



ORDER XG-W102-032-2018

IN THE MATTER OF the *National Energy Board Act*,
R.S.C. 1985, c. N-7, as amended (NEB Act) and the
regulations made thereunder; and,

IN THE MATTER OF an application made by Westcoast
Energy Inc., carrying on business as Spectra Energy
Transmission (Westcoast), pursuant to Part III (section 58 and
subsection 48(2.1)) and Part IV of the NEB Act and section 17
of the *National Energy Board Onshore Pipeline Regulations*
(OPR), dated 19 October 2017, filed with the National Energy
Board (Board) under File OF-Fac-Gas-W102-2017-11 01.

BEFORE the Board on 10 December 2018.

WHEREAS the Board received an application dated 19 October 2017 from Westcoast, pursuant to Part III (section 58 and subsection 48 (2.1)) and Part IV of the NEB Act, and section 17 of the OPR, to construct and operate the Spruce Ridge Program (Project) and for such further and other relief as the Board may consider appropriate;

AND WHEREAS Westcoast requested an Order pursuant to section 58 of the NEB Act, exempting Westcoast from the application of paragraphs 30(1)(a) and (b) and section 31 of the NEB Act in respect of the Project and exempting the pipeline tie-ins from the application of section 47 of the NEB Act;

AND WHEREAS the Project includes the construction and operation of two residue natural gas pipeline loops: the Chetwynd Loop, comprised of approximately 25 kilometres (km) of 914 millimetres (mm) (NPS 36) outside diameter pipeline and the Aitken Creek Loop, comprised of approximately 13 km of 609.6 mm (NPS 24) outside diameter pipeline, as well as the installation of two additional compressor units at the existing Compressor Station N5 and Compressor Station 2, and minor modifications at Compressor Station N5 and Compressor Station 16, as set out in Schedule A attached to, and forming part of, this Order;

AND WHEREAS the Board held a public hearing in respect of the Project, pursuant to Hearing Order GH-001-2018, as amended by way of procedural updates, during which the Board heard from Westcoast and the participants in the proceeding;

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AND WHEREAS the Board has had regard to all considerations that are directly related to the Project and relevant, including environmental matters, pursuant to Part III of the NEB Act;

AND WHEREAS the Board has examined the application and related submissions from Westcoast and participants in the proceeding and considers it to be in the public interest to grant the following relief;

IT IS ORDERED that, pursuant to section 58 of the NEB Act, the pipeline tie-ins specified in the application for the Project are exempt from the application of paragraphs 30(1)(a) and (b), and sections 31 and 47 of the NEB Act;

IT IS FURTHER ORDERED that, pursuant to section 58 of the NEB Act, the remaining facilities in the applied for Project, as specified in Schedule A, are exempt from the provisions of paragraphs 30(1)(a) and (b), and section 31 of the NEB Act, the effect of which is to approve the Project subject to the following conditions:

General

1. Condition Compliance

Westcoast must comply with all of the conditions contained in this Order unless the Board otherwise directs.

2. Design, Construction and Operation

Westcoast must cause the Project to be designed, located, constructed, installed and operated in accordance with the specifications, standards, commitments made and other information referred to in its application, subsequent filings or as otherwise agreed to during the hearing process.

3. Implementation of Environmental Protection

Westcoast must implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations, procedures and its commitments for the protection of the environment included in or referred to in its application, subsequent filings or as otherwise agreed to during the hearing process.

Prior to Construction

4. Environmental Protection Plan (EPP)

Westcoast must file with the Board **for approval, at least 30 days prior to commencing construction**, an updated project-specific EPP. The EPP must describe all environmental protection commitments, procedures, and mitigation and monitoring commitments as set out in its application, Westcoast's subsequent filings, or as otherwise agreed to in Westcoast's related submissions. The EPP must include, but not be limited to, the following:

- a) environmental protection procedures and criteria for implementing these procedures, mitigation measures and monitoring applicable to all Project phases and activities of the Project;
- b) any updates to contingency plans and management plans;
- c) an Amphibian Management Plan;
- d) a Breeding Bird Management Plan;
- e) a Traditional Land Use Sites Discovery Contingency Plan; and,
- f) updated environmental alignment sheets.

5. *Construction Schedule*

Westcoast must file with the Board, **at least 30 days prior to commencing construction**, a detailed construction schedule(s) identifying major construction activities, and must notify the Board of any modifications to the schedule(s) as they occur.

6. *Construction Monitoring Plan for Indigenous Peoples*

- a) Westcoast must file with the Board, **at least 30 days prior to commencing construction**, a plan describing participation by Indigenous peoples in monitoring activities during construction for adverse environmental impacts, archaeological resources and items, areas related to traditional land and resource uses, and areas of cultural significance. The plan must include, but not be limited to:
 - i) a summary of engagement activities undertaken with Indigenous peoples to develop the plan and to determine opportunities for their participation in monitoring activities;
 - ii) a list of potentially affected Indigenous peoples that have reached agreement with Westcoast to participate as monitors;
 - iii) the scope, methodology, and justification for monitoring activities to be undertaken by Westcoast and each participant identified in a)ii, including those elements of construction and geographic locations that will involve monitor(s);
 - iv) a description of how Westcoast will use the information gathered through the participation of monitor(s); and,
 - v) a description of how Westcoast will provide the information gathered through the participation of monitor(s) to the participating Indigenous communities.
- b) Westcoast must provide a copy of the plan to those Indigenous peoples identified in ii) **no later than three days after filing the plan with the Board**. Westcoast must file with the Board, prior to commencing construction, confirmation that it did so.

7. *Outstanding Traditional Land Use Investigations*

- a) Westcoast must file with the Board **for approval, at least 30 days prior to commencing construction**, a report on any outstanding traditional land use (TLU) investigations for the Project. The report must include, but not be limited to:
 - i) a summary of the status of TLU investigations undertaken for the Project, including Indigenous community-specific TLU studies or planned supplemental surveys;

- ii) a description of how Westcoast has considered and addressed information from any TLU investigations on which it did not report during the GH-001-2018 proceeding;
 - iii) a description of any outstanding concerns raised by potentially affected Indigenous peoples regarding potential effects of the Project on the current use of lands and resources for traditional purposes, including a description of how these concerns have been or will be addressed by Westcoast;
 - iv) a summary of any outstanding TLU investigations or follow-up activities that will not be completed prior to commencing construction, including why they are not being completed prior to construction, an estimated completion date, if applicable, and a description of how Westcoast has already identified, or will identify, any potentially affected TLU sites or resources if the outstanding investigations will not be completed prior to construction; and,
 - v) a description of how Westcoast has incorporated any revisions necessitated by the TLU investigations or follow-up activities into the EPP for the Project.
- b) Westcoast must provide a copy of the report to Indigenous peoples included in its consultation activities on any outstanding TLU investigations for the Project **no later than three days after filing the report with the Board**. Westcoast must file with the Board, prior to commencing construction, confirmation that it did so.

8. *Report on Engagement with Indigenous Peoples*

Westcoast must file with the Board, **at least 30 days prior to commencing construction, and every six months thereafter until completing construction**, a report summarizing Westcoast's engagement with all potentially affected Indigenous peoples identified, including Indigenous Intervenors. These reports must include, but not be limited to:

- a) a summary of the concerns raised by Indigenous peoples;
- b) a description of how Westcoast has addressed or will address the concerns raised;
- c) a description of any outstanding concerns; and,
- d) a description of how Westcoast intends to address any outstanding concerns, or an explanation as to why no further steps will be taken.

9. *Archaeological and Heritage Resource Permits and Clearances*

Westcoast must file with the Board, **at least 30 days prior to commencing construction**:

- a) confirmation that Westcoast has obtained all of the required archaeological and heritage resource permits and clearances from the British Columbia Ministry of Forests, Lands and Natural Resource Operations;
- b) a description of how Westcoast will meet conditions and respond to any comments and recommendations contained in the permits and clearances referred to in a) above; and,
- c) a description of how Westcoast has incorporated additional mitigation measures as applicable, into its EPP as a result of conditions or recommendations referred to in paragraph b).

10. Programs and Manuals

Westcoast must file the following programs and manuals with the Board, within the time specified:

- a) Construction Safety Manual(s), pursuant to section 20 of the *National Energy Board Onshore Pipeline Regulations*: **at least 14 days prior to commencing construction**. These manuals must address routine construction activities, as well as blasting, avalanche safety, and special access road procedures that may be required in areas subject to activities other than Project construction (e.g., quarry blasting);
- b) Field Joining Program: **at least 14 days prior to commencing joining activity**; and,
- c) Field Pressure Testing Program: **at least 14 days prior to commencing pressure testing**.

During Construction

11. Construction Progress Reports

Westcoast must file progress reports with the Board **on the 1st and 16th of each month during construction** of the Project. Each report must include the following:

- a) information on the activities carried out during the reporting period;
- b) an update on the extent to which construction activities overlap with applicable critical timing periods for wildlife and timing windows for instream works, and any mitigation measures required and implemented to reduce the risk of adverse impacts during the environmentally sensitive periods;
- c) any environmental, socio-economic, safety and security issues and issues of non-compliance; and,
- d) the measures undertaken for the resolution of each issue and non-compliance for environmental, socio-economic and safety issues, and confirmation that identified security issues have been addressed.

12. Landowner-specific Consultation Update

With respect to the private lands crossed by the Project that are owned by Mr. Charles Lasser (Landowner) and to which the Board refers in section 2.1.2.1 of its letter decision related to this Project, Westcoast must file a consultation update with the Board, **at least 30 days prior to commencing construction which includes**:

- a) a summary of its consultation with the Landowner from 20 September 2018 up to the time of filing. This summary must include, but not be limited to:
 - i) the methods, dates, and locations of consultation activities;
 - ii) a summary of any concern(s) and comments raised by the Landowner;
 - iii) how Westcoast has addressed or will address the concern(s) and comments raised;
 - iv) a description of any outstanding concerns; and,

- v) how Westcoast intends to address any outstanding concerns, or an explanation why no further steps are required; and,
- b) a site-specific construction plan for the part of the proposed Project located on the Landowner's lands, to be developed in consultation with the Landowner, describing the methods and timing of construction activities that affect the Landowner, including but not limited to:
 - i) the timing of construction activities;
 - ii) conditions for entry of Project-related survey and construction crews, including vehicles and equipment;
 - iii) number and location of right of way crossings;
 - iv) mitigation measures to reduce stress to the Landowner's cattle;
 - v) post-construction mitigation measures regarding re-vegetation; and,
 - vi) post-construction mitigation measures regarding tree removal; and,
- c) an explanation, if applicable, as to why Westcoast is unable to meet any of the requirements of the submissions described in (a) and (b) above.

13. Watercourse Crossing Inventory

Westcoast must file with the Board, **at least 30 days prior to commencing construction of any watercourse crossing**, the following:

- a) an updated inventory of all watercourses to be crossed, including, for each crossing:
 - i) the name of the watercourse being crossed and an identifier for the crossing;
 - ii) the location of the crossing;
 - iii) the primary and contingency crossing methods;
 - iv) information on the presence of fish and fish habitat;
 - v) a description of the composition of the riparian habitat at the crossing location and an indication if the riparian habitat has a limiting effect on the productive capacity of the watercourse, and if its removal or disturbance represents a potential influence on fish communities;
 - vi) the provincial instream work window or timing restrictions (i.e., window of least risk);
 - vii) planned construction timing; and,
 - viii) an indication of whether any of the applicable Fisheries and Oceans Canada's "Measures to Avoid Causing Harm to Fish and Fish Habitat" cannot be implemented; and,
- b) detailed generic design drawings of trenchless, dry open-cut, frozen open-cut, and isolation crossings of various watercourse types;
- c) site-specific information for each watercourse crossing where any of the applicable Fisheries and Oceans Canada's "Measures to Avoid Causing Harm to Fish and Fish Habitat" cannot be implemented for the primary watercourse construction method, including:
 - i) crossing-specific engineered design drawings;
 - ii) photographs up-stream, down-stream, and at the crossing location;
 - iii) a description of the fish species and habitat that is present at the crossing location, and whether fish spawning is likely to occur within the immediate area;

- iv) the site-specific mitigation and habitat enhancement measures to be used to minimize impacts;
 - v) any potential residual effects;
 - vi) proposed reclamation measures;
 - vii) commercial, recreational and Indigenous fishery resources within the immediate area as a result of the crossing's construction; and,
 - viii) an assessment of the risk of serious harm; and,
- d) a summary of consultations with appropriate government authorities, potentially affected Indigenous peoples and affected landowners/tenants. In its summary, Westcoast must provide a description and justification for how Westcoast has incorporated the results of its consultation, including any recommendations from those consulted.

14. Contingency Watercourse Crossings

- a) For any watercourse crossing where Westcoast will employ a contingency crossing method instead of its proposed primary method, and where any of the applicable Fisheries and Oceans Canada's "Measures to Avoid Causing Harm to Fish and Fish Habitat" cannot be implemented, Westcoast must file with the Board **at least 30 days prior to commencing construction of the contingency watercourse crossing**:
- i) confirmation of the contingency watercourse crossing method that will be employed, the rationale for employing that method, and a summary of the differences between the primary and contingency watercourse crossing methods; and,
 - ii) the following site-specific information:
 - a. detailed crossing-specific engineered design drawings;
 - b. photographs up-stream, down-stream, and at the crossing location; a description of the fish species and habitat that is present at the crossing location, and if fish spawning is likely to occur within the immediate area;
 - c. a description of the composition of the riparian habitat at the fish-bearing crossing location and an indication if the riparian habitat has a limiting effect on the productive capacity of the watercourse, and if its removal or disturbance represents a potential influence on fish communities;
 - d. the site-specific mitigation and habitat enhancement measures to be used to minimize impacts;
 - e. any potential residual effects;
 - f. proposed reclamation measures; and,
 - g. a discussion of the potential impacts to commercial, recreational and Aboriginal fishery resources (as defined in the *Fisheries Act*) within the immediate area as a result of the crossing's construction; and,
- b) For all other instances where a contingency crossing method will be employed and all of the applicable Fisheries and Oceans Canada's "Measures to Avoid Causing Harm to Fish and Fish Habitat" will be implemented, Westcoast must file with the Board, **at least 7 days prior to commencing construction of the contingency watercourse crossing**, a notification that the contingency method will be employed. With this notification,

Westcoast must explain why the contingency method is being employed and provide a summary of the differences between the primary and contingency watercourse crossing methods; and,

- c) Westcoast must provide, **within 30 days after the date that the last Order is issued for Leave to Open**, confirmation that any contingency watercourse crossing(s) identified to the Board pursuant to a) and b) were the only contingency watercourse crossing(s) implemented for the construction of the Project; or that contingency watercourse crossing methods were not required for the Project.

15. Authorizations under paragraph 35(2)(b) of the Fisheries Act and Species at Risk Act permits

- a) For any instream activities that will require an authorization under paragraph 35(2)(b) of the *Fisheries Act*, Westcoast must file with the Board, **at least 10 days prior to commencing the respective instream activities**, a copy of the authorization under paragraph 35(2)(b) of the *Fisheries Act*;
- b) For any instream activities that will require a permit under the *Species at Risk Act*, Westcoast must file with the Board, **at least 10 days prior to commencing the respective instream activities**, a copy of the permit issued under the *Species at Risk Act*; and,
- c) Westcoast must confirm, **within 30 days after the date that the last Order is issued for Leave to Open**, that:
 - i) any required *Fisheries Act* authorizations were obtained from Fisheries and Oceans Canada and filed with the Board pursuant to a), or notify the Board that no authorizations were required; and,
 - ii) any required *Species at Risk Act* permits for instream activities were obtained from the competent minister under the *Species at Risk Act*, and filed with the Board pursuant to b), or notify the Board that no permits were required.

Post-construction and Operation

16. Condition Compliance by the Accountable Officer

Within 30 days of the date that the construction of the Project is completed, Westcoast must file with the Board a confirmation that the Project was completed and constructed in compliance with all applicable conditions in this Order. If compliance with any of these conditions cannot be confirmed, Westcoast must file with the Board details as to why compliance cannot be confirmed. The filing required by this condition must include a statement confirming that the signatory to the filing is the accountable officer of Westcoast, appointed as Accountable Officer pursuant to section 6.2 of the *National Energy Board Onshore Pipeline Regulations*.

17. Caribou Habitat Offset Measures Plan

Westcoast must offset the Project footprint occurring within the Pine River Local Population Unit and the Graham Local Population Unit and file an Offset Measures Plan (OMP) with the

Board for approval. Westcoast may incorporate the implementation of the additional compressor stations offset measures into its other ongoing offsets programs. The Plan shall be filed **on or before 1 February after the second complete growing season** after commencing operation of the Project and include the following:

- a) the final quantification of the project footprint within the Pine River Local Population Unit and the Graham Local Population Unit;
- b) a table listing the offset measures and offset ratios to be implemented or already underway, including site-specific details and map locations, and an explanation of how they meet criteria in the scientific literature for offsets;
- c) a schedule indicating when offset measures will be initiated and the estimated date when implementation will be complete; and,
- d) an assessment of the predicted effectiveness of the measures, including a discussion of uncertainty, and a quantitative compilation showing how the offset measures have offset the previously calculated residual effects.

18. Caribou Monitoring Reports

Westcoast must file with the Board (and notify representatives of Indigenous peoples who have expressed to Westcoast an interest in this filing) **in accordance with the schedule referred to in Condition 20 c)**, reports outlining the results of the Caribou Habitat Offset Measures Monitoring Plan. The reports must also include the schedule referred to in Condition 20c).

19. Post-Construction Monitoring Plan for Indigenous Peoples

- a) Westcoast must file with the Board, **within 90 days after the date that the last Order is issued for Leave to Open**, a plan describing participation by Indigenous peoples in monitoring activities during the operation of the pipeline. The plan must include, but not limited to:
 - i) A summary engagement activities undertaken with Indigenous peoples to determine opportunities for their participation in monitoring activities;
 - ii) a list of potentially affected Indigenous peoples that have reached agreement with Westcoast to participate as monitors;
 - iii) the scope, methodology, and justification for monitoring activities to be undertaken by Westcoast and each participant identified in a) ii), including those elements of post-construction and operation, and geographic locations that will involve monitor(s);
 - iv) a description of how Westcoast will use the information gathered through the participation of monitor(s); and,
 - v) a description of how Westcoast will provide the information gathered through the participation of monitor(s) to the participating Indigenous community.
- b) Westcoast must provide a copy of the plan to those Indigenous peoples identified in a) ii)) **no later than three days after filing the plan with the Board**. Westcoast must also file with the Board confirmation that it did so.

20. *Post-Construction Environmental Monitoring Reports*

On or before 1 February following each of the first, third and fifth complete growing seasons after completing final clean-up, Westcoast must file with the Board a post-construction environmental monitoring report that:

- a) describes the methodology used for monitoring;
- b) identifies any modifications for the criteria established for evaluating reclamation success described in its EPP and the rationale for any modifications;
- c) identifies the issues to be monitored, including but not limited to unexpected issues that arose during construction, and their locations (e.g. on a map or diagram, in a table), including the Wetland Functions Monitoring Program;
- d) describes the current status of the issues (resolved or unresolved), any deviations from plans and corrective actions undertaken;
- e) assesses the effectiveness of mitigation measures (planned and corrective) against the criteria for success; including but not limited to an assessment of the effectiveness of implementation of species-specific (e.g. western toad, barn and bank swallows, little and northern brown myotis, migratory birds and breeding birds) mitigation measures; and,
- f) includes details of consultation undertaken with the appropriate provincial and federal authorities; and, provides proposed measures and the schedule that Westcoast would implement to address ongoing issues or concerns.

21. *Pipeline Geographic Information System (GIS) Data*

Westcoast must provide the Board, **within one year of the date Westcoast files with the Board the confirmation letter required pursuant to Condition 21**, as-built GIS data in the form of Esri® shapefiles. This must include:

- a) a file that contains pipeline segment centre lines identified by pipeline name, where each segment has a unique outside diameter, wall thickness, maximum operating pressure, external coating, field-applied girth weld coating, pipe manufacturing specification and depth of cover. If the above values of the pipeline change at any point along the length of the pipeline, the pipeline should be segmented at that point. This file must include details on the degree of accuracy of the GIS data; and,
- b) a file that depicts point locations and names of compressor stations, terminals, custody transfer meters, and block valves, as applicable.

The data must be NAD83 and projection must be geographic (latitudes and longitudes). The filing required by this condition must include a statement confirming that the signatory to the filing is the Accountable Officer of Westcoast.

22. *Sunset Clause*

This Order shall expire on 10 December 2021 unless construction in respect of the Project has commenced by that date.

NATIONAL ENERGY BOARD

Original signed by L. George for

Sheri Young
Secretary of the Board

SCHEDULE A
National Energy Board Order XG-W102-032-2018

Westcoast Energy Inc., carrying on business as Spectra Energy Transmission
Application dated 19 October 2017
assessed pursuant to section 58 of the *National Energy Board Act* and Section 43 of the
National Energy Board Onshore Pipeline Regulations

Spruce Ridge Program Project
File OF-Fac-Gas-W102-2017-11 01

Pipeline Specifications

Construction Type	New Construction	
Location	Chetwynd Loop Peace River Regional District, B.C. Private and Unserved Crown Land a-75-I/ 93-P-12 to c-77-G/ 93-O-9	Aitken Creek Loop Peace River Regional District, B.C. Unserved Crown Land b-29-I /94-B-16 to c-44-L /94-A-13
Length	Approximately 25 km	Approximately 13 km
Outside Diameter	914.4 mm (NPS 36)	609.6 mm (NPS 24)
Wall Thickness	13.1 mm	8.8 mm
Pipe Material	Carbon Steel	
Pipe Standard	CSA Z245.1	
Pipe Grade	483 Cat II M5C	
External Coating	<ul style="list-style-type: none"> Line, crossover and pigging pipe: 3-layer and/or fusion bonded epoxy Heavy wall pipe: 3-layer and/or fusion bond epoxy with abrasion resistant over coat 	
Maximum Operating Pressure	9,930 kPa (1,440 psi)	
Product Carried	Non-sour natural gas	

SCHEDULE A (continued)
National Energy Board Order XG-W102-032-2018

Facilities Specifications – New Unit at Compressor Station 2

Project Type	Modifications – Additional Unit
Facility Type	Compressor
Location	Existing Compressor Station 2
Description	Discharge Pressure of 9,930 kPa (1440 psig)
Product	Non-sour natural gas

Facilities Specifications – Compressor Station N5

Project Type	Modifications – Additional Unit
Facility Type	Compressor
Location	Existing Compressor Station N5
Description	Discharge Pressure of 9,930 kPa (1440 psig)
Product	Sour natural gas

Facilities Specifications – Compressor Station N5

Project Type	Modifications
Facility Type	Compressor Station
Location	Existing Compressor Station N5
Description	<ul style="list-style-type: none"> Upgrades to piping and equipment associated with compressor unit 2 to accommodate additional throughput Wheel upgrade to compressor
Product	Non-sour natural gas

Facilities Specifications – Compressor Station 16

Project Type	Modifications
Facility Type	Compressor Station
Location	Existing Compressor Station 16
Description	<ul style="list-style-type: none"> Upgrades to piping and equipment associated with compressor unit 1 to accommodate additional throughput Wheel upgrade to compressor
Product	Non-sour natural gas