



Operations Regulatory Compliance

Closed Report - CV1819-570 - 12 August 2019

Event Type

Field Inspection

CV Event Number

CV1819-570

Project Companies

• Trans Mountain Pipeline ULC

Name of the Operating Company

Trans Mountain Pipeline ULC

Rationale, Scope, and Additional Description

Inspection of OM2017-066 - work conducted under the North Saskatchewan River in the City of Edmonton. Focus areas included diving safety, ice-platform viability checks. Verified compliance with the National Energy Board Onshore Pipeline Regulations (OPR), and company-specific requirements.

Selected Province/Territory

Alberta

Start Date

2019-03-20

End Date

2019-03-21

Inspection Officer Number

- 2541
- 2275

Selected Disciplines

Safety Management

Tool Used:

- Notice of Non-compliance (NNC) (2)
- Corrected Non-compliance (CNC) (2)

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

- National Energy Board Act (NEBA)
 - National Energy Board Onshore Pipeline Regulations (OPR)

- Standards
 - CSA Z662-15 Oil and Gas Pipeline Systems
- Plans And Procedures
 - Project-specific plan or procedure
 - Damage Prevention Plan

Selected Regulatory Instrument Numbers

Not Selected

Facility Details

Facility Types

Pipeline

• Pipeline

Life-cycle Phases

Operations

Additional Information

Selected Facilities

• Mainline (Pipeline)

Observations (No follow-up required)

General Observations

Date

2019-03-21

Discipline

Safety

Management

Categories

- Workplace Exposures and Protections
 - Safeguarding
 - Personal Protective Equipment
 - Industrial Sanitation and Personnel Facilities
 - Fire Protection
 - Hazard Assessment
- Permanent Structures
 - Housekeeping
 - Signage
- Lighting
 - Task Lighting

Facility

Observations

- -both the office trailers and engineered platforms were free of clutter and showed good housekeeping
- -ice thickness measurements and qualitative assessments were done daily
- -engineered platform was demarcated with pylons and snow piles
- -restricted area around diving hole and tents was painted onto the ice, identifying where PFD's were required
- -barricades were in place to prevent unauthorized access to ice holes; plywood was placed overtop of drilled holes

- -muster points were identified
- -spill kit was present
- -personal protective equipment (PPE) was in use: standard PPE, plus personal flotation devices (PFD's) in the restricted area on the ice
- -safe work permits were observed identifying: ice assessments, diving activities, dredging hazards and controls were identified; all workers signed off on the permit
- -site safety plan was reviewed; workers signed off on it
- -Ground Disturbance permit and variance was reviewed
- -Diver Rescue Procedure was reviewed
- -Damage Prevention Plan was reviewed North Saskatchewan River Anchor Drilling Installation
- -Aquatech Diving and Marine Services Ltd. "Mobilization Check List" was reviewed
- -medical supplies were available, which included an AED, spinal board and O2 bottles.
- -Supplied air inlets were placed away from diesel exhaust from the tent heaters
- -diver tethers were tested to 1800 lbs.
- -diving equipment was checked prior to use; checklist utilized on the "Diver's Log"
- -pre-use checks were completed on mobile equipment
- contractor stated the main air line is blown out three times per day to minimize condensation in the line
- -divers wore helmet cameras and audio equipment allowing staff to view their work and make recommendations in real time
- -In discussion with Trans Mountain representatives, they have formally submitted 1 incident report to the NEB, and have recorded several minor releases, on shore, that were lower than reporting threshold -Environmental Protection Plan for the project is on site for reference
- -TransMountain staff stated the need to do this project was identified as a result of post fish survey work completed on the original operations and maintenance (OM) project. The fish survey identified that the mats had shifted and needed to be re-set and anchored

Tool Used

No

Tool Used

Worker Certifications

Date 2019-03-21 Discipline Safety Management Categories

- Training and Competency
 - Training and Competency

Facility

Mainline

Observations

During the inspection, the Inspection Officers randomly selected one of the diving sub-contractors employees and requested their diving certification documentation. Upon review, it was apparent the

certification had expired. The Inspection Officers followed up by requesting the diving certifications for all of the sub-contractors divers used for this project. Upon review, all other certifications appeared to be current at the time of the inspection. After analyzing the results, the Inspection Officers are of the opinion this is not a systematic issue and will not require additional action by Trans Mountain.

Tool Used

No

Tool Used

Compliance Summary

NNC - Contractor Oversight

Date

2019-03-21

Discipline

Safety

Management

Categories

- Training and Competency
 - Training and Competency

Facility

Mainline

Observations

The assigned Project Inspector representing the NEB Regulated Company was not familiar with the specifics of the dive safety plan, and admitted he was not familiar with commercial diving operations or associated hazards and controls. Oversight of the specialized work being conducted by contractors was inadequate.

Tool Used

Notice

of Non-compliance (NNC)

Legislative Requirement

National

Energy Board Onshore Pipeline Regulations (OPR)

Sections Of The Act

National Energy Board Onshore Pipeline Regulations (OPR)

6.5 Management System Processes

(1) A company shall, as part of its management system and the programs referred to in section 55,

 \checkmark (k) establish and implement a process for verifying that employees and other persons working with or on behalf of the company are trained and competent and for supervising them to ensure that they perform their duties in a manner that is safe, ensures the security of the pipeline and protects the environment;

Company Action Required

The regulated company shall commit to ensuring that those assigned oversight responsibilities have sufficient technical qualifications, and have been provided the requireded specialized training to ensure

viable and effective oversight on all future projects where contractors are undertaking specialized work. Provide verification of this commitment, including how this will be ensured.

Due Date

2019-04-29

CNC - Hazard Identification: Diesel Fumes

Date

2019-03-21

Discipline

Safety

Management

Categories

- Workplace Exposures and Protections
 - Hazard Assessment

Facility

Mainline

Observations

Diesel exhaust fumes from the tent heaters was not identified as a hazard and as a result it was not vented an adequate distance away from workers, which created an exposure hazard to workers in the tents.

Tool Used

Corrected

Non-compliance (CNC)

Legislative Requirement

National

Energy Board Onshore Pipeline Regulations (OPR)

Sections Of The Act

National Energy Board Onshore Pipeline Regulations (OPR)

- 6.5 Management System Processes
 - (1) A company shall, as part of its management system and the programs referred to in section 55,
 - ${ \checkmark }$ (c) establish and implement a process for identifying and analyzing all hazards and potential hazards;
 - \checkmark (f) establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks;

Company Action Required

The company needs to alter the exhaust piping on the heaters to direct it away from the workers.

Due Date

2019-03-21

CNC - Hazard Identification: Noise Control

Date

2019-03-21

Discipline

Safety

Management

Categories

- Noise Control
 - Enclosures
 - Monitoring/Evaluation

Facility

Observations

Noise levels were elevated when workers were blowing down airlines; this hazard was not noted on the job hazard assessment and hearing protection PPE was not issued.

The Regulated Company ensured hearing protection was issued and updated their JHA.

Tool Used

Corrected

Non-compliance (CNC)

Legislative Requirement

National

Energy Board Onshore Pipeline Regulations (OPR)

Sections Of The Act

National Energy Board Onshore Pipeline Regulations (OPR)

- 6.5 Management System Processes
 - (1) A company shall, as part of its management system and the programs referred to in section 55,
 - \checkmark (c) establish and implement a process for identifying and analyzing all hazards and potential hazards;
 - \checkmark (f) establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks;

Company Action Required

The Regulated Company to ensure hearing protection is issued and update their JHA.

Due Date

2019-03-21

NNC - Review of onsite field level safety and hazard analysis documentation

Date 2019-03-21 Discipline Safety Management Categories

- Workplace Exposures and Protections
 - Personal Protective Equipment
 - Hazard Assessment

Facility

Mainline

Observations

Field level safety documentation was provided for various dates between 11 and 21 March 2019. The documentation was requested for TransMountain as the certificate holder and their sub-contractors on site. The documentation consisted of TransMountain's daily Safe Work Permits along with daily Field Level Hazard Assessments (FLHA's) and Job Safety Analysis (JSA's) from various sub-contractors.

After reviewing all of the documentation the Inspectors identified that TransMountain's Safety Work Permits did not list PFD's as required PPE for a project that is based on the ice over the North Saskatchewan River. Other PPE was listed as required but not PFD's on four separate daily Safety Work Permits. The sub-contractors FLHA's and JSA's did list PFD's as a requirement.

The Inspectors also noted that there were differences between the sub-contractors JSA's and FLHA's as to what hospital is closest to the job site in case of an emergency.

Tool Used

Notice

of Non-compliance (NNC)

Legislative Requirement

National

Energy Board Onshore Pipeline Regulations (OPR)

Sections Of The Act

National Energy Board Onshore Pipeline Regulations (OPR)

- 6.5 Management System Processes
 - (1) A company shall, as part of its management system and the programs referred to in section 55,
 - ✓ (f) establish and implement a process for developing and implementing controls to prevent, manage and mitigate the identified hazards and the risks and for communicating those controls to anyone who is exposed to the risks;
 - \checkmark (I) establish and implement a process for making employees and other persons working with or on behalf of the company aware of their responsibilities in relation to the processes and procedures required by this section;
- 29. Maintenance Safety
 - (1) If a company contracts for the provision of services in respect of the maintenance of a pipeline, the company shall
 - \checkmark (b) inform the contractor of all special safety practices and procedures necessitated by the conditions or features specific to the maintenance; \checkmark (b.1) inform the contractor of the contractor's responsibilities referred to in paragraph 6.5(1)(I);

Company Action Required

TransMountain will ensure their field level staff are provided direction regarding atypical operations maintenance work to have a higher level of review for hazards and potential hazards and to the Safe Work Permits.

TransMountain will ensure their field level staff are requried to not soley rely on sub-contractors to identify hazards and potential hazards along with their associated controls during operatons and maintenance work.

Due Date 2019-04-29