

For excavators, contractors
and our community

Natural Gas Pipeline Safety and Emergency Information

> Important safety information enclosed.



\$500

Read this brochure,
then fill out and return the
pre-paid survey card for a
chance to win a
\$500 gift card.



Westcoast Energy Inc., an
Enbridge Company
Public Awareness
Program, 2022



Enbridge Public Awareness Program
7500 River Road
Richmond, BC V6X 1X6

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

All pipeline markers
provide the name
of the pipeline operator,
product being transported
and a telephone number
for reporting pipeline
emergencies.



**Click
Before
You Dig**.com

Pipeline safety

You have received this brochure because your company is located near where an Enbridge pipeline or associated facilities exist and may be involved in ground disturbance activities such as: excavation-related work, land development, dredging, construction, or facility installations.

This brochure provides you with important safety information regarding:

- The presence of pipelines in your community
- How to work safely near pipelines
- One-call centre information, including how to have underground utilities located and marked
- How to prevent pipeline incidents
- The need for authorization when constructing a facility or vehicle crossings across the pipeline
- How to recognize, report and respond in the event of an emergency
- How to contact Enbridge in emergency and non-emergency situations

In case of emergency

Our pipeline is monitored 24/7. If you suspect a pipeline emergency, please find a safe place to call 911 and then call Enbridge's toll-free emergency number.

24-hour emergency number

▶ **1-800-663-9931**

How you can reach us (non-emergencies only):



Phone
1-877-640-8665
(Public Awareness hotline)



Email
cdnpublicawareness@enbridge.com



Mail
Public Awareness Program
200, 425 1 St. SW
Calgary, Alberta, T2P 3H5



Website
enbridge.com/publicawareness



Please read and then
share the information in
this brochure with others
in your organization.

Safety and the pipeline right-of-way (ROW): A shared responsibility

Our responsibility is to educate you on how to safely conduct activities near our pipelines. In turn, your responsibility is to ensure that before any activity commences, you've confirmed the locations of any underground pipelines and received the necessary written approvals.

Enbridge takes seriously the responsibility for the safe operation of its pipelines.

While our pipeline is buried beneath the ground in the ROW, we never lose sight of our potential impact on the air, water and land around us, or on our responsibility to preserve all elements of our environment.

In fact, our activities—including pipeline design, construction, testing, maintenance, operation and safety practices—are subject to government regulations, which we meet or exceed.

If we disturb the ground, every effort is made to restore the land to its original condition and to protect the quality of the air and water that sustain us.


Whether it's wildlife, soil, freshwater or historical artifacts, in every aspect of our business, we work hard to preserve the natural balance of our land. To do that, we carefully plan every project from start to finish, making sure our people know what is expected as well as implementing programs that will help to protect the environment.

Being responsible for pipeline safety, however, does not mean we are in it alone.

Engaging with communities is important to us. That's why we work year-round to provide safe, reliable operations and why we regularly communicate important safety information to utilities, contractors, local governments, emergency services, landowners, tenants, regulators and neighbours.

As an excavator, developer or utility company, you also have an important role to play, as your commitment to safe construction and ground disturbance practices reduces the risk of pipeline damage and helps safeguard you and your employees, as well as the communities living and working along the pipeline.

Your safety, and the safety of those living and working near our pipelines, is an important part of our overall safety management system, and we continue to promote good working relationships with excavators, developers and utility companies through industry meetings, personal contact and brochures such as this one.



A right-of-way is a strip of land of varying widths that may contain one or more pipelines.

The ROW

A ROW is a strip of land of varying widths that may contain one or more pipelines.

While the depth and locations of the pipelines can vary within the ROW, the ROW:

- Identifies an area that restricts certain activities to protect public safety
- Provides Enbridge employees and contractors access to the pipeline for inspections, maintenance, testing or in an emergency

The ROW can exist in many kinds of ecosystems, from river crossings and cultivated fields to urban areas. Because of this, there is no distinct look to the ROW.



Pipeline markers

Pipeline markers are signs that indicate that a pipeline is in the area. While there are permanent pipeline markers at railways, roads and other intervals along the ROW, these show only the **approximate** location of buried pipelines and should never be used as a reference for the exact location. These signs also provide you with important information such as the pipeline owner, the type of product being carried, a reminder to Call or Click Before You Dig, and an emergency number for reporting pipeline emergencies.

The depth and location of pipelines vary across Enbridge's system. As such, only an Enbridge representative can accurately determine the location and depth of our pipeline in a specific area. That's why it's important to always call your local one-call centre in advance of any planned ground disturbance activity. If underground utilities do exist, they will be located and identified using temporary colour-coded markings.

Pipeline markers do **NOT** indicate exact locations of a pipeline. Call or Click Before You Dig to have pipeline locations marked.

Canada Energy Regulator (CER) requirements

Under the CER Act, the responsibility to prevent pipeline damage is shared between anyone who plans to conduct an activity near a pipeline and the pipeline company.

Activities near Enbridge's pipeline may need authorization as outlined in the *National Energy Board Damage Prevention Regulations— Authorizations and Damage Prevention Regulations (DPR)—Obligations of Pipeline Companies* (together, the DPRs). The DPRs apply to any person or company planning or undertaking an activity near a CER-regulated pipeline.

Ground disturbance activities

A ground disturbance is any work, operation or activity that results in the disturbance of the earth.

If you plan to carry out ground disturbance activities within the prescribed area, you must consult with and receive consent from Enbridge before moving ahead.

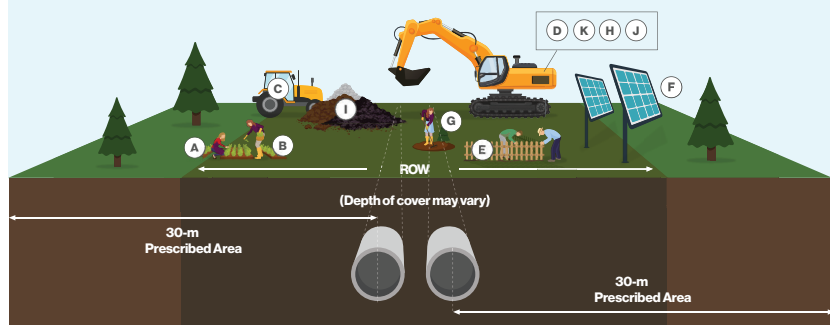
The illustration on the next page provides some guidance on activities that require written consent. If you are unsure if your planned activity requires a locate request or written consent, please contact Enbridge.

Activities that DO NOT require consent

- (A) Ground disturbance less than 30 cm below the surface (e.g. planting flowers)
- (B) Agricultural cultivation less than 45 cm deep (unless notified by the pipeline company that it's unsafe to do so in certain areas)
- (C) Operating vehicles or mobile equipment across a pipeline which are used for normal farming operations

Activities that DO require consent

- (D) Ground disturbance depths of 30 cm or more (excavating, digging, trenching, land leveling, topsoil stripping, deep tilling, subsoiling and grading)
- (E) Installing/constructing a fence, retaining wall or structure
- (F) Installing facilities on, along, under or across the pipeline prescribed area
- (G) Landscaping, tree planting, clearing and removing stumps
- (H) Constructing roads, paving, parking areas, driveways, ditches
- (I) Stockpiling materials
- (J) Drainage or irrigation systems (including dykes, ditches and culverts)
- (K) Crossing a pipeline while not on an upgraded and traveled portion of an established highway or public road with vehicles or mobile equipment



Enbridge's cross-border and interprovincial pipelines are regulated by the CER and must comply with specific pipeline standards and regulations. In addition to the ROW, where the pipeline is located, the CER has established a 30-m prescribed area on either side of the pipeline—measured perpendicularly from the centreline of the pipe—to protect the public, the environment and the pipeline. **If planning to conduct any ground disturbance in this area, written consent from Enbridge is first required.** Modified from CER image in “Pipeline Damage Prevention Regulations” information product.

Constructing a facility or conducting a ground disturbance activity

Under the DPRs, if you are planning to construct a facility or cause ground disturbance across, on, along or under a pipeline, or if you will be conducting any ground disturbance activities within the prescribed area, you must:

- 1 Contact the pipeline company to obtain written consent to conduct these activities.
- 2 If written consent is given, you must make a locate request to determine the location of the pipeline.

The locate request must be made at least three working days before the day on which the construction or planned ground disturbance activity is to start. To make the request visit **clickbeforeyoudig.com** or call your local one-call centre (numbers provided at the back of this brochure).

Construction and ground disturbance activity must not proceed until locating and marking of the pipeline and any possible mitigating factors have been addressed.

Mobile equipment and vehicle crossings

Federal regulations also require that anyone wanting to cross the pipeline with vehicles (including recreational vehicles like 4X4s, all-terrain vehicles (ATV), utility vehicles (UTV), snowmobiles and motorcycles) or mobile equipment (outside of a travelled portion of a highway or public road) must have the pipeline company's written consent before doing so.

If you need to cross Enbridge's natural gas system, we must first be notified to assess if the vehicle, machinery or mobile equipment is safe to cross our assets. Engineering assessments are required for equipment crossing, so please be sure to contact us early to allow sufficient time for review, assessment and documentation of your application.

Once we've evaluated the request and confirmed whether or not the vehicle may cross safely, we will provide the necessary written consent or work with you on modifications as required.

Mobile equipment and vehicle crossings, must not proceed until the locating and marking of the pipeline, and any possible mitigating factors have been addressed.

Please review the DPRs for more information, and to make sure the regulations are understood prior to planning work in proximity to a CER-regulated pipeline. The address can be found at the back of this brochure.

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**.

Unauthorized Activity and Administrative Monetary Penalties (AMPs)

Certain contraventions of the CER Act and its associated regulations, such as the DPRs, must be reported by the pipeline company to the CER. Such contraventions can result in the CER imposing financial penalties called Administrative Monetary Penalties (AMPs) on companies or individuals when enforcement tools such as letters, orders or voluntary commitments are not working to prevent unauthorized activity. These activities, such as not contacting your local one-call center to have facilities located, or crossing the pipeline with vehicles or mobile equipment for non-agricultural activities, are actions that could be subject to AMPs. The CER Act sets the maximum daily fines of up to \$25K for individuals and \$100K for companies per violation.

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

Safety checklist

If you are planning to conduct work in the prescribed area, please follow these steps.

1 Plan your activity.

Identify the location of your work, making sure to look for pipeline marker posts, warning signs or other buried facilities.

2 Contact Enbridge to obtain written consent.

Contact us to obtain our guidelines for constructing a facility, conducting a ground disturbance activity or vehicle crossing near the pipeline. Remember, written consent is required for the construction of facilities across, on, along or under a pipeline; conducting ground disturbance activities within the prescribed area, and crossing a pipeline with a vehicle or mobile equipment across the ROW (where no highway or public road exists).

3 Make a locate request.

At least three working days before the planned activity is to start, contact clickbeforeyoudig.com or call your local one-call centre.

4 Be on site

when underground facilities are being located to be sure you understand the meaning of the markings.

5 Review CER requirements.

Confirm that any persons or companies hired to do work on your behalf, such as contractors, are aware of the necessary obligations.

6 Follow all instructions provided

in the authorization, including hand exposing or vacuum excavating the pipe before mechanical excavations within 5 m of the pipe and notifying Enbridge prior to backfilling. An Enbridge representative must be on site during backfill.

7 Immediately notify Enbridge if you come into contact with the pipe or its coating. Immediately call our 24-hour emergency line at 1-800-663-9931.

Step #1: Plan your activity

Ground disturbance within 30 m of the centreline

If you are planning an excavation within the 30-m prescribed area or the ROW, you must notify and receive written permission from Enbridge before commencing work.

Explosives

If the work involves explosives, written permission must be obtained to blast within 30 m, and a detailed blasting plan must be filed with Enbridge as part of the application process. Mining activities within 40 m of a pipeline ROW require consent from the CER.

Drainage improvements

If you are planning to improve drainage across or within the ROW, you must consult with us first. Any excavation near the pipeline ROW must be supervised by an Enbridge representative. Consulting with us as early as possible regarding your drainage proposal, including installing drain tiles, ditching, grading or deep tilling, will allow us to assess your work and set safe work procedures when working within the pipeline ROW or within the 30-m prescribed area.

For installations across the ROW, written permission is required. A crossing application with tile design layout must be sent to Enbridge early for our review and assessment. If approved, we will provide the necessary consent. In certain instances where systematic tiling is proposed, a header installation may be preferred in order to reduce the number of crossings and excavation activity within the pipeline ROW.

Visit enbridge.com/crossings for information on how to apply for consent, application guidelines and drawing requirements.

Ground disturbance activities within the prescribed area must not proceed until the locating and marking of the pipeline, and any possible mitigating factors have been addressed. Among other requirements, the person must also have written consent from Enbridge to conduct the activity.

Step #2: Written permission

You must receive written permission prior to doing any work within Enbridge's ROW. Ensure that scope of work, appropriate plans, schedule and equipment lists are provided to Enbridge in a timely manner for our review and assessment and preparation of written consent.

If your scope of work changes, you must inform Enbridge. This includes, but is not limited to: changes to scope of work, location, schedule, method of installation, and equipment to be used. We will work with you to issue a revised consent.

Be sure to follow the specific instructions provided by Enbridge as part of the consent to conduct activities.

Step #3: Call or Click Before You Dig

We know that sometimes work needs to be done on or near the pipeline. That's why we are a member of Call or Click Before You Dig, a quick, **free** and easy communication service that notifies member companies of proposed activities so that underground infrastructure can be safely marked with flags, stakes or paint before work begins.

The locate request must be made at least three working days before the day on which the activity is to start. To make the request visit **clickbeforeyoudig.com** or call your local one-call centre (numbers are on the side panel of this brochure).

The one-call centre will then inform an Enbridge representative who will come to your job site ready to mark the location of the pipeline.



Know the code

Colour codes are extremely important. While not all facility owners have adopted the same coding system, it remains very important that you confirm colour markings when you see them.

APWA (American Public Works Association) Uniform Color Code

	White —Proposed Excavation
	Pink —Temporary Survey Markings
	Red —Electric Power Lines, Cables, Conduit and Lighting Cables
	Yellow —Gas, Oil, Petroleum or Gaseous Materials
	Orange —Communication, Alarm or Signal Lines
	Blue —Potable Water
	Purple —Reclaimed Water, Irrigation and Slurry Lines
	Green —Sewer and Drain Lines

Step #4: Be on site

Within three working days of placing your one-call request, an Enbridge representative will be on site to locate our facilities, free of charge. It's important that you are also on site when these locates are being done.

By being on site when Enbridge facilities are being located you can ask questions about the markings, answer questions we may have for you, and plan for any additional measures that may be needed.

For example, you may be required to:

- Hold a pre-job meeting with Enbridge to inform construction crews of safe work procedures over or near the pipeline.
- Erect temporary fencing to shield the pipeline from heavy equipment and be sure that machines follow designated routes.
- Build ramps to specifications provided in Enbridge's written consent for temporary equipment crossings in order to cross safely over our pipeline. An Enbridge representative must oversee ramp construction.

Step #5: Review CER requirements

All persons working on your behalf, including employees, contractors and subcontractors, must be made aware of their obligations before any work starts. Be sure to keep documents with safety requirements and guidance on site.

Step #6: Follow all instructions

Once the location of the pipeline has been marked, you may be required to positively identify the pipe by either hand exposure or vacuum excavating. The positive identification zone for pipelines is 3 m and an Enbridge representative must be present at the time of positive identification.

Once the pipeline has been positively identified, no machinery can be used to dig within 5 m of the pipeline, or any distance underneath the pipeline without the direct supervision of an Enbridge representative.

When you are ready to backfill over or under our exposed pipeline, please call Enbridge at least one full working day before you cover the exposed pipeline. An Enbridge representative must be on site during backfill. All work must be done in accordance with the specifications listed in Enbridge's written permission.

Step #7: In case of an emergency

Any contact with the pipe or its coating must be reported. Immediately notify Enbridge at **1-800-663-9931** if you come into contact with the pipe or its coating.

It is important that you know the warning signs and how to respond in the event of an emergency. Please refer to the **Critical safety information** section of this guide to read about what to do in the event of an emergency.

How errors happen

Don't assume anything.

Call or Click Before You Dig

At any pipeline location, appearances can be deceiving.

- Never assume the location of a pipeline. Wait until the Enbridge representative is on site and the pipe is located and exposed so you know the correct alignment before excavating.
- Never assume only one pipe exists in an area. There may be other facilities within your work area. That's why calling or clicking before you dig is so important, as it allows the one-call service centre to notify other member companies who might have underground utilities in the area.
- Check for underground utility marker signs. Under no circumstances does the absence of marker signs indicate an absence of underground facilities. Signs, in some instances, may be missing, stolen or vandalized. Should you become aware that any Enbridge signs are damaged or missing, please contact us.
- Remember that pipelines exist in urban as well as rural areas. When contacting utilities to locate and mark their services on a city construction site, please also contact Enbridge.

Always remember to dig with CARE

C all or **C**lick Before You Dig.

A llow required time for markings. Provide adequate notice prior to starting your excavation. This provides time for companies to accurately locate and mark their facilities in your dig area.

R espect the marks. Before you begin your excavation, walk through the site to familiarize yourself with the markings and the location of buried facilities. Confirm that all companies have responded to you indicating they have marked your dig area.

E xcavate carefully. It is important that you take a proactive approach to safety not only for yourself, but also for your community by initiating the one-call process and excavating with CARE.



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

Protecting the people, communities and environment near our operations is the most important part of our job.

In an emergency

Pipelines have been proven to be the safest transportation mode for energy commodities.

While rare, pipeline leaks can happen for a number of different reasons. Studies have shown that third-party damage is one of the most common reasons for pipeline leaks or ruptures, which underscores the importance of Click or Call Before You Dig programs.

Internal inspection tools are used to detect potential problems with the pipeline which enables Enbridge to perform investigative digs and repair any anomalies. Since some commodities are more flammable than others, a pipeline leak or rupture will have different consequences depending on the commodity being transported.

Hydrocarbon products such as natural gas and natural gas liquids are very flammable, and can catch fire from even the smallest spark or ignition source. The products in Enbridge's system are flammable, and are potentially hazardous and explosive under certain conditions.

Given our thorough maintenance, testing, training, monitoring and safety programs, a pipeline leak is unlikely; however, if one were to occur, it's important that you know the warning signs and how to respond in the event of an emergency or if you suspect pipeline operations have been disrupted in any way.

Know the warning signs

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.



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

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 smell, similar to diesel fuel, oil or propane, you will not smell the common rotten egg odour associated with natural gas.

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.



The BC Pipeline

Enbridge's BC Pipeline system stretches from Fort Nelson in northeast BC and from Gordondale near the BC /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 60 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.

For us, preparedness means developing integrated response plans based on open communication and teamwork. We work year-round with local fire and police services so that they have the information they require to respond to an emergency and we regularly communicate important information to local governments, community fire and police services, utilities, residents, business owners, neighbours, tenants, community leaders and contractor companies, like you.



What to do in an emergency

- Your personal safety is our number one priority. If you suspect a natural gas leak, follow these steps:
- **Leave the area.**
 - **If you are outdoors**, shut off all engines and leave the area immediately, moving to a location up or cross wind. The use of motor vehicles or other equipment can be a potential ignition source and should not be used.
 - **If you suspect natural gas has leaked into your house or office, evacuate immediately.**
 - **Call 911** from a safe location. Your cell phone can be an ignition source so you must be a safe distance away before using it.
 - **Call Enbridge's 24-hour emergency telephone number 1-800-663-9931.** Wait for further instructions from Enbridge emergency personnel or other first responders.
 - If safe to do so, warn others to stay away.
 - If it is not safe to evacuate, shelter in place.

What NOT to do in an emergency

- Do not touch or go near the leaking gas, liquid or vapour that may have come from the pipeline.
- **Do not attempt to operate Enbridge's pipeline valves.**
- Do not start your vehicle or any other piece of equipment that can act as a possible ignition source.
- Do not light a match or smoke and avoid heat sources or making sparks that could ignite the leaking gas as you are leaving the area.
- Do not turn on or off anything that may create a spark—including cell phones, telephones, light switches, vehicle alarms, vehicle keyless entry and flashlights—until you are in a safe location.

This page contains important phone numbers you can use to contact an Enbridge representative with any comments or questions.

In case of an emergency, please find a safe place to **call 911** and then call the toll-free 24-hour Enbridge emergency number:

1-800-663-9931

For questions regarding agreements, general operations or if you need to plan construction, fencing, digging or explosives use, please contact us.

British Columbia and Alberta **crossingscanada@enbridge.com**

For related guidelines to crossings and encroachment, visit **enbridge.com/crossings**.

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

More information can also be found at: **enbridge.com/damageprevention** or **enbridge.com/workingnearpipelines**.

Call or Click Before You Dig

Before performing any ground disturbance activity within the prescribed area, or constructing a facility on, along, across or under a pipeline, please visit **clickbeforeyoudig.com** or contact your local one-call centre.

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



Links for more information

Canada Energy Regulator **cer-rec.gc.ca**
See CER's Pipeline Damage Prevention - Ground Disturbance, Construction and Vehicle Crossings

Canadian Common Ground Alliance **canadiancga.com**

Alberta Common Ground Alliance **albertacga.ca**

BC Common Ground Alliance **commongroundbc.ca**

Enbridge Inc. **enbridge.com**