ENVIRO-VAC™

SITE SPECIFIC RISK ASSESSMENT FORM

ASBESTOS EXPOSURE CONTROL PLAN

(See Also EV OH&S Manual, Safety Tool Box Talk Form for Further Site-Specific Instruction)

PROJECT ADDRESS:	9815 Robson Road, Surrey BC V3V 2R9
OWNER:	C/o Clearview Demolition Ltd. – 8285 Lickman Rd, Chilliwack BC V2R 3Z9
PRIME CONTRACTOR:	

General Site PPE Requirements (CSA approved):				
	☒	Hard-hat	☒	Gloves (cut resistant - Level 3 Kevlar minimum or Leather)
	☒	Steel Toe Boots	☐	Gloves (Industrial nitrile, gauntlet length)
	☐	High Visibility Vest	☐	Full body harness with fall restraint/arrest
	☒	Eye Protection (safety glasses)	☒	Other: Face coverings in all areas where respiratory protection is not required.
	☐	Coveralls (Reflective–Fire-rated)		

1.0	Has an asbestos survey been completed by an OH&S Professional? Comments: Pre-Demolition Hazardous Building Materials Assessment prepared by MBC Group dated June 1st, 2021		Yes ☒ No ☐
2.0	Have all areas of asbestos been identified? Comments:		Yes ☒ No ☐
3.0	What type of asbestos was identified?	Chrysotile ☒ Amosite ☐ Actinolite ☒ Tremolite ☐ Other ☐	
4.0	Where is the asbestos and what condition is it in?	4.1 *See item 14.0 for site-specific procedures.*	
5.0	Is the asbestos friable or non-friable?	Friable, Non-friable	☒ ☒
6.0	Can the asbestos become friable during any of these activities?	Alteration, Removal, Demolition	☒ ☒ ☒
7.0	Is set-up of worker decontamination area moderate risk? **See item 8.0 to answer.**		Yes ☐ No ☒
8.0	Are there any activities that could disturb asbestos material during set up of containment walls or during installation of plastic on walls? If yes, explain: The subject buildings were found to be in POOR condition and have loose vermiculite contamination spread throughout the ground and walls		Yes ☒ No ☐
9.0	Is debris present? If yes, explain: The survey notes that the subject buildings were found to be in POOR condition and loose vermiculite contamination spread throughout the ground and walls.		Yes ☒ No ☐
10.0	Are there any electrical hazards or air distribution issues that require special controls? If yes, explain:		Yes ☐ No ☒
11.0	Are there non-standard containment requirements or information? If yes, explain:		Yes ☐ No ☒
	Determine activities that may disturb asbestos during set-up and describe what kind of precautions will be / should be implemented with due regard for potential fibre release and exposure to workers and or occupants.		
	See Item 8.0 *"site-specific procedure" (e.g., working within bumping distance of an ACM texture ceiling during set-up requires Moderate Risk work procedures).*		
12.0	Is partial demolition required to access asbestos? E.g., below floors, behind walls or above ceilings? If yes, see Sec. 14 for Risk Factor and plan.		Yes ☒ No ☐
13.0	Determine activities that may disturb asbestos during removal of floorboards, walls or ceilings and detail site-specific control & work procedures with due regard for potential fibre release & exposure to workers & or occupants.		
	Detail site-specific procedures – **See Item 14.0**		
	Describe how substrate will be removed - **See Item 14.0**		
14.0	Classify each item of abatement work below and describe methods to be used for isolating work area from any occupants and the site-specific abatement procedures to be utilized. Attached are the applicable abatement & control procedures i.e., methodology, access / egress / worker decontamination.	**Mod. Risk Scenario**	☒
		Mod. Mod. Risk Scenario	☒
		High Risk Scenario	☐

The buildings and structures on the industrial site are scheduled for demolition and are unoccupied. The work involves the removal/disposal of the following asbestos containing materials identified in the Pre-Demolition Hazardous Building Materials Assessment prepared by MBC Group dated June 1st, 2021:

The asbestos-containing vermiculite, paint, mastic and cementitious patch amounts to approximately 14,000/ft2.

Loose vermiculite within the concrete block walls

- Service Plant – Main Room, Boiler Room, & Kiln #1 (approximately ~5,000/ft2 of cinder-block wall surface areas)
- Kilns #2, 3 & 4 (debris on the floor and other areas within)

Asbestos paint on concrete and metal surfaces

- Silver paint/coating on concrete, concrete block, and metal surfaces within Kilns #2, 3 & 4 (debris on the floor and other surfaces within)

Silver mastic on wall penetrations of the kilns.

- Applied to non-asbestos black caulking at wall penetrations within Kilns #2 & 3. (Some concealed & on adjoining building materials Flange gaskets in the piping systems)

A cementitious patch

- West concrete block wall (some concealed and some on adjoining building material)

Dark grey gaskets (2 gaskets)

- Concealed at flanges of mechanical piping systems in the Kiln #3 Sprinkler Room

Treated Lumber Storage Shed Roof
- Asphalt Shingles & Mastic (approximately 6,000/ft2)

Dry Shed Treated Lumber Storage Roof
- Mastic (approximately 150/ft2)

Note The survey specifies that the following areas were **not assessed/sampled** due to safety concerns and that further sampling/inspection of the above areas will need to be conducted once these areas are deemed safe to do so.:

- Building 9 (Treehouse)
  - Safe access was not provided at the time of inspection.
- Building 15 (Maintenance Shop)
  - Require additional asphalt samples from the roof to determine whether it is an ACM.
  - Not inspected due to visible damage to the building structure, posing a health and safety hazard.
- Building 21 (Electrical Shed)
- Building 26 Roof (Gen Area II)
- Building 27 Roof (Gen Shed)
- Building 18 Roof (Stacker 2 Roof)
- Building 1 Roof (Office)
- Building 29 Roof (Kiln 1)
- Building 11 Roof (Service Plant)
  - No visual of the roof, due to scissor lift restrictions.
- All underground utilities/services
- Confined spaces
  - Internals of tanks

14.1	(Area 1 – Scope of work) **Clean Up of ACM Debris** The work area will be delineated using banner tape and a wash station will be set up at the egress point to the work area for worker decontamination. Workers will enter the work area wearing a minimum f ½ face respirator, Tyvek suits and gloves, and mist with amended water using an airless sprayer or other device designed to produce a fine water spray. Workers will clean up spilled asbestos material and debris using the HEPA vacuum, working their way into the area to avoid tracking material further. Final cleaning will be performed by wet wiping and HEPA vacuuming the area. Waste will be disposed of as asbestos waste. See attached Moderate Risk procedures. **Asbestos Paint on Substrate Using Grinder** Asbestos paint on concrete and metal surfaces requires the use of grinders with localized ventilation to remove. Note that controls in place for asbestos abatement will mitigate potential silica hazards from the grinding of concrete. Work will occur within a containment with HEPA-filtered negative air unit(s), with workers in Modified Moderate Risk PPE including PAPR respirators and Tyvek suits. The air will be misted prior to disturbance and then the bulk of the asbestos paint will be scraped off of the surface using razor scrapers or other hand tool. The residual material will then be removed using a grinder with HEPA-shroud or vacuum at the source of disturbance to contain dust. Edges may require application of the asbestos paint solvent however review this as smell can be offensive to tenants and they may request it not be used. Edges to be scrubbed with hand tools. Upon completion of the removal, the exposed area will be encapsulated (review this with client as further floor installation guarantee may require bare concrete) and the work area will be HEPA-vacuumed/wet-wiped prior to release of the work area. A two-stage wash station will be used for worker decontamination. All waste is to be packaged in double 6 mil bags/packaging for disposal as asbestos waste. See attached work procedures. **Cementitious Patch, Gaskets, Mastic at Penetrations** The work area will be isolated using barrier tape and poly drop sheets, with a wash station at the egress point for worker decontamination. Ensure that lockout of systems is confirmed prior to working on any live electrical system. Workers will enter the work area wearing all typical Moderate risk PPE including Tyvek suits and a minimum of ½ face respirators. A drop sheet will be placed under the work areas prior to any removal and with a HEPA vac at the source to catch any debris. The material will be wetted with amended water and workers will remove the material using a hook knife or other crevice tool and place directly into a bag for disposal. Scrape any residue from the substrate using scrub pad or rag as necessary. The substrate may be removed completely with residue if applicable for the situation. Upon completion, the work area will be HEPA-vacuumed and exposed areas encapsulated as required. Please refer to the attached Moderate Risk work procedures.
14.2	(Area 2 – Scope of work) **Roof Mastic/Shingles** The work involves aiding an excavator in the removal and disposal of exterior substrates with asbestos containing mastic such as flashing, shingles etc. The materials will be removed with the mastic complete to minimize disturbance. The area will be isolated with asbestos barrier tape around the perimeter of the work area – at least 15 ft from area or to property line. The excavator operator will be fit tested onsite for a ½ face respirator and the cab will be sealed. The excavator will remain inside the work zone until project area completion. Worker(s) will enter the work area wearing all typical Moderate Risk PPE including Tyvek suits, cut proof gloves, and a minimum of ½ mask respirators. A hose, demo mister or rain is to be used for dust control. Workers will aid the excavator in the controlled removal of the materials from the building and place it into double lined bins for disposal, or it will be placed into a laydown area where workers will package for disposal as asbestos waste. A wash station will be used for worker decontamination. The excavator bucket will be wiped/washed down prior to exiting the work area. Enviro-Vac workers will perform visual inspection of the work are to ensure all debris has been removed and packaged. If debris is present, it can be manually picked up within the moderate risk work area and placed into the bins for disposal as asbestos waste. Please refer to the attached Moderate Risk work procedure.

14.3	(Area 3 – Scope of work) **Vermiculite (Block Wall)** The work area will be set up as a modified moderate risk work area using barrier tape, poly sheeting, and a mobile decontamination unit c/w 3 stage shower unit. The work area will be placed under negative air in addition to the localized ventilation provided by the vec-loader. Workers will enter the work area wearing all typical modified moderate risk PPE including Tyvek suits and PAPR respirators. A separate moderate risk work area inclusive of raised warning tape, wash station and drop sheets will be created around the HEPA equipped trailer mounted self bagging vacuum unit (vec-loader). The vec-loader operator will enter the work area wearing all typical moderate risk PPE including Tyvek suit and ½ face respirator. All operation of the vec-loader and sealing of waste bags are to be performed under moderate risk work procedures. Vacuum lines will be run from the vecloader directly to the block walls. Workers will open the block wall by cutting the outer concrete with a diamond blade, and open the wall using manual tools. With the vacuum line directly at the holes, the vermiculite will be allowed to flow directly into the vacuum hose of the vecloader. Please note that the holes will be made of such size as to ensure that the vec loader vacuums all vermiculite as it comes from the block wall, and not allowing surplus material to accumulate. Once the wall is bulk drained, additional holes will be created in the face of the block, and the interior of the block vacuumed of all vermiculite. Once complete, a visual inspection will be performed by Envirovac OHS and the work area including the interior of the block sealed with an asbestos encapsulant. Please refer to the attached work procedures.				
Respiratory Protection Required: ½ respirators with P100 filters, & PAPR's as noted above. Number of negative air units required: 2-3 Maximum height of abatement area: 20' Waste will be removed from containment through: upon completion					
15.0	Will there be unprotected workers near the asbestos work areas? Is there potential for occupant exposure? If yes, explain:				Yes ☐ No ☒
16.0	Detail air monitoring required. **Name of firm: MBC Group** **Start Date: TBD** **Type: Asbestos** **Other Instructions:**	Daily	☐	Ambient	☐
		Protocol	☐	Occupational	☐
		Number of Days:		Clean Room	☐
				Air Clearance	☐
17.0	Is fall protection required? **(EV OH&S Manual Part 4)** Comments:				Yes ☐ No ☒
18.0	Is Hot Work occurring? **(EV OH&S Manual Part 5)** If yes, complete a Hot Work Permit. (Torches for Bin Lining) Comments: **Note that copies of all Hot Work Permits must be submitted to the office**				Yes ☒ No ☐
19.0	Are needles or biological hazards a potential concern? **(EV OH&S Manual Part 9)** Comments: **As it is undetermined on the duration the building has been unoccupied, hypodermic needles may be present within the house.** Controls: **Use sharps kit (tongs, puncture resistant gloves, safety glasses, etc.) for removal. See Biohazard Exposure Control Plan and follow procedures included - attached.** Comments: Currently the COVID-19 outbreak is a bio-hazardous concern and Enviro-Vac has a COVID Exposure control plan that are in place that must be followed – See ECP Controls: • All workers are to self-assess to ensure they do not have any symptoms prior to attending site each day. Workers with any symptoms are not permitted to enter the site. • Ensure workers confirm that they do not have any symptoms of COVID19 – track this on paperwork and in Vericlock • Forehead thermometers are available onsite and in the shop for all workers to take their temperature prior to starting work. • Only workers who reside together in the same house on a regular basis are permitted to drive in cars without PPE, otherwise, face coverings (1/2 mask respirators or surgical/cloth masks) are required to be worn when driving in cars as workers will be within the 2-metre social distancing requirement. • Face coverings are to be worn at all times on site. • All touch points should be wiped down with Fosters 40-80 or other approved disinfectant on a regular basis. • Each worker is to use his/her own washout station and wash hands regularly for a minimum of 20 seconds or use alcohol-based sanitizer. • To limit the sharing of paperwork, each worker has an individual sign off sheet. Supervisor will write the names of attendance on the Toolbox and any site FLRAs/JSAs. If paperwork does need to be shared, it shall be done with workers in masks and gloves, and workers are to wash or sanitize their hands before and after handling the paperwork. Other Biological hazards we run into on sites are needles or drug paraphernalia or excrement (human or animal) – includes any black/grey water cleanups. **NOTE** that if our workers may come into contact with human blood or feces, we have to offer them the Twinrix vaccination for Hepatitis. This has been noted in the worker orientation as well as a tailgate that is shipped out every year as our notification to the workers. If a worker wants us to handle it – contact the union as they should in theory provide, as it's a requirement of their work in abatement.				Yes ☒ No ☐
20.0	Are cut hazards a potential concern? **(EV OH&S Manual Part 5)** Comments: Workers will utilize sharp tools and be in contact with sharp materials Controls: Use caution at all times, be familiar with tools in use and wear Kevlar Level 3 gloves or leather				Yes ☒ No ☐

21.0	Do Overhead Hazards exist? (Consider all tasks including setup) Comments: Wear hardhats for all work overhead (ceiling removal and setup)	Yes ☐ No ☐
22.0	Are confined space procedures applicable? **(EV OH&S Manual Part 5)** Comments:	Yes ☐ No ☒
23.0	Thermal stress concerns: **(EV OH&S Manual Part 5)** Comments: As the weather conditions vary, workers are to ensure that they dress appropriately for the weather and that they self-assess for signs of exposure or Heat stress. See SWP for Thermal Stress (Part 5, section 11) • Review the signs of heat stress frequently at toolbox meetings • Take breaks in a shaded area. • Cooling vests/towels can be used on top or underneath Tyvek suits but must remain in the contaminated work area until washed down. • Wear sunscreen • Hydrate throughout the day (including replacing the electrolytes). • Monitor each other for signs of heat stress.	Yes ☒ No ☐
24.0	Lockouts **(EV OH&S Manual Part 5)** Highlight the applicable one: Electrical - Ventilation: Comments: Lockouts to be by Clearview	Yes ☒ No ☐
25.0	Are bird guano or rodent droppings a concern? **(EV OH&S Manual Part 6)** Comments: Controls:	Yes ☐ No ☒
26.0	Is there potential for violence in the workplace? **(EV OH&S Manual Part 1)** If yes, complete Violence Prevention Risk Assessment and refer to appropriate procedures in OHS manual.	Yes ☒ No ☐
27.0	Are Job Safety Analysis applicable for the site? **(EV OH&S Manual Part 3)** If yes, then which ones? Comments: Ladders, Power Tools, Vac Loader, Bin Lining, Hot Works	Yes ☒ No ☐
28.0	Is electrical available? If not, how is power to be provided? Comments: To be provided by the owner.	Yes ☒ No ☐
29.0	Is water available? If not, how is water to be provided? Comments: To be provided by the owner.	Yes ☒ No ☐
30.0	Are any of the following Hazardous Materials also present on site? If so, please see applicable exposure control plans **(EV OH&S Manual Part 6)** Comments: • Lead paint is present on painted building materials throughout. Controls in place for asbestos abatement will mitigate any inhalation hazards presented by lead dust. In addition, workers should minimize skin exposure and decontaminate with clean soap and water to ensure that the skin absorption hazard is also mitigated. • Refer to hazardous materials building survey for other hazards; however, no removal or disturbance of other hazardous materials is expected or included in ENVIROVAC's scope of work.	Lead: Yes ☒ No ☐ Mould: Yes ☐ No ☐ PCBs: Yes ☐ No ☐ Mercury: Yes ☐ No ☐ Guano: Yes ☐ No ☐ ODSs: Yes ☐ No ☐ Silica: Yes ☒ No ☐ Other: Yes ☐ No ☐
31.0	Waste will be moved from site VIA	EV ☐ HLI ☒
32.0	**First Aid Assessment:** Hazard Rating: High Level of First Aid attendant required: Level 1 Attendant up to 15 workers Supplies/Facilities Required: Level 1 First aid kit is sufficient	
	Additional Barriers to aid? If yes, describe barriers and plan to overcome:	Yes ☐ No ☒
	Driving Time to Hospital:	Under 20 minutes: ☒ Over 20 minutes: ☐

33.0	**Number of Workers on this Project:**	**4-5 Workers**
	Number of working days on this Project:	**6-8 Weeks**
	Day, evening or night shift (Start and End times):	**8:00AM-4:00PM**
	Schedule start date:	**July 26, 2021**
34.0	Completed by: Corinna for Steve Parks (Reviewed by Steve Parks)	
35.0	Date completed: July 20, 2021	
36.0	Contact Phone Number: **604.513.1324**	Signature: 

I have read and understood the above information and the associated procedures mentioned:

Date	***Name***	***Signature***	***Emergency Contact Name and Number***
