



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.

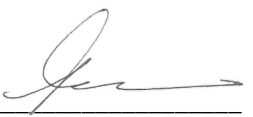
I have issued this Preliminary Determination based on a review of relevant information including the documents listed in Schedule D. I, however, make no representation or warranty as to the accuracy or completeness of that information.

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.

2016-07-08
Date Issued



Alan W. McCammon
For Director, *Environmental Management Act*

Schedule A

The site covered by this Preliminary Determination is located at 10380, 10388 and 10402 No. 2 Road, Richmond, British Columbia which is more particularly known and described as:

Lot 2 Section 31 Block 4 North Range 6 West New Westminster District Plan EPP49229
PID: 029-631-408 10380 No. 2 Road, Richmond


Lot 1 Section 31 Block 4 North Range 6 West New Westminster District Plan EPP49229
PID: 029-631-386 10388 No. 2 Road, Richmond

Lot 3 Section 31 Block 4 North Range 6 West New Westminster District Plan EPP49229
PID: 029-631-394 10402 No. 2 Road, Richmond

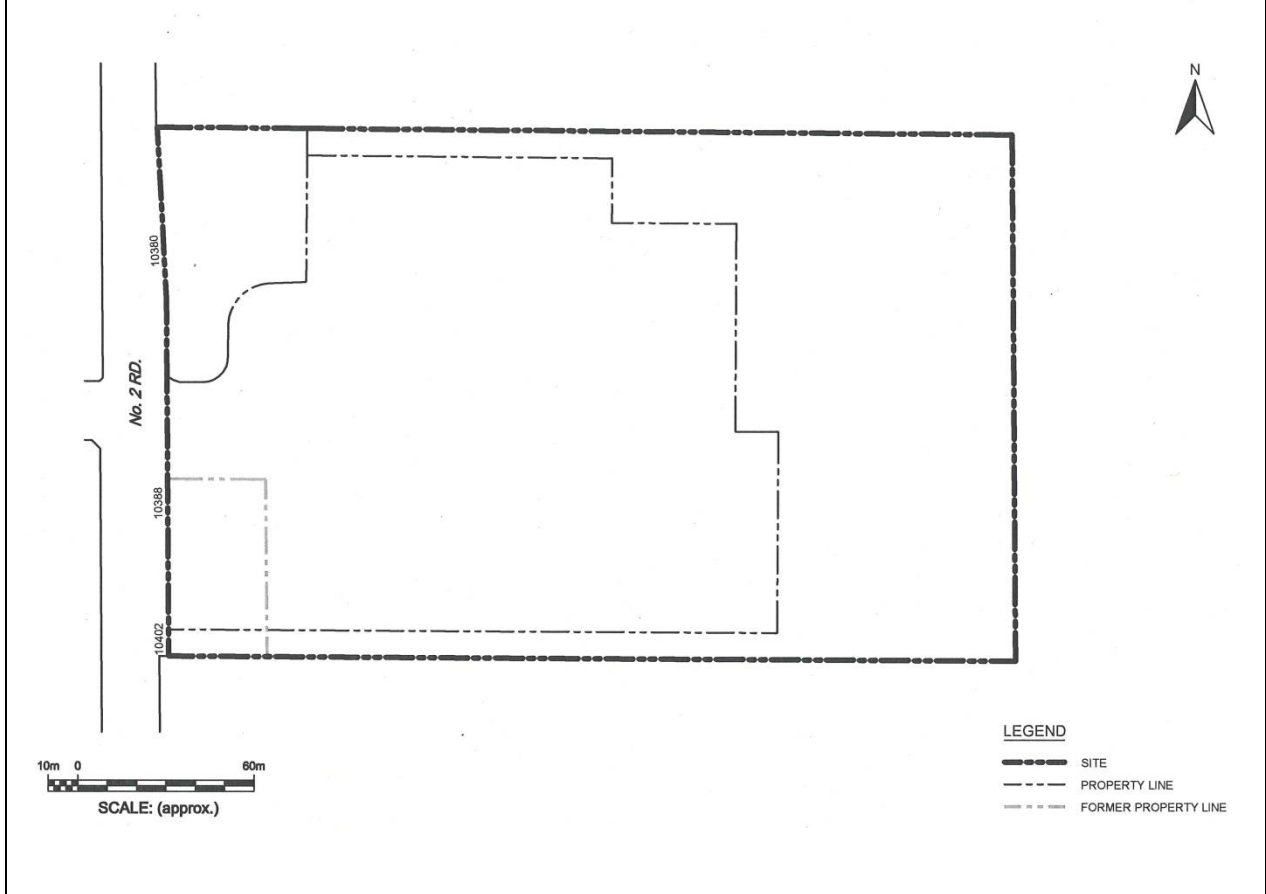
The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 8' 14.90"
Longitude: 123° 9' 26.60"

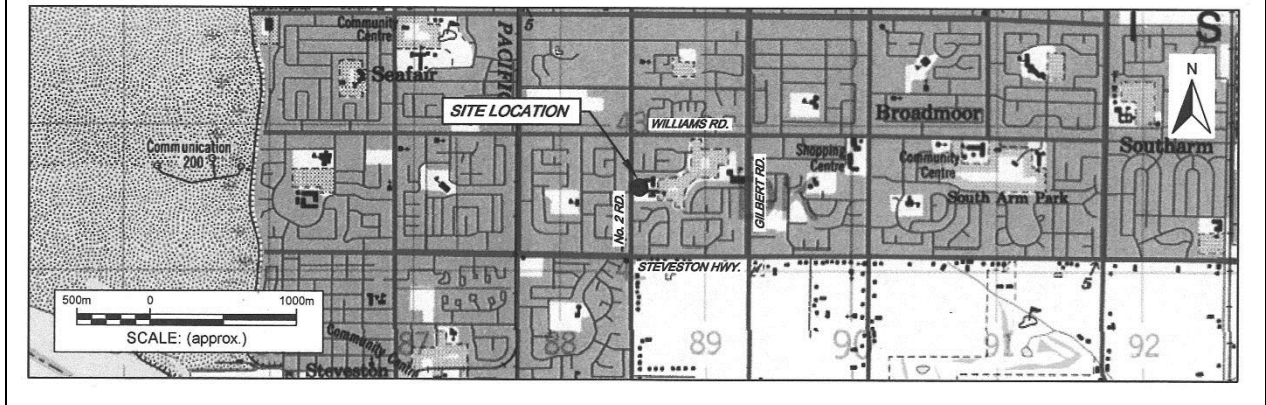
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Site Plan

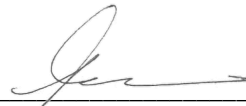


Location Map



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Site Identification Number 17374
Version 8.0 R


Alan W. McCammon
For Director, Environmental Management Act
3 of 7

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 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) Buildings constructed on the site will be slab-on-grade.

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 person in a written submission to the Director. An application for an amendment or new Determination may be necessary.

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Site Identification Number 17374
Version 8.0 R



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For Director, *Environmental Management Act*

4 of 7

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

Substances evaluated in vapour for residential 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

2016-07-08

Date Issued

Site Identification Number 17374

Version 8.0 R



Alan W. McCammon

For Director, *Environmental Management Act*

5 of 7

(trans), ethylbenzene, 1,3-hexachlorobutadiene, n-hexane, isopropyl benzene (cumene), methylcyclohexane, methyl tert-butyl ether (MTBE), 4-methyl-2-pentanone, monochlorobenzene, naphthalene, 1,1,1,2-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.

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;
- VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- 1,2-Dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, monochlorobenzene, tetrachloroethene, trichloroethene and vinyl chloride (chloroethene);
- Bromodichloromethane, bromoform, carbon tetrachloride, dibromochloromethane and dichloromethane;
- Benzene, ethylbenzene, toluene and xylenes (total);
- Benzo[a]pyrene; and
- Bromobenzene, bromomethane, 1,3-butadiene, 2-butanone, chloroethane, chloromethane, 1,2-dibromoethane, dibromomethane, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethene(cis), 1,2-dichloroethene(trans), 1,2-dichloropropane, 1,3-dichloropropene(cis), 1,3-dichloropropene(trans), 4-methyl-2-pentanone, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, , 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichlorofluoromethane and 1,1,2-trichloro-1,2,2-trifluoroethane.

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;
- VPHw, LEPHw, VHW₆₋₁₀ and EPHW₁₀₋₁₉;
- 1,2-Dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, monochlorobenzene, tetrachloroethene and trichloroethene;
- Carbon tetrachloride and dichloromethane;
- 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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6 of 7

Schedule D

Documents

Additional Information – Report of Findings – Preliminary Site Investigation – Stage 1 and Stage 2, 10380, 10388 and 10402 No. 2 Road, Richmond, BC, Michael Geraghty, P.Geo., Keystone Environmental Ltd., June 2016;

Summary of Site Condition, Michael Geraghty, P.Geo., Keystone Environmental Ltd., April 2016;

Report of Findings – Preliminary Site Investigation – Stage 1 and Stage 2, 10380, 10388 and 10402 No. 2 Road, Richmond, BC. Keystone Environmental Ltd., April 2016; and

Report of Findings – Stage 1 Preliminary Site Investigation, 10440 and 10460 No. 2 Road, Richmond, BC. Pacific Environmental Health and Safety, April 2013.

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7 of 7