



Oil Pipelines Information for Emergency Responders

Please retain this booklet for your information

**Click
Before
YouDig.com**

 **TransCanada**
In business to deliver

Why are you receiving this booklet?

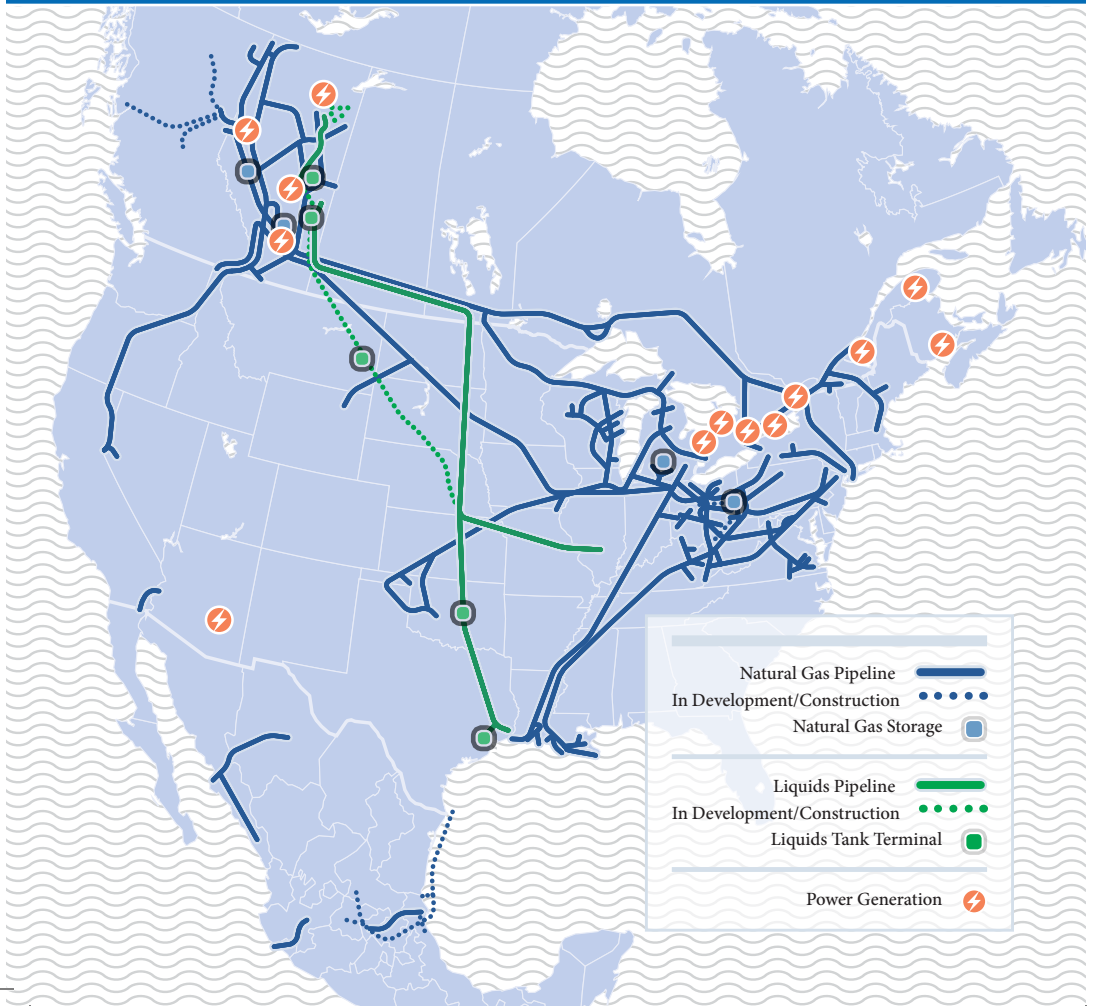
This brochure contains important safety information about crude oil pipelines, and you are a trusted emergency responder in a community located near a TransCanada pipeline. To help you understand the role you play in contributing to pipeline safety, we ask that you review the information provided. If you would like more information or have questions, please contact us at public_awareness@transcanada.com or call us toll-free at **1.855.458.6715**.

In the case of a pipeline emergency, please call **1.888.982.7222**.

Please retain this booklet for your information.

En cas d'urgence liée à un gazoduc, appelez le **1.888.982.7222**. Si vous souhaitez recevoir des informations sur la sécurité des gazoducs en français, veuillez envoyer un courriel à l'adresse public_awareness@transcanada.com ou appelez **1.855.458.6715**.

North American Assets



About Us

TransCanada is a leading North American energy infrastructure company with an industry-leading safety record. For more than 65 years, we have been building, operating, and maintaining pipeline systems in a responsible and reliable way to meet the energy needs of North America.

What is Crude Oil?

- Crude oil is a liquid mixture of naturally occurring petroleum hydrocarbons.
- Crude oil is amber to black in colour depending on the source. It can possess a rotten egg, gasoline, tar or “skunk-like” odour.
- Crude oil vapours are volatile, and can be flammable and explosive. Vapours are heavier than air and can travel along the ground in low-lying areas. Oil vapours can be ignited by many sources including cellular phones, radios and vehicles.
- Crude oil can contain varying levels of hydrogen sulfide (H₂S), an extremely poisonous gas. H₂S vapours can cause eye, skin and respiratory tract irritation, and can be lethal.

Our Liquids Facilities

TransCanada owns and operates pipelines and other associated oil facilities including pump stations and tank terminals.

Pipelines

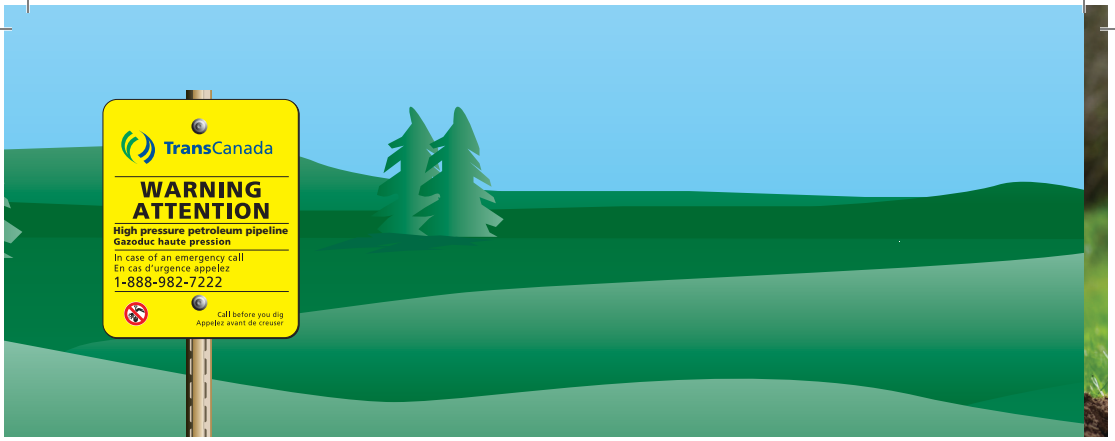
Pipelines are the safest and most efficient method to transport energy to market. Our pipelines are built using industry best practices, which include using the highest quality materials during construction, implementing routine quality inspections and monitoring the pipeline 24 hours per day from TransCanada’s Operations Control Centre.

Pump Stations

Pump stations are located at intervals along the pipeline in order to move oil through the pipeline. The majority of pump stations are driven by electric motors. Where electric power is not available, TransCanada uses gas turbines to drive the pumps.

Tank Terminals

A tank terminal is an industry term for a storage facility. Tank terminals consist of a number of interconnected storage tanks where oil is collected and measured. Oil is stored in these tanks until it is ready to be transported through the pipeline.



Pipeline Location

- Most pipelines are buried underground in an area of cleared land often referred to as the “right-of-way” .
- Only a TransCanada representative can determine the location and depth of the pipeline. Pipelines may not follow a straight course between marker signs.

Pipeline Markers

- Pipeline marker signs contain important information, including the owner of the pipeline, the product shipped in the pipeline and emergency contact numbers.
- TransCanada uses a variety of markers and signs along right-of-ways to alert people to the general location of its pipelines. Markers are typically placed where the pipeline intersects roads, railroads, rivers, fence rows and in heavily congested areas.
- **Do not rely on pipeline markers or signs to show you the pipeline’s location, path or depth.** Instead contact your local One-Call Centre. TransCanada and other utilities will send a representative to the proposed excavation site to mark buried utilities at no cost to you.
- It is against the law to willfully and knowingly deface, damage, remove or destroy any pipeline sign. If these signs are missing, damaged or otherwise unreadable, please contact TransCanada to replace them.



Warning Sign



Warning Sign



Vent Marker



Aerial Marker



Public Safety

- Unauthorized digging and crossing by contractors, farmers, landscapers and homeowners is a leading cause of pipeline incidents.
- TransCanada encourages anyone planning an excavation or a crossing near a pipeline right-of-way to first call their local One-Call Centre.
- The One-Call Centre will notify owners of buried facilities in the area, who will send representatives to mark these facilities with flags, paint or other marks, helping avoid damaging them.
- The service is free and could prevent accidents, injuries or deaths.
- Locate requests can be made online (www.clickbeforeyoudig.com), via a mobile phone app (Alberta, Saskatchewan and Quebec) or via phone.

Dig with **C.A.R.E.**

Click or Call before you dig

Allow required time for marking

Three business days (with the exception of five business days in Ontario).

Respect the marks

Lines are marked by flags, paint or other markers (normally yellow for pipelines).

Excavate carefully

A TransCanada representative must be present before any digging is allowed and all digging must take place during the time allotted. Hand dig to determine exact location of pipeline.

Click or Call Before You Dig – It's Free

Important Contact Information

Canadian One-Call Centres:

B.C. 1.800.474.6886
Alberta 1.800.242.3447
Saskatchewan 1.866.828.4888
Manitoba 1.800.940.3447
Ontario 1.800.400.2255
Quebec 1.800.663.9228

www.clickbeforeyoudig.com

Mobile phone apps:

Alberta Dig Info AB
Saskatchewan..... Sask 1st Call
Quebec.....Info-Excavation

Emergency..... 1.888.982.7222

General Inquiries

Phone 1.855.458.6715
Email... public_awareness@transcanada.com
Landowner Inquiries..... 1.866.372.1601

TransCanada is regulated by the National Energy Board in Canada. For more information on energy regulations, visit www.neb-one.gc.ca.



Maintaining Pipeline Safety

- TransCanada meets or exceeds all applicable federal and provincial safety standards.
- The pipeline facilities are monitored 24/7 to ensure safety and integrity of the entire system.
- In the unlikely case of a leak, the pipelines are equipped with multiple valves that can be closed manually or automatically, often within minutes, reducing the potential amount of product released.
- TransCanada patrols pipeline rights-of-way by ground and by air to identify any unsafe or unauthorized activity within the right-of-ways which could damage the pipeline.
- TransCanada's employees are trained to meet or exceed all regulated training in Canada.



Pipeline Incidents

A pipeline incident could involve an uncontrolled or unplanned release of oil from the pipeline system. TransCanada's state-of-the-art leak detection systems, elevated safety features and specially trained staff ensure that leaks would be quickly identified and addressed.

In the unlikely event an incident should occur, TransCanada's top priorities are to ensure the safety of the public and emergency responders, and to minimize effects on the environment and surrounding properties. TransCanada will immediately respond by shutting down the pipeline and dispatching emergency personnel to the location of the incident. Valves spaced at intervals along all TransCanada pipelines will be shut off either automatically or manually allowing the oil to be quickly and effectively isolated. Do not attempt to operate any of these valves.

Trained crews are dispatched to the site to coordinate a response with local emergency services.

TransCanada will not restart the pipeline until the issue has been addressed and it is safe to do so.

TransCanada's policies and practices for emergency response planning go above and beyond the standard regulatory requirements for emergency response.



Safety in the Community

Safety is a core value at TransCanada. We make safety – for ourselves, each other, our contractors and for members of our communities – an integral part of the way we work.

TransCanada's operations extend across North America with established offices in various communities. Each region is fully staffed with qualified employees trained in pipeline safety and emergency response to ensure the safe and efficient operation of the facilities in the area.

We view the communities we operate in as emergency response partners. We will work collaboratively with emergency responders, extending invitations to participate in exercises and training.



TransCanada uses the Incident Command System structure for emergency response. In the event of an emergency, we hope to work with emergency response officials in a Unified Command approach to ensure everyone is familiar with local operations and related safety issues. TransCanada does not expect volunteer or dedicated local fire departments to have the equipment or specific experience needed to respond to a leak or rupture with the exception of protecting the public by conducting evacuations if necessary and keeping them out of the impacted area.

Leak Detection

Although a pipeline leak is rare, it is important to know how to recognize the signs. Use your senses of smelling, seeing and hearing to detect a potential pipeline leak.

What you may smell

- Many petroleum products have a distinct smell. "Sour" crude oil may smell similar to a skunk, rotten eggs or tar.

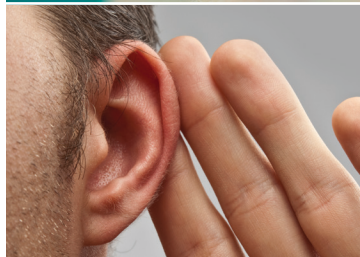


What you may hear

- A hissing or roaring sound.

What you may see

- Amber to black liquid.
- Rainbow sheen or black liquid on top of water.
- Discoloured vegetation on or near a pipeline in an area that is usually green.
- Stained or melted snow/ice over pipeline areas.



If You Suspect a Leak

If you witness any of the typical signs listed, or any other unusual sights, sounds or smells near a pipeline location, it is important that you follow these steps:

- 1. Leave** the area immediately.
 - 2. Move** to a safe location, call '911'.
 - 3. Call** TransCanada's emergency number: **1.888.982.7222**. This number can be found on all pipeline marker signs and facility gates.
 - 4. Avoid** touching the release or inhaling vapors from any leaking liquids.
 - 5. Warn** others to stay away.
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Actions for Emergency Services

Do

- Protect yourselves and the public.
- Contain and extinguish any secondary fires if safe to do so.
- Provide traffic and crowd control.
- Secure the site and establish a safe zone to ensure public safety.
- Evacuate unnecessary personnel.
- Monitor for LEL, H₂S and benzene if possible.
- Eliminate all ignition sources if safe to do so.
- Provide first aid as needed.
- Allow TransCanada employees clear and quick access to the emergency site.

Do Not

- Attempt to operate any valves.
- Go near the spill until a hazard assessment has been conducted by TransCanada.
- Attempt to contain the oil or try to identify the oil.

TransCanada's Emergency Number:
1.888.982.7222

