

A final copy of the compliance verification report for CV1920-188 is included at the end of this message. If non-compliances were identified during the compliance activity, the officer considers them to be resolved. No further follow-up is required. If this activity is a Field Inspection or Emergency Exercise Evaluation, the CER may post the results of the activity on its external website.

Identified non-compliances to company plans or procedures are non-compliances either to:

- the condition of an authorization document that requires implementation of that plan or procedure; or
- to the relevant section of the regulations that requires implementation of that plan or procedure including those sections that require implementation of plans or procedures as part of a Program.

Event Type

Information
Exchange Meeting

CV Event Number

CV1920-188

Selected Related Events

- REM-0083b
- REM-0083
- REM-0085
- REM-0085b
- REM-0085c
- REM-0085d
- REM-0085e
- REM-0085f
- REM-0085g
- REM-0303
- REM2019-002
- REM2019-005
- REM2019-012
- REM2019-011
- REM2019-023
- REM2019-028
- REM2019-034
- REM2019-033
- REM2019-035
- REM2020-010
- REM2020-011
- REM2020-012
- REM2020-013
- REM2020-014
- CV1920-489

Project Companies

- Trans Mountain Pipeline ULC

Name of the Operating Company

Not specified

Rationale, Scope, and Additional Description

IE meeting focused on contamination and remediation. Scope to include: overview of Trans Mountain's contaminated sites management program/procedures, groundwater and surface water monitoring program/procedures (focus, Burnaby and Edmonton Terminals), commitments and mitigation measures (worker and environment), related contaminated sites, potentially contaminated sites and the Trans Mountain Expansion Project (TMEP), including Condition 46, CER updates with respect to ORCA/OERS remediation module, and the 2020 Annual Updates Process.

Selected Province/Territory

- Alberta
- British Columbia

Landowner Complaint File Number

Not specified

Start Date

2020-01-13

End Date

2020-01-13

Inspection Officer Number

- 2558

Selected Disciplines

- Environmental Protection
- IAMC Observation

Tool Used:

- Information Request (IR) (4)

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

- National Energy Board Act (NEBA)
 - National Energy Board Onshore Pipeline Regulations (OPR)
- Canadian Energy Regulator Act (CERA)
 - Canadian Energy Regulator Act (CERA)
- Plans And Procedures
 - Project-specific Environmental Protection Plan (EPP)
 - Environmental Plans Volume 2 Pipeline Environmental Protection Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 72 Appendix B Contamination Discovery Contingency Plan [C01961]
 - Project-specific plan or procedure
 - Contamination Identification and Assessment Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 46 [A90938-3]

Selected Regulatory Instrument Numbers

- OC-065

Additional Project-specific Requirements or Conditions

Not specified

Facility Details

- Facility Types
 - Pipeline
 - • Pipeline right of way (ROW)
 - • Terminal
- Life-cycle Phases
 - • Construction
 - • Operations

Additional Information

Selected Facilities

- Mainline (Pipeline)
- BURNABY (Facility)
- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT] (Facility)

Observations (No follow-up required)

Compliance Summary

IR #1: Pre-Meeting Information Request

Discipline

Environmental Protection

Categories

- Soils and Soil Productivity
 - Chemical Spills/Releases
- Surface Water Management
 - Surface Water Management Plan
- Water Bodies - Non-Fish-bearing
 - Chemical Spills/Releases
- Water Bodies - Fish-bearing
 - Chemical Spills/Releases
- Groundwater
 - Chemical Spills/Releases

Facility

- Mainline
- BURNABY
- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT]

Latitude

49.26848937

Longitude

-122.93134198

Observations

Prior to the Information Exchange meeting, CER Staff require the following information related to contaminated site management, remediation and monitoring. Please provide a response to the following request by 8 January 2020. Upload the document to ORCA via the link to be provided separately (CV1920-188).

Tool Used

Information
Request (IR)

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,
 - ? (c) establish and implement a process for identifying and analyzing all hazards and potential hazards;
 - ? (d) establish and maintain an inventory of the identified hazards and potential hazards;
 - ? (e) establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal operating conditions;
 - ? (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;

Information Requested

Upload the following response documentation to ORCA via the link to be provided separately (CV1920-188):

PRE-MEETING INFORMATION REQUEST (IR)

Prior to the Information Exchange meeting, CER Staff require the following information for review. Please provide a response to the following request by noon on Friday 10 January 2020. Upload the document to ORCA via the link to be provided separately (CV1920-188):

1. A list of TMPUs processes and procedures that relate to TMPU's management of contaminated sites. This includes copies of:
 1. Processes and Procedures that guide TMPU's groundwater and surface water monitoring programs at the Burnaby and Edmonton Terminals.
 2. Process and Procedures which relate to TMPU's communication of contamination-related hazards to:
 - workers on site, including during for new construction/ground disturbance
 - the public
 - potentially affected groups

Discussion Topics during the meeting

Please bring the following information to the meeting for discussion:

1. In relation to known contaminated sites at the Burnaby and Edmonton Terminals:
 1. Complete the information in the attached table. If the summary information entered by the CER is erroneous or requires clarification, provide edits or updates.
 2. Provide a georeferenced map of the terminals showing the known contaminated sites, and nearby sensitive receptors.
 3. If there are additional contaminated sites at the terminals known to TMPU that are not known to the CER (i.e. not on the list provided in table (a)), identify these in the table (a) and the map (b).
2. An overview of the groundwater and surface water monitoring that is occurring at the Burnaby and Edmonton Terminals, in relation to the contaminated sites listed in the attached table.
3. A list of the commitments TMPU has made regarding the management of contaminated sites specific to the TMEP.
4. Any updates to the list of pre-identified known or potentially contaminated sites that might be encountered by the TMEP (filing [A90938-3](#)).
5. An overview of how TMPU manages its contaminated sites (i.e. its contaminated sites management program).
6. Identify commitments made relating to contamination identification, management and mitigation related to the TMEP, including a brief overview of the Contamination Identification and Assessment Plan (Condition 46 filing [A90938-3](#)). Discuss how these are incorporated into TMPU's

contaminated sites management program and the EPPs for the TMEP. Discuss the list of known or potential contaminated sites that might be encountered during construction.

7. An overview of how TGPU manages and mitigates risk to workers (and potentially others) related to contamination at the work sites, including potential or previously unknown contamination. This includes terminal operations, and construction projects (e.g. TMEP).

Due Date

2020-01-10

Inspector Analysis

TGPU requested an extension to conduct the IE and provide the IE response. CER staff determined that there was no possibility to change the date of the IE due to CER staff availability, however the IR was updated. The due date for the IR was amended and some information that was initially requested to be submitted in advance of the meeting was requested to be shared at the meeting.

The IR shown above is the amended IR.

The information requested was provided on the due date and the IR was closed. Upon review if there are outstanding questions these will be discussed at the in-person IE planned for 13 Jan 2020.

Date Response Submitted

2020-01-10

Reason Closed

Requirement
met

IR #2: Enter site information for sites with no REM# in OERS

Discipline

Environmental Protection

Categories

- Soils and Soil Productivity
 - Chemical Spills/Releases
- Groundwater
 - Monitoring and Testing
 - Chemical Spills/Releases

Facility

- BURNABY
- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT]

Latitude

49.26848937

Longitude

-122.93134198

Observations

During the meeting four sites were identified that REM #s were not issued for some sites at the Burnaby and Edmonton Terminals. In some cases, this was due to filing being via letters and REM#s not being generated by the CER by error. The original letter-based NOCs were found in CER files. During the file review conducted by CER staff, an additional site for which an NOC was submitted by letter but that a REM # wasn't generated was identified for a site at the Edson station. Since the NOC submissions by letter, the CER has implemented NOC reporting by OERS, requiring additional specific details for each site as part of an NOC. Although the CER has identified the original NOC letters or notice in the Annual report, CER staff anticipate that the CER will not have all the required details to create the REM records in OERS on it's own.

Tool Used

Information
Request (IR)

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,
 - ? (m) establish and implement a process for the internal and external communication of information relating to safety, security and protection of the environment;

Information Requested

In order to enable a complete record in the CER's database, it is requested that Trans Mountain create REM files by submitting new NOCs in OERS for the following five sites:

- Edmonton Terminal ERT Line 2A Sampler Release,
- Edmonton Terminal Historical contamination on Centre Road,
- Edmonton Terminal Gate Valve Plug sites;

- Burnaby Terminal Manifold Area site;
 - Edson Station - Inline Inspection Tool Removal site.
- Please provide email confirmation to CER staff once complete.

Due Date

2020-05-07

Inspector Analysis

CER staff located the initial NOCs that were submitted by Trans Mountain in CER files, therefore Trans Mountain had complied with reporting guidance described in the Remediation Process Guide. CER provided the documentation to Trans Mountain and Trans Mountain completed NOC reporting in ORCA as requested. The sites listed were assigned REM numbers REM2020-010, REM2020-011, REM2020-012, REM 2020-013, REM 2020-014. The IOs appreciate Trans Mountain's assistance in enabling the CER to have up to date and accurate information in it's remediation database. Further follow up of these sites will occur as part of the CER's remediation process/ongoing remediation oversight.

Date Response Submitted

2020-05-07

Reason Closed

Requirement
met

IR #3 Clarification of Reporting Requirements**Discipline**

Environmental Protection

Categories

- Soils and Soil Productivity
 - Chemical Spills/Releases
- Groundwater
 - Chemical Spills/Releases

Facility

- Mainline
- BURNABY
- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT]

Latitude

49.26848937

Longitude

-122.93134198

Observations

CER is seeking to clarify expectations and share guidance on notification process and requirements for contamination identified during TMEP construction (i.e. alignment between Condition 106 notification requirements, general remediation process guide notification (NOC), and Condition 46 commitments).

Tool Used

Information
Request (IR)

Legislative Requirement

Contamination

Identification and Assessment Plan for the Trans Mountain Pipeline ULC
Trans Mountain Expansion Project NEB Condition 46 [A90938-3]

Applicable Wording from Legislative Document

Should existing

contamination that is not sourced from Trans Mountain's activities in these areas be identified prior to or during construction works, Trans Mountain will notify the owner of the property of the identified contamination as well as the NEB and other Appropriate Regulatory agencies, as appropriate, of contamination found within the construction footprint area. Trans Mountain will ensure contaminated waste material encountered during construction within the pipeline construction footprint is tracked and managed appropriately. Trans Mountain will not contact regulatory authorities directly regarding existing historical contamination on third-party properties that may extend beyond the construction footprint area. The responsible party, the land owner, at their discretion can notify the authorities as required by applicable laws and regulations. Should impacts be identified on Trans Mountain properties or as a result of releases that occur as a result of Trans Mountain's construction activities, Trans Mountain will implement appropriate mitigation and remediation measures in accordance with the NEB Remediation Process Guide (2011). Notification to regulatory agencies when contamination is identified, prior to or during construction, will proceed according to the NEB's Remediation Process Guide (2011). The notification will be provided in writing to the NEB Secretary of the Board as soon as practicable as well as to other affected regulatory agencies, municipalities, Aboriginal groups and other stakeholders.

Information Requested

During the IE meeting held 13 January 2020, it was identified that clarification regarding CER reporting requirements and expectations for contaminated sites identified during the Trans Mountain Expansion Project was warranted. This is such that CER staff overseeing the Project, CER staff overseeing the remediation files, and Trans Mountain have a consistent understanding of CER reporting requirements that are included in the CER Remediation Process Guide, Condition

46 Contamination Identification and Assessment Plan, and Condition 106, and that they are aligned as much as possible. CER staff's interpretation is outlined in the table below. The table doesn't address other potential reporting requirements, such as to other jurisdictions, or to other interested or affected parties.

It is requested that Trans Mountain review the table below and provide a response with any comments, or confirmation that the information presented below is an accurate summary of how it will notify the CER of contamination identified during the TMEP.

Situation	Request/Guidance	Regulatory Requirements
Contamination discovered during TMEP (attributable to current or historical Trans Mountain activities, or third Party Contamination identified on the TMEP Footprint)	<ol style="list-style-type: none"> 1. Condition 106 Construction Progress Reports <ul style="list-style-type: none"> • Include in Monthly Construction Progress Reports (Condition 106 filings) • State if NOC was submitted to the CER (include date, and REM#). • If NOC not yet submitted, confirm that an NOC will be submitted, including an estimate for timing of submission • Include other information as required by Condition 106 1. Notification of Contamination (NOC) via OERS <ul style="list-style-type: none"> • Include a statement in NOCs submitted via OERS that clearly states if the contamination was identified during the TMEP (Scenario page of the NOC). 	<ul style="list-style-type: none"> • Remediation Process Guide • Contamination Identification and Assessment Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 46 [A90938-3] • Environmental Plans Volume 2 Pipeline Environmental Protection Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 72 Appendix B Contamination Discovery Contingency Plan [C01961] • Condition 106 [C00061-3]- some details TBD based on CV1920-489

	<ul style="list-style-type: none"> • Indicate the date that the contamination was reported to the CER on the Condition 106 filing on the Scenario page • If the contamination has yet to be reported in a Condition 106 filing, confirm that it will be reported on the next C106 filing (cite date of next planned filing). 	
Suspected Contamination discovered during TMEP	<p>Notification not required until contamination is confirmed by sampling, analysis and comparison to the applicable regulatory criteria. Once contamination is confirmed, see requirement above. [LP1]</p> <p>Note: The CER expects Trans Mountain to implement appropriate mitigation to protect people, property and the environment in the event suspected contamination is identified, including before confirmation of contamination.</p>	<ul style="list-style-type: none"> • Environmental Plans Volume 2 Pipeline Environmental Protection Plan for the Trans Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 72 Appendix B Contamination Discovery Contingency Plan [C01961]
<p>Due Date 2020-05-07</p> <p>Inspector Analysis Trans Mountain notified CER staff on 23 April 2020 upon its review of the minutes that since the time of the IE meeting, "Trans Mountain has clarified with the CER that Condition 106 will no longer include the discovery of historical contamination. Please refer to the Implementation Assessment Meeting that was held on March 30, 2020 (CV1920-489)." The response submitted on 7 May 2020 reflects this. CER staff for this IE meeting met with the CER staff who conducted the later IA meeting CV1920-489. Staff confirmed the approach to be taken by Trans Mountain, i.e. to report confirmed contamination via only the typical NOC reporting process is acceptable, noting that it is consistent with remediation process guide expectations and staff's interpretation of the approved Contamination Identification and Assessment Plan for the Trans</p>		

Mountain Pipeline ULC Trans Mountain Expansion Project NEB Condition 46 [[A90938-3](#)]. CER staff noted and discussed that by not including confirmed contamination in the Condition 106 filings, this information on newly identified contaminated sites will not be explicitly indicated to the public, however, consistent with other remediation documentation held at the CER, this information can be accessed by the public if requested through ATIP, and that the CER is currently considering mechanisms to increase public disclosure of contaminated sites information.

The IO notes that CER staff can continue to follow up on Trans Mountain's contamination identification, assessment, reporting and mitigation via other compliance verification activities, such as field inspections, and via the CER's remediation process over the course of the TMEP. No further information required.

Date Response Submitted

2020-04-23

Reason ClosedRequirement
met**IR #4: Annual groundwater monitoring report for Burnaby Terminal****Discipline**

Environmental Protection

Categories

- Groundwater
 - Monitoring and Testing
 - Chemical Spills/Releases

Facility

- BURNABY

Latitude

49.26848937

Longitude

-122.93134198

Observations

During the meeting, Trans Mountain's groundwater monitoring program was discussed particularly in relation to the Burnaby and Edmonton Terminals. Staff seek an example of an annual groundwater monitoring report and any subsequent action taken in response.

Tool Used

Information
Request (IR)

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,
 - ? (c) establish and implement a process for identifying and analyzing all hazards and potential hazards;
 - ? (d) establish and maintain an inventory of the identified hazards and potential hazards;
 - ? (e) establish and implement a process for evaluating and managing the risks associated with the identified hazards, including the risks related to normal and abnormal operating conditions;
 - ? (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;

Information Requested

As an example of Trans Mountain's Groundwater Monitoring Program, please provide:

- a copy of the most recent Annual Groundwater Monitoring Report conducted for the Burnaby Terminal, and
- a summary of next steps planned or taken at the Burnaby Terminal in response to the findings of the Annual Groundwater Monitoring Report.

Upload the response directly to ORCA as part of the IE Meeting, CV1920-188 (link will be provided separately).

Due Date

2020-05-07

Inspector Analysis

Trans Mountain provided a copy of the 2019 Groundwater Monitoring Report Trans Mountain Pipeline Burnaby Terminal 8099 Shellmont Street, Burnaby, BC dated 1 May 2020. CER staff reviewed the report at a high level.

In Trans Mountain's presentation and during the discussion held during the meeting, Trans Mountain indicated it conducts a review of the results of groundwater monitoring, to evaluate changes (trends?) etc.:

- "Monitoring results are reviewed annually
- Compare against applicable regulatory criteria
 - Assess changes in data
 - Determine required changes for the following year
 - Change in sampling frequency and timing
 - Change in parameters sampled
 - New wells required
 - Well repairs "

In its response to this IR, Trans Mountain states:

"Next steps at the Burnaby Terminal include annual groundwater monitoring in accordance with the recommendations outlined in section 7 of the Groundwater Monitoring Report (Attachment 1). Additionally, Trans Mountain is monitoring the impact of the Trans Mountain Expansion Project (TMEP)..."

Recommendations included in Section 7 of the 2019 Groundwater Monitoring Report are:

"Continue to monitor the groundwater quality at the Property to maintain a record of subsurface conditions and to assess potential migration of contaminants of concern. The sampling locations, schedule and frequency should take into consideration of the groundwater flow direction, potential sources of incidental release, seasonal changes in groundwater levels, the extent of previous contamination and current groundwater data."

Trans Mountain's 3.3 Groundwater Monitoring Plan states:

"4.3.2 Groundwater monitoring results are documented in annual groundwater monitoring reports and results are evaluated in order to develop the subsequent year's monitoring program."

The response provided to this point does not demonstrate how or if Trans Mountain has conducted the assessment of changes or trends in data, or evaluation to determine changes required for the following year. The recommendations section of the consultant's report does not clearly indicate that this assessment or evaluation was completed by the consultant. Additional Information is required, see follow-up request.

Date Response Submitted

2020-05-07

Reason Closed

Requirement
met

Information Requested

Follow-up Information Request:

Focusing on or using the Piping Manifold Area at the Burnaby Terminal (REM2020-010) as an example, provide evidence that demonstrates that Trans Mountain has completed an assessment of the annual groundwater monitoring results including Trans Mountain's:

1. assessment of changes in the data (trends)
2. determination of any changes required for the following year (i.e. changes in, sampling frequency and timing or in parameters sampled, identification of any well changes (new wells or repairs))

Due Date

2020-07-15

Inspector Analysis

Trans Mountain submitted a response which described the assessment of trends in groundwater and consideration of whether subsequent monitoring remains appropriate, given the results. A supplemental report from the consultant was also submitted, briefly outlining the assessment of the previous data set and the conclusion that no changes to the monitoring program were deemed necessary.

Officers have no further concern, this concludes CV1920-188.

Date Response Submitted

2020-07-14

Reason Closed

Requirement
met

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