



**INSPECTION OFFICER ORDER NO. SLM - 002 - 2017**

IN THE MATTER OF THE *NATIONAL ENERGY BOARD ACT*, AN ORDER UNDER SECTION 51.1

\_\_\_\_\_  
*Full name of the recipient*

is employed by Westcoast Energy Inc., carrying on business as Spectra Energy Transmission (Westcoast), and/or is a person conducting

*Company Name*

an excavation or construction on or near a facility located at Chetwynd, British Columbia.

On 26 August 2017, the undersigned *National Energy Board* Inspection Officer conducted

*Date*

an inspection at WCS-10 Tributary to Moberly River 55.814522 -122.165859 and WCS-16 Highrise Creek at 55.767084 -122.214498.

*Location on R.O.W*

The Inspection Officer has reasonable grounds to believe:

1. The access bridges over the two watercourse crossings have not been constructed according to specification drawings, and may not be safe for large equipment, pipe and people to cross;
2. The "Riparian Management Areas" have not been adequately protected from rutting and general disturbance; and
3. Sediment and erosion control measures at each watercourse crossing is not adequate.

*the inspection officer shall describe the grounds for making the order*

*Based on the above mentioned, the inspection officer has reasonable grounds to believe that a hazard to the safety or security of the public, or employees of a company or a detriment to property or the environment is being or will be caused by the construction, operation, maintenance or abandonment of the pipeline, or excavation activity or construction of a facility as per 49(2)(a).*

Therefore, \_\_\_\_\_ is HEREBY ORDERED,

*Full name of the recipient*

pursuant to subsections 51.1(1) and 51.1(2) of the *National Energy Board Act*, to

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|--|--|
| <input checked="" type="checkbox"/> take measures specified below for guarding the safety or security of the public or employees or protecting property or the environment | <input checked="" type="checkbox"/> Suspend work until the hazard or detrimental situation has been remedied to the satisfaction of the inspection officer; or the order is stayed or rescinded by the Board |
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Specified Measures: Westcoast shall:

- a) Stop travel on the span bridges located at WCS-10 Tributary to the Moberly River, and WCS-16 Highrise Creek;
- b) Stop travel on the wooden access ramp across WCS-16 Highrise Creek and remove as soon as practicable;
- c) Provide written confirmation from a Professional Engineer that the span bridges located at WCS-10 and WCS-16 meet the requirements of Spectra Energy Drawing No. 22 Typical Temporary Bridge-Portable, and that it is safe to transport sidebooms and the 42" section of pipe to be installed at each watercourse;



and

- d) Correct all non-compliances at each watercourse with reference to requirements specified in the High Pine Expansion Project Environmental Protection Plan, dated 2 August 2016.

### 26 August 2017 Inspection - South Pipeline Loop Watercourses

Reference: EPP, Table 7-7 & Environmental Alignment Sheets

#	KP	Name	Riparian Management Area M	Resources, Requirements and Hazards	Observations
WCS-10	8.9	Tributary to Moberly River	40 (80 total)	<ul style="list-style-type: none"> <li>• Caribou herd range</li> <li>• The riparian management area will be flagged prior to construction</li> <li>• Install clear span bridge</li> <li>• Fish bearing watercourse</li> <li>• RAP from July 15 to August 15</li> <li>• Avoid harm to fish and fish habitat</li> <li>• Rescue fish prior to crossing</li> <li>• Keep RoW clearing as narrow as possible within the riparian zone and disturbance in the riparian area disturbance should be minimized</li> <li>• Disturbance and clearing minimized</li> <li>• Discharge water 50 m away from watercourse and prevent erosion</li> <li>• Gaps will be left in strippings at wildlife trails</li> <li>• Apply seed mix to minimize erosion</li> <li>• For bank stabilization, soft engineering is preferred over riprap armoring to facilitate natural channel processes. On steep banks utilize brush layering or geo-grid system to stabilize soil. If stream banks must be armored, install live dormant posts of will or dogwood between riprap and through an underlying geotextile cloth at a prescribed density</li> </ul>	<ul style="list-style-type: none"> <li>• Silt fence does not meet compliance to specification Spectra Energy Drawing No.1</li> <li>• Clean granular material has not been used to construct the temporary bridge as required by specification Spectra Energy Drawing No. Drawing 22</li> <li>• Metal supporting posts for the bridge abutment are leaning out</li> <li>• The wooden mats used for the construction of the abutments are broken and leaning out</li> <li>• Exposed soil is in the channel and banks of the watercourse from equipment operating through the creek</li> <li>• Two sediment laden, non-woven geotextile fabric piles (deleterious material) located within the Riparian Management Area (RMA) have not been removed</li> <li>• Large trees within the RMA, and not in the work area have been cut down</li> <li>• Topsoil piles have not been marked/flagged</li> <li>• At the marked wildlife trails, access has not been maintained through the soil piles</li> <li>• Trees have been cut up to 11 m off of the right-of-way near wildlife trails</li> <li>• Rutting up to 60 cm deep through the creek on the west</li> </ul>



				<ul style="list-style-type: none"> <li>• High or severe erosion risk and priority area for installation of sediment barriers</li> <li>• Weed management required</li> <li>• Lessen disturbance to vegetation, wildlife habitat and sensitive areas</li> <li>• Avoid and minimize caribou habitat loss and restore on-site then monitor for effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>• limit of the right-of-way</li> <li>• Broken wooden mats on site</li> </ul>
WCS-16	15.1	Highrise Creek	50 (100 total)	<ul style="list-style-type: none"> <li>• Caribou herd range</li> <li>• The riparian management area will be flagged prior to construction</li> <li>• Limit clearing dimensions and reduce disturbance to vegetation</li> <li>• Temporary workspace will be reduced</li> <li>• Install clear span bridge</li> <li>• Fish bearing watercourse</li> <li>• Avoid harm to fish and fish habitat</li> <li>• Rescue fish prior to crossing</li> <li>• Keep RoW clearing as narrow as possible within the riparian zone and disturbance in the riparian area disturbance should be minimized</li> <li>• Clearly stake and/or flag sensitive areas like old forest</li> <li>• Disturbance and clearing minimized to blade width or 20 m</li> <li>• Avoid felling trees into old forest</li> <li>• Discharge water 50 m away from watercourse and prevent erosion</li> <li>• Potentially unstable trench</li> <li>• Apply seed mix to minimize erosion</li> <li>• For bank stabilization, soft engineering is preferred over riprap armoring to facilitate natural channel processes. On steep banks utilize brush layering or geo-grid system to</li> </ul>	<ul style="list-style-type: none"> <li>• Silt fencing does not meet compliance to specification Spectra Energy Drawing No.1</li> <li>• Clean granular material has not been used to construct the temporary bridge as required by specification Spectra Energy Drawing No. Drawing 22</li> <li>• Ramp across the watercourse does not have a culvert, and has not been constructed as required by specification Spectra Energy Drawing No. 21</li> <li>• Metal supporting post for the bridge abutment is leaning out</li> <li>• The wooden mats used for the construction of the abutments are leaning out</li> <li>• Large trees within the RMA, and off right-of-way have been cut and felled into the old forest stand</li> <li>• Broken wooden mats on site</li> <li>• Garbage on site</li> <li>• Rutting in the RMA to 30 cm deep</li> </ul>



				<p>stabilize soil. If stream banks must be armored, install live dormant posts of will or dogwood between riprap and through an underlying geotextile cloth at a prescribed density</p> <ul style="list-style-type: none"> <li>• Lessen disturbance to vegetation, wildlife habitat and sensitive areas</li> <li>• Avoid and minimize caribou habitat loss and restore on-site then monitor for effectiveness</li> </ul>	
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<b>Inspection Officer</b>		<hr style="width: 200px; margin: 0 auto;"/> Signature
	IO Designation <b>#1680</b>	
	Date <b>27 August 2017</b>	
517 10th Avenue SW Calgary AB T2R 0A8		