

For Excavators and Contractors

\$500

Fill out and return the completed survey card or visit enbridge.com/excavatorsurvey for a chance to win a \$500 gift card.

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, 2019



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.



Click Before You Dig.com

Pipeline safety: A shared responsibility

You are receiving this safety brochure as you or your organization may be involved in activities that may result in the disturbance of the earth. These activities, known as ground disturbance activities, could include excavation related work, land development, dredging or underground installations near one of Enbridge's pipelines or associated facilities.

This brochure has been designed to provide you with 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 properly marked.
- The need for authorization when constructing a facility or vehicle crossings across the pipeline.
- How to recognize the signs of a leak.
- How to report and respond in the event of an emergency.

If you would like more information about the Enbridge pipelines in your area—including pipeline size, contents transported or pipeline location—please contact us.

In case of 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

Email
CdnPublicAwareness@enbridge.com

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

Website
enbridge.com/publicawareness

Facebook
facebook.com/enbridge



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

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

While our pipelines are buried beneath the ground in the right-of-way (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.

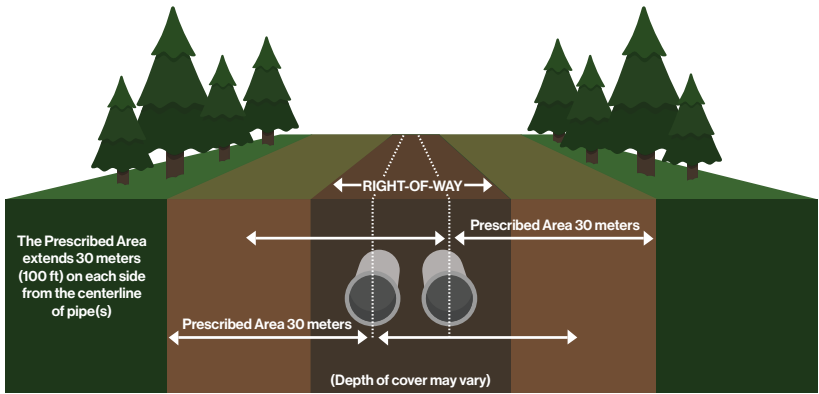


Being responsible for pipeline safety, however, does not mean we are in it alone.

Engaging with communities is important to us. That's why we work year-round to provide safe, reliable operations, and 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 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 is an important part of our overall safety management system, and we continue to promote good working relationship with excavators, developers and utility companies through industry meetings, personal contact and brochures such as this one.



> Enbridge’s interprovincial pipelines are regulated by the Canada Energy Regulator (CER), formerly the National Energy Board, and must comply with specific pipeline standards and regulations. In addition to the right-of-way, where the pipeline is located, the CER has established a 30 metre (100 foot) prescribed area on either side of the pipeline—measured perpendicularly from the centreline of the pipe—to protect you, the environment and the pipeline. **You must first obtain written permission from Enbridge to conduct any ground disturbance activity in this area.**

The ROW and pipeline markers

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

The ROW identifies an area that restricts certain activities to protect public safety and provides Enbridge employees and contractors access to the pipeline for inspections, maintenance, testing and in the event of an emergency.

ROWs 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.

While there are permanent pipeline markers at railways, roads and other intervals along the ROW, these show only the approximate location of pipelines. 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. 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.

Canadian Energy Act requirements

Under the Canadian Energy Regulator Act (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 pipeline(s) are prohibited unless authorized through the *National Energy Board Pipeline Damage Prevention Regulations—Authorizations and Pipeline Damage Prevention Regulations—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.

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).

If you reside in a province where one-call centres do not exist, please contact Enbridge directly.

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. We will work with you to review the request.

Activities causing ground disturbance can include, but are not limited to, the following:

- Excavating, digging, trenching or ditching.
- Installation of facilities on, along, under or across the pipeline.
- Tunneling, boring, drilling, pushing or augering.
- Topsoil stripping, subsoiling, land-leveling and grading.
- Tree planting, clearing and removing stumps.
- Quarrying or blasting/using explosives.
- Grinding or milling of asphalt/concrete.
- Building roads or highways.
- Seismic exploration.
- Driving fence posts, bars, rods, pins, anchors or pilings.
- Constructing a facility (eg. fences, sheds, parking lots, drainage or irrigation systems, ditches, power lines, or retaining walls).

Mobile equipment and vehicle crossings

Federal regulations also require that any persons wanting to operate vehicles or mobile equipment across a pipeline (outside the 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 is safe to cross our assets. Once we've evaluated the request and confirmed that the vehicle may cross safely, we will provide the necessary written consent. Crossing and ground disturbance activity 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.

Unauthorized activity and 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 within the prescribed area. The CER Act sets the maximum daily fines 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**.

Eight step safety checklist

If you are planning to conduct work in the prescribed area, please follow this eight step safety checklist:

- 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 all necessary written consent if conducting work within the prescribed area or planning to cross the pipeline.
- 3 Make a locate request.** To make a request, visit ClickBeforeYouDig.com, call your local one-call centre or call Enbridge directly where no one-call centre exists. Locate requests are to be made at least three days (five in Ontario) before the day on which the activity is to start.
- 4 Be on site** when the pipeline is being marked and confirm that you understand the meaning of the locate markings. Make sure all other buried utilities are also located.
- 5 Review CER requirements.** confirm that all persons working on your behalf, including employees and contractors, are aware of the necessary obligations.
- 6 Positively identify the pipeline** (e.g. hand expose or vacuum excavate) before using machinery within five metres of the pipeline.
- 7 Call Enbridge** at least one full working day before you backfill over any exposed pipeline. An Enbridge representative must be on site during backfill.
- 8 Immediately notify Enbridge** if you come into contact with the pipe or its coating by calling **1-877-420-8800**. For the Express Pipeline system call **1-888-449-7539**.

Step #1: Plan your activity

Excavation within 30m of the centreline of an Enbridge pipeline

If you are planning an excavation within the 30 metre (100 foot) prescribed area or the ROW, you must notify and receive written permission from Enbridge before commencing work. Guidelines for crossings and temporary applications can be found at enbridge.com/workingnearpipelines

Explosives

If the work involves explosives, written permission must be obtained to blast within the 30 metre (100 foot) prescribed area, and a detailed blasting plan must be filed with Enbridge as part of the application process. Mining activities within 40 metres of a pipeline ROW require consent from the CER.

Drainage improvements

If you are planning to improve drainage across or within the ROW, consult with us first. Early communication will help in the approval process required for installing tiles, ditching, grading or deep tillage exceeding 45 centimetres (18 inches). Consulting with us regarding your drainage proposal will allow us to assess your work and set safe work procedures when working within the pipeline ROW or within the 30 metre (100 foot) prescribed area.

If you are planning to install drainage tile, design drawings must be submitted early for review and approval by Enbridge. In certain cases, a header installation may be preferred in order to reduce the number of crossings and excavation activity within the ROW. Any proposed cost sharing must be approved by Enbridge prior to installation.



Step #2: Written permission

You must acquire written permission prior to doing any work within Enbridge's right-of-way. Ensure that scope of work, appropriate plans, schedule and equipment list are provided to Enbridge in timely manner for Enbridge's 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. Enbridge 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 free underground infrastructure location service. This one-call service notifies member companies of proposed activities so that the companies can locate and mark buried assets before any work begins.

Visit ClickBeforeYouDig.com, and within three working days of your request (five in Ontario), an Enbridge representative will be at your job site ready to mark the location of the pipeline(s).






Contact your local one-call centre (or Enbridge directly, where no one-call centres exist) using the contact information on the side panel of this brochure.

**Click
Before
YouDig.com**

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 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: Positively identify the pipeline

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.

Step #7: Backfill over exposed pipeline(s)

When you are ready to backfill over 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 #8: 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 *Emergency 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 clicking or calling 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.

Protecting the air, water and land is an important part of our job.

In an emergency

Pipelines have been proven as the safest transportation mode for energy commodities. Pipeline leaks are rare but can happen for a number of different reasons. Studies show 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:

- A moist patch or pool of black liquid...it may be crude oil.
- A moist patch or pool of light brown or yellow liquid...it may be synthetic crude oil or condensate.
- A steam-like cloud, or a frost-like appearance on the ground... it may be a natural gas liquid.
- Continuous bubbling in a wet area...it might be a pipeline leak.



You might hear:

- A roaring, blowing or hissing sound...it may be a pipeline leak.



You might smell:

- An odour similar to gasoline or diesel fuel...it may be a refined oil product.
- An odour similar to gasoline, but much stronger and less pleasant...it may be natural gas liquid.



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 kilometres (17,000 miles) 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.

On February 27, 2017, Enbridge Inc. completed its merger with Spectra Energy, creating a new company operating under the name Enbridge Inc. This brochure has been created to include the new assets acquired as part of the merger. For emergency information related to assets from both Enbridge and Spectra, please visit enbridge.com/emergency



Steps for a safe response

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 mechanized equipment. Move as far away from the leak as possible in an upwind direction, avoiding contact with escaping liquids and gases.
- 2 **Call 911**
- 3 Call the toll-free, 24-hour Enbridge emergency number:
1-877-420-8800

For the Express Pipeline, call
1-888-449-7539
- 4 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 drive into the area or start your car.
- Do not 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.**
- Do not remain in a building if the smell is stronger inside than outside.

We appreciate your calls, any time of the year, any time of day. 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

For questions regarding Enbridge's general operations or if you need to plan construction, fencing, digging or explosives use, please call collect the number for your area:

Western Canada

Alberta, Saskatchewan and Manitoba
crossingrequests@enbridge.com
1-780-420-5164 (Collect)

Eastern Canada

Ontario and Quebec (Request ROW Services)
est.reg.crossing@enbridge.com
1-800-668-2951 (Toll-Free)

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

Before performing any ground disturbance activity, please contact your local one-call centre as follows:

In the Northwest Territories contact Enbridge directly at **1-780-420-5164** (Collect)

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



Links for more information

Canada Energy Regulator
cer-rec.gc.ca

Canadian Common Ground Alliance
canadiancga.com