

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 crude oil pipelines and/or related facilities. Please keep this brochure and share this important information with other emergency and public officials.

Emergency number: 1-800-858-5253

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Read this brochure,
then scan for a chance
to win an \$800 grant.





Pipeline safety: A shared responsibility

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 an Emergency or Public Official, you need to be aware of the Enbridge pipelines in your area and how to respond safely and effectively to a pipeline emergency. At your request, we can provide additional Enbridge pipeline information including the pipeline's location and size, and the contents transported. For additional resources, details on emergency response drills in your area, to talk to an Enbridge representative or to schedule an Enbridge presentation during your next meeting, please call **1-877-799-2650** or email us at **uspublicawareness@enbridge.com**.





Pipeline purpose and reliability

The United States has the largest pipeline network in the world. Data collected by the U.S. Department of Transportation reports pipelines are the safest way to move energy resources like the crude oil, natural gas and other petroleum products Enbridge transports. We are committed to the safe and reliable operation of our pipelines in your community. Every year our company invests in the latest technology and training to meet the high environmental and safety standards expected by those who live and work near our pipelines.

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 right-of-way (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, see our Safety Report to the Community at **enbridge.com/safety**.



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 state and federal guidelines. The purpose of this program is to prevent damage to our pipeline facilities from excavation activities such as digging, trenching, blasting, boring, tunneling, 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 colored flags or marks on the ground, please stop the activity and ask the person to call **811** or visit **clickbeforeyoudig.com** before continuing. One should not rely on word-of-mouth, maps, memory or pipeline markers when planning a digging project.

One-call requirements

1



At least two to three business days before your project—any time you are disturbing the soil—(depending on state law), call **811** or visit **clickbeforeyoudig.com**.

2



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

3



811 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, professional locators will come to your location and mark underground utility lines—including pipelines (marked with yellow flags or paint)—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 can be determined by the pipeline marker.

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

- The pipeline marker displays the operator's name, the product transported and an emergency phone number.
- Markers should never be removed or relocated.
- Markers should not be used to give exact locations and are not an alternative to calling 811.
- If an emergency is suspected or discovered, call the number on the marker.
- ROWs must be kept free from structures and obstruction to allow proper inspections, access for maintenance or in case of an emergency.



Vent marker



Line marker



Aerial marker

Marker appearance may vary in your area.

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 odor near one of our above ground facilities, call 911 immediately, then call Enbridge's 24-hour emergency number found in this brochure.

Keeping pipelines safe

The objective of Enbridge's Integrity Management Program is to improve pipeline safety through a systematic approach involving data gathering, risk assessment, integrity assessments, prevention and mitigation. The U.S. Department of Transportation has developed specific High Consequence Area (HCA) regulations for the operations and maintenance of natural gas and liquids transmission pipelines. These regulations are more rigorous than those for non-HCA locations and focus integrity management activities on populated areas and areas where it would be difficult to evacuate people. In most cases, we apply the more rigorous requirements to the operation of all our pipeline facilities, not just the HCAs.

Facility and purpose

At certain facilities, tanker trucks deliver producers' crude oil to **lease automatic custody transfer (LACT) units**, where it is metered and piped into crude oil storage facilities.

Crude oil storage facilities are used to safely store and transport crude oil to refineries and other market destinations via pipeline.

Pump stations increase pressure in the pipeline to maintain flow and are monitored 24/7 by Enbridge's control centers.

Valve sites are located along the pipeline ROW and may be used to control the flow of products in the pipeline.

Normal operations

During normal operations, a slight odor may be noticed during oil transfers or maintenance activities. Higher truck traffic is common near LACT units.

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Crossing or traversing the ROW



ROWs are not designed as roads or storage locations. The weight of vehicles, equipment or materials can damage pipelines below.



Do NOT do the following without obtaining Enbridge consent:

- Cross or travel along ROW with a vehicle, machinery or mobile equipment
- Park vehicles or equipment on ROW
- Stockpile materials or construct any structures on the ROW
- Disturb the ground within the ROW

Vehicle and mobile equipment crossings

As part of Enbridge's ongoing commitment to public safety, Enbridge requires that anyone wanting to cross the pipeline with vehicles including recreational vehicles like 4X4s, all-terrain vehicles, utility vehicles, motorcycles or mobile equipment (outside of a traveled portion of a highway or public road) submit a request to obtain the pipeline company's written consent before doing so. By submitting your request, you provide Enbridge the opportunity to assess:

- If the vehicle, machinery or mobile equipment being used can safely cross or traverse our pipeline within the ROW at that location
- If the proposed use is safe by confirming the location and depth of cover of pipelines at the location of the crossing
- If any mitigation measures are required due to there being a potential risk or no alternative crossing locations

Crossing during an emergency:

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

Non-emergency crossings:

Email Enbridge at crossingsus@enbridge.com before using the ROW.

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.

The role of the local responder

Besides handling traffic control, securing the site and fighting secondary fires, local responders often assist by:

- Making appropriate contacts if it appears that the pipeline incident impacts other agencies, facilities or local authorities
- Handling search and rescue
- Providing medical aid
- Coordinating a community emergency response plan, determining whether evacuation is warranted (mandating an evacuation, if required) and designating an evacuation center

Planning and zoning departments – please read!

Land development near pipelines

Public Officials involved in planning and zoning can help by verifying that land developers submit plans showing the accurate location of nearby pipelines and other buried utilities at the proposed site.

For additional information, see the Department of Transportation's recommended practices for developing land near existing pipelines and facilities, please visit phmsa.dot.gov.



If any pipelines exist, ask the developer:

- Have you consulted with the utility operator?
- Have you, working with the utility operator, considered the need for ROW access or setback requirements?
- Have you considered evacuation routes to be used in the unlikely event of an emergency?
- How will you prevent excavation damage to buried utilities during construction?
- Are there plans for alternative uses for the pipeline ROW such as green spaces, parks, golf courses, trails and other recreational spaces?

Did you know?

Contacting the pipeline operator as soon as possible means we can stop the product flow and make notifications as needed.

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.

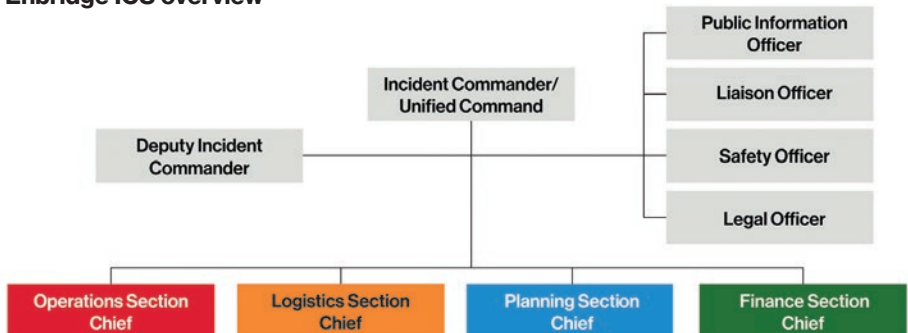
By using the ICS, trained personnel from throughout the organization can be deployed to support an incident.

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

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

Additional information on ICS can be obtained on the Federal Emergency Management Agency webpage at: training.fema.gov/emiweb/is/icsresource.

Enbridge ICS overview



Product information

Hazard awareness and prevention measures

Because crude oil pipelines typically operate under high pressure and can transport large volumes, accidents involving them can be hazardous. If an incident occurs on an Enbridge pipeline, our representatives will provide the emergency responders with safety data sheets for the product in the pipeline.

The chart below provides general information about products transported through Enbridge pipelines. For more information, please see the Pipeline and Hazardous Material Safety Administration's "Emergency Response Guidebook." Request a free copy or download the mobile app at phmsa.dot.gov/hazmat/library.erg.

Product	Appearance	Odor	Special behavior	Hazards
Crude oil	Color ranges from yellow to black	Similar to gasoline or diesel fuel	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Flammable and explosive under certain conditions• Suffocation can occur if vapors displace the oxygen in an enclosed area
Natural gas liquids (NGLs)	Steam-like cloud or frost-like appearance on the ground	Similar to gasoline	<ul style="list-style-type: none">• Heavier than air• Stays close to the ground in low-lying areas	<ul style="list-style-type: none">• Flammable and explosive under certain conditions• Suffocation can occur if vapors displace the oxygen in an enclosed area
Diluents	Clear to black liquid	Extremely strong odor similar to crude oil	<ul style="list-style-type: none">• Very light and fluid, similar to gasoline	<ul style="list-style-type: none">• Flammable and explosive under certain conditions• Suffocation can occur if vapors displace the oxygen in an enclosed area
Condensate	Clear to dark brown	Similar to gasoline or diesel fuel	<ul style="list-style-type: none">• Very light and fluid, similar to gasoline	<ul style="list-style-type: none">• Flammable and explosive under certain conditions

Responding to a crude oil, NGL or hydrogen sulfide (H₂S) incident

In the event of a pipeline emergency, contact Enbridge immediately so we can stop the flow of oil and immediately start containment. **Do not operate pipeline valves.**

Of the hundreds of components in crude oil, benzene has the potential to be the most toxic and volatile. Benzene content in crude oils varies greatly. Firefighters should use standard protective equipment and approved supplied air-breathing equipment in enclosed spaces.

In the event of a pipeline emergency involving natural gas liquids or diluent (natural gas condensate), contact Enbridge immediately (if you can make a phone call a safe distance away from plume), so we can stop the flow of gas and then allow any fire present to burn out. Use intrinsically safe equipment (e.g., flashlights, two-way radios and gas-detectors with audible alarms).

Do not use ignition sources or attempt to walk in product releases or vapors. Evacuate all unnecessary personnel and evaluate the area only when safe to do so, while wearing appropriate personal protective equipment. In an emergency involving diluent, keep surrounding surfaces, including exposed equipment and containers, cool with a water fog or spray. **Do not operate pipeline valves.**

Some crudes and condensates contain H₂S, which has a rotten egg smell and is toxic in high concentrations. The accepted industry practice is to wear approved supplied air-breathing equipment when concentrations exceed 10 ppm. **Do not operate pipeline valves.**

For detailed information on product hazards and appropriate responses to a pipeline emergency, we encourage you to take free online pipeline emergency response training at mypipelinetraining.com.

Resources

Free training opportunity for emergency responders and 911 dispatchers

Emergency responders and others responsible for public safety in our counties of operation – including 911 dispatchers – can access the National Association of State Fire Marshals' Pipeline Emergencies online training program at mypipelinetraining.com.

The trainings can be completed in one or multiple sessions, and a certificate is provided upon completion. This program may qualify for the following:

- Continuing education credits
- OSHA HAZMAT compliance
- Insurance Service Office Fire Suppression Rating Schedule Program

For more information, please contact us at **1-877-799-2650** or erinfo@enbridge.com.

Safe community grant program

Enbridge offers grants to emergency response agencies in the communities where we operate. These grants can be used for equipment or training to help organizations respond effectively to pipeline emergencies.

For more information, visit enbridge.com/safecommunity.

Field Emergency Response Plan

Our Field Emergency Response Plan is available to emergency response organizations in counties where we operate. These plans provide information on the ways we'll work with emergency responders during the initial stages of a pipeline incident. Visit emergencyresponderinfo.com to register and request the plan for your area. Your request for access will be reviewed within 10 business days.

Additional resources for emergency responders

- mypipelinetraining.com
- emergencyresponderinfo.com
- phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg
- npms.phmsa.dot.gov
- naturalgas.org
- ingaa.org
- pipeline101.org
- call811.com
- clickbeforeyoudig.com

Contact Enbridge



24-hour emergency number
1-800-858-5253



Land and ROW hotline
1-855-869-8261



Email
uspublicawareness@enbridge.com



Website
enbridge.com/uspublicawareness



Facebook
facebook.com/enbridge

If you have a non-emergency question regarding Enbridge's Damage Prevention Program, Integrity Management Program or operations in your area, you can call Public Awareness at **1-877-799-2650** or visit enbridge.com/uspublicawareness.

Emergency 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 centers 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:

- Colored 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, sulfur 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 vapors 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.

What NOT to do during an emergency response



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 center 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.