

For excavators and contractors

\$500

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

Pipeline Safety and Emergency Information

> Important safety information enclosed.



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 You Dig.com

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
- Utility Safety Partners (formerly Alberta One-Call) information, including how to have underground utilities properly located and marked
- How to prevent pipeline incidents
- The need to obtain written approval from the pipeline owner before working near a pipeline and for vehicle crossings
- 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

1-888-813-6844

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. SW
Calgary, AB T2P 3L8

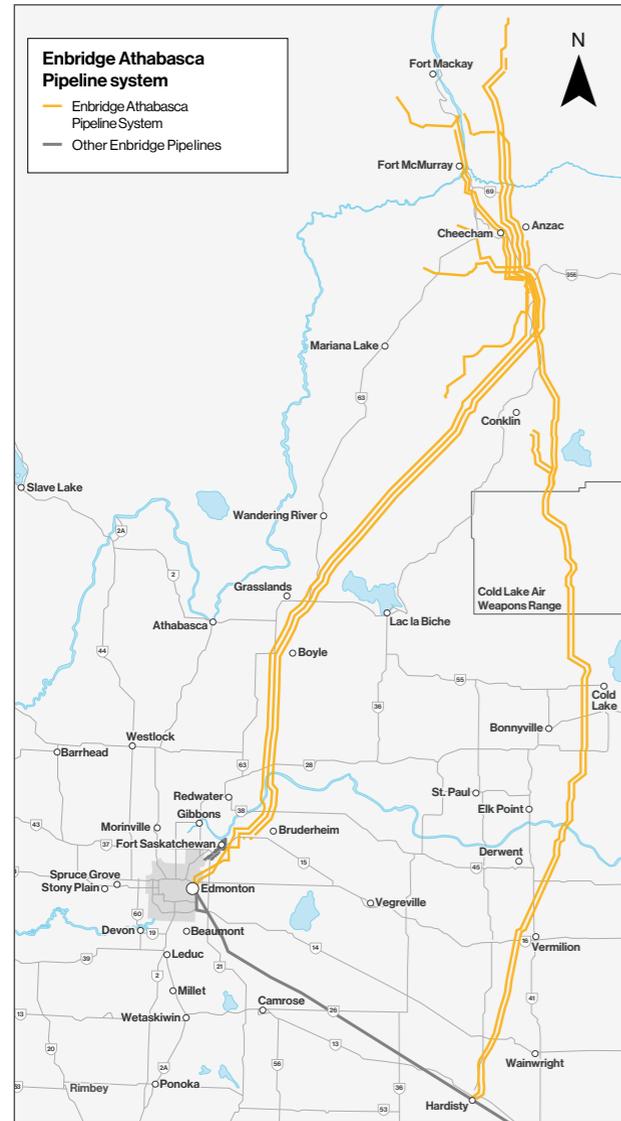


Website
enbridge.com/publicawareness



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

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. 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, the communities and the environment located nearby.

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 of capacity—enough to supply nearly 700,000 homes.

The Athabasca System

The Enbridge Regional Oil Sands System, called the Athabasca System, consists of a network of more than 2,000 km of pipelines originating north of Fort McMurray and delivering south to Edmonton and Hardisty, Alberta.



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.

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

AER Alberta Energy Regulator. aer.ca

Canadian Common Ground Alliance canadiancga.com

Alberta Common Ground Alliance albertacga.com

Enbridge Inc. enbridge.com

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 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.

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 received the necessary approvals and confirmed the location of any underground pipelines.

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

If we do 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 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 pipeline, 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 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

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.

The Alberta Energy Regulator

Pipelines in Enbridge's Athabasca System are provincially regulated by the AER and must comply with specific pipeline standards and regulations.

As part of AER regulations, certain ground disturbance activities require prior notice and in some cases written permission, before work can commence.

Ground disturbance activities

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

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.

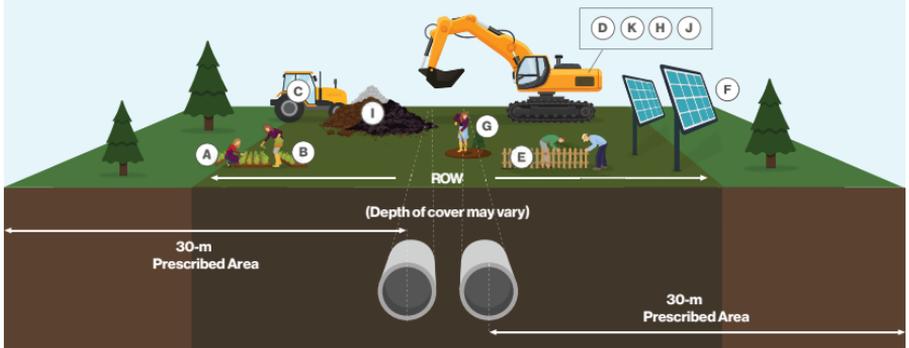
Pipeline markers do **NOT** indicate exact locations of a pipeline. Call or Click Before You Dig to have pipeline locations marked.

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



> 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.

When performing a ground disturbance activity, you must first contact Utility Safety Partners (formerly Alberta One-Call) at least two full working days prior to commencing work to request the location of any buried facilities. The one-call centre will then notify Enbridge and request that Enbridge locate and mark any underground pipeline(s) before work can begin.

Per the AER's regulations, "ground disturbance" does not include:

- Cultivation to a depth of less than 45 cm
- Any other activity to a depth of less than 30 cm that does not result in a reduction of earth cover less than the cover provided when the pipeline was constructed

Unless it falls into the above two exceptions, consider your activity a ground disturbance activity and contact Utility Safety Partners (formerly Alberta One-Call) before continuing work.

No ground disturbance activity may be undertaken within 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.

If you are working in the controlled area, outside the pipeline ROW, you must still contact the pipeline company at least two full working days before the planned ground disturbance so that the pipeline can be located and marked.

You must not proceed with a ground disturbance within the controlled area until the locating and marking of the pipeline(s) have been completed.

Vehicles and mobile equipment

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 travelled 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 your plans include a need to cross the pipeline with a vehicle or mobile equipment, please contact Enbridge to assess if the vehicle, machinery or mobile equipment is safe to cross our pipelines. We will assess the request and if approved, provide written consent including mitigation measures.

Pipeline(s) must be located and marked, and any mitigation measures in place prior to crossing pipeline(s) with equipment.

Crossing during an emergency

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

> **1-888-813-6844**

Non-emergency crossings

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

Safety checklist

If you are planning to conduct work in the ROW or controlled area, please follow these steps:

- 1 **Plan your activity.** Identify the location of your work, including an area 30 m beyond your proposed dig site, making sure to look for pipeline warning signs or marker posts.
- 2 **Click Before You Dig or call Utility Safety Partners (formerly Alberta One-Call)** at least three working days before planned work.
- 3 **Be on site** when the pipeline is being located to be sure you understand the meaning of the markings.
- 4 Make sure to **obtain all necessary written permissions** from Enbridge if conducting work within the ROW or controlled area.
- 5 **Follow all instructions** provided in the authorization including hand exposing or vacuum excavating the pipe before mechanical excavations.
- 6 **Call Enbridge** at least one full working day before you backfill over any exposed pipeline. An Enbridge representative must be on site during backfill.
- 7 **Immediately notify** Enbridge at **1-888-813-6844** if you come into contact with the pipe or its coating.

Step #1: Plan your activity

Ground disturbance within 30 m of the pipeline.

If you are planning any ground disturbance activity, be sure to search records for the existence of pipelines in an area at least 30 m beyond the proposed dig area. If work includes activity within the ROW, remember that written permission from Enbridge is required before start of work;

this includes any plans to cross or drive vehicles over the ROW. If you are working within the controlled area outside of the ROW, you must contact Enbridge and place a locate request with Utility Safety Partners (formerly Alberta One-Call) at least three working days prior to 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 controlled area, and a detailed blasting plan must be filed with Enbridge as part of the application process.

Drainage improvements

If you are planning to improve drainage across or within the ROW, consult us first. Any excavation near the pipeline ROW must be supervised by an Enbridge representative, who can help maintain the safety of our pipelines.

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 controlled area.

For installations within the ROW, written permission is required.

Enbridge must also complete an engineering assessment on all non-farming equipment crossing a pipeline. Please allow sufficient time for review, assessment and documentation of your application.

A crossing application with drainage proposal layout must be sent to Enbridge early for our review and assessment. If approved, we will provide a crossing agreement. In certain cases, a header installation may be preferred in order to reduce the number of crossings and excavation activity within the ROW.

Step #2: 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.

To protect public safety and reduce the risk of pipeline damage, you must first Call or Click Before You Dig at least three working days in advance of any ground disturbance activity on or within the 30-m controlled area. Please Call or Click Before You Dig using the contact information on the side panel of this brochure.



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 #3: 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 locations 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 #4: Written permission

You must receive written permission prior to doing any work within the 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 #5: Follow all instructions

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

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 5 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.

Step #6: Backfilling over exposed pipe

When you are ready to backfill, please call Enbridge at least one full working day before you cover any exposed pipe. 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 emergency

Any contact with the pipe or its coating must immediately be reported.

Immediately notify Enbridge at **1-888-813-6844** 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, it allows Utility Safety Partners (formerly Alberta One-Call) 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, 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:

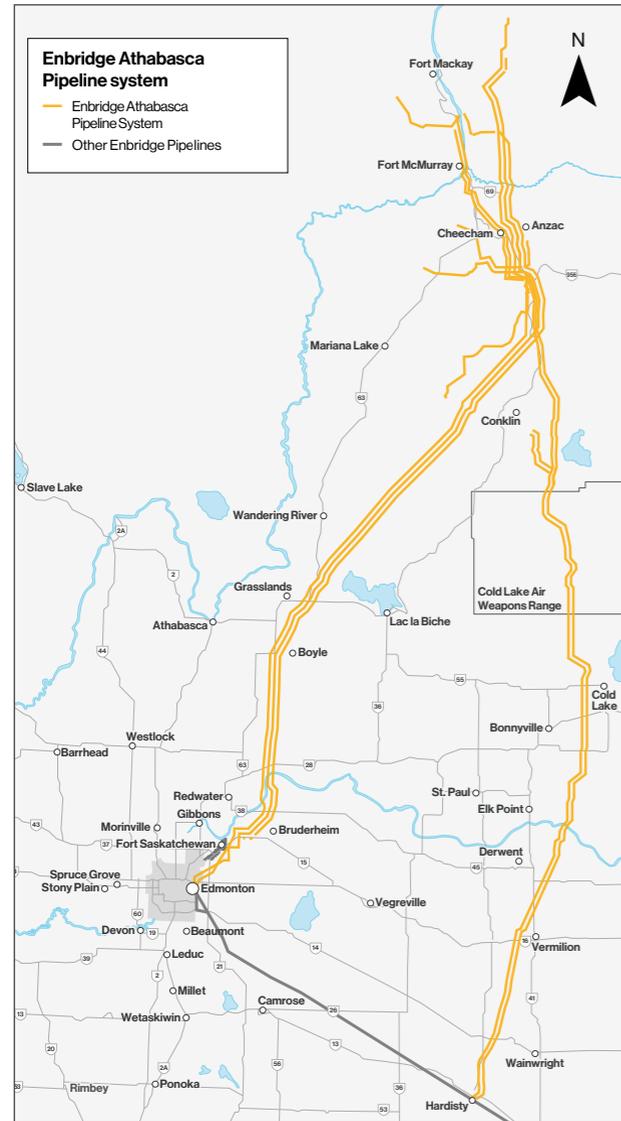
- An unusual roaring, blowing or hissing sound



You might smell:

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

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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.
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