



PRELIMINARY DETERMINATION
(Pursuant to Section 44 of the *Environmental Management Act*)

I have made a Preliminary Determination that the site identified in Schedule A of this document **is not** a contaminated site.

This Preliminary Determination is qualified by the requirements and conditions specified in Schedule B.

The site does not have concentrations of the substances specified in Schedule C that exceed the applicable standards and criteria prescribed in the Contaminated Sites Regulation for determining whether a site is a contaminated site.

I have issued this Preliminary Determination based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

This is to advise that I will consider submissions received 30 days after delivery of this Preliminary Determination before a Final Determination is made.

In accordance with the *Environmental Management Act*, I will notify persons with an interest in the subject site once a Final Determination is made.

This Preliminary Determination should not be construed as an assurance that there are no hazards present at the site.

February 13, 2018
Date Issued


J.A. Brooke
For Director, *Environmental Management Act*

Schedule A

The site covered by this Preliminary Determination is located at the south portion of the property currently referenced as 1229 Hornby Street, Vancouver, BC which is more particularly known and described by the following metes and bounds:

Starting at the southwest corner of Lot G, Block 100, District Lot 541, Group 1, New Westminster District, Plan EPP44019:

- The point of commencement.
- Thence 44° 46' 03" for 68.543 metres;
- Thence 134° 44' 55" for 36.578 metres;
- Thence 224° 46' 08" for 68.549 metres;
- Thence 314° 45' 29" for 36.576 metres;
- Returning to the point of commencement.

PID: 029-416-141

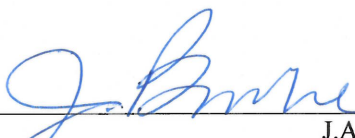
The site contains part of a legal parcel depicted in an engineering drawing prepared by Keystone Environmental Ltd. on October 26, 2017.

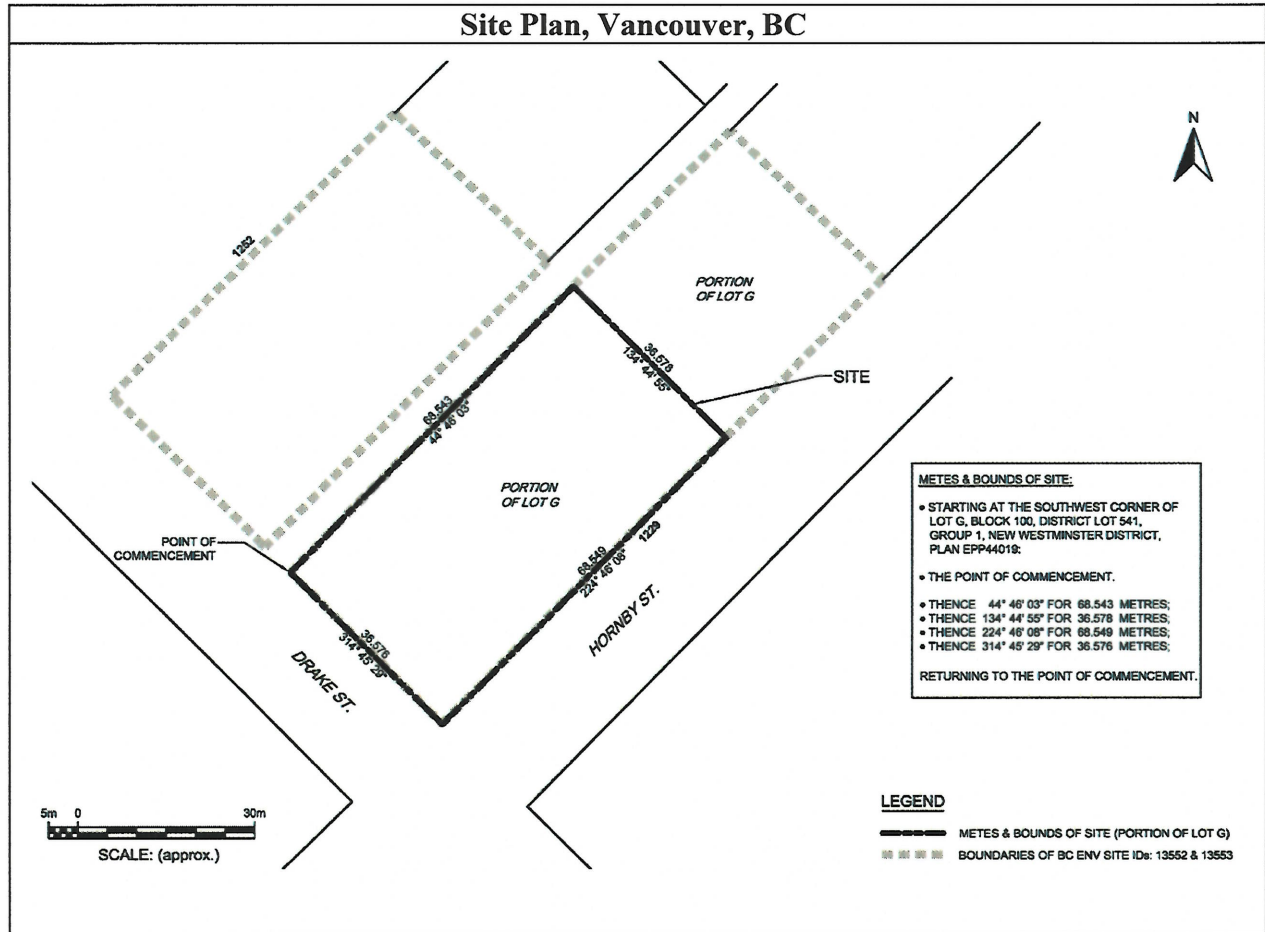
The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 16' 40.30"
Longitude: 123° 7' 46.50"

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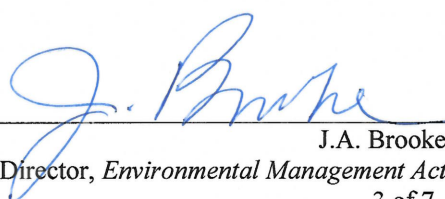
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Schedule B

Requirements and Conditions

1. Any changes in land, vapour or water uses must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination may be necessary. The uses to which this condition applies are described in Schedule C and in the site investigation documents listed in Schedule D.

The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet Contaminated Sites Regulation numerical standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of building foundation existing or expected at the site. These assumptions include the following:

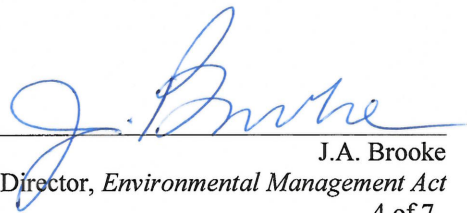
- (a) The building will have an underground parking no more than 27.7 meters below the grade that existed on October 27, 2017; and
- (b) Groundwater will not be in contact with the building foundation.

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at the site and the range of structures, locations and depths of buildings foundation assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination may be necessary.

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Schedule C

Substances and Uses

Substances evaluated in soil for commercial land soil use:

To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, tin, vanadium and zinc;
- Benzene, ethylbenzene, toluene, styrene and xylene;
- VPHs, LEPHs and HEPHs;
- Bromobenzene, bromodichloromethane (BDCM), bromoform (tribromomethane), bromomethane, 1,3-butadiene, 2-butanone, carbon tetrachloride, chloroethane (ethyl chloride), chloroethene (vinyl chloride), chloroform, chloromethane, dibromochloromethane (DBCM), 1,2-dibromoethane, dibromomethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1 and 1,2 dichloroethane, 1,1 and 1,2 dichloroethene, dichloromethane (methylene chloride), 1,2-dichloropropane, 1,3-dichloropropene (cis and trans), 4-methyl-2-pentanone, monochlorobenzene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene (PERC), 1,1,1 and 1,1,2 trichloroethane, trichloroethylene (TCE) and trichlorofluoromethane (Freon 11); and
- Benz[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene and pyrene.

Substances evaluated in vapour for commercial land vapour use:


To meet numerical standards prescribed for defining whether a site is contaminated:

- Benzene, bromobenzene, bromodichloromethane (BDCM), bromoform (tribromomethane), bromomethane, 1,3-butadiene, 2-butanone, carbon tetrachloride (tetrachloromethane), chloroethane (ethyl chloride), chloroethene (vinyl chloride), chloroform (trichloromethane), chloromethane (methyl chloride), 2-chlorotoluene, n-decane, dibromochloromethane (DBCM), 1,2-dibromo-3-chloropropane, 1,2-dibromoethane (ethylene dibromide), dibromomethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene (cis), 1,2-dichloroethene (trans), dichloromethane (methylene chloride), 1,2-dichloropropane, 1,3-dichloropropane, 1,3-dichloropropene (cis), 1,3-dichloropropene (trans), ethylbenzene, 1,3-hexachlorobutadiene, n-hexane, isopropyl benzene (cumene), methylcyclohexane, 4-methyl-2-pentanone, monochlorobenzene, naphthalene, 1,1,1,2-

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tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene (PERC), toluene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene (TCE), trichlorofluoromethane (Freon 11), 1,2,3-trichloropropane, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, VPHv and xylenes, mixture.

Substances evaluated in water for drinking water use:

To meet numerical standards prescribed for defining whether a site is contaminated:

- Aluminum, antimony, arsenic, barium, boron, cadmium, chromium, copper, lead, lithium, magnesium, mercury, molybdenum, selenium, sodium, strontium, tin, uranium and zinc;
- Benzene, ethylbenzene, toluene and xylenes (total);
- VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- Bromobenzene, bromodichloromethane, bromoform, bromomethane, 1,3-butadiene, 2-butanone, carbon tetrachloride, chloroethane, chloromethane, dibromochloromethane, 1,2-dibromoethane, dibromomethane, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, 1,2-dichloroethene(cis), 1,2-dichloroethene(trans), dichloromethane, 1,2-dichloropropane, 1,3-dichloropropene, 4-methyl-2-pentanone, monochlorobenzene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, trichlorofluoromethane and 1,1,2-trichloro-1,2,2-trifluoroethane, trichloromethane (chloroform) and vinyl chloride (chloroethene); and
- Benzo[a]pyrene.

Substances evaluated in water for marine aquatic life water use:

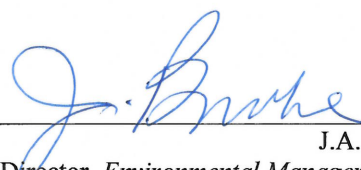
To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, titanium, uranium and zinc;
- Benzene, ethylbenzene and toluene;
- VPHw, LEPHw, VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- Carbon tetrachloride, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, dichloromethane, monochlorobenzene, tetrachloroethene, trichloroethene and trichloromethane (chloroform); and
- Acenaphthene, acridine, anthracene, benzo[a]anthracene, benzo[a]pyrene, chrysene, fluoranthene, fluorene, naphthalene, phenanthrene, pyrene and quinoline.

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Schedule D

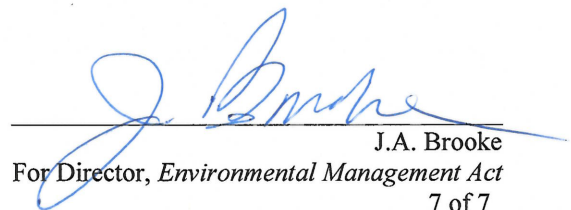
Documents

- *Summary of Site Condition, South Portion of 1229 Hornby Street, Vancouver, BC, Keystone Environmental Ltd., October 2017;*
- *Report of Findings – Preliminary Site Investigation – Stage 1 and Stage 2, South Portion of 1229 Hornby Street, Vancouver, BC, Keystone Environmental Ltd., October 2017;*
- *Groundwater and Vapour Analytical Results, 1252 Burrard Street, Vancouver, BC, Keystone Environmental Ltd., October 2017;*
- *Protocol 6 Approval Application for Relief from Investigation on a Portion of the Site (Tower C) Prior to Obtaining a Part Site Determination for Another Portion of Site (Tower A) – 1229 Hornby Street, Vancouver, BC, BC Ministry of Environment and Climate Change, October 2017;*
- *Phase 1 Environmental Site Assessment, 1252-1270 Burrard Street & 1229-1263 Hornby Street, Vancouver, BC, Keystone Environmental Ltd., January 2010; and*
- *Preliminary Site Investigation – Stage 1 and 2, 1290 Burrard Street and 1271-1281 Hornby Street, Vancouver, BC, Keystone Environmental Ltd., March 2006.*

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