



VIA E-MAIL

Victoria File: 26250-20/22027
Site ID: 22027

December 13, 2021

Mr. Jeff Bayles
Pacificgold Homes Ltd., Inc.No. BC0740162
957 Langford Pky
Victoria, BC, V9B 0A5
jbayles@westhillsbc.com

Dear Mr. Bayles:

Re: Approval in Principle – 2229 Boxwood Road, Nanaimo, British Columbia

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) soil which may exceed the standards triggering a Contaminated Soil Relocation Agreement set out in section 40 of the Contaminated Sites Regulation and may be encountered during any future subsurface 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

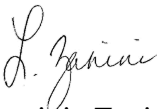
undertaking remediation. It is also the responsibility of those persons to ensure that all activities conducted under this Approval in Principle are carried out with due regard to the rights of third parties, and comply with other applicable legislation that may be in force.

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, conditions or circumstances described in the risk assessment upon which the remediation plan is based, 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 1-800-663-7867.

Yours truly,



Lavinia Zanini, P.Geol.
Senior Contaminated Sites Officer

Enclosure

cc:

Phil Stewart, City of Nanaimo
455 Wallace Street, Nanaimo, BC V9R 5J6
Phil.Stewart@nanaimo.ca

Paul Gardner, CSAP, Tetra Tech Canada Inc.
1000 10th Fl, 885 Dunsmuir Street, Vancouver, BC V6C 1N5
paul.gardner@tetrattech.com

Tara Siemens Kennedy, CSAP, SNC-Lavalin
8648 Commerce Court, Burnaby, BC V5A 4N6
Tara.kennedy@snclavalin.com

Darren Moss, Tectonica Management Inc
201-890 Crace St., Nanaimo, BC V9R 2T3
darren@tectonica.ca

CSAP Society, apopova@csapsociety.bc.ca

Client Information Officer, ENV, Victoria 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 Pacificgold Homes Ltd., Inc.No. BC0740162 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.

December 13, 2021

Date Issued

Lavinia Zanini

For Director, *Environmental Management Act*

Schedule A

The site covered by this Approval in Principle is located at 2229 Boxwood Road, Nanaimo, British Columbia which is more particularly known and described as:

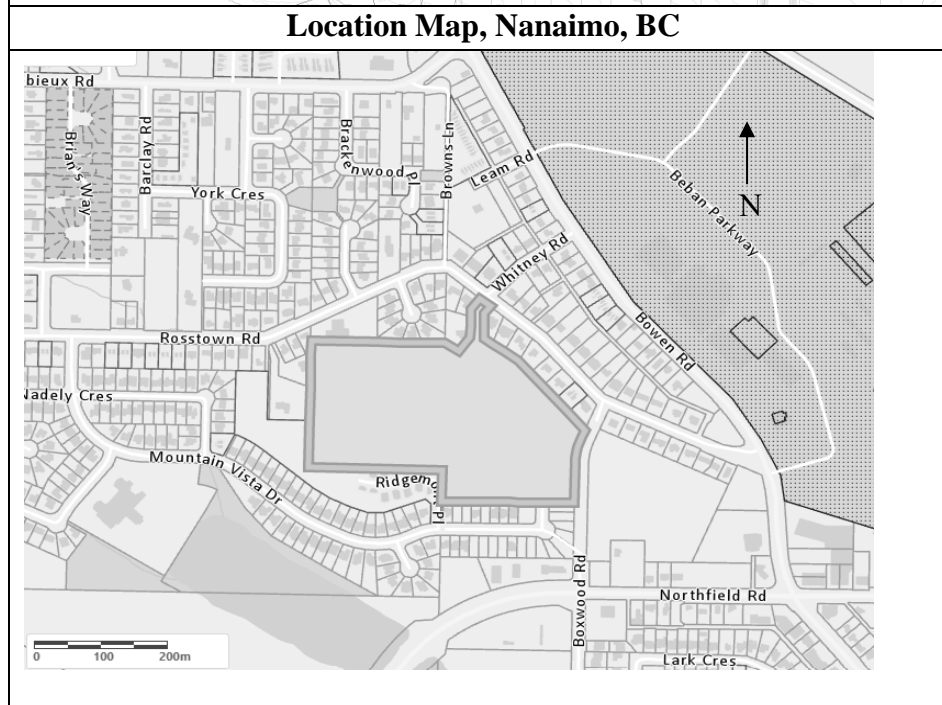
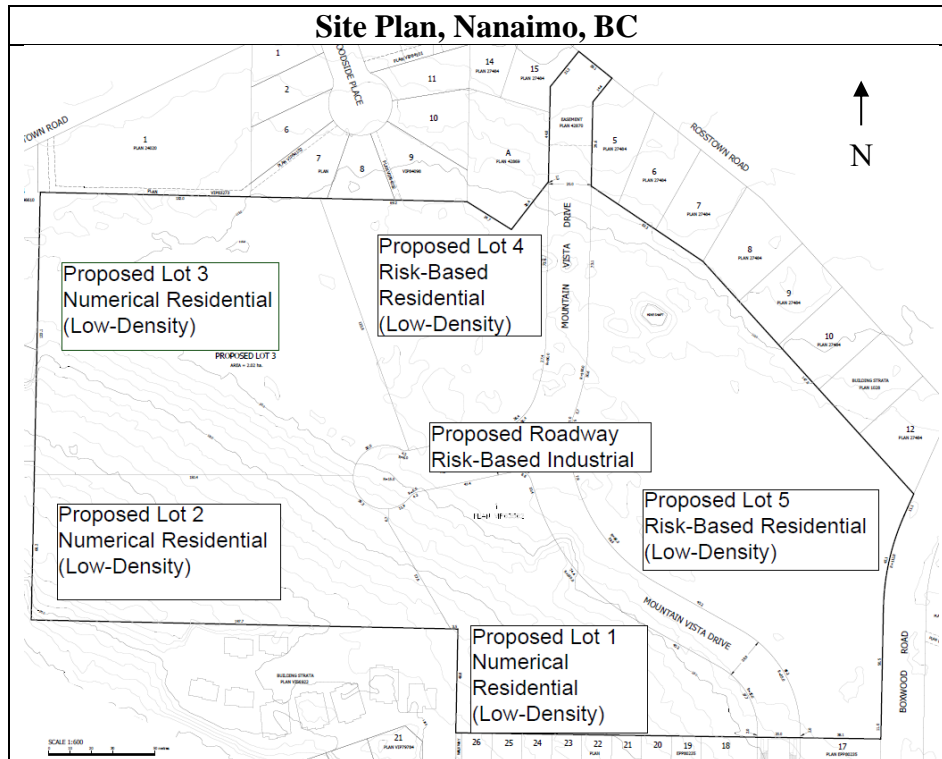
Lot 1, Section 18, Ranges 6 and 7, Mountain District, Plan VIP63562
PID: 023-477-733

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

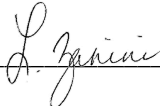
Latitude: 49° 11' 41.00"
Longitude: 123° 59' 59.00"

December 13, 2021
Date Issued


Lavinia Zanini
For Director, *Environmental Management Act*



December 13, 2021
Date Issued


 Lavinia Zanini
 For Director, Environmental Management Act

Schedule B

Requirements and Conditions

1. Remediation, including monitoring, inspections and maintenance of any works, must be undertaken by the responsible persons in the manner and schedule specified in the plan listed in Schedule D and as summarized below or as specified in a modification of the plan approved by the Director.
 - (a) The maximum amount of soil that exceeds residential land-low density use standards to be relocated to Proposed Lot 5 is 32,000m³.
 - (b) A minimum 1-m thick cap of uncontaminated soil will be placed on top of the contaminated soil relocated to create a private forest.
 - (c) Inspection within 1 year of completion of the Private Forest on Lot 5 to confirm the continued presence of the 1 m thick uncontaminated fill cap and top-up with additional material if considered necessary.
 - (d) Groundwater from the Proposed Lot 4, Proposed Lot 5 and the Proposed Roadway must not be used for drinking water purposes.
 - (e) Following remediation, groundwater concentrations will be monitored according to the remediation plan.
 - (f) Following the relocation of the contaminated soil and placement of the capping material, the portion of Lot 5 which contains the capped relocated soils (Private Forest) will be surveyed and a covenant must be placed with the City of Nanaimo stating that soil may not be removed/excavated at within this portion of Lot 5 without authorization from the City of Nanaimo. This covenant must be registered with the BC Land Title and Survey Authority.
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 persons 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 persons or their agent. The records must be available for inspection by the Director.

December 13, 2021
Date Issued


Lavinia Zanini
For Director, *Environmental Management Act*

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 every year 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;
 - (b) An assessment comparing remediation progress to the actions and schedule set out in the plans<s> referenced above. Refer to Condition 3 above if remedial progress differs substantially from the schedule set out in the approved plan;
 - (c) Interpretation of current and cumulative monitoring results from the groundwater, monitoring program;
 - (d) Evaluation of the performance of the institutional and/or engineering controls; and
 - (e) 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 expected at the site. These assumptions include the following:
 - (a) Future use is for residential purposes with a combination of slab-on-grade, basements, or parkades; with the future foundation or basement slab at an elevation above the water table.

December 13, 2021
Date Issued


Lavinia Zanini
For Director, *Environmental Management Act*

Any inconsistencies that arise between the structures, locations and depths of proposed or constructed buildings or trenches at the site and the range of structures, locations and depths of buildings or trenches 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 Approval in Principle may be necessary.

December 13, 2021
Date Issued


Lavinia Zanini
For Director, *Environmental Management Act*

Schedule C

Substances and Uses

Lots 1, 2, 3 Part of the site

Substances to be remediated in soil for low density residential land soil use:

To meet numerical remediation standards:

Aluminum	7429-90-5
Arsenic	7440-38-2
Barium	7440-39-3
Benzene	71-43-2
Chromium	7440-47-3
Cobalt	7440-48-4
Lithium	7439-93-2
Naphthalene	91-20-3
Nickel	7440-02-0
Phenanthrene	85-01-8
Zinc	7440-66-6

Substances to be remediated in water for drinking water use:

To meet local background concentrations:

Cobalt	7440-48-4
--------	-----------

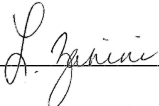
Lots 4, 5 Part of the site

Substances to be remediated in soil for low density residential land soil use:

To meet risk-based remediation standards:

Aluminum	7429-90-5
Anthracene	120-12-7
Arsenic	7440-38-2
Barium	7440-39-3
Benzene	71-43-2
Benz(a)anthracene	50-32-8

December 13, 2021
Date Issued


Lavinia Zanini
For Director, Environmental Management Act

Cadmium	7440-43-9
Chromium	7440-47-3
Cobalt	7440-48-4
Copper	7440-50-8
HEPHs	NA
Lead	7439-92-1
LEPHs	NA
Lithium	7439-93-2
Naphthalene	91-20-3
Nickel	7440-02-0
Phenanthrene	85-01-8
Toluene	108-88-3
VPHs	NA
Xylenes	1330-20-7
Zinc	7440-66-6

Substances to be remediated in water for drinking water use:

To meet risk-based remediation standards:

Iron	7439-89-6
Lithium	7439-93-2
Manganese	7439-96-5

To meet local background concentrations:

Cobalt	7440-48-4
--------	-----------

Future Roadway Part of the site

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

To meet risk-based remediation standards:

Arsenic	7440-38-2
Benzene	71-43-2
Cadmium	7440-43-9
Chromium	7440-47-3
Cobalt	7440-48-4
Nickel	7440-02-0

December 13, 2021
Date Issued


Lavinia Zanini
For Director, Environmental Management Act

Substances to be remediated in water for drinking water use:

To meet risk-based remediation standards:

Iron	7439-89-6
Lithium	7439-93-2
Manganese	7439-96-5

To meet local background concentrations:

Cobalt	7440-48-4
--------	-----------

December 13, 2021
Date Issued


Lavinia Zanini
For Director, *Environmental Management Act*

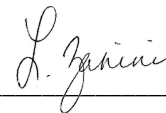
Schedule D

Documents

- *Re: Contaminated Sites Services Application Director's Preapproval under Protocol 6 2229 Boxwood Road, Nanaimo, BC (PID: 023-477-733), Ministry of Environment and Climate Change Strategy, September 1, 2021;*
- *Summary of Site Condition, Tetra Tech Canada Inc., April 29, 2021;*
- *Human Health and Ecological Risk Assessment, 2229 Boxwood Road Property, Nanaimo, BC, Debby Reeves / Andrew Wan, SNC Lavalin, April 29, 2021;*
- *Performance Verification Plan, 2229 Boxwood Road, Nanaimo, BC, Debby Reeves / Andrew Wan, SNC Lavalin, April 29, 2021;*
- *Remediation Plan, 2229 Boxwood Road, Nanaimo, BC, Ben Barton / Martin Jarman, Tetra Tech Canada Inc., April 28, 2021;*
- *Detailed Site Investigation, 2229 Boxwood Road, Nanaimo, BC, Roxanne Croxall / Ben Barton, Tetra Tech Canada Inc., April 21, 2021;*
- *Stage 1 Preliminary Site Investigation Update, 2229 Boxwood Road, Nanaimo, BC, Roxanne Croxall / Ben Barton, Tetra Tech Canada Inc., April 21, 2021;*
- *Protocol 6 Preapproval Request, 2229 Boxwood Road, Nanaimo, BC, PID 023-477-733, Paul Gardner / Don Williams, Tetra Tech Canada Inc., March 22, 2021;*
- *Stage 2 Preliminary Site Investigation, 2229 Boxwood Road, Nanaimo, BC, Kristy Gabelhouse / Martin Jarman, Tetra Tech EBA Inc, November 7, 2016; and*
- *Stage 1 Preliminary Site Investigation, 2229 Boxwood Road, Nanaimo, BC, Joel Shandro / Martin Jarman, EBA Engineering Consultants Ltd. April 2012.*

December 13, 2021

Date Issued



Lavinia Zanini

For Director, *Environmental Management Act*