

## Operations Regulatory Compliance

---

### Closed Report - CV1920-484 - 24 March 2020

**Event Type**

Field  
Inspection

**CV Event Number**

CV1920-484

**Project Companies**

- Trans Mountain Pipeline ULC

**Name of the Operating Company**

Trans Mountain  
Pipeline ULC

**Rationale, Scope, and Additional Description**

Inspection of ongoing construction TMX Spread 2. The scope of the inspection included contaminated sites, biosecurity, soil handling, waste management, erosion and sediment control, as well as wetland and watercourse crossings mitigation, traditional land & resource use and heritage resource sites mitigation.

**Selected Province/Territory**

- Alberta

**Start Date**

2020-01-14

**End Date**

2020-01-17

**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:**

- 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 Plans Volume 2: Pipeline Environmental Protection Plan for the Trans Mountain Pipeline ULC TMEP NEB Condition 72 Rev 6 Sept 2019

### **Selected Regulatory Instrument Numbers**

Not Selected

### **Facility Details**

#### **Facility Types**

Pipeline

- Pipeline right of way (ROW)

#### **Life-cycle Phases**

- Construction
- Pre-Construction

### **Additional Information**

#### **Selected Facilities**

- TRANS MOUNTAIN EXPANSION PROJECT (Pipeline)
- 

## **Observations (No follow-up required)**

### **General Right of Way (RoW) Observations**

#### **Date**

2020-01-16

#### **Discipline**

Environmental Protection

#### **Categories**

- Soils and Soil Productivity
  - Erosion Control
  - Soil Handling
  - Biosecurity
  - Soil Integrity
  - Chemical Spills/Releases
- Water Bodies - Fish-bearing
  - Temporary Access Structures
  - Sedimentation/Turbidity
  - Destruction/Loss of Habitat
  - Disturbance
  - Chemical Spills/Releases
- Housekeeping
  - Waste Management
- Training and Documentation
  - Documentation Available/Up to Date
  - Permits/Approvals
  - Training
  - Inspections
- Socio-economic
  - Traditional Land and Resource Use

## Facility

- TRANS MOUNTAIN EXPANSION PROJECT

## Observations

The Trans Mountain Expansion Project (TMEP) Right of Way of Spread 2 was inspected by the Inspection Team. Observations are summarized below:

- **Topsoil stripping and stockpiling:** Topsoil management was observed at various locations across Spread 2. Soils were properly stripped, piled and labeled in all instances observed.
- **Clearing Activity:** The Inspection Team observed burning, felling and mulching along the right of way (RoW). Burning took place in specified areas which had been stripped to subsoil, as per EPP requirement to preserve topsoil. Merchantable timber observed to be stored in a tidy manner. The edges of the RoW (marked by flagging tape) were respected with no instances of trespass off RoW observed.
- **Biosecurity:** Biosecurity cleaning stations were observed at various locations during the inspection. Signage identifying cleaning stations was observed on stations located on the RoW. Biosecurity spotchecks completed on various equipment revealed cleaning records were available on request. The cleaning records were reviewed by the Inspection Team with no issues noted. Whirling disease procedures were discussed, and consist of a 3 level system depending on the risk of exposure. IOs observed signage at watercourse crossings which included the WD note as a reminder for crews to follow Whirling Disease protocols at these locations.
- **Traditional Land Use (TLU) Sites:** Mitigations for a number of different TLU sites were observed during the inspection. Signage, flagging, buffer zones, and pre-construction plant gathering were some of the most frequent mitigations observed, all in compliance with the commitments to Condition 100 on a site specific basis. The Inspection Team met with the Company Indigenous Monitors to discuss their experience, training and role in the project.
- **Company Indigenous Monitor Involvement and Training:** The Inspection team met with company IMs to discuss their experience and involvement. Company IMs are working with Environmental Inspectors (EIs) at present, and reported a positive and inclusive work environment. Company IMs are participating in a training and capacity building program on Spread 2. An example of a Company IM daily report was viewed by the Inspection Team.
- **Hazardous waste and hazardous products storage:** the Inspection Team spot checked hazardous waste storage vessels for secondary containment, spill kits and waste segregation at every opportunity available. In all cases observed with the exception of one (CNC #1), from heavy machines to small fuel drums, secondary containment was in place.

## Tool Used

No

Tool Used

## Documentation Review

### Date

2020-01-08

### Discipline

Environmental Protection

### Categories

- Soils and Soil Productivity
  - Erosion Control
  - Restoration

- Vegetation
  - Vegetation Control
- Groundwater
  - Monitoring and Testing
- Training and Documentation
  - Documentation Available/Up to Date
  - Permits/Approvals
  - Training
  - Inspections
- Socio-economic
  - Effects on Communities (including indigenous)
  - Traditional Land and Resource Use
  - Heritage Resources

## Facility

- TRANS MOUNTAIN EXPANSION PROJECT

### Observations

During the first 1.5 days of the Inspection, construction activity was shut down along the Spread 2 Right of Way (RoW) due to extreme cold. During this time, the Inspection Team opportunistically assessed compliance to various elements of the EPP and Conditions of the Trans Mountain Expansion Project (TMEP) since the inspection was unable to proceed outdoors. Subjects covered included:

### Groundwater Monitoring Program

IOs inquired on the status of this Program. TMPU organized a conference call with a Technical Specialist from off-site, who provided a summary of the ongoing Program and answered all questions asked. No issues noted.

### Stakeholder Notifications

The Inspection Team viewed various notification documents and mailing lists provided by TMEP, demonstrating that the company had notified a number of stakeholder groups of the work commencing with the required amount of notice (number of days before start of work). In general, notifications were in the form of printouts in local newspapers and newsletters disseminated to residents, recreational users, Indigenous communities, Alberta Health, local MLAs and MPs, Fire chiefs, etc. in September 2019. No issues noted.

### Cultural Awareness Training for contractors

The Inspection Team reviewed the Level 1 orientation training provided by the Prime Contractor for workers on Spread 2. This was viewed in order to assess the sharing of culturally sensitive information and awareness of workers. Between the presentation and other Prime Contractor documents, workers have been made aware of hunting and fishing restrictions, the traditional land on which they work, the names of Indigenous communities along the Spread, the existence and importance of traditional land use (TLU) sites along the Spread, and chance find procedures. A brief summary of commonly found archeological artefacts was also shared.

TMEP staff reiterated the importance of ongoing discussion and awareness of cultural sensitivities as a key feature, which the company indicated is regularly shared during tailgate meetings.

### DFO Permits

The Inspection Team inquired for an update on the status of DFO permits on Spread 2. TMPU organized a phone call with a Technical specialist from off-site to provide an update. No water crossing construction has yet begin. The Critical Habitat risk map was discussed, as well as the Athabasca rainbow specifically. No concerns noted.

**Environmental Deficiencies Identification and Tracking Software for TMEP:** The Inspection Team viewed TMPUs internal tracking software in which daily IE and IM reports are recorded and

assessed by a supervisor. Examples of EI daily reports and issue-identification (deficiency tracking) were viewed. Deficiencies observed by EIs, e.g., a lack of secondary containment or mis-mulched tree stumps are flagged and tracked (corrective actions and due date). IOs noted that this system facilitates proactive compliance of TMEP to their EPP, and documentation of staff's efforts to address problems which IOs may also identify in the field.

### **Coarse Woody Debris (CWD)**

The management and spreading of CWD was discussed with TMPU staff. TMPU staff demonstrated a thorough level of understanding and awareness, and was consistent with the commitments outlined in the EPP. This work has not yet been implemented in the field as no watercourse construction has yet begun or been reclaimed. No concerns noted.

### **Authorizations for work**

The Team inquired into the KPs at which all work was being conducted along the Spread. The Team reviewed TMEPs list of locations with ongoing work in comparison to the locations at which work is not authorized to begin. No issues noted. It was also observed that authorized work areas were displayed visually on sizeable Spread 2 wide map posted in the meeting trailer for all workers' awareness.

### **Tool Used**

No Tool Used

## **Watercourse Crossings and Wetlands**

### **Date**

2020-01-17

### **Discipline**

Environmental Protection

### **Categories**

- Water Bodies - Fish-bearing
  - Temporary Access Structures
  - Erosion
  - Disturbance

### **Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

### **Observations**

Numerous wetlands were observed along the RoW. Appropriate buffers, signage and erosion control were in place in all instances observed. The Inspection Team observed that TMEP opportunistically narrowed the RoW in a newly-discovered wetland area (KP281.7) to preserve as many riparian trees as feasible.

Little Brule Creek, Carrot Creek and Bench Creek crossings were all inspected. Silt fencing and erosion control measures were present where needed and surveying and flagging were observed to be in place. Active work had not yet begun in any watercourse crossings at the time of the inspection.

### **Tool Used**

No

Tool Used

## IAMC Indigenous Monitors Observations Alexander First Nation

### Date

2020-01-08

### Discipline

Environmental Protection

### Categories

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

### Facility

- TRANS MOUNTAIN EXPANSION PROJECT

### Observations

*Additional Observation recorded by IAMC Indigenous Monitors participating in the CER Inspection as part of the Inspection Team.*

*Any compliance related observations that require specific regulatory follow-up have been recorded above.*

### Tool Used

No

Tool Used

## IAMC Indigenous Monitors Observations Ermineskin First Nation

### Date

2020-01-08

### Discipline

Environmental Protection

### Categories

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

### Facility

- TRANS MOUNTAIN EXPANSION PROJECT

### Observations

*Additional Observation recorded by IAMC Indigenous Monitors participating in the CER Inspection as part of the Inspection Team.*

*Any compliance related observations that require specific regulatory follow-up have been recorded above.*

## TMX-IMAC Environmental Inspection Report

Spread 2 Edson, Alberta  
January 14-18, 2020

Edson Environmental Inspection:  
Observation focus: Construction and worksites.  
Scope of inspection: stated to be environmental inspection.

Jan.14, 2020

Initial meeting (restaurant):

CER Inspection Officers (IOs) 2 and 2 IAMC Indigenous monitors (IM) 1 and myself.

- < >what we will be covering as of sites and the KPs traveled
- both IOs spoke of their backgrounds, fields of knowledge, and expectations for inspections
- a knowledge/information exchange for the area
- IOs spoke of work being done in areas of interest
- weather advisories for the week -30s to -40s
- what times to meet in the morning, lunch and end of day.

End of meeting.

Jan.15, 2020

Morning meet up (hotel lobby):

CER IOs (2) 1 IM (myself)

- < >-35 morning
- heard from some of personnel / people with vehicle troubles in the lobby area of hotel.
- morning spent waiting on response from TMX if Inspection will proceed as construction halted today due to cold weather
- IO's get response, we can proceed to the Edson Yard at 10 a.m.
- IO's spoke of what work could be covered for the day

Left hotel by 9:45

Jan.15 2020 cont.

Edson TMX Yard, (Construction trailer)  
Opening meeting:

TMX 7, CER IOs 2, 1 IM (myself),

- Introductions made,
- IO's spoke to the purpose for the inspection
- an information exchange for areas and aspects of interest
- health and safety gave us an informative overview of what duties his job entails
- Document review is mention for the day(all parties agree)

- weather shut down for construction -40 weather
- TMX spoke of what type of work was taking place at the time, maintenance, cleaning, staking, construction, clearing,
- TMX very helpful with representation of documents and information
- IO's ask for what kind of training/intake process new employees get when first starting on TMEP.
- TMX orientation video review, some permits covered, what types of signage that is out, and other watercourse crossing construction related documents covered in document review,
- TMX speaks to having a paperless reporting system, an online app uploads records, daily works, documents from inspectors, managers, supervisors, employees, all staff
- TMX mentions spread 1 work is suspended for the week due to the cold weather
- IO's, TMX navigate plans for next day (inspection)
- TLU sites/ sensitive areas spoken of as an area of interest to CER IO's
- contaminated areas are of interest to CER IO's
- I was asked for any areas of interest

End of meeting  
End of day.

Jan.16 2020

Edson TMX yard, (construction trailer)  
Opening meeting:

5 TMX, 2 CER IO's, 2 IM's (1 and myself)

- greetings exchanged
- spoke to weather forecast of -40's for the day
- spoke of work scheduled for the day
- conversation of what a level 1 comprehension training program is and how its conducted
- spoke of TLU sites/sensitive areas
- spoke of what Fish and Wildlife (FW) protocols are.
- spoke of watercourse crossings (WC) procedures
- spoke of what was being done with the coarse woody debris (CWD)
- explanation given for forecasted works or potential work progression processes
- spoke of some of TMEP conditions and commitments
- notification verification for surrounding areas took place
- Information exchange of the clubroot coverage of Alberta and areas of inspection, any worksites near contaminated areas
- information given on bio-security/treatments for contamination
- also conversations on compliances TMEP has covered on biohazards areas including clubroot, whirling disease
- a whirling disease information exchange/discussion

End of meeting

Site 1 (access point to Right Of Way)

- CER notices clearing is wider than expected
- signage out, and visible
- construction work in progress
- mulcher actively working on arrival on site
- many employees on site
- mechanical assistance needed for machinery

- clearing, stripping, topsoil grading, staking, and mulching was started before inspection
- inspected 2 none running machinery
- information request for 2 machines
- inspected refueling station
- very cold weather expected all week

#### Site 2 (confidential site)

- signage out with note # on it, visible
- site was close to access point also known as a shoefly
- topsoil stripped , plots scraped where burning pile were set to start in days to come
- bio-security stations in place close to TLU site
- no issue with this site

#### Site 3 (yard)

bio-security process (no car washes open)

#### Site 4 (heritage site)

- signage out, visible
- many employees on site
- very busy in area
- explanation to why grading of soil is being done
- construction; stripping, clearing, grading snow, silt fence being constructed, sorting of trees and piled for retail purchase and/or donate, burned.
- many spoils of soil
- secondary containment needed for graded snow
- mulcher due at site next day
- hydrovac slurry pit inspected
- no issue with this site

#### Edson TMX yard (construction trailer)

##### Closing meeting:

- confirm to meet up for 6:30 a.m. supervisor/managers/inspectors/foremen meeting
- confirm meeting TMX IM's
- information given for construction activity in area
- list of site Ids made available
- confirm site visits for next day
- confirm next day will be full day of inspection

#### End of day

Jan.17, 2020

Edson yard  
(TMX main office trailers)

##### Opening meeting:

- < >opening remarks made by TMX personnel
- introductions made
- safety moment is a great exercise for staff
- activity for day reported

End of meeting

TMX yard (construction trailer)

- met with TMX IM's
- TMX IM's are confident, well versed,
- IM's stated to be free to work alone but are not far from any TMX environmental inspector(EI)
- IM's stated they haven't had any chance finds yet
- all TMX personnel expected at later tailgate meeting
- our lead TMX EI expected at that meeting
- CER IO's and myself check our own PPE (weather wise)

Site 5 (watercourse crossing)

- signage up
- buffer zone, clearly marked and visible
- I thought this site was an area of interest because of the area surrounding this crossing
- the area has changed since my last inspection
- construction on both side of access point to ROW
- this site planned for an open isolated cut
- no work in buffer zones indicated
- grading maybe required in buffer zone
- no real issues with this site
- noticeably more has been cleared on both sides of water break buffer zone
- no other issues or interests to me

Site 6 (across the access road)

- -31 weather outside
- signage up
- steaks clearly marked and visible
- a cleaning station at entrance to site
- cleaning station is a level 1 bio-security station
- burning pile in the distance
- designated areas scraped for more piles to be burnt
- piles burnt on mineral soil as required in EPP confirmed
- no issues with this site
- site has no interests to me

Lunch break (restaurant)

Parks Canada employee joins us before heading to next site, (not prepared for weather)

Site 6 (confidential site)

- signage up
- construction in clearing, stripping, mulching, burning, grading, piling
- TLU is clearly marked , and visible
- conditions determined to be monitored while construction is being conducted
- contractor truck had no drip tray for refueling station but was in a secondary containment unit

- - 30 weather outside
- machines record information request for 1 machine at site
- no issues

Site 7 (watercourse crossing)

- I missed this site visit, adjusting PPE due to weather
- no issues mentioned

Site 8 (watercourse crossing)

- signage is up, visible
- buffer zone steaks out clearly marked
- open isolated cut still in plans for this site
- is a plant gathering site
- no riparian growth at this site
- Atco line is close to ROW
- no issues with this site

Site 9

- signage up, visible
- -25 weather outside
- clearing site
- no work being conducted in area after clearing
- observed a feller buncher work
- 
- watercourse ID New
- fish bearing watercourse
- classified as a class E watercourse
- 

Edson TMX yard (construction trailer)

Closing meeting:

6 TMX, 2 CER, 2 IMs (myself included)

- spoke of what was inspected

**Tool Used**

No

Tool Used

**Compliance Summary**

**CNC #1 Fuel nozzle drip mitigation**

**Date**

2020-01-16

**Discipline**

Environmental Protection

**Categories**

- Soils and Soil Productivity
  - Chemical Spills/Releases

**Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

**Observations**

The CER Inspector observed fuel nozzles from a diesel slip tank in the back of a service truck on the RoW which were not placed into their drip-catchers.

**Tool Used**

Corrected

Non-compliance (CNC)

**Legislative Requirement**

Environmental

Plans Volume 2: Pipeline Environmental Protection Plan for the Trans Mountain Pipeline ULC TMEP NEB Condition 72 Rev 6 Sept 2019

**Applicable Wording from Legislative Document**

Spill

Prevention: 139. All fuel nozzles are to be stored in a secure manner to prevent drips and spills. Fuel nozzle secured within a receptacle to collect incidental drips after fueling. Do not wash equipment or machinery in or near watercourses, wetlands or lakes. Control wastewater from construction activities to avoid discharge directly or indirectly into any body of water.

**Company Action Required**

Trans Mountain will ensure that the fuel nozzles are stored in drip-catching receptacles and provide confirmation and photographic evidence of the solution to the CER Inspection Officer.

**Due Date**

2020-01-17