



**TRANSMOUNTAIN**

# The RESP@NDER

Quarterly Newsletter for Emergency Responders

Summer 2019

## HOW TO RECOGNIZE A PIPELINE EMERGENCY

Being prepared and knowing how to recognize a pipeline emergency is important.

Pipeline emergency warning signs include:

- the strong odour of petroleum (gasoline or diesel) or sulphur (rotten eggs);
- unusual sounds;
- signs of dead or discoloured vegetation;
- pools of liquid in an otherwise dry pipeline right-of-way; or
- water with an oil or rainbow sheen

If you notice any of the warning signs of a pipeline emergency:

- leave the area immediately on foot in an upwind direction;
- eliminate possible ignition sources such as cigarettes, cellphones or keyless door entry; and
- notify the Trans Mountain 24-hour Emergency Line: 1.888.876.6711.

If your organization would like to learn more about pipeline safety and response, we can arrange an awareness session at your location. To book a session, please contact us.

## COMMITMENT TO RESEARCH



**Trans Mountain uses an Integrated Safety and Loss Management System (ISLMS) based on continuous improvement as an underlying principle. The Trans Mountain Emergency Management (EM) Program is no exception.**

One of our continual improvement pillars is to invest in, monitor, and analyze research findings to enhance emergency management strategies, plans, and equipment. As part of the enhanced EM Program for the Trans Mountain Expansion Project, we are required to report to the Canada Energy Regulator (formerly the National Energy Board) on how results of these findings are considered and incorporated into our emergency response planning.

Currently, we are funding, supporting or otherwise involved in several research initiatives. We continue to engage with Indigenous groups, government

agencies, and industry regarding future research opportunities. We also monitor the development of evolving response technologies and incorporate advancements into the EM Program, as appropriate.

With each research initiative comes an improved understanding of the fate and behaviour of diluted bitumen, which can be used to support decision-making in the unlikely event of an incident and influence spill response overall. Dozens of industry, university and government-led research initiatives in recent years have led to an improved understanding of how crude oil behaves in marine and fresh waters. This means we can better predict how the product would behave in case of a spill.

Ongoing research contributes to our ability to mitigate and prevent, prepare for, respond to and recover from an incident. With these initiatives, and as technology, regulation, industry standards, operational needs, and partnerships continue to evolve, so too will our EM Program.

## Sumas Deployment

**Over two days in May, Trans Mountain completed a training and deployment exercise on the Fraser River near Maquabeak Park in Coquitlam, BC.**

The exercise was designed to allow response personnel to demonstrate their knowledge and understanding of our Sumas District Geographic Response Plan and to successfully deploy spill response equipment during high river flow conditions. Deployment objectives included implementing emergency response procedures with emphasis on responder and public safety, cooperation between Trans Mountain and third-party responders, and validation of a spill control point on the river to contain and recover product.

During the exercise, response personnel mobilized one of our Oil Spill Containment and Recovery (OSCAR) trailers and its contents, including hard containment boom, skimmer, hand lines, and porto tank. The OSCAR trailer equipment was supported by multiple jet boats, response vessels, and a decontamination trailer. More than 75 personnel including employees, contractors, first responders, government agencies and Indigenous groups took part.

**In case of a pipeline emergency or to report odours, call 24 hours: 1.888.876.6711**

## IMPLEMENTING RESEARCH FINDINGS

### Dozens of research initiatives in recent years have strengthened awareness around how diluted bitumen behaves in marine and fresh waters.

Most recently, two of our research-based program enhancements include developing a *Submerged and Sunken Oil Response Plan (SSORP)* and adding a dedicated Submerged Oil Trailer to our fleet of equipment.

The *SSORP* is designed to capture characteristics, strategies and response guidelines for oil that may become sunken or submerged and highlights the importance of a rapid initial conventional response and assessment. The plan also provides up-to-date, research-based data on the fate and behaviour of sunken and submerged oil, including:

- environmental considerations for response
- response tactics in various waterbody types and conditions
- assessment, containment and recovery strategies

- in-situ water treatment planning and processes
- special considerations for water intakes and sources

The *SSORP* was exercised in September 2018 as part of a full-scale emergency response exercise we conducted at our Westridge Marine Terminal. One of the exercise objectives was the development of initial supplemental response plans, including an incident-specific submerged and sunken oil plan.

We also reinforced our large fleet of emergency and spill response equipment with the addition of a Submerged Oil Trailer, which houses equipment specifically selected for water-based spill containment and recovery. The trailer is strategically located along the Trans Mountain Pipeline route for rapid mobilization to emergency incidents as needed. It contains equipment which includes but is not limited to watering bags, underwater viewing boxes, silt fencing and an aqua dam.

In cooperation with government and industry partners, we also contributed to the development of the *Underwater Seabed Cleanup and Assessment*

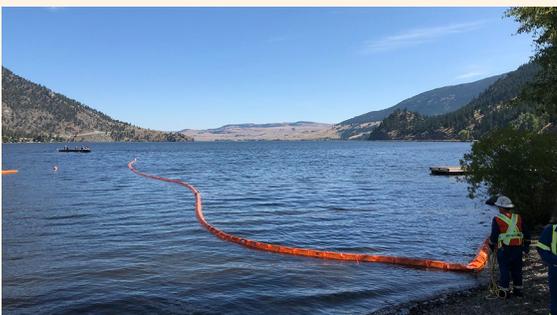
*Technique (uSCAT)* manual. The manual was developed by *Coastal & Ocean Resources* to support planning, decision making and operational response to nearshore oil that may have become submerged or sunken. This valuable response tool outlines protocols, techniques and procedures for detecting and documenting sunken oil in a marine environment and provides response personnel with specific information and advice based on research and experience.

The manual provides guidance on standards for surveying, reporting and managing a uSCAT program during a spill, and includes a *Sinking Oil Risk Assessment Tool* to assist in evaluating the potential for a spilled product to sink. The uSCAT manual was formally incorporated into our EM program in 2019, as part of enhancements to the *SSORP*. The manual is publicly available online at [uscat.ca](http://uscat.ca).

Ongoing research will inform and improve oil spill preparedness and response capabilities. We will continue to leverage this knowledge to enhance emergency management strategies, plans, and equipment as part of our EM Program.

## Kamloops Deployment

In September, we conducted a deployment exercise on the South Thompson River in Kamloops, BC and at Nicola Lake near Merritt, BC.



The purpose of the exercise was to activate and validate our Geographic Response Plan and to provide response crews with an opportunity to enhance and demonstrate their understanding of emergency response procedures, plans and responsibilities. The exercise allowed participating responders to demonstrate effective use of spill response equipment in river and lake conditions and to refresh personnel on both land and water-based spill response tactics by deploying equipment in real time. Trans Mountain employees and contractors, first responders, government agencies and Indigenous groups participated in or observed the exercise.

Equipment mobilized during the exercise were spill response trailers, response boats, a containment boom and associated spill response equipment. In addition to our inventory, we work with a network of oil spill response contractors to supplement existing inventories of equipment, if necessary.

As part of the exercise, we had the opportunity to test a specialized boom provided by **Harbo Technologies**. The lightweight and portable boom can be rapidly deployed by just two people, with no additional equipment needed. The boom is available in virtually unlimited lengths and is both hydrodynamic and aerodynamic, with each 82-foot section stored in a suitcase-shaped caddy. After use, the boom can be collected quickly and disposed of appropriately. We are currently taking the opportunity to review the applicability of the boom supplied by Harbo Technologies and how it may be incorporated into our existing fleet of emergency response equipment.

CONTACT US:

We welcome and encourage your feedback about the Responder newsletter:



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