



**VIA EMAIL: [jpaquin@orionconstruction.ca](mailto:jpaquin@orionconstruction.ca)**

Victoria File: 26250-20/25366  
Victoria File: 26250-20/14593  
Victoria File: 26250-20/12170  
Victoria File: 26250-20/27029  
Site ID: 25366/14593/12170/27029

March 20, 2024

Jeremy Paquin  
Orion Construction  
105 – 19923 80A Avenue  
Langley, BC V2Y 0E2

Dear Jeremy Paquin:

**Re: Approval in Principle – 9800 Van Horne Way, 9900 Block of River Drive  
Roadway & Portion of 9980 River Drive, Richmond, B.C.**

Please find enclosed an Approval in Principle respecting the contaminated site referenced above.

In addition to the conditions set out in Schedule B of the Approval in Principle, please be advised of the following:

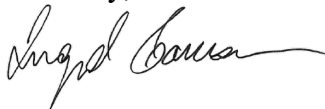
1. Information about the site will be included in the Site Registry established under the *Environmental Management Act*.
2. The provisions of this Approval in Principle are without prejudice to the right of the Director to make orders or impose requirements as the Director may deem necessary in accordance with applicable laws. Nothing in this Approval in Principle will restrict or impair the Director's powers in this regard.
3. A qualified environmental consultant should be available to identify, characterize and appropriately manage:
  - (a) any environmental media that may be contaminated, or
  - (b) removal of soil under the provisions of Part 8 of the Contaminated Sites Regulation and may be encountered during any future work at the site.

4. This Approval in Principle does not authorize entry upon, crossing over, or use for any purpose of private or Crown lands or works, unless and except as authorized by the owner of such lands or works. The responsibility for obtaining such authority rests with the persons undertaking remediation. It is also the responsibility of those persons to ensure that all activities conducted under this Approval in Principle are carried out with due regard to the rights of third parties, and comply with other applicable legislation that may be in force.
5. Additional permits and approvals may be required before remediation begins.
6. All site materials (e.g., excavated soil, replaced soil, groundwater from dewatering, pumping, well development etc.) must be characterized and managed in accordance with applicable legislation and ministry guidance.
7. Groundwater wells that are no longer required must be properly decommissioned in accordance with the *Water Sustainability Act's* Groundwater Protection Regulation.
8. Please be advised that there are inherent health and safety risks associated with remediation activities at contaminated sites. Development of site-specific work procedures in accordance with WorkSafeBC regulations is warranted. Please direct related questions to the WorkSafeBC office at 604-276-3100 (Lower Mainland only) or 1-888-621-7233 (toll free in B.C.).
9. Any substantial modifications to the approved remediation plan, including substantial changes to the remediation schedule, or changes in land use, must be promptly identified by written submission to the Director.
10. If an application for a Certificate of Compliance is to be submitted for the site, the confirmation of remediation report accompanying the application must demonstrate compliance with the remediation standards and criteria in force at the time the application for the Certificate is made, which may differ from the remediation standards and criteria in force at the time of issuance of this Approval in Principle.

Issuance of this Approval in Principle is a decision that may be appealed under Part 8 of the *Environmental Management Act*.

If you require clarification of any aspect of this Approval in Principle, please contact the undersigned at [site@gov.bc.ca](mailto:site@gov.bc.ca).

Yours truly,



Ingrid Sorensen, M.A.Sc., R.P.Bio  
Senior Risk Assessment Officer

Enclosure

cc: Mathew Discusso, City of Richmond  
(VIA EMAIL) [EnvSustainability@richmond.ca](mailto:EnvSustainability@richmond.ca)

Cavin Green, 1321791 B.C. Ltd., 9800 Vanhorne Way  
(VIA EMAIL) [cavin.green@cedarcoast.com](mailto:cavin.green@cedarcoast.com)

Cambell Vani, British Columbia Hydro and Power Authority, Registered Owner,  
9980 River Drive  
(VIA EMAIL) [vani.campbell@bchydro.com](mailto:vani.campbell@bchydro.com)

Kristy Todd Millar, HSBC Bank Canada, Mortgage over 9800 Vanhorne Way  
(VIA EMAIL) [kristy\\_todd\\_millar@hsbc.ca](mailto:kristy_todd_millar@hsbc.ca)

Jeff Taylor, Approved Professional, Active Earth Engineering Ltd.  
(VIA EMAIL) [jeff.taylor@activeearth.ca](mailto:jeff.taylor@activeearth.ca)

Reider Zapf-Gilje, Approved Professional, GeoEnviroLogic Consulting  
(VIA EMAIL) [reidar.geoenvirologic@gmail.com](mailto:reidar.geoenvirologic@gmail.com)

Anna Popova, CSAP Society  
(VIA EMAIL) [apopova@csapsociety.bc.ca](mailto:apopova@csapsociety.bc.ca)

Client Information Officer, ENV, Victoria  
(VIA EMAIL) [csp\\_cio@Victoria1.gov.bc.ca](mailto:csp_cio@Victoria1.gov.bc.ca)



**APPROVAL IN PRINCIPLE**  
(Pursuant to Section 53 of the *Environmental Management Act*)

**THIS IS TO CERTIFY** that the remediation plan described herein submitted by Orion Construction for the contaminated site identified in Schedule A of this document has been approved.

When implemented, the remediation plan must be implemented in accordance with the requirements and conditions specified in Schedule B.

The substances for which remediation will be conducted and for which this Approval in Principle is valid are specified in Schedule C.

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

A Director may rescind this Approval in Principle if conditions imposed in the Approval in Principle are not complied with or any fees payable under Part 4 of the Act or regulations are outstanding.

This Approval in Principle should not be construed as an assurance that there are no hazards present at the site.

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Ingrid Sorensen  
For Director, *Environmental Management Act*

## Schedule A

The site covered by this Approval in Principle is located at 9800 Van Horne Way, 9900 Block of River Drive Roadway and Portion of 9980 River Drive, Richmond, British Columbia which is more particularly known and described as:

9800 Van Horne Way, Richmond, BC

Lot A Except Part On Statutory Right Of Way Plan BCP22019, Section 22 Block 5 North Range 6 West New Westminster District Plan LMP1595  
PID: 017-483-115

Portion of 9980 River Drive, Richmond, BC

All of that part of land, being a portion of Plan NWP83373, situated in Richmond, B.C as shown shaded within the heavy dashed outline on a Plan prepared by Active Earth Engineering Ltd., Figure A FILE 2428 O23 (BC Hydro Off-Site Management Area), dated October 17, 2023, which part may be more particularly described as follows;

Commencing Northerly at a bearing of 0°21'45" at a distance of 110.319m from the Southwesterly corner of Lot 1 Plan NWP83373

Thence Easterly at a bearing of 90°0'0" a distance of 88.000m

Thence Northerly at a bearing of 0°0'0" a distance of 90.000m

Thence Westerly at a bearing of 270°0'0" a distance of 81.399m towards the Westerly boundary Lot 1 Plan NWP83373

Thence Southerly at a bearing of 187°43'57" a distance of 47.018m

Thence Southerly at a bearing of 180°21'45" a distance of 43.410m more or less to the point of commencement, said part containing 7,753.9 square meters more or less.

9900 Block of River Drive Roadway, Richmond, BC

All of that part of land, being a portion of River Drive, situated in Richmond, B.C as shown shaded within the heavy dashed outline on a Plan prepared by Active Earth Engineering Ltd., Figure B FILE 2428 N23 (City of Richmond Off-Site Management Area North of 9800 Van Horne Way), dated November 3, 2023, which part may be more particularly described as follows;

Commencing Easterly at a bearing of 75°31'10" at a distance of 18.500m from the Northeasterly of the Northwestern corners of Lot A Plan LMP1595

Thence North at a bearing of 0°0'0" a distance of 5.000m

Thence Easterly at a bearing of 75°31'10" a distance of 18.000m

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Thence South at a bearing of 180°0'0" a distance of 5.000m towards the Northerly boundary Lot A Plan LMP1595

Thence Westerly at a bearing of 255°31'10" a distance of 18.000m more or less to the point of commencement, said part containing 87.1 square meters more or less.

The site contains part of a legal parcel depicted in an engineering drawing prepared by Active Earth Engineering Ltd. on October 17, 2023 (the "BC Hydro OMA") and part of a City of Richmond roadway depicted in an engineering drawing prepared by Active Earth Engineering Ltd. on and November 3, 2023 (the "City of Richmond OMA").

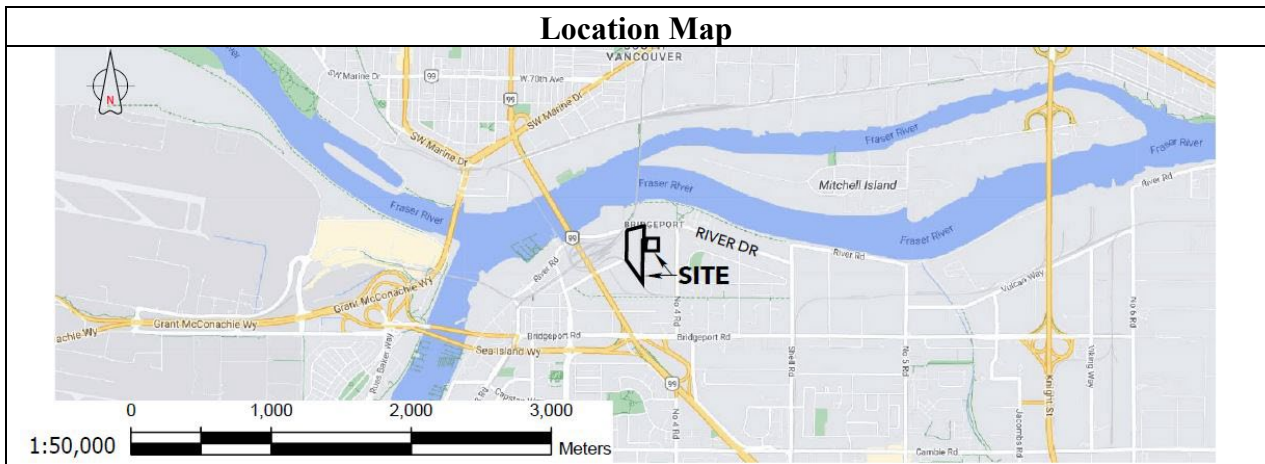
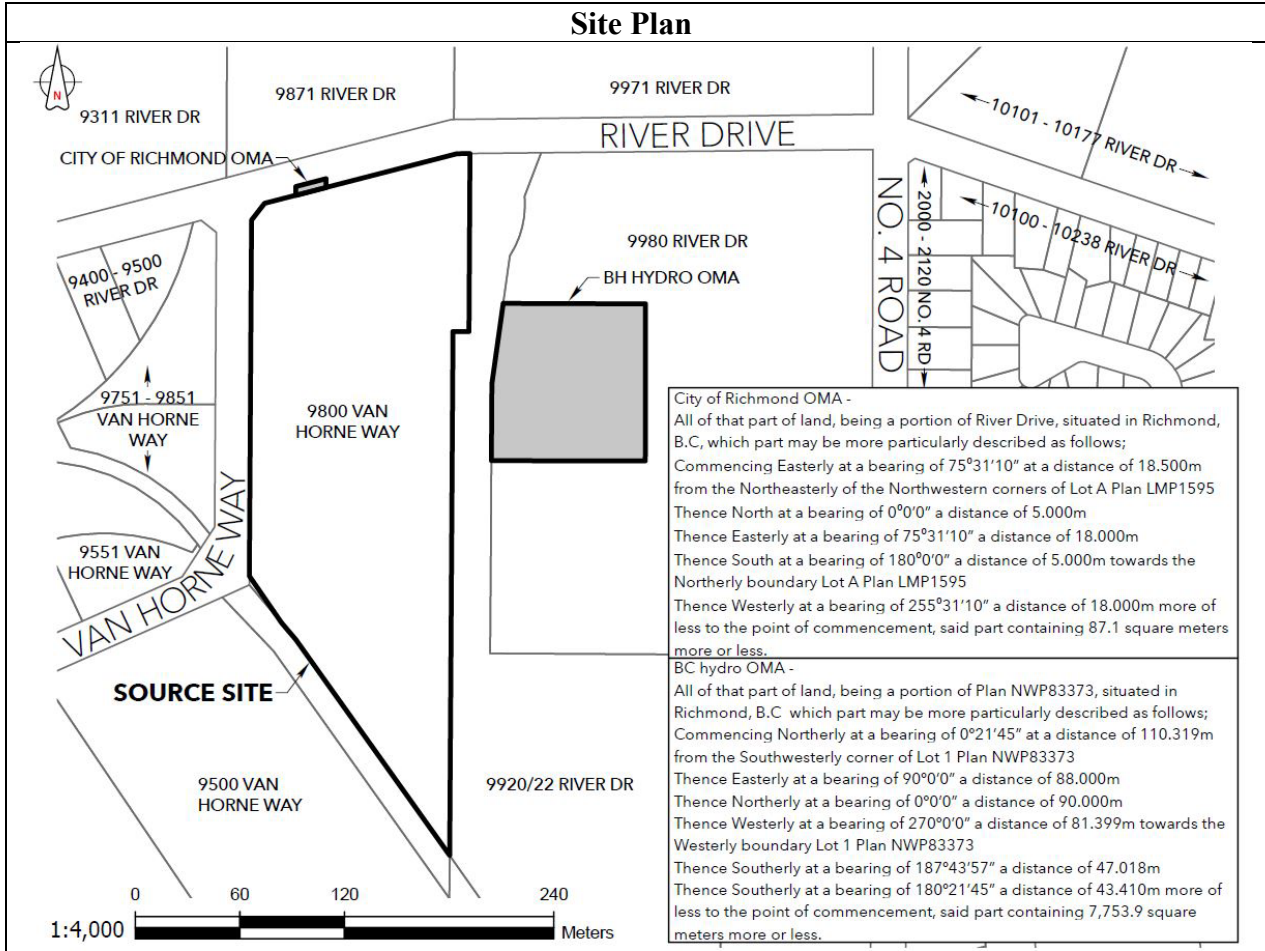
The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 11' 51.8"  
Longitude: 123° 07' 05.4"


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## Schedule B

### Requirements and Conditions

1. Remediation, including monitoring, inspections and maintenance of any works, must be undertaken by the responsible person in the manner and schedule specified in the plan listed in Schedule D or as specified in a modification of the plan approved by the Director.
2. Any substantial modifications to the approved remediation plan, including substantial changes to the remediation schedule, conditions or circumstances described in the risk assessment upon which the remediation plan is based, or changes in land, vapour, water, or sediment use, must be promptly identified in a written submission by the responsible person to the Director. An application for an amendment or new Approval in Principle may be necessary.
3. Up-to-date records of monitoring, inspections and maintenance of any works must be maintained by the responsible person or their agent. The records must be available for inspection by the Director.
4. Remediation must be completed within five years of the date of issuance of this Approval in Principle.
5. Remediation must be confirmed in accordance with applicable legislation and ministry guidance. Within 90 days of completing remediation, a report summarizing confirmation of remediation must be prepared in accordance with section 49 (2) of the Contaminated Sites Regulation and submitted to the Director.
6. A statement signed by an Approved Professional must be submitted to the Director *annually* within 90 days of the anniversary of the date of issuance of this Approval in Principle. The statement must include the following:
  - (a) A summary of remedial activities undertaken during the reporting period; and
  - (b) An assessment comparing remediation progress to the actions and schedule set out in the plans referenced above. Refer to Condition 3 above if remedial progress differs substantially from the schedule set out in the approved plan.

If requested by the Director, a report signed by an Approved Professional must be submitted for review to the Director and must include the following:

- (a) A summary of remedial activities undertaken to date;

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- (b) An assessment comparing remediation progress to the actions and schedule set out in the plans referenced above. Refer to Condition 3 above if remedial progress differs substantially from the schedule set out in the approved plan; and
  - (c) Supporting documentation (e.g., analytical reports, records of inspection, maintenance of treatment works, etc.).
7. 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) *“Future development at the Site will be slab on grade and/or paved areas.”*

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 Approval in Principle may be necessary.

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For Director, *Environmental Management Act*

## Schedule C

### Substances and Uses

#### 9800 Van Horne Way (PID: 017-483-115)

##### *Substances to be remediated in soil for industrial land soil use:*

###### To meet risk-based remediation standards:

arsenic	7440-38-2	tetrachlorophenol, 2,3,4,6-	58-90-2
dichloroethylene, 1,2-cis-	156-59-2	tetrachlorophenol, 2,3,5,6-	935-95-5
dichlorophenol, 2,4-	1220-83-2	toluene	108-88-3
dichlorophenol, 2,5-	583-78-8	trichloroethylene	79-01-6
LEPHs	NA	trichlorophenol, 2,3,5-	933-78-8
methanol	67-56-1	trichlorophenol, 2,3,6-	933-75-5
pentachlorophenol [PCP]	87-86-5	xylenes	1330-20-7
tetrachloroethylene	127-18-4	zinc	7440-66-6
tetrachlorophenol, 2,3,4,5-	4901-51-3		

##### *Substances to be remediated in vapour for industrial land vapour use:*

###### To meet risk-based remediation standards:

trichloroethylene	79-01-6	VPHv	NA
vinyl chloride	75-01-4	xylenes, total	1330-20-7

##### *Substances to be remediated in water for marine and freshwater aquatic life water use:*

###### To meet risk-based remediation standards:

chlorophenol, 3-	108-43-0	tetrachloroethylene	127-18-4
chlorophenol, 4-	106-48-9	tetrachlorophenol, 2,3,4,5-	4901-51-3
dichlorophenol, 2,4-	1220-83-2	tetrachlorophenol, 2,3,4,6-	58-90-2
dichlorophenol, 2,5-	583-78-8	tetrachlorophenol, 2,3,5,6-	935-95-5
dichlorophenol, 3,4-	95-77-2	trichloroethylene	79-01-6
dichlorophenol, 3,5-	591-35-5	trichlorophenol, 2,3,6-	933-75-5

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ethylbenzene	100-41-4	trichlorophenol, 2,4,5-	95-95-4
EPHw10-19	NA	trichlorophenol, 2,4,6-	88-06-2
LEPHw	NA	trichlorophenol, 3,4,5-	609-19-8
pentachlorophenol [PCP]	87-86-5	toluene	108-88-3
naphthalene	91-20-3	VHw	NA
phenanthrene	85-01-8	VPHw	NA
pyrene	129-00-0	xylene, total	1330-20-7
		zinc	7440-66-6

**Portion of 9980 River Drive**

***Substances to be remediated in soil for industrial land soil use:***

To meet risk-based remediation standards:

tetrachloroethylene	127-18-4	trichloroethylene	79-01-6
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***Substances to be remediated in water for marine and freshwater aquatic life water use:***

To meet risk-based remediation standards:

tetrachloroethylene	127-18-4	trichloroethylene	79-01-6
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**9900 Block of River Drive Roadway**

***Substances to be remediated in soil for industrial land soil use:***

To meet risk-based remediation standards:

trichloroethylene	79-01-6
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***Substances to be remediated in water for marine and freshwater aquatic life water use:***

To meet risk-based remediation standards:

tetrachloroethylene	127-18-4	trichloroethylene	79-01-6
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For Director, Environmental Management Act

## Schedule D

### Documents

*Summary of Site Condition, 9800 Van Horne Way, 9900 Block of River Drive Roadway and Portion of 9980 River Drive, Richmond, BC, prepared by Active Earth Engineering Ltd., dated January 2024;*

*Remediation Plan, 9800 Van Horne Way, Richmond, BC, prepared by Active Earth Engineering Ltd., dated January 2024;*

*Off-Site Communication Records, 9900 Block of River Drive Roadway and Portion of 9980 River Drive, Richmond, BC, prepared by Active Earth Engineering Ltd., dated January 2024;*

*Human Health and Ecological Risk Assessment, 9800 Van Horne Way, Richmond, BC, prepared by Steer Environmental Associates, dated January 2024;*

*Stage 1 Preliminary Site Investigation Update and Detailed Site Investigation, 9800 Van Horne Way, Richmond, BC, prepared by Active Earth Engineering Ltd., dated January 2024;*

*Stage 2 Preliminary Site Investigation, 9800 Van Horne Way, Richmond, BC, prepared by Active Earth Engineering Ltd., dated August 2022;*

*Stage 1 Preliminary Site Investigation, 9800 Van Horne Way, Richmond, BC, prepared by Active Earth Engineering Ltd., dated January 2022;*

*Supplemental Site Investigation, 9800 Van Horne Way, Richmond, BC, prepared by Active Earth Engineering Ltd., dated June 2021;*

*Groundwater and Soil-Vapour Sampling – 9800 Van Horne Way, Richmond, BC, prepared by PGL Environmental Consultants, dated June 2021;*

*Environmental Cost Associated with Redevelopment – 9800 Van Horne Way, Richmond, BC, prepared by PGL Environmental Consultants, dated February 2021;*

*Environmental Subsurface Investigation at 9800 Van Horne Way, Richmond, BC, prepared by Arcadis Canada Inc., dated December 2017.*

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