ductwork	Not Determined
Potential Asbestos Paper Insulation Lining Interior of Metal Exhaust Vents to Rooftop	1 vent
Potential Asbestos Roofing Membranes, Felts, Mastics, Caulkings, Sealants, and/or Patching Compounds	Not Determined
<b>OTHER HAZARDOUS MATERIALS</b>	
Lead Paint Remaining Attached to Building Materials for Recycle/Disposal, Dependent on TCLP Lead Testing (if deemed necessary by receiving site)	Not Determined
Potential PCB Containing Ballasts/Capacitors	15 fixtures
Mercury Containing Thermostats	2 thermostats
Mercury Containing Light Tubes	16 tubes

We hope you have found the above information useful. If you have any questions, or require clarification please contact this office.

Tom Farrell  
Astech Consultants Ltd.  
Ref: 24052HE01C.AEH



# ASBESTOS BULK SAMPLE REPORT

Date: March 29, 2021  
 Client: CLEARVIEW DEMOLITION LTD.  
 Location: **Main Building #100**  
**9815 Robson Road**  
**Surrey, BC**

Comments: 1) Asbestos (bulk) by PLM analyzed as per NIOSH 9002 Issue 2.  
 2) Workers' Compensation Board of British Columbia (WCB) defines asbestos containing material as 0.5% or more asbestos, with the exception of Vermiculite Insulation which is defined as "any asbestos".  
 3) Samples will be disposed of after 90 days, unless the Client requests otherwise.

## Sample(s) Collected on March 18, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos		Asbestos	
				%	Type	%	Type
24052 BS01	South Tank Area - Ground Floor - North Mezzanine Office	12" Floor Tile	1: Grey	100%	Non-Fibrous	None	Detected
24052 BS02	South Tank Area - Ground Floor - North Mezzanine Office	Floor Tile Adhesive	2: Beige	100%	Non-Fibrous	None	Detected
24052 BS03	North Tank Area - Ground Floor - Process Area	Paint Filling Compound on Gypsum Board (on Wall, West Column)	1: Beige 2: White	100%	Non-Fibrous	None	Detected
24052 BS04	South Tank Area - Ground Floor - North Mezzanine Office	Paint Filling Compound on Gypsum Board (West Wall)	1: Beige 2: White	100%	Non-Fibrous	None	Detected
24052 BS05	South Tank Area - Ground Floor - North Mezzanine Office	Sealant (in Brown Metal- Framed Window)	1: Black	2%	Cellulose	98%	Non-Fibrous
24052 BS06	South Tank Area - Ground Floor - North Mezzanine Office	Paint Filling Compound on Gypsum Board (North Wall beside Column)	1: Beige 2: White	100%	Non-Fibrous	None	Detected
24052 BS07	South Tank Area - Ground Floor - North Mezzanine Office	2' X 4' Ceiling Tile (Large Fissures, East Side)	1: Beige	60%	Cellulose	20%	Glass
				20%	Non-Fibrous	None	Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos	Asbestos
				% Type	% Type
24052 BS08	South Tank Area - Ground Floor - North Mezzanine Office	2' X 4' Ceiling Tile (Large Fissures, West Side)	1: Beige	60% Cellulose 20% Glass 20% Non-Fibrous	None Detected
24052 BS09	South Tank Area - Ground Floor - North Mezzanine Office	2' X 4' Ceiling Tile (Large Fissures, near Centre)	1: Beige	60% Cellulose 20% Glass 20% Non-Fibrous	None Detected
24052 BS10	South Tank Area - Ground Floor - North Mezzanine Office	2' X 4' Ceiling Tile (Medium Fissures, near Centre)	1: Beige	60% Cellulose 20% Glass 20% Non-Fibrous	None Detected
24052 BS11	South Tank Area - Ground Floor - North Mezzanine Office	Cove Base	1: Black	100% Non-Fibrous	None Detected
24052 BS12	South Tank Area - Ground Floor - North Mezzanine Office	Cove Base Adhesive	2: Beige	100% Non-Fibrous	None Detected
24052 BS13	South Tank Area - Ground Floor - South Mezzanine Office	Sealant (in Brown Metal- Framed Window, West)	1: Black	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS14	South Tank Area - Ground Floor - South Mezzanine Office	Pipe Thread Compound (at Fitting of Sprinkler Piping above Ceiling)	1: Grey	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS15	South Tank Area - Ground Floor - South Mezzanine Office	Paint Filling Compound on Gypsum Board (Ceiling at Valance)	1: Cream 2: White	100% Non-Fibrous	None Detected
24052 BS16	South Tank Area - Ground Floor - South Mezzanine Office	Paint Filling Compound on Gypsum Board (East Wall)	1: Cream 2: White	100% Non-Fibrous	None Detected
24052 BS17	South Tank Area - Ground Floor - South Mezzanine Office	Paint Filling Compound on Gypsum Board (North Wall)	1: Cream 2: White	100% Non-Fibrous	None Detected
24052 BS18	North Tank Area - Ground Floor - Process Area	2' X 4' Ceiling Tile (Medium Fissures)	1: Beige	60% Cellulose 20% Glass 20% Non-Fibrous	None Detected
24052 BS19	North Tank Area - Ground Floor - Process Area	2' X 4' Ceiling Tile (Medium Fissures)	1: Beige	60% Cellulose 20% Glass 20% Non-Fibrous	None Detected
24052 BS20	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Natural Gas Piping)	1: Grey	100% Non-Fibrous	None Detected
24052 BS21	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at North Tank)	1: Grey	100% Non-Fibrous	None Detected
24052 BS22	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at North Tank)	1: Brown	100% Non-Fibrous	None Detected
24052 BS23	North Tank Area - Ground Floor - Process Area	Flange Gasket (at North Tank)	1: Grey	30% Cellulose 10% Non-Fibrous	<b>60% Chrysotile</b>

Sample	Location	Description	Layer: Colour	Non-Asbestos	Asbestos
				% Type	% Type
24052 BS24	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Fire Hose Piping at North Tank)	1: Off-White	2% Cellulose 98% Non-Fibrous	None Detected
24052 BS25	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at North Tank)	1: Off-White	2% Cellulose 98% Non-Fibrous	None Detected
24052 BS26	North Tank Area - Ground Floor - Process Area	Flange Gasket (at North Tank)	1: Beige	80% Cellulose 15% Glass 5% Non-Fibrous	None Detected
24052 BS27	North Tank Area - Ground Floor - Process Area	Flange Gasket (at North Tank)	1: Blue	100% Non-Fibrous	None Detected
24052 BS28	North Tank Area - Ground Floor - Process Area	Flange Gasket (at Tank #6)	1: Beige	80% Cellulose 15% Synthetic 5% Non-Fibrous	None Detected
24052 BS29	North Tank Area - Ground Floor - Process Area	Flange Gasket (in Storage at Tank #6)	1: Dark Grey	15% Non-Fibrous	<b>85% Chrysotile</b>
24052 BS30	North Tank Area - Ground Floor - Process Area	Flange Gasket (at Tank #8)	1: Green	80% Cellulose 5% Glass 15% Non-Fibrous	None Detected
24052 BS31	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at Tank #8)	1: Beige	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS32	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at Tank #10)	1: Beige	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS33	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at Tank #11)	1: Blue	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS34	North Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping at Tank #11)	1: Blue	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS35	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Natural Gas Piping at Tank #1)	1: Brown	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS36	North Tank Area - Ground Floor - Vacuum Pump Room	Flange Gasket (at Flange of Mechanical Piping)	1: Dark Grey	15% Non-Fibrous	<b>85% Chrysotile</b>
24052 BS37	North Tank Area - Ground Floor - Vacuum Pump Room	Pipe Thread Compound (at Fitting of Mechanical Piping)	1: Beige	1% Cellulose 99% Non-Fibrous	None Detected
24052 BS38	North Tank Area - Ground Floor - Vacuum Pump Room	Pipe Thread Compound (at Fitting of Mechanical Piping)	1: Grey	100% Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos		Asbestos		
				%	Type	%	Type	
24052 BS39	North Tank Area - Ground Floor - Vacuum Pump Room	Pipe Thread Compound (at Fitting of Compressed Air Piping)	1: Off-White	1%	Cellulose	99%	Non-Fibrous	None Detected

Analyst(s): Lillian Fan, Jessica Young

Sample(s) Collected on March 23, 2021

Sample	Location	Description	Layer: Colour	Non-Asbestos		Asbestos		
				%	Type	%	Type	
24052 BS40	South Tank Area - Ground Floor - Process Area	Loose Fill Vermiculite Insulation Debris (Southeast Corner)	1: Beige	99%	Non-Fibrous	1%	Actinolite	
24052 BS41	South Tank Area - Ground Floor - Process Area	Wall Construction Paper	1: Brown	98%	Cellulose	2%	Non-Fibrous	None Detected
24052 BS42	South Tank Area - Ground Floor - Process Area	Paint Pipe Thread Compound (at Fitting of Sprinkler Piping)	1: Red	100%	Non-Fibrous			None Detected
24052 BS43	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at South Tank)	1: Beige	100%	Non-Fibrous			None Detected
24052 BS44	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at South Tank)	1: Beige	100%	Non-Fibrous			None Detected
24052 BS45	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at South Tank)	1: Beige	100%	Non-Fibrous			None Detected
24052 BS46	South Tank Area - Ground Floor - Process Area	Flange Gasket (at Tank #5)	1: Black	100%	Non-Fibrous			None Detected
24052 BS47	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at Tank #1)	1: Grey	100%	Non-Fibrous			None Detected
24052 BS48	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at Tank #1)	1: Blue	2%	Cellulose	98%	Non-Fibrous	None Detected
24052 BS49	South Tank Area - Ground Floor - Process Area	Flange Gasket (at South Tank)	1: Dark Grey	15%	Non-Fibrous	85%	Chrysotile	
24052 BS50	South Tank Area - Ground Floor - Process Area	Flange Gasket (at South Tank)	1: Dark Grey	15%	Non-Fibrous	85%	Chrysotile	
24052 BS51	South Tank Area - Ground Floor - Process Area	Flange Gasket (at North Tank)	1: Grey	85%	Cellulose	15%	Non-Fibrous	None Detected

Sample	Location	Description	Layer: Colour	Non-Asbestos	Asbestos
				% Type	% Type
24052 BS52	South Tank Area - Ground Floor - Process Area	Pipe Thread Compound (at Fitting of Mechanical Piping, at South Tank)	1: Beige	100% Non-Fibrous	None Detected
24052 BS53	South Tank Area - Ground Floor - Process Area	Flange Gasket (at South Tank)	1: Dark Grey	15% Non-Fibrous	<b>85% Chrysotile</b>
24052 BS54	Exterior - at West End of North & South Tank Areas	Pipe Thread Compound	1: Beige	100% Non-Fibrous	None Detected
24052 BS55	Exterior - at West End of North & South Tank Areas	Pipe Thread Compound	1: Beige	100% Non-Fibrous	None Detected
24052 BS56	Exterior - at West End of North & South Tank Areas	Flange Gasket	1: Black	100% Non-Fibrous	None Detected

Analyst(s): Jessica Young



American Industrial Hygiene Association (AIHA) Bulk Asbestos Proficiency Analytical Testing (BAPAT)  
Astech Consultants Ltd. Laboratory Participant ID# 200542



# LEAD BULK SAMPLE REPORT

Date: March 29, 2021  
Client: CLEARVIEW DEMOLITION LTD.  
Location: Main Building #100  
9815 Robson Road  
Surrey, BC

Comments:

- 1) The Workers' Compensation Board of British Columbia (WCB) no longer allows reference to Health Canada's definition of a lead-containing surface coating material.
- 2) WCB does not define a safe level for a lead-containing surface coating material.
- 3) Analyzed by X-Ray Fluorescence (XRF) with direct read parts per million (PPM).
- 4) Sample results report lead only.
- 5) < means less than, > means more than.
- 6) Samples will be disposed of after 90 days, unless the Client requests otherwise.

Sample(s) Collected on March 18, 2021

Sample	Location	Description	Colour	Lead PPM
24052 LS01	South Tank Area - Ground Floor - Process Area	Paint (on Wood Wall, South)	Green	426 PPM
24052 LS02	North Tank Area - Ground Floor - Process Area	Paint (on Wood Cove Base)	Brown	< 11 PPM

Analyst(s): Jessica Young



Certified to ISO:20807; and Health Canada's and Natural Resources Canada's requirements for compliance with Health Canada Safety Code 32 & 34