

## Operations Regulatory Compliance

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### Closed Report - CV1920-164 - 24 March 2020

**Event Type**

Field  
Inspection

**CV Event Number**

CV1920-164

**Project Companies**

- Trans Mountain Pipeline ULC

**Name of the Operating Company**

Trans Mountain  
Pipeline ULC

**Rationale, Scope, and Additional Description**

TMEP Spread 1 [Spread 1] Environmental Protection Inspection. The scope of this inspection includes construction activities underway at various locations across the spread, including the Yard and the Edmonton Terminal. Contaminated sites management is a particular focus of this inspection.

**Selected Province/Territory**

- Alberta

**Start Date**

2020-01-20

**End Date**

2020-01-22

**Inspection Officer Number**

- 2738T
- 2275

**Selected Disciplines**

- Environmental Protection
- IAMC Observation

**Tool Used:**

- Information Request (IR) (1)
- Corrected Non-compliance (CNC) (3)

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**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)
- Canadian Energy Regulator Act (CERA)
  - Canadian Energy Regulator Act (CERA)
- Plans And Procedures
  - Project-specific Environmental Protection Plan (EPP)
    - Pipeline Environmental Protection Plan, Rev 6 (September 2019)
  - Project-specific plan or procedure
    - Contamination Discovery Contingency Plan (Pipeline EPP, Sept 2019 Rev 6)

### **Selected Regulatory Instrument Numbers**

- AO-003-XO-T260-010-2016

### **Facility Details**

#### **Facility Types**

Pipeline

- Pipeline right of way (ROW)
- Terminal

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

- Construction
- Operations

### **Additional Information**

#### **Selected Facilities**

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

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

### **General Right of Way**

#### **Date**

2020-01-20

#### **Discipline**

Environmental Protection

#### **Categories**

- Soils and Soil Productivity
  - Soil Handling
  - Biosecurity
  - Chemical Spills/Releases
- Water Bodies - Fish-bearing
  - Temporary Access Structures
  - Disturbance
- Wildlife
  - Destruction/Loss of Habitat
  - Habitat Restoration/Offsets
- Vegetation
  - Invasive Plant Management

- Groundwater
  - Chemical Spills/Releases
- Socio-economic
  - Traditional Land and Resource Use
  - Human Occupancy and Resource Use

## Facility

- TRANS MOUNTAIN EXPANSION PROJECT

## Observations

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

- **Contaminated Sites:** The locations of a moderate risk (KP40.02) and high risk (KP 26.390) contaminated site were inspected. Note that in this context 'risk' refers to the "potential to impact the Project Footprint " (pg 8, Condition 46). At KP40.02, active topsoil stripping was underway during the inspection. Signage indicating the potential contamination was in place, and the EI was present to inspect the work. The EI reported that no visual or olfactory evidence of contamination had been encountered. Daily EI reports for the two dates on which soils in the vicinity of potential contamination were assessed. TMEP staff ascertain that workers on site were also verbally informed of the hazard during tailgate meetings, though it was not identified on the field level hazard assessment form on the day of the inspection. At KP26.390, no active work was being conducted during the inspection. Topsoil had been stripped and was labeled with stakes as per EPP requirements. Signage indicating the contaminated site was present. During this inspection, TMEP's contaminated site management was verified to be in compliance with Condition 46, TMEP's Contamination Identification and Assessment Plan.
- **Traditional Land Use (TLU) Sites:** Mitigations for a number of different TLU sites were observed during the inspection. Signage was in place in all cases and appropriate mitigations as required by Condition 100 were present. Of particular note, the TLU around a cemetery site was protected with an extended buffer, additional signage, prayer cloth, etc. The Company Indigenous Monitor met the Inspection Team to provide a brief prayer and tobacco ceremony at the site before we inspected. It was an inclusive and collaborative example of traditional knowledge and respect within the construction work area.
- **Topsoil stripping and stockpiling:** Topsoil management was observed at various locations across Spread 1. Soils were properly stripped, piled and staked in all instances observed. Discussions about how topsoil is adequately separated from frozen subsoils were had with EIs; all EIs, and foremen as well, were knowledgeable to topsoil management and thickness in specific areas of work.
- **Biosecurity:** Equipment was spot checked for the biosecurity cleaning sticker and cleaning record - no non-compliances observed. Signage was in place for clubroot and weed risk, and TMEP staff were aware of clubroot risk locations and cleaning procedures.

## Tool Used

No

Tool Used

## Watercourse and Wetland Crossings

### Date

2020-01-20

### Discipline

Environmental Protection

### Categories

- Water Bodies - Fish-bearing
  - Temporary Access Structures
  - Destruction/Loss of Habitat
  - Disturbance
- Wildlife
  - Destruction/Loss of Habitat
  - Habitat Restoration/Offsets
- Socio-economic
  - Traditional Land and Resource Use
  - Human Occupancy and Resource Use

### Facility

- TRANS MOUNTAIN EXPANSION PROJECT

### Observations

The Trans Mountain Expansion Project (TMEP) activity near watercourse crossings, occurring at the time of the inspection along Spread 1, was inspected by the Inspection Team. Specific observations are summarized below:

- **North Saskatchewan River Horizontal Directional Drilling (HDD)** : Both the drilling pad side (west) and the drag line side (east) of the North Saskatchewan River HDD area were inspected. Topsoil was being stripped and piled, with appropriate labels along the edges of the RoW, no issues noted. Signage for the key wildlife biodiversity zones, wetlands and TLU sites along the river valley were properly signed and in correspondence with the alignment sheets. The edges of the RoW are tidy and soil piles confined to the RoW flagged areas.
- **Creek near KP 34, west of North Saskatchewan River:** an unnamed drainage, atop which a culverted bridge was built in support of access to the North Saskatchewan River drilling pad, was inspected. A discussion ensued about a few trees in the drainage area which had been cut, with respect to the EPP requirements for creek buffer zones and clearing. The work done is within the commitments of the EPP and Environmental Inspectors were knowledgeable of the requirements and commitments.
- **A number of wetland crossings** were observed across Spread 1; buffer zones, signage and erosion and sediment control were in place in accordance with the EPP. The Inspection Team observed narrowed right of ways around wetlands and water courses in cases where there was an opportunity for trees to be saved.

### Tool Used

No Tool Used

## Acheson Construction Yard General observations

### Date

2020-01-21

**Discipline**

Environmental Protection

**Categories**

- Soils and Soil Productivity
  - Chemical Spills/Releases
- Housekeeping
  - Waste Management
  - Temporary Structures
- Training and Documentation
  - Inspections

**Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

**Observations**

The Inspection Team visited the Acheson yard and inspected the following areas:

- Waste storage area
  - Waste bins appropriately labelled
  - Inspection of waste bin contents revealed appropriate waste streams as per bin labels
  - Housekeeping adequate in this area
  - No issues noted
- Biosecurity wash tent
  - Wash station within tent is within containment
  - Hazardous and controlled products within tent observed within secondary containment
  - Spill kit present
  - Area is tidy and clean with appropriate housekeeping observed
  - No issues noted
- Mechanics garage
  - Inspection team observed waste segregation and storage within labelled bins within the garage
  - Shop is tidy with no evidence of leaks or spills onto and beneath shop floor (rig mats) onto soil.
  - No issues noted
- Refuelling facility
  - CER Inspector observed drips on snow and ground at both diesel tanks below nozzle holders (Please refer to CNC #1).
  - CER Inspector observed used fuel filter and diesel soaked rag stored outside containment on diesel bulk storage tank platform (Please refer to CNC #2).
  - CER Inspector observed staining on diesel tank walls originating from source on top of tanks, with entrainment onto ground and staining on gravel beneath tanks (Please refer to CNC#3).

**Tool Used**

No

Tool Used

## IAMC Indigenous Monitors Observations Lac Ste Anne Metis

### Date

2020-01-20

### Discipline

Environmental Protection

### Categories

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

### Facility

- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT]
- 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.*

### Overview

At all inspection sites the placement and quality of signage was of note. Signage observed included: wetland identification, waste bin labels, location entry, designated smoking areas, cautionary signs for watercourses, environmentally sensitive areas, TLU sites, danger – open excavation, biosecurity cleaning, contaminated or potentially contaminated sites. Clear and well placed signage plays an important role along the footprint of the Transmountain Pipeline System and Expansion Project (TMEP) Spread 1, not only for the environmental information but also for the safety of the workers and public. Transmountain and its contractors appear to be doing a good job with signage.

### Observations

<b>Location:</b> KP 48+650	<b>Date:</b> January 20, 2020
<ul style="list-style-type: none"> <li>• Signage in place</li> <li>• Topsoil staked with wildlife corridor crossing</li> <li>• Equipment cleaning sticker on cat and hydrovac</li> <li>• Signage for hot line and open excavation</li> <li>• Silt and rope fencing in place</li> <li>• Pipe covered with leak detection line on top</li> </ul>	
<b>Location:</b> Potential Contaminated Site	<b>Date:</b> January 20, 2020
<ul style="list-style-type: none"> <li>• Signage in place identifying "Contaminated Site / Soils"</li> <li>• Topsoil stripping and mulching</li> <li>• Proper mitigation measures in place</li> <li>• Topsoil staked</li> </ul>	
<b>Location:</b> Paleo Site	<b>Date:</b> January 20, 2020
<ul style="list-style-type: none"> <li>• TMEP Indigenous Monitor (IM) attended the inspection of the site and provided a</li> </ul>	

tobacco offering and prayer.	
<ul style="list-style-type: none"> <li>• Flagging present.</li> <li>• No issues observed.</li> </ul>	
<b>Location:</b> Acheson Contractor Yard	<b>Date:</b> January 21, 2020
<ul style="list-style-type: none"> <li>• Several issues observed including fuel drips on ground and some fuel frozen on side of tank, fuel filter and dirty rag left sitting by the front of the tank, and fuel expelled from top of tank. All issues were resolved by the end of the inspection.</li> <li>• Secondary containment was in place by fuel tanks.</li> <li>• Waste disposal was well marked and organized with proper waste in the correct containers.</li> </ul>	
<b>Location:</b> Yard Wash Bay	<b>Date:</b> January 21, 2020
<ul style="list-style-type: none"> <li>• Fuel container – pump – blower had secondary containment.</li> <li>• Spill kits present on site.</li> <li>• Secondary containment under light towers.</li> <li>• Oil and antifreeze stored properly in unit with signage.</li> </ul>	
<b>Location:</b> Yard Mechanic Shop	<b>Date:</b> January 21, 2020
<ul style="list-style-type: none"> <li>• Secondary containment under exterior heater.</li> <li>• Fire extinguisher and spill kit on site.</li> <li>• Waste disposal in place, waste containers well labelled and used correctly.</li> <li>• Shop was clean and organized.</li> <li>• Yard was well organized.</li> </ul>	
<b>Location:</b> Shoe Fly 28	<b>Date:</b> January 21, 2020
<ul style="list-style-type: none"> <li>• Equipment present and working on site.</li> <li>• Light tower pylons present with secondary containment in place.</li> <li>• Corridor shared with EPCOR</li> </ul>	
<b>Location:</b> KP 47+500	<b>Date:</b> January 22, 2020
<ul style="list-style-type: none"> <li>• Pipegang on site</li> <li>• Jeeping – sandblasting occurring.</li> <li>• Good housekeeping practices observed on site.</li> </ul>	
<b>Location:</b> KP 34.2	<b>Date:</b> January 22, 2020
<ul style="list-style-type: none"> <li>• Appropriate signage in place.</li> <li>• Drill pad with rig mats at site.</li> <li>• Topsoil stripping completed. Staking underway. Woodland topsoil pile was marked specifically.</li> <li>• No trespass determined.</li> </ul>	
<b>Location:</b> Ellerslie Site	<b>Date:</b> January 22, 2020

<ul style="list-style-type: none"> <li>• High risk site.</li> <li>• Proper contamination mitigation in place.</li> <li>• Site was delineated with survey stakes and signage.</li> <li>• No further work initiated at this point.</li> </ul>	
<b>Location:</b> KP 38+200	<b>Date:</b> January 22, 2020
<ul style="list-style-type: none"> <li>• Rigmats in place of entry.</li> <li>• Survey stakes in place.</li> <li>• Mulching and topsoil stripping in progress. No add-mixing observed.</li> </ul>	

### 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 Monitors Observations Sucker Creek First Nation

### Date

2020-01-20

### Discipline

Environmental Protection

### Categories

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

### Facility

- EDMONTON [TRANS MOUNTAIN EXPANSION PROJECT]
- 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.*

We met with the Trans Mountain Environmental and Safety Inspector. Briefed us on what has been happening and what is currently being done on sites. Went over last weeks inspection and what our Inspection this week would involve. Reviewed which areas of interest to start on our first day of Inspections.

Went out to the Confidential and shoefly, Moderate and Low risk areas, Yards and the Trans Mountain



Edmonton Terminal location for Inspections. Went to the Terminal, had a meeting with Inspectors and foremen on this site, went over progress and what we wanted to Inspect. CER IO and IM went to inspect one of the Trans Mountain Yards.

Most of the current work being done is stripping of topsoil, equipment piling topsoil in proper location and signage posted. Access well constructed with geo tech material, soil and signage in place. Everyone was helpful, answered all questions, provided reports when requested and assisted when needed. Everything was clean, organized and in compliance. I don't have any concerns and was interested in the progress that has been done since my last inspection visit on this spread. I was impressed with how they are handling and doing proper protocol with the heritage sites and preserving the area. I look forward to see more production on this project as they are progressing.

#### **Tool Used**

No

Tool Used

## **Compliance Summary**

### **Edmonton Terminal**

#### **Date**

2020-01-21

#### **Discipline**

Environmental Protection

#### **Categories**

- Soils and Soil Productivity
  - Soil Handling
  - Chemical Spills/Releases
- Surface Water Management
  - Containment and Drainage Structures
- Groundwater
  - Monitoring and Testing
- Housekeeping
  - Waste Management

#### **Facility**

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

#### **Observations**

The Trans Mountain Expansion Project (TMEP) 'footprint' on the Edmonton Terminal was inspected by the Inspection Team. Notes on more specific observations made and compliance verification are summarized below:

- **Contaminated Site Chance Find:** TMEP has enacted their Chance Find procedure for some contaminated soils encountered on 10 September 2019 during berm construction activity within the terminal. The Environmental Inspector (EI) described three separate areas of contaminated soils which were encountered. The Inspection Team reviewed documentation for one of the three to 'spot check' that the Chance Find process is being carried out as committed in the Contamination Identification and Assessment Plan (*TMEP Condition 46*). The Inspection Team

has confirmed that TMEP has responded in compliance with the commitments of *Condition 46* thus far.

- **Asbestos containing materials:** Asbestos containing materials were constructed upon/removed at the time of the inspection; a building being constructed on, and pipeline coating. Signage, and flagging tape were observed. In discussion with the Trans Mountain Safety representative and the Environmental Inspector for the Terminal, a number of hazard mitigations are anticipated to be in place for these works at the Terminal. Mitigations reported by TM staff included a three-room staging system for containing asbestos within the building, air monitoring, respiratory protection, signage, and a 'glove-bag' technique. Trans Mountain staff were aware of their asbestos containing material disposal procedure, monitoring, and training required for individuals working with the hazardous substance.
- **Hazardous/controlled substances:** Propane, acetylene, and oxygen gases were observed to be labeled, secured (with straps) and stored in metal cages within the terminal. Secondary containment was present under all hazardous substances which were observed during this part of the inspection.
- **Remote Impoundment:** the Remote Impoundment which collects surface water runoff and serves as a contingency plan for containment of product in the event of multiple tank failures was observed. Trans Mountain staff described the permitting procedure for sampling the surface water for contaminants before scheduled releases.

### Tool Used

Information  
Request (IR)

### Legislative Requirement

AO-003-XO-T260-010-2016

### Condition Requirement

1

### Applicable Wording from Legislative Document

IN

THE MATTER OF an application pursuant to section 21 of the NEB Act, dated 1 March 2017, by Trans Mountain Pipeline ULC (Trans Mountain) to vary Order XO-T260-010-2016 relating to the Edmonton Terminal West Tank Area (Application) under Files OF-Fac-Oil-T260-2013-03 07 and OF-Fac-Oil-T260-2013-03 61. BEFORE the Commission of the Canada Energy Regulator (Commission) on 23 October 2019 WHEREAS..... (see Order for details) IT IS ORDERED that pursuant to subsection 21(1) of the NEB Act, Schedule A attached to Order AO-001-XO-T260-010-2016 is hereby varied to reflect the changes to Edmonton Terminal, as set out in the Application. IT IS FURTHER ORDERED that Schedule A of Order AO-001-XO-T260-010-2016 is revoked and replaced by Schedule A attached hereto. Issued at Calgary, Alberta on 23 October 2019. THE COMMISSION OF THE CANADA ENERGY REGULATOR From the Original Order, XO-T260-010-2016: Clauses: 1. Trans Mountain shall comply with all the conditions contained in this Order unless the Board directs otherwise. 2. Trans Mountain shall cause the approved Project to be designed, located, constructed, installed, and operated in accordance with the specifications, standards, commitments made, and other information referred to in its application and its related submissions. 3. Trans Mountain shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations, procedures and its commitments for the protection of the environment included in or referred to in its application and its related submissions;

### Company Action Required

TransMountain was authorized to start work in the Edmonton Terminal West Tank Area on 23 October 2019, pursuant to Authorization AO-003-XO-T260-010-2016.

The Environmental Inspector's Daily report from 10 September 2019, as well as other documentation

related to the chance find of contaminated soil in the Edmonton Terminal Trans Mountain Expansion Project Footprint indicated work being conducted on 10 September, 2019.

Please clarify the purpose and scope of the work that was being conducted on and around the date of 10 September 2019, and under which Authorization.

Provide a response via OERS by 4:00 pm on 18 March 2020.

**Due Date**

2020-03-18

**Acheson Construction Yard, CNC #1****Date**

2020-01-21

**Discipline**

Environmental Protection

**Categories**

- Soils and Soil Productivity
  - Chemical Spills/Releases

**Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

**Observations**

The Trans Mountain Expansion Project (TMEP) Acheson Yard was inspected by the Inspection Team. During the inspection the CER Inspector observed drips on snow and ground at both diesel tanks below nozzle holders.

**Tool Used**

Corrected

Non-compliance (CNC)

**Legislative Requirement**

Pipeline

Environmental Protection Plan, Rev 6 (September 2019)

**Applicable Wording from Legislative Document**

## 11.4.1

Spot Spills Spot spills are considered to be generally small. Their effects can be minimized and will not result in the suspension of activities if the appropriate actions listed as follows are promptly implemented. All small spills of fuels, hydraulic fluids or hazardous materials shall be contained, reported immediately to an Environmental Inspector and cleaned-up. • An Environmental Inspector will approve methods to remove contaminated soils, in consultation with a qualified specialist, if warranted. Locations where spot spills occur are to be recorded. • Dispose of impacted materials at a Trans Mountain-approved waste facility in accordance with the Waste Management Plan (Appendix G). • All efforts will be made to clean-up the release. The Contractor shall demonstrate that residual impacts are not left in place; however, if residual impacts remain, the steps to further assessing and remediating the contamination will be developed in consultation with Trans Mountain and in accordance with the guidance set out in the NEB Remediation Process Guide (NEB 2011)

**Company Action Required**

Trans Mountain will clean up the observed contamination and provide confirmation and photographic evidence of cleanup to the CER Inspection Officer.

**Due Date**

2020-01-22

**Acheson Construction Yard CNC #2****Date**

2020-01-21

**Discipline**

Environmental Protection

**Categories**

- Soils and Soil Productivity
  - Chemical Spills/Releases

**Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

**Observations**

The Trans Mountain Expansion Project (TMEP) Acheson Yard was inspected by the Inspection Team. The CER Inspector observed a used fuel filter and diesel soaked rag stored outside containment on diesel bulk storage tank platform.

**Tool Used**

Corrected

Non-compliance (CNC)

**Legislative Requirement**

Pipeline

Environmental Protection Plan, Rev 6 (September 2019)

**Applicable Wording from Legislative Document**

## 7.0

GENERAL PIPELINE CONSTRUCTION MITIGATION MEASURES Waste Disposal 119. Collect construction debris (e.g., welding rods, oil cans, ropes, bands, timbers and

caps) and other waste materials on a regular basis and dispose of at a Trans Mountain-approved waste disposal facility and in accordance with the Waste Management (Appendix G) and the Spill Contingency Plan (see Appendix B). Ensure wastes are recycled where practical. Appendix G: 4. Used oil and oil filters will be placed in sealed containers and delivered for disposal by a qualified service contractor. Only Trans Mountain-approved facilities are permitted to receive waste oil.

### **Company Action Required**

Trans Mountain will remove and appropriately dispose of the used filter and oily rag, and provide confirmation as well as photographic evidence to the CER Inspection Officer.

### **Due Date**

2020-01-22

## **Acheson Construction Yard CNC #3**

### **Date**

2020-01-21

### **Discipline**

Environmental Protection

### **Categories**

- Soils and Soil Productivity
  - Chemical Spills/Releases

### **Facility**

- TRANS MOUNTAIN EXPANSION PROJECT

### **Observations**

The Trans Mountain Expansion Project (TMEP) Acheson Yard was inspected by the Inspection Team. The CER Inspector observed staining on diesel tank walls originating from source on top of tanks, with entrainment onto ground and staining on gravel beneath tanks.

### **Tool Used**

Corrected Non-compliance (CNC)

### **Legislative Requirement**

Pipeline

Environmental Protection Plan, Rev 6 (September 2019)

### **Applicable Wording from Legislative Document**

11.0

SPILL CONTINGENCY PLAN 11.4.1 Spot Spills Spot spills are considered to be generally small. Their effects can be minimized and will not result in the suspension of activities if the appropriate actions listed as follows are promptly implemented. All small spills of fuels, hydraulic fluids or hazardous materials shall be contained, reported immediately to an Environmental Inspector and cleaned-up. • An Environmental Inspector will approve methods to remove contaminated soils, in consultation with a qualified specialist, if warranted. Locations where spot spills occur are to be recorded. • Dispose of impacted materials at a Trans Mountain-approved waste facility in accordance with the Waste Management Plan (Appendix G). • All efforts will be made to clean-up the release. The Contractor shall demonstrate that residual impacts are not left in place; however, if residual impacts remain, the steps to further assessing and

remediating the contamination will be developed in consultation with Trans Mountain and in accordance with the guidance set out in the NEB Remediation Process Guide (NEB 2011).

**Company Action Required**

Trans Mountain will:

- Clean up the diesel staining on tank surfaces and gravel, and appropriately dispose of any contaminated material.
- Determine the cause of the leak and conduct repairs to prevent future recurrence.
- Provide a response including confirmation of repair as well as photographic evidence of clean up to the CER Inspection Officer

**Due Date**

2020-01-22