

June 30, 2021

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

Attention: Coastal GasLink Pipeline Ltd.

RE: Amendment to Application Determination Number 100111341
Permit Holder: Coastal GasLink Pipeline Ltd.
Amendment Date of Issuance: June 30, 2021
Amendment Effective Date: June 30 2021
Application Submission Date: June 4, 2021
Amendment Application Number: 100111341

AMENDMENT DETAILS

Pipeline Project No.: 000025689	Amend to include a change in and about a stream.
Segment No.: 1	
Changes In and About a Stream: 0006929	

GENERAL PERMISSIONS, AUTHORIZATIONS AND CONDITIONS
PERMISSIONS
Oil and Gas Activities Act

- The BC Oil and Gas Commission, under section 31(7) of the *Oil and Gas Activities Act*, hereby grants an amendment to the permit issued for the above referenced Application Determination Number, any associated authorizations subject to the original permit, any subsequent amendments and any additional or revised conditions as set out herein, as per the Amendment Details table above and, if required, as detailed in the Activity Details table(s) below.

Seg No.: 1	From: 14-34-078-19 To: 03-33-078-19
Flow Direction: Uni-Directional	Maximum Operating Pressure (kpa): 9930
Product: Natural Gas - Sweet	Max H₂S (mol%): 0.002
Installation Number(s): 1	

- 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'.
- Notwithstanding the above permissions and authorizations, this permit does not authorize the following Associated Oil and Gas Activity(s): 00209851- 00209869

CONDITIONS

Notification

4. Unless a submission has been made under condition 5, the permit holder must annually, on or before March 31 of each year, submit to the Commission a Post Construction Plan map showing the location and nature of any construction activities completed under this permit during the previous calendar year.
5. Within 60 days of completion of construction activities under this permit, the permit holder must submit to the Commission a Post Construction Plan as a shape file and PDF plan accurately identifying the location of the total area actually disturbed under this permit, and a written statement indicating whether the permit holder has complied with the permit conditions and applicable legislation relating to the design and construction of the activities authorized under this permit. The written statement must be signed by the permit holder and specify the date on which it was made. The shapefile and plan must be submitted via eSubmission.

Clearing/Forest Act

6. 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.
7. Clearing and site preparation must be confined to the area approved in the Certified Project Description of the associated Environmental Assessment Certificate.

Water Course Crossings and Works

8. Stream, lake and wetland crossings must be constructed in accordance with the methods and any mitigations, as specified in the application.
9. Following initial construction, stream, lake and wetlands crossings are authorized for necessary pipeline maintenance activities on the activity area except for:
 - a) stream bank or stream bed revetment works in a stream classified as S1, S2, S3, S4 or S5;
 - b) pipe replacement within the stream channel where the original application specified a trenchless crossing method and the planned works involve a trenched crossing method;
 - c) permanent alteration of a stream bank;
 - d) works within a Temperature Sensitive Stream established by order under s. 27 of the Environmental Protection and Management Regulation; or
 - e) works within a Fisheries Sensitive Watershed established by order under s. 28 of the Environmental Protection and Management Regulation.
10. The Permit Holder must ensure any instream works related to pipeline maintenance are planned and overseen by a qualified professional. This individual must assess and determine whether planned works pose a risk to any of the features listed below, and is responsible for developing and implementing mitigation measures to reduce any potential impacts on these features, as required:
 - a) fish or important fisheries habitat;
 - b) species identified as special concern, threatened, or endangered under the federal *Species at Risk Act*; or
 - c) species identified by Order as a species at risk under the *Forest and Range Practices Act* or the *Oil and Gas Activities Act*.

This assessment must be provided to the Commission upon request.

11. Open cut crossings of wetlands must be planned and conducted in accordance with the relevant detail in that are specified in the application, and the following requirements:
 - a) where the wetland substrate consists of rocks, pebbles or coarse gravel overlaying finer material, this material must be removed and stockpiled separately above the high water mark of the wetland for replacement during restoration;

- b) materials referred to in (a) must be excavated and stockpiled in a manner that minimizes sediment dispersal within the wetland and must be replaced in a manner that minimizes disturbance to the wetland following pipeline installation;
 - c) channels, banks and beds of wetlands, including any disturbed stable natural material, must be restored, to the extent practicable, to the structure and conditions that existed before the crossing construction was initiated;
 - d) excavated materials must be contained using appropriate techniques, so that that sediment-laden water and spoil do not re-enter the wetland; and
 - e) any sediment-laden trench water must be pumped onto stable surfaces in a manner that does not cause erosion of soils or release of suspended sediments to watercourses.
12. Construction or maintenance activities within a fish bearing stream or wetland must occur:
- a) during the applicable reduced risk work windows as specified in the Peace Region Selected Terrestrial and Aquatic Wildlife Least-Risk Windows; or, as amended from time to time;
 - 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.

If activities are to occur in accordance with b or c above, the documentation must be submitted to the Commission prior to commencement of activities.

13. Equipment to be used in or adjacent to a stream, lake or wetland must be clean or otherwise free of external grease, oil or other fluids, excessive muds, soil and vegetation, prior to entering the waterbody.
14. Within the RMA, generators and other stationary equipment that require refueling must be situated in secondary containment capable of containing the fuel capacity of the generators.
15. Except with leave of the Commission, prior to construction activities in a wetland, the permit holder must develop a wetland Water Quality Monitoring Program to the satisfaction of the Commission. The wetland Water Quality Monitoring Program must:
- a) be developed, implemented and supervised by a qualified professional;
 - b) be consistent with the BC Water Quality Guidelines;
 - c) include environmental water quality monitoring for potential exceedance of the BC Water Quality Guidelines for the protection of aquatic life or, where they exist, the Water Quality Objectives for a specific wetland, as they may be amended from time to time;
 - d) where appropriate, require pre and post construction monitoring proximal to the location of potential disturbance from construction activities;
 - e) require sampling that is representative of water quality variation across the pipeline right of way through wetlands with a riparian classification of W1; and
 - f) require documentation of pre and post construction monitoring completed under (d).
16. The permit holder must implement the Water Quality Monitoring Programs developed as per condition 15 and do each of the following:
- a) provide records of documentation of all pre and post construction monitoring to the Commission;
 - b) immediately report to the Commission any exceedance of the BC Water Quality Guidelines for aquatic life or, where they exist, the Water Quality Objectives for a specific watercourse or wetland that persist for a period of 24 hours or greater, relative to the baseline; and
 - c) immediately take steps to address the factors producing any exceedance of the BC Water Quality Guidelines for aquatic life, relative to the baseline, should any exceedance persist for a period of 24 hours or greater, and where such steps do not result in addressing the turbidity exceedance, promptly suspend construction operations at the site of activities causing the exceedance until effective solutions, satisfactory to the Commission, have been developed and implemented.

17. As part of the post construction monitoring program, the permit holder must, for all watercourse and wetland crossings:
- a) inspect and provide a report to the Commission that includes assessment of:
 - i. RMA stability;
 - ii. erosion risk to the watercourse;
 - iii. vegetation re-establishment within the RMA, including species composition, percent establishment, and presence of invasive plant species; and
 - iv. identify where contingency measures may be required to address the items in (i), (ii) or (iii).

Where contingency measures are required, the permit holder must develop and implement an appropriate plan to the satisfaction of the Commission.

18. The permit holder must construct, maintain, and deactivate all mechanical stream crossings constructed for access within the operating area according to the following requirements, as applicable:
- a) Wetland crossings must be constructed, maintained and removed in accordance with the following:
 - i. organic cover within and adjacent to the wetland must be retained;
 - ii. minimize erosion or release of sediment within the wetland;
 - iii. any padding materials must be placed on the wetland surface only and must not be used for infilling;
 - iv. any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and
 - v. the wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.

Archaeology

19. No construction activities are authorized in the vicinity of archaeology site(s) GkRf-29 without the issuance of a site alteration permit, pursuant to the terms under Section 12.4 of the *Heritage Conservation Act* and as approved by the BC Oil and Gas Commission.
20. 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.
21. 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.
22. 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.

Environment

23. 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 site prior to the construction activities taking place.
24. The permit holder must undertake dust control measures to ensure that dust resulting from construction activities does not affect safe travel on a road or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas or other similar areas.
25. The permit holder must undertake reasonable measures to mitigate noise from construction activity that has the potential to affect public safety or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas during periods of use or other similar areas.
26. The permit holder must ensure shooflies are constructed in a manner that provides for proper surface drainage, prevents pooling on the surface, and maintains slope integrity.
27. In all locations where run-off from the area of the pipeline right of way or work space may flow into a watercourse, the permit holder must contour and stabilize banks and approach slopes and install berms, silt fences, cross ditches, or implement other alternative effective measures as appropriate to minimize erosion and avoid sediment deposit into the watercourse.

Agriculture Land Commission

28. The permit holder must, in relation to any oil and gas activities and related activities, authorized herein that are located within the Agricultural Land Reserve:
 - a) Implement any recommendations for soil handling and management of surface water contained in the Schedule A report(s) submitted with this application,
 - b) Within 24 months of the date of completion of pipeline construction, conduct reclamation of any area of land disturbed by non-farm use in accordance with any recommendations contained in the Schedule A Report and the requirements set out in Schedule B of the Agreement between the Provincial Agricultural Land Commission and the BC Oil and Gas Commission dated December 8, 2017, to the satisfaction of the BC Oil and Gas Commission, or in accordance with such alternate requirements identified by a Qualified Specialist and agreed to by the BC Oil and Gas Commission, and
 - c) Submit a Schedule B Report to the Oil and Gas Commission and to the landowner(s) if the area of land is private land, in accordance within the timelines specified in the Agreement.

ACTIVITY SPECIFIC DETAILS, PERMISSIONS AND CONDITIONS

PIPELINES

Land Area Number: 100015503

Pipeline Project Number: 000025689

Technical Pipeline Permissions

29. The permit holder is authorized to construct and operate the pipeline segments 001 to transmit natural gas under a maximum operating pressure of 9930 kPa, and under a maximum concentration of H₂S of 0.002 mol% unidirectionally in a 1219 mm (48 inch) diameter pipe, and in accordance Piping & Instrumentation Diagram(s) submitted by Coastal GasLink Pipeline Ltd.: 80373-01-ML-02-001 Revision B, dated June 17, 2020, 4759-01-ML-02-001 R02T1 Revision B, dated June 17, 2020. Changes may be made to pigging design, and to above ground valves and piping, provided that:
 - a) the changes do not affect direct connections to pipelines and facilities;
 - b) there are no changes to approved pressure protection, H₂S protection or isolation;

- c) there is no substantive impact to any aspect of the project that was included in a consultation under the Consultation and Notification Regulation; and
- d) the design and operation of the pipeline continues to meet all regulatory requirements including the requirements of CSA Z662, as amended from time to time.

ADVISORY GUIDANCE

1. Construction Plan - 80373-03-ML-15-001-Rev01.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. The permit holder must provide notices required by the Pipeline Regulation prior to beginning construction, maintenance or repair of the pipeline.
4. As required by section 4 of the Pipeline Regulation, the permit holder must design, construct, operate and maintain the pipeline in accordance with CSA Z662, as amended from time to time.
5. As required by section 4(2) of the Pipeline Regulation, the permit holder must submit to the Commission the pipe and component specifications and the as-built drawings for the pipeline within 3 months after completion of construction of a pipeline.
6. As required by section 24(1) of the Oil and Gas Activities Act General Regulation, the permit holder must complete the surveying and posting of the pipeline right of way within 16 months after completing construction of the pipeline.
7. As required by section 7 of the Pipeline Regulation, the permit holder must include the pipeline authorized by this permit in its Integrity Management Plan and Damage Prevention Program.
8. The permit holder must avoid all archaeology sites unless issued a site alteration permit by the Commission, pursuant to section 12 of the *Heritage Conservation Act*.

DEFINITIONS

Unless the condition or its context indicates otherwise, the terms in this permit have the same meaning as defined in the *Oil and Gas Activities Act* or the regulations under that Act.

“construction activities” or “construction” means clearing, site preparation, trench excavation, pipe installation and any other activities required to construct a pipeline.

“qualified specialist” means a person who possesses an appropriate combination of formal education, knowledge, skills, and experience to conduct a technically sound and rational assessment for the area of practice, and be familiar with applicable regulations, standards, policies, protocols and guidelines.

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:

Landowners/Rights Holders .
Work Safe BC
BC EAO

May 18, 2021

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

Attention: Coastal GasLink Pipeline Ltd.

RE: Determination of Application Number 100111341

Permit Holder: Coastal GasLink Pipeline Ltd.
Date of Issuance: May 18, 2021
Effective Date: May 18, 2021
Application Submission Date: December 14, 2020
Application Determination Number: 100111341

AUTHORIZED ACTIVITIES

Pipeline Project No.: 000025689	Segment No.: 1
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GENERAL PERMISSIONS, AUTHORIZATIONS AND CONDITIONS

PERMISSIONS

Oil and Gas Activities Act

1. The BC Oil and Gas Commission, under section 25 (1) of the *Oil and Gas Activities Act*, hereby permits the permit holder referenced above to carry out the following activities, indicated in the Authorized Activities table above, subject to the conditions contained herein, any applicable exemptions and authorizations:
 - a. To construct and operate a pipeline as detailed in the Technical Specification Details tables below.

Seg No.: 1	From: 14-34-078-19 To: 03-33-078-19
Flow Direction: Uni-Directional	Maximum Operating Pressure (kpa): 9930
Product: Natural Gas - Sweet	Max H₂S (mol%): 0.002
Installation Number(s): 1	

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'.
3. Notwithstanding the above permissions and authorizations, this permit does not authorize the following Associated Oil and Gas Activity(s): 00209851- 00209869

CONDITIONS

Notification

4. Unless a submission has been made under condition 5, the permit holder must annually, on or before March 31 of each year, submit to the Commission a Post Construction Plan map showing the location and nature of any construction activities completed under this permit during the previous calendar year.
5. Within 60 days of completion of construction activities under this permit, the permit holder must submit to the Commission a Post Construction Plan as a shape file and PDF plan accurately identifying the location of the total area actually disturbed under this permit, and a written statement indicating whether the permit holder has complied with the permit conditions and applicable legislation relating to the design and construction of the activities authorized under this permit. The written statement must be signed by the permit holder and specify the date on which it was made. The shapefile and plan must be submitted via eSubmission.

Clearing/Forest Act

6. 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.
7. Clearing and site preparation must be confined to the area approved in the Certified Project Description of the associated Environmental Assessment Certificate.

Archaeology

8. No construction activities are authorized in the vicinity of archaeology site(s) GkRf-29 without the issuance of a site alteration permit, pursuant to the terms under Section 12.4 of the *Heritage Conservation Act* and as approved by the BC Oil and Gas Commission.
9. 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.
10. 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.
11. 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.

Environment

12. 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 site prior to the construction activities taking place.
13. The permit holder must undertake dust control measures to ensure that dust resulting from construction activities does not affect safe travel on a road or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas or other similar areas.

14. The permit holder must undertake reasonable measures to mitigate noise from construction activity that has the potential to affect public safety or significantly impair the use and enjoyment of lawfully occupied permanent dwellings, significant public use areas during periods of use or other similar areas.
15. The permit holder must ensure shooflies are constructed in a manner that provides for proper surface drainage, prevents pooling on the surface, and maintains slope integrity.
16. In all locations where run-off from the area of the pipeline right of way or work space may flow into a watercourse, the permit holder must contour and stabilize banks and approach slopes and install berms, silt fences, cross ditches, or implement other alternative effective measures as appropriate to minimize erosion and avoid sediment deposit into the watercourse.

Agriculture Land Commission

17. The permit holder must, in relation to any oil and gas activities and related activities, authorized herein that are located within the Agricultural Land Reserve:
 - a. Implement any recommendations for soil handling and management of surface water contained in the Schedule A report(s) submitted with this application,
 - b. Within 24 months of the date of completion of pipeline construction, conduct reclamation of any area of land disturbed by non-farm use in accordance with any recommendations contained in the Schedule A Report and the requirements set out in Schedule B of the Agreement between the Provincial Agricultural Land Commission and the BC Oil and Gas Commission dated December 8, 2017, to the satisfaction of the BC Oil and Gas Commission, or in accordance with such alternate requirements identified by a Qualified Specialist and agreed to by the BC Oil and Gas Commission, and
 - c. Submit a Schedule B Report to the Oil and Gas Commission and to the landowner(s) if the area of land is private land, in accordance within the timelines specified in the Agreement.

ACTIVITY SPECIFIC DETAILS, PERMISSIONS AND CONDITIONS

PIPELINES

Land Area Number: 100015503

Pipeline Project Number: 000025689

Technical Pipeline Permissions

18. The permit holder is authorized to construct and operate the pipeline segments 001 to transmit natural gas under a maximum operating pressure of 9930 kPa, and under a maximum concentration of H₂S of 0.002 mol% unidirectionally in a 1219 mm (48 inch) diameter pipe, and in accordance Piping & Instrumentation Diagram(s) submitted by Coastal GasLink Pipeline Ltd.: 80373-01-ML-02-001 Revision B, dated June 17, 2020, 4759-01-ML-02-001 R02T1 Revision B, dated June 17, 2020. Changes may be made to pigging design, and to above ground valves and piping, provided that:
 - a. the changes do not affect direct connections to pipelines and facilities;
 - b. there are no changes to approved pressure protection, H₂S protection or isolation;
 - c. there is no substantive impact to any aspect of the project that was included in a consultation under the Consultation and Notification Regulation; and
 - d. the design and operation of the pipeline continues to meet all regulatory requirements including the requirements of CSA Z662, as amended from time to time.

ADVISORY GUIDANCE

1. Construction Plan - 80373-03-ML-15-001-Rev01.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. The permit holder must provide notices required by the Pipeline Regulation prior to beginning construction, maintenance or repair of the pipeline.
4. As required by section 4 of the Pipeline Regulation, the permit holder must design, construct, operate and maintain the pipeline in accordance with CSA Z662, as amended from time to time.
5. As required by section 4(2) of the Pipeline Regulation, the permit holder must submit to the Commission the pipe and component specifications and the as-built drawings for the pipeline within 3 months after completion of construction of a pipeline.
6. As required by section 24(1) of the Oil and Gas Activities Act General Regulation, the permit holder must complete the surveying and posting of the pipeline right of way within 16 months after completing construction of the pipeline.
7. As required by section 7 of the Pipeline Regulation, the permit holder must include the pipeline authorized by this permit in its Integrity Management Plan and Damage Prevention Program.
8. The permit holder must avoid all archaeology sites unless issued a site alteration permit by the Commission, pursuant to section 12 of the *Heritage Conservation Act*.

DEFINITIONS

Unless the condition or its context indicates otherwise, the terms in this permit have the same meaning as defined in the *Oil and Gas Activities Act* or the regulations under that Act.

“construction activities” or “construction” means clearing, site preparation, trench excavation, pipe installation and any other activities required to construct a pipeline.

“qualified specialist” means a person who possesses an appropriate combination of formal education, knowledge, skills, and experience to conduct a technically sound and rational assessment for the area of practice, and be familiar with applicable regulations, standards, policies, protocols and guidelines.

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



James O'Hanley
Vice President, Applications
Authorized Signatory
Commission Delegated Decision Maker

Copied to:

Landowners/Rights Holders .
Work Safe BC
BC EAO