

For public works, officials and community leaders

Pipeline Safety and Emergency Information

> Important safety information enclosed.

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Emergency number: 1-888-813-6844

Enbridge Pipelines (Athabasca) Inc.

Enbridge Pipelines (Woodland) Inc.

Public Awareness Program, 2022



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

24-hour Enbridge emergency number:
1-888-813-6844

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



click
Before
YouDig.com

Pipeline safety

You are receiving this brochure because we have identified you as a public works, public official or community leader near Enbridge's Regional Oil Sands system (the Athabasca system), and related facilities.

This brochure provides you with basic safety information about pipeline operations in your area.

This brochure covers all Enbridge owned and/or operated assets including:

- Enbridge Pipelines (Athabasca) Inc.
- Enbridge Pipelines (Woodland) Inc.

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

1-888-813-6844

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. Street S.W.
Calgary, AB T2P 3L8



Website
enbridge.com/publicawareness

Please read and share the information in this brochure with others in your organization, then keep it for future reference.

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

You have an important role to play as a public official, public works or community leader in keeping your communities living and working near our pipelines safe. You can help reduce the risk of damage to pipelines by knowing about pipelines in your community and committing to safe land use planning, permitting and development.

In addition to this brochure, we continue to promote our good working relationship with public officials, community leaders, permit applicants, developers and public works departments through meetings and personal contact.

As the owner and operator of thousands of kilometres of pipelines transporting oil and natural gas, our highest priority is operating our assets safely and reliably to protect the people, communities and environment located nearby.

While our pipelines are buried out of sight in the ROW, we never lose sight of the bigger picture of our potential impact on the air, water and land around us and 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, we strive to restore the land to its original condition and to protect the quality of the air and water that sustains 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 the land. To do that, we carefully plan from start to finish on any project, making sure our people know what's expected and implement 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 regularly communicate important safety information to utilities, contractors, local governments, emergency responders, landowners, tenants, regulators and neighbours.

The Alberta Energy Regulator (AER)

Pipelines in Enbridge's Athabasca System are provincially regulated by the AER and must comply with specific pipeline standards and regulations. It's important to remind permit applicants that as part of AER regulations, certain ground disturbance activities require prior notice and in some cases written permission, before any work can commence.



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 ROW and pipeline markers:

- Markers should never be removed or relocated.
- If an emergency is suspected or discovered, call the number on the marker.
- The ROW must remain clear. Structures, stockpiles, stored equipment and burn piles are not permitted within the ROW.
- The pipeline marker displays the operator's name, the contents and an emergency phone number.
- Markers should not be used to give exact locations and are not alternative to contacting clickbeforeyoudig.com.

Ground disturbance

A ground disturbance is any work, operation or activity that results in the disturbance of the earth of more than 30 cm (45 cm for agricultural cultivation).

No ground disturbance activity may be undertaken in the pipeline ROW, or within 5 m of the centreline of a pipeline where no ROW exists, without first obtaining written permission from the pipeline owner.

Additionally, no ground disturbance within the controlled area can take place until the locating and marking of the pipeline has been completed.

For planning, development and public works purposes, it's important to make applicants aware that:

- A location other than the pipeline ROW is chosen as the muster point or meeting place when developing emergency plans for a project.
- Written consent and contacting Call or Click Before You Dig (a one-call centre) are required before conducting any ground disturbance such as constructing roads, paving, parking areas, driveways, ditches, railways, overhead or underground facilities, installing services, building a berm.
- Drainage improvements activity or construction on, along, across or under a pipeline requires written consent.
- Landscaping, tree planting, clearing and removing stumps, or stockpiling materials within the pipeline ROW require review, assessment and written consent.
- Permanent structures are prohibited within the pipeline ROW.
- Written consent is required to operate vehicles or mobile equipment across a pipeline (outside of the travelled portion of a highway or public road).
- Positive identification is required (using hand exposure or vacuum excavation) before mechanical excavation within 5 m of the pipeline.
- Enbridge must be notified, at least one full working day, before backfilling over any exposed pipe. An Enbridge representative must be on site before backfilling.

For more information, email us at crossingscanada@enbridge.com.



Risk: Following safe digging practices can save your life. Failure to do so can endanger yourself, emergency responders and your community.

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 visit **clickbeforeyoudig.com** or contact your 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 three business days before your project—any time you will disturb the soil—visit **clickbeforeyoudig.com**. If possible, mark the proposed project area with white flags or paint.



When you Call or Click Before You Dig, you'll either be connected to a representative or redirected to a guided online form 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.



Click Before You Dig will provide this information to companies with buried utilities near the work site, saving you the time and trouble of contacting them individually. Within a few days, professional locators will come to your location and mark underground utility lines—including pipelines (marked with yellow flags or paint).



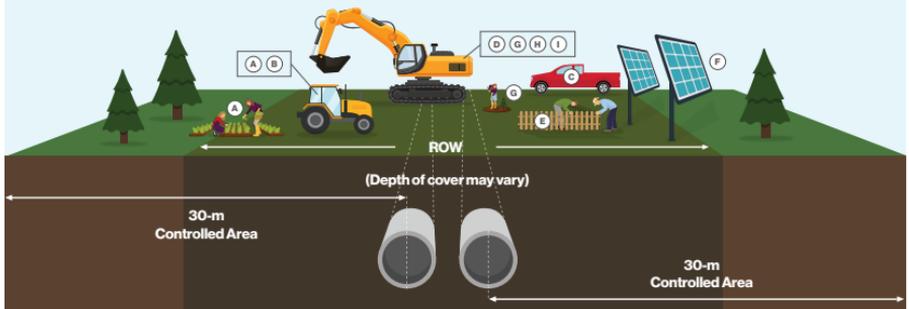
Make sure that all companies listed on your one call ticket have marked or cleared the work site and that you have waited until the listed work start time. Avoid digging near markings in order to save yourself from possible injury or property damage. An Enbridge representative will contact you for additional requirements for work within 30 m of an Enbridge pipeline.

Activities that do not require consent

- (A) Cultivation to a depth of less than 45 cm (e.g. cultivating agricultural crops) or ground disturbance to a depth of less than 30 cm (e.g. gardening)
- (B) Operating vehicles or mobile equipment across a pipeline which are used for normal farming operations
- (C) Crossing a pipeline while traveling off-road with an off-highway or private passenger vehicle **up to 3/4 ton** (as defined by the *Traffic Safety Act*)

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, structure, roads, paving, parking areas, driveways or ditches
- (F) Installing facilities on, along, under or across the pipeline ROW (or within 5 m of a pipeline where no ROW exists)
- (G) Landscaping, tree planting, clearing and removing stumps, or stockpiling materials
- (H) Drainage or irrigation systems (including dykes, ditches and culverts)
- (I) Crossing a pipeline while not on an upgraded and traveled portion of an established highway or public road with vehicles or mobile equipment (other than off-highway vehicles and private passenger vehicles **up to 3/4 ton**, as defined in the *Alberta Traffic Safety Act*).



Modified from CER image in "Pipeline Damage Prevention Regulations" information product.

> In addition to the ROW where pipelines are located, the AER has established a 30-m controlled area, measured perpendicularly from the centreline of the pipeline, in each direction, to protect you, the environment and the pipeline.

Mobile equipment and vehicle crossings

The AER has also set guidelines for operating vehicles (including recreational vehicles like 4X4s, all-terrain vehicles (ATV), utility vehicles (UTV), snowmobiles and motorcycles) or mobile equipment within the pipeline ROW.

Any vehicle crossing a pipeline that is not within the upgraded and traveled portion of an established highway or public road requires approval from Enbridge, unless:

- The vehicle or equipment is used for farming operations.
- The vehicle is an off-highway or private passenger vehicle less than 3/4 ton, as defined in the Traffic Safety Act.

If proposed plans include a need to cross the pipeline with a vehicle or mobile equipment, please inform permit applicants and public works departments that they need to contact Enbridge to assess if their vehicles, machinery or mobile equipments are safe to cross our pipelines. We will review the request and if approved, provide written consent including mitigation measures.

Crossing and ground disturbance activities are not to proceed until the pipeline is located and marked and any required mitigating measures are in place.

Written permission

Written permission is required prior to undertaking any ground disturbance within the pipeline ROW, or within 5 m of the centreline of a pipeline where no ROW exists. Approval is also required to operate a vehicle or equipment across the pipeline (unless an exception applies).

As part of our review and assessment process for written consent, we require that permit applicants, developers and public works departments provide us with the scope of work, appropriate plans, schedule and equipment lists.

When this information is provided in a timely manner, we are better able to help applicants, developers and public works departments avoid unnecessary and costly delays.

If the scope of work changes, applicants, developers and public works departments must contact Enbridge again. This includes, but is not limited to: changes to the scope of work, location, schedule, method of installation and equipment to be used. Enbridge will work with applicants, public works departments and developers to issue a revised consent.

Safety checklist

If work is being planned in the ROW or controlled area, please remind permit applicants, developers and public works departments to follow these steps:

- 1. Plan your activity.** Identify the location of your work, including an area 30 m beyond your proposed work site.
- 2. Contact Enbridge** to obtain all necessary permissions before conducting work within the ROW or operating vehicle/equipment across the pipeline.
- 3. Contact Utility Safety Partners (formerly Alberta One-Call)** at least three working days before planned work.
- 4. Be on-site** when the pipeline is being located to be sure you understand the meaning of the markings.
- 5. Review AER 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.
- 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 at 1-888-813-6844** if you come into contact with the pipe or its coating.



As our communities continue to grow, it's important that Enbridge maintains ongoing consultation with public officials, public works departments, community leaders, developers, landowners and industry for any proposed development projects in proximity to our pipeline systems.

Land use planning

Industrial, residential and commercial development that encroaches on the pipeline ROW can present safety and operational risks to those working and living nearby. That's why it's important to consult with us early in the planning stage of a project on or near Enbridge assets. This allows affected parties to better incorporate existing pipelines and facilities into the plan, making sure that the new development meets both regulatory and Enbridge requirements, while also maintaining high standards for public safety.

Significant population and infrastructure growth, without Enbridge's knowledge, has the potential to impact the operational requirements of our existing pipelines, such as changes to operating pressure, revisions to our emergency response plans, increased public awareness outreach and other actions as necessary.

As such, we ask that public officials, public works departments, community leaders, developers and industry consult with Enbridge, early and often, before any development within 500 m of our assets. This helps avoid issues by allowing us to assess potential impacts and recommend possible measures for protection. This area includes our ROW where we ask that as public officials you consult with us before any development in the lots along these areas and help us encourage developers to leave these areas as green space.

Land development decisions in the vicinity of our pipelines should be based on risk-informed decisions.

Below are some questions to be asked prior to considering land use development:

- Have you checked your proposed development area for the presence of pipelines or other underground utilities?
- Are there any pipeline markers or warning signs in the area?
- Have you contacted Utility Safety Partners (formerly Alberta One-Call) to determine if there are any buried facilities that may affect your project planning?
- Have you obtained the necessary written permissions from Enbridge and other facility owners?
- Have you, working with the utility operator, considered the need for ROW access?

- Have you considered evacuation routes to be used in the event of an emergency?
- How will you prevent damage to buried utilities during construction?
- Does the utility operator agree with your development proposal?

Remember, written permission from Enbridge is required prior to all of the following activities:

- **Ground disturbance within a pipeline ROW**
- **Ground disturbance within 5 m of the centreline of a pipeline, where no ROW exists**
- **Vehicle or equipment crossing within the pipeline ROW (unless the vehicle or equipment is used for farming operations, or the vehicle is an off-highway or private passenger vehicle less than 3/4 ton, as defined in the Traffic Safety Act)**
- **A locate request is also required for any ground disturbance within the controlled area 30 m from the centreline of pipe**

Guidelines for crossings and temporary applications can be found at enbridge.com/crossings.

Report emergencies

Any contact with the pipe or its coating must immediately be reported to Enbridge at 1-888-813-6844.

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.

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 air, water and land in your community is an important part of our job.

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, 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 and share the warning signs and how to respond in the event of an emergency or if you suspect pipeline operations have been disrupted in anyway.

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

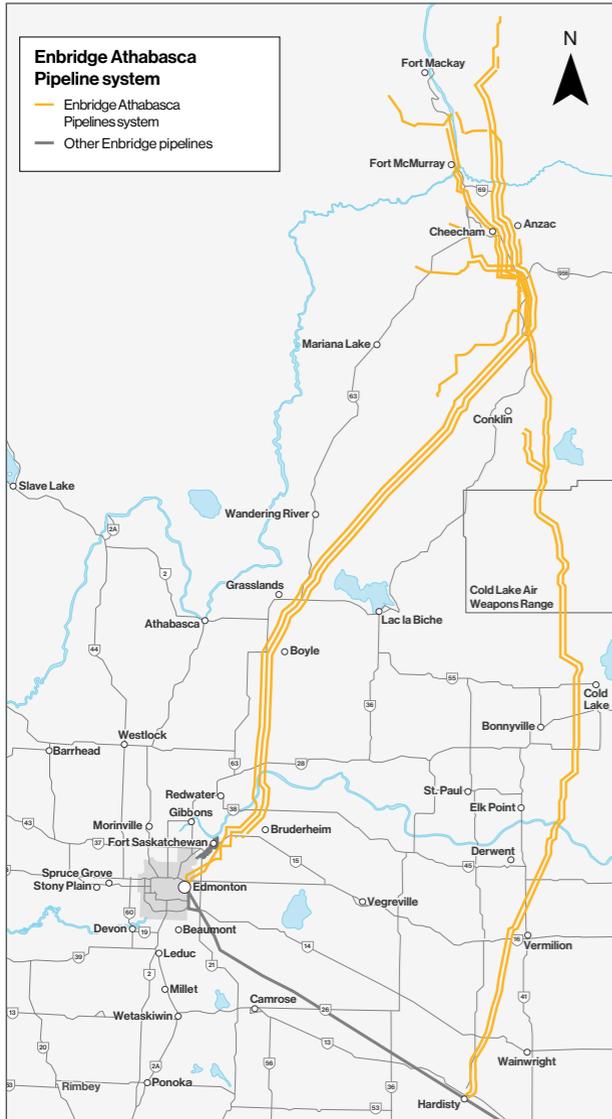


You might smell:

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

Information about our emergency management program can be found at enbridge.com/emergencymanagement.

Information on crude oil product characteristics can be found under key public safety information in the emergency management section of enbridge.com.



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.

Every day we move the energy that North Americans count on—millions of barrels of oil, billions of cubic feet of natural gas and thousands of megawatts of renewable energy. Our role is to safely and reliably deliver the energy that helps fuel people’s lives and our commitment to safety is at the core of everything we do. But we know we can’t do it alone.

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, contractors, residents, business owners, neighbours and tenants.



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: **1-888-813-6844.**
- 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 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.

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:

1-888-813-6844

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 ROW such as construction, digging or explosive use, please email **crossingscanada@enbridge.com**.

To provide Enbridge advanced notification of land use planning and development, please email **notifications@enbridge.com**.

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

Call or Click Before You Dig

Before performing any ground disturbance activity please visit **clickbeforeyoudig.com** or contact Utility Safety Partners (formerly Alberta One-Call) **1-800-242-3447**



Links for more information

Alberta Energy Regulator (AER) **aer.ca**

Canadian Common Ground Alliance **canadiancga.com**

Alberta Common Ground Alliance **albertacga.ca**

Enbridge Inc. **enbridge.com**