

# Pipeline safety and emergency information

for Emergency Responders  
and Public Officials.

Important safety information enclosed.

16-LEP

 **ENBRIDGE**  
Life Takes Energy™

## Pipeline safety: A shared responsibility

This brochure is meant specifically for public safety and local public officials, including firefighters, members of law enforcement, 911 dispatch dispatchers, emergency medical technicians, emergency managers, city and county leadership, public works departments and planning and zoning departments. You have a vital role in pipeline safety that includes:

- Coordinating a community emergency response plan
- Advocating for safe development near pipelines and the use of 811 in your community
- Activating your organization's response and contacting the pipeline operator if your organization receives the initial notification of a potential pipeline emergency
- Working with Enbridge to keep the public safe in a pipeline emergency by disseminating information, providing medical aid and other lifesaving services and determining and implementing evacuation procedures

Free pipeline training for emergency responders and public safety professionals at [mypipelinetraining.com](http://mypipelinetraining.com)

### After reading this brochure, you should know how to:

- Respond in an emergency situation and protect the public
- Contact Enbridge
- Recognize a pipeline leak
- Find the location of pipelines in your jurisdiction
- Excavate safely
- Safely develop land near pipelines in your community

It is critical that you keep and share the information in this brochure. Visit [enbridge.com/resources](http://enbridge.com/resources) or contact us at [USpublicawareness@enbridge.com](mailto:USpublicawareness@enbridge.com) for:

- Physical or electronic copies of this brochure
- 811 magnets and Uniform Color Code pocket cards
- Posters featuring pipeline safety information and emergency numbers
- A visit from an Enbridge representative

Brochures like this one are also mailed to people who live and work near our pipelines, as well as schools, farmers and professional excavators in our areas of operations. If you have pipelines transporting petroleum products other than, or in addition to, crude oil in your jurisdiction, you've also received a copy of the materials mailed to those who live or work near these types of lines.

## Enbridge North American assets



### Pipeline maps are available online through:

Enbridge Pipelines  
(North American assets)  
[enbridge.com/map](http://enbridge.com/map)

National Pipeline Mapping System  
(U.S. transmission pipelines)  
[npms.phmsa.dot.gov](http://npms.phmsa.dot.gov)

For information on Enbridge gathering lines that may be present in your area, call **877.799.2650** or contact us at [USpublicawareness@enbridge.com](mailto:USpublicawareness@enbridge.com).

## We value your feedback

Please take a few moments to complete our pipeline safety survey online at [enbridge.com/surveyUS](http://enbridge.com/surveyUS) or mail it to Public Awareness Manager, 1100 Louisiana, Suite 3300, Houston, TX 77002. **Complete responses will be placed into a drawing for a \$750 Safe Community grant for your organization.**

### Please select only one answer to each question.

#### Emergency Responders Only

1. Which of the following describes your department's participation in emergency response exercises with pipeline operators?

- We have participated in the past  
 We haven't participated because we haven't been invited to participate in the past  
 We haven't participated because the time wasn't convenient  
 We haven't participated because there are too many other types of trainings

2. Do you feel your department is prepared to handle a pipeline emergency?

- Yes  No

#### Public Officials Only

1. Have you utilized the National Pipeline Mapping System to find out where pipelines are located in your area?

- Yes  No

2. Does your entity use the 811 system prior to excavation projects?

- Yes  No

3. If there was development occurring near a pipeline in your community, what would you do?

- Nothing  
 Put the developer in contact with the pipeline company  
 Stop development because it's not safe  
 Other \_\_\_\_\_

#### Emergency Responders and Public Officials

1. How might you know if there is a pipeline leak?

- See liquid on the ground  
 Hear a roaring, blowing or hissing sound  
 The first two options are correct  
 None of the above

2. How often do you meet with pipeline operators with operations in or near your community?

- Never  
 Once a year  
 Once every few years  
 More than once a year

3. When being contacted by pipeline operators, I prefer:

- To be contacted by each pipeline company in my area individually  
 To be contacted by all pipeline companies in my area at once

4. Please indicate how strongly you believe the following statement: Enbridge is a safe operator.

- Strongly believe  
 Somewhat believe  
 Neither believe nor disbelieve  
 Somewhat disbelieve  
 Strongly disbelieve

5. Please rate your knowledge of pipeline safety before receiving this brochure:

- Not informed  
 Somewhat informed  
 Very informed

6. Please rate your knowledge of the pipeline safety information after receiving this brochure:

- Not informed  
 Somewhat informed  
 Very informed

Name: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

County: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

One winner will be chosen for the prize mentioned above. All responses must be received by December 31, 2016. A winner will be drawn on February 1, 2017 and notified by March 1, 2017.

By completing this survey, you consent to Enbridge collecting and using the personal information you provide (name, address, email address, phone number) in order to contact you for contest purposes, as well as to provide you with important safety information. This personal information will be collected, used or disclosed by Enbridge in accordance with Enbridge's privacy policy, which can be viewed at [www.enbridge.com/PrivacyPolicy](http://www.enbridge.com/PrivacyPolicy). If you have questions or concerns regarding our privacy practices, or if you wish to withdraw your consent, please contact the Enbridge Privacy Officer at **1.888.444.4003** (toll-free) or [privacy.office@enbridge.com](mailto:privacy.office@enbridge.com).







## Emergency information

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.

## The report

Although we immediately dispatch our emergency response teams upon notification, local 911 dispatch centers or other public safety officials often receive the initial report. The following could indicate a potential pipeline emergency and may be reported by callers or emergency responders:



### They might see:

- Liquid on the ground
- Discolored snow or vegetation
- Oily sheen on water surfaces



### They might hear:

- A roaring, blowing or hissing sound



### They might smell:

- An unusual sulfur or rotten egg odor

**Please share the information on the following page with your 911 dispatch center.**



## 911 dispatchers— please read! Initiating the response

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

1. Reassure the caller that emergency response crews and Enbridge will be contacted and will arrive as soon as possible.
2. Advise the caller of the following as the situation dictates:
  - 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
  - Do not light a match
  - Do not turn on or off anything that may create a spark—including cell phones, telephones, light switches, vehicle alarms, vehicle keyless entry and flashlights—until you are in a safe location
  - **Do not operate pipeline valves**
  - Do not remain in a building if the smell is stronger inside than outside
  - If an evacuation center has been designated, advise the caller of the location
3. Call Enbridge's toll-free, 24-hour emergency number for your area. It is important to contact the pipeline operator as soon as possible so we can stop product flow and make notifications as needed.

Enbridge Control Center:

📞 **800.858.5253**

## A safe response

If you suspect an emergency on an Enbridge pipeline, immediately call our toll-free, 24-hour emergency number for your area from a safe location. Our monitoring system may have already alerted us to the disruption, but always call to verify. The pipeline operator's name and emergency telephone number can be found on the pipeline marker.

Once on-site, Enbridge representatives will work with you to establish safe procedures for securing the area or other emergency measures. If our representatives have not arrived, there are some important steps you can take:

- If it is safe to do so, turn off any mechanized equipment and ignition sources in the suspected leak's vicinity
- Secure the site and determine a plan to evacuate or shelter-in-place
- Monitor for hazardous atmospheres
- Control and redirect traffic
- Provide immediate access to Enbridge representatives
- Implement your local emergency plan

We will work with emergency responders in the event of a pipeline emergency to resolve the situation safely and effectively. We value the knowledge and skills of emergency responders and designed our guidelines to keep you, employees and the public safe.

## 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 shut 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 our permission unless there is an immediate risk to safety.** If a fire occurs at one of our facilities, unless lives are at risk we ask that fire crews stay outside of the property until Enbridge representatives arrive.

## Potential product hazards

Because crude oil pipelines generally operate under high pressure and can transport large volumes, accidents involving them can be hazardous. In the event of an incident on our pipeline, Enbridge representatives will provide emergency responders with the 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](https://phmsa.dot.gov/hazmat/library/erg).

Product	Appearance	Odor	Special Behavior	Hazards
<b>Crude Oil</b>	Color 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 vapors 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 vapors displace the oxygen in an enclosed area
<b>Diluents*</b>	Clear to black liquid	Extremely strong odor similar to crude oil	Very light and fluid, similar to gasoline	Flammable and explosive under certain conditions  Suffocation can occur if vapors 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

\* Many compounds of crude oil, diluents and condensate are volatile and toxic and may enter the human body through inhalation, ingestion and skin absorption to cause irritation, dizziness, headache or even loss of consciousness. Benzene levels in condensate vary greatly and prolonged and repeated exposure to certain levels may cause severe health effects.



Detailed information on product hazards and appropriate response to a pipeline emergency is available through our free online education program for emergency responders. **Register at [mypipelinetraining.com](http://mypipelinetraining.com).**

## Responding to a crude oil incident

Should a pipeline emergency occur, 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.

## Responding to an NGL or diluent (petroleum distillate) incident

In the event of a pipeline emergency involving natural gas liquids or diluent (petroleum distillate), 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, 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!**

## Responding to an incident involving hydrogen sulfide (H<sub>2</sub>S)

Some crudes and condensates contain hydrogen sulfide (H<sub>2</sub>S), 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 more information or additional response training specific to hydrogen sulfide, please contact us at **877.799.2650** or **USpublicawareness@enbridge.com**.

## The Incident Command System

When responding to an incident, Enbridge will work with emergency responders and any other assisting agencies under the National Incident Management System's Incident Command System (ICS). ICS establishes a coordinated approach to managing facilities, equipment, personnel and procedures.



## The role of the local responder

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

- Making appropriate contacts if it appears 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



## The pipeline right-of-way

The pipeline follows a narrow, clear stretch of land called a right-of-way that allows our employees and contractors to access the pipeline for inspections, maintenance, testing and emergencies.

It's important that the right-of-way remains clear. For your safety and to protect the pipeline, written permission is required before planting any shrubs within the pipeline right-of-way. Stockpiles, stored equipment, structures and trees are prohibited within the right-of-way.

Pipeline rights-of-way aren't designed as roads, and heavy vehicles and equipment can damage the pipelines below. Before crossing our pipeline right-of-way with heavy machinery, call Enbridge at the 24-hour telephone number for your area and we'll work with you to establish safe crossing.

If you realize you've moved heavy equipment across an Enbridge pipeline without calling, even if you don't notice damage, report it to us immediately so we can assess the pipeline.

If, as a public safety or local public official, you have the opportunity to advise local businesses or facilities along the pipeline right-of-way on their emergency response plans, encourage them not to choose the right-of-way as the identified muster point. For more information about our right-of-way standards, please call our Land Services Department toll-free at **866.331.3493**.

## Dangers of downed power lines on rights-of-way—emergency responders, please read!

Pipelines often share the right-of-way with other utilities. Electrical power transmission lines in particular can compromise or damage pipelines if they come into contact with an aboveground pipeline feature or even the ground above the pipeline. Please contact us at our 24-hour telephone number for your area if a power line is downed near an Enbridge pipeline.

## Aboveground facilities

While most Enbridge pipelines are buried underground, our systems also include many aboveground facilities. It's important that you know about these facilities and what to expect as part of normal operations.

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



### Do not operate pipeline valves!

Doing so may cause a pipeline leak or prolong a pipeline incident.

Facility and Purpose	Normal Operations
<p>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</p>	<p>During normal operations, a slight odor may be noticed during oil transfers or maintenance activities. Higher truck traffic is common near LACT units.</p>
<p><b>Crude oil storage facilities</b> are used to safely store and transport crude oil to refineries and other market destinations via pipeline</p>	<p>During normal operations, a slight odor may be noticed during oil transfers or maintenance activities</p>
<p><b>Pump stations</b> increase pressure in the pipeline to maintain flow and are monitored 24/7 by Enbridge's control centers</p>	<p>During normal operations, no significant odors should be detected</p>
<p><b>Valve sites</b> are located along the pipeline right-of-way and may be used to control the flow of products in the pipeline</p>	<p>During normal operations, no significant odors should be detected</p>

## Pipeline location

You can find the general location of an Enbridge pipeline by looking for pipeline markers. These markers should never be used as a reference for a pipeline's exact location.

Pipeline operators are required to submit transmission pipeline maps to the National Pipeline Mapping System. These maps can be accessed online at [npms.phmsa.dot.gov](http://npms.phmsa.dot.gov). Public officials and emergency responders may request special access that provides greater location detail than the maps available to the public.



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

## Planning and Zoning Departments – please read!

### Land development near pipelines

As rural areas become more urbanized, housing and commercial developments are being built near pipelines and related facilities. Public officials involved in planning and zoning can help by verifying that land developers submit plans with the accurate location of nearby pipelines and other buried utilities. To access the Department of Transportation's recommended practices for developing land near existing pipelines and facilities, please visit [phmsa.dot.gov](http://phmsa.dot.gov).

Before approving new developments, ask developers if they have identified pipelines and other underground utilities at the proposed site. If there are pipelines in the area, ask:

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

## Protect yourself, protect your property – Call 811 Before You Dig!

811 is a free, nationwide service created to keep you safe with a simple phone call before you begin digging. It's an easy process, and it's always the safest option anytime you are moving dirt. At least two to three business days before your project (depending on state law), simply call **811** with important details about your work, including:

- The type of work you will be doing and a description of the area
- The date and time your project will begin
- Your worksite's address, the road on which it's located and the nearest intersection
- Driving directions or GPS coordinates

Within two to three business days professional locators will mark underground utility lines, including crude oil pipelines (marked with yellow flags or paint), so you can work around them, saving yourself from possible injury or property damage.

Many states now offer online "811" options, including states in the areas where we operate. Visit [clickbeforeyoudig.com](http://clickbeforeyoudig.com) to learn more.

Do not rely on word-of-mouth, maps, memory or pipeline markers when planning a digging project. A call to **811** is necessary to properly locate pipelines and other buried utilities before excavation. If you see someone digging or disturbing the soil and there are no flags or marks on the ground, stop the activity and ask that person to call **811** before continuing.



### Emergency responders—please read!

Striking a pipeline while responding to a wildfire could create additional hazards if a product is released into the environment. If you need to dig a fire break, call **811**, explain the situation and request an emergency locate request so pipelines and other underground utilities can be located before you begin.



Know what's below.  
Call before you dig.

Watch an Enbridge neighbor explain how calling **811** saves lives at [enbridge.com/call811](http://enbridge.com/call811)



4½ minutes  
The approximate time  
it takes to call 811

OR

4½ days  
The average work delay  
due to hitting a pipeline  
while digging



The cost of calling 811  
before digging



The percentage of time  
work is completed without  
damage when the 811  
system is used prior  
to digging



A nationwide number that  
can save money and lives

## Did you know?

### 811 is a free service

- 811 is a free, nationwide service for locating underground utilities
- It's paid for by pipeline and other utility companies to protect you and your community

### It's never safe to assume the depth of pipelines

- The depth of pipelines and other utilities can change over time
- Some pipelines and related facilities may be located above the ground

### 811 isn't just for digging projects

- Call 811 before any soil-disturbing activities, which include but **are not limited to** constructing roads, driveways, ditches, railways, overhead or underground utilities and other facilities; installing fence posts and planting trees or shrubs

## Heavy rains, floods and droughts can affect the soil above buried pipelines

- To avoid pipeline damage, special considerations are needed when working above or below the ground in extremely wet or dry conditions
- Always call 811 before beginning any soil-disturbing activity, including during or after a significant weather event, then consult with Enbridge to determine how you can work safely near the pipeline

## Striking a pipeline while digging can have serious consequences

- If a product is released from the pipeline, it could damage your property
- You may also be responsible for fines and repair costs
- Rupturing a pipeline can cause injuries or even death



U.S. Public Awareness  
Administrative Team  
1100 Louisiana St., Suite 3300  
Houston, TX 77002-5217

**24-hour emergency numbers  
for your area:**



Know what's below.  
**Call** before you dig.

Presort Std  
U.S. Postage  
**PAID**  
Wichita, Ks  
Permit No. 504

Participate in our pipeline safety survey for a chance to win a \$750 grant for your organization. See inside for details.