

For excavators and contractors

Pipeline Safety and Emergency Information

> Important safety information enclosed.



Enbridge Pipelines Inc.

Enbridge Pipelines
(Norman Wells) Inc.

Enbridge Bakken
Pipeline Company Inc.

Enbridge Southern Lights
GP Inc.

Express Pipeline Ltd. on behalf
of Express Pipeline Limited
Partnership

Public Awareness
Program, 2022

\$500

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



Enbridge Public Awareness Program

7500 River Road

Richmond, BC V6X 1X6

24-hour Enbridge emergency number:

1-877-420-8800

For Express Pipeline emergencies,
call 1-888-449-7539

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



Pipeline safety

You have received this brochure because your company is located near where Enbridge pipelines 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

All of our pipelines are 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

• 1-877-420-8800

If located along the Express Pipeline system, from Hardisty, Alberta to Wildhorse, Alberta, call:

• 1-888-449-7539

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 1St. S.W.

Calgary, AB T2P 3L8



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

1

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 pipelines are 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—everything from 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 and 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.



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 the event of an emergency

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

Pipeline markers and the Canada Energy Regulator (CER)



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 systems. 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 Click Before You Dig or 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.

Canada Energy Regulator 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 pipelines are prohibited unless authorized through the *National Energy Board Pipeline Damage Prevention Regulations—Authorizations and Pipeline 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.

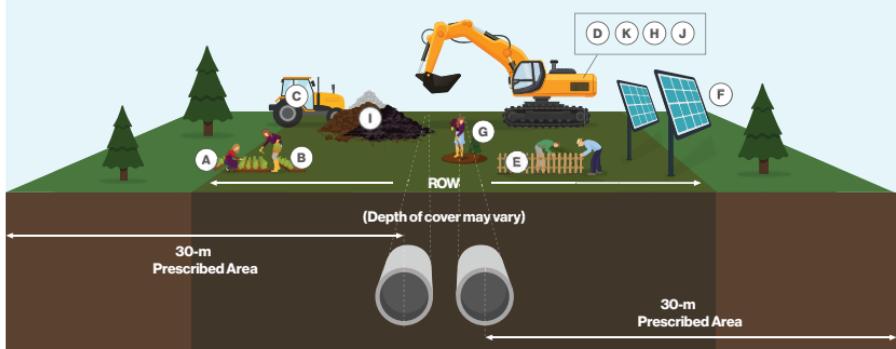
Pipeline markers
do NOT indicate exact
locations of a pipeline.
Call or Click Before
You Dig to have pipeline
locations marked.

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.

Damage prevention (continued)

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 (five in Ontario) 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).

If you reside in the Northwest Territories, where one-call centres do not exist, please contact Enbridge directly.

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 any persons or group wanting to operate vehicles (including recreational vehicles like 4X4s, all-terrain vehicles (ATV), utility vehicles (UTV), snowmobiles and motorcycles) or mobile equipment across a pipeline (outside of a travelled portion of a highway or public road) must first receive written consent from the pipeline company.

If you need to cross an Enbridge pipeline, 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.

Crossing during an emergency

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

> 1-877-420-8800

If located along the Express Pipeline system, from Hardisty, AB to Wildhorse, AB, call **1-888-449-7539**

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. Unauthorized activities, such as, not calling your local one-call centre to have facilities located (or contacting Enbridge directly where a one-call centre does not exist) 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 warning signs or pipeline marker posts.
- 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 pipelines. 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 (five in Ontario) before the planned activity is to start, contact clickbeforeyoudig.com or call your local one-call centre. In the Northwest Territories, you can contact Enbridge directly.
- 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 five metres and notify 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 **1-877-420-8800** or for the Express Pipeline system call **1-888-449-7539**.

Step #1: Plan your activity

Excavation and ground disturbance within 30m of the centreline of an Enbridge pipeline

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

Explosives

If the work involves explosives, written permission must be obtained to blast within the 30-m prescribed area, 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 crossing agreement.

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. Any proposed cost sharing must be approved by Enbridge prior to installation.

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 us. 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.



Before beginning a proposed project, visit clickbeforeyoudig.com, call your local one-call centre, or contact Enbridge directly (for those in the Northwest Territories), and within three working days (five in Ontario) of your request, an Enbridge representative will be at your job site ready to mark the location of the pipeline(s).

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 (five in Ontario) 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 Enbridge 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 pipelines.
- 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 Enbridge's pipeline(s). 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 is to start. Be sure to keep documents with safety requirements and guidance on site.

Step #6: Follow all instructions

Once the locations of all buried pipelines have been marked, you must positively identify the pipe by either hand exposure or vacuum excavating. The positive identification zone for pipelines is five metres, 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 five metres 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 Enbridge's exposed pipeline(s), please call Enbridge at least one full working day before you cover any 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 **1-877-420-8800** if you come into contact with the pipe or its coating. For emergencies along the Express Pipeline system, immediately call **1-888-449-7539**.

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; 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 Click 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 the environment near our operations is the most important part of our job.

In an emergency

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

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

The liquid hydrocarbons in Enbridge's pipeline system are under pressure, hazardous, highly flammable and can be potentially explosive under certain conditions. Crude oil can also cause environmental damage when released in large volumes, so it's important to always have underground lines located and marked before any work begins.

In addition to third-party damage, pipelines can also leak as a result of a defect or some other type of pipewall damage. Internal inspection tools are used to detect potential pipe problems in advance, which enable companies to perform investigative digs and repair the damage. Since some commodities are more flammable than others, a pipeline leak or rupture will have different consequences depending on the commodity being transported.

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

For pipelines carrying liquid hydrocarbons, each product has individual characteristics. This means that the warning signs can vary depending on the product involved.



You might see:

- Coloured liquid on the ground
- Flames, if a leak has ignited
- Oily rainbow-like sheen on water surfaces
- Continuous bubbling in a wet area
- Discolored snow or vegetation in an otherwise green area
- A steam-like cloud or fog
- Unexpected frost buildup on the ground
- Dirt being blown or appearing to be thrown into the air



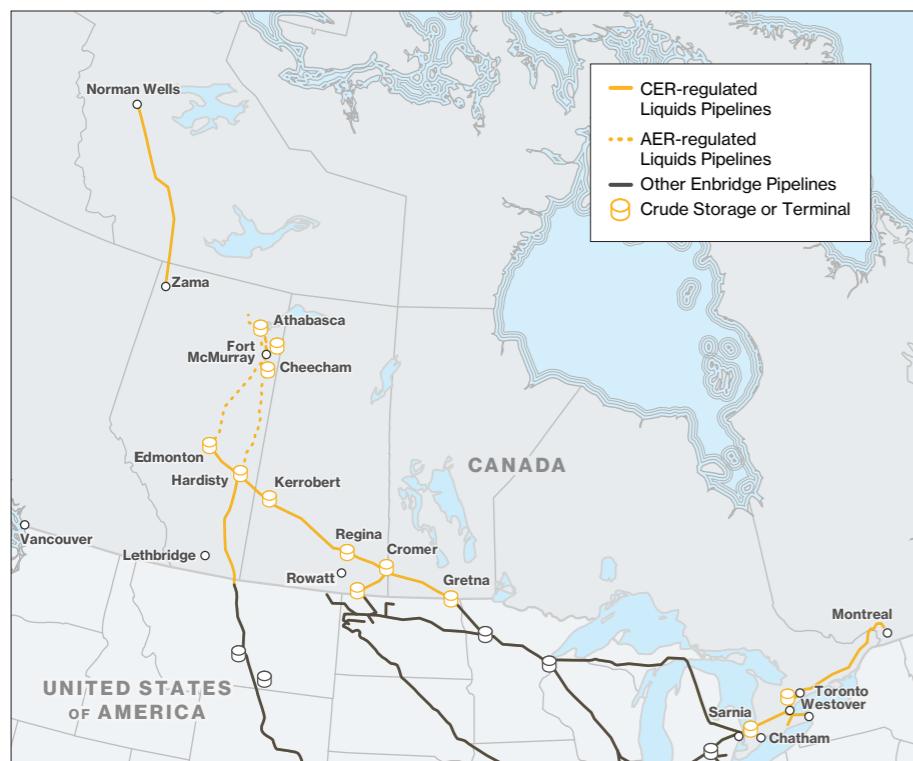
You might hear:

- An unusual roaring, blowing, or hissing sound



You might smell:

- An unusual odour similar to diesel fuel, gasoline, sulphur, or rotten egg



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.

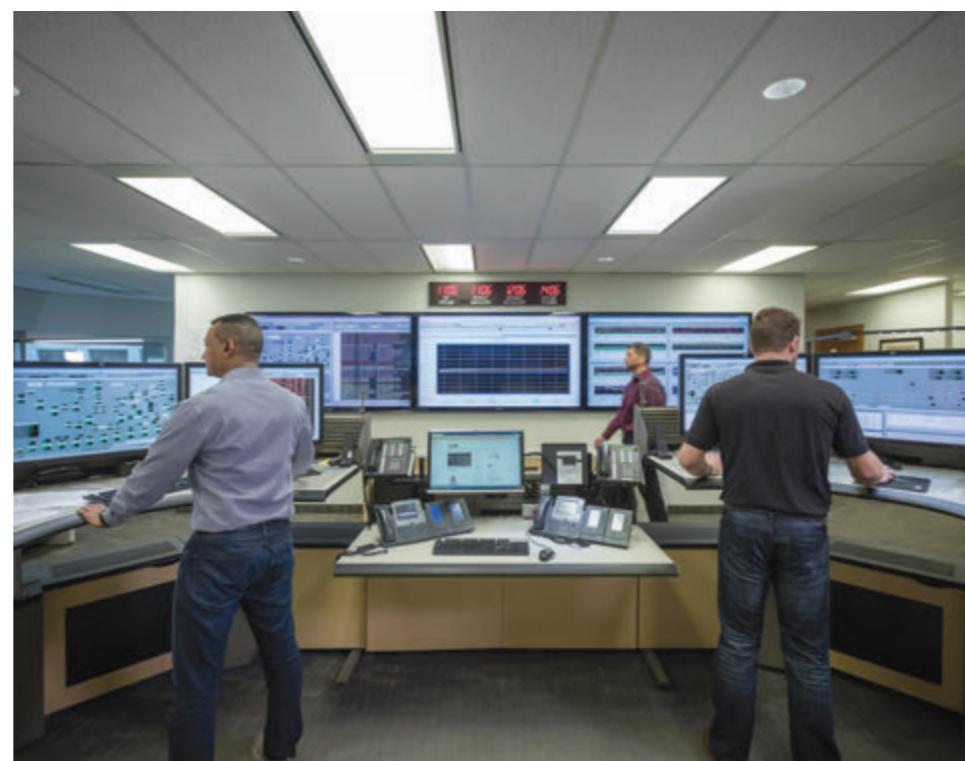
Enbridge is a global energy infrastructure leader with a vision to be the leading energy delivery company in North America.

We fuel people's quality of life, operating the world's longest and most complex crude oil and liquids transportation system with more than 27,000 km (17,000 mi) of active crude pipeline.

We deliver more than three million barrels of crude and liquids every day and transport 25 percent of the crude oil produced in North America. Moving close to 80 separate commodities, on any single day, Enbridge is the largest single conduit of oil into the U.S.

We distribute energy, operating North America's largest natural gas utility by volume, and third largest by customer count. And we generate energy, with a renewable portfolio that includes nearly 1,750 megawatts (MW) of capacity—enough to supply nearly 700,000 homes.

Steps for a safe response



What to do in an emergency

If you see, smell or hear any of the warning signs, please immediately do the following:

- 1 If you can do so safely, turn off any ignition sources. Move as far away from the leak as possible in an upwind direction, avoiding contact with escaping liquids and gases.
- 2 Call **911** from a safe location.
- 3 Call the toll-free, 24-hour Enbridge emergency number **1-877-420-8800**.
- 4 For the Express Pipeline, call **1-888-449-7539**.
- 5 Follow instructions provided to you by Enbridge and local emergency responders.

What NOT to do in an emergency

- Do not touch any liquid or vapour that may have come from the pipeline.
- Do not start your car, drive into the area or re-enter the area.
- Do not smoke or light a match.
- Do not turn on or off anything that may create a spark, including cell phones, telephones, light switches, vehicle alarms and flashlights—until you are in a safe location.
- **Do not operate pipeline valves or attempt to stop a leak.**
- Do not remain in a building if the smell is stronger inside than outside.

How to reach us

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:

1-877-420-8800

If located along the Express Pipeline system, from Hardisty, Alberta to Wildhorse, Alberta, please **call 911** and then call:

1-888-449-7539

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

If you need to plan construction, fencing, digging, drainage work or explosives use, please email crossingscanada@enbridge.com.

For crossing guidelines, please visit enbridge.com/crossings.

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. If you plan to do work in the Northwest Territories please call Enbridge directly.

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

- Sask 1st Call **1-866-828-4888**

- Click Before You Dig Manitoba **1-800-940-3447**

- Ontario One-Call **1-800-400-2255**

- Quebec (Info-Excavation) **1-800-663-9228**

- In the Northwest Territories, contact Enbridge directly **1-867-587-7000**



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

Enbridge enbridge.com