



VIA EMAIL: wmills@richmond.ca

Victoria File: 26250-20/18325
Site ID: 18325

November 29, 2019

Warren Mills
City of Richmond
6911 No. 3 Road,
Richmond, BC V6Y 2C1

Dear Warren Mills:

Re: Certificate of Compliance - 14960 Triangle Road, Richmond, British Columbia

Please find enclosed a Certificate of Compliance respecting the site referenced above.

In addition to the conditions set out in Schedule B of the Certificate of Compliance, 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 Certificate of Compliance 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 Certificate of Compliance will in any way restrict or impair the Director's power 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) 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.
4. Groundwater wells that are no longer required must be properly decommissioned in accordance with the *Water Sustainability Act's* Groundwater Protection Regulation.
5. Please note that future site development may create preferential pathways for vapour. In this event, further assessment and remediation of vapour may be warranted.

6. Please note that the attached Certificate of Compliance does not address obligations of employers regarding worker health and safety under the *Workers Compensation Act* and Occupational Health and Safety Regulation. Development of site-specific work procedures in accordance with Workers' Compensation Board regulations may be warranted. Please direct related questions to Worksafe BC.

Issuance of this Certificate of Compliance is a decision that may be appealed under Part 8 of the *Environmental Management Act*.

If you require clarification of any aspect of this Certificate of Compliance, please contact the undersigned at 236-468-2209 (toll free via Enquiry BC at 1-800-663-7867).

Yours truly,



Liliana Jerade
Senior Contaminated Sites Officer

Enclosure

cc:

CSAP Society
apopova@csapsociety.bc.ca

Robert McLenehan, Approved Professional, Golder Associates
rmclenehan@golder.com

Blair McDonald, Approved Professional, Golder Associates
bgmcdonald@golder.com



CERTIFICATE OF COMPLIANCE
(Pursuant to Section 53 of the *Environmental Management Act*)

THIS IS TO CERTIFY that as of the date indicated below, the site identified in Schedule A of this Certificate of Compliance has been satisfactorily remediated to meet the applicable Contaminated Sites Regulation remediation standards.

This Certificate of Compliance is qualified by the requirements and conditions specified in Schedule B.


The substances for which remediation has been satisfactorily completed and for which this Certificate of Compliance is valid are listed in Schedule C.

I have issued this Certificate of Compliance 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.

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

This Certificate of Compliance should not be construed as an assurance that there are no hazards present at the site.

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Liliana Jerade
For Director, *Environmental Management Act*

Schedule A


The site covered by this Certificate of Compliance is located at 14960 Triangle Road, Richmond, British Columbia which is more particularly known and described as:

Lot 9 Fractional Section 33 Block 4 North Range 5 West New Westminster District Plan 3447.
PID: 005-200-351.

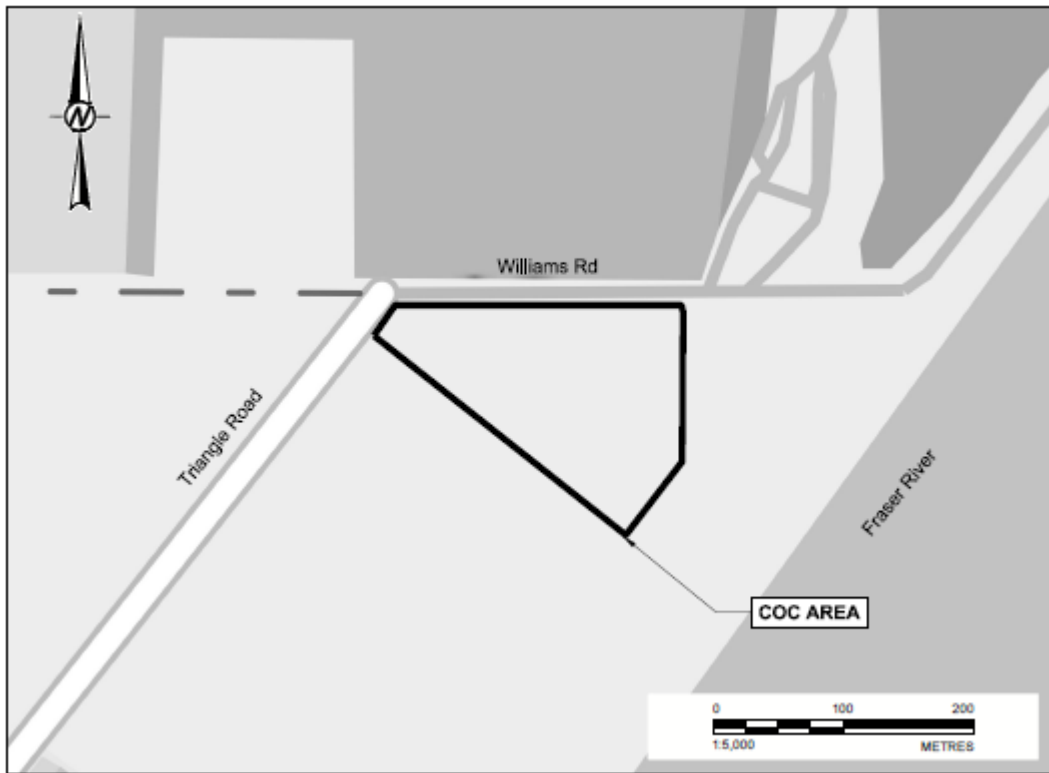
The approximate centre of the site using the NAD (North American Datum) 1983 convention is:

Latitude: 49° 08' 23.93"
Longitude: 123° 03' 33.37"

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For Director, *Environmental Management Act*

Site Plan, Richmond, BC



Location Map, Richmond, BC



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Schedule B

Requirements and Conditions

1. Any changes in land, vapour, water or sediment uses must be promptly identified by the responsible persons in a written submission to the Director. An application for an amendment or new Certificate of Compliance 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 are constructed with slab-on grade construction;*
- (b) *No groundwater will be in contact with the slab.*

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 Certificate of Compliance may be necessary.

Any inconsistencies that arise between the structures, locations and depths of proposed 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 Certificate of Compliance may be necessary.

2. The principal risk controls which must be present or implemented and must be maintained at the site include the following:
 - a) At least 1 m of clean material or a cap will be maintained across the Site
3. If requested by the Director, the responsible persons must provide a signed statement indicating whether the principal risk controls listed in clause 2 of this Schedule have been and continue to be met. This may include providing a signed statement by an Approved Professional.


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4. The Director must be notified promptly by the person responsible for the site if performance verification actions indicate that any institutional and engineering controls required in clause 2 of this Schedule are not being met. The following information must be submitted to the Director with the notification, or as soon as practicable thereafter:
 - (a) The time period over which institutional and engineering controls did not meet the requirements of Schedule B;
 - (b) The nature of the excursion
 - (c) The temporary or permanent corrective measures implemented or to be implemented;
 - (d) An implementation schedule; and
 - (e) Supporting documentation.

5. 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) An evaluation of the performance of the institutional and engineering controls;
 - (b) Recommendations for modification of any plans referenced above, along with supporting rationale;
 - (c) Interpretation of current and cumulative results of the performance verification actions undertaken according to the plan described in clause 4 above; and
 - (d) Supporting documentation.

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Schedule C

Substances and Uses

Substances remediated in soil for industrial land soil use:

To meet numerical remediation standards:

- Benzo(a)pyrene (50-32-8),
- Dibenz(a,h)anthracene (53-70-3),
- Fluoranthene (206-44-0),
- Indeno(1,2,3-c,d)pyrene (193-39-5),
- Naphthalene (91-20-3),
- Pyrene (129-00-0)

To meet risk-based remediation standards:

- Anthracene (120-12-7) Arsenic (7440-38-2), zinc (7440-66-6)
- Benz(a)anthracene (56-55-3)
- Benzo(b)fluoranthene (205-99-2),
- Benzo(k)fluoranthene (207-08-9)
- Chloride ion (16887-00-6)
- LEPHs (NA), VPH (NA)
- Phenanthrene (85-01-8)

Substances remediated in water for freshwater aquatic life water use:

To meet risk-based remediation standards:

- Anthracene (120-12-7), Benzo(a)pyrene (50-32-8),
- Chromium (18540-29-9, 16065-83-1),
- Chloride ion (16887-00-6)
- Cobalt (7440-48-4)
- Fluoranthene (206-44-0),
- Naphthalene (91-20-3),
- Phenanthrene (85-01-08),
- Pyrene (129-00-0),
- LEPHw (NA)

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Substances remediated in water for marine aquatic water use:

To meet risk-based remediation standards:

- Anthracene (120-12-7),
- Benzo(a)pyrene (50-32-8),
- Cobalt (7440-48-4),
- Fluoranthene (206-44-0),
- Naphthalene (91-20-3),
- Nickel (7440-02-0)
- Phenanthrene (85-01-08),
- Pyrene (129-00-0),
- LEPHw (NA)

Substances remediated in vapour for industrial land vapour use:


To meet numerical remediation standards:

- *Naphthalene (91-20-3)*

To meet risk-based remediation standards:

- *Benzene (71-43-2)*
- *VPH (NA)*

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Schedule D

Documents

Summary of Site Condition. Golder Associates Limited. 17 September 2019.

Addendum to Risk Assessment for Site 18325 AND 21989: 14940 and 14960 Triangle Road, Richmond . Golder Associates Limited. 17 September 2019.

Addendum to Standards Portion of Site 18325 and 21989: PSI and DSI – 14940 and 14960 Triangle Road, Richmond, BC. Golder Associates Limited. 16 September 2019.

Protocol 6 Approval to Not Delineate Chloride in Soil and Groundwater at 14940 and 14940 Triangle Road, Richmond, BC. BC ENV. 9 September 2019.

Protocol 6 Approval Application to Not Delineate Chloride in Soil and Groundwater at 14940 and 14960 Triangle Road, Richmond, BC – Response to BC ENV Email Dated 17 July 2019. 13 August 2019.

Protocol 6 Approval Application to Not Delineate Chloride in Soil and Groundwater at 14940 and 14960 Triangle Road, Richmond, BC. Golder Associates Ltd. 11 June 2019.

Stage 1 and Stage 2 Preliminary Site Investigation and Detailed Site Investigation and Quantitative Human Health and Ecological Risk Assessment – 14940 and 14960 Triangle Road, Richmond, BC. Golder Associates Limited. 5 October 2018.

Confirmation of Remediation – 14960 Triangle Road, Richmond, BC. Vancouver, BC. Golder Associates Ltd. (2018). 20 September 2018.


Water Use Determination for 14940 and 14960 Triangle Road, Richmond, BC. Ministry of Environment and Climate Change Strategy. 11 April 2018.

14940 and 14960 Triangle Road, Richmond, BC – Application for Water Use Determination. Hemmera Envirochem Inc. 30 January 2018.

Phase 1 and Phase 2 Environmental Site Investigations, 14940 Triangle Road, Richmond, BC. Pottinger Gaherty Environmental Consultants Ltd. (2013). March 2013.

Phase I and Limited Phase II Environmental Site Assessment – 14960 Triangle Road Richmond, BC. Golder Associates Ltd. 27 March 2012.


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Phase I Environmental Site Assessment – 14960 Triangle Road, Richmond, British Columbia. Vancouver, BC. Thurber Engineering Ltd. 24 June 2011.

Supplemental Investigation and Soil Remediation – 14960 Triangle Road, Richmond, BC. Vancouver, BC. Thurber Engineering Ltd. November 18, 2011.

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Version 9.0 R

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