



Ministry of
Environment

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.

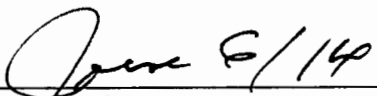
The site **does not** have concentrations of the substances specified in Schedule C that exceed the applicable standards and criteria prescribed in the Contaminated Sites Regulation for determining whether a site is a contaminated site.

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 35 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.



Date Issued



John E. H. Ward
For Director, *Environmental Management Act*

Schedule A

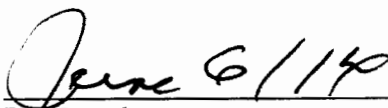
The site covered by this Preliminary Determination is located at 10335 176th Street, Surrey, British Columbia which is more particularly known and described as:

Parcel "B" (Explanatory Plan 3069) North East Quarter, Section 6, Township 9, New Westminster District, Except East 33 Feet, Explanatory Plan 9619

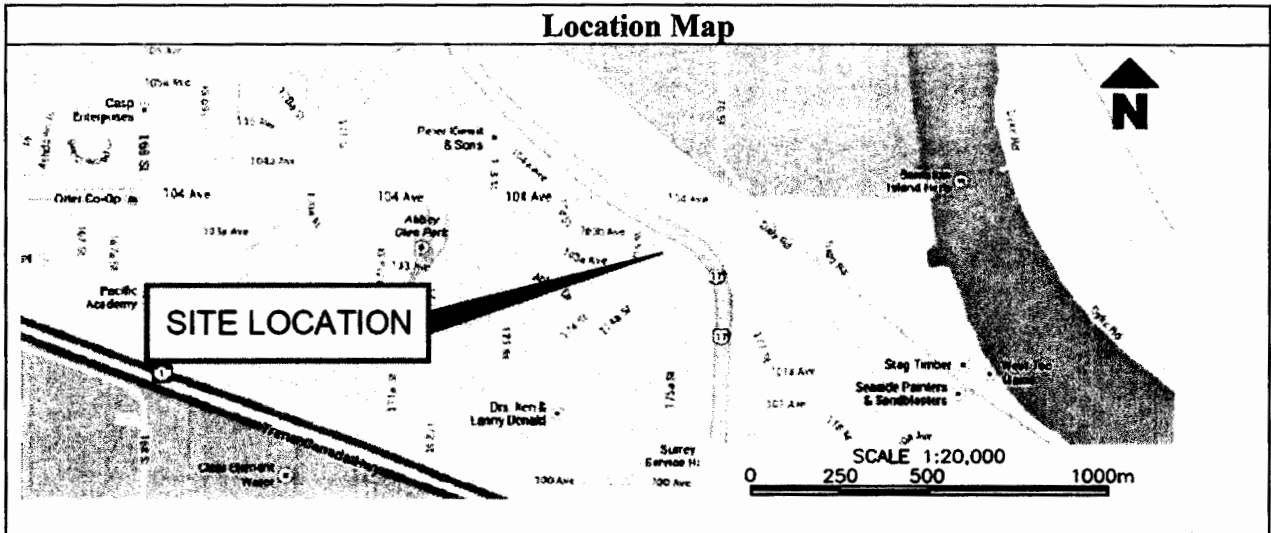
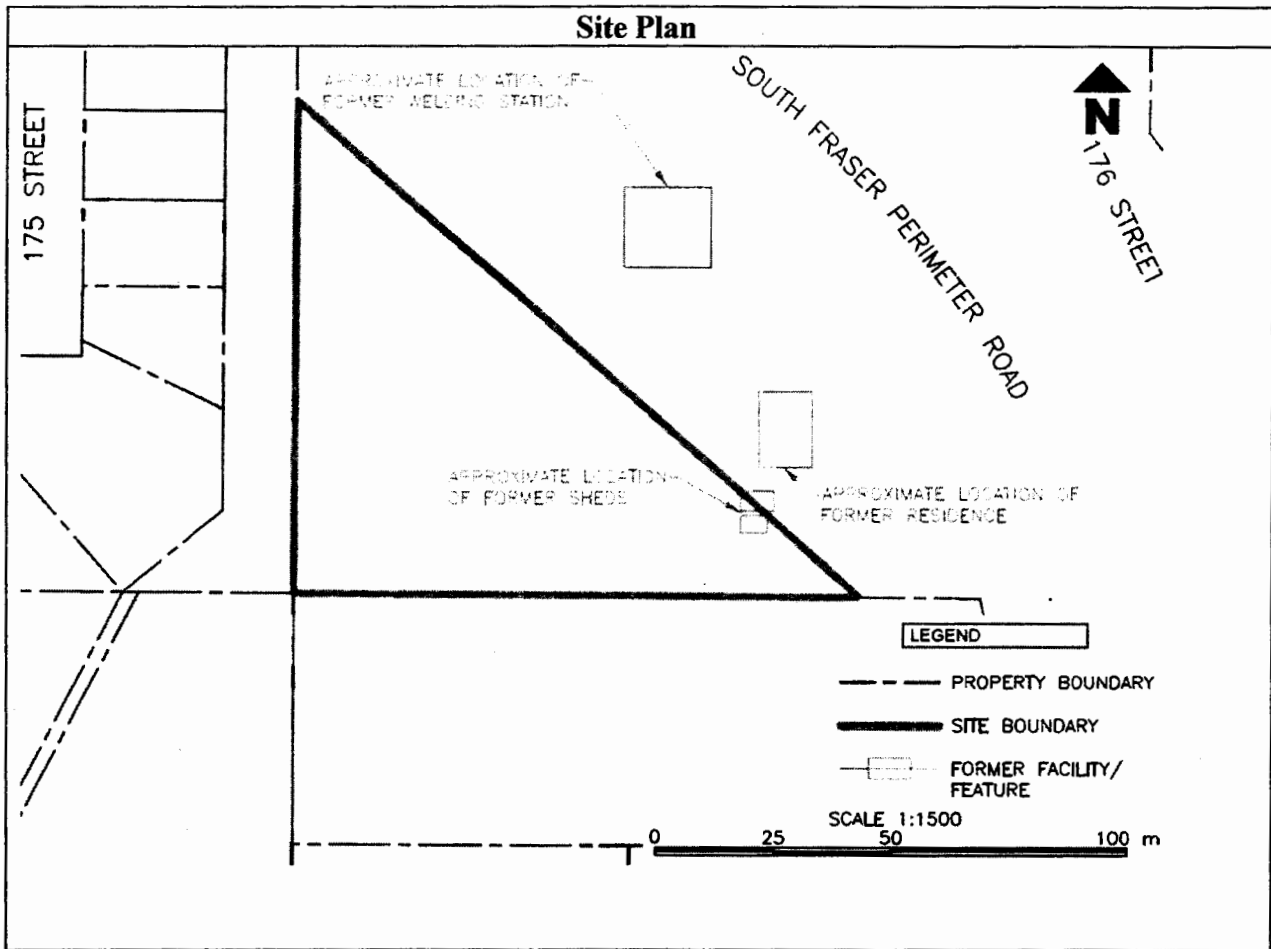
PID: 013-259-563

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

Latitude:	49°	11'	23.3"
Longitude:	122°	44'	9.7"


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Schedule B

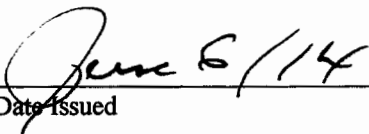
Requirements and Conditions

1. Any changes in land, vapour, or water uses must be promptly identified by the responsible persons in a written submission to the Director. An application for an amendment or new Determination of Contaminated Site 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.

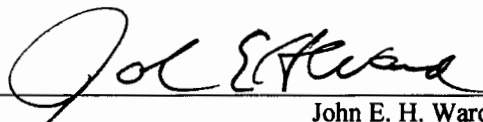
The documents listed in Schedule D indicate that vapour attenuation factors were applied to meet Contaminated Sites Regulation numerical standards at the site. These vapour attenuation factors were selected based on assumptions about the structures, locations and depths of buildings existing or expected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

- (a) A slab-on-grade residential building will be present at the site.

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 assumed in the selection of vapour attenuation factors in the documents listed in Schedule D must be promptly identified by the responsible persons 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 use soil use:

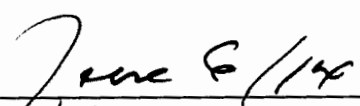
To meet numerical standards prescribed for defining whether a site is contaminated:

- Antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead mercury, molybdenum, nickel, selenium, silver, tin, uranium vanadium and zinc;
- VPHs, LEPHs and HEPHs;
- Chlorobenzenes, dichlorobenzenes, polycyclic aromatic hydrocarbons (pahs), benz[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene, dibenz[a,h]anthracene, indeno [1,2,3-cd] pyrene, naphthalene, phenanthrene, pyrene, benzene, benzo[a]pyrene, ethylbenzene, tetrachloroethylene, toluene, trichloroethylene and xylene; and
- Bromodichloromethane (BDCM), bromoform (tribromomethane), chloroethane (ethyl chloride), chloromethane (methyl chloride), dibromochloromethane (DBCM), 1,1-dichloroethane, 1,2-dichloroethylene (cis) (1,2-dichloroethene (cis)), 1,2-dichloroethylene (trans) (1,2-dichloroethene (trans)), 1,2-dichloropropane (propylene dichloride), 1,3-dichloropropane, methyl tert-butyl ether (MTBE), 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichlorofluoromethane (freon 11) and vinyl chloride (chloroethene).

Substances evaluated in vapour for residential land use vapour use:

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

- Acetone, BDCM (bromodichloromethane), benzene, bromobenzene, bromomethane (methyl bromide), 1,3-butadiene, 2-butanone (methyl ethyl ketone), carbon disulfide, carbon tetrachloride (tetrachloromethane), chlorobenzene (monochlorobenzene), chloroethene (vinyl chloride), cumene (isopropylbenzene), n-decane, 1,2-dibromoethane (ethylene dibromide) (EDB), 1,2-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-dichloroethene, trans (1,2-dichloroethylene, trans), dichloromethane (methylene chloride), 1,2-dichloropropane (propylene dichloride), ethyl acetate, ethylbenzene, n-hexane, methylcyclohexane, methyl isobutyl ketone (4-methyl-2-pentanone), methyl tert-butyl ether (MTBE), naphthalene, 1,1,2,2-tetrachloroethane, tetrachloroethylene (PCE) (PERC), toluene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-


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trichloroethane, trichloroethylene (TCE), 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113), 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, VPHv and xylenes, mixture.

Substances evaluated in water for drinking water use:

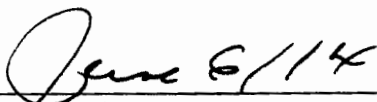
To meet numerical standards prescribed for defining whether a site is contaminated:

- Aluminum, antimony, arsenic, barium, boron, cadmium, chromium, copper, lead, lithium, magnesium, mercury, molybdenum, selenium, uranium and zinc;
- Methyl tertiary butyl ether (MTBE), VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- Vinyl Chloride, dichlorobenzene, 1,2, dichlorobenzene, 1,4, dichloroethane, 1,2, dichloroethylene, 1,1, tetrachloroethylene and trichloroethylene;
- Bromodichloromethane (BDCM), dibromochloromethane (DBCM), dichloromethane (methylene chloride), tetrachloromethane (carbon tetrachloride), tribromomethane (bromoform) and trichloromethane (chloroform);
- Benzene, ethylbenzene, toluene and xylenes (total);
- Benzo[a]pyrene; and
- Chloroethane (ethyl chloride), chloromethane (methyl chloride), 1,1-dichloroethane, 1,2-dichloroethylene (cis) (1,2-dichloroethene (cis)), 1,2-dichloroethylene (trans) (1,2-dichloroethene (trans)), 1,2-dichloropropane (propylene dichloride), 1,3-dichloropropane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane and trichlorofluoromethane (freon 11).

Substances evaluated in water for freshwater aquatic life water use:

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

- Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, titanium, uranium and zinc;
- Methyl tertiary butyl ether (MTBE), VPHw, LEPHw, VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- Dichlorobenzene, 1,2, dichlorobenzene, 1,3, dichlorobenzene, 1,4, dichloroethane, 1,2, tetrachloroethylene and trichloroethylene;
- Dichloromethane (methylene chloride), tetrachloromethane (carbon tetrachloride) and Trichloromethane (chloroform);
- Benzene, ethylbenzene 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*, SLR Consulting (Canada) Ltd., February 2014;
- *Stage 2 Preliminary Site Investigation*, SLR Consulting (Canada) Ltd., March 2014; and
- *Stage 1 Preliminary Site Investigation*, Hemmera, January 2013.


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