



Operations Regulatory Compliance

Closed Report - CV1920-157 - 10 February 2020

Event Type

Field Inspection

CV Event Number

CV1920-157

Project Companies

• Trans Mountain Pipeline ULC

Name of the Operating Company

Trans Mountain Pipeline ULC

Rationale, Scope, and Additional Description

This was a CER/IAMC joint inspection which verified Trans Mountain's compliance with its Environmental Protection Plan for the project during construction of Spread 1 in the Edmonton region. Specific areas of focus were biosecurity, topsoil salvage, wetland and watercourse crossing mitigation and traditional land use areas mitigation.

Selected Province/Territory

• Alberta

Start Date

2019-11-25

End Date

2019-11-28

Inspection Officer Number

• 2275

Selected Disciplines

- Environmental Protection
- IAMC Observation

Tool Used:

Corrected Non-compliance (CNC) (1)

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

- Canadian Energy Regulator Act (CERA)
 - Canadian Energy Regulator Act (CERA)

- · Plans And Procedures
 - Project-specific Environmental Protection Plan (EPP)
 - Pipeline Environmental Protection Plan for the Trans Mountain Expansion Project - NEB Condition 72 - Revision 6 - A6Y2H2
 - Project-specific plan or procedure
 - Heritage Resources and Sacred and Cultural Sites Plan. 01-13283-GG-0000-EV-RPT-0051. Rev 2. July 2019. NEB Condition 100

Selected Regulatory Instrument Numbers

• OC-065

Facility Details

Facility Types

Pipeline

• Pipeline right of way (ROW)

Life-cycle Phases

Construction

Additional Information

Selected Facilities

• TRANS MOUNTAIN EXPANSION PROJECT (Pipeline)

Observations (No follow-up required)

General RoW and Pipe Yard Observations

Date

2019-11-25

Discipline

Environmental Protection

Categories

- Soils and Soil Productivity
 - Erosion Control
 - Soil Handling
 - Biosecurity
 - Soil Integrity
 - Chemical Spills/Releases
- Water Bodies Non-Fish-bearing
 - Temporary Access Structures
 - Chemical Spills/Releases
- Wildlife
 - Species of Concern
- Vegetation
 - Invasive Plant Management
- Housekeeping
 - Waste Management
- Training and Documentation
 - Documentation Available/Up to Date

- Socio-economic
 - Traditional Land and Resource Use
 - Heritage Resources

Facility

• TRANS MOUNTAIN EXPANSION PROJECT

Observations

The inspection team observed a variety of activities over the course of this 4 day inspection. Prior to inspection, the rental vehicle underwent a level 3 cleaning in accordance with biosecurity protocols for the Project.

Construction Activities Observed:

- surveying and staking;
- hydrovac and line locates;
- · mulching;
- · topsoil stripping, and grading
- construction of utility, watercourse and wetland crossings

The inspection team reviewed the hazards with the site foremen at all locations and signed the Field Level Hazard Assessment's (FLHA) over the course of the 4-day inspection.

Soil Management

Topsoil stripping and grading was observed at KP 49, KP48, KP36, KP19. Both the Lead Environmental Inspector and crew members referenced soil samples being taken every 100m to verify topsoil depth referenced by the grade plan. The inspection team observed topsoil stripping activities and segregated, staked, and labelled topsoil piles. All piles observed were within the ROW boundaries and no trespassing was observed. The inspection team also observed segregated, staked, and labelled transition piles and subsoil piles. When contractor crew members were asked the depth of the topsoil, their answers were consistent with the Lead Environmental Inspector's answer. When asked how they know the depth of topsoil to strip they referenced the grading plan.

A keyed edge of the ROW indicated the depth of the topsoil and grading. The inspection team observed both silt fencing and keyed edges used for erosion mitigation.

The inspection team observed no stains under inspected equipment.

No issues noted.

Vegetation

The inspection team observed signage for a site with significant weed infestation. Signage was present with mitigation instructions. At the time, that site had not yet been disturbed.

No issues noted.

Biosecurity

Maximum bio-security cleaning is Level 3 Cleaning the process of which is as follows: Level 1 is the removal of soil/debris via brooms/shovels, a mechanical process. Level 2 is power washing the equipment to remove the remaining soil. Level 3 is the application of a bleach solution. . Clubroot is the main biosecurity concern on this spread.

Cleaning records were requested and reviewed for 4 pieces of equipment that had stickers indicating they had been cleaned. Trans Mountain uses an app to record and store information relating to equipment cleaning. Information collected includes equipment identification, date, photos of equipment post-cleaning. Records reviewed were consistent with equipment observed and no issues were noted.

Biosecurity levels were clearly marked at locations with signage, stakes, and in the FLHAs. The inspection team observed two cleaning stations for foot traffic at level 3 sites. Crew members passing from a contaminated site to a clean site used these cleaning stations and signed a log. Equipment cleaning-station assembly had begun and the inspection team observed one site where it was in the process of being set-up. Until the equipment stations were set up, the equipment on the contaminated sites remained on that location and did not cross into the clean sites.

No issues noted.

Socio-Economic

The inspection team visited TLU-01a, TLU-01b, TLU MC-K4(A), and PAL-1. Stakes and flagging were present and setback distances were maintained. When the inspection team asked crew members what they would do if they came upon a chance find, the crew answered with the correct steps of stopping work and contacting an environmental inspector. The Trans Mountain IM and the IAMC IM representatives discussed history relevant to the sites and their importance to the indigenous communities.

No issues noted.

Wetland Management

The inspection team visited several wetland sites: Wetland crossing (shrubby swamp) at 46.5 (WT note 1) WT-231, WT-220, and WT-230.

At WT-231, wetland signage was present and ready for install after soil stripping was completed. Observed stripping of wetland soils, which were stored separately and marked such that they can be replaced in the same location. The inspection team requested a wetland crossing plan for one of the sites visited, which they later reviewed and found no issues. TMX team discussed wildlife field studies that were conducted prior to construction activity to ensure minimal disturbance. TMX team also discussed methods to minimize erosion into waterbodies, which included a combination of keyed edges, silt fences, and shrubbery, all of which were observed by the inspection team. At WT-2301, TMX discussed their field guide that is targeted to the construction crews such that the crews can understand what is required for different types of wetlands. This guide is to supplement the EPP. The inspection team requested access to the guide, which they later reviewed and found no issues.

At WT-229 wetland crossing inspection team observed that wing walls and matting was in place.

At WT-1425 TMX discussed that they are keeping part of the wetland and associated habitat intact for the wildlife in the area.

No issues noted.

Housekeeping

The inspection team visited the North Gate and Enoch Yards. Waste bins were present and clearly labelled. Separate bins existed for: garbage; cardboard; contaminated soil; epoxy coating; empty plastics; spent aerosols; and oily waste. The generator had a drip tray underneath. The yard also stored several mobile spill kits ready for use. Drainage ditches exist and drain into a storm pond. No stains or litter observed. Site was clean and tidy.

The inspection team also visited the Enoch Yard. Within the trailer, the inspection team observed several documents posted on the bulletin board including the ERP fact sheet, the site specific safety plan, the site specific environmental execution plan, and the site specific hazard and risk assessment for the yard. Within the yard existed: stockpiles of pipe; appropriate waste storage areas with bins segregated and labelled; sea cans containing various supplies; generators with drip trays; and spill kits by each trailer. A water retention pond and drainage area also existed to capture run-off water. Several pieces of equipment were inspected for stains, fire extinguishers, and spill kits. Approximately

10 pieces of equipment were on-site, some of which were dirty. The inspection team reviewed cleaning records for 237, SPT26, 243, SPT6 and 256. All had appropriate cleaning, and it was surmised the dirt was due to moving the equipment about in the yard when it was muddy. Fire extinguishers on equipment 257 and 243 were overdue with respect to monthly inspections (monthly inspections required). Upon further investigation by Trans Mountain, it was confirmed that these two pieces of equipment had expired fire extinguishers, which were replaced during the inspection with inspected and fit for duty fire extinguishers. Please refer to CNC#1.

Tool Used

No

Tool Used

IAMC Indigenous Monitor Observations

Date

2019-11-25

Discipline

Environmental Protection

Categories

- Socio-economic
 - Effects on Communities (including indigenous)
 - Traditional Land and Resource Use
 - Heritage Resources

Facility

• TRANS MOUNTAIN EXPANSION PROJECT

Observations

An IAMC monitor employed by Lac Ste. Anne Métis, took part in the joint CER-IAMC environmental inspection of TMX Spread 1 from November 25-28, 2019. This report documents observations made by them during the inspection.

Observations

- 1. Spread #2 Yard Inspection (Acheson)
- Good security at gate
- Disposal containers well marked and organized
- Spill container on site and ready for use
- Yard was well organized and neat
- Good drainage was in place
- Erosion control in place for sand pile
- 2. Red Zone
- Club root in field
- Boot wash station was set up
- Sign out sheet was set up
- Company to work on equipment biowash
- Rigmats in place at start of Red Zone with geotextile underneath
- Good signage in place at Red Zone
- 3. Green Zone
- Observed topsoil stripping on small wetland.
- All excavation occurred within the marked area.

- 4. TLU Site 1A
- Location stakes in place with flagging at Blackmud Creek
- Coyote tracks present on upper section of riparian area.
- Deer spotted by creek.
- 5. Paleo Site
- Accompanied by TMEP IM
- ID markers and flagging in place
- No other work started yet
- 6. TLU Site MC-K4CA
- ID markers and flagging in place
- TMEP was asked what measures would be taken if something was found and they responded that the Nation who had identified the TLU sites or Paleo sites would be contacted.
- 7. TLU 1B/EC141
- ID markers and flagging in place
- No other work started.
- 8. RoW Construction activity spot check #1
- Lots of activity in the area
- Watched the biowash from green zone
- Compliance of biowash
- Stripping of topsoil and seconds in the red zone
- Hydrovac being done in the red zone
- 9. RoW Construction activity spot check #2
- Biowash for boots set up (yellow zone)
- Good signage in place and well organized
- Mulching occurring at site.
- Topsoil stripping has been started.
- 10. Enoch Yard Inspection
- Good security in place
- Good spill containment for light stand / skidsteer / big trucks
- Site was well organized
- Spill kits on big trucks were present
- Two big truck fire extinguishers did not have up to date safety check (this was rectified immediately)
- Silt fence looks neat and tidy
- Good drainage in place
- · Animal (unidentified) tracks present in yard

Unresolved Issues / Observations

There are no observations or issues that did not get resolved in the field or that otherwise need to be addressed through the Issues Management Process.

Tool Used

No

Tool Used

IAMC Indigenous Monitor Observations

Date

2019-11-25

Discipline

Environmental Protection

Categories

- Socio-economic
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 - Heritage Resources

Facility

TRANS MOUNTAIN EXPANSION PROJECT

Observations

November 25, 2019 Trans Mountain Project

Met with CER/Environment for introductions

Meeting with Trans Mountain team @ 1 pm Sherwood Park Best Western for Safety Orientations and CER introduction

November 26, 2019

6:00 am meet with CER IOs and crew @ Sherwood Park Best Western

Inspector meeting @ 6:30 am

Carwash to wash truck and bleach @ 7:30

Kick off 9:30 am sign on with Foreman, Trans Mountain Environment Inspector and Equipment

Foreman spread 1 Trans Mountain

Spread 2 Midwest

November 27, 2019

9:00 am 1A Rd 111 st Blackmud creek TLU confidential site

TLU 1B ECN 1 (condition)

TLU 01A

TLU Confidential site MC-K4A

PLA1

10:30 am Wash station Red zone level 3 cleaning, bleaching station

0+000 - KP68.49 endangered Sharpe

1:40 KP 19+300 Anthony Henday and 66st stripping top soil, constructing ROW. Dog walkers around field. They have been asked to stay far from the wood debris flying in the area from the Mulchers. This area site is a level 1, cleaning station put up in operation to clean up equipment and boots upon exit at the available stations

Close to the Anthony Henday and Residential homes

There will be a HDD will be set to go under the Henday

Very clean and organized bio security station

3:15 pm

RoW construction area green (s) and red zone (n). No wash station. Staging area for matts

Grading top soil

Signage in place, no non compliances

Bio security is top notch

Beginning construction

November 28, 2019

@ 9 am meet up with the crew at the Town Place Hotel

@ 9:15 am Enoch Yard - Orientation Safety Amanda

Yard Inspection: clean organized.

Completed Inspection and doing a follow up then wrap up Instructions

Waste storage segregation

Equipment Inspection and extinguishers (3 expired)
Silt fence installed, caps on every pipe
Environmental coverage on all sites. Trans Mountain EI 5 and 2 SA energy Compliant
Wrap up of Inspection in trailer on the Enoch Yard

Tool Used

No

Tool Used

Compliance Summary

CNC #1 - Expired fire extinguishers

Date

2019-11-28

Discipline

Safety

Management

Categories

- Workplace Exposures and Protections
 - Fire Protection

Facility

TRANS MOUNTAIN EXPANSION PROJECT

Observations

During inspection of the Enoch Yard, the inspection team observed fire extinguishers on parked stringing trucks which did not have visible up to date inspection tags. Upon further investigation, Trans Mountain confirmed that two of the trucks had fire extinguishers expired inspection tags.

Tool Used

Corrected

Non-compliance (CNC)

Legislative Requirement

Pipeline

Environmental Protection Plan for the Trans Mountain Expansion Project - NEB Condition 72 - Revision 6 - A6Y2H2

Applicable Wording from Legislative Document

2.0 FIRE CONTINGENCY PLAN The Prime Contractor(s)

will develop a Fire Contingency Plan and a Fire Prevention Plan as part of their Emergency Response Plan (ERP) that will include, at a minimum, the guidelines provided in the TMEP Health and Safety Management Program and associated Emergency Management Program. Fire Prevention Measures The following standard measures will be adhered to during construction of the Project: • Prior to commencement of construction, the Contractor(s) will designate a Fire Boss. The Fire Boss will be familiar with fire suppression techniques, equipment and procedures. • All vehicles will carry firefighting equipment (e.g., Pulaski axes, shovels and backpack pumps) in sufficient quantities so that each worker has access to, at minimum, one hand tool with which to carry out fire suppression work. All motorized equipment must carry a fully charged fire extinguisher. The Fire Boss will ensure that fire extinguishers are present and meet requirements. The Fire Boss will also ensure compliance under the Alberta

Forest and Prairie Protection (Ministerial) Regulation as it relates to firefighting equipment.

Company Action Required

Trans Mountain shall replace or inspect and update the tags of the fire extinguishers with expired tags observed on stringing trucks at the Enoch yard.

Due Date

2019-11-28