

# Pipeline Safety and Emergency Information

for emergency and public officials



You are receiving this brochure because we have identified you as an **Emergency or Public Official** with responsibilities in the vicinity of Enbridge's pipelines and/or related facilities. Please keep this brochure and share this important information with other emergency and public officials.

**Emergency number: 1-888-813-6844**

## Contents:

Safe digging information	3
How to determine where our pipelines are located	4
Crossing or traversing right-of-way (ROW)	5
Emergency information and response procedures	7
How to contact Enbridge	11
Pipeline safety information including how to recognize a leak and how to respond in the event of a pipeline emergency	12

Read this brochure,  
then scan the QR code  
with your phone camera  
or visit [enbridge.com/surveys](http://enbridge.com/surveys) to complete an  
online survey.



## Awareness today means safer tomorrows

Tomorrow is more than just the energy we transport. It's the energy we put in. It's the time we spend volunteering. It's our commitment to sustainability and the environment. It's the investments we make in our community to ensure the places we live and work are safe and vibrant. It's because we see the potential in people and care about the world around us. Tomorrow is on, and we're committed to making it better.

### 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.



Please scan the QR code to learn more about **Tomorrow is on:** Enbridge and the energy transition.

## Know what's below



**Risk:** Failure to dig safely can endanger yourself, emergency responders and your community. Safe digging practices can save your life.

Enbridge maintains a Damage Prevention Program in accordance with provincial regulations. The purpose of this program is to prevent damage to our pipeline facilities from excavation activities such as digging, trenching, blasting, boring, tunneling or backfilling or other activities such as heavy equipment crossing, storage on the right-of-way (ROW), etc. The Damage Prevention Program also monitors the depth of cover over our pipelines and conducts regular patrols of our ROW to monitor for unauthorized activities.

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](http://clickbeforeyoudig.com) or contact their local one-call centre before continuing. One should not rely on word-of-mouth, maps, memory or pipeline markers when planning a digging project.

Please make community members, permit applicants, public works departments, excavators, contractors and developers aware that they need to make a locate request by following the steps listed below.

### One-call requirements

1



At least three business days before your project—any time you are disturbing the soil—visit [clickbeforeyoudig.com](http://clickbeforeyoudig.com) or call your local one-call centre.

2



When you call or click, you'll be connected to a representative, who will ask you 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.

3



Your local one-call centre will provide this information to pipeline operators, such as Enbridge and other companies with buried utilities near the work site, saving you the time and trouble of contacting them individually.

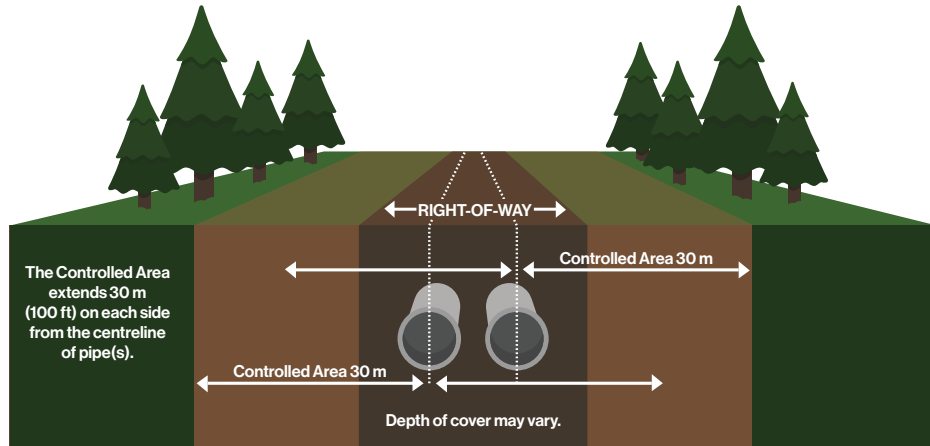
4



Within a few days, pipeline operators and utilities will respond to the one-call ticket. If line locating is required, professional locators will come to your location to mark their facilities—so you can work around them, saving yourself from possible injury or property damage.



## Know what's below



### Pipeline ROW and pipeline location

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 may be determined by the pipeline marker.

A few important notes when it comes to the ROW and pipeline markers:

- It is prohibited to remove, relocate or damage pipeline markers.
- The pipeline marker displays the operator's name, the contents and an emergency phone number.
- Pipeline ROW must be kept free from structures and other obstructions to allow access to the pipeline. Pipelines are patrolled from the air and the ground and obstructions prevent proper inspections.
- Markers should not be used to give exact locations and are not an alternative to contacting [clickbeforeyoudig.com](http://clickbeforeyoudig.com).



Vent marker



Line marker



Aerial marker

### Consent within the controlled area and ROW

The **controlled area** is a 30-m strip of land, measured perpendicularly on each side from the centreline of pipe(s). Regulations require that no ground disturbance activity may be undertaken in the pipeline ROW or within five metres of the centreline of a pipeline where there is no designated pipeline ROW, 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. Written consent from Enbridge is also required for installation of facilities within the ROW and for certain vehicle or mobile equipment crossings within the ROW.

### The Alberta Energy Regulator

Pipelines in Enbridge's Athabasca System are provincially regulated by the Alberta Energy Regulator (AER) and must comply with specific pipeline standards and regulations. As part of AER regulations, certain ground disturbance activities require approval from the pipeline company before work can commence.

< Marker appearance may vary in your area.

## Crossing or traversing the ROW

If any of your activities will encroach or cross an Enbridge pipeline, Enbridge ROW or involve ground disturbance within the controlled area, you must contact Enbridge for an assessment and to obtain Enbridge's written consent.

Please contact Enbridge at [crossingscanada@enbridge.com](mailto:crossingscanada@enbridge.com) prior to planning any construction or ground disturbance activity in the vicinity of a pipeline ROW.

Some examples of activities include:

- Construction or installation of a new facility across, over, on, along or under an Enbridge asset and/or ROW
- 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 commercial vehicles or private passenger vehicles as defined in the Traffic Safety Act, having a nominal chassis rating of not greater than 2 tonnes) .
- Subdivision development across, on, along or over an Enbridge asset and/or ROW
- Installation of agricultural drainage tile across, on, along or under an Enbridge asset and/or ROW
- Overhead power lines that cross or parallel an Enbridge asset and/or ROW
- Maintaining existing applicant facilities that affect Enbridge assets, land and/or ROW

All metallic foreign lines need to be assessed for potential impact on our corrosion control.

Enbridge must also be notified of blasting activities within 300 m of an Enbridge pipeline ROW.

In addition to having your proposed activity assessed, we also have construction guidelines for you to follow when working around or near our ROW.

Below are some general guidelines; however, there may be more job-specific construction guidelines that our representative will provide you prior to beginning your work.

- 1 Once written consent is obtained, we require at least three working days' notice prior to the commencement of any work or excavation over or near our pipeline ROW so that we may field-locate our pipelines. Enbridge may require its representative be on-site before any excavating, crossing, backfilling or construction activities occur within the controlled area. The Enbridge representative will let you know if they need to be on-site during your activities. The Enbridge representative is authorized to stop any work that is being performed in an unsafe manner.
- 2 No building, structure or obstruction is allowed to be erected within the pipeline ROW. If you have questions related to pipeline ROW width, just ask and we'll be happy to share that information with you.
- 3 An Enbridge representative must give written approval for heavy equipment to cross pipelines at any location.
- 4 Excavation within the pipeline ROW must be performed in accordance with company-approved procedures.
- 5 In addition to complying with the above requirements, you must follow all federal and/or provincial laws and regulations including applicable One-Call requirements. To see your One-Call requirements, visit [clickbeforeyoudig.com](http://clickbeforeyoudig.com).

### 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](mailto:crossingscanada@enbridge.com).

## Know what's near you



### Above ground facilities

While most Enbridge pipelines are buried underground, our system also includes additional facilities, such as pump stations, valve sites, storage facilities and others. It's important that you know what to expect as part of normal operations at these facilities.

Emergency and public officials like you can help us maintain a safe, secure and reliable pipeline system.

If you notice any suspicious activity or abnormal odour near one of our above ground facilities, call 911 immediately, then call Enbridge's 24-hour emergency number for your area.

Facility and purpose	Normal operations
At certain facilities, tanker trucks deliver producers' crude oil to <b>lease automatic custody transfer (LACT) units</b> , where it is metered and piped into crude oil storage facilities.	During normal operations, a slight odour may be noticed during oil transfers or maintenance activities. Higher truck traffic is common near LACT units.
<b>Crude oil storage facilities</b> are used to safely store and transport crude oil to refineries and other market destinations via pipeline.	During normal operations, a slight odour may be noticed during oil transfers or maintenance activities.
<b>Pump stations</b> increase pressure in the pipeline to maintain flow and are monitored 24/7 by Enbridge's control centres.	During normal operations, no significant odours should be detected.
<b>Valve sites</b> are located along the pipeline ROW and may be used to control the flow of products in the pipeline.	During normal operations, no significant odours should be detected.

## Know what's there: Product information

It is important to remember that the liquid hydrocarbons carried on Enbridge's system are flammable, hazardous and explosive under certain conditions.

SDS information regarding hazardous products is available at various locations across our system.

In the event of an Enbridge pipeline incident, Enbridge representatives will provide emergency responders with the SDS for the product in the pipeline.

Please see the chart below for information about crude oil product characteristics. Additional information about crude characteristics can be found under key public safety information in the emergency management section of [enbridge.com](http://enbridge.com).

Enbridge transports close to 85 unique commodity types. The general characteristics of the products carried on the system are similar in terms of flammability and general composition.

Safety Data Sheets (SDS) contain information about regulatory classification, health hazards, toxicity, first aid and fire information for the products in the pipeline.

### Characteristics of liquid hydrocarbons

Product	Appearance	Odour	Special behaviour	Hazards
<b>Crude oil</b>	Colour ranges from yellow to black.	Similar to gasoline or diesel fuel.	Flows with the profile of the land. Flow depends on temperature and viscosity; can be thick and slow-moving or light and able to move quickly.	Flammable and explosive under certain conditions. Suffocation can occur if vapours displace the oxygen in an enclosed area.
<b>Natural gas liquids (NGLs)</b>	Steam-like cloud or frost-like appearance on the ground.	Similar to gasoline.	Heavier than air. Stays close to the ground in low-lying areas.	Flammable and explosive under certain conditions. Suffocation can occur if vapours displace the oxygen in an enclosed area.
<b>Diluents</b>	Clear to black liquid.	Extremely strong odour similar to crude oil.	Very light and fluid, similar to gasoline.	Flammable and explosive under certain conditions. Suffocation can occur if vapours displace the oxygen in an enclosed area.
<b>Condensate</b>	Clear to dark brown.	Similar to gasoline or diesel fuel.	Very light and fluid, similar to gasoline.	Flammable and explosive under certain conditions.








\* Some crudes and condensates contain hydrogen sulfides (H<sub>2</sub>S), which have a rotten egg smell and are toxic in high concentrations.

## Damage prevention



### Our safety measures

Safety is, and always will be, our number one priority. Our team devotes hundreds of thousands of hours every year to keeping our systems running smoothly and without incident. We invest heavily in safety measures, including:

-  Inspection and preventative maintenance programs
-  Around-the-clock monitoring of pipelines and facilities
-  Emergency response training and drills for employees and local emergency responders
-  Pressure tests on new and existing pipelines
-  Aerial and ground patrols along the pipeline ROW
-  Automatic shut-off and remote-control valves
-  High-quality pipeline material and protective coating

Enbridge has enhanced safety measures for pipelines that cross bodies of water and highly populated or environmentally sensitive areas.

To read more about our pipeline safety efforts, visit [enbridge.com/safety](https://enbridge.com/safety).

## Emergency information

### Information for 911 dispatchers

After identifying a potential pipeline emergency and dispatching local responders, take the following actions as the situation dictates to facilitate a safe, effective response:



#### Do

- Reassure the caller emergency response crews and Enbridge will be contacted and will arrive soon.
- Advise the caller of an evacuation center if it has been designated.
- Call Enbridge's toll-free, 24-hour emergency number.
- Instruct caller to move as far away from the leak as possible (upwind if possible), avoiding contact with escaping liquids and gases.



#### Do NOT

- Drive into the area or start your car.
- Light a match.
- Turn on or off anything that may create a spark (cell phone, telephone, light switch, vehicle alarm, vehicle keyless entry system, flashlight) – until you are in a safe location.
- Operate pipeline valves.
- Remain in a building if the smell is stronger inside than outside.

## Resources

### Free training opportunity for emergency responders and 911 dispatchers

Emergency responders and others responsible for public safety in our areas of operation – including 911 dispatchers – can access the National Association of State Fire Marshals' Pipeline Emergencies online training program at [mypipelinetraining.com](https://mypipelinetraining.com). Certification is provided upon completion of the program.

### Emergency Response Plans

Enbridge also has Emergency Response Plans available to first responders. The plans describe our Emergency Management Program, including how we manage mitigation, preparedness, response and recovery.

Plans are available online at [emergencyresponderinfo.com](https://emergencyresponderinfo.com). If you have any questions, would like to request a map of your area or would like to provide feedback on our emergency response plans, please email [erinfo@enbridge.com](mailto:erinfo@enbridge.com).

### Security

Enbridge views the security of our facilities as an integral part of our Emergency and Security Management Program. If you notice suspicious activity near or on our above ground facilities, call 911, then call Enbridge's 24-hour emergency number.



An electronic version of this brochure can be found by scanning this QR code or visiting [enbridge.com/brochures](https://enbridge.com/brochures).

# Incident Command System



Enbridge utilizes the Incident Command System (ICS) for managing a response to an emergency.

The ICS organizational structure is designed to coordinate with other responding agencies and to include those agencies inside a unified command post for a coordinated response.

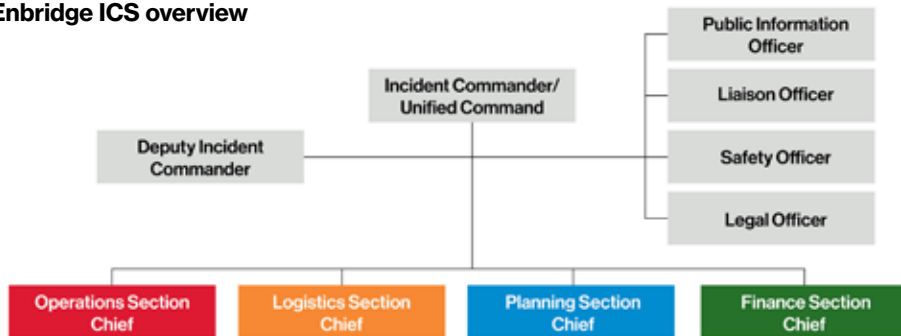
The ICS is a flexible, scalable tool that provides a common framework, uses common terminology and has standardized functional roles.

By using the ICS, trained personnel from throughout the organization can be deployed to support any incident.

Elements of the response management enabled through use of the ICS include:

- Incident Action Plan – define objectives, strategies and resources that contribute to public safety, responder safety and the environment
- Site safety and security
- Communications plans
- Maintaining an exclusion zone
- Traffic management
- Public information management

## Enbridge ICS overview



# Contact Enbridge

In case of an emergency, please find a safe place to **call 911** and then call Enbridge at:

**1-888-813-6844**

## How to reach us

**Phone:**  
(non-emergencies only)  
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

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

## Call or Click Before You Dig

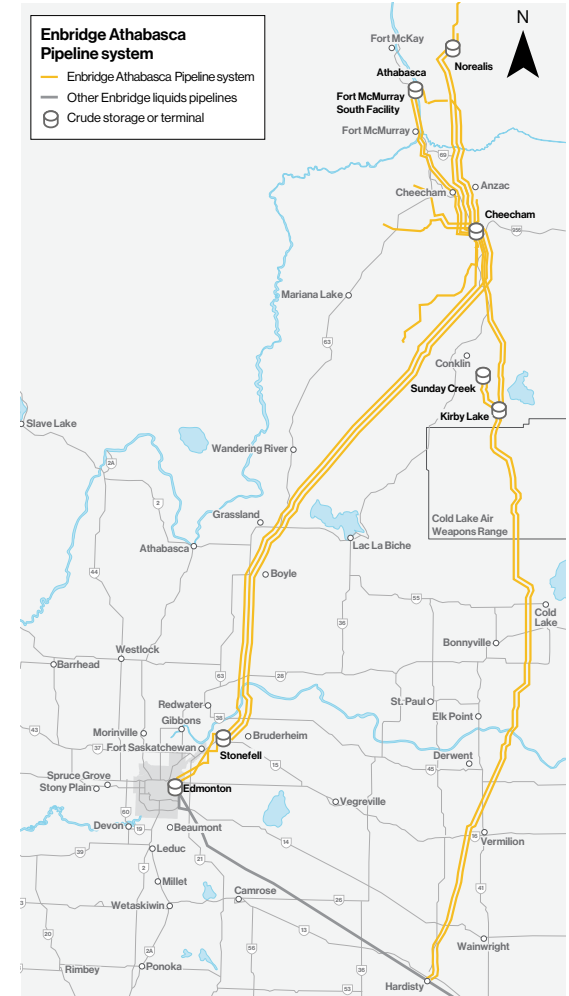
- **clickbeforeyoudig.com**
- Utility Safety Partners  
**1-800-242-3447**

## Links for more information

If you are planning work on the right-of-way, such as building a fence, deep tilling, digging a ditch, operating equipment or other activities, please email **crossingscanada@enbridge.com**.

To learn more about our Damage Prevention Program, visit **enbridge.com/damageprevention**.

More information about our emergency management program can be found at **enbridge.com/emergencymanagement**.



AER  
**aer.ca**

AER: Working Around Oil and Gas Pipelines  
**aer.ca/providing-information/by-topic/pipelines/working-around-oil-and-gas-pipelines**

Alberta Pipeline Act  
**qp.alberta.ca/documents/Acts/p15.pdf**

Alberta Pipeline Rules  
**canlii.ca/t/c16m**

# Emergency response information



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

## Recognizing a pipeline leak

In an emergency, protecting the public is your top priority – and it's our top priority as well. We value your expertise as public safety officials, and we're committed to providing you with the information and training you need to respond in the unlikely event of an emergency involving our pipelines or facilities. Although we immediately dispatch our emergency response teams upon notification, local 911 dispatch centres or other public safety officials typically receive the initial report. The following items listed below could indicate a potential pipeline emergency and may be reported by callers or emergency responders.



### 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
- Discoloured 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

It is important to know that an unintended release of product from the pipeline has potential hazards including:



- Products may be flammable and explosive under certain conditions.



- Suffocation can occur if vapours displace the oxygen in an enclosed area.

## Steps for a safe response

- 1** Abandon any mechanized equipment and ignition sources in the suspected leak's vicinity.
- 2** Secure the site and determine a plan to evacuate or shelter in place.
- 3** Monitor for hazardous atmospheres.
- 4** Control and redirect traffic.
- 5** Provide immediate access to Enbridge pipeline representatives.
- 6** Implement your local emergency plan.

## In the event of an emergency



### **Do not operate pipeline valves or extinguish any pipeline fires.**

Doing so may prolong or worsen an incident or even cause another leak in the pipeline. Our control centre personnel can close some valves automatically, while trained employees must manually close others.



### **Do not create a spark.**

Possible ignition sources include smoking materials, open flames, light switches, telephones, cell phones, pagers, flashlights, keyless entry remotes, motor vehicles and other electronic devices.



### **Do not enter an Enbridge facility without permission.**

If a fire occurs at one of our facilities, unless lives are at risk, we ask that fire crews stay outside of the property.