BRITISH COLUMBIA Ministry of Environment

FINAL DETERMINATION

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

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

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

Sept. 22/14
Date Issued

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

Site Identification Number 16602
Version 8.0 R

Schedule A

The site covered by this Final Determination is located along the south side of 1788 West 2nd Avenue, Vancouver, British Columbia which is more particularly known and described by metes and bounds as:

Starting at the northeast corner of Lot 1 Block 228 District Lot 526 Group 1 New Westminster District Plan EPP20272
Thence 1° 32' 06" for 35.918 metres;
To the point of commencement.
Thence 181° 31' 50" for 0.610 metres;
Thence 271° 30' 54" for 15.242 metres;
Thence 1° 31' 50" for 0.610 metres;
Thence 91° 30' 54" for 15.242 metres;
Returning to the point of commencement.

PID: 028-857-224

The site contains part of a legal parcel depicted in an engineering drawing prepared by Keystone Environmental Ltd. on March 7, 2014.

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

Latitude:	49°	16'	9.7"
Longitude:	123°	8'	42.3"

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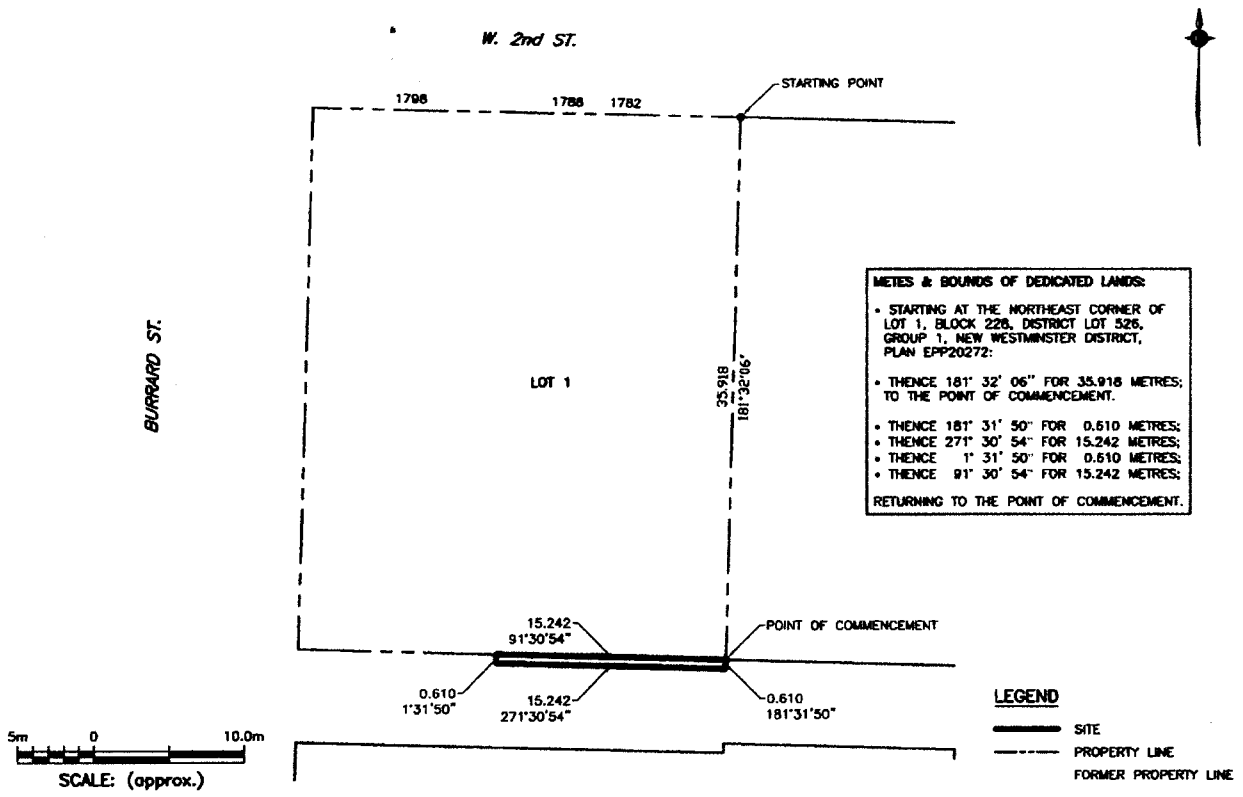
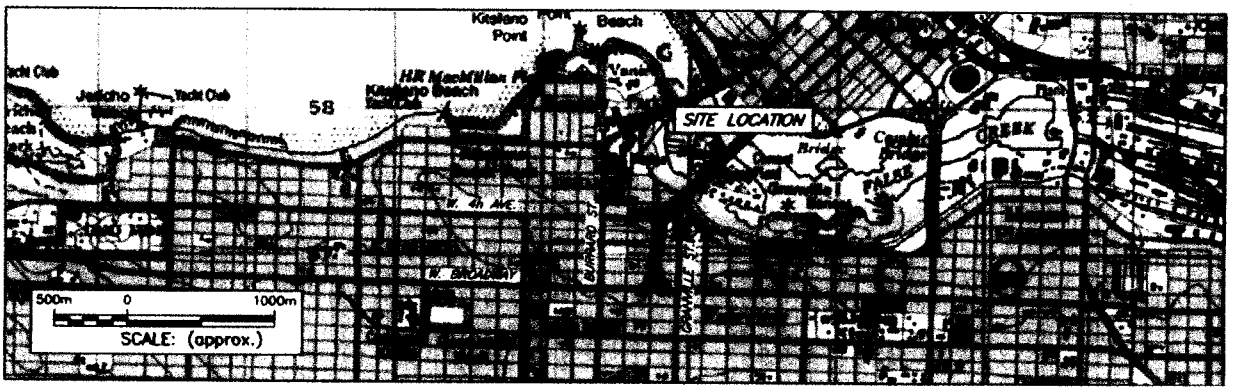
Site Plan



Location Map



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Schedule B

Requirements and Conditions

1. Any changes in land use must be promptly identified by the responsible person in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site may be necessary. The use to which this condition applies is 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 a Contaminated Sites Regulation numerical standard at and adjacent to the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings existing or expected at and adjacent to the site. These assumptions include the following:

   (a) The site will have either a slab on grade building or pavement at grade that will cover the entire site.
   (b) The building to the north of the Site will not have a foundation greater than 6.1 meters below ground surface.

   Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings at or adjacent to the site and the range of structures, locations and depths of buildings 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 of Contaminated Site may be necessary.

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Schedule C

Substances and Uses

Substances evaluated in soil for residential land soil use:

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

- Antimony, beryllium, cobalt, molybdenum, nickel, selenium, silver, vanadium, arsenic, barium, cadmium, chromium, copper, lead, mercury (inorganic) and zinc;
- VPHs, LEPHs and HEPHs;
- Chloroform, dichloroethane (1,1-, 1,2-), dichloroethene (1,1-, 1,2-), 1,2-dichloropropane, 1,3-dichloropropene (cis and trans), carbon tetrachloride, trichloroethane (1,1,1-, 1,1,2-), 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, tetrachloroethylene (PERC) and trichloroethylene (TCE);
- Styrene, benzene, ethylbenzene, toluene, xylene and methyl tert-butyl ether (MTBE);
- Benz[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno [1,2,3-c,d] pyrene, naphthalene, phenanthrene, pyrene and benzo[a]pyrene (B[A]P); and
- Bromodichloromethane (BDCM), bromoform (tribromomethane), bromomethane (methyl bromide), 2-butanone (methyl ethyl ketone), chloroethane (ethyl chloride), chloromethane (methyl chloride), dibromochloromethane (DBCM), 1,2-dibromoethane (ethylene dibromide) (EDB), dibromomethane (methylene bromide), dichlorodifluoromethane (Freon 12), 4-methyl-2-pentanone (methyl isobutyl ketone), 1,1,1,2-tetrachloroethane and vinyl chloride (chloroethene).

Substances evaluated in vapour for residential land vapour use:

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

- Benzene, bromodichloromethane (BDCM), bromoform (tribromomethane), bromomethane (methyl bromide), carbon tetrachloride (tetrachloromethane), chlorobenzene (monochlorobenzene), chloroethane (ethyl chloride), chloroform (trichloromethane), chloromethane (methyl chloride), DBCM (dibromochloromethane), 1,2-dibromoethane (ethylene dibromide) (EDB), dibromomethane (methylene bromide), 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane (Freon 12), 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene (1,1-dichloroethylene), 1,2-dichloroethene, cis (1,2-dichloroethylene, cis), 1,2-dichloroethylene, trans (1,2-dichloroethene, trans), dichloromethane (methylene chloride), 1,2-dichloropropane (propylene dichloride), 1,3-dichloropropene, ethylbenzene, naphthalene, styrene, TCE (trichloroethylene), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene

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(PCE) (PERC), toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichlorofluoromethane (Freon 11), vinyl chloride (chloroethene), 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, iron, lead, magnesium, manganese, mercury, molybdenum, selenium, sodium, strontium, uranium and zinc;
- Methyl tertiary butyl ether (MTBE), VH_{w6-10} and EPH_{w10-19};
- Vinyl chloride, 1,2-dichlorobenzene, 1,4-dichlorobenzene, monochlorobenzene, 1,2-dichloroethane, 1-1 dichloroethene, tetrachloroethylene and trichloroethylene;
- Bromodichloromethane (BDCM), dibromochloromethane (DBCM), dichloromethane, tetrachloromethane, tribromomethane and trichloromethane;
- Benzene, ethylbenzene, toluene and xylenes total;
- Benzo[a]pyrene; and
- Bromobenzene, bromomethane (methyl bromide), 1,3-butadiene, chloroethane (ethyl chloride), 1,2-dibromoethane (ethylene dibromide), dibromomethane (methylene bromide), (EDB), dichlorodifluoromethane (Freon 12), 1,1-dichloroethane, 1,2-dichloroethene (cis) (1,2-dichloroethylene (cis)), 1,2-dichloroethene (trans) (1,2-dichloroethylene (trans)), 1,2-dichloropropane (propylene dichloride), 1,3-dichloropropene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichlorofluoromethane (Freon 11), 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113).

Substances evaluated in water for marine water 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;
- Methyl tertiary butyl ether (MTBE), VPH_w, $LEPH_w$, VH_{w6-10} and EPH_{w10-19};
- 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, monochlorobenzene, 1,2-dichloroethane, tetrachloroethylene and trichloroethylene;
- Ethylene glycol and 1,2-propylene glycol;
- Dichloromethane, tetrachloromethane and trichloromethane;
- Benzene, ethylbenzene, styrene, and toluene; 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,* Lori C. Larsen, P.Ag., March 7, 2014;
- *Report of Findings – Addendum Letter Dedicated Lands Adjacent to 1788 West 2nd Avenue, Vancouver, BC,* Keystone Environmental Ltd., March 7, 2014;
- *Report of Findings – Preliminary Site Investigation Stage 1, Underground Storage Tank Removal and Supplemental Site Investigation Addendum - 1788 West 2nd Avenue, Vancouver, BC*, Keystone Environmental Ltd., May 2013;
- *Supplemental Site Investigation, 1820 Burrard Street and 1782 West 2nd Avenue, Vancouver, BC,* Keystone Environmental Ltd., August 2012;
- *Release Request Scenario 5 Development Permits Application, 1820 Burrard Street and 1782 West 2nd Avenue, Vancouver, BC*, Keystone Environmental Ltd., July 2012;
- *Phase I Environmental Site Assessment, 1820 Burrard Street & 1782 West 2nd Avenue Vancouver, BC,* Keystone Environmental Ltd., April 2010;
- *Preliminary Site Investigation, Stage 2, 1820 Burrard Street & 1782 West 2nd Avenue Vancouver, BC.,* Keystone Environmental Ltd., May 2000; and
- *Preliminary Site Investigation, Stage 1, 1820 Burrard Street & 1782 West 2nd Avenue Vancouver, BC*, Keystone Environmental Ltd., April 2000.

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