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Operations Regulatory Compliance

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Closed Report - 28 March 2019

Event Type: Field Inspection

CV Event Number
CV1819-560

Selected Related Events

- OM2017-066

Name of the Regulated Company for this Event

Trans
Mountain Pipeline ULC

Name of the Operating Company

Trans
Mountain Pipeline ULC

Rationale, Scope, and Additional Description

Trans Mountain Pipeline ULC ("Trans Mountain") completed pipeline protection activities along the Trans Mountain pipeline Right-of-Way ("ROW") at KP 19.99 within the North Saskatchewan River crossing, in the City of Edmonton, Alberta. The pipeline protection activities are to address the insufficient depth of cover at the channel thalweg and prevent the potential risk of pipeline exposure during high flow events. This work was completed under OM2017-066. Trans Mountain completed an inspection of the condition of the armouring in fall of 2018, and determined that some of the upstream armoured mats have been displaced. The downstream armoured mats, on top of the pipeline remain in place, protecting the pipeline. Trans Mountain is proceeding with re-positioning of the displaced armouring and long term measures to address anchoring of the mats. The scope of work for the matting re-positioning consists of conducting an ice assessment to ensure equipment can safely access the ice surface, conducting ice building as required based on existing ice conditions, creating an open trench within the ice surface along the leading edge of the armouring, re-positioning displaced armouring within the watercourse, drilling screw piles into the riverbed material, and fastening the entire leading row of armouring to the screw piles. Divers will be utilized to assist with the re-positioning of the displaced armouring and conduct the fastening of the armouring to screw piles.

Selected Province/Territory

- Alberta

Start Date
2019-03-11End Date
2019-03-12

Inspection Officer Number

- 2619
- 2738T
- 2650T

Selected Disciplines

- Environmental Protection

Compliance Tool Used:

- Corrected Non-compliance (CNC) (1)
-

This inspection was undertaken to verify compliance with the following legislative requirements:

- National Energy Board Act (NEBA)
 - National Energy Board Act (NEBA) 2016-06-19
 - National Energy Board Onshore Pipeline Regulations (OPR)
- Plans And Procedures
 - Project-specific Environmental Protection Plan (EPP)
 - Environmental Protection Plan: Trans Mountain Pipeline ULC Warranty Work within the North Saskatchewan River

Selected Regulatory Instrument Numbers

- OC-2

Facility Details**Facility Types**

Pipeline

- Pipeline right of way (ROW)

Life-cycle Phases

- Operations

Additional Information

Maintenance activity

Selected Facilities

- Mainline (Pipeline)
-

Observations (No follow-up required)**General Observations****Date**

2019-03-11

Discipline

Environmental Protection

Categories

- Water Bodies - Fish-bearing
 - Sedimentation/Turbidity
 - Disturbance
 - Chemical Spills/Releases
- Wildlife
 - Disturbance

- Housekeeping
 - Waste Management
- Training and Documentation
 - Documentation Available/Up to Date

Facility

- Mainline

Observations

On River Activities

- On river activities were occurring on an engineered ice surface that was created in previous weeks. Trans Mountain representatives indicated the ice is inspected daily and is approximately 1 m thick.
- NEB Inspectors observed live footage of diver performing work underwater (measuring and cutting underwater piles).
- Several pieces of equipment were stored on the engineered ice in the vicinity of the diver tents including a welder, small generator, mobile heaters. All equipment was stored in secondary containment. A small fuel can was also stored on the ice within secondary containment. No non-compliances were observed with respect to equipment and fuel storage on ice.
- A large spill kit containing sorbent pads, a boom and garbage bags was observed near the dive tent. NEB Inspectors discussed the position with Trans Mountain representatives as the location was in close proximity to essential dive gear (i.e., air cables) and Inspectors were concerned about the possibility of safety risks if the spill kit was required. Trans Mountain representatives indicated that spill kits were also located on mobile equipment (i.e., bobcats and excavators) and that the large kit is moved on a daily basis based on risk and is in its current location due to the presence of the equipment and fuel for the divers.
- NEB Inspectors observed the drilling of holes in the ice for the installation of the piles. The hole was drilled using a modified excavator. Electric (battery powered) augers were also present onsite, Trans Mountain representatives indicated this was to reduce the use of fuel on the ice surface.
- Installation of piles was observed. This was done by twisting using the modified excavator with ongoing communication via radios with a diver. Inspectors observed the communication system within the diver tent.
- Previously drilled holes were covered with plywood which was secured to the ice surface. The area of existing holes was also fenced off and warnings were posted on the fence.

Turbidity Monitoring

- NEB Inspectors observed two rounds of turbidity sampling during the inspection approximately 2 hours apart. One sampling round was observed in closer detail:
 - Transects were appropriately located spatially downstream of the instream work as per the outline in the Environmental Protection Plan (EPP) for the activity.
 - Water grab samples were taken approximately 1m into the water column.
 - NEB Inspectors observed the testing of water samples which were performed in triplicate for each sample location.
 - No exceedances were observed during the inspection. NEB Inspectors also reviewed the results of past sampling events and no exceedances were recorded.

Onshore Laydown Area

- The laydown area included three trailers (general construction, office trailer and a dive trailer), a storage area for the screw anchor piles and a small parking area.
- A mobile heating unit, generator, and spill kit were present behind the trailers. Appropriate secondary containment was observed under all equipment where required in the EPP.
- The large spill kit contained sorbent pads, booms and garbage bags.
- The laydown area was generally tidy and well organized, however some waste was observed (see CNC #1).

Compliance Tool Used
No Compliance Tool Used

Compliance Summary

Corrected Non-Compliance (CNC) #1 - Housekeeping

Date

2019-03-11

Discipline

Environmental Protection

Categories

- Housekeeping
 - Waste Management

Facility

- Mainline

Observations

Although largely tidy and well organized, NEB Inspectors observed a few items that required additional attention within the laydown yard.

- A dirty rag was observed in the drip pan for the generator; Trans Mountain representatives immediately removed and disposed of the rag in the contaminated waste bin.
- Soot was observed on the snow around the mobile heater unit. Trans Mountain representatives indicated that over 3000 L of was fuel was being burned daily during cold work days, and the soot is a result of this high fuel consumption. The snow was removed while Inspectors were in the field and Trans Mountain representatives indicated that they would continue to monitor the area.
- An apple core was located underneath the dive tank trailer, and this was immediately remediated by staff on-site.
- An improvised restroom area was located beside the dive trailer. A heated portable washroom was in the immediate vicinity. Trans Mountain indicated that this issue was discussed at the morning meeting and all workers were reminded to use the facilities provided.
- Cut pilings were stored in an area of the laydown yard. A small amount (1-2 grams) of metal shavings was observed on the snow. This was discussed with company representatives and the site was cleaned up and a metal storage bin was ordered for the remainder of the Project.

Inspectors note that this area is not secure and is accessible to the general public. However, Trans Mountain representatives acknowledged that regardless of this fact they are still responsible for the cleanliness of the site and addressed all of these issues in a timely fashion. No additional corrective action is required.

Compliance Tool Used

Corrected

Non-compliance (CNC)

Legislative Requirement

Environmental

Protection Plan: Trans Mountain Pipeline ULC Warranty Work within the North Saskatchewan River

Applicable Wording from Legislative Document

3.5 Containment Handling & Spill Response 12.

All garbage should be kept in appropriate disposal facilities and removed from the site at the time of demobilization.