

August 2, 2018

Coastal GasLink Pipeline Ltd.
450-1st Street SW
Calgary, Alberta T2P 5H1

Attention: Coastal GasLink Pipeline Ltd.

RE: Permit Replacement for Application Determination Number 100084534, OGC Legacy #9643657

Permit Holder: Coastal GasLink Pipeline Ltd.
Permit Date of Issuance: August 9, 2016
Replacement Date of Issuance: August 2, 2018
Replacement Expiration Date: August 9, 2019
Application Determination No.: 100084534

GENERAL PERMISSIONS, AUTHORIZATIONS and CONDITIONS

1. The BC Oil and Gas Commission (the "Commission"), hereby replaces the permit and any associated authorizations to construct and operate an ancillary oil and gas activity.
2. This permit replacement is subject to the conditions of the original permit, authorizations, subsequent amendments, corrections, and any additional conditions as set out herein.
3. The permit has been replaced for one year and will expire on August 9, 2019.

Petroleum and Natural Gas Act

4. Pursuant to Section 138(1) of the Petroleum and Natural Gas Act, the permit holder is authorized to enter, occupy and use any unoccupied Crown land located within the operating area to carry out the associated oil and gas activity authorized under this permit.

CONDITIONS

5. The rights granted by this authorization 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.
6. The Permit holder must not assign or sublicense this permit or permit any person to use or occupy the land, other than its employees, contractors, or representatives, without the Commission's written consent.
7. The Permit Holder must ensure that the area is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.
8. The Permit Holder must ensure that the area is free of garbage, debris and unused equipment.

Permit Holder: Coastal GasLink Pipeline Ltd.
Application Determination number: 100084534

Application Submission Date: June 25, 2018
Date Issued: August 2, 2018



Jacqueline Bourke
Authorized Signatory
Commission Delegated Decision Maker

cc: Land Agent – Roy Northern Land Service Ltd.
OGC, Compliance and enforcement



August 9, 2016

Coastal GasLink Pipeline Ltd.
450 -1st Street SW
Calgary, Alberta T2P 5H1;

Attention: Katherine Sheriff

RE: Storage Permit within Units 43 & 44, Block E, 93-P-4

Date of Issuance: August 9, 2016
Commission No.: 9643657

PERMISSIONS

Petroleum and Natural Gas Act

1. Pursuant to section 138(1) of the *Petroleum and Natural Gas Act*, the permit holder is permitted to enter, occupy, and use any unoccupied Crown land located within the areas described in the attached construction plan, Document No: CGE4703-MSI-G-MP-489, revision 0, dated November 6, 2015 (the "construction plan"), by Midwest Surveys Land Surveying Ltd. as submitted to the Commission in the permit application dated December 3, 2015 to construct and operate a related activity for the purposes of carrying out oil and gas activities as defined in the *Oil and Gas Activities Act* (hereinafter referenced together as the "operating area"), subject to the conditions set out below.
 - (1) 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.
 - (2) The permission to occupy and use Crown land does not entitle the permit holder to exclusive possession of the operating area.
 - (3) The total disturbance within the operating area must not exceed 19.78 ha.

AUTHORIZATIONS

Forest Act

2. Pursuant to section 47.4 of the *Forest Act*, the permit holder is authorized to remove Crown timber from the operating area under Cutting Permit No. 16 under Master Licence to Cut number M02340.
3. This Cutting Permit is deemed spent upon the submission of the post-construction plan or upon either the cancellation or the expiry of the activities authorized by this permit.

Water Sustainability Act

4. Pursuant to section 11 of the *Water Sustainability Act*, the permit holder is authorized to make changes in and about streams, as shown on the construction plan for construction and maintenance activities, unless otherwise restricted by this authorization.

CONDITIONS**Notification:**

5. A notice of construction start must be submitted to the Commission a minimum of 48 hours prior to the commencement of activities under this permit. Notification must be sent via OGC.ExternalNotifications@bcogc.ca.
6. 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.
7. The permit holder must notify the Saulteau First Nations Lands Department office five (5) working days prior to commencement. Notification will be sent to Fernie Garbitt at fgarbitt@saulteau.com.

General:

8. 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.
9. The permit holder must not assign, sublicense or transfer this permit or permit any person to use or occupy Crown land, other than its employees, contractors, or representatives, without the Commission's written consent.
10. The permit holder must ensure that any Crown land within the operating area is maintained in a condition so as to minimize hazards, including but not limited to hazards associated with storage of materials and equipment.
11. The permit holder must ensure that any Crown land within the operating area is free of garbage, debris and unused equipment.

Environmental:

12. The permit holder must ensure that no deleterious material is deposited into a stream, wetland or lake.
13. This permit does not authorize infilling of any stream, wetland or lake.
14. The operating area must not be located within the Riparian Management Area of a wetland
15. Except to facilitate a crossing, the operating area must not be located within the Riparian Reserve Zone of a stream.
16. Following completion of the construction activities authorized under this authorization the permit holder must, as soon as practicable,
 - (1) decompact any soils compacted by the activity;
 - (2) 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; and
 - (3) ensure re-vegetation of any exposed soil on the operating area including, where necessary, using seed or vegetative propagules of an ecologically suitable species that
 - (a) promote the restoration of the wildlife habitat that existed on the operating area before the oil and gas activity was begun, and
 - (b) stabilize the soil if it is highly susceptible to erosion.

17. Following completion of the activities permitted under this permit, any surface soils removed from the operating area must be redistributed so that the soil structure is restored, to the extent practicable, to its condition before the activity was begun.

Clearing:

18. All harvested Crown timber must be marked with Timber Mark Number MTB 700.
19. Cutting Permit No. 16 does not grant the permit holder the exclusive right to harvest Crown timber from the operating 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 operating area at the time they undertake harvesting activities.
20. Stumpage for Cutting Permit No. 16 will be calculated in accordance with the Interior Appraisal Manual as amended from time to time.
21. The Interior merchantability specifications and monetary waste billing requirements in the Provincial Logging Residue and Waste Measurement Procedures Manual that are in effect upon issuance of this authorization apply to any waste assessments required under Master License to Cut M02340.
22. The holder of Cutting Permit No. 16 must pay to the government, stumpage and any waste billing determined in accordance with the terms of this authorization.
23. The permit holder is authorized to fell any trees located on Crown land within 1.5 tree lengths of the operating 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 operating area without causing damage to standing timber may be harvested.

Watercourse Crossings or Works:

24. Stream crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
25. In-stream activities within a fish bearing stream must occur:
 - a. during the applicable reduced risk work windows as specified in the during the applicable reduced risk work windows as specified in the Peace Region Selected Terrestrial and Aquatic Wildlife Least-Risk Windows;
 - b. in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the Commission; or
 - c. in accordance with an authorization or letter of advice from Fisheries and Oceans Canada that is provided to the Commission.
26. 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. Stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
 - (1) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings;
 - (2) The permit holder must ensure that permanent bridges are designed and fabricated in compliance with:
 - (a) the Canadian Standards Association Canadian Bridge Design Code, CAN/CSA-S6; and
 - (b) soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.
 - (3) Except with leave of the Commission, the permit holder must ensure that:
 - (a) culverts are designed and fabricated in compliance with the applicable:

- (i) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or
 - (ii) Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium; or
- (b) Any pipe installed in lieu of a culvert is of at least equivalent standard and strength as any culvert as specified above.
- (4) Except with leave of the Commission, the permit holder must ensure that bridges or culverts meet the criteria set out in (a), (b) or (c) below:
- (a) 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 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:

Column 1	Column 2
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

- (b) The bridge, or any component of the bridge:
 - (i) is designed to pass expected flows during the period the bridge is anticipated to remain on the site;
 - (ii) is constructed, installed and used only in a period of low flow; and
 - (iii) is removed before any period of high flow begins.
 - (b) The culvert:
 - (i) is a temporary installation, and the permit holder does not expect to subsequently install a replacement culvert at that location;
 - (ii) is not installed in a stream, when the stream contains fish;
 - (iii) is sufficient to pass flows that occur during the period the culvert remains on the site;
 - (iv) is installed during a period of low flow; and
 - (v) is removed before any period of high flow begins.
- (5) Snow fills must consist of clean snow and may only be located on streams that are dry or frozen to the bottom during the period of construction, maintenance and use. Where periodic thaws are anticipated, the permit holder must ensure measures are in place that allow meltwater to pass through, ensure movement of fish is not impeded, and prevent pooling on the upstream side of the snow fill. Snow fill and any installed culverts must be removed prior to spring snow melt;
- (6) Ice bridges on fish bearing streams may only be constructed where sufficient water depth and stream flows prevent the bridge structure from coming in contact with the stream bottom;
- (7) Water applied to construct an ice bridge on a water body must be sourced in accordance with the *Water Sustainability Act* unless

- (a) the water body is a stream with a stream channel width of at least 5 meters and is not designated as a sensitive stream under the *Fish Protection Act*, or has a riparian class of W1, W3, or L1;
 - (b) the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;
 - (c) the water body is not within the boundaries of a public park;
 - (d) pump intakes do not disturb beds of streams or wetlands and are screened with a maximum mesh size and approach velocity in accordance with the Fisheries and Oceans Canada Freshwater Intake End-of-Pipe Fish Screen Guideline, and
 - (i) where the water body is a stream, the flow of water in the stream at the time and location of pumping exceeds 60 litres per second and the instantaneous pumping rate does not exceed 1% of the water flowing in the water body at the time and location the pumping occurs, or
 - (ii) where the water body is a lake or pond, the cumulative volume of water withdrawn does not exceed 10 cm of lake or pond depth, calculated as the product of lake or pond surface area x 10 cm;
 - (e) records of water withdrawal and corresponding streamflow measurements are maintained by the permit holder and provided to the Commission upon request.
- (8) Bridge or culvert abutments, footings and associated scour protection must be located outside the natural stream channel and must not constrict the channel width.

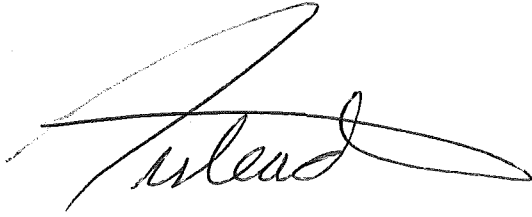
Archaeology:

- 28. Archaeology site GgRI-3 must be avoided by construction crews. The archaeology site must be flagged in the field with No Work Zone ribbon by a permitted archaeologist prior to the commencement of construction activities.
- 29. An AIA report must be submitted to the Commission as soon as practicable.
- 30. If artifacts, features, materials or things protected under section 13(2) of the Heritage Conservation Act are identified the permit holder must, unless the permit holder holds a permit under section 12 of the Heritage Conservation Act issued by the 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 Commission and the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations
 - c. refrain from resuming work in the vicinity of the artifacts, features, materials or things except in accordance with an appropriate mitigation plan that has been prepared in accordance with the Heritage Conservation Act and approved by the Archaeology Branch of the Ministry of Forests, Lands and Natural Resource Operations.

ADVISORY GUIDANCE

- 1. Appropriate tenure will 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.
- 2. Unless a condition or its context suggests otherwise, terms used in this authorization have the same meaning as the Environmental Protection and Management Regulation under the *Oil and Gas Activities Act*.

The attached plan(s) forms an integral part of this permit.



Ashley Istead
Natural Resource Officer

pc: Roy Northern Land Service Ltd.
Commission No.: 9643657
Worksafe BC
MoFLNRO: Peace
OGC First Nations: BRFN, MLIB, SFN, WMFN
OGC Compliance & Enforcement