

PIPELINE

AWARENESS

Safety Information for

Local
LeadersLand
PlanningEmergency
Management
& Responders

Emergency Response Dos and Don'ts in the First Five Minutes of a Pipeline Incident

By Glen Boatwright, Principal, Boatwright Consulting, former Firefighter, Emergency Manager, and HAZMAT Officer



"Engine 3, Engine 7, Squad 2, Battalion 3, respond priority one to a pipeline release at 2241 Fairview Road, use TAC 21"...

While pipelines are statistically the safest mode of transportation and incidents are infrequent, they can and do occur. Initial actions taken by first responders when on the scene of a pipeline incident can be critical to ensuring a timely and safe conclusion.

So, in the first five minutes, what actions should you take?

1. First, approach cautiously from upwind, uphill or upstream.

Stay clear of vapors, fumes, smoke and spills. Do not assume gases or vapors are harmless because of a lack of smell.

Determine the wind direction. Clues can include elevated flags, blowing trees, and ripples on bodies of water. If those clues aren't present, use local weather service resources to determine wind direction and speed. For releases of gases, this is critical information to aid in determining exposures and the need for any evacuations.

2. Secure the scene.

Establish isolation zones and set up barricades. Protecting the public and isolating or removing ignition sources should remain the focus.

Ignition sources can include vehicles (be mindful of positioning of fire apparatus and law enforcement vehicles), electrical transmission and distribution lines, nearby railroads, and the list goes on. Migration can occur in storm and sewer systems, conduits, and specifically for hazardous liquids, in areas where the topography changes from a higher to lower elevation.

...continued on back



DOWNLOAD:

Incident Response Checklist:
https://qrco.de/incident_response

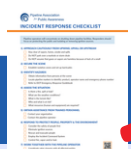


Table of Contents

First 5 Minutes of a Pipeline Incident	1
Resources for Local Officials	2
Pipeline Right-Of-Way Questions	3
Pipeline Maps Enhance Safety	4
Pipeline Maps & Information Tools	5
The Lexington Incident	6
Excavation Safety Tips	7
Potential Pipeline Leak Hazards	8
Recognizing a Pipeline Leak	9
Your Duty as a Public Official	10
Infrastructure Safety Checklist	12
24/7 Utility Safety	13
Pipelines In Your Community	14
Pipeline Marker Anatomy, Request Information, Provide Feedback	15
One Call Law, Pre-Ex Checklist	16

You can find the sections most relevant to you by locating the symbols at the bottom of each page.



Local Leaders



Land Planning



Emergency Management & Responders

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If you have questions about the Pipeline Association for Public Awareness, our programs, or need more information from any of our members, please visit pipelineawareness.org.

Join our email list for grant opportunities, shareable resources and more!



Resources for Local Officials

Scan the QR code or use this link to view Public Official Resources: https://qrco.de/public_official



PIPELINE EMERGENCY TRAINING

Pipeline Association for Public Awareness offers free training and scenarios for fire, law enforcement and 911 center personnel online at: https://qrco.de/emergency_response



PIPELINE MAPS FOR PUBLIC OFFICIALS

Register for access to the Pipeline Information Management Mapping Application (PIMMA) at: https://qrco.de/NPMS_Pipes



PIPELINE MAPS & EVACUATION DISTANCE

Access maps that show location of pipelines and evacuation distance considerations at: https://qrco.de/PipeVision_Mapping



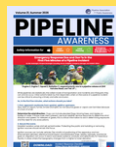
EVACUATION GUIDANCE

The Pipeline Association for Public Awareness provides emergency response technical guidance on when to shelter-in-place versus evacuate at: https://qrco.de/Evacuation_Shelter



PIPELINE MEMBER DIRECTORY

Access contact information for pipeline operators in your community who participate in the Pipeline Association for Public Awareness at: https://qrco.de/PAPA_Members



Digital Publication

Download an electronic version of this publication at: https://qrco.de/Newsletter_Digital



SAFETY CHECKLIST

Download an excavation safety checklist for projects near pipelines at: https://qrco.de/Dig_Checklist

COPIES OF MATERIALS PROVIDED TO THE GENERAL PUBLIC OR EMERGENCY RESPONSE OFFICIALS

Pipeline members will send you copies of the public awareness materials they provide to the general public or emergency officials in your area. Email your request to the company contact person listed in the Pipeline Member Directory. Access the directory at: https://qrco.de/PAPA_Membership

Pipelines in Your Community

Download in English, Vietnamese, Mandarin Chinese, Spanish, Russian, Tagalog, and Tongan.



PIPELINE RIGHT-OF-WAY

SIX COMMON QUESTIONS

Want to know the location of pipelines in your community and the products they transport? Access to pipeline maps differs from state-to-state, but the following resources can assist public officials in requesting maps from pipeline operators and accessing available maps online.



The Pipeline Informed Planning Alliance (PIPA) provides information and resources for local officials at: https://qrco.de/Public_Officials

1 What requirements are normally included in easement agreements?

Most easement agreements prohibit storing vehicles or flammable materials, require special procedures for digging and limit or prohibit building structures and planting trees on the right-of-way. Exceptions can be granted through a specific encroachment agreement with the pipeline operator.

2 Who maintains the pipeline right-of-way?

The pipeline operator is typically responsible for ensuring the right of-way is visible from the air and easily accessible on the ground. Maintenance may include mowing, trimming trees or removing trees or structures.

3 How can I help protect people living and working near pipelines?

Planning/zoning officials, city engineers and other public officials can help prevent pipeline emergencies. Encourage builders and developers to consider the location of pipeline rights-of-way in their development plans and encourage property owners to contact 811 and notify pipeline operators before building or digging near the right-of-way.

4 How do I help protect important structures, foliage or animals on a right-of-way?

In most cases, issues related to existing structures, foliage or animals on or near the right-of-way are resolved before pipeline

construction and addressed within the easement agreement. If not, landowners, permitting, planning, zoning and emergency management officials should contact the pipeline operator to discuss options. This could include relocating a structure, arranging to inspect the right-of way at ground level, testing or other accommodations.

5 What special procedures may be needed to build roads or install utilities on an existing right-of-way?

Construction plans may require hydro excavation to confirm the location of existing pipelines before installing new roads or utilities. Pipeline operators may request to be onsite during construction activity. Always contact 811 before beginning a project near an existing pipeline right-of-way even if your agency is typically exempt from state One Call requirements.

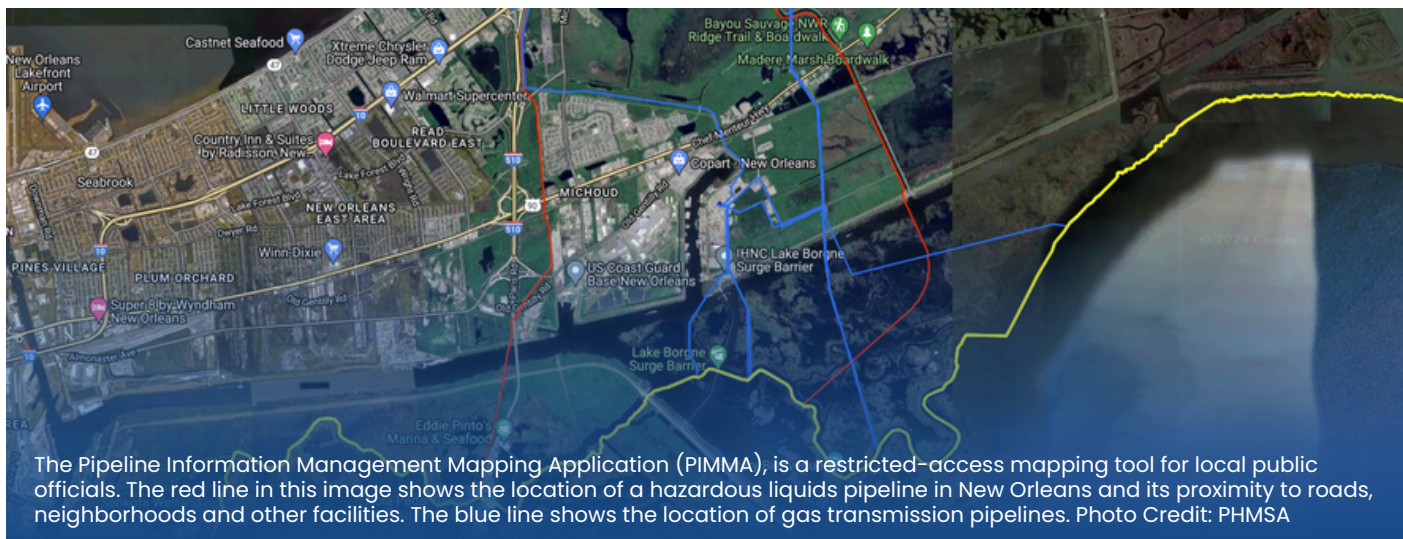
6 What should I know about pipelines that run under rivers, lakes, and other waterways?

Activities such as dredging, anchoring and pier installation can pose serious safety risks if conducted near these underwater pipelines. Anyone planning marine construction or working in or near a waterway should:

- Contact 811 to identify the presence of submerged pipelines.
- Coordinate with the pipeline operator before beginning work.
- Review local and federal regulations related to waterway access and construction.

Learn more at: MarineSafe811.org





PIPELINE MAPS ENHANCE COMMUNITY SAFETY

Want to know the location of pipelines in your community and the products they transport? Access to pipeline maps differs from state-to-state, but the following resources can assist public officials in requesting maps from pipeline operators and accessing available maps online.

NATIONAL PIPELINE MAPPING SYSTEM



The Pipeline and Hazardous Materials Safety Administration (PHMSA) provides access to maps through the National Pipeline Mapping System (NPMS). Local, state, tribal and federal officials can access detailed maps of hazardous liquid and gas transmission pipelines in their jurisdiction by registering for NPMS's Pipeline Information Management Mapping Application (PIMMA). Register for PIMMA access to view maps and request mapping files at:

https://qrco.de/NPMS_Pipes

PIPELINE ASSOCIATION FOR PUBLIC AWARENESS



The Pipeline Association for Public Awareness offers its more than 300 pipeline and utility operator members the ability to share pipeline location information with local, state and tribal officials online through the Pipelines Nearby and the password-protected PipeVision application. Access Pipelines Nearby at:

https://qrco.de/pipelines_nearby

and Pipe Vision at:

https://qrco.de/PipeVision_Mapping

NATIONAL ASSOCIATION OF PIPELINE SAFETY REPRESENTATIVES

National Association of Pipeline Safety Representatives (NAPSR) provides regulatory oversight for natural gas and gas utility lines in all states, and sometimes hazardous liquids pipelines and gas utility lines in all states.

NAPSR members can help state and local government officials access and request pipeline mapping information for their jurisdiction. Contact your state's NAPSR program manager for assistance requesting pipeline maps and for access to state-specific resources at:

<https://qrco.de/napsr>

STATE ONE CALL CENTERS



The 811 system and state One Call centers are a hub for connecting public works departments, community planners and other local and tribal officials with pipeline location information. Learn more about 811 in your state at:

https://qrco.de/one_call_laws

PIPELINE MAPS & INFORMATION TOOLS



Pipeline maps are available to local emergency and public officials in a variety of online resources. The table below compares features and information available through four different information sources for local public and emergency officials. Pipeline operators are always the best resource for information about their lines in your community.

Information & Features	Public Viewer ¹	PIMMA ¹	PIPEVISION ²	Pipeline Markers ³
Includes evacuation distance guidance			✓	
GIS data files available for request		✓		
Includes operator emergency contact information		✓	✓	✓
Includes operator non-emergency contact information	✓	✓	✓	
Includes pipeline product information	✓	✓	✓	✓
Identifies location of transmission pipelines	✓	✓	✓	✓
Identifies location of distribution mains			✓	✓
Identifies location of gathering pipelines			✓	✓
Identifies location of offshore pipelines	✓	✓		✓
Allows local officials to help operators locate identified sites ⁴ near pipelines in their community		✓	✓	✓
Password-protected access to data		✓	✓	
Data is available for the public	✓			✓

1. Public Viewer and PIMMA are managed by the Department of Transportation's Pipeline and Hazardous Material Safety Administration as part of the National Pipeline Mapping System (NPMS). Information in NPMS is updated annually and limited to transmission pipelines.

2. PipeVision is managed by the Pipeline Association for Public Awareness. PipeVision is limited to data submitted by members of the Association.

3. Pipeline markers indicate the approximate, but not exact location of underground lines. Permanent pipeline markers are located along transmission pipelines, but they may not be located continuously along gathering, distribution or offshore pipelines.

4. "Identified Sites" refers to indoor or outdoor places near a pipeline where a large number of individuals regularly gather (i.e. parks, stadiums, shopping malls, etc.)



WEBINAR

FREE WEBINAR: USING NATURAL GAS METERS DURING GAS EMERGENCIES

Learn practical considerations for meter use, situational awareness, key safety reminders, and how professional gas meters can support emergency response efforts.



Who Should Attend: Fire, EMS, Emergency Management, Law Enforcement, Hazmat Teams, and other emergency response personnel.

Public Officials: Please Share with emergency responders in your community!

October 28, 2026

12 PM MT - FREE (Virtual)

REGISTER:
PIPELINEAWARENESS.ORG/WEBINARS

THE LEXINGTON INCIDENT: CROSS-BORE RISK AND LESSONS LEARNED FOR PUBLIC OFFICIALS



On April 9, 2025

a natural gas explosion occurred in Lexington, Missouri following an underground utility strike during a fiber-optic installation project. The blast destroyed multiple homes, claimed the life of a five-year-old child, and left others with life-altering injuries.

This tragedy is a sobering reminder that underground incidents do not stop at the job site. When something goes wrong below ground, the consequences can extend directly into homes, neighborhoods, and communities. For public officials, incidents like this are not distant industry events—they are deeply connected to the decisions made at the local level.

Why This Matters to Public Officials

While excavation work may be performed by contractors or utility companies, the conditions that influence safety are often shaped by local leadership.

Decisions related to planning, permitting, infrastructure coordination, and public works all play a role in:

- Identifying and reducing risk before work begins
- Ensuring safe practices are followed during projects
- Supporting effective response when incidents occur

Even when you are not directly involved in excavation, your role helps shape whether risks are minimized—or unintentionally increased.



What Happened (Preliminary)

Available information indicates that a natural gas distribution line was compromised during horizontal directional drilling (HDD). Following the strike, gas migrated through surrounding soil and along a path of least resistance, eventually entering a nearby residence through existing utility pathways.

Gas accumulated until ignition triggered a catastrophic explosion. Investigators are reviewing locating practices, verification methods, and post-strike response—including whether subsurface conflicts such as cross-bores contributed to the outcome.

Cross-Bores: A Known, High-Consequence Risk

Cross-bores occur when one utility is unintentionally installed through another—often a gas line intersecting a sewer or service lateral. These conditions can remain undetected for years, becoming dangerous only when disturbed or when gas migrates into confined spaces.

Because they are hidden and often undocumented, cross-bores represent one of the most serious risks in underground work.

**Share resources with your
community:**



https://qrco.de/Public_Official

Key Lessons from the Incident & What This Means for Public Officials

The following lessons are not limited to contractors or operators—they have direct implications for local decision-making....

1 Trenchless Does Not Mean Low Risk

While trenchless methods reduce surface disruption, they increase subsurface uncertainty. When bore paths intersect undocumented or inaccurately mapped utilities, the risk of cross bores rises significantly.

2 Locates Are Indicators, Not Protection

Standard locating practices may not identify private laterals, depth variations, or historical installations. Paint marks show approximate position—not clearance.

3 Blind Boring Magnifies Consequences

Boring without full visibility—especially beneath structures or in shared corridors—can leave hazards in place long after installation is complete.

4 A Strike Is Not the End of the Event

In gas incidents, the most severe consequences often occur after the initial strike, as gas migrates through soil or existing pathways.

5 Cross-Bore Awareness Must Be Field-Level Knowledge

These risks are not theoretical—they require ongoing awareness, training, and verification practices in the field.

As a public official, your role includes:

- **Asking the right questions** on projects involving trenchless or high-risk excavation methods
- **Ensuring safe practices are reinforced**, not assumed, during permitting and project approval
- **Recognizing that markings alone are not sufficient** for risk prevention
- **Being mindful of timelines and development pressures** that may unintentionally compress safety measures

Your influence helps ensure that safety is considered early—not just after something goes wrong.

The Bottom Line

The Lexington incident reinforces a fundamental truth of underground work: **what we cannot see often poses the greatest risk.**

Cross-bores, gas migration, and subsurface conflicts demand disciplined verification, thoughtful planning, and strong communication.

Public safety is not only shaped in the field—it is shaped through leadership. And safer communities are built when safety is considered in every decision, at every level.

EXCAVATION SAFETY

TIPS FOR PUBLIC WORKS, MUNICIPAL & COUNTY OFFICIALS

Public Works and other municipal excavation activities often require coordination with pipeline and utility companies. Encourage work crews to adopt the following critical safety steps when excavating near underground lines.



Always Call or Click 811 Before Digging

Call or click 811 or contact your state's One Call center at least 2-3 days before digging, grating or excavating in compliance with state law to request a "dig ticket." For large or unusual projects, request planning, design and meet tickets before starting your project. These tickets are available in most states and can be requested during the project planning phase.



Pre-Mark the Area & Wait for Operators to Mark Lines

Identify the excavation area for line locators by pre-marking or white-lining using white marking paint. Wait to start your job until all pipeline and utility operators mark the location of their lines or indicate "all clear."



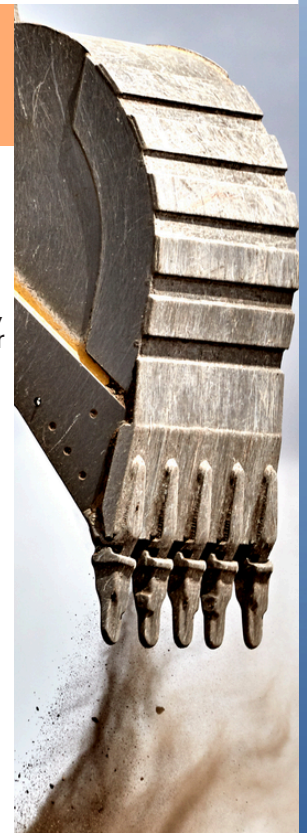
Dig with Care & Backfill Properly

Dig with care using appropriate hand and vacuum-digging tools near pipelines and utility lines. Backhoes, augers and other mechanical equipment should not be used to expose underground lines. Maintain temporary flags, stakes or paint marks until you have finished digging. If you expose a pipeline, a pipeline or utility representative will typically request to be onsite to inspect the pipe before you backfill and compact the soil.



Report Damage or Leaks

If a pipeline is dented, scraped or damaged while digging or you suspect a pipeline leak, immediately leave the area and warn others to stay away. From a safe location, call 9-1-1 and notify the pipeline or utility owner. In some states, you may be required to also notify the One Call center. Do not operate mechanical equipment in an area where you suspect a leak.



Watch and share our excavation safety training videos!

https://qrco.de/Training_Video

Potential Hazards Associated with Pipeline and Pipeline Facility Leaks

Natural Gas



- A gas that is colorless and lighter than air
- Odorant may be added (distribution pipelines only; transmission pipelines are generally not odorized)
- Flammable and easily ignited
- Will displace oxygen and can cause asphyxiation or dizziness
- May produce irritating and/or toxic gasses

Petroleum Gas



- A liquefied petroleum gas (LPG, e.g. propane/butane) that is colorless, tasteless, and heavier than air
- Odorant may be added
- 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 lighter than air
- Will displace oxygen and can cause asphyxiation
- May cause burns, injury, frostbite
- Toxic and may be fatal
- Flammable
- Runoff may cause pollution

Carbon Dioxide



- A heavy gas that is colorless, odorless, tasteless, and heavier than air
- Not flammable
- Will displace oxygen and can cause asphyxiation and dizziness
- May cause burns, injury, frostbite

Ethanol



- A colorless liquid
- Flammable and easily ignited
- May cause burns or injury
- 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



- Crude oil containing hydrogen sulfide (H₂S), a toxic and flammable contaminant; recognizable by a rotten egg or burnt match odor
- Flammable and easily ignited
- Toxic and may be fatal
- Extremely irritating, toxic and corrosive
- Runoff may cause pollution

Sour Gas



- Natural gas containing hydrogen sulfide (H₂S), a toxic and flammable contaminant; recognizable by a rotten egg or burnt match odor
- 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



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



- ✓ **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.
- ✓ **Warn others to stay away from the leak.**

- ✗ **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 Responders

Pipeline operators strive to promote community safety and emergency preparedness to help prevent digging accidents. Resources for emergency responders are available on our website at pipelineawareness.org/training.



WHAT IS YOUR DUTY AS A PUBLIC OFFICIAL WHEN IT COMES TO KEEPING THE COMMUNITY SAFE

By Scott Phillips, Director of Damage Prevention, Mississippi 811 Inc.
Over 35 Years in Municipal Service as a Deputy Fire Chief and Mayor

As public officials, we are entrusted with the safety and well-being of our communities—a responsibility that goes beyond policy-making and budget oversight. It is a duty grounded in leadership, foresight, and a commitment to proactive action.

When it comes to pipeline safety, that responsibility is not abstract—it shows up in how informed, prepared, and engaged you are.

Federal guidance from the Pipeline and Hazardous Materials Safety Administration identifies public officials as key partners in ensuring communities understand pipeline risks and know how to respond when something goes wrong.

Your Role Is to Stay Informed and Connected

You are not expected to be a pipeline expert. But you are asked to:

- Be aware of pipelines and related infrastructure in your community
- Understand the types of risks they may present
- Stay connected with operators and emergency responders

This awareness directly impacts decisions around planning, permitting, and public works—and helps prevent risk from being unintentionally introduced.

Prevention Starts with Awareness

Many pipeline incidents are preventable. The most common cause is excavation damage. Public officials play a role in prevention by:

- Reinforcing safe digging practices like calling 811
- Supporting policies and messaging that reduce risk
- Ensuring departments and contractors follow safe excavation procedures

Preparedness Happens Before the Emergency

Strong response doesn't begin when something goes wrong—it begins with preparation.

That includes:

- Coordinating with emergency responders and pipeline operators
- Making sure response plans consider pipeline incidents
- Participating in drills, exercises, and planning conversations

When these relationships and plans are in place, communities respond faster and more effectively.

Quick Safety Checklist for Cities & Counties

1. Call 811 before any excavation begins
2. Require pre-job safety meetings for city workers and contractors
3. Ensure all facilities on the One Call ticket are located and marked
4. Stop work if a utility is not marked or unclear—call 811 and/or the operator
5. Provide basic pipeline awareness training to all field staff
6. Require PPE and site-specific safety plans on all excavation sites
7. Make utility maps accessible to public works teams and emergency responders



WHAT IS YOUR DUTY AS A PUBLIC OFFICIAL WHEN IT COMES TO KEEPING THE COMMUNITY SAFE

...Continued from pg. 10

Communication Builds Safer Communities

Clear, consistent communication is one of the most powerful tools public officials have.

You can strengthen safety by:

- Sharing pipeline safety information with residents and businesses (See our Pipelines in Your Community handout in this newsletter)
- Supporting public awareness campaigns
- Reinforcing key messages before an incident occurs

When people know what to look for and what to do, outcomes improve.

Your Decisions Shape Long-Term Risk

Every decision related to land use, development, and infrastructure has safety implications. Being informed about pipeline locations and risks helps ensure that growth does not unintentionally increase exposure.



The Bottom Line

Public safety is not just about response—it's about prevention, preparation, and communication. As a public official, your role is to stay informed, stay engaged, and ensure safety is part of everyday decision-making. Because safer communities don't happen by chance—they are led that way.



DOWNLOAD:

Critical Information for Emergency Preparedness:
https://qrco.de/critical_information



Actions Public Officials Can Take This Quarter to Strengthen Pipeline Safety

1. Connect with Your Local Pipeline Operator

Reach out and establish (or re-establish) a point of contact.

- Request a briefing on pipeline locations and products in your area
- Ask about current public awareness efforts and utilize the resources at https://qrco.de/public_official
- Ensure your team knows who to call with questions

2. Review and Strengthen Emergency Preparedness

Make sure pipeline incidents are part of your community's planning.

- Confirm emergency response plans include pipeline scenarios
- Coordinate with fire, police, and emergency management teams
- Participate in or support at least one drill, tabletop, or planning discussion
- Refer emergency responders to the training resources at https://qrco.de/emergency_response

3. Reinforce Safe Digging and Public Awareness Messaging

Use your platform to reduce preventable incidents.

- Promote 811 and safe excavation practices in communications
- Share pipeline safety information with residents, businesses, and contractors
- Integrate safety reminders into permitting, zoning, or public works processes

Free pipeline emergency training is available at: pipelineawareness.org/training

PROTECTING UNDERGROUND INFRASTRUCTURE SAFETY CHECKLIST



Permit applicants and public works departments planning to dig, grate, clear ditches or operate heavy equipment on or near the location of underground pipelines or utility lines are encouraged to use this safety checklist:

- ☒ **Plan your activity.** Identify the location of your work, making sure to look for pipeline markers and other indications that an underground pipeline or utility line is in the area. Utilize Subsurface Utility Engineering (SUE) services, submit a design or planning ticket through 811, or refer to publicly available maps such as the National Pipeline Mapping System (NPMS) to obtain information about underground pipelines and utilities near your worksite.
- ☐ **Contact the pipeline or utility operator.** Operators each manage their own internal processes and guidelines for approving projects within or crossing their right-of-way
- ☐ **Make a locate request.** In alignment with state laws, contact 811 at least two or three working days before your project starts to request that pipeline and utility operators locate and mark the location of underground lines.
- ☐ **Be on site** when underground facilities are being located to ask any questions you have regarding temporary markings/flags or how to safely dig within the tolerance zone.
- ☐ **Review employee and contractor safety procedures.** Confirm that anyone hired to do work on your behalf, including contractors, is aware of risks associated with digging near underground lines and appropriate safe digging procedures.
- ☐ **Follow all instructions and guidance** provided by pipeline and utility operators including hand digging or vacuum excavating the pipe before mechanical excavations particularly in or near the tolerance zone. Notify the pipeline or utility operator prior to backfilling. Pipeline representatives may need to be onsite during backfill.
- ☐ **Immediately notify the pipeline or utility operator** if you damage, scrape, crack or dent a pipe or its coating. From a safe place, immediately call 911 and the operator if the pipeline is damaged and could be leaking. Notify 811 about the damage according to your state law.



Download and share this checklist!
https://qrco.de/Dig_Checklist

EXCAVATION SAFETY TRAINING VIDEO

Every dig impacts more than dirt. Share this video with your employees, contractors, and anyone in your community that digs.



Working safely near pipelines:

WHAT EVERY EXCAVATOR MUST KNOW



https://qrco.de/Training_Video

Watch the video and complete the quiz for a chance to win a \$500 gift card!

24/7 UTILITY SAFETY



Pipeline Association
for Public Awareness
pipelineawareness.org/247safety



Aerial Patrols

Operators 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



Click
Before
You Dig

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



**SHARE WITH YOUR
COMMUNITY**

PIPELINES IN YOUR COMMUNITY

Gathering, transmission and distribution pipeline networks safely transport natural gas, gasoline, crude oil and other energy products across the country and to homes and businesses in your community. Gathering lines transport natural gas and other energy products from production sites to processing facilities and connect to transmission lines that carry energy products from one part of the state to another and across the country. Distribution lines are located throughout communities and connect to homes and businesses.



PIPELINE MAPS

Use the National Pipeline Mapping System, npms.phmsa.dot.gov/ or Pipelines Nearby pipelinesnearby.org to learn more about the pipelines in your community. Pipeline and utility operators also maintain maps of their pipeline system.



PIPELINE MARKERS & METERS

Pipeline markers and gas meters identify the general location of underground pipelines. Markers include the pipeline operator's name, emergency number and product transported. Some but not all distribution lines are identified by pipeline marker signs including curb markers. Gathering lines are generally located in rural areas and may or may not be identified with permanent pipeline markers.



SUSPECT A PIPELINE LEAK?

If you suspect a pipeline leak, leave the area, call 9-1-1 and notify the pipeline or utility operator. Do not operate any device that might cause a spark near a pipeline leak.

Signs of a leak can include:

- Smell of "rotten eggs" (if odorant is added) or a chemical smell
- Hissing, whistling, or roaring sound near pipeline or gas appliance
- Sheen on water or continuous bubbling, dying vegetation, dirt spraying in air



KEEPING PIPELINES SAFE

Pipeline and utility operators protect underground lines and host communities through employee training, regular maintenance and testing, corrosion protection, system monitoring, cybersecurity protocols and inspections to check for leaks or other damage. Operators also conduct regular maintenance activities within the pipeline easement, including mowing, trimming and tree removal. Pipeline Integrity Management plans are available for review and outline an operator's ongoing safety and maintenance activities.



EMERGENCY RESPONSE COORDINATION

A pipeline leak can ignite or contaminate water or soil. While first responders secure the area, assess the scene and respond to immediate medical and safety needs, pipeline and utility personnel will restrict the flow of gas or other products and will take action to minimize the impact of the emergency and protect the public. Public safety personnel should not attempt to operate pipeline valves.



ALWAYS CONTACT 811 BEFORE DIGGING

Call or click 811 to request a "dig ticket" at least 2-3 days before starting work in compliance with state law. Wait until all lines are marked and dig with care using non-mechanical tools near underground lines. If a pipeline is damaged, immediately report the damage from a safe location. For more information, visit clickbeforeyoudig.com or call811.com.



This page is available in English, Vietnamese, Mandarin Chinese, Spanish, Russian, Tagalog, and Tongan.
https://qrco.de/pipelines_community



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.
- Pipeline markers **are not** typically used to identify the location of natural gas service lines that connect directly to homes or businesses.
- 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**.

REQUEST INFO

We want to hear from you. Contact us online or by email to request additional information from pipeline companies. Your request will be forwarded to all pipeline member companies operating facilities in your state/county.

ONLINE

pipelineawareness.org/request-info

EMAIL

admin@pipelineawareness.info



FEEDBACK

Complete a short survey and tell us what you found useful in this publication and any topics you'd like us to include in the future.
https://qrco.de/Survey_2026



Pipeline Association
for Public Awareness

SAFETY TOOLKIT



Share social media posts to educate your community on how to live and work safely near critical pipelines in your community:
https://qrco.de/social_material



SAFETY TIP:

Natural gas detectors can provide an added layer of protection for homes and businesses by alerting occupants to the presence of natural gas in the air. Help raise awareness in your community by encouraging residents to install natural gas detectors.

ONE CALL LAW UPDATES

One Call laws outline requirements for notification systems and set standards for locating and marking pipelines and underground facilities. This guide, produced by the Pipeline Association for Public Awareness, includes updates on laws in 25 states.

https://qrco.de/state_law_changes



PRE-EXCAVATION CHECKLIST

Download in **English** or **Spanish** for projects near pipelines.



English:
https://qrco.de/English_Checklist



Spanish:
https://qrco.de/SPA_Checklist

...continued from cover

3. Identify hazards.

Pipelines are regulated by the Pipeline & Hazardous Materials Safety Administration (PHMSA), which is under the U.S. Department of Transportation umbrella. Those regulations require that pipelines transporting gases and highly volatile liquids be marked with signage that contains the following information:

- Product being transported
- Name of the operator
- Telephone number that is staffed 24/7 by a human being

Locate pipeline markers and obtain information from persons at the scene. Responders should also refer to the DOT Emergency Response Guidebook.

Contact the operator and relay as much information as you can regarding the current status of the incident. Obviously, the precise location of the pipeline release is critical.

4. Assess the situation.

Next, conduct a thorough scene size-up of the incident, including **identification of hazards** such as:

- Ignition sources
- Pathways for product migration
- Life safety exposures

Consider:

- Is there a fire, spill or leak?
- What are the weather conditions?
- What is the terrain like?
- Who and what is at risk?
- What resources (human and equipment) are required?



Of primary importance in the early stages of a pipeline incident is to avoid the trap of tunnel vision. Far too often we focus on the immediate area of an incident when conducting our scene size-up and hazard assessment. There have been instances where first responders have been solely focused on a structure with an inside gas leak or a directional drill impact into a pipeline and fail to recognize that product is migrating and will eventually find an ignition source or enter a body of water.

5. Obtain assistance from trained personnel.

Pipeline operators will dispatch personnel as soon as they are notified of an incident. Those operators that have supervisory control and data acquisition (SCADA) systems may identify decreases in pressure parameters and initiate remote isolation of the affected pipeline, if possible.

Understand that pipeline operator personnel response times will vary. By maintaining communications with the pipeline operator via their emergency phone number, you may be able to be informed of estimated time of arrival of personnel.

Do not operate any pipeline valves upstream of a single residential meter at a house. Operating system valves can create a very dangerous situation if done incorrectly. Isolate the area and wait on the arrival of trained and qualified pipeline operations personnel.

Before an incident occurs, make sure you are aware of the pipelines located in your jurisdiction and work with operators to enhance planning and response. Emergency responders should also become familiar with the DOT Emergency Response Guidebook (ERG), which provides critical guidance for hazardous materials and pipeline emergencies, including protective actions and initial response considerations.



DOWNLOAD:

Access the DOT ERG and other training resources:
https://qrco.de/ER_Training