

Non OGAA v 3.3

October 13, 2017

Trans Mountain Pipeline ULC 2700, 300 – 5<sup>th</sup> Avenue SW Calgary, AB T2P 5J2

Attention: Trans Mountain Pipeline ULC

RE: Determination of Application Area Number 100101505

Approval Holder: Trans Mountain Pipeline ULC

**Date of Issuance:** October 13, 2017 **Effective Date:** October 13, 2017

Application Submitted Date: July 17, 2017 Application Determination Number: 100101505 Approved Disturbance Footprint: 66.264 ha

# **GENERAL APPROVALS and CONDITIONS**

# **APPROVALS**

# **Land Act**

1. The BC Oil and Gas Commission (the "Commission") under section 39 of the Land Act hereby approves the Approval Holder referenced above to use and occupy Crown land to construct and operate an NEB related activity(s) as set out in the applicable Approved Activities and Activity Details tables below for the purposes of constructing and operating a pipeline under the National Energy Board Act (Canada) subject to the conditions set out herein.

# **APPROVED ACTIVITIES**

<b>NEB Ancillary Activity No:</b> 00171374–00171416	Type: Access	<b>Tenure No.:</b> 9000178 <b>Document No.:</b> 954897
NEB Road Right of Way No.: 04615	Segment No.: 003, 005, 007, 013, 023, 056, 058, 059, 065, 074, 075, 076, 077, 089, 091, 092, 094, 095, 106, 108	
Changes in and about a Stream No.: 0003911	As included in the application referenced herein, unless referenced in the Refused Activities table, below.	Tenure No.: N/A Document No.: N/A

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### **ACTIVITY DETAILS**

From: N 5875966.84	Ε	349566.123	<b>To: N</b> 5871823.497	Ε	344443.338
From: N 5871047.836	Ε	343887.885	To: N 5870552.004	Ε	342785.195
From: N 5870036.331	Ε	339459.948	To: N 5870112.721	Ε	339586.053
From: N 5861016.55	Ε	345387.6	To: N 5862059.379	Ε	344730.306
From: N 5853143.486	Ε	346539.123	To: N 5853082.554	Ε	346364.732
From: N 5826561.998	Ε	357804.573	<b>To: N</b> 5826644.769	Ε	358338.522
From: N 5826544.816	Ε	357673.587	To: N 5826553.466	Ε	357759.631
From: N 5826377.575	Ε	357723.221	To: N 5826538.48	Ε	357742.042
From: N 5822871.113	Ε	356518.659	To: N 5822858.995	Ε	356557.876
From: N 5814426.391	Ε	355288.29	<b>To: N</b> 5814416.69	Ε	355380.834
From: N 5814218.606	Ε	355294.039	<b>To: N</b> 5814183.089	Ε	355309.883
From: N 5812627.343	Ε	354690.96	<b>To: N</b> 5812707.383	Ε	354691.138
From: N 5806943.895	Ε	352671.947	<b>To: N</b> 5806972.194	Ε	352665.136
From: N 5796607.621	Ε	351131.426	<b>To: N</b> 5796621.689	Ε	351142.511
From: N 5792274.267	Ε	349829.968	<b>To: N</b> 5792374.718	Ε	349941.798
From: N 5789838.588	Ε	349165.497	To: N 5789858.588	Ε	349021.435
From: N 5788463.019	Ε	348538.223	<b>To: N</b> 5788470.853	Ε	348532.337
From: N 5787869.535	Ε	348337.576	<b>To: N</b> 5787885.178	Ε	348306.61
From: N 5781590.827	Ε	344863.042	<b>To: N</b> 5781589.757	Ε	344866.378
From: N 5778681.655	Ε	343712.267	To: N 5778678.947	Ε	343720.104
	From: N 5871047.836 From: N 5870036.331 From: N 5861016.55 From: N 5853143.486 From: N 5826561.998 From: N 5826544.816 From: N 5826377.575 From: N 5822871.113 From: N 5814426.391 From: N 5814218.606 From: N 5812627.343 From: N 5806943.895 From: N 5796607.621 From: N 579838.588 From: N 5788463.019 From: N 5787869.535 From: N 5787869.535	From: N 5871047.836 E From: N 5870036.331 E From: N 5861016.55 E From: N 5853143.486 E From: N 5826561.998 E From: N 5826544.816 E From: N 5826377.575 E From: N 5822871.113 E From: N 5814426.391 E From: N 5814218.606 E From: N 5812627.343 E From: N 5806943.895 E From: N 5796607.621 E From: N 579838.588 E From: N 5788463.019 E From: N 5787869.535 E From: N 5787869.535 E	From: N 5871047.836 E 343887.885 From: N 5870036.331 E 339459.948 From: N 5861016.55 E 345387.6 From: N 5853143.486 E 346539.123 From: N 5826561.998 E 357804.573 From: N 5826544.816 E 357673.587 From: N 5826377.575 E 357723.221 From: N 5822871.113 E 356518.659 From: N 5814426.391 E 355288.29 From: N 5814218.606 E 355294.039 From: N 5812627.343 E 354690.96 From: N 5806943.895 E 352671.947 From: N 5796607.621 E 351131.426 From: N 5789838.588 E 349165.497 From: N 5788463.019 E 348538.223 From: N 5787869.535 E 344863.042	From: N 5871047.836         E 343887.885         To: N 5870552.004           From: N 5870036.331         E 339459.948         To: N 5870112.721           From: N 5861016.55         E 345387.6         To: N 5862059.379           From: N 5853143.486         E 346539.123         To: N 5853082.554           From: N 5826561.998         E 357804.573         To: N 5826644.769           From: N 5826544.816         E 357673.587         To: N 5826553.466           From: N 5826377.575         E 357723.221         To: N 5826538.48           From: N 5814426.391         E 355288.29         To: N 5814416.69           From: N 5814218.606         E 355294.039         To: N 5814183.089           From: N 5812627.343         E 354690.96         To: N 5812707.383           From: N 5806943.895         E 352671.947         To: N 5806972.194           From: N 5796607.621         E 349829.968         To: N 5792374.718           From: N 5789838.588         E 349165.497         To: N 5789858.588           From: N 5787869.535         E 348337.576         To: N 5787885.178           From: N 5781590.827         E 344863.042         To: N 5781589.757	From: N 5871047.836 E 343887.885 To: N 5870552.004 E From: N 5870036.331 E 339459.948 To: N 5870112.721 E From: N 5861016.55 E 345387.6 To: N 5862059.379 E From: N 5853143.486 E 346539.123 To: N 5853082.554 E From: N 5826561.998 E 357804.573 To: N 5826644.769 E From: N 5826544.816 E 357673.587 To: N 5826553.466 E From: N 5826377.575 E 357723.221 To: N 5826538.48 E From: N 5822871.113 E 356518.659 To: N 5822858.995 E From: N 5814426.391 E 355288.29 To: N 5814416.69 E From: N 5812627.343 E 354690.96 To: N 5812707.383 E From: N 5806943.895 E 352671.947 To: N 5806972.194 E From: N 5792274.267 E 349829.968 To: N 5792374.718 E From: N 5788463.019 E 348538.223 To: N 5788470.853 E From: N 5787869.535 E 348337.576 To: N 5787885.178 E From: N 5787869.535 E 344863.042 To: N 5781589.757 E

- 2. The approvals 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. The Commission, pursuant to section 39 of the *Land Act*, hereby approves the occupation and use of any Crown land located within the activity area.
  - a) A licence approved under section 39 of the *Land Act* for the Crown land portion of this application is attached. The Approval Holder is subject to the conditions contained in the Licence.
  - b) The approval to occupy and use Crown land under the Licence 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.
  - c) The approval to occupy and use Crown land does not entitle the Approval Holder to exclusive possession of the activity area.
  - d) The total disturbance within the activity area must not exceed the total approved disturbance footprint as referenced above.
  - e) The permission to occupy and use Crown land excludes the area within map reserves designated under sections 16 and 17 of the *Land Act*, unless:
    - (i) the map reserves have been amended for the purposes of the Trans Mountain Expansion Project; or
    - (ii) the Trans Mountain Expansion Project has been deemed compatible use with the overlapped map reserves.

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#### **Forest Act**

4. The Commission, pursuant to section 47.4 of the *Forest Act*, hereby approves 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.: M02455 Master Licence to Cut No.: M02363

Cutting Permit No.: 4

Cutting Permit No.: 10

Timber Mark No.: MTC178

Total New Cut: 21.65 ha

Cutting Permit No.: 10

Timber Mark No.: MTC179

Total New Cut: 36.14 ha

Forest District: (DPG) Prince George Natural
Resource District

Forest District: (DKA) Thompson Rivers Natural
Resource District

Region: Interior Region: Interior

5. Timber harvesting under each of the above cutting permits must not commence until the Approval Holder has submitted the relevant appraisal documents to the Ministry of Forests, Lands and Natural Resource Operations and Rural Development and received confirmation of the stumpage rate.

6. The cutting permits are deemed spent upon the submission of the post-construction plan or upon either the cancellation or expiry of the activities approved under the permit.

# **Water Sustainability Act**

- 7. The Commission, pursuant to section 11 of the *Water Sustainability Act*, approves the changes in and about a stream, as detailed in the application, within the activity area for construction and maintenance activities, unless otherwise restricted by this approval.
- 8. Except with leave of the Commission, in-stream works must be carried out in accordance with the methods and any mitigations, as specified in the application.

### CONDITIONS

#### **Notification**

- 9. A notice of construction start must be submitted prior to the commencement of activities under this permit 48 hours before or as per the relevant legislation if longer than 48 hours. Notification must submitted via Kermit for pipelines and facilities. For all other activity types notification must be submitted through OGC.ExternalNotifications@bcoqc.ca.
- 10. At least 48 hours prior to the commencement of activities under this approval, the Approval Holder must provide notice to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the work is to commence.
- 11. On or before April 30 of each year until construction is completed, the Approval Holder must submit to the Commission an interim post-construction plan as a PDF plan accurately identifying the location any roads constructed under this approval during the preceding year (April 1 to March 31).
- 12. Within 60 days of the completion of construction activities under this approval, the Approval Holder must submit to the Commission a final post-construction plan as a shapefile and PDF plan accurately identifying the location of the total area actually disturbed under this approval.
- 13. A notice of maintenance activities must be submitted, as per the relevant Commission process at the time of submission, at least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities.
- 14. At least 21 working days prior to the commencement of any changes in or about a stream associated with maintenance activities, the Approval Holder must provide a notice of works to any First Nation(s) who may have Aboriginal Interests identified, as per the BC First Nations Consultative Areas Database, within the area in which the works are to occur.

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15. Prior to deactivating any road segment authorized under this permit, the Approval Holder must provide written notice of the intention to users of the road known to the Approval Holder, and the Commission via the Declaration of Road Deactivation Form via eSubmission.

#### **Environmental**

- 16. 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.
- Clearing and site preparation must be confined to the area approved in the Certified Project Description of the associated Environmental Assessment Certificate.
- 18. 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 operating area prior to the construction activities taking place.
- 19. 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.
- 20. The Approval 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 approval.
- Following completion of the construction activities authorized herein, the Approval Holder must, as soon as practicable:
  - a) decompact any soils compacted by the activity;
  - if natural surface drainage pattern was altered by the carrying out of the activity, the Approval Holder must restore, to the extent practicable, to the drainage pattern and its condition before the alteration: and
  - re-vegetate any exposed soil on the activity area including, where necessary, using seed or vegetative propagules of an ecologically suitable species that:
    - 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.
- 22. Following completion of construction activities authorized herein, 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.
- 23. The Approval Holder must take reasonable measures to ensure that the quality, quantity or timing of flow of the water to any waterworks located within or adjacent to the activity area is not materially adversely affected. If it is not practicable to avoid such an effect, the Approval Holder must:
  - take all reasonable measures to minimize the adverse effect;
  - provide notice to the owner or user of the waterworks before or as soon as practicable following any adverse effect; and
  - for the period of adverse effect, provide the owner or user of the waterworks with an alternate supply of water of equal or better quality.
- 24. The Approval Holder must ensure that the approved activities do not cause a material adverse effect on the quality, quantity or natural timing of flow of water in an aquifer.
- 25. If construction activities result in the removal or rendering ineffective of a range barrier, the Approval Holder must, before livestock is turned out on the area, or, if livestock turnout has occurred, as soon as practicable, construct a replacement barrier that is at least as effective as the one removed or rendered ineffective was before the removal or rendering ineffective.
- 26. The Approval Holder must, as soon as practicable, restore recreation sites, recreation trails, or recreation facilities established or authorized under the Forest and Range Practices Act that are adversely affected by construction activities to their pre-construction condition to the Commission's satisfaction.
- 27. Clearing and site preparation must be confined to the construction corridor, except as approved in the spatial data referenced in Approvals, above, and must not, without leave of the Commission, occur within:

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 a) an area containing a significant mineral lick, bear den, Trumpeter Swan nest, other nesting site, significant wallow, or Sharp-tailed Grouse Lek, unless it is not damaged by activities approved under this permit;

- b) Old Growth Management Areas, other than those identified in conflict in the Old Growth Management Areas Mitigation and Replacement Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 76, dated September 2016, unless the incursion is less than 0.1 ha;
- c) Wildlife Tree Retention Areas; or
- a Riparian Management Area, except as approved in the spatial data referenced above, unless the Riparian Management Area has been previously cleared.
- 28. Prior to new construction or modification, the Approval Holder must complete a pre-site assessment identifying any karst features within 100 m of approved activities. The Approval Holder must submit, to the satisfaction of the Commission, results of the assessment, including mitigation in the form of a report. The assessment and report must be completed by a qualified professional.
- 29. The road must be maintained such that dust resulting from construction or use 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.
- 30. The Approval Holder must undertake reasonable measures to mitigate noise from the construction or use of the road 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.
- 31. (1) Except with leave of the Commission or where the stream is dry or frozen, water quality must be monitored by a qualified professional in accordance with this condition, during construction where works occur:
  - a) in-stream;
  - b) within the Riparian Reserve Zone of streams with a Riparian Class of S1, S2, or S3; or
  - c) within 20 m of a stream with a Riparian Class of S4.
  - (2) The Approval Holder must:
  - a) monitor locations upstream and downstream of the location of any physical disturbance associated with the project either in-stream or in the riparian areas identified above;
  - identify, document and report to the Commission any exceedance of the British Columbia Approved Water Quality Guideline: Aquatic Life, Wildlife & Agriculture (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines");
  - c) inform the Commission of any exceedance within 24 hours of becoming aware of it; and
  - d) undertake measures to eliminate the cause of the exceedance and remedy the effects of it.
- 32. Except with leave of the Commission or where the wetland is dry or frozen, water quality must be monitored by a qualified professional in accordance with this condition, during construction where works occur within a W1 wetland. The Approval Holder must:
  - a) monitor the locations proximal to the disturbance from construction activities;
  - identify, document and report to the Commission any exceedance of the British Columbia Approved Water Quality Guideline: Aquatic Life, Wildlife & Agriculture (March 2016 or as amended or replaced from time to time) (the "Water Quality Guidelines");
  - c) inform the Commission of any exceedance within 24 hours of becoming aware of it; and
  - d) undertake measures to eliminate the cause of the exceedance and remedy the effects of it.

### Clearing

33. The Approval Holder is permitted to fell any trees, under applicable regulations, located on Crown land within 1.5 tree lengths of the activity area that are considered to be a worker safety hazard 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.

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34. The holder of the cutting permit must pay to the government, stumpage and any monetary waste billing determined in accordance with the *Forest Act* and the terms of this approval.

- 35. All harvested Crown Timber must be marked with the cutting permit's associated Timber Mark.
- 36. Stumpage for cutting permits falling within the Interior Area, as defined in the Interior Appraisal Manual (Manual) will be calculated in accordance with the Manual as amended from time to time. In the current version of the Manual, stumpage will be determined in accordance with Table 6-3 (volume based).
- Monetary waste billing applied under the Master Licence to Cut are subject to the merchantability specifications and waste billing requirements in the Provincial Logging Residue and Waste Measurement Procedures Manual.

# **Water Course Crossings and Works**

- 38. Subject to the provisions of this approval, crossings of streams must be constructed in accordance with the Vehicle Crossing Methods, as appropriate, that are specified in the document named 01-13283-S3-0000-EV-XGS-0003 R2.xlsx, uploaded 2017-09-01 12:44:38.0 that has been submitted to the satisfaction of the Commission.
- 39. Stream crossing methods, other than the Vehicle Crossing Methods described in condition 38, may be constructed if a qualified professional assesses potential environmental impacts as less than impacts associated with the aforementioned methods and as long as the alternate methods are not otherwise restricted by this approval.
- 40. The Approval Holder must ensure all of the following for each crossing of a stream, wetland and lake:
  - the crossing is constructed and maintained at times and in a manner that is unlikely to harm fish or destroy, damage or harmfully alter fish habitat;
  - b) the crossing does not prevent the movement of fish, nor impede the movement of fish to the extent that it is harmful to the survival of the fish;
  - c) the side of the stream, lake or wetland is protected at the crossing; and
  - any disturbance to the stream channel and stream bank, wetland or lake bottom, as applicable, is mitigated.
- 41. In-stream activities within a fish bearing stream, lake or wetland must occur:
  - a) during the applicable reduced risk work windows as specified in the regional timing windows for respective regions through which the road/access passes and within which the works will occur;
  - in accordance with alternative timing and associated mitigation recommended by a qualified professional and accepted by the National Energy Board and provided to the Commission; or
  - in accordance with an authorization from Fisheries and Oceans Canada (DFO) that is provided to the Commission, or in accordance with DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat.
- 42. Any substance, sediment, debris or material that could adversely impact the stream:
  - must not be allowed or permitted to enter or leach or seep into the stream from an activity, construction, worksite, machinery or from components used in the construction of any works, or
  - b) must not be placed, used or stored within the stream channel.
- 43. Mechanical stream crossings must be constructed, maintained and deactivated according to the following requirements, as applicable:
  - a) Only bridges, culverts, ice bridges or snow fills may be constructed at stream crossings.
  - b) Notwithstanding, (a), matting or steel plates may be used to cross streams classified as NCD or S6;
  - The Approval 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
    - soil property standards, as they apply to bridge piers and abutments; set out in the Canadian Foundation of Engineering Manual.

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- d) Except with leave of the Commission, the Approval Holder must ensure that:
  - i. any culverts used are designed and fabricated in compliance with the applicable:
    - (a) Canadian Standards Association CSA G401, Corrugated Steel Pipe Products; or

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- (b) Canadian Standards Association Standard CSA B1800, Section B182.2, Plastic Non-pressure Pipe Compendium; or
- 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 Approval Holder must ensure that bridges and 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 the table below for the period the Approval Holder anticipates the structure will remain on site, as set out in Column 1 in the table below:

Column 1 Anticipated period crossing structure will remain on site	Column 2 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:

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- (a) is a temporary installation, and the Approval 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) 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.
- g) Water applied to construct an ice bridge on a water body must be sourced in accordance with the Water Sustainability Act unless:
  - i. the water body is a stream with a stream channel width of at least 5 metres and is not designated as a sensitive stream under the *Fish Protection Act*, or has a riparian class of W1. W3. or L1:
  - ii. the water is sourced from the same water body proximal to the location on which the ice bridge is constructed;

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- iii. the water body is not within the boundaries of a public park;
- iv. 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:
  - (a) 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
  - (b) 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.
- h) Records of water withdrawal and corresponding streamflow measurements are maintained by the Approval Holder and provided to the Commission upon request.
- i) 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, culverts must be installed to allow meltwater to pass through. Snow fill and any installed culverts must be removed prior to spring snow melt.
- j) Bridge or culvert abutments, footings and scour protection must be located outside the natural stream channel and must not constrict the channel width.
- k) Equipment used for activities under this approval must not be situated in a stream channel unless it is dry or frozen to the bottom at the time of the activity or if under flowing conditions, is carried out in accordance with DFO's Measures to Avoid Harm to Fish and Fish Habitat, and the advice of a qualified professional.
- 44. (1) Before any in-stream maintenance works in or adjacent to a stream or wetland crossing occurs where any of the following are established in relation to the stream or wetland after construction of the road is complete:
  - Species identified as special concern, threatened, or endangered under the federal Species at Risk Act;
     or
  - b) Species identified by Order as a species at risk under the Forest and Range Practices Act or the Oil and Gas Activities Act.

the Approval Holder must submit a plan developed by a qualified professional, to the satisfaction of the Commission, that specifies measures to avoid or mitigate potential impacts to those species.

- (2) The Approval Holder must implement the plan when undertaking the maintenance works.
- 45. Wetland crossings must be constructed, maintained and removed in accordance with the following:
  - a) Organic cover within and adjacent to the wetland must be retained;
  - b) Minimize erosion or release of sediment within the wetland;
  - c) Any padding materials must be placed on the wetland surface only and must not be used for infilling;
  - d) Any padding materials must be removed as soon as practicable following construction, considering weather and ground conditions; and
  - e) The wetland, including banks and bed, must be restored, to the extent practicable, to the condition that existed before the crossing was initiated.
- 46. Following initial construction, stream crossings are approved for necessary road modification activities on the operations area except for:
  - a) works within the boundary of a provincial park;
  - b) construction or replacement of a bridge or major culvert on a S1, S2, S3, S4 or S5 stream;
  - c) installation of a closed bottom structure in a fish bearing stream;
  - d) excavation or grading of a stream bank of stream bed;

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- e) works within a stream established under s. 27 of the Environmental Protection and Management Regulation (EPMR) as a Temperature Sensitive Stream; or
- f) works within a Fisheries Sensitive Watershed established under s. 28 of the EPMR.
- 47. The Approval Holder must place and maintain a sign, at a distance from each bridge sufficient to enable users to stop safely before reaching the bridge that states the maximum load capacity of the bridge.
- 48. The Approval Holder must ensure that each bridge or major culvert is regularly inspected by a qualified person. Records of inspections must be retained by the Approval Holder for at least one year after the bridge or major culvert is removed from the site or the Approval Holder's responsibility for the road ceases.
- 49. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road.
- 50. The Approval Holder must ensure that bridges and culverts on fish streams are constructed and maintained in a manner that does not prevent or impede the movement of fish.
- 51. The Approval Holder must prepare and maintain as-built drawings of any bridges or culverts exceeding 2000 mm in diameter or height that are constructed or modified by the Approval Holder. These drawings must be provided to the Commission upon request.

### **Archaeology**

52. An AIA report must be submitted to the Commission as soon as practicable.

# **Road Conditions**

- 53. Unless a condition or its context suggests otherwise, terms used in this approval have the same meaning as the Oil and Gas Road Regulation under the *Oil and Gas Activities Act*.
  - a) The term "culvert" refers to culverts other than "major culverts", as defined in the Oil and Gas Road Regulation.
  - b) A "major culvert" has the same meaning as in the Oil and Gas Road Regulation.
- 54. The Approval Holder must ensure that the road is cleared to the width necessary to ensure all of the following:
  - a) the safety of Approval Holders using the road;
  - b) the integrity of the topography of the area;
  - c) the maintenance of draining of water in the area;
  - d) the stability of terrain in the area; and
  - e) the safe conduct of operations, considering the following:
    - i. the placement of pits, quarries, landings or waste areas;
    - ii. the storage of bridge of culvert material;
    - iii. the amount of area required to operate equipment within the clearing width, including equipment turnaround sites;
    - iv. the need to remove snow; and
    - v. the need to construct fencing or other ancillary structures.
- 55. The Approval Holder must ensure that the road is designed, constructed and maintained in a manner that does each of the following:
  - a) enables industrial and non-industrial users of the road to use the road safely;
  - b) preserves the integrity of the topography of the area;
  - c) maintains the drainage of water in the area; and
  - d) protects stability of the terrain in the area.

Permitting and Authorizations Page 9 of 12 Telephone: (250) 794-5200 Physical Address: 6534 Airport Road, Fort St. John, BC Facsimile: (250) 794-5379 Mailing Address: Bag 2, Fort St. John, BC V1J 2B0 24 Hour: (250) 794-5200

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56. If the Approval Holder temporarily stops using the oil and gas road to carry out a primary activity for a period anticipated to be greater than 6 months, the person is not required to perform the maintenance and undertake the modifications set out in condition 8 but must ensure:

- a) the structural integrity of the road prism and clearing width are stable, and
- b) the drainage systems of the road are functional

to the extent necessary to ensure there is no material adverse effect on fish, fish habitat, water quality or quantity, wildlife or wildlife habitat.

### **Road Operations and Maintenance**

- 57. The Approval Holder must perform the maintenance and undertake modifications necessary to ensure that:
  - a) the road prism and all access structures related to the road are stable;
  - b) watercourse crossing structures and any other in-stream works associated with the road are functional and appropriate for the uses of the road; and
  - road surface and slope drainage systems are functional and prevent pooling of water on the road surface.
- 58. If a structural deficiency occurs on a bridge authorized under this Permit during the construction or maintenance of the road, the Approval Holder must do at least one of the following:
  - a) correct the defect or deficiency;
  - b) close, remove or replace the bridge; or
  - c) restrict traffic loads to a safe level.
- 59. The Approval Holder must ensure that the activities associated with this permit do not result in any deleterious materials being deposited into a stream, wetland or lake.
- 60. The Approval Holder must not operate a motor vehicle at a speed that is unsafe for the conditions and exceeds the lesser of 80km/h or the speed posted on a relevant traffic control device.
- 61. The Approval Holder must not close or restrict access to the road by another person except temporarily as set out below:
  - To address an existing or imminent threat to the road or environment, or that may endanger human life or property;
  - b) To address something that would impede the Approval Holder from using the road; or
  - c) To carry out maintenance on the road as required by this permit.
- 62. If access to the road is restricted in accordance with the provisions of this permit, the Approval Holder must notify the Commission immediately.

#### **Deactivation**

- 63. Except with leave of the Commission, the Approval Holder must deactivate the road when the road is no longer needed. At minimum, deactivation must include:
  - Barricade of the road surface width in a clearly visible manner to prevent access by motor vehicles, other than all-terrain vehicles;
  - b) Removal of stream pipe culverts and arch culverts;
  - c) Removal of bridge and log or box culvert superstructures; and
  - d) Stabilization of the road prism and the clearing width of the road.
- 64. The Approval Holder must not begin deactivating the road for 14 days from the date of submission of notice of deactivation in accordance with this approval.
- 65. Any road segment authorized by this permit that is not included in the notice to deactivate must continue to be maintained by the Approval Holder.

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# **ADVISORY GUIDANCE**

 Construction Plans are for the Approval Holder's internal reference only and were not reviewed as a decision tool for this permit, nor do they form an integral part of this permit.

- 2. The Approval Holder should be aware that the approval under s.39 of the *Land Act* does not extend to Indian Reserves; parks, protected areas or recreation areas designated under the *BC Parks Act*; municipal Crown land; or private land.
- 3. The Approval Holder should be aware that the approval under the *Forest Act* to harvest timber does not extend to harvesting within private land or area based tenures, specifically woodlots, tree farm licences, First Nations woodland licences, and community forests.
- 4. The Approval Holder should be aware that impacts to recreation features, trails, recreation facilities, interpretative forest sites or recreation sites identified, authorized or established under the Forest and Range Practices Act are subject to additional authorizations by the Ministry of Forests, Lands and Natural Resource Operations.
- 5. The Approval Holder should be aware that there may be First Nation's traditional, cultural, or spiritual activities occurring concurrently with maintenance activities, as well as areas of current use or cultural resources that overlap the activity area. All reasonable efforts should be made to minimize interference with those activities while carrying out the activities authorized herein.
- 6. 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.
- 7. 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.

# <u>REFUSALS</u>

The BC Oil and Gas Commission ("the Commission"), under section 26 (1) (a) of the *Oil and Gas Activities Act (OGAA)*, hereby refuses permissions for the following activity(s) indicated in the Refused Activities table below and submitted as part of the Application Area Number referenced above.

### REFUSED ACTIVITIES

NEB Road Right of	Segment No.: 001					
<b>Way No.:</b> 04615	From: N 5876756.001 E 350879.002	To: N 5876691.614	<b>E</b> 350759.622			
Changes in and about a Stream	AR_NOV2016_14					

All pages included in this permit and any attached plan(s) form an integral part of this permit.

James O'Hanley

Vice President, Permit Adjudication

Copied to:

Land Agent – CH2M Hill Energy Canada, Ltd.

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First Nations – Adams Lake Indian Band, Canim Lake Indian Band, Lheidli-T'enneh Band, Lhtako Dene Nation, Neskonlith Indian Band, Simpcw First Nation
Ministry of Forests - Prince George Natural Resource District & Thompson Rivers Natural Resource District OGC Compliance and Enforcement
OGC Community Relations

Approval Holder: Trans Mountain Pipeline ULC