

May 25, 2022

FortisBC Energy Inc.
16705 Fraser Highway
Surrey, BC V4N 0E8

Attention: FortisBC Energy Inc.

RE: Determination of Application Number 100114575

Permit Holder: FortisBC Energy Inc.

Date of Issuance: May 25, 2022

Effective Date: May 25, 2022

Application Submission Date: December 3, 2021

Application Determination Number: 100114575

Approved Disturbance Footprint: 1.173 ha

ACTIVITIES APPROVED

Associated Oil & Gas Activity No.: 00219557	Type: Access
Associated Oil & Gas Activity No.: 00219558, 00219559	Type: Storage Area
Changes In and About a Stream: 0007156	

GENERAL PERMISSIONS, AUTHORIZATIONS AND CONDITIONS

PERMISSIONS

Petroleum and Natural Gas Act

1. The BC Oil and Gas Commission (the "Commission") pursuant to section 138 of the *Petroleum and Natural Gas Act* hereby permits the Permit Holder referenced above to construct and operate a related activity(s) as detailed in Activities Approved table above and the Activity Details table(s) below, when applicable, for the purposes of carrying out oil and gas activities as defined in the *Oil and Gas Activities Act* (OGAA); subject to the conditions set out herein.
2. The permissions and authorizations granted under this permit are limited to the area identified in the spatial data submitted to the Commission in the permit application as identified and dated above; herein after referred to as the 'activity area'.

The Commission, pursuant to section 138(1) of the *Petroleum and Natural Gas Act*, hereby permits the occupation and use of any Crown land located within the activity area.

- a. The permission to occupy and use Crown land expires two years from the date of issuance, unless the Commission has received notice of construction start, or this permit is otherwise extended, suspended, cancelled, surrendered or declared spent.
- b. The permission to occupy and use Crown land does not entitle the permit holder to exclusive possession of the activity area.
- c. The total disturbance within the activity area must not exceed the total approved disturbance footprint as referenced above.

GENERAL AUTHORIZATIONS AND CONDITIONS

AUTHORIZATIONS

Forest Act

3. The Commission, pursuant to section 47.4 of the *Forest Act*, hereby authorizes the removal of Crown timber from the activity area under the cutting permits associated with the Master Licence(s) as follows:

Master Licence to Cut No.: M02441

Cutting Permit No.: 5

Timber Mark No.: MTD475

Total New Cut: 0.48 ha.

Forest District: (DSQ) Sea to Sky Natural Resource District

Region: Coastal

4. The cutting permit(s) are deemed spent upon the submission of the post-construction plan or upon either the cancellation or expiry of the activities authorized under the permit.

Water Sustainability Act

5. The Commission, pursuant to section 11 of the *Water Sustainability Act*, authorizes the Changes In and About a stream, as detailed in the Activities Approved table above, within the activity area for construction and maintenance activities, unless otherwise restricted by this authorization:
 - a. Instream works must be carried out in accordance with the methods and any mitigations, as specified in the application.

CONDITIONS

Notification

6. A notice of construction start must be submitted, as per the relevant Commission process at the time of submission, at least 48 hours prior to the commencement of activities under this permit.
7. Within 60 days of the completion of construction activities under this permit, the permit holder must submit to the Commission a post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this permit. The shapefile and plan must be submitted via eSubmission.
8. The Permit Holder must notify the First Nation(s) copied on this permit/authorization at least 5 (five) working days prior to project commencement.

General

9. The rights granted by this permit in relation to unoccupied Crown land are subject to all subsisting grants to or rights of any person made or acquired under the *Coal Act*, *Forest Act*, *Land Act*, *Mineral Tenure Act*, *Petroleum and Natural Gas Act*, *Range Act*, *Water Sustainability Act* or *Wildlife Act*, or any extension or renewal of the same.
10. The permit holder must not assign, sublicense or permit any person other than its employees, contractors or representatives, to use or occupy any Crown land within the activity area without the Commission's written consent.
11. The permit holder must ensure that any Crown land within the activity area is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.
12. The permit holder must ensure that any Crown land within the activity area is maintained free of garbage, debris and derelict equipment.

Environmental

13. Construction activities must not result in rutting, compaction or erosion of soils that cannot be reasonably rehabilitated to similar levels of soil productivity that existed on the activity area prior to the construction activities taking place.
14. Any temporary access must be constructed and maintained in a manner that provides for proper surface drainage, prevents pooling on the surface, and maintains slope integrity.
15. The permit holder must make reasonable efforts to prevent establishment of invasive plants on the activity area resulting from the carrying out of activities authorized under this permit.
16. Following completion of construction associated with the associated activities set out in the authorized Activities table above, the permit holder must, as soon as practicable
 - a. decompact any soils compacted by the activity;
 - b. if natural surface drainage pattern was altered by the carrying out of the activity, the permit holder must restore, to the extent practicable, to the drainage pattern and its condition before the alteration;
 - c. re-vegetate any exposed soil on the activity area including, where necessary, using seed or vegetative propagules of an ecologically suitable species that:
 - i. promote the restoration of the wildlife habitat that existed on the area before the oil and gas activity was begun, and
 - ii. stabilize the soil if it is highly susceptible to erosion.
 - d. any retrievable surface soils removed from the activity area must be redistributed so that the soil structure is restored, to the extent practicable, to its condition before the activity was begun.
17. The Permit Holder must not undertake the temporary or permanent storage of potentially acid generating rock with a neutralization ratio potential of less than 2 or rock with a potential to generate metal leachate, within the operating area, until the permit holder has submitted to the satisfaction of the Commission, a plan for storage and handling of potentially acid generating and metal leaching rock on site. The plan must include the following elements:
 - a. the criteria used to classify acid rock drainage/metal leaching potential;
 - b. monitoring and mitigation plan; and
 - c. technical specifications and locations of storage containment structures for stored material

The above information must be prepared by a qualified professional and all proposed protocols, mitigation or monitoring outlined in the plan must be implemented by the permit holder. Any monitoring or other data collected pursuant to the monitoring and mitigation plan must be retained by the permit holder and provided to the Commission upon request.

Clearing/Forest Act

18. The permit holder is permitted to fell any trees located on Crown land within 1.5 tree lengths of the activity area that are considered to be a safety hazard according to Workers Compensation Act regulations and must be felled in order to eliminate the hazard. Trees or portions of these trees that can be accessed from the activity area without causing damage to standing timber may be harvested.
19. The holder of the cutting permit must pay to the government, stumpage and any waste billing determined in accordance with the terms of this authorization.

20. The authorized cutting permit does not grant the permit holder the exclusive right to harvest Crown timber from the activity area. Authority to harvest some or all of the timber may be granted to other persons. The permit holder's right to harvest timber applies to any timber found on the site at the time they undertake harvesting activities.
21. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark.
22. Any waste assessments applied under the Master Licence to Cut are subject to the merchantability specifications and monetary waste billing requirements in the Provincial Logging Residue and Waste Manual specific to the region associated with the Cutting Permit authorization.
23. Stumpage will be calculated in accordance with the Coast Appraisal Manual (volume based).

Water Course Crossings and Works

23. Stream, lake and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
24. At any time, the Commission may suspend instream works authorized under this permit. Suspensions on instream works will remain in place until such time as the Commission notifies permit holders that works may resume. Reasons for suspension of works may include, but are not limited to, drought conditions and increased environmental or public safety risks.
25. Equipment used for activities under this Permit must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity.
27. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - a. To facilitate construction of a crossing, a machine is permitted to ford the stream a maximum of one time in each direction at the crossing location.
 - b. Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - c. The permit holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - i. the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - ii. soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - d. Except with leave of the Commission, the permit holder must ensure that
 - i. culverts are designed and fabricated in compliance with the applicable:
 - a. Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - b. Canadian Standards Association Standard CSA B1800, Section B182.8, Plastic Non-pressure Pipe Compendium; or
 - ii. any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
 - e. Except with leave of the Commission, the permit holder must ensure that bridges or culverts meet the criteria set out in i., ii. or iii. below:
 - i. the bridge or culvert is designed to pass the highest peak flow of the stream that can reasonably be expected within the return periods set out in Column 2 of the table below for the period the permit holder anticipates the structure will remain on site, as set out in Column 1 of the table below:

Anticipated period crossing structure will remain on site	Peak flow period
Bridge or culvert, 3 years or less	10 years
Bridge other than a bridge within a community watershed, more than 3 years but less than 15	50 years
Bridge within a community watershed, more than 3 years	100 years
Bridge, 15 years or more	100 years
Culvert, more than 3 years	100 years

ii. the bridge, or any component of the bridge:

- a. is designed to pass expected flows during the period the bridge is anticipated to remain on the site;
- b. is constructed, installed and used only in a period of low flow; and
- c. is removed before any period of high flow begins.

iii. the culvert;

- a. is a temporary installation, and the permit holder does not expect to subsequently install a replacement culvert at that location;
- b. is not installed in a stream, when the stream contains fish;
- c. is sufficient to pass flows that occur during the period the culvert remains on the site;
- d. is installed during a period of low flow; and
- e. is removed before any period of high flow begins.

- f. Bridge or culvert abutments, footings and associated scour protection must be located outside the natural stream channel and must not constrict the channel width.

Archaeology

28. If an artifact, feature, material or thing protected under the *Heritage Conservation Act* is identified within the activity area, the permit holder must, unless the permit holder holds a permit under Section 12.4 of the *Heritage Conservation Act* issued by the BC Oil and Gas Commission in respect of that artifact, feature, material or thing:

- a. Immediately cease all work in the vicinity of the artifacts, features, materials or things;
- b. Immediately notify the BC Oil and Gas Commission; and
- c. Resume work in the vicinity of the artifacts, features, materials or things in accordance with direction from the BC Oil and Gas Commission.

29. Prior to the commencement of construction activities the permit holder must:

- a. Complete an archaeological assessment of the activity area in accordance with applicable requirements of the *Heritage Conservation Act*, and
- b. Complete and submit to the BC Oil and Gas Commission an acceptable report on the results of the assessment.

30. If the report required under the condition above recommends any further assessment work on an area, the permit holder must not begin construction activities on that area until the further assessment is completed.

ADVISORY GUIDANCE

1. Construction Plan - 20210636QP_0.pdf is for the permit holder's internal reference only and was not reviewed as a decision tool for this permit, nor does it form an integral part of this permit.
2. Instructions for submitting notice of construction start, as required by regulation, can be found in the Oil and Gas Activity Operations Manual on the Commission's website.
3. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.
4. Appropriate tenure may be issued upon acceptance of the post-construction plan. Submission of the original application and submission of the post-construction plan is considered an application for all subsequent applicable *Land Act* tenures. Upon the Commission's acceptance of the post-construction plan no further applications for replacement tenure are required.
5. Temporary access is intended to be short term access to facilitate construction of an oil and gas activity. It is not intended for sustained use and is not constructed to oil and gas road standards.

All pages included in this permit and any attached documents form an integral part of this permit.



Justin Anderson
Authorized Signatory
Commission Delegated Decision Maker

Copied to:

First Nations – Musqueam Indian Band, Squamish Nation
Ministry of Forests District Office – (DSQ) Sea to Sky Natural Resource District