

Emergency Response Strathcona County



Kinder Morgan Canada (KMC) is a member of the Strathcona District Mutual Assistance Program (SDMAP) — a partnership of more than 30 industrial and community agencies involved in emergency response planning in east Edmonton and Strathcona County (sdmap.ca).

- Members of SDMAP share best practices for industrial incident planning and response, perform routine training exercises, and provide emergency response support to one another
- In the event of an emergency at the Edmonton Terminal, KMC would call first on Strathcona County Emergency Services (SCES), one of the members of SDMAP. If further support were required, KMC would then call on other SDMAP members
- These assistance relationships are outlined as part of the Edmonton Terminal Emergency Response Plan

As a member of SDMAP, KMC also provides emergency support to other members with portable equipment such as:

- Two fire-suppression foam trailers equipped with up to 3,000 gallons of foam each
- A fire-suppression foam canon
- Lengths of fire hose

Emergency Response and Fire Suppression



Spill Containment

The Edmonton Terminal is lined with an impermeable material and surrounded by berms. Precipitation runoff from the site, water used to put out fires and any spilled product are collected in a containment area and managed appropriately in accordance with regulations. This prevents leakage off site, or down into soil and groundwater.

Absorbent pads and booms are stored at the terminal for use in the event of a spill on site.

Fire Suppression

Kinder Morgan Canada's (KMC) Edmonton Terminal has a sophisticated fire suppression system:

- Firewater pond, accessible year round
- On-site storage of fire-suppression foam concentrate
- Full site water and foam coverage via a system of pumps, hoses, trucks, hydrants, sprinklers and canons
- Access to additional manpower, foam concentrate and foam canons through the Strathcona District Mutual Aid Program (SDMAP)

KMC tests the fire equipment regularly to ensure that it would be fully functional in the event of an emergency.

As an entity regulated by the National Energy Board, the Edmonton Terminal is required to adhere to the codes and standards of the National Fire Protection Association.

Emergency Response and Management



Trans Mountain has an established Emergency Management Program for the Trans Mountain Pipeline and maintains close to 40 fire plans:

- Fire Safety Plan for every storage terminal and pump station facility
- Fire Pre-Plan for every storage terminal facility

There are five facets to fire planning for storage terminals:

PREVENT

- Large tanks use a floating roof design
- Storage tanks are grounded
- Tank inspections
- Training and job safety programs

PREPARE

- Training in Incident Safe Approach, Incident Command System (ICS), basic firefighting and spill response techniques
- Master service contracts with third parties such as industrial firefighting services
- Mutual aid agreements
- Emergency exercises involving first responders, government agencies, Aboriginal groups and contractors
- Storage tank firefighting course

DETECT

- Terminals have early detection and fire suppression systems installed and will be further equipped based on site-specific assessments
- Alarm in the Control Centre monitored round-the-clock



- Storage tanks equipped with floating roofs will have, at a minimum, early fire detection systems and fixed rim seal firefighting capability
- Basic firefighting equipment in company vehicles

RESPOND

- Trans Mountain personnel, complemented by trained responders and contractors, provide 24/7 emergency response managements
- Incident Command System (ICS) to organize its response to emergencies
- Unified Command with local emergency services

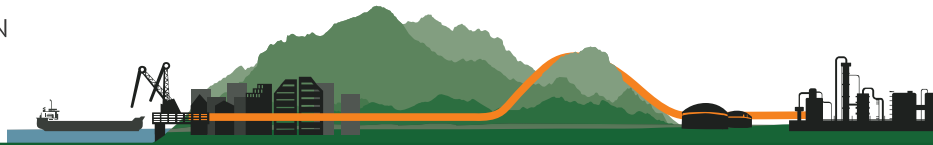
MAINTAIN

- Trans Mountain operates in accordance with numerous maintenance standards
- Weekly, monthly, spring/fall and annual testing of all foam equipment
- Tank inspections are conducted in accordance with our Facility Integrity Program which complies with API Standards for inspections

Next Steps

Enhance Emergency Management Plan including:

- Review of current fire plans and resources
- Enhancements built on existing emergency response capacity
- Seeking opportunities to establish more formal mutual aid agreements
- Sharing plans and collecting input from public safety agencies, Aboriginal groups and other jurisdictions



Edmonton Terminal Air Quality



Strathcona Industrial Association (SIA)

SIA is a not-for-profit association that represents heavy industrial operators in east Edmonton and Strathcona County (sia.ab.ca).

SIA provides a common voice for local industry, focusing on the following topics:

- Environmental management and monitoring
- Safety
- Community involvement
- Land use planning

As part of SIA's environmental monitoring activities, they have set up air quality monitoring stations throughout the Strathcona area that measure:

- Hydrogen sulphide
- Sulphur dioxide
- Nitrogen oxides
- Total hydrocarbons

- Particulate matter
- Wind speed, direction and temperature
- Air quality modelling

As a member of the Strathcona Industrial Association (SIA), Kinder Morgan Canada (KMC) participates in assessing air quality in Strathcona County.

An Air Emissions Management Plan for the Edmonton Terminal has been generated, as a requirement of NEB Condition 79 for TMEP. This condition requires that Trans Mountain do the following:

- Establish baseline, pre-construction conditions
- Outline the siting criteria for an air monitoring station
- Develop a schedule and methods for monitoring potential contaminants of concern
- Identify the process for reporting air quality monitoring data