

Pipeline Safety and Emergency Information

For Emergency Responders

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Emergency number: 1-888-813-6844

About Enbridge

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.

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 85 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.

We also generate energy, with a renewable portfolio that includes nearly 2,000 megawatts (MW) of capacity—enough to supply nearly 900,000 homes.

In case of emergency

Our pipelines are monitored 24/7. If you suspect an emergency, please call Enbridge's toll-free, **24-hour emergency number for your area:**

1-888-813-6844

How to reach us



Public Awareness hotline

(Non-emergencies only)

1-877-640-8665



Email

cdnpublicawareness@enbridge.com



Mail

Public Awareness Program

200,425 1 St. S.W.

Calgary, AB T2P 3L8



Website

enbridge.com/

[emergencymanagement](https://enbridge.com/emergencymanagement) or


enbridge.com/publicawareness

Pipeline safety: A shared responsibility

Keeping in touch with you is very important to us; that's why we contact those who live, work and congregate near our systems on an ongoing basis.

This brochure is intended for emergency responders—including firefighters, members of law enforcement, 9-1-1 dispatchers, emergency medical technicians, emergency managers, medical facilities and mutual aid partners—to help inform you of your vital role in pipeline safety, which may include:

- Coordinating a community emergency response plan
- Activating your organization's emergency response plan
- Contacting the pipeline operator if your organization receives the initial notification of a potential pipeline emergency
- Providing medical aid and other lifesaving services, if necessary
- Working with Enbridge to keep the public safe in a pipeline emergency by disseminating information and determining and implementing evacuation procedures, if necessary

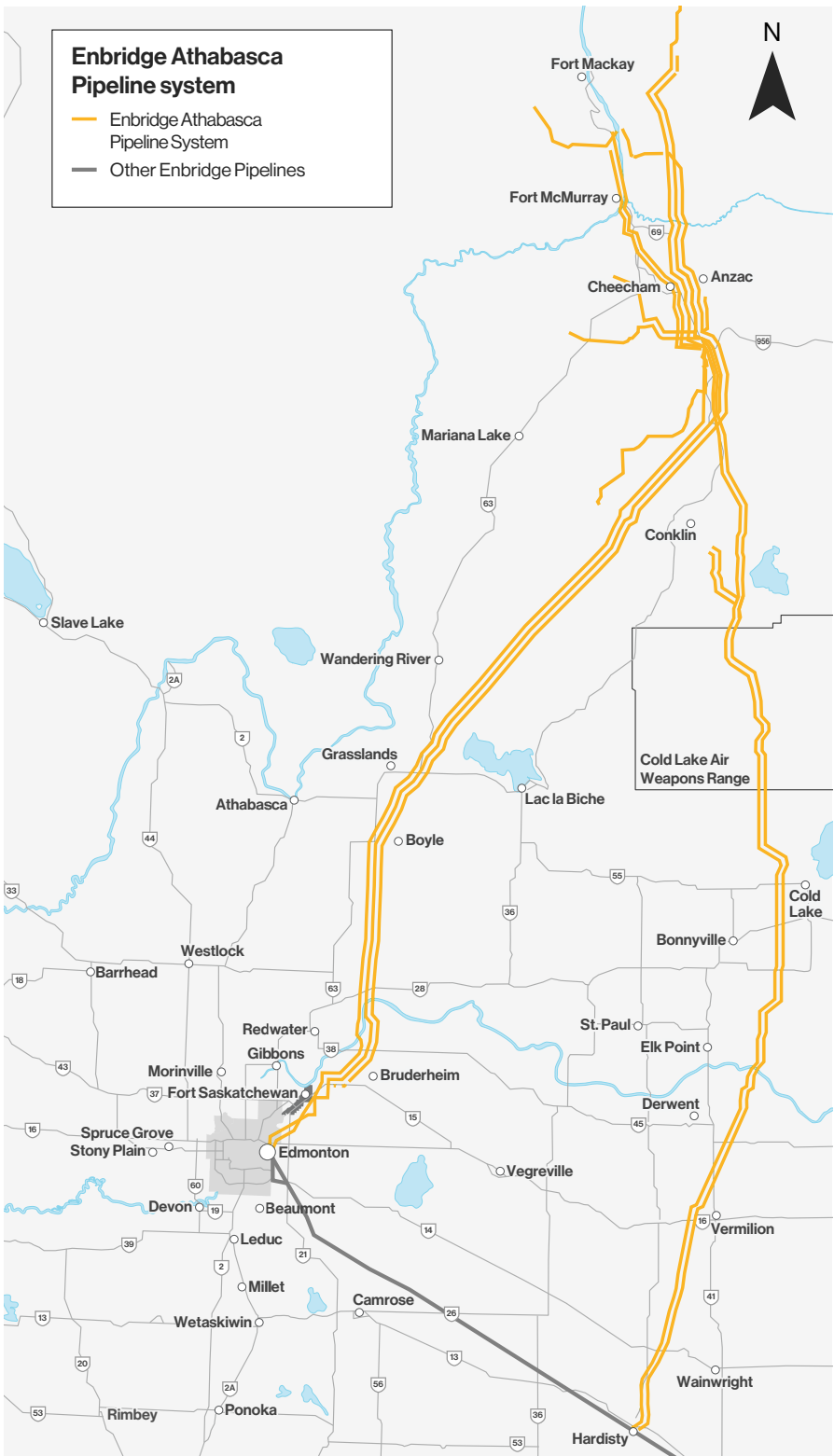


We ask that you read and then share, with your agency or department, the important information in this brochure.

Enbridge Athabasca Pipeline system

- Enbridge Athabasca Pipeline System
- Other Enbridge Pipelines

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The Enbridge Regional Oil Sands System, 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.

Enbridge takes its responsibility for safe pipeline operation very seriously.

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

We work year-round to keep our operations safe and reliable, and we regularly communicate important information to local governments, emergency services, utilities, contractors, landowners, tenants, regulators and neighbours.

While our pipelines are buried out of sight beneath the ground in the right-of-way (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—including pipeline design, construction, testing, maintenance, operation and safety practices—are subject to government regulations, which we meet or exceed.

We constantly monitor all of our activities and take every step to make sure we protect the environment. Our control centres constantly monitor and control our network of pipelines, keeping operators continuously apprised of conditions and trends along the ROW. Enbridge also has emergency response teams and equipment situated along the ROW in the unlikely event of an emergency.

Please see the Athabasca region map at the back of this brochure for emergency response crews near you.



Pipeline ROW and pipeline location

A pipeline follows a narrow, clear stretch of land, or 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.
- ROW must be kept free from structures and obstruction to allow proper inspections, access for maintenance or in case of an emergency.
- 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 an alternative to contacting [clickbeforeyoudig.com](https://www.clickbeforeyoudig.com).

There may also be other pipelines in the area. As emergency responders, you should familiarize yourself with all pipeline systems in your jurisdiction.

All pipeline markers provide important information including the owner name, the type of product being carried and an emergency number for reporting pipeline emergencies:
1-888-813-6844.

Enbridge owns and operates many petroleum storage facilities along its crude oil pipeline systems in Canada. A storage facility can be recognized by the large tanks that are used to hold crude oil or petroleum products.



Crude oil storage

Enbridge storage tanks are used to safely store petroleum and to help ensure that a sufficient supply of crude oil moves through our pipeline systems to refineries and other market destinations.

Enbridge takes its responsibility for safety very seriously. We have strict procedures in place at each of our petroleum storage facilities, including restricted entry and special training requirements for anyone who works on or near our storage tanks, station pipelines and metering facilities and terminal valves.

We maintain and routinely practice emergency response plans for each of our storage facilities, which enables us to work promptly and effectively with local emergency responders.

In the unlikely event of a storage facility incident, Enbridge will conduct a swift, safe and thorough repair in close cooperation with regulatory authorities and will responsibly mitigate impacts to the environment or property.

Signs of a leak

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.



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

Note: A slight odour may be noticed when oil volumes are being received and delivered simultaneously at a storage facility.

It is important that you do not create an ignition source if you suspect anything abnormal along a pipeline route or at a petroleum storage facility. Potential ignition sources include smoking materials or open flames, cell phones, pagers, flashlights, keyless entry remotes and motor vehicles.

It is also important to remember that emergency responders should never try to operate pipeline valves.

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

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.

SDS information regarding 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.

More information about our emergency management program can be found at [enbridge.com/emergencymanagement](https://www.enbridge.com/emergencymanagement).

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](https://www.enbridge.com).

Basic characteristics of liquid hydrocarbons

Product	Appearance	Odour	Special behaviour	Hazards
Crude oil	Colour ranges from yellow to black	Similar to gasoline or diesel fuel	Flows with the land profile 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
Synthetic crude, condensate or refined products	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 (H₂S), which have a rotten egg smell and are toxic in high concentrations.

A coordinated response with Enbridge

While rare, pipeline incidents can occur. If potential trouble occurs anywhere on the line, protecting the public is our first priority.

Although our field response teams are immediately dispatched upon notification, local emergency response organizations often receive the initial report. Preparedness and quick response help to minimize the threat to the public and damage to the environment.

Our priority on safety includes first responders, and we value the expertise you possess. That's why we are committed to strengthening our partnerships through meetings, training exercises, personal contact and information updates such as this brochure. We always appreciate hearing from you and encourage you to call at your convenience whenever you have questions or concerns.

For Enbridge, preparedness means developing integrated response plans based on open communication and teamwork. We work to provide local emergency services with the information they require to respond appropriately. We also hold regular emergency response training and exercises in select locations throughout the year to keep employees' skills fresh and to maintain strong and effective coordination with local emergency responders.

As emergency responders, you are trained to deal with a wide variety of potentially dangerous conditions.

In the case of a pipeline leak or rupture, your early presence on the scene can help us determine what problem has occurred, what damage or disruption is either present or preventable, and how we can work together to manage the situation.



Maintaining open communication and a close working relationship with local authorities and emergency responders is essential for us in safeguarding the communities along our pipeline routes.

Enbridge local emergency response teams are generally dispatched to a pipeline incident in one of several ways:

- The Enbridge 24-hour control centre detects or is notified of and confirms a potential problem and, depending on the situation, notifies emergency responders directly.
- A landowner, tenant or member of the public suspects a potential problem and phones the toll-free emergency response number.
- An Enbridge representative is already on the scene and contacts emergency responders for assistance (such as monitoring access, controlling traffic, fighting fires or evacuating residents).
- An emergency response organization receives the initial report.

Dealing with calls

The guidelines below may augment your standard procedure for handling emergency calls that relate to pipeline emergencies. This information is also provided to landowners, residents and tenants.

- 1** Advise the caller that Enbridge emergency response crews will be contacted immediately and will arrive at the site as soon as possible.
- 2** If the caller reports a strong hydrocarbon smell, advise the following at your discretion:
 - If you can do so safely, turn off any ignition source that you and others around you may be using. Put out cigarettes or other lit materials.
 - **Leave the area quickly.** Move as far away from the leak as possible, to a safe position upwind of the potential leak site.
 - Avoid contact with escaping liquids or gases.
 - Don't start your car or any other equipment that could be a potential ignition source.
- 3 Do not operate pipeline valves.**
- 4** If an evacuation centre has been designated, advise the caller of the location.
- 5** Contact Enbridge using our toll-free, 24-hour emergency number **1-888-813-6844**. This number is also located on all pipeline marker signs along the ROW.

What you shouldn't do



Never attempt to operate pipeline valves or extinguish any pipeline fires. Doing so may prolong or worsen an incident—or even cause another leak in the pipeline.

Enbridge control centre personnel can shut down some valves automatically, while trained Enbridge personnel are required to manually close other valves.



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
- Other electronic devices



If a fire occurs at an Enbridge facility, unless lives are at risk, we ask that fire crews stay outside of the station property until Enbridge representatives arrive.

Do not extinguish crude oil fires with water.

The danger from electrical sources is great, particularly if an electrical cubicle building or substation is involved.

Storage facilities should not be entered without permission unless there is an immediate risk to public safety.

Key actions for emergency responders



1. Notify Enbridge

Immediately phone the Enbridge emergency toll-free number. Our monitoring system may have already alerted us to the disruption, but please call to be sure.

When calling, please provide:

- Name
- Location
- Description of the emergency

Toll-free
emergency number

1-888-813-6844



2. Establish a safety zone

Once on site, meet with Enbridge representatives and establish safe procedures for securing the area or other emergency measures protecting people first, environment second and then property.



3. Unified command

If the Enbridge representative has not yet arrived, there are some important steps emergency responders can take:

- If it's safe to do so, shut off all engines and ignition sources in the vicinity of the leak.
- Approach with caution from an upwind location.
- Secure the site and determine a plan to evacuate or shelter in place.
- Monitor for hazardous atmospheres.
- Control and redirect traffic, designating a safe location for bystanders.
- Ensure Enbridge representatives have immediate access to the site.
- Implement your local emergency plan.

Planning ahead

Planning ahead allows us to work together as an effective team if an emergency occurs.

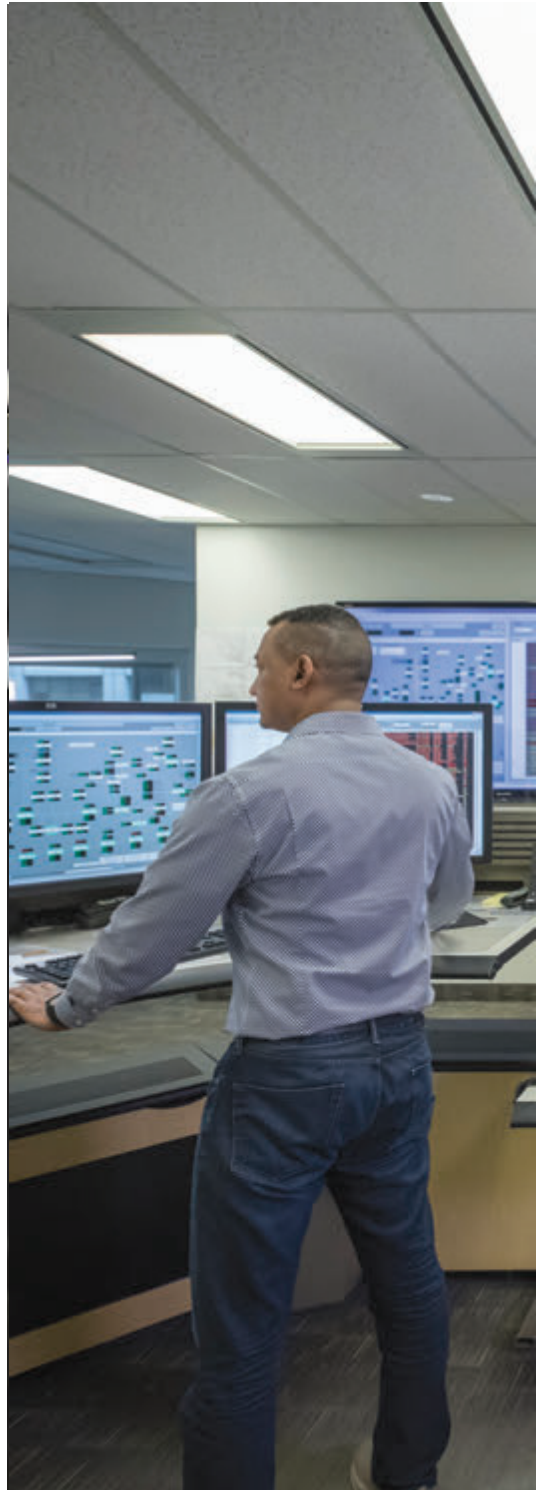
Enbridge's visits with local authorities and emergency response organizations are an opportunity to discuss a coordinated approach to handling pipeline incidents.

Immediate response

In the unlikely event of an incident, our emergency plan will immediately go into effect.

- Enbridge will work with local emergency responders to identify and solve the problem.
- Personnel from Enbridge's control centre have the ability to quickly shut down and isolate sections of the pipeline.
- Local emergency responders will be notified. They may secure the area and move residents to a safe location depending on the situation.
- Our trained emergency response crews will arrive to deal with the release and repair the damaged pipe or facility.

If an incident occurs, Enbridge emergency response teams are responsible for ensuring the problem is dealt with quickly and efficiently. Enbridge personnel will work to keep responders and the public safe, protect the environment from further harm and conduct all necessary follow-up steps to return the community to its original condition.





Enbridge uses the ICS for managing a response to an emergency.

Its organizational structure is designed to coordinate with other responding agencies.



Elements of response management enabled through use of the ICS:

- Incident Action Plan – define objectives, strategies, resources that contribute to public safety, responder safety and the environment
- Site safety and security
- Communications plan
- Containment and recovery
- Clean-up and waste management
- Public information management

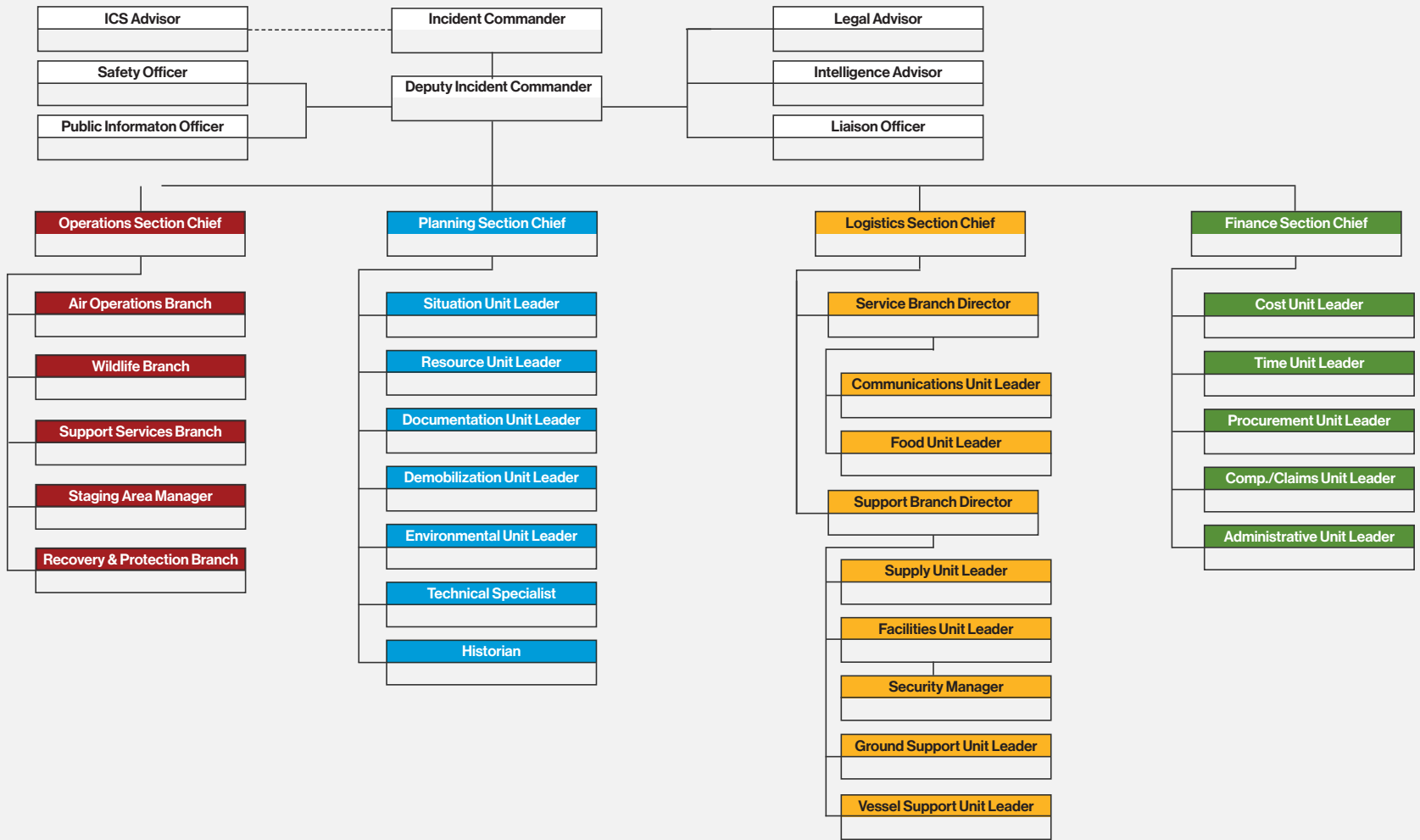
Through specific roles under a unified command system, Enbridge will work together with local responders to effectively, safely and efficiently manage any incident along our system.

Basic ICS structure

Command	Operations	Planning	Logistics	Finance
Overall management and determination of priorities and objectives	Reduce or eliminate the hazard, implement containment and control measures for the safety of responders, the public and the environment, and restore normal operations	Collection, evaluation and dissemination of tactical information, development of an Incident Action Plan, and coordination of resource identification	Supplying support needs	All financial matters

ENBRIDGE ICS 207 organization chart

Incident name: _____ Operational period: _____ Prepared by: _____ at ____:____



This is an example ICS Organization Chart that is scalable to the incident.



Open this page to view the ICS chart.

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

These attributes help ensure that the incident swiftly transitions from the reactive to proactive phase by setting up a chain of command, establishing a set of priorities and strategies and coordinating resources to address those priorities, often with our emergency response partners. By using the ICS, trained personnel from across the organization can be deployed to support an incident.

Training and exercises

Emergency response training exercises are a key part of our emergency response preparedness. Frequent exercise participation by all emergency response staff is critical to maintaining response readiness.

Online emergency responder training

The American Petroleum Institute and the Association of Oil Pipe Lines have created a free online training portal to assist first responders on the techniques and skills necessary to address liquids or natural gas pipeline emergencies. Content for these offerings comes from the National Association of State Fire Marshals "Pipeline Emergencies" curriculum and as such is considered best-in-class.

The three available courses are organized by need:

- 1 Emergency Personnel Awareness (Introduction)
- 2 First Responders Operations (Intermediate)
- 3 Hazardous Materials Technician (Comprehensive)

Throughout the courses, participants will learn:

- The basics of gas and liquids pipeline operations
- Potential hazards associated with products
- Pipeline emergency response tactics
- How to manage pipeline emergency response
- How to apply the information to real-life situations

The training is available at mypipelinetraining.com. Certification is also available, by request, upon completion of the program.

Exercise participation

Enbridge's Field Emergency Response Plans are available to all emergency response organizations within proximity of our operations. The Field Emergency Response Plans focus on first responder actions, including how Enbridge will work with first responder organizations to protect the public and the environment during the initial stages of a pipeline incident.

If you would like to participate in an emergency response exercise, please call the number for your area, listed on the last page of this brochure and ask to speak to an emergency response coordinator.



Enbridge also has Integrated Contingency Plans available to first responders. The Integrated Contingency Plans are our all-encompassing emergency response plans that describe our Emergency Management Program including – how we manage mitigation, preparedness, response and recovery.

All plans are available online at emergencyresponderinfo.com. If you have any questions or would like to provide feedback on our emergency response plans, please email em@enbridge.com.

Types of training for Enbridge personnel

Enbridge response personnel receive regular training – both in classroom and field demonstrations including:

- Pipeline operating practices and procedures (including emergency response)
- Implementation and activation of Emergency Response Plans
- Safety procedures
- Selection and use of personal protective equipment
- Material hazards and risk assessment techniques

- Basic first aid skills
- Initiating notifications
- ICS organization during an emergency
- Media communications
- Tactical training for containment and recovery, including booms and skimmers

Types of exercises

- Workshops
- Tabletop exercises
- Drills
- Functional exercises and equipment deployments
- Full-scale exercises

Media communications

A coordinated approach to media communications allows accurate, important information to be provided to the public with minimum confusion or delay. Enbridge has trained and qualified spokespeople to coordinate public statements and respond to media inquiries. Our spokespeople can be reached at **1-888-992-0997** or media@enbridge.com.

Prevention is key.

While Enbridge has developed effective emergency response procedures, we continue to focus on all of the tools, technologies and strategies that support safe and reliable operations.



These measures include:

- Sophisticated monitoring and control systems that operate 24 hours a day, 365 days a year
- Regular pipeline ROW patrols by aircraft and in some areas by land
- Investigative dig programs to support and confirm pipeline integrity
- Meeting and exceeding industry standards and regulations
- Public awareness education
- Stationing emergency response staff and equipment at strategic locations along the pipeline route
- Research and development on technologies designed to prevent corrosion and cracking
- Tests to confirm pipeline integrity on new pipelines/systems
- The use of durable coating systems and cathodic protection (use of low voltage electric current) to protect pipe from external corrosion
- The use of increasingly sophisticated in-line inspection technologies to measure the size and location of minute changes in the integrity of every line in our system

Maintaining pipeline integrity

From the purchase of high quality steel pipe manufactured to meet stringent criteria, to the cathodic protection system we employ to prevent corrosion, Enbridge makes the safety of the system a priority before and during its operation with a variety of processes and technologies.

Security

Enbridge views the security of our facilities as an integral part of our Emergency Management Program and our Security Management Program. As such, we continue to exercise our plans and maintain open communication and close working relationships with local authorities and emergency responders.

How to reach us

Emergency
number

1-888-813-6844

This page contains important phone numbers you can use to contact an Enbridge representative.

If you have any comments or questions, please contact us. Please call your local regional office listed to the right and ask to speak to an Enbridge representative or an emergency response coordinator.

More information can also be found online at enbridge.com/emergencymanagement.

A helpful tip: Save the Enbridge emergency phone number in your list of contacts or cell phone for quick reference in an emergency.

For non-emergencies, contact:

**Athabasca Region
Emergency Response Specialist**
1-780-762-4773

For general information about
Enbridge Pipelines (Athabasca) Inc.
Enbridge Pipelines (Woodland) Inc.
1-877-640-8665
cdnpublicawareness@enbridge.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.

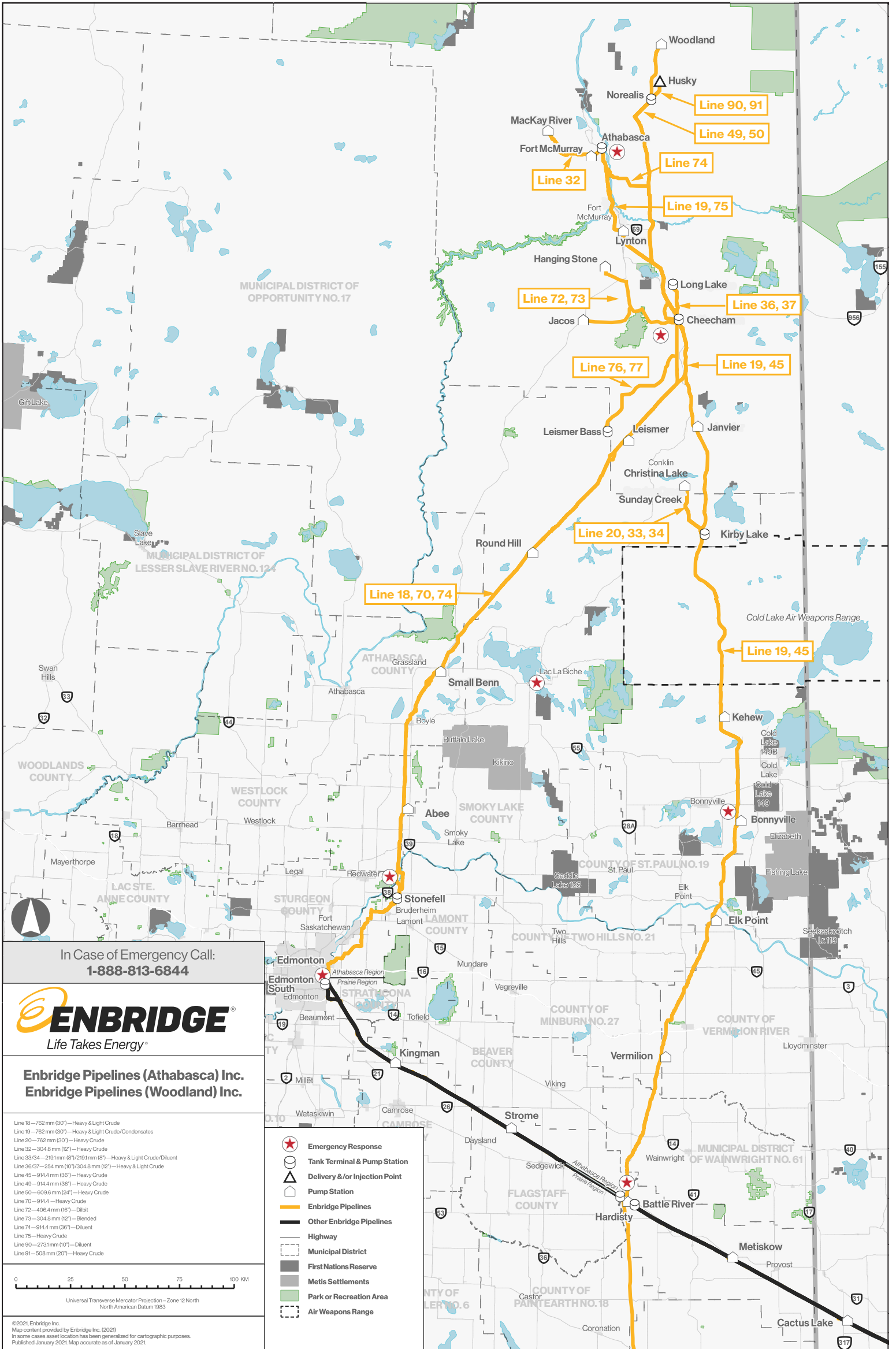
> **1-888-813-6844**

Non-emergency crossings

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



Enbridge Pipelines (Athabasca) Inc.
Enbridge Pipelines (Woodland) Inc.
Public Awareness Program, 2022



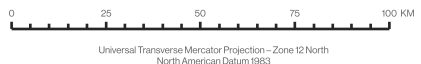
In Case of Emergency Call:
1-888-813-6844



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

- Line 18—762 mm (30")—Heavy & Light Crude
- Line 19—762 mm (30")—Heavy & Light Crude/Condensates
- Line 20—762 mm (30")—Heavy Crude
- Line 32—304.8 mm (12")—Heavy Crude
- Line 33/34—2191 mm (87/2191 mm (87")—Heavy & Light Crude/Diluent
- Line 36/37—254 mm (10")/304.8 mm (12")—Heavy & Light Crude
- Line 45—914.4 mm (36")—Heavy Crude
- Line 49—914.4 mm (36")—Heavy Crude
- Line 50—609.6 mm (24")—Heavy Crude
- Line 70—914.4 mm (36")—Heavy Crude
- Line 72—406.4 mm (16")—Dilbit
- Line 73—304.8 mm (12")—Blended
- Line 74—914.4 mm (36")—Diluent
- Line 75—Heavy Crude
- Line 90—2731 mm (107")—Diluent
- Line 91—508 mm (20")—Heavy Crude

- Emergency Response
- Tank Terminal & Pump Station
- Delivery &/or Injection Point
- Pump Station
- Enbridge Pipelines
- Other Enbridge Pipelines
- Highway
- Municipal District
- First Nations Reserve
- Metis Settlements
- Park or Recreation Area
- Air Weapons Range



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 In some cases asset location has been generalized for cartographic purposes.
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