

INDIGENOUS MONITOR OVERVIEW REPORT

Month: February 2023

Indigenous Monitor days on-site: 24

**Project Region: Edmonton and
Yellowhead**

**Kilometre Posts (KPs) monitored:
KP 1–337**

Indigenous Monitors on the Trans Mountain Expansion Project – Overview

The Trans Mountain Expansion Project (the Project or TMEP) is retaining Indigenous Monitors as integrated members of its construction Environmental Inspection team. Indigenous Monitors work with Environmental Inspectors to monitor compliance with mitigation measures to minimize impacts to traditional resource use and cultural/heritage sites during construction. Indigenous Monitors have a strategic role in providing traditional knowledge directly and pragmatically to construction oversight practices and bring an Indigenous lens to daily environmental inspection activities.

This Overview Report provides highlights of the Indigenous Monitors' day-to-day work and key mitigation measures observed by the Monitors related to Project construction in the Edmonton and Yellowhead Regions. The purpose of this report is to provide an update on Indigenous Monitor activity to Indigenous groups.

During this reporting period, key activities in the Edmonton and Yellowhead Regions involving Indigenous Monitors included monitoring site housekeeping, watercourse restoration inspection, reclamation, Edmonton Terminal, Traditional Land Use (TLU) sites and hydrotest. Pipeline construction on Spread 1 is mechanically complete; some final Project activities on the Spread 1 right-of-way are being completed intermittently. The Project Construction Progress Report (Condition 106) for February 2023, which reports environmental events and deficiencies in Tables 4 and 5 respectively, is found [here](#).

The Project has a process for sharing information related to potential TLU and Heritage Resource chance finds during construction. The [Protecting TLU and Cultural Heritage Resources Fact Sheet \(link here\)](#) provides an overview of the chance find communication process. Applicable Indigenous groups are notified and engaged directly on potential chance finds.

For more information: email info@transmountain.com or call 1.866.514.6700.

Site Housekeeping

The Indigenous Monitors regularly conduct inspections of construction areas for general housekeeping measures. This includes observing and documenting waste management practices and hazardous materials containment, as well as inspecting that spill kits are effectively placed and stocked with absorbent materials.

The Indigenous Monitors conducted housekeeping inspections near KP 99 on Spread 2. Indigenous Monitors also check that secondary containment is placed underneath machinery and stored petrochemicals. No environmental concerns were identified.



Housekeeping and spill preparedness KP 99.



Housekeeping and spill preparedness KP 99.

Watercourse Restoration Inspection

Environmental mitigation measures for in-stream construction of watercourses are prescribed in the provincial permits and the watercourse crossing plans, and in some cases, a Fisheries and Oceans Canada (DFO) authorization. Mitigation measures required for in-stream construction include but are not limited to biosecurity cleaning of equipment, secondary containment of hydrocarbons, salvaging of stream bed material, fish salvage, water quality monitoring and sediment/erosion control. When in-stream work is complete, Indigenous Monitors regularly monitor watercourse crossings. Erosion and sediment control (ESC) measures are monitored; these measures mitigate erosion and sediment transport from construction sites to downstream areas and watercourses. On-site ESC mitigations may include sediment fences, swales, wattles, rock armouring, erosion control blankets and hydroseeding, as well as water drainage control measures.

Indigenous Monitors inspected the effectiveness of restorations completed for several watercourses in Spread 2, including AB-19 at KP 63 and AB-176 at KP 314. Indigenous Monitors observed site housekeeping efforts, recontour of the bank and transplant areas including erosion control blanket, willow stakes in riparian zones, re-seeding in previously excavated and backfilled areas, and rock armouring and stream bed material replacement. These mitigations were installed and working as planned. No deficiencies were identified.



Inspection of AB-19 at KP 63



Inspection of AB-176 at KP 314.

Reclamation

Subsoil is de-compacted to alleviate compaction caused by construction activities before topsoil replacement. Acceptable topsoil depths are confirmed by an Environmental Inspector (EI) during final cleanup. Multiple measurements are taken of topsoil replacement quality and depth. After the contractor has properly prepared the ground for seed, the area is seeded with the approved mix that reflects the vegetation profile from pre-disturbance.

Indigenous Monitors were on-site inspecting various reclamation activities on Spread 2, including discing for soil decompaction, topsoil replacement, confirming topsoil depth and confirmation that proper seed mixes are applied. Indigenous Monitors worked with Environmental Inspectors to ensure mitigation measures were in place during reclamation activities and that proper topsoil depths were confirmed.



Topsoil replacement KP 337.

Edmonton Terminal Inspection

To accommodate the increased capacity of the pipeline system, Trans Mountain is adding new storage tanks at existing terminals. All additions will take place within the existing footprint of the terminals. All tanks are constructed in accordance with American Petroleum Institute (API) Standard 650 – Welded Tanks for Oil Storage.

The Edmonton Terminal expansion is adding four new storage tanks, taking the total number to 39. The additional tanks will add approximately 1,315,000 bbl of capacity to the facility, bringing the total to 9.25 million barrels.

Strategies for avoiding or reducing potential environmental impacts are employed at all stages of construction by following the Environmental Protection Plans. The goal is to protect the environment, have as little impact as possible and ensure the land is returned to a similar function.

A joint inspection was conducted at Edmonton Terminal by the Environmental Inspector and Indigenous Monitor. Observations included construction in the Line 2 pump building, liner installation and final grade around the new tanks, tank 5/6 berm re-established, ongoing backfill and final grade around the new pump building, and preparation for the new lift station.

Waste management was inspected as well as secondary containment for equipment and fuel storage tanks. Open excavations were marked and properly delineated. Walking paths were kept clear. Spill kits and spill response procedures were also reviewed in the field. Key compliance measures on the construction permit were reviewed and mitigations were in place. No deficiencies were noted.



Good housekeeping on-site at Edmonton Terminal.



Fire and stormwater collection system under construction.



New tanks Edmonton Terminal.

Traditional Land Use Sites (TLU)

Resource-Specific Mitigation Tables and Environmental Alignment Sheets are used to illustrate locations of and summarize specified mitigation for previously identified historical resources and TLU areas. Such locations have been identified via TLU studies conducted by Indigenous groups and archaeology baseline assessments conducted in relation to the Project over many years.

Indigenous Monitors inspected previously identified TLU sites along the right-of-way on Spread 2 to confirm mitigation measures remain in place including signage, staking and flagging.

Indigenous Monitors inspect TLU sites with a focus on sites near active construction to ensure mitigation measures are in place to protect Heritage Resources. Sites inspected include but are not limited to TLU-2, TLU-3, TLU-4, TLU-5 and TLU-25.

An Indigenous Monitor also performed an inspection on a plant gathering site. The Indigenous Monitor confirmed no chemicals have been sprayed in the TLU site, construction is confined to approved work boundaries and that boundary signage is in place. Inspected mitigation measures remained in compliance. No cultural or environmental concerns were identified.



Signage and mitigations in place at TLU-4.



Signage and mitigations in place at TLU-5.



Signage and mitigations in place at TLU-25.

Hydrostatic Testing

Once the pipe is installed and backfill is complete, crews begin the hydrostatic testing process. Hydrostatic testing involves testing the pipeline for strength and integrity. The test involves filling the pipe system with water and the pressurization of the system to a specified test pressure.

Indigenous Monitors attended pre-withdrawal meetings, reviewed the water withdrawal permit, compliance checklists, and inspected withdrawal and release points to see mitigations in place to prevent scouring.

Indigenous Monitors inspected these sites through the duration of the hydrostatic testing process. During water withdrawal, Indigenous Monitors confirmed proper fish screen size, that the diversion license was on-site, proper flow rate was maintained, the amount of water withdrawn was less than the amount specified on the permit, and that generators and pumps had proper secondary containment.

When the hydrostatic test was complete, discharge to source began. Indigenous Monitors talked with the Environmental Inspector on-site about the water test results from the ongoing sampling confirming no deleterious material was in the water. Further discussions took place about proper filters in use and allowable flow rate used while releasing water to source. Several Indigenous Monitors visited this site to confirm these mitigations were in place and effective in preventing potential impacts. No issues identified during these inspections.



Hydrotest withdrawal point Wabamun Park KP 97



Hydrotest Gainford Pump Station KP 99.



Temporary test head installed at KP 135.

Indigenous Monitor Request Dashboard

Indigenous Monitors are provided with daily on-site field support from Environmental Inspectors and office support from Indigenous Monitor Coordinators. Indigenous Monitors can also make specific support requests or submit questions through their daily report. Examples include but are not limited to requests for Project reports (beyond any reports or documents requested and shared through day-to-day team activity on-site), input from an environmental resource specialist or on-site support from an Elder or other cultural knowledge holder. Requests and their completion status are noted below.

Status	Rolling Total and Type of Requests				
	Project Reports/Documents	Environmental Resource Specialists	Elder/Cultural Knowledge Holder	Other	Total
Total	7	1	8	-	16
Fulfilled	7	1	8	-	16
Outstanding	-	-	-	-	-

This report has been reviewed by the active Indigenous Monitor(s)

CONTACT US:

Trans Mountain

 info@transmountain.com

 1.866.514.6700

 transmountain.com

  @TransMtn

 [youtube.com/transmtn](https://www.youtube.com/transmtn)



 PO Box 81018
Burnaby, BC V5H 3B0

