

Natural Gas Pipelines Information for Emergency Responders

Please retain this booklet for your information





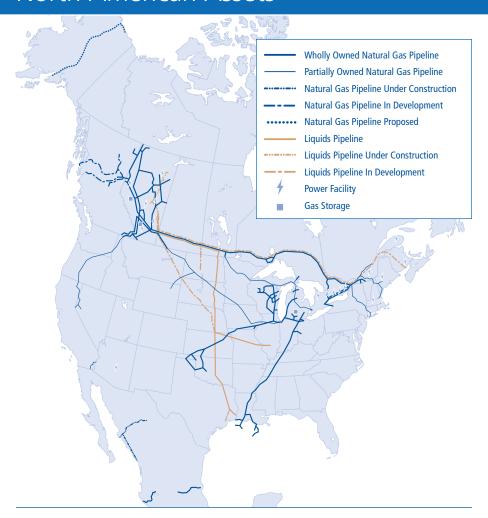
Why are you receiving this booklet?

This brochure contains important safety information about natural gas 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**.

Please retain this booklet for your information.

En caso de emergencia relacionada con un oleoducto, llame al 1.800.447.8066. Si desea recibir información de seguridad sobre los oleoductos en español, envíe un email a **public_awareness@transcanada.com** o llame al **1.855.458.6715**.

North American Assets



What is Natural Gas?

- Natural gas is an energy source composed mostly of methane.
- Natural gas is said to be odorless, but some people detect a slight hydrocarbon smell. If the gas has been odorized, it could smell "skunk-like" or similar to rotten eggs.
- Natural gas is highly flammable and explosive.

Our Natural Gas Facilities

TransCanada own and operates pipelines and other associated natural gas facilities including meter stations and compressor stations.

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 and implementing routine quality inspections and 24 hour monitoring programs throughout the life of the pipeline.

Meter Stations

Meter stations are facilities necessary within a pipeline system that measure the volume of natural gas transported by a pipeline. Natural gas is measured at all locations where it either enters the pipeline (receipt station) or leaves the pipeline (sales station).

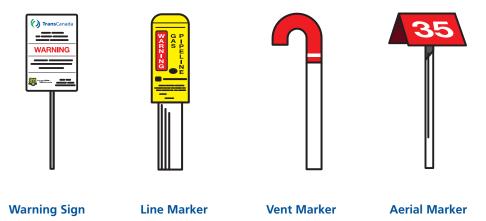
Compressor Stations

As natural gas flows along a pipeline, it slows due to friction between it and the pipeline. This results in a loss of pressure along the pipeline. In order to make the gas flow continuously at a desired flow rate, it is re-pressurized at suitable locations along the pipeline. This is done by mechanically compressing the gas at sites connected to the pipeline known as compressor stations. The location and quantity of compressor stations required in a pipeline system is dependent on a number of factors, including the operating pressure of the pipeline, the diameter of the pipe used, elevation changes along the pipeline route and the desired volume of gas to be transported.



Pipeline Location

- Most pipelines are buried underground in an area of cleared land often referred to as the "right-of-way". Markers are used to indicate a pipeline's approximate location as well as the name of the pipeline and the operator's information.
- Only a TransCanada representative can determine the location and depth of the pipeline. Pipelines may not follow a straight course between marker signs.



Dig with C.A.R.E.

Call before you dig Allow required time for marking Respect the marks

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

Excavate carefully

When digging near underground utilities, be sure to hand dig to determine their exact location.



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 streets, 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, call '811' America's national toll-free number for requesting underground utility location.
- 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.



Pipeline Integrity

- TransCanada works to meet all applicable federal and state safety standards.
- The pipeline facilities are monitored 24/7 to ensure safety and integrity of the entire system.
- 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 all mandated federal requirements for Pipeline Operator Qualifications in the U.S.
- In accordance with federal regulations, some segments along TransCanada's pipelines have been designated as High Consequence Areas (HCAs). To maintain the integrity of these HCAs, TransCanada has developed supplemental hazard assessment and prevention programs called Integrity Management Programs (IMPs). These programs may include internal inspections, external evaluations and pressure tests. For information regarding these measures, contact TransCanada and ask to speak with the US IMP Program Manager.

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 '811'.
- Dispatchers at '811' 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.



Pipeline Incidents

A pipeline incident could involve an uncontrolled or unplanned release of natural gas from the pipeline system. TransCanada's state-of-the-art leak detection systems, elevated safety features and specially trained staff make us confident 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 the appropriate personnel to the location of the incident. Valves spaced at intervals along all TransCanada pipelines will be shut off either automatically or manually allowing incidents 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 identified, resolved 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.

Call Before You Dig – It's Free

Important Contact Information

One Call Center	811
Emergencies	1.800.447.8066
General Inquiries	1.855.458.6715
Landowner Inquiries	1.877.287.1782

TransCanada is regulated by US Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) in the United States.

Crossing or Encroachment Agreements

Email us_crossings@transcanada.com Phone1.877.287.1782

National Pipeline Mapping System (N.P.M.S.)

You can access further information regarding transmission pipelines located in your community transporting hazardous liquids or natural gas through the National Pipeline Mapping System at www.npms.phmsa.dot.gov.



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.

In the event of an emergency, we will utilize Unified Command via the Incident Response System (ICS) with local responders to ensure everyone is familiar with local operations and is ready to respond in the event of an incident. TransCanada does not expect volunteer or dedicated emergency services 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.



Actions for Emergency Services

Do

- Protect yourself and the public
- Contain and extinguish any secondary fires if safe to do so
- Evacuate all public within 825 yards/2500 feet. A TransCanada representative may revise the evacuation distance upon assessment of the incident
- Provide traffic and crowd control
- Secure the site ensure public safety. Keep a safe distance away
- Evacuate unnecessary personnel
- Eliminate all ignition sources if safe to do so
- Provide first aid as needed.
- Allow TransCanada employees clear access to the emergency site

Do Not

- Attempt to operate any valves
- Attempt to put out any ignited natural gas with water

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

 Natural gas is said to be odorless, but some people detect a slight hydrocarbon smell. If the gas is odorized, it may "skunklike" or similar to rotten eggs it may smell.

What you may hear

• A hissing or roaring sound.

What you may see

- Dead or dying vegetation on or near a pipeline in a normally green area.
- Water bubbling or blowing into the air at a pond, creek, or river.
- Dirt being blown or appearing thrown into the air.
- 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: **1.800.447.8066**. This number can be found on all pipeline marker signs and facility gates.
- 4. Warn others to stay away.

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

Call before you dig

Allow required time for marking

Respect the marks

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

Excavate carefully

When digging near underground utilities, be sure to hand dig to determine their exact location.





Actions for Emergency Services

ဓိ

- Protect yourself and the public
- Contain and extinguish any secondary fires if safe
- Evacuate all public within 825 yards/2500 feet. A TransCanada representative may revise the evacuation distance upon assessment of the
- Provide traffic and crowd control
- Secure the site ensure public safety. Keep a safe distance away
 - Evacuate unnecessary personnel
- Eliminate all ignition sources if safe to do so
- Allow TransCanada employees clear access to the Provide first aid as needed

emergency site

Do Not

- Attempt to operate any valves
- Attempt to put out any ignited natural gas with water



TransCanada's Emergency Number: 1.800.447.8066