



Victoria File: 26250-20/22693
Site ID: 22693

Date: August 19, 2019

Mr. Warren Mills wmills@richmond.ca
City of Richmond
6911 No 3 Road,
Richmond, BC, V6Y 2C1

Dear Mr. Warren Mills:

**Re: Preliminary Determination – Dedicated Lands West Adjacent to 8671
Hazelbridge Way, Richmond, British Columbia**

Please find enclosed a Preliminary Determination respecting the site referenced above and be advised of the following:

1. The Director has made a Preliminary Determination that the site is not contaminated because the numerical standards and criteria of the Contaminated Sites Regulation have been met at the site.
2. Information about the site will be included in the Site Registry established under the *Environmental Management Act*.
3. The provisions of this Preliminary Determination are without prejudice to the right of the Director to make orders or impose requirements as the Director may deem necessary in accordance with applicable laws. Nothing in this Preliminary Determination will restrict or impair the Director's power in this regard.
4. A qualified environmental consultant should be available to identify, characterize and appropriately manage:
 - (a) any environmental media that may be contaminated, or
 - (b) soil which may exceed the standards triggering a Contaminated Soil Relocation Agreement set out in section 40 of the Contaminated Sites Regulationand may be encountered during any future subsurface work at the site.

5. Groundwater at the site meets the applicable Contaminated Sites Regulation “no water use” standards for VHW₆₋₁₀ and/or EPHW₁₀₋₁₉. Please note that future site development (dewatering, perimeter drainage systems, sumps, etc. associated with future buildings, etc.) may create preferential pathways for groundwater. In this event, further assessment and remediation of groundwater may be warranted.
6. Groundwater wells that are no longer required must be properly decommissioned in accordance with the *Water Sustainability Act's* Groundwater Protection Regulation.
7. Please note that future site development may create preferential pathways for vapour. In this event, further assessment and remediation of vapour may be warranted.

This is to advise that the Director will consider submissions received within 35 days after delivery of this Preliminary Determination before a Final Determination is made.

If you require clarification of any aspect of this Preliminary Determination, please contact the undersigned at 778-698-4885 (toll free via Enquiry BC at 1-800-663-7867).

Yours truly,



J.A. Brooke
Senior Contaminated Sites Officer

Enclosure

cc: Jason Ha, Concord Galleria (Nominee) Ltd. Jason.ha@concordpacific.com
900-1095 W. Pender Street, Vancouver, BC, V6E 2M6

BC Hydro and Power Authority,
333 Dunsmuir St. Vancouver, B.C., V6B 5R3

Telus,
510 W. Georgia Street, Vancouver, BC, V6B 0M3

Vancouver Airport Authority,
PO Box 44638, YVR Domestic Terminal RPO, Richmond, BC, V7B 1W2

Richard Nailen, HSBC Bank Canada, Commercial Real Estate,
Suite 600, 885 W. Georgia Street, Vancouver, BC, V6C 3G1

James Smith, Approved Professional, Envision Environmental Ltd.,
jsmith@envisionenvironmental.ca
5266 Bursill Street, Vancouver, BC, V5R3Z5

Anna Popova, CSAP Society apopova@csapsociety.ca

Nick Dayal, Geostratus Consulting Inc., nick@geostratus.ca
PO Box 77024 Kingsway Knight PO, V5V 5E7



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.

August 19, 2019

Date Issued

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

Schedule A

The site covered by this Preliminary Determination is dedicated lands located west adjacent to and subdivided from 8671 Hazelbridge Way, Richmond, British Columbia, which are more particularly known and described by the following:

Metes and Bounds:

ALL THAT PART of land situated in Richmond, B.C. as shown within the heavy outline on a Survey Plan prepared by Butler Sundvick, Drawing 4048-Legal Description 1 dated September 25th, 2018, which said part may be more particularly described as follow

Commencing at the most southerly corner of Lot 3 Section 28 Block 5 North Range 6 West New Westminster District Plan EPP80548,

Thence $347^{\circ}45'03''$ for a distance of 1.438 metres, more or less,

Thence $32^{\circ}44'05''$ for a distance of 22.962 metres, more or less,

Thence $90^{\circ}26'04''$ for a distance of 2.984 metres, more or less, said distance being an easterly production of the westerly boundary of said Lot 3, to the point of intersection with the easterly boundary of said Lot 3,

Thence along the curve to the left having a 3997.084 metre radius and a radial bearing of $126^{\circ}18'02''$ to the centre of said curve and a radial bearing of $306^{\circ}06'32''$ to the end of said curve having an arc distance of 13.378 metres, more or less,

Thence along the curve to the left having a 2997.250 metre and a radial bearing of $126^{\circ}06'32''$ to the centre of said curve and a radial bearing of $305^{\circ}52'30''$ to the end of said curve having an arc distance of 12.241 metres, to the point of commencement, said part in heavy outline containing 42.3 square metres, more or less.

The site contains part of a legal parcel depicted in Drawing 4048-Legal Description 1 prepared by Butler Sundvick, B.C. Land Surveyor, dated September 25th, 2018.

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

Latitude: $49^{\circ} 11' 20.19''$
Longitude: $123^{\circ} 07' 55.36''$



August 19, 2019

Date Issued

Site Identification Number 22693

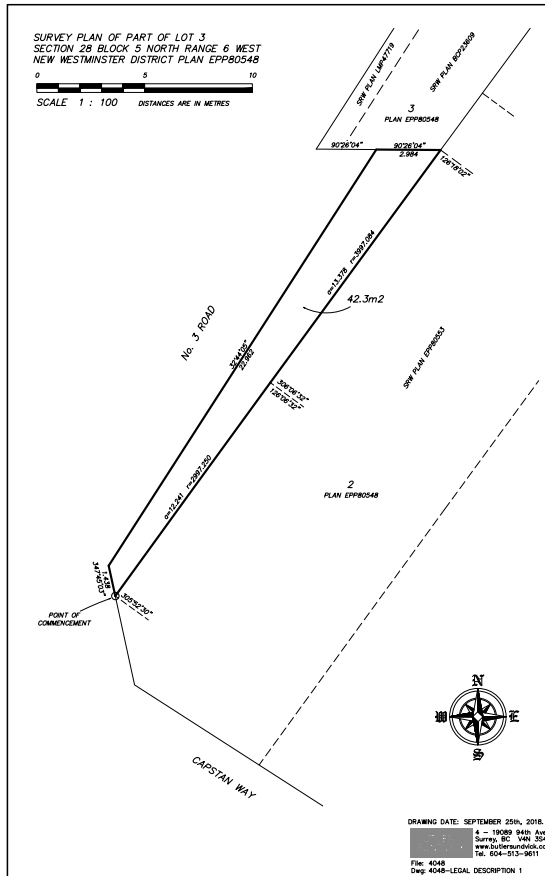
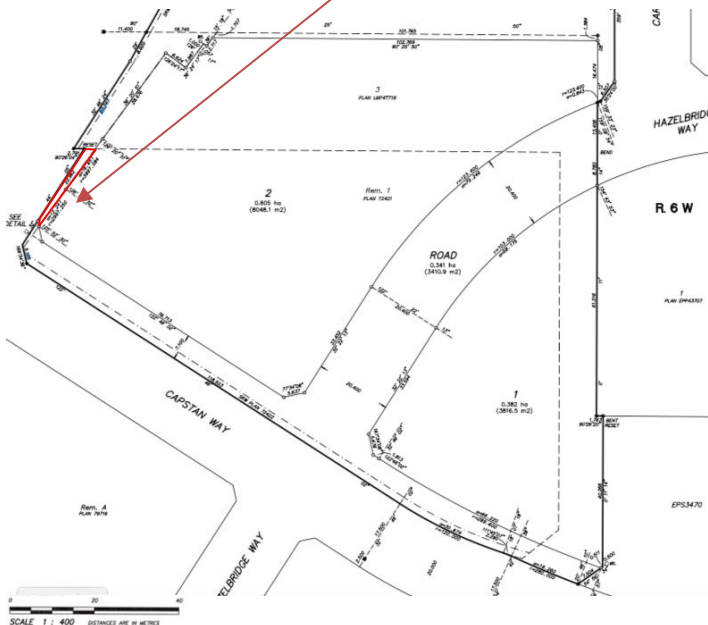
Version 9.0 R

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

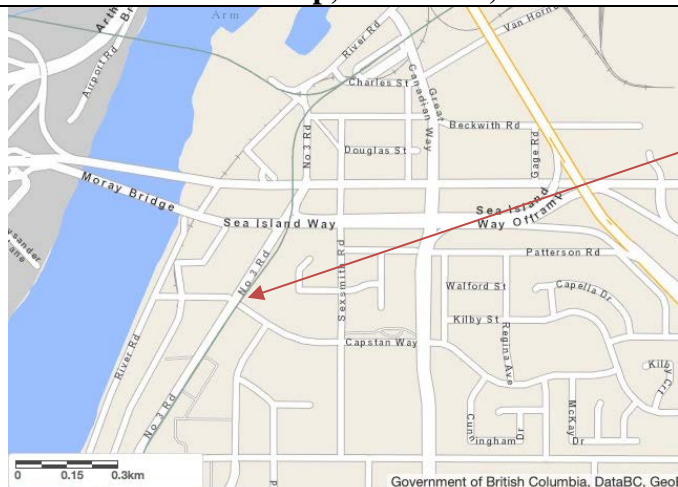
2 of 9

Site Plan, Richmond, BC

SITE: Dedicated land west adjacent to and subdivided from 8671 Hazelbridge Way, Richmond, BC



Location Map, Richmond, BC



SITE

August 19, 2019
Date Issued

Site Identification Number 22693
Version 9.0 R

J.A. Brooke
For Director, Environmental Management Act
3 of 9

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 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) Any building or structure constructed onsite will have a concrete floor slab and the base of the underside of the floor slab will not be in contact with groundwater.

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 of Contaminated Site may be necessary.

August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R



J.A. Brooke

For Director, *Environmental Management Act*

4 of 9

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:

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
acenaphthene	83-32-9	ethylbenzene	100-41-4
anthracene	120-12-7	ethylene glycol	107-21-1
antimony	7440-36-0	fluoranthene	206-44-0
arsenic	7440-38-2	fluorene	86-73-7
barium	7440-39-3	HEPHs	NA
benzene	71-43-2	indeno(1,2,3-cd)pyrene	193-39-5
benzo(a)anthracene	56-55-3	lead	7439-92-1
benzo(a)pyrene	50-32-8	LEPHs	NA
benzo(b+j)fluoranthenes	205-99-2 & 205-82-3	methyl tert-butyl ether [MTBE]	1634-04-4
benzo(k)fluoranthene	207-08-9	methylnaphthalene, 1-	90-12-0
carbon tetrachloride	56-23-5	methylnaphthalene, 2-	91-57-6
chlorobenzene	108-90-7	naphthalene	91-20-3
chloroform	67-66-3	nickel	7440-02-0
chromium	7440-47-3	phenanthrene	85-01-8
chrysene	218-01-9	pyrene	129-00-0
cobalt	7440-48-4	quinoline	91-22-5
copper	7440-50-8	styrene	100-42-5
dibenz(a,h)anthracene	53-70-3	tetrachloroethane, 1,1,2,2-	79-34-5
dichlorobenzene, 1,2-	95-50-1	tetrachloroethylene	127-18-4
dichlorobenzene, 1,3-	541-73-1	tin	7440-31-5
dichlorobenzene, 1,4-	106-46-7	toluene	108-88-3
dichlorodifluoromethane	75-71-8	trichloroethane, 1,1,1-	71-55-6
dichloroethane, 1,1-	75-34-3	trichloroethane, 1,1,2-	79-00-5
dichloroethane, 1,2-	107-06-2	trichloroethylene	79-01-06
dichloroethylene, 1,2-cis-	156-59-2	trichlorofluoromethane	75-69-4
dichloroethylene, 1,2-trans-	156-60-5	triethylene glycol	112-27-6



August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R

J.A. Brooke

For Director, *Environmental Management Act*

5 of 9

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
dichloroethylene, 1,1-	75-35-4	vinyl chloride	75-01-4
dichloromethane	75-09-02	VPHs	NA
dichloropropane, 1,2-	78-87-5	xylenes, total	1330-20-7
dichloropropene, 1,3- (cis+trans)	542-75-6	zinc	7440-66-6

Substances evaluated in vapour for commercial vapour use:

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

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
acetone	67-64-1	hexane, n-	110-54-3
benzene	71-43-2	isopropylbenzene	98-82-8
butadiene, 1,3-	106-99-0	methyl tert-butyl ether [MTBE]	1634-04-4
carbon tetrachloride	56-23-5	methylcyclohexane	108-87-2
chloroform	67-66-3	naphthalene	91-20-3
decane, n-	124-18-5	tetrachloroethylene	127-18-4
dibromoethane, 1,2-	106-93-4	toluene	108-88-3
dichloroethane, 1,1-	75-34-3	trichloroethylene	79-01-06
dichloroethane, 1,2-	107-06-2	trimethylbenzene, 1,2,4 -	95-63-6
dichloroethylene, 1,2-cis	156-59-2	trimethylbenzene, 1,3,5-	108-67-8
dichloroethylene, 1,2-trans	156-60-5	vinyl chloride	75-01-4
dichloroethylene, 1,1-	75-35-4	VPHv	NA
dichloromethane	75-09-02	xylenes, total	1330-20-7
ethylbenzene	100-41-4		



August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R

J.A. Brooke

For Director, *Environmental Management Act*

6 of 9

Substances evaluated in water for drinking water use:

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

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
acenaphthene	83-32-9	dichloropropane, 1,2-	78-87-5
acetone	67-64-1	dichloropropene, 1,3- (cis + trans)	542-75-6
anthracene	120-12-7	ethylbenzene	100-41-4
antimony	7440-36-0	ethylene glycol	107-21-1
arsenic	7440-38-2	EPHw10-19	NA
barium	7440-39-3	fluoranthene	206-44-0
benzene	71-43-2	fluorene	86-73-7
benzo(a)anthracene	56-55-3	lead	7439-92-1
benzo(a)pyrene	50-32-8	methyl ethyl ketone [MEK]	78-93-3
benzo(b+j)fluoranthenes	205-99-2 & 205-82-3	methyl tert-butyl ether [MTBE]	1634-04-4
bromodichloromethane	75-27-4	methylnaphthalene, 1-	90-12-0
bromoform	75-25-2	methylnaphthalene, 2-	91-57-6
bromomethane	74-83-9	naphthalene	91-20-3
carbon tetrachloride	56-23-5	nickel	7440-02-0
chlorobenzene	108-90-7	propylene glycol, 1,2-	57-55-6
chloroform	67-66-3	pyrene	129-00-0
chromium	7440-47-3	quinoline	91-22-5
chrysene	218-01-9	styrene	100-42-5
cobalt	7440-48-4	tetrachloroethane, 1,1,1,2-	630-20-6
copper	7440-50-8	tetrachloroethane, 1,1,2,2-	79-34-5
dibenz(a,h)anthracene	53-70-3	tetrachloroethylene	127-18-4
dibromochloromethane [DBCM]	124-48-1	tin	7440-31-5
dibromoethane, 1,2-	106-93-4	toluene	108-88-3
dichlorobenzene, 1,2-	95-50-1	trichloroethane, 1,1,1-	71-55-6
dichlorobenzene, 1,4-	106-46-7	trichloroethane, 1,1,2-	79-00-5
dichlorodifluoromethane	75-71-8	trichloroethylene	79-01-6
dichloroethane, 1,1-	75-34-3	trichlorofluoromethane	75-69-4
dichloroethane, 1,2-	107-06-2	triethylene glycol	112-27-6
dichloroethylene, 1,2-cis-	156-59-2	VHw6-10	NA



August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R

J.A. Brooke

For Director, *Environmental Management Act*

7 of 9

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
dichloroethylene, 1,2-trans-	156-60-5	vinyl chloride	75-01-4
dichloroethylene, 1,1-	75-35-4	xylenes, total	1330-20-7
dichloromethane	75-09-02	zinc	7440-66-6

Substances evaluated in water for aquatic life marine/estuarine water use:

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

PCOC Analyzed	CAS Number	PCOC Analyzed	CAS Number
acenaphthene	83-32-9	ethylbenzene	100-41-4
acridine	260-94-6	ethylene glycol	107-21-1
anthracene	120-12-7	EPHw10-19	NA
antimony	7440-36-0	fluoranthene	206-44-0
arsenic	7440-38-2	fluorene	86-73-7
barium	7440-39-3	lead	7439-92-1
benzene	71-43-2	LEPHw	NA
benzo(a)anthracene	56-55-3	methyl tert-butyl ether [MTBE]	1634-04-4
benzo(a)pyrene	50-32-8	naphthalene	91-20-3
carbon tetrachloride	56-23-5	phenanthrene	85-01-08
chlorobenzene	108-90-7	propylene glycol, 1,2-	57-55-6
chloroform	67-66-3	pyrene	129-00-0
chromium	7440-47-3	quinoline	91-22-5
chrysene	218-01-9	styrene	100-42-5
cobalt	7440-48-4	tetrachloroethylene	127-18-4
copper	7440-50-8	toluene	108-88-3
dichlorobenzene, 1,2-	95-50-1	trichloroethylene	79-01-6
dichlorobenzene, 1,3-	541-73-1	VHw6-10	NA
dichlorobenzene, 1,4-	106-46-7	VPHw	NA
dichloroethane, 1,2-	107-06-2	xylenes, total	1330-20-7
dichloromethane	75-09-02	zinc	7440-66-6



August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R

J.A. Brooke

For Director, Environmental Management Act

8 of 9

Schedule D

Documents

- *Detailed Site Investigation, 8555 Capstan Way, 8671 Hazelbridge Way & Dedicated Lands, Richmond, BC*, Sara Bathgate & Nick Dayal, Geostratus Consulting Inc., June 2019;
- *Summary of Site Condition, 8555 Capstan Way, Richmond, BC*, James Smith, Envision Environmental Consulting Ltd., June 2019;
- *Confirmation of Remediation Report, 8671 Hazelbridge Way, Richmond, BC*, Sara Bathgate & Nick Dayal, Geostratus Consulting Inc. March 2019;
- *Stage 1 Preliminary Site Investigation Update, 8555 Capstan Way, 8671 Hazelbridge Way & Dedications, Richmond, BC*, Sara Bathgate & Nick Dayal, Geostratus Consulting Inc., March 2019;
- *Scenario 5 Release - Release Request: Zoning, Subdivision, Demolition and Development Applications, 8511 Capstan Way, Richmond, BC*, Ministry of Environment & Climate Change Strategy, October 31, 2017;
- *Release Request: Rezoning, Subdivision, Demolition and Development Permit Application, 8511 Capstan Way, Richmond, BC*, NEXT Environmental Inc., October 16, 2017;
- *Site Remediation Plan, 8511 Capstan Way, Richmond, BC*, Michael Muttersbach, NEXT Environmental Inc., October 12, 2017;
- *Stage 1 Preliminary Site Investigation, 8511 Capstan Way, Richmond, BC*, Ardavan Mansourpour & Michael Muttersbach, NEXT Environmental Inc., April 17, 2017;
- *Decommissioning of Fuel Dispensing Equipment, 8551 Capstan Way, Richmond, BC*, Michelle Stockwell & Duncan MacDonald, Pottinger Gaherty Environmental Consultants Ltd., January 14, 2008;
- *Environmental Stage 2 Preliminary Site Investigation, 8511, 8531 and 8551 Capstan Way, Richmond, BC*, Catherine Galbrand & Phil Lowery, NEXT Environmental Inc., July 2005; and
- *Environmental Stage 1 Preliminary Site Investigation, 8511, 8531 and 8551 Capstan Way, Richmond, BC*, Catherine Galbrand & Phil Lowery, NEXT Environmental Inc., June 3, 2005.

August 19, 2019

Date Issued

Site Identification Number 22693

Version 9.0 R



J.A. Brooke

For Director, *Environmental Management Act*

9 of 9