

Natural Gas Pipeline Safety and Emergency Information

for emergency and public officials



You are receiving this brochure because we have identified you as an **Emergency or Public Official** with responsibilities in the vicinity of Enbridge's pipelines and/or related facilities. Please keep this brochure and share this important information with other emergency and public officials.

Emergency number: 1-800-663-9931

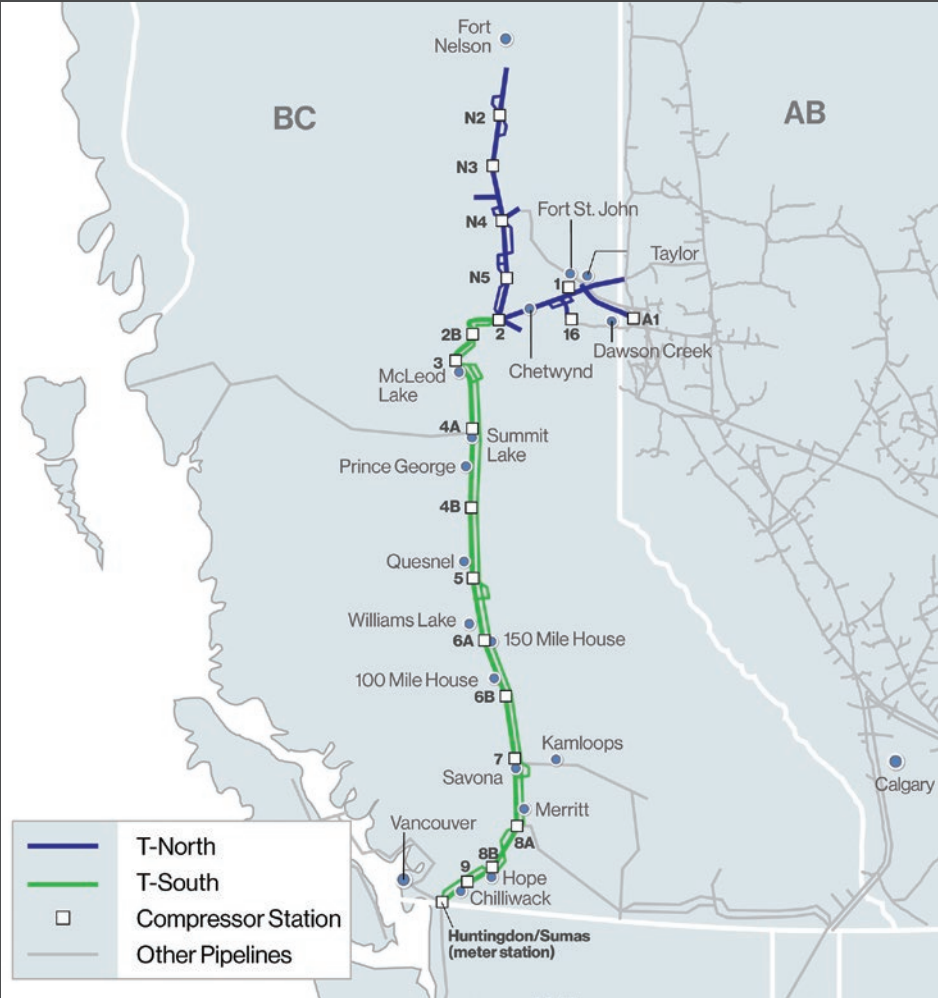
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Read this brochure,
then scan for a chance
to win an \$800 grant.



About the BC Pipeline (Westcoast system)



Life takes energy: to heat our homes, to feed our families, to fuel our vehicles. Enbridge connects people to the energy they need to help fuel their quality of life.

Enbridge's BC Pipeline system stretches from Fort Nelson in northeast B.C. and from Gordondale near the B.C./Alberta border, south to the Canada/U.S. border at Huntingdon/Sumas.

This system, which serves markets throughout B.C. and the Lower Mainland, the U.S. Pacific Northwest and beyond, transports approximately 55 percent of the gas produced in the province.

Our BC system also supplies about 50 percent of natural gas demand in the American states of Washington, Oregon and Idaho.

Know what's below



Risk: Failure to dig safely can endanger yourself, emergency responders and your community. Safe digging practices can save your life.

Please make community members, permit applicants, public works departments, excavators, contractors and developers aware that they need to make a locate request by following the steps listed below.

Enbridge maintains a Damage Prevention Program in accordance with federal guidelines. The purpose of this program is to prevent damage to our pipeline facilities from excavation activities such as digging, trenching, blasting, boring, tunneling, backfilling or other activities such as heavy equipment crossing, storage on the ROW, etc. The Damage Prevention Program also monitors the depth of cover over our pipelines and conducts regular patrols of our ROWs to monitor for unauthorized activities.

If you see someone digging or disturbing the soil and there are no flags or marks on the ground, please stop the activity and ask the person to **clickbeforeyoudig.com** or contact their local one-call centre before continuing. One should not rely on word-of-mouth, maps, memory or pipeline markers when planning a digging project.

One-call requirements



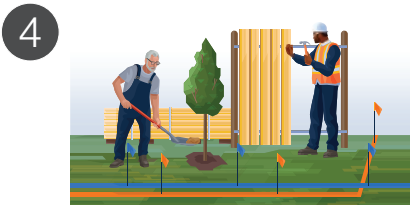
At least two to three business days before your project—any time you are disturbing the soil—visit **clickbeforeyoudig.com** or call your local one-call centre.



Your local one-call centre will provide this information to pipeline operators, such as Enbridge and other companies with buried utilities near the work site, saving you the time and trouble of contacting them individually.



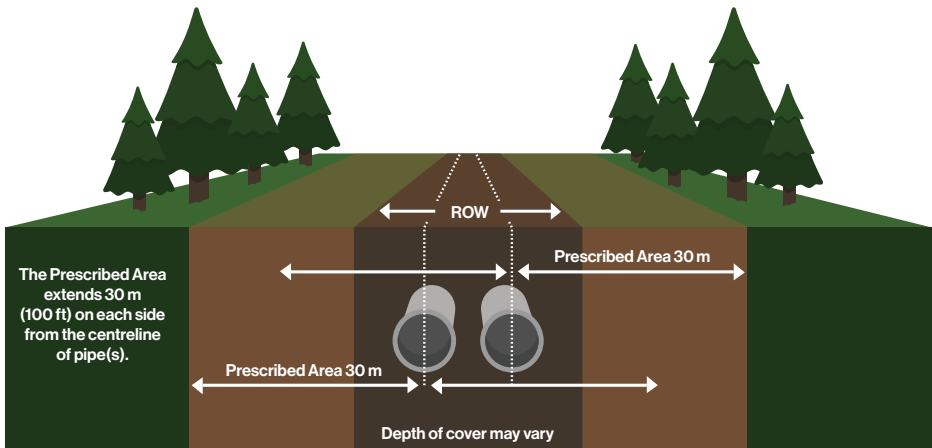
When you call or click, you'll be connected to a representative, where you'll be asked to provide important details about your project, such as the type of work you'll be doing, where you'll be doing it and when your project is expected to begin.



Within a few days, pipeline operators and utilities will respond to the one-call ticket. If line locating is required, professional locators will come to your location to mark their facilities—so you can work around them, saving yourself from possible injury or property damage.



Know what's below



Pipeline ROW and pipeline location

A pipeline follows a narrow, clear stretch of land, called a ROW, that allows our employees and contractors to access the pipeline for inspections, maintenance, testing and emergencies.

Approximate location of the pipeline can be determined by the pipeline marker.

A few important notes when it comes to ROWs and pipeline markers:

- Markers should never be removed or relocated.
- The pipeline marker displays the operator's name, the contents and an emergency phone number.
- If an emergency is suspected or discovered, call the number on the marker.
- Pipeline ROW must be kept free from structures and other obstructions to allow access to the pipeline. Pipelines are patrolled from the air and the ground and obstructions prevent proper inspections.
- Markers should not be used to give exact locations and are not an alternative to contacting [clickbeforeyoudig.com](https://www.clickbeforeyoudig.com).

Consent within the prescribed area and ROW

The prescribed area is a 30 m strip of land, measured perpendicularly on each side from the centreline of pipe(s). Regulations require that within this area activities causing, or that might cause, a ground disturbance cannot occur without written consent from the pipeline company. If written consent for the activity is granted, you must then make a locate request to confirm the location of the pipeline and any other underground utilities. All planned construction activities on, along, under or across the pipeline must also receive approval from Enbridge and a locate request, before going ahead. Written consent from Enbridge is also required for vehicle or mobile equipment crossings within the ROW.



Vent
marker



Line
marker



Aerial
marker

< Marker appearance may vary in your area.

Crossing or traversing the ROW



ROWs are not designed as roads or storage locations. The weight of vehicles, equipment or materials can damage pipelines below.



Do NOT do the following without obtaining Enbridge consent:

- Cross or travel along ROW with a vehicle, machinery or mobile equipment
- Park vehicles or equipment on the ROW
- Stockpile materials or construct any structures on the ROW
- Disturb the ground within the ROW

Vehicle and mobile equipment crossings

The Canada Energy Regulator (CER) requires that anyone wanting to cross the pipeline with vehicles including recreational vehicles like 4X4s, all-terrain vehicles, utility vehicles, motorcycles or mobile equipment (outside of a traveled portion of a highway or public road) submit a request to obtain the pipeline company's written consent before doing so.

By submitting your request, you provide Enbridge the opportunity to assess:

- If the vehicle, machinery or mobile equipment being used can safely cross or traverse our pipeline within the ROW at that location
- If the proposed use is safe by confirming the location and depth of cover of pipelines at the location of the crossing
- If any mitigation measures are required due to there being a potential risk or no alternative crossing locations

Crossing during an emergency:

If a crossing is required while responding to an emergency, please call Enbridge's emergency number before crossing the ROW.

➤ **1-800-663-9931**

Non-emergency crossings:

For requests and questions about vehicle and agricultural crossings, email crossingscanada@enbridge.com.

Know what's near you: Compressor stations



Natural gas is highly pressurized as it travels through a pipeline.

Compressor stations

To ensure the natural gas remains pressurized, it must be compressed periodically along the pipeline. This is accomplished by using compressor stations where gas is compressed either by a turbine, a motor or an engine.

Over extended distances, friction and elevation differences reduce the pressure within the pipeline, which slows the flow of gas. That's where compressor stations play a significant role.

These stations, placed along a transmission pipeline system, give the gas a needed boost, helping it get from one station to the next. Compressor stations operate 24 hours a day, 365 days a year and are monitored 24/7 by highly-trained personnel at a centralized gas control centre. We have strict procedures in place at each of our stations and employ a variety of safety systems and practices to protect the public, employees and our facilities. In the unlikely event of an incident, every station has an emergency shutdown system that stops the compressor units, isolates and vents the compressor station gas piping, and diverts gas in the pipeline around the station.

Know what's there: Product information

It is important to remember that the natural gas carried on Enbridge's system is flammable, hazardous and explosive under certain conditions.

A naturally occurring product, the sweet gas transported through Enbridge's BC system is composed primarily of methane and is non-toxic. However, when mixed with the appropriate ratio of oxygen, it can easily ignite. Sweet gas is lighter than air and will readily disperse with the wind.

Safety Data Sheets (SDS) contain information about regulatory classification, health hazards, toxicity, first aid and fire information for the products in the pipeline. SDS information regarding hazardous products is available at various locations across our system. In the event of an Enbridge pipeline incident, Enbridge representatives will provide emergency responders with the SDS for the product in the pipeline.








Characteristics of natural gas

Appearance	Colourless.
Odour	Sweet gas has a slight petroleum or hydrocarbon smell. <i>Unlike the gas that is distributed in homes, the sweet gas in Enbridge's pipelines does not have an odourant added to enhance its smell. While you may notice a slight similarity to diesel fuel, oil or propane, you will not smell the common rotten egg odour associated with natural gas.</i>
Special behaviour	Lighter than air, it rises and dissipates into the atmosphere in open areas. In enclosed areas, it collects first overhead.
Hazards	Extremely flammable and explosive under certain conditions. Asphyxiation can occur if vapours displace the oxygen in an enclosed area.

Damage prevention

Our safety measures

Safety is, and always will be, our number one priority. Our team devotes hundreds of thousands of hours every year to keeping our systems running smoothly and without incident. We invest heavily in safety measures, including:

-  Inspection and preventative maintenance programs
-  Around-the-clock monitoring of pipelines and facilities
-  Emergency response training and drills for employees and local emergency responders
-  Pressure tests on new and existing pipelines
-  Aerial and ground patrols along the pipeline ROW
-  Automatic shut-off and remote-control valves
-  High-quality pipeline material and protective coating

Enbridge has enhanced safety measures for pipelines that cross bodies of water and highly populated or environmentally sensitive areas.

To read more about our pipeline safety efforts, visit enbridge.com/safety.

Canada Energy Regulator requirements and penalties

Enbridge's pipelines are regulated by the CER, which sets specific standards and regulations for compliance. These regulations help maintain the safety of our pipelines while allowing certain activities to occur (subject to review and conditions).

Activities on the ROW and prescribed area including ground disturbance, excavation, vehicle/mobile equipment crossing, as well as construction, are subject to the Canadian Energy Regulator Act (CER Act), the CER Pipeline Damage Prevention Regulations – Authorization, and CER Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies (together, the DPRs).

Violations of the CER Act and associated regulations such as the DPRs must be reported by the pipeline company to the CER. The CER Act sets the maximum daily fines (known as Administrative Monetary Penalties, or AMPs) of up to \$25,000 for individuals and \$100,000 for companies (per violation).

More information about the DPRs and AMPs can be found on the CER website at cer-rec.gc.ca.

Municipal operations and maintenance activities

The CER permits certain maintenance activities without requiring the consent of the pipeline owner. Refer to the CER guidance document titled Damage Prevention Guidance for Municipal Operations and Maintenance Activities for more details. Municipal public works departments should make themselves aware of the activities that would require the pipeline company's written consent to ensure that the appropriate applications are made with sufficient time. Please contact Enbridge with any questions. We can be reached at crossingscanada@enbridge.com.

Emergency information

Information for 911 dispatchers

After identifying a potential pipeline emergency and dispatching local responders, take the following actions as the situation dictates to facilitate a safe, effective response:



Do

- Reassure the caller emergency response crews and Enbridge will be contacted and will arrive soon.
- Advise the caller of an evacuation center if it has been designated.
- Call Enbridge's toll-free, 24-hour emergency number.
- Instruct caller to move as far away from the leak as possible (upwind if possible), avoiding contact with escaping liquids and gases.



Do NOT

- Drive into the area or start your car.
- Light a match.
- Turn on or off anything that may create a spark (cell phone, telephone, light switch, vehicle alarm, vehicle keyless entry system, flashlight) – until you are in a safe location.
- Operate pipeline valves.
- Remain in a building if the smell is stronger inside than outside.

Resources

Free training opportunity for emergency responders and 911 dispatchers

Emergency responders and others responsible for public safety in our counties of operation – including 911 dispatchers – can access the National Association of State Fire Marshals' Pipeline Emergencies online training program at mypipelinetraining.com. Certification is provided upon completion of the program.

Emergency Response Plans

Enbridge also has Emergency Response Plans available to first responders. The plans describe our Emergency Management Program, including how we manage mitigation, preparedness, response and recovery.

Plans are available online at emergencyresponderinfo.com. If you have any questions, would like to request a map of your area, or would like to provide feedback on our emergency response plans, please email erinfo@enbridge.com.

Security

Enbridge views the security of our facilities as an integral part of our Emergency and Security Management Program. If you notice suspicious activity near or on our above ground facilities, call 911, then call Enbridge's 24-hour emergency number.

Incident Command System



Enbridge utilizes the Incident Command System (ICS) for managing a response to an emergency.

The ICS organizational structure is designed to coordinate with other responding agencies and to include those agencies inside a Unified Command Post for a coordinated response.

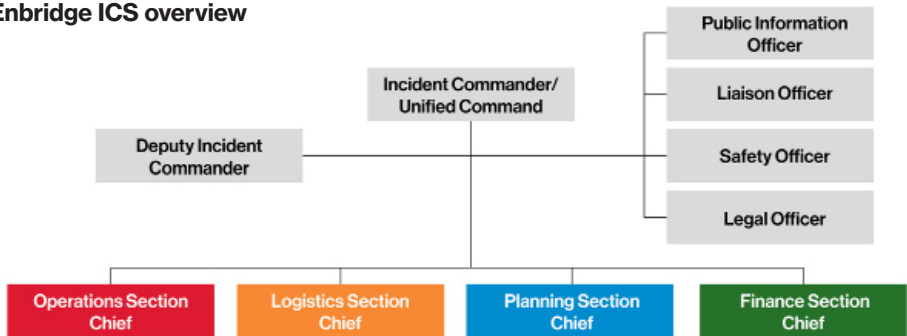
The ICS is a flexible, scalable tool that provides a common framework, uses common terminology and has standardized functional roles.

By using the ICS, trained personnel from throughout the organization can be deployed to support any incident.

Elements of the response management enabled through use of the ICS include:

- Incident Action Plan – define objectives, strategies and resources that contribute to public safety, responder safety and the environment
- Site safety and security
- Communications plans
- Containment and recovery
- Clean-up and waste management
- Public information management

Enbridge ICS overview



Contact Enbridge



24-hour emergency number
1-800-663-9931



Phone:
(non-emergencies only)
1-877-640-8665



Email:
cdnpublicawareness@enbridge.com



Mail:
Public Awareness Program
200, 425 1st St. S.W.
Calgary, AB T2P 3L8



Website:
enbridge.com/publicawareness

Call or Click Before You Dig



Please visit **clickbeforeyoudig.com** or contact your local one-call centre:

- Utility Safety Partners
(formerly Alberta One-Call)
1-800-242-3447
- BC 1 Call: **1-800-474-6886**

Links for more information

To reach an Enbridge land representative, call **1-800-668-2951** (toll-free) or email **landcontactcan@enbridge.com**.

If you are planning work on the right-of-way, such as building a fence, deep tilling, digging a ditch, operating equipment or other activities, please email **crossingscanada@enbridge.com**.

More information can also be found online at **enbridge.com/damageprevention**.

More information about our emergency management program can be found at **enbridge.com/emergencymanagement**.

Natural gas product characteristics (under key public safety information in the emergency management section) – **enbridge.com**.

CER
cer-rec.gc.ca

- CER Pipeline Damage Prevention Regulations – Authorizations sets out the requirements under which ground disturbance in the prescribed area and excavation and construction activities near the pipeline (including the ROW) can be conducted safely. It also provides requirements for authorization to cross the pipeline.
- CER Pipeline Damage Prevention Regulations – Obligations of Pipeline Companies establishes the responsibilities of the pipeline company to the person proposing or conducting the activity and to the Canada Energy Regulator.

Enbridge Inc.
enbridge.com

Westcoast Energy Inc., an Enbridge Company

Emergency response information



Risk: Ignoring the critical safety information below could create additional hazards for the public, responders and the environment.

Recognizing a pipeline leak

In an emergency, protecting the public is your top priority – and it's our top priority as well. We value your expertise as public safety officials, and we're committed to providing you with the information and training you need to respond in the unlikely event of an emergency involving our pipelines or facilities. Although we immediately dispatch our emergency response teams upon notification, local 911 dispatch centres or other public safety officials typically receive the initial report. The following items listed below could indicate a potential pipeline emergency and may be reported by callers or emergency responders.



You might see:

- Dirt being blown or appearing to be thrown into the air
- Flames, if gas is ignited
- A white vapour stream or mist-like cloud
- Unexpected frost buildup on the ground
- Dead or dying vegetation in an otherwise green area
- Continuous bubbling in wet areas or at a pond, creek or river



You might hear:

- An unusual roaring, blowing, hissing or loud whistling sound



You might smell:

- Odourized pipelines: An unusual sulphur or rotten egg odour
- Unodourized pipelines: A slight smell similar to diesel fuel or oil

Most natural gas has a naturally occurring slight petroleum smell similar to diesel, oil or propane. However, typically when natural gas is distributed into homes and businesses, the distributor adds an odourant to enhance the smell of the gas to make it easier to detect a potential leak.

Steps for a safe response

- 1** Abandon any mechanized equipment and ignition sources in the suspected leak's vicinity.
- 2** Secure the site and determine a plan to evacuate or shelter in place.
- 3** Monitor for hazardous atmospheres.
- 4** Control and redirect traffic.
- 5** Provide immediate access to Enbridge pipeline representatives.
- 6** Implement your local emergency plan.

What NOT to do during an emergency response



Do not operate pipeline valves or extinguish any pipeline fires. Doing so may prolong or worsen an incident, or even cause another leak in the pipeline. Our control centre personnel can close some valves automatically, while trained employees must manually close others.



Do not create a spark. Possible ignition sources include smoking materials, open flames, light switches, telephones, cell phones, pagers, flashlights, keyless entry remotes, motor vehicles and other electronic devices.



Do not enter an Enbridge facility without permission. If a fire occurs at one of our facilities, unless lives are at risk, we ask that fire crews stay outside of the property.