

<b>Project Name</b>	COASTAL GASLINK PIPELINE Project	<b>Inspection Status</b>	Final
<b>EA Certificate #</b>	E14-03	<b>Inspection No.</b>	IR2021-014
<b>Project Status</b>	Certified	<b>Inspection Start</b>	2021-04-27
<b>Sector</b>	Energy	<b>UTM</b>	10U 533697 E 6071620 N
<b>Trigger</b>	Planned Inspection	<b>Inspection Type</b>	Field
<b>Project Description</b>	The Coastal GasLink Pipeline Project (Project) is an approximately 650 kilometer (km) long natural gas pipeline connecting facilities in northeast British Columbia (BC) to the LNG Canada facility near Kitimat.		
<b>Location Description</b>	The Project is near Groundbirch (40 km west of Dawson Creek) in northeast BC to the LNG Canada facility near Kitimat. This inspection covered portions of focused on work being carried out in Sections 1, 3, 4, 5, 6, 7 and 8 of the Project.		
<b>Inspection Summary</b>	<p>From April 27 to May 6, 2021 Environmental Assessment Office (EAO) Director of Compliance and Enforcement Chris PARKS and Senior Compliance and Enforcement Officer Clayton SMITH (collectively EAO C&amp;E) inspected the Coastal GasLink Pipeline Project (Project) against requirements of the Environmental Assessment Certificate (EAC) #E14-03 (Appendix 1).</p> <p>The Project was in Construction at the time of inspection. Project areas inspected include Sections 1, 3, 4, 5, 6, 7 and 8 covering various locations from roughly Chetwynd, B.C. to Smithers, B.C.</p> <p>This inspection included a virtual debrief of observations with Project staff at approximately 0830 hours on May 19, 2021.</p> <p>After review of observations and information obtained during the inspection, the following compliance determinations have been made:</p> <ol style="list-style-type: none"> <li>1. NOT COMPLIANT with EN2020-011 regarding controlling the risk of sediment transport to Environmentally Sensitive Receptors, watercourses.</li> <li>2. NOT COMPLIANT with EN2020-011 regarding controlling the risk of sediment transport to Environmentally Sensitive Receptors, wetlands.</li> <li>3. NOT COMPLIANT with EN2020-011 with regards to maintaining erosion and sediment control measures during and after Project works to ensure they continue to function as intended.</li> <li>4. NOT COMPLIANT with EN2019-003 and Condition 26 of Schedule B regarding storing waste and debris in animal proof containers.</li> <li>5. COMPLIANT EN2020-004 and Condition 18 of Schedule B regarding retention and field signage of Whitebark Pine trees on the right of way.</li> <li>6. NOT COMPLIANT with Condition 26 of Schedule B and the Environmental Management Plan regarding posting signs to clearly identify sensitive environmental features.</li> <li>7. NOT COMPLIANT with Condition 26 of Schedule B regarding returning the bed and banks of each watercourse to as close as practical to their original contours.</li> <li>8. NOT COMPLIANT with Condition 26 of Schedule B regarding streambank restoration using willows.</li> </ol>		

	<p>9. NOT COMPLIANT with Condition 26 of Schedule B regarding use and maintenance of secondary containment.</p> <p>Additional detail regarding these findings may be found in the sections below.</p> <p>The compliance determinations in this report reflect the findings from the inspection dates noted above. These determinations can change at any time upon information gathered through future inspections or if new information is obtained by EAO C&amp;E.</p>
<b>In Attendance</b>	<p><b>April 27 to May 5, 2021</b></p> <p>No attendance</p> <p><b>May 6, 2021</b></p> <p>Assistant Coordinator Cultural Monitor Community Liaison Program, Coastal GasLink</p> <p>Three members of the Cultural Monitor Community Liaison program</p>
<b>Certificate Holder</b>	Coastal GasLink Pipeline Ltd.
<b>Mailing Address</b>	<p>450 1<sup>st</sup> Street S.W.</p> <p>Calgary, AB</p> <p>T2P 5H1</p>
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## INSPECTION DETAILS

### Requirement 1: Condition 26

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

### Coastal GasLink Pipeline Project, Environmental Management Plan (Appendix 4)

#### Section 8.3 - Surface Material Removal, Salvage and Grading

Stabilize exposed surface material and subsoil where the potential for erosion exists. Refer to the Soil Erosion Contingency Plan (Appendix C.7) for additional information.

### Environmental Assessment Act, 2018, Order Under Section 53(1) (Appendix 5)

#### EN2020-011, December 8, 2020

- Control the risk of sediment transport to Environmentally Sensitive Receptors by implementing the following:
  - Stabilize exposed surface material and subsoil during and after Project works where potential for erosion exists;
  - Plan and install erosion and sediment control measures before, during and after Project works; and,
  - Maintain these measures during and after Project works to ensure they continue to function as intended.

**Findings:**

Over the course of the inspection EAO C&E observed various instances where sediment laden Project water had left the right of way (RoW) and transported to environmentally sensitive receptors (watercourses). The following are examples of locations where the release of sediment laden Project water into watercourses was observed:

**Section 1:**

- KP 50+910, watercourse 43B1 (S6). Low chain side of crossing, sediment laden water left the RoW and overtopped a sediment fence. A small scour channel flows directly into the stream feature (S6). Sediment observed in watercourse downstream of crossing.
- Watercourse 42B1 (S6) – High chain side approach exposed with steep slope (35-45 percent) containing limited erosion controls. Sediment laden water overtopped sediment fence and was observed in the channel downstream of crossing.
- KP 54+204, watercourse 46B1 (S3). On the high chain approach on the downstream side of the RoW, sediment laden Project water has left the RoW and sediment deposition was observed within the stream feature.
- KP 55+310, watercourse 47B1 (S3). Observed sumps at capacity, and eroded channel directing water off the RoW. Sediment laden water observed within channel downstream of crossing.
- KP 57+269, watercourse 7C (S6). Evidence of scour outside of RoW into forest adjacent to stream feature (S6). No evidence of sediment into the watercourse, however, snow covered conditions during inspection. Soil stockpiles on high chain side of crossing placed on edge of RoW with no erosion and sediment control (ESC) measures behind them. Potential for this material to mobilize sediment down slope into the S6.

**Section 3:**

- Crooked River (S1), approximately KP 212+550. High chain approach of RoW slopes towards Crooked River. High flow conditions experienced within the Crooked River causing Project related exposed surfaces and sediment laden water mixing with Crooked River flows. **Update:** during the Opportunity to Respond to this inspection record, the Certificate Holder stated that the events described in this record are a result of overland flooding of the river and are not associated with Project construction. It appears that Project clearing and stripping occurred during a lower flow time of year and took place within the flood plain of the Crooked River. As water levels increased during freshet, this portion of the Project was inundated with natural river flows.
- KP 214+804 (S3). Sediment laden water leaving RoW and entering channel. High chain sump draining through filter bag. Water from filter bag then flows back towards and into S3 stream.
- KP 215+000 (approximate – no signage) (NCD). Sediment from travel lane on RoW draining into the feature both upstream and downstream of the crossing. Feature then appears to drain into S3 stream which crosses the RoW near KP 214+804.
- KP216+050 (approximate)(S4). Sediment laden water observed leaving RoW through water bar on high chain side of crossing and flows downstream into the stream feature (S4). Downstream of the RoW the S4 stream feature then drains into an S3 stream, which crosses the RoW at approximately KP 215+650. Sediment laden Project water observed reaching the S4 and visible turbid plume from within the S4 observed transporting into the S3 stream.
- KP 227+800 (S1B), watercourse 110C, wetland # WL11553. Sediment laden water from RoW transported material into watercourse. Sediment deposition observed within the watercourse at the crossing location. Additionally, surface materials from the RoW on the high chain side of the crossing were observed leaving the Project site and actively transporting downslope into the watercourse / wetland upstream of the bridge crossing.

- KP229+909 (S2), watercourse 118C. A slope failure occurred on the high chain side of the crossing at this location. The failure measured to be approximately 15 m long x 17 m wide. Material from the hillside reached the stream as a result of this failure. Water was observed to be pooled at the top of the slope, which may have contributed to this failure. The pooled water measured to be approximately 73 meters (m) long by 7 m (estimated) at widest point. The BC Oil and Gas Commission has also observed this location and are responding through their own processes.

Section 4:

- KP244+510, watercourse WC272 (S3). Sediment laden Project water observed to be overwhelming a sump, leaving the RoW and entering the stream channel.
- KP 277+187 (approximate), watercourse 295-834 (S3). On the high chain approach to this crossing (roughly KP 277+400) sediment laden water from the Project was observed to be directed off the RoW and into a previously existing roadside ditch. Tracking the water in the ditch downstream, it flows through a culvert beneath the road and continues to drain down the slope towards and into the S3 stream (KP 277+187) upstream of the bridge crossing. Sediment laden Project water observed reaching the S3 stream.
- KP 281+200 (approximately, no signage). Flume like measure installed at crossing to move water through the RoW and keep sediment laden water from within the RoW from entering the feature. Plastic sheeting and filter cloth do not extend the entire length of the crossing which allows sediment laden Project water to drain into the feature at the upper and lower extent of the flume. Additionally, outlet hose from pump with filter bag attached observed on the ground less than 2 m from top of stream bank. Pump not running during inspection, however, chance for sediment laden discharge from filter bag to reach stream feature during pump use due to proximity of bag to feature.
- KP329+282. Watercourse feature (NCD) not adequately protected from Project soil stockpiles. Flowing water in contact with soil stockpiles. Used filter bags placed adjacent to the feature allowing sediment laden discharge water from the filter bags to drain into the feature. **Update:** During the Opportunity to Respond, the Certificate Holder stated the following:
  - *Coastal GasLink has confirmed that the locations of concern identified in Photos 33-37 were located outside wetland WL 11248. In this case Coastal GasLink has confirmed that the soil stockpile and dewatering activities identified in the IR2021-014 Inspection Record were placed specifically in locations designed to protect the wetland from ESC risks and therefore were in alignment with the requirements of the EAC and EAO Order EN2020-011.*
  - EAO C&E has moved this finding from Requirement 2 below to Requirement 1. Whether the site is a wetland or a watercourse, Project related sediment was observed mobilizing into this NCD feature which drains directly into Clear Creek. The soil stockpiles were not protected in a manner that controls sediment from transporting off the stockpiles and into the water feature. Additionally, sediment from the filter bags was observed to be mobilized into the water feature as a result of Project pumping activities, including the placement of filter bags directly within the watercourse. The practices carried out at this site during the time of inspection are non-compliant with the requirements of the EAC and EAO Order EN2020-011.

Section 5:

- KP 395+542 (S6), watercourse 408. Sediment from the RoW observed in the vegetation and within the channel at this crossing. ESC measures failed or were overwhelmed/not maintained. Material transported downstream outside of Project onto other stakeholders' tenure (transmission line).



Section 6:

- KP 450+400, erosion on RoW, overwhelmed water bars and sediment fence and drains on RoW. Discharged from RoW to watercourse from both banks.
- KP 463+900 (approximate), sediment laden water observed discharged from right-of-way to unknown watercourse or wetland feature. Silt fence, sump, and water bar flooded and not effective. Culvert under travel lane damaged and not effective, contributing to sediment discharge.

Section 7:

- KP 586+700, sediment discharge to lake evident from deposition within lake and on remnant ice.
- KP 586+800, sediment laden water pumped from roadside sump to sediment bag located 2 m from watercourse. Sediment laden water reaching watercourse.
- KP 587+450 (approximate), sediment laden Project water observed from the air to have reached a lake adjacent to the RoW at multiple locations. **Update:** During the Opportunity to Respond to this Inspection Record the Certificate Holder stated that they are “*confident that what is identified as sediment being deposited on the lake ice, is in fact natural tannins leaching out of the forest during spring melt. This is a natural process and should not be associated with Coastal GasLink’s ESC compliance record.*” No evidence, such as a signed submission by a Qualified Professional, was provided to verify this assertion. During EAO C&E’s inspection, melt conditions and runoff into lakes was observed from both the air and the ground. Similar lakes in the area did not appear to show the same visible amount of sediment laden runoff transporting into them. Furthermore, as seen in the photo 27 below, Project works including clearing and surface preparation were conducted adjacent to this lake. On the balance of probabilities, the sediment laden water observed to reach the lake at this location is Project related.



Photo 1. Section 1, watercourse 43B1, S6. Sediment laden water overtopped sediment fence and observed in channel downstream of crossing.





Photo 2. Section 1, watercourse 42B1, S6. Overwhelmed ESC measures with sediment leaving RoW and observed in channel downstream.



Photo 3. Section 1, watercourse 47B1, S3. Observed sumps at capacity, and eroded channel directing water off the RoW. Sediment laden water observed within channel down stream of crossing.





Photo 4: Section 1, watercourse 46B1, S3. Sediment laden water from RoW observed within channel downstream of crossing.



Photo 5: Section 3, Crooked River. High chain approach slopes towards Crooked River. Stripping into naturally occurring flood plain within the Crooked River. Project related exposed surfaces and sediment laden water mixing with Crooked River flows.





Photo 6. Section 3, approximately KP214+804, S3. Sediment laden water leaving RoW and entering channel.



Photo 7. Section 3, approximately KP214+804, S3 High chain sump draining through filter bag. Water from bag then flows back towards and into S3 stream.



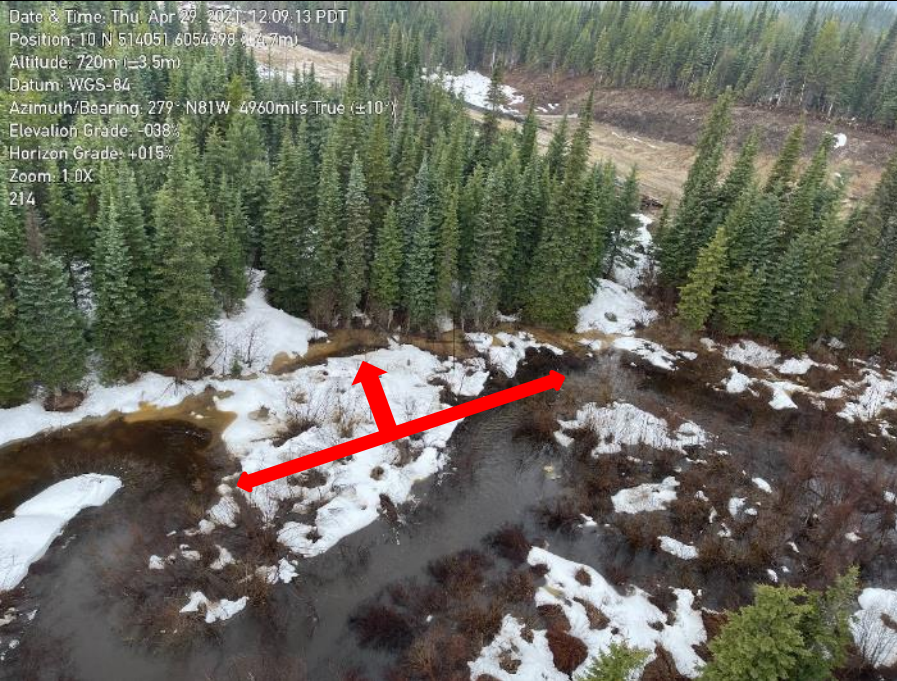


Photo 8. Sediment into channel at KP 214+804 S3.

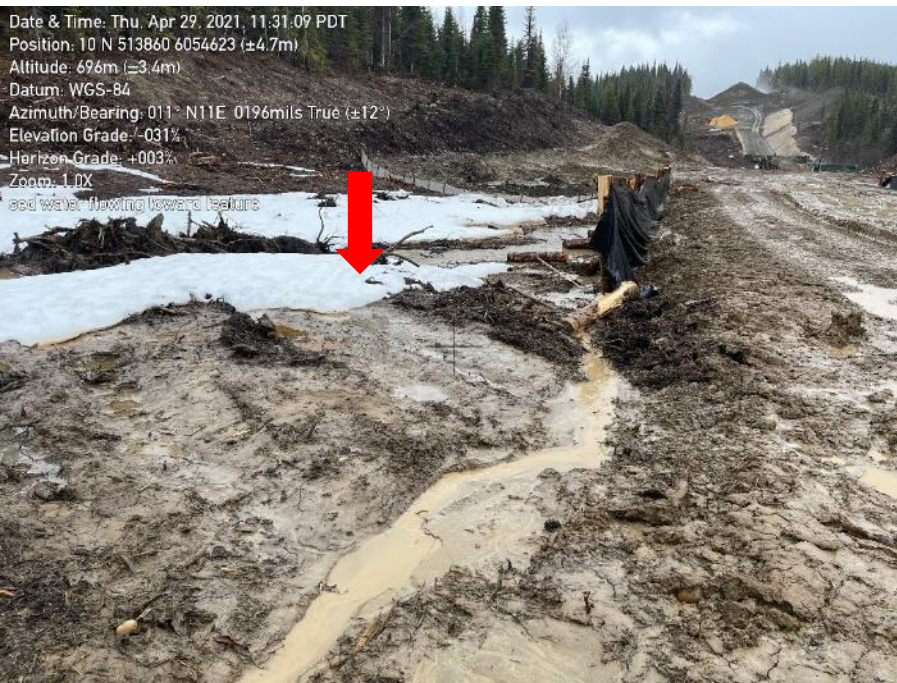


Photo 9. Sediment laden water into NCD. Unknown name (signage not maintained). Feature drains into KP 214+804 (S3) downstream of the crossing.





Photo 10. Water bar on high chain side of KP216+050 (S4). From RoW looking at forest.



Photo 11. Water bar on high chain side of KP216+050 (S4). From forest looking at RoW.





Photo 12. Sediment laden water into S4 at KP 216+100, which then reaches S3 at KP 215+700.



Photo 13. S4 draining into S3 downstream of crossing at KP 215+650.





Photo 14. KP281+200. Water from RoW flowing into feature around the flume both upstream and downstream of the measure.



Photo 15. KP 244+510, watercourse WC272 (S3). Water from RoW overwhelming sump and flowing into stream feature.





Photo 16. KP 329+282. Right of way, view looking down chain.



Photo 17. KP 329+282. Looking downstream from culvert outlet on right of way. Stockpiles on right of way with no mitigation measures.





Photo 18. KP 392+282. Stockpiles on right of way within channel.



Photo 19. KP392+282. Filter bag potentially placed within WL11248 downstream of right of way. Sediment mobilized into NCD feature with direct connection to Clear Creek.





Photo 20. KP 392+282. Sediment from filter bag entering water feature.



Photo 21. KP 395+542 (S6). Overwhelmed / not maintained ESC measures.





Photo 22. Sediment into feature downstream of crossing at approximately KP 395+550.



Photo 23. KP 450+400, overview.



Date & Time: Thu, Apr 29, 2021, 11:26:39 PDT  
 Position: 9 N 694123 6001736 ( $\pm 4.7m$ )  
 Altitude: 974m ( $\pm 3.5m$ )  
 Datum: WGS-84  
 Azimuth/Bearing: 127° S53E 2258mils True ( $\pm 10^\circ$ )  
 Elevation Angle: -23.9°  
 Horizon Angle: +01.4°  
 Zoom: 1.0X  
 cgl



Photo 24. KP 463+900, overview.

Date & Time: Fri, Apr 30, 2021, 7:12:09 PDT  
 Position: 9 N 681587 6008756 ( $\pm 10.5m$ )  
 Altitude: 935m ( $\pm 2.7m$ )  
 Datum: WGS-84  
 Azimuth/Bearing: 058° N15E 0996mils True ( $\pm 12^\circ$ )  
 Elevation Angle: -34.3°  
 Horizon Angle: -01.4°  
 Zoom: 1.0X  
 27.25



Photo 25. KP 586+800, sediment bag placed within 2 m of channel. Discharge into feature.





Photo 26. KP 586+700, sediment discharge to lake evident from deposition within lake and on remnant ice



Photo 27. KP587+450 (approximate). Sediment from RoW entering lake.

The observations by EAO C&E over the course of the inspection, and examples displayed above, provide evidence of non-compliance with EN2020-011 with regards to controlling the risk of sediment transport to Environmentally Sensitive Receptors by stabilizing exposed surface materials and subsoil during and after Project works where potential for erosion exists and maintaining erosion and sediment control measures during and after Project works to ensure they continue to function as intended.

During the Opportunity to Respond to this Inspection Record (IR) the Certificate Holder requested that the IR be updated to outline where ESC issues have been reported as resolved. EAO C&E would like to note that the inspections are “point in time” meaning that the information reported within this document reflect the findings made during the field inspection. Since the time of inspection, the Certificate Holder has provided information to EAO C&E to indicate that some of the identified non-compliant sites have undergone repairs and/or upgrades to bring them back into compliance.

Based on the Certificate Holders response, a portion of the non-compliant sites remain “open” with additional work being required to resolve ESC issues. Furthermore, after review of the response by the Certificate Holder, EAO C&E understands that a portion of the non-compliant sites have not undergone further repairs or upgrades after inspection by Project staff as “...no evidence of sediment entering the watercourse was observed. ESC mitigation measures are functioning as designed.” Based on these responses, it appears that ESC maintenance or upgrades are planned “as needed.” However, attending the sites under dry conditions and determining the need for upgrades on whether turbid water is actively flowing into a receptor during that field visit will not control the risk of sediment transport to environmentally sensitive receptors, as required under EN2020-011. Mitigation measures to stabilize exposed surface materials and subsoil as well as erosion and sediment control structures are to be functional and effective to limit the impact to environmentally sensitive receptors at all times.

Examples of sites where EAO C&E observed sediment laden Project water actively flowing into environmentally sensitive receptors during the inspection and the sites were not repaired or upgraded, based on the Certificate Holders responses, include but may not be limited to KP 214+804 (S3), KP 215 (NCD) and KP216+050 (S4). Without improvements being completed there is a high risk that these, and the other non-compliant sites that have not been actioned, will again experience impact’s during future rain or runoff events.

**Compliance Determination:** Out, Referral to Administrative Penalty

## **Requirement 2:**

**Environmental Assessment Act, 2018, Order Under Section 53(1) (Appendix 5)**

**EN2020-011, December 8, 2020**

1) Control the risk of sediment transport to Environmentally Sensitive Receptors by implementing the following:

- Stabilize exposed surface material and subsoil during and after Project works where potential for erosion exists;
- Plan and install erosion and sediment control measures before, during and after Project works; and,
- Maintain these measures during and after Project works to ensure they continue to function as intended.

## **Findings:**

Over the course of the inspection EAO C&E observed various instances where sediment laden Project water was either actively flowing from the right of way to receptors or had left the right of way and transported to environmentally sensitive receptors (wetlands). The following are examples of locations where the release of sediment laden Project water into wetlands was observed:

### **Section 1:**

- KP 53+137 (approximate), wetland WL0723 (Environmentally and Socially Important Wetland (ESIW)). Observed active pumping of sediment laden water off the RoW into a filter bag. Filter bag was placed adjacent to WL0723 and sediment laden water from the bag was observed flowing directly into the

wetland outside of the RoW. Additionally, ESC measures on the RoW were not functioning as intended and sediment laden Project water from the RoW was observed to be flowing into the wetland within the RoW.

Section 3:

- KP 227+800 (S1B), watercourse 110C, wetland # WL11553 (ESIW). Sediment laden water from RoW transported material into watercourse. Sediment deposition observed within the watercourse at the crossing location. Additionally, surface materials from the RoW on the high chain side of the crossing were observed leaving the Project site and actively transporting downslope into the watercourse / wetland upstream of the bridge crossing while EAO C&E was on site.
- KP229+100. NCD type feature crossing the RoW observed to have sediment laden water within. As feature leaves the RoW failed ESC measures are present. Sediment deposition off the RoW observed. Pooled sediment laden water from this location also observed off the RoW.

Section 4:

- KP298+700, wetland WL0552 (no signage). Sediment laden Project water was observed leaving the RoW and entering an off-RoW wetland. Sediment laden water was observed to be mixing with the wetlands natural water.
- KP 298+861, wetland WL8113 (ESIW). Sediment laden Project water observed passing the ESC measures and reaching the wetland outside of the RoW.
- KP335+200. Sediment laden Project water observed to be leaving the RoW and settling in a location outside of the RoW.

Section 6:

- KP 422+250 (approximate), WL 0844 (ESIW), sediment laden water from RoW overwhelms ineffective ESC measures, measures not maintained, sediment laden water pooled in wetland south of RoW.
- KP 435+200, sediment laden water directed and discharged from ROW has reached wetland located north of RoW boundary. Sediment laden water evident in wetland 275 m north of RoW.
- KP 444+200, WL 0903 (ESIW), discharge of sediment laden water from RoW to wetland. Entire wetland visibly turbid.
- KP 462+170, wetland 11128 (ESIW), sediment laden water discharged from RoW to wetland. Ineffective sediment fence installation allowing flow under and around fence, spoil pile adjacent to wetland does not have sediment fence preventing discharge to wetland.





Photo 28. WL0723. Sediment laden water from filter bag draining back into wetland outside of RoW.



Photo 29. WL0723. Sediment laden water from RoW flowing into wetland.





Photo 30. Sediment leaving right of way and draining towards wetland WL11553 near KP227+733.

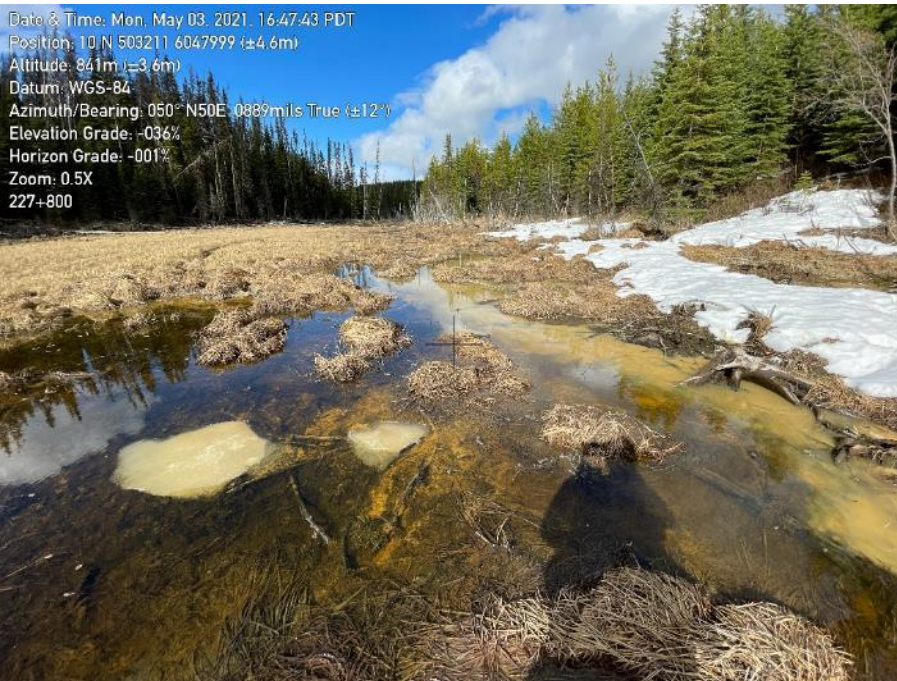


Photo 31. Sediment from above photo reaching wetland WL11553 upstream of crossing.





Photo 32. Wetland with no signage at roughly KP 298+700. Sediment laden water from this location left RoW and reached wetland below (WL0552).



Photo 33. Wetland with no signage at roughly KP 298+700. Sediment laden water from this location left RoW and reached wetland below (WL0552).





Photo 34. Wetland with no signage at roughly KP 298+700. Sediment laden water and sediment deposited in wetland (WL0552).



Photo 35. WL8113 at approximately KP 298+861. Sediment laden water passing ESC measures and entering wetland.





Photo 36.WL8113 at approximately KP 298+861. Sediment depositing into wetland feature.



Photo 37. Wetland WL11248 at KP 329+282, view looking down chain.

The observations by EAO C&E over the course of the inspection, and examples displayed above, provide evidence of non-compliance with EN2020-011 with regards to controlling the risk of sediment transport to Environmentally Sensitive Receptors by stabilizing exposed surface materials and subsoil during and after Project works where potential for erosion exists and maintaining erosion and sediment control measures during and after Project works to ensure they continue to function as intended.

**Compliance Determination:** Out, Referral to Administrative Penalty

**Requirement 3: Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

**Coastal GasLink Pipeline Project, Environmental Management Plan (Appendix 4)**

**Section 8.3 - Surface Material Removal, Salvage and Grading**

Stabilize exposed surface material and subsoil where the potential for erosion exists. Refer to the Soil Erosion Contingency Plan (Appendix C.7) for additional information.

**Environmental Assessment Act, 2018, Order Under Section 53(1) (Appendix 5)**

**EN2020-011, December 8, 2020**

- 1) Control the risk of sediment transport to Environmentally Sensitive Receptors by implementing the following:
- Stabilize exposed surface material and subsoil during and after Project works where potential for erosion exists;
  - Plan and install erosion and sediment control measures before, during and after Project works; and,
  - **Maintain these measures during and after Project works to ensure they continue to function as intended.**

**Findings:**

The following photos are examples of erosion and sediment control measures that have been installed on the Project and were observed to be ineffective due to maintenance being required.





Photo 38. Example of non maintained ESC measure seen near KP 227+800.



Photo 39. Example of non maintained ESC measure seen near KP 227+800.





Photo 40. Non maintained ESC measure near KP 274+300. Erosion taking place beneath the measure.



Photo 41. Non maintained ESC measure near KP 274+300.





Photo 42. KP 299+100. Coarse material used for check dam construction. Flow beneath the check dam. Large spacing between check dams.



Photo 43. KP 301+900, loose erosion control blanket with limit staples/stakes.





Photo 44. KP 302+045. ESC measures installed across channel. Measures full and require maintenance.



Photo 45. KP 302+045. ESC measures installed in front of culvert inlet. Measures observed to require maintenance.





Photo 46. Approximately KP 299+700. ESC measure collapsed.



Photo 47. Approximately KP 299+500. ESC measure overwhelmed and collapsed.





Photo 48. Failing sediment fence at Camp 9A.



Photo 49. Failing ESC measure at approximately KP 395+550. Lead to sediment discharging into stream feature.





Photo 50. Approximately KP 392+400. Gap beneath sediment fence where two sections meet. Adjacent to stream crossing.



Photo 51. Example of a full sump with sediment laden water overtopping banks.





Photo 52. Erosion and flow beneath ESC measure.

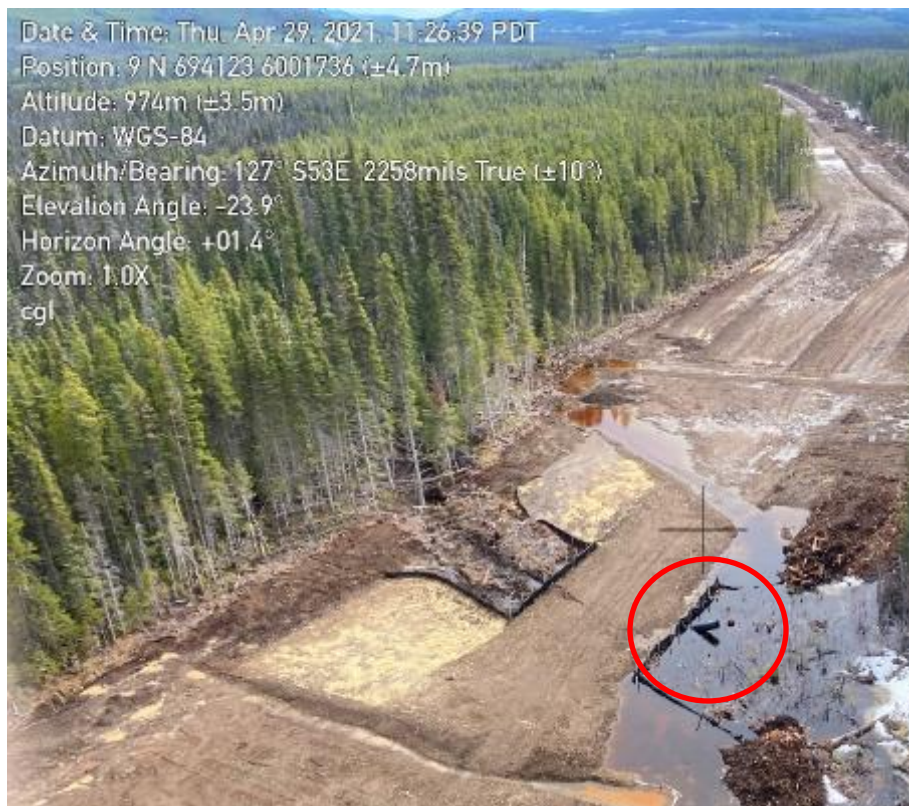


Photo 53. Damaged culvert.



The observations by EAO C&E over the course of the inspection, and examples displayed above, provide evidence of non-compliance with EN2020-011 with regards to maintaining erosion and sediment control measures during and after Project works to ensure they continue to function as intended.

During the Opportunity to Respond the Certificate Holder provided the following response to the photo above showing the site at KP 392+400:

- *KP 392+400: Field personnel have confirmed that the sump located at this location was designed to overtop its banks and was operating as designed at the time of the inspection. Coastal GasLink therefore suggests that this location is in alignment with the requirements of the EAC and EAO Order EN2020-011.*
- During EAO C&E's time on site, sediment laden water was observed to be discharging from this sump towards a watercourse. The sump was not large enough to capture and settle out the suspended material, water was observed to continuously flow through the sump without treating the visibly turbid water. The sump was either not functioning as designed or required maintenance as it was a source of sediment input into a watercourse.

**Compliance Determination:** Out, Referral to Administrative Penalty

**Requirement 4: Environmental Assessment Act, 2002, Order Under Section 34(1) (Appendix 6)**

**EN2019-003, June 17, 2019**

Pursuant to Section 34(1) of the Act, I order that the Certificate Holder, as of the date of this Order, and hereafter for the life of the Project, secure, dispose of, remove, or otherwise manage all wildlife attractants in a manner that prevents the attraction of wildlife and/or access to attractants by wildlife, to the satisfaction of EAO Compliance and Enforcement.

**Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

**Coastal GasLink Pipeline Project, Environmental Management Plan (Appendix 4)**

**Appendix C - Chemical and Waste Management Plan – Waste Disposal**

- Each construction site will be equipped with adequate garbage receptacles for solid non-hazardous wastes and debris. These materials will be collected as required and disposed of at approved locations. Food wastes will be stored in animal proof (bear-proof) containers and transported to an appropriate landfill site.

\*Lists have been shortened from the original version.

**Findings:**

While EAO C&E was on the Project right of way, accessed off the Lone Prairie Road, a waste bin containing anthropogenic food waste was observed to be left open and unattended. Food waste was observed within the bin. This same finding was observed at this location during EAO C&E's inspection of the Project on October 21, 2020.



Photo 54. Waste bin with lid observed to be left open.



Photo 55. Example of contents within bin shown in above photo.

Two unattended bags of food waste were observed to be on the ground near KP 299+800. No crews were in the immediate vicinity at the time of observation. See below photos.





Photo 56. Bag 1 containing food waste on ground at approximately KP 299+800.



Photo 57. Bag 2 containing food waste on ground at approximately KP 299+800.

The above observations provide evidence of non-compliance with the Environmental Management Plan and EAO C&E's June 17, 2019 Order, EN2019-003.

During the Opportunity to Respond to this Inspection Record the Certificate Holder provided the following response:

*Shortly after this inspection ended, timed to coincide with construction crews returning to the Project after freshet, Coastal GasLink implemented a series of Project-wide compliance blitzes intended to remind workers of the regulatory requirements governing the Project and reinforce the importance of following the established compliance processes. These included week-long periods where an increased focus was placed in morning meetings, daily reports and handouts for workers, on specific compliance issues. A compliance blitz specific to the Project requirements around proper storage of animal attractants was one of these blitzes held for field staff.*

*Coastal GasLink agrees that the waste bins located off the Lone Prairie Road in Section 1 have presented a repeated compliance issue. Since time of this inspection, Coastal GasLink confirms that these bins have been removed from this location. Coastal GasLink is also working with the Prime Contractor responsible for Pipeline Section 1 to confirm that waste is stored in locations where they can be closely monitored. Likewise, Coastal GasLink is working with the Prime contractor in Section 4 where the two bags of garbage were found to remind them of the importance of this requirement.*

**Compliance Determination:** Out - Warning - Refer to Enforcement Summary

#### **Requirement 5: Condition 18**

Where the Project footprint intersects with whitebark pine, the Holder must:

- (i) describe the implementation plan for the mitigation set out in the Application Section 8, Table 8-1 and Table 8-7;
- (ii) provide a whitebark pine density analysis and identify additional site specific mitigation that will be carried out by the Holder, such as cone collection, propagation and planting; and
- (iii) consult with EC and FLNR on (i) and (ii), and provide copies to OGC prior to the Holder's planned date to commence Construction.

The Holder must implement additional site specific mitigation as set out above.

#### **Environmental Assessment Act, 2018, Order Under Section 53(1)**

**EN2020-004, June 16, 2020 (Appendix 7)**

- 2) Cause a Qualified Professional to develop a Whitebark Pine Mitigation, Reclamation, and Monitoring Plan (Plan).

#### **Coastal GasLink Pipeline Project, Whitebark Pine Mitigation, Reclamation and Monitoring Plan (Appendix 8)**

##### **Section 4.1.2 Reduction of Permitted Footprint**

Additionally, within the contractor construction footprint, currently 18 mature trees have been avoided and retained (Table 4-1).

##### **Section 4.1.3 Avoidance Mechanisms**

###### **Signage**

Signs will be placed at the boundaries of whitebark pine high density areas to alert workers to the presence of whitebark pine within the respective kilometre posts (KPs). This signage will alert the contractor that trees for avoidance may be present along the edge of this section (Figure 4-1).



**Findings:**

EAO C&E inspected 11 of the 18 mature whitebark pine trees that have been retained on the right of way, as referenced in the Whitebark Pine Mitigation, Reclamation and Monitoring Plan. During the inspection, eleven of the eleven trees inspected were confirmed to be retained and each had signage and flagging alerting crews of their presence and that they are not to be removed.



Photo 58. Example of a whitebark pine tree inspected and confirmed to be retained.

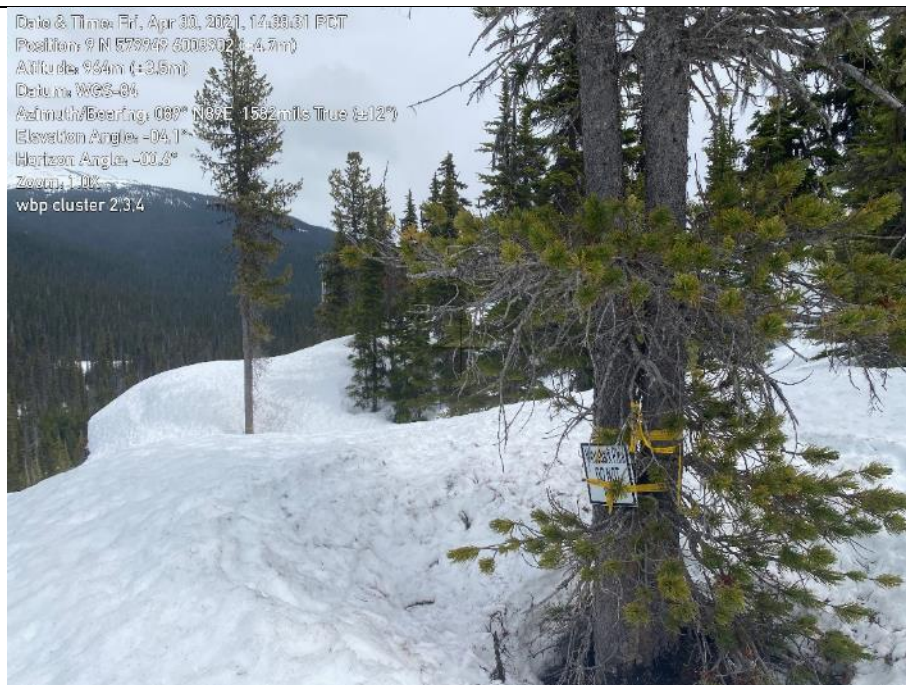


Photo 59. Second example of a whitebark pine tree inspected and confirmed to be retained.

Signage placed at the boundaries of whitebark pine high density areas to alert workers to the presence of whitebark pine were not observed during the inspection. However, this may have been due to the deep snow conditions encountered while conducting the inspection. EAO C&E requested that during the Opportunity to Respond, the Certificate Holder provide photo documentation showing that signs have been placed at the boundaries of whitebark pine high density areas.

EAO C&E was provided two photographs documenting the field signage which indicates presence of Whitebark Pine between KP 586+285 to 586+400 and KP 588+871 to KP 588+968. EAO C&E notes the photo titled Figure 1 (not included in this Inspection Record), shows the sign laying on the ground. To effectively alert the workers of the presence of Whitebark Pine within the respective kilometre posts, it is recommended that this sign be re-installed in a manner that makes it more visible.

**Compliance Determination:** In

#### **Requirement 6: Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

#### **Coastal GasLink Pipeline Project, Environmental Management Plan (Appendix 4)**

##### **Section 8.4 - Signage**

Post signs immediately following clearing (including name, number and KP) for watercourses. Signs will be posted 100 m from the watercourse or at the top of the valley slope, whichever is greater, to alert the Contractor of the upcoming watercourse.



### Section 7.1.3 – Specific Measures

Post signs to clearly identify sensitive environmental features to ensure they are protected. Refer to the environmental worksheets for a listing of sensitive environmental features located along the pipeline ROW.

#### Findings:

Over the course of the inspection EAO C&E observed various locations where signage near watercourses and wetlands were either not in place (e.g. KP 281+200), had fallen over and were no longer posted / not visible (e.g. KP 395+542) or faded and no longer legible. Below are examples of the observations:



Photo 60. Blank signage. KP 214 range.

Date & Time: Thu, Apr 29, 2021, 10:37:39 PDT  
 Position: 10 N 53108 60557623 ±14.1m  
 Altitude: 714m ±6.0m  
 Datum: WGS-84  
 Azimuth/Bearing: 331° N29W 5884mils True ±12°  
 Elevation Grade: +002°  
 Horizon Grade: +002°  
 Zoom: 8.0X  
 signage



Photo 61. Second example of blank signage near KP 214.

Date & Time: Thu, Apr 29, 2021, 11:03:54 PDT  
 Position: 10 N 53985 60571152 ±14.1m  
 Altitude: 709m ±4.0m  
 Datum: WGS-84  
 Azimuth/Bearing: 036° N36E 0940mils True ±12°  
 Elevation Grade: +010°  
 Horizon Grade: +002°  
 Zoom: 0.5X  
 signage near kp



Photo 62. Blank signage near KP 215+780.





Photo 63. Faded / blank signage near KP 215+700.



Photo 64. Blank signage near KP 215+280.





Photo 65. Approximately KP 215+110. Blank signage.



Photo 66. Faded and non legible signage at approximately KP 298+600.

The above observations provide evidence of non-compliance with the Environmental Management Plan. This finding has been documented as non-compliant in Inspection Records IR2020-021, IR2020-047, IR2020-051 and IR2020-055. Previous compliance determinations specific to this requirement have ranged from a Notice of Non-compliance to Warnings.



During the Opportunity to Respond, the Certificate Holder indicated that *“the specific locations outlined in IR2021-014 have been provided to the relevant Prime contractors and these signs will be inspected, and refreshed as needed, to confirm compliance.”*

**Compliance Determination:** Out - Order - Refer to Enforcement Summary

**Requirement 7: Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

**Coastal GasLink, Environmental Management Plan, Section 8.4 – Watercourse Crossings (Appendix 4)**

**Section 8.4.3 Specific Measures**

**Bank Protection and Reclamation**

Return the bed and banks of each watercourse to as close as practical to their original construction preparation contours. Do not realign or straighten watercourses or change their hydraulic characteristics.

**Findings:**

Throughout the inspection watercourse crossing reclamation work was inspected. EAO C&E’s observations at the crossings include the following:

- Watercourse 46B1 (S3). The re-constructed channel, where the pipe has been installed through the crossing, has large substrate consisting primarily of cobble placed in a manner that limits the channels profile. EAO C&E observed sub-surface like flows through the reconstructed portion of the channel. The lack of a defined channel profile may cause fish passage issues as the channel depth is limited. The measured channel width at the crossing was roughly 20 m wide. The feature is classified as an S3, which are defined as fish-bearing streams with a channel width between 1.5-5 m. The width of the stream banks does not align with the upstream and downstream portions of the feature. Under almost all conditions the flow will be subsurface due to large substrate, a wider than average channel width and limited channel profile.
- Watercourse 47B1 (S3). The re-constructed channel, where the pipe has been installed through the crossing, has large substrate consisting primarily of cobble placed in a manner that limits the channels profile. Flow through this area of the channel was observed to be within the spaces between the cobble itself; the lack of a defined channel profile limited the channels depth through this portion of the stream. The lack of a channel profile and channel depth through the re-established portion of the feature may causes fish passage restrictions.
- Watercourse 43B1 (S6). Channel consisting of large substrate which is not uniform with upstream and downstream conditions. Sub-surface like flow and limited channel profile.
- Watercourses UN41-28 (S4), UN41-29 (S4), UN41-30 (S4), UN41-34 (S4), UN42-22 (S3), and KP33+260, unknown watercourse number. Each of these crossings were inspected and appeared to have a limited channel profile following the stream restoration works. In some cases, the work completed within the channel had the potential to cause barriers to fish passage. The substrate used to reclaim the channels is large and may not be appropriate for channels of this size, especially during low flow conditions. There is limited to no channel profile at each of these sites.

Date & Time: Wed, Apr 28, 2021, 11:09:36 MST  
Position: 10 N 594451 6161608 ( $\pm 3.7$ m)  
Altitude: 837m ( $\pm 6.0$ m)  
Datum: WGS-84  
Azimuth/Bearing: 302° N58W 5369mils True ( $\pm 12^\circ$ )  
Elevation Grade: -055%  
Horizon Grade: -006%  
Zoom: 0.5X  
46B1\_54\_204



Photo 67: Watercourse 46B1, S3. View from bridge crossing looking upstream.

Date & Time: Wed, Apr 28, 2021, 10:41:17 MST  
Position: 10 N 594447 6161622 ( $\pm 4.7$ m)  
Altitude: 835m ( $\pm 3.5$ m)  
Datum: WGS-84  
Azimuth/Bearing: 208° S28W 3698mils True ( $\pm 12^\circ$ )  
Elevation Angle: -21.2°  
Horizon Angle: +00.6°  
Zoom: 1.0X  
46b1



Photo 68: Watercourse 46B1, S3. Channels flow at this location is sub-surface and over a wide area (greater than 5 m).





Photo 69. Watercourse 46B1, S3. View from channel bank.



Photo 70. Watercourse 46B1, S3. Channel as seen outside of the restoration area. Upstream looking downstream.





Photo 71: Watercourse 47B1, S3. Shallow flow through reconstructed channel. Potential barrier to fish passage.



Photo 72: Watercourse 43B1. Upstream looking downstream.





Photo 73. Watercourse UN41-34, S4. Lack of channel profile through crossing. Potential barrier to fish passage.



Photo 74. Watercourse UN41-30, S4. Lack of channel profile through crossing. Potential barrier to fish passage.



Photo 75. Watercourse UN41-29, S4. Lack of channel profile through crossing. Potential barrier to fish passage.



Photo 76. Watercourse UN41-28, S4. Lack of channel profile through crossing. Potential barrier to fish passage.



Date & Time: Tue, Apr 27, 2021, 16:17:38 MST  
Position: 10 N 608533 6169658 ( $\pm 4.7m$ )  
Altitude: 738m ( $\pm 3.4m$ )  
Datum: WGS-84  
Azimuth/Bearing: 204° S24W 3627mils True ( $\pm 13^\circ$ )  
Elevation Grade: -050%  
Horizon Grade: +004%  
Zoom: 1.0X  
S4 k033+227



Photo 77. Watercourse UN42-22, S3. Lack of channel profile through crossing. Potential barrier to fish passage.

Date & Time: Tue, Apr 27, 2021, 15:56:52 MST  
Position: 10 N 610559 6169626 ( $\pm 7.1m$ )  
Altitude: 740m ( $\pm 8.0m$ )  
Datum: WGS-84  
Azimuth/Bearing: 245° S65W 4356mils True ( $\pm 15^\circ$ )  
Elevation Grade: -025%  
Horizon Grade: -004%  
Zoom: 2.0X  
S4 k033+260



Photo 78. KP33+260, unknown watercourse number. Lack of channel profile through crossing. Potential barrier to fish passage.

The above observations appear to provide evidence of non-compliance with requirements within the Environmental Management Plan to return the bed and banks of each watercourse to as close as practical to their original contours or to not change their hydraulic characteristics.

During the Opportunity to respond to this Inspection Record the Certificate Holder provided the following response:

*Coastal GasLink agrees with the EAO's assessment of the condition of watercourses 43B1, 46B1, 47B1 and UN42-22. Coastal GasLink further notes that as these locations do not meet the regulatory requirements, they would not have passed a final environmental inspection and additional work will be required at these locations in order to meet the required reclamation standard. Coastal GasLink confirms that these watercourses will be subject to further qualified professional (QP) inspection before these sites can be considered complete.*

*Coastal GasLink notes that while re-work is still required to restore the channels to upstream and downstream conditions, Watercourse 43B1 is an S6 and therefore not fish bearing, and watercourse UN42-22 has no evidence of fish habitat upstream of this crossing. As a result, the current condition of both streams is not considered, by fisheries QPs, to be barriers to fish passage.*

*Coastal GasLink is currently reviewing the remaining watercourses identified in Requirement 7 to confirm the EAO's observations. If QPs confirm that the condition of those streams does not meet the relevant regulatory requirements, additional reclamation work will be required.*

The above findings do not represent the definitive list of sites which are non-compliant with this requirement. To ensure compliance with this requirement the findings need to be brought Project wide.

**Compliance Determination:** Out - Warning - Refer to Enforcement Summary

#### **Requirement 8: Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application. *See Appendix 3 for full Condition wording.*

#### **Coastal GasLink, Environmental Management Plan, Section 8.4 – Watercourse Crossings (Appendix 4)**

##### **Section 8.4.3 Specific Measures**

##### **Bank Protection and Reclamation**

Implement permanent bank reclamation measures to re-establish riparian vegetation and fish habitat as a part of backfill operations (Refer to Appendix B, Dwgs. STDS-03-ML-05-601, STDS-03-ML-05-602, STDS-03-ML-05-603, STDS-03-ML-05-604, **STDS-03-ML-05-606**, STDS-03-ML-05-607, and STDS- 03-ML-05-608).

##### **Drawing STDS-03-ML-05-606 – Streambank Reclamation Vegetated Geotextile Installation (Appendix 10)**

- Willows should be harvested as close to installation as possible, preferably the previous day but no more than 2 days early. Willows should be 1.5 cm to 2.5 cm in diameter and 2.0 m to 3.0 m long with no more than 25 cm left exposed.
- Planting rate should be approximately 1 stem per 15.0 cm (6 inches roughly).

#### **Findings:**

During the inspection EAO C&E viewed the willow installation used for bank reclamation at select crossings. The willow stakes observed were primarily less than 1.5 to 2.5 centimeters (cm) in diameter and less than 2 – 3 m long.



Additionally, the willow stakes had more than 25 cm left exposed and the planting rate of 1 stem per 15 cm was often not met. See photos below for examples.



Photo 79. KP 41. Willow stake density less than one stem per 15 cm.



Photo 80. KP 41. Example of willow stake diameter (less than 1.5-2.5 cm diameter).





Photo 81. KP 41. Example of the observed planted depth of willow stakes. More than 25 cm left exposed after planting.



Photo 82. KP 41. Overview of planting at site. Willows not planted to depth, do not reach diameter requirement, not spaced to specification and are less than 2 – 3 m long.



Date & Time: Tue, Apr 27, 2021, 16:18:12 MST  
Position: 10 N 608528 6169662 ( $\pm 9.6$ m)  
Altitude: 739m ( $\pm 20.3$ m)  
Datum: WGS-84  
Azimuth/Bearing: 175° S05E 3111mils True ( $\pm 16^\circ$ )  
Elevation Angle:  $-23.1^\circ$   
Horizon Angle:  $+02.1^\circ$   
Zoom: 1.0X  
85+297



Photo 83. KP35+297. Overview of willows at site. Willows less than 2 – 3 m long, not planted to depth requirement, spacing not one stem per 15 cm.

Date & Time: Tue, Apr 27, 2021, 16:04:26 MST  
Position: 10 N 600386 6170003 ( $\pm 4.6$ m)  
Altitude: 801m ( $\pm 3.5$ m)  
Datum: WGS-84  
Azimuth/Bearing: 134° S46E 2382mils True ( $\pm 12^\circ$ )  
Elevation Grade:  $-051\%$   
Horizon Grade:  $+003\%$   
Zoom: 0.5X  
u/s



Photo 84. KP 43+457 (S4), Watercourse UN41-28. Overview of willow planting.





Photo 85. KP 42+886 (S4), watercourse UN41-30). Overview of willow planting.



Photo 86. KP 329+300, Clear Creek. Example of depth willow stakes are planted (more than 25 cm exposed). Diameter less than 1.5 – 2.5 cm.





Photo 87. KP 329+300, Clear Creek. Willows not planted at one stem per 15 cm.

The above observations provide evidence of non-compliance with the bank protection and reclamation requirement within the Environmental Management Plan.

During the Opportunity to Respond to this Inspection Record the Certificate Holder Provided the following response, in part:

*Coastal GasLink respectfully notes that typical drawing STDS-03-ML-05-606 (included as Attachment 4: Typical Drawing STDS-03-ML-05-606) states that the use of willow staking is an optional mitigation (see Figure 3: Excerpt from Typical Drawing STDS-03-ML-05-606) and therefore not a requirement. Further, Coastal GasLink notes that its guidance around the use of willow staking, and included in IR2021-014, is limited to what its Prime Contractors “should” implement rather than a requirement of what it “will” implement and therefore is clearly intended as guidance on what will give the willow stakes the best possible chance of success.*

*As willow staking is an optional mitigation intended to help promote new growth along a reclaimed watercourse bank, Coastal GasLink argues that any use of willow staking (whether it adheres to the typical guidance or not) is more beneficial than no willow staking. Also, as outlined in its response to Requirement 7, Coastal GasLink’s measure of whether reclamation activities are successful rests in the final product rather than the specific implementation. Therefore, regardless of mitigation execution, if bank reclamation is deemed to not be successful during subsequent inspections, Coastal GasLink would require additional reclamation to be completed regardless of whether one specific mitigation measure (e.g., willow stakes) were executed as per company guidance.*

When reviewing the documentation surrounding this requirement, Section 8 (Introduction) of the CGL EMP states the following:

**“The general environmental protection measures provided below are applicable to all work areas throughout the construction phase (emphasis added by EAO C&E). These general measures are followed by detailed specifications for each phase of new pipeline construction.”**

Within EMP Section 8.4 Watercourse Crossings, Section 8.4.1 (Introduction) states:

“At watercourses, the method of vehicle crossing and pipeline crossing has taken into consideration engineering and constructability requirements, fisheries values and protection of riparian habitats. **The mitigation outlined in this section applies to all watercourses** (emphasis added by EAO C&E).”

As for the statement that “Coastal GasLink’s measure of whether reclamation activities are successful rests in the final product rather than the specific implementation”, the willow implementation is to follow the guidance in the EMP. Survivorship or successful growth is a separate finding / topic.

The requirement referenced above states that bank reclamation measures to re-establish riparian vegetation and fish habitat are specifically part of backfill operations. When the willows are installed, they are to be installed to the specifications within the EMP, Appendix B.

**Compliance Determination:** Out - Warning - Refer to Enforcement Summary

#### **Requirement 9: Condition 26**

The Holder must develop and implement an Environmental Management Plan (EMP) in accordance with Section 25 and Appendix 2A of the Application.

#### **Environmental Management Plan, Appendix D – Management Plans (Appendix 9)**

##### **Chemical and Waste Management Plan**

##### **D.1.1.4 Mitigation**

All employees, contractors and consultants of Coastal GasLink will be required to comply with applicable regulations for the containment, handling, storage, use and disposal of wastes and chemicals.

##### **General Measures**

- Construction yards and staging areas that are designated as an industrial waste or chemical storage area will be selected and designed to:
  - provide safe storage areas, including secondary containment, for all chemical liquids and hazardous wastes in accordance with applicable regulatory requirements.

##### **Waste and Chemical Storage**

- Secondary containment may be required depending on the location, type, volume and duration of the waste or chemical being stored. Secondary containment will be in accordance with applicable federal, provincial and municipal requirements.
- Secondary containment areas not protected from the elements will be monitored regularly to ensure that ice, snow, or rainwater have not decreased the volumetric capacity for storage of a spill to be less than 125% of the aggregate storage volume of the containment area. Water accumulated within a secondary containment structure may be removed if authorized by the Environmental Inspector. If there is visible hydrocarbon sheen, the water will be collected for proper storage and disposal.



**Findings:**

EAO C&E observed practices regarding secondary containment over the course of the inspection. The observations included:

- Hydrocarbon based products stored directly on the ground in the path of previously flowing water;
- Waste associated with hydrocarbon storage containers disposed on the ground and on their side, increasing the chance of spills from the containers;
- Capacity of secondary containment being limited due to water accumulation within the containment; and,
- Secondary containment at capacity with water and discharging into the surrounding environment.



Photo 88. Approximately KP 229+100. Canister of gasoline left unattended on the right of way. Note eroded channel beneath the canister indicating flowing water recently occurred at this location.





Photo 89. At capacity secondary containment within 100 m of watercourse at approximately KP 227+746. Water leaving containment structure.

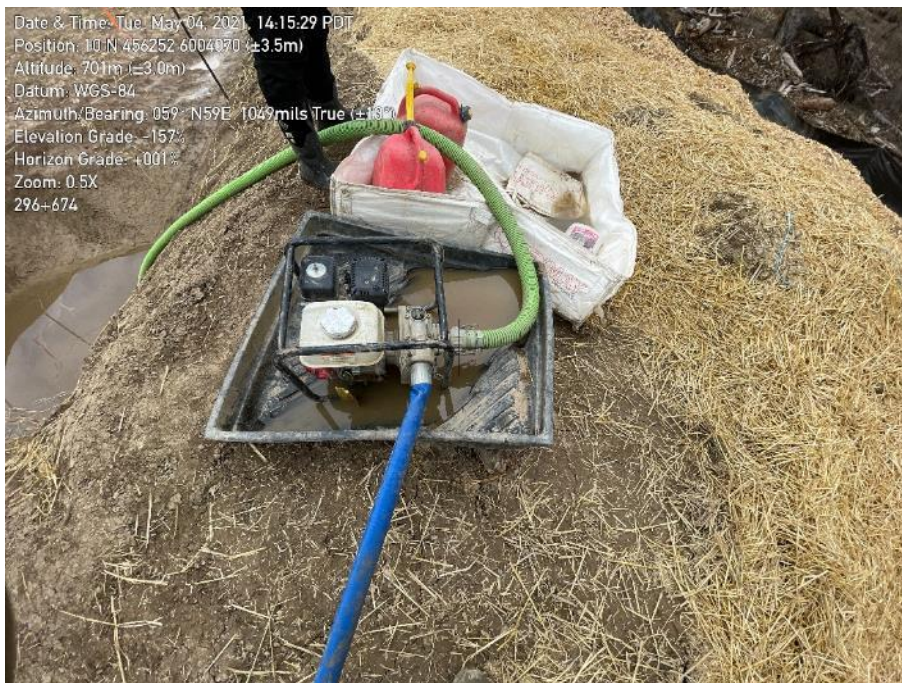


Photo 90. Secondary containment on angle and water leaving containment. Near KP 296+674.





Photo 91. Above ground fuel storage with water accumulating in secondary containment - Camp 9A.



Photo 92. Secondary containment full and water leaving containment - Camp 9A.





Photo 93. Used buckets of hydrocarbon products stored on side directly on ground - Camp 9A.



Photo 94. Secondary containment on angle and water at risk of leaving containment - Camp 9A.





Photo 95. Secondary containment near capacity with oily sheen observed at KP327+700.

The above observations provide evidence of non-compliance with Appendix D of the Environmental Management Plan.

During the Opportunity to Respond, the Certificate Holder provided the following:

*As outlined previously, due to the workforce restrictions imposed by the PHO Order, and the logistical delays returning the workforce to the field in a responsible manner under the appropriate COVID-19 precautions once the PHO Order was removed, Coastal GasLink was resource constrained during the entire 2021 winter construction season. At the same time, the workforce that was present was focused specifically on installing and maintaining ESC measures. As discussed in the multiple compliance update meetings between Coastal GasLink and regulatory agencies in the first few months of 2021, this resulted in some commitments, such as cleaning out secondary containment, being given a lower priority if an immediate risk was not apparent.*

*As outlined in Coastal GasLink's responses to Requirements 4 and 6, the spring compliance blitzes also included a focus on inspecting secondary containment and the proper storage of potentially harmful substances on the Project. Coastal GasLink confirms that all the locations identified in Requirement 9 have been addressed.*

EAO C&E notes that at the time of inspection workforce restrictions were no longer in place and understands that some crews were sent home due to "spring break up". Although some of the examples above may be categorized as "lower priority" there are also examples such as at KP 227+746 where there are immediate risks to watercourses as a result of the documented non-compliances.

**Compliance Determination:** Out - Warning - Refer to Enforcement Summary


Actions Required by Certificate Holder & Additional Comments
None at this time.
Enforcement Summary
<p><b>COASTAL GASLINK PIPELINE LTD. IS WARNED THAT THE PROJECT IS NOT COMPLIANT WITH ORDER NUMBER EN2019-003 REGARDING:</b></p> <ul style="list-style-type: none"> <li>Requirement 4 above, securing, disposing, removing, or otherwise managing all wildlife attractants.</li> </ul> <p><b>COASTAL GASLINK PIPELINE LTD. IS WARNED THAT THE PROJECT IS NOT COMPLIANT WITH CONDITION #26 OF EAC# E14-03 REGARDING:</b></p> <ul style="list-style-type: none"> <li>Requirement 7 above, returning bed and banks of watercourses to as close as practical to their original contours;</li> <li>Requirement 8 above, streambank restoration;</li> <li>Requirement 9 above, use and maintenance of secondary containment.</li> </ul> <p><b>IN ADDITION, COASTAL GASLINK PIPELINE LTD. IS NOT COMPLIANT WITH CONDITION #26 OF EAC# E14-03 (REQUIREMENT 6 ABOVE). SEE APPENDIX 12 FOR AN ORDER ISSUED UNDER SECTION 53 OF THE ENVIRONMENTAL ASSESSMENT ACT.</b></p> <p><b>COASTAL GASLINK PIPELINE LTD. IS NOTIFIED THAT IN RESPONSE TO ONGOING NONCOMPLIANCE WITH EN2020-011 EAO C&amp;E WILL BE RECOMMENDING AN ADMINISTRATIVE PENALTY TO A DECISION MAKER PURSUANT TO SECTION 60 OF THE ENVIRONMENTAL ASSESSMENT ACT. COASTAL GASLINK PIPELINE LTD. WILL BE CONTACTED WITH ADDITIONAL INFORMATION REGARDING THE ADMINISTRATIVE PENALTY PROCESS.</b></p> <p><b>EAO C&amp;E MAY INSPECT TO DETERMINE IF THE COASTAL GASLINK PIPELINE PROJECT HAS BEEN BROUGHT BACK INTO COMPLIANCE WITH THESE REQUIREMENTS. CONTINUED NON-COMPLIANCE WITH THESE REQUIREMENTS MAY RESULT IN ADDITIONAL ENFORCEMENT UNDER THE ENVIRONMENTAL ASSESSMENT ACT. SEE REGULATORY CONSIDERATIONS SECTION FOR ADDITIONAL INFORMATION.</b></p>
Regulatory Considerations
<p>The Certificate Holder requested that this Inspection Record mentions <i>“that despite the restrictions imposed by the PHO Order, its efforts represent a significant improvement in the implementation of its ESC requirements and were essential in mitigating potential ESC risks to the environment stemming from the reduced workforce numbers. Coastal GasLink is including these details in this response because the IR2021-014 Draft Inspection Record omits any mention of the workforce restrictions overcome by Coastal GasLink over the past seven months”</i> EAO C&amp;E notes that the non-compliances regarding erosion and sediment control deficiencies leading to impacts to watercourses did not stem from reduced workforce numbers. Project wide non-compliances specific to ESC predate the January 2021 PHO Order, as documented in previous EAO C&amp;E Inspection Records. EAO C&amp;E reports on compliance and non-compliance, not improvements or deterioration in the status of a requirement. With respect to the requirements in this record specific to erosion and sediment control, the Project was non-compliant in numerous locations during the field inspection.</p> <p>In the Certificate Holder’s response to the IR they also noted that <i>“...all ten days of this inspection were completed without participation from Coastal GasLink representatives. As a result, many of the specific compliance issues outlined in the IR were not identified in detail to Coastal GasLink until July 8, 2021, except for ESC issues independently identified by the IESCA. Had Coastal GasLink been able to participate on some of this inspection, or conduct periodic telephone check-ins during the inspection, it would have been better situated to quickly address</i></p>



*issues identified and provide additional context around how it intended to address the issues identified.”* Consistent with EAO’s Safe Work Procedures at the time of the inspection, EAO requested that this inspection not be attended by Certificate Holder and Contractor staff. The exception was on May 6, 2021 when one CGL member and three Cultural Monitor Community Liaison’s joined the inspection. EAO C&E also met and spoke at length with an Environmental Inspector as he accompanied a BC Oil and Gas Commission Inspector during his field work. Information relevant to the ongoing field inspection, such as observations about watercourses and waste management, were relayed to that inspector at that time. On May 19, 2021, following the inspection, EAO C&E conducted an inspection debrief, which was attended by Certificate Holder staff, and informed of the preliminary findings including concerns with ESC preparedness around watercourses and wetlands. It is not EAO C&E’s role to identify and catalogue each site which is non-compliant and relay that information to the Certificate Holder in a set time frame. The Certificate Holder and Contractor staff have a responsibility to continually assess their work areas to ensure compliance is met. It is the Certificate Holders responsibility to maintain compliance with the terms and conditions of the Certificate at all times.

Please note that the findings in this record are not intended as comprehensive lists of non-compliant sites (e.g. signage, stream restoration, secondary containment). Improvements and corrective actions as a result of documented non-compliances are to be brought Project wide where these incidents of non-compliance exist, not only to the specific locations documented within this record.

**Inspection Conducted by**

 Clayton Smith Senior Compliance & Enforcement Officer	<b>Date Sent to Certificate Holder for Opportunity to Respond</b> <b>2021-07-08</b>
	<b>Date Finalized</b> <b>2021-09-23</b>

**Appendices**

Appendix 1: EA Certificate #E14-03  
Appendix 2: Schedule A  
Appendix 3: Schedule B  
Appendix 4: CGL\_EMP\_2018  
Appendix 5: EN2020-011\_Coastal GasLink\_2020-12-08) Section\_53\_Order\_ESC  
Appendix 6: EN2019-003 Coastal GasLink Section 34 Order – Attractants  
Appendix 7: Coastal Gaslink\_2020-06-16\_Section\_53\_Order\_Whitebark\_Pine  
Appendix 8: Coastal GasLink Pipeline Project, Whitebark Pine Mitigation, Reclamation and Monitoring Plan  
Appendix 9: CGL\_EMP\_Appendix D, Management Plans  
Appendix 10: CGL\_EMP Appendix B\_2018  
Appendix 11: CGL Opportunity to Respond IR2014-014 Environmental Assessment Certificate #E14-03 Project Wide EAO Inspection – April/May 2021  
Appendix 12: EN2021-001\_Coastal GasLink\_Section\_53\_Order\_Signage

**Environmental Assessment Office - Compliance & Enforcement Branch**

<b>Mailing Address:</b> PO Box 9426 Stn Prov Govt Victoria, BC V8W 9V1	<b>Phone:</b> 250-387-0131 <b>Email:</b> <a href="mailto:eao.compliance@gov.bc.ca">eao.compliance@gov.bc.ca</a> <b>Website:</b> <a href="http://www.gov.bc.ca/eao">www.gov.bc.ca/eao</a>
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