

IMPORTANT SAFETY INFORMATION

# PIPELINE SAFETY

*For your family, neighborhood, and community*



**8** SURPRISING  
FACTS  
ABOUT  
PIPELINES

See page 7



# 24/7 UTILITY SAFETY



Pipeline Association  
for Public Awareness

[pipelineawareness.org/247safety](http://pipelineawareness.org/247safety)



## Aerial Patrols

Operators regularly survey their pipeline rights-of-way from the sky



## Ground Patrols

Operators monitor their pipelines from the ground and respond to potential issues along their rights-of-way



## One Call

One Call centers communicate with utility locators after a One Call ticket has been submitted so appropriate utilities are properly marked before excavation



## Communicating with Neighbors

Operators regularly communicate with the community and their customers about safety around their pipelines and facilities



## In-Line Inspection

Technology allows operators to monitor their utilities from the inside out



## Pipeline Integrity

Pipelines are rigorously inspected and tested to ensure they are operating safely. Pipeline pressure, movement, vibration, and temperatures are analyzed

## Preventative Maintenance

If in-line inspections identify anything abnormal, pipelines are exposed, examined, and if necessary, repairs are made







## 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. Pipeline operators are committed to the safe and reliable operation of their pipelines in your community.

## Damage Prevention Awareness and Prevention Measures

Pipeline operators maintain a Damage Prevention Program in accordance with state and federal guidelines. The purpose of this program is to assure safety and prevent pipeline incidents. The Damage Prevention Program also monitors the cover over our pipelines and conducts regular patrols of our ROWs 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 **call 811** or visit **www.call811.com**. One should not rely on word-of-mouth, maps, memory or pipeline markers when planning a digging project.

## Call 811 Before you Dig



State law requires you to contact 811 **before starting any project that disturbs the ground** such as fencing, installing a mailbox, planting trees or deep plowing. This **free and easy service** helps prevent accidents and protect underground pipelines. Visit **www.call811.com** to learn more.

**Call or click before you dig**  
Call 811 or contact your local One Call System

**Respect the marks**  
Flags, paint or other markers (normally yellow for pipelines)

**Wait the required time**  
Generally 48 to 72 hours, depending upon state requirements

**Excavate with care**  
Pothole or hand dig to determine exact location of pipelines



## Right-of-Way (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:

- Markers should never be removed or relocated.
- If an emergency is suspected or discovered, call the number on the marker.
- The ROW must remain clear. Structures, stockpiles, stored equipment and burn piles are not permitted within the ROW.
- 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 alternative to calling 811.



## PIPELINE MARKER ANATOMY

REMINDER THAT SIGNS ARE PROTECTED BY FEDERAL LAW

WARNING TO WORK NEAR PIPELINES WITH EXTREME CAUTION

NAME OF PRODUCT TRANSPORTED

NAME OF THE PIPELINE OPERATOR

EMERGENCY PHONE NUMBER

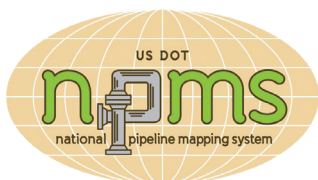
REMINDER TO ALWAYS CALL OR CLICK 811 BEFORE DIGGING



### What to Know

- Pipeline markers **vary in size, shape, and color**, but always include common information about the pipeline or utility line.
- Pipeline markers **do not** identify the exact location, depth or number of pipelines in the area.
- Pipelines **do not** always run in a straight line between markers.
- Pipeline markers are located along transmission pipelines, but they **may not** be located continuously along gathering or distribution lines.
- Natural gas service lines that connect directly to homes or businesses **are not** typically marked by pipeline markers.
- Pipeline markers **are protected by federal law**, and intentionally damaging or removing one can result in a fine.
- Report missing or damaged pipeline markers to the pipeline operator so they **can be replaced**.

## National Pipeline Mapping System (NPMS)



The National Pipeline Mapping System (NPMS) includes information on hazardous liquid pipelines and natural gas transmission pipelines. To view the transmission pipelines in your area, visit [www.npms.phmsa.dot.gov](http://www.npms.phmsa.dot.gov). You can also visit [pipelinesnearby.org](http://pipelinesnearby.org) for information on pipelines operated by many members of the Pipeline Association for Public Awareness.





## Recognizing a Pipeline Leak

In the unlikely event of a pipeline leak, one or any combination of the items listed below can typically help you recognize a leak.



### 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

## Responding to a Pipeline Leak

DO



- ✓ **First, leave the immediate area on foot!** Move in a crosswind direction away from the leak or vapor cloud and maintain a safe distance. Abandon any equipment being used in or near the area.
- ✓ **Then, go directly to a safe location and then call 911** and the pipeline operator's emergency number that is located on the nearest pipeline marker or on page 8 of this brochure.
- ✓ **Warn others to stay away from the leak.**

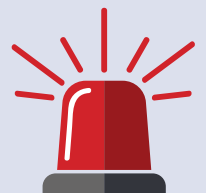
DO NOT



- ✗ **Cause any open flame or other potential source of ignition** such as an electrical switch, vehicle ignition, lighting a match, ringing a doorbell, etc.
- ✗ **Come into direct contact** with any escaping liquids or gas.
- ✗ **Drive into a leak or vapor cloud** while leaving the area.
- ✗ **Attempt to operate any pipeline valves** yourself. You may inadvertently route more product to the leak or cause a secondary incident.
- ✗ **Attempt to extinguish a natural gas fire.**
- ✗ **Use telephones (including cell phones)** or anything that could cause a spark.
- ✗ **Use email, text or the internet to contact the company** about a leak, and never assume someone has reported the leak.

## Liaison with Emergency Officials

Pipeline operators strive to build relationships and liaise with the emergency response community to share resources and provide education for a safe response to a pipeline emergency. Our resources for Emergency and Public Officials are available on our website, [pipelineawareness.org](http://pipelineawareness.org).





# Potential Hazards Associated with Pipeline and Pipeline Facility Leaks

## Natural Gas



- A gas that is colorless, odorless, lighter than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation or dizziness
- May produce irritating and/or toxic gasses

## Petroleum Gas



- A gas that is colorless, odorless, tasteless, heavier than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation or dizziness
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas

## Petroleum Liquids



- Liquids and vapors are heavier than air
- Flammable and easily ignited
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas
- Runoff may cause pollution

## Anhydrous Ammonia



- Colorless gas or liquids with pungent odor and heavier than air
- Will displace oxygen and can cause asphyxiation
- May cause burns, injury, frostbite
- Toxic and may be fatal
- Runoff may cause pollution

## Carbon Dioxide



- A heavy gas that is colorless, odorless, tasteless, and heavier than air
- Will displace oxygen and can cause asphyxiation and dizziness
- May cause burns, injury, frostbite

## Ethanol



- A colorless liquid that is heavier than air
- Flammable and easily ignited
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gas
- Runoff may cause pollution

## Hydrogen Gas



- A gas that is colorless, odorless and lighter than air
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation and dizziness
- May cause burns, injury, frostbite
- May produce irritating and/or toxic gasses

## Sour Crude Oil



- Corrosive contaminant found in crude oil that has an odor like the smell of rotten eggs or a burnt match and is heavier than air.
- Flammable and easily ignited
- Toxic and may be fatal
- Extremely irritating, toxic and corrosive
- Runoff may cause pollution

## Sour Gas



- Corrosive contaminant found in natural gas that has an odor like the smell of rotten eggs or a burnt match and is heavier than air.
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation
- May cause burns, injury, frostbite
- Toxic and may be fatal
- Extremely irritating, toxic and corrosive
- Runoff may cause pollution





## 8 SURPRISING FACTS

### About the Pipelines Beneath Our Feet

They're rarely seen, barely heard of, and yet profoundly important to everyday life. Pipelines run silently beneath our feet—carrying the energy that fuels our homes, heats our water, powers our industries, and drives our economy.

But even if you live or work near one, chances are there's more to the story than meets the eye.

The truth is, pipelines are part of an intricate, carefully monitored system that relies on technology, regulations, and the awareness of everyday people to function safely and smoothly. Understanding what lies underground empowers us all to make safer, more informed decisions—and even help prevent emergencies.

Here are **8 surprising facts** about the pipelines beneath our feet that might change the way you see your surroundings:

#### 1 The U.S. Has the Largest Pipeline Network in the World

With more than **3.3 million miles** of pipelines crisscrossing the nation, the U.S. operates the most expansive energy transport system on Earth. Chances are, one is closer than you think.

#### 2 Pipelines Are the Safest Way to Transport Energy

According to the U.S. Department of Transportation, pipelines are statistically the **safest and most efficient method** to move oil, gas, and other fuels—far safer than trucks or railroads.

#### 3 Pipeline Markers Don't Show Exact Locations

Those roadside signs signal a pipeline's presence, but not its **exact depth or location**. That's why relying on memory or guesswork is risky—and why calling or clicking 811 before digging is a must. You can make a request online at: [clickbeforeyoudig.com](https://clickbeforeyoudig.com) (for most states in the U.S.) or visit your state's 811 website directly through [call811.com](https://call811.com).

#### 4 Pipeline Rights-of-Way Are More Than Just Empty Land

A Right-of-Way (ROW) must remain **clear of sheds, firewood, trees, or fences** to allow access for inspections and repairs. It's not just a guideline—it's a vital part of community safety.

#### 5 They Carry More Than Just Oil and Natural Gas

Many people are surprised to learn that pipelines also transport substances like **ethanol, anhydrous ammonia, carbon dioxide, and hydrogen**, each with specific safety protocols and risks.

#### 6 They're Watched 24/7 with High-Tech Monitoring

Operators use **aerial patrols, pressure sensors, satellite systems, flow meters, and more** to detect any change in a pipeline's condition - often identifying issues before they become problems.

#### 7 811 Isn't Just Helpful—It's the Law

811 Isn't Just Helpful—It's the Law Calling or clicking 811 before any digging project is required in every state. It's free, fast, and could prevent a catastrophic accident or service disruption— even for small projects like planting a tree. **Contacting 811 is free, fast, and can prevent serious injury or costly service disruptions.**

#### 8 Your Awareness Helps Keep Everyone Safe

Pipeline safety isn't just in the hands of operators. **Your attention matters.** Reporting suspicious digging, unusual smells, or strange ground conditions can prevent serious incidents.

By understanding what lies below, we can protect what we love above.

***Stay informed. Stay alert. And if you're ever unsure—just call or click 811.***



**Take the Quiz for  
a Chance to WIN!**

Scan the QR code to test  
your knowledge and  
*WIN 1 of 4 \$250 gift cards.*



<https://pipelineawarenessorg.wufoo.com/forms/z1fvvlhi1anplcc/>

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## Pipeline Operator Sponsors

### **CHS/Jayhawk Pipeline Operator**

#### **Emergency Phone Number**

888-542-9575

#### **Products Transported**

Crude Oil

### **Hess Corporation**

#### **Emergency Phone Number**

800-406-1697

#### **Products Transported**

Natural Gas, Natural Gas Liquids,  
Crude Oil

### **Montana-Dakota Utilities Co.**

#### **Emergency Phone Number**

800-638-3278

#### **Products Transported**

Natural Gas, Propane

### **Tenderfoot Pipeline Operator**

#### **Emergency Phone Number**

866-868-3028

#### **Products Transported**

Natural Gas

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To request information from additional PAPA pipeline member companies, visit:

[pipelineawareness.org/request-info](https://pipelineawareness.org/request-info)

Email: [admin@pipelineawareness.info](mailto:admin@pipelineawareness.info)