

# pipeline awareness

<a href="#">Safety Information for ▶</a>	<a href="#">Local Leaders</a> 	<a href="#">Community Planning</a> 	<a href="#">Emergency Management</a> 
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Clark County Fire Department personnel practice responding to a natural gas pipeline leak using water to disperse gas vapors and reduce static electricity. Fire, law enforcement, paramedics and gas company personnel participate in joint training exercises at a Southwest Gas training facility in Henderson, Nevada. Similar facilities across the United States provide training opportunities for pipeline operators and local responders. Photo Credit: Southwest Gas

## Joint Training Improves Emergency Preparedness

### PIPELINE OPERATORS OPEN DOORS TO TRAINING FACILITIES

**T**wo firefighters carefully approach the small house. A police officer and gas company personnel are nearby. A gas line connected to the home is leaking, and each of these first responders is forced to make split-second decisions that impact public safety.

The leak at this home is part of a joint training exercise at a special facility managed by the local gas company. Rows of small homes, miniature apartment buildings and fully functioning gas, water and electric systems allow first responders and utility personnel to train together at facilities like this one across the United States.

“Training sessions over the last several years have helped us share our standard operating procedures with local fire departments,” says Tom Anderson, senior manager, Gas Operations at Xcel Energy. “When we train together, we are better coordinated when we respond to an actual emergency,” he adds.

» CONTINUE READING ON PAGE 16

Register for FREE webinars at [pipelineawareness.org/webinars](http://pipelineawareness.org/webinars).

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# Connected

**B**elow the ground, a network of 2.8 million miles of gathering, transmission and distribution pipelines transport the energy that more than 328 million Americans and businesses use every day.

For more than a decade, this publication has served as a trusted information resource for local public officials and has facilitated increased pipeline awareness and communication across the country. Each issue includes reference information and updates on current topics related to pipeline safety.

Pipeline personnel, local leaders, county emergency managers and local community planners are connected in their individual and coordinated efforts to promote and protect public safety. In this issue, we explore the benefits of coordinated public safety efforts including joint emergency response training, emergency planning and land use planning. We talk with a former county council member from Washington about his efforts to pass local pipeline safety ordinances (p. 13) and with a non-profit organization that helps schools develop pipeline-specific emergency plans (p. 6).

Enjoy this issue!



**Jeff Farrells,**  
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Download an electronic version of this publication at [pipelineawareness.org/newsletter](http://pipelineawareness.org/newsletter).

## 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 [bit.ly/PAPAMembers](http://bit.ly/PAPAMembers).

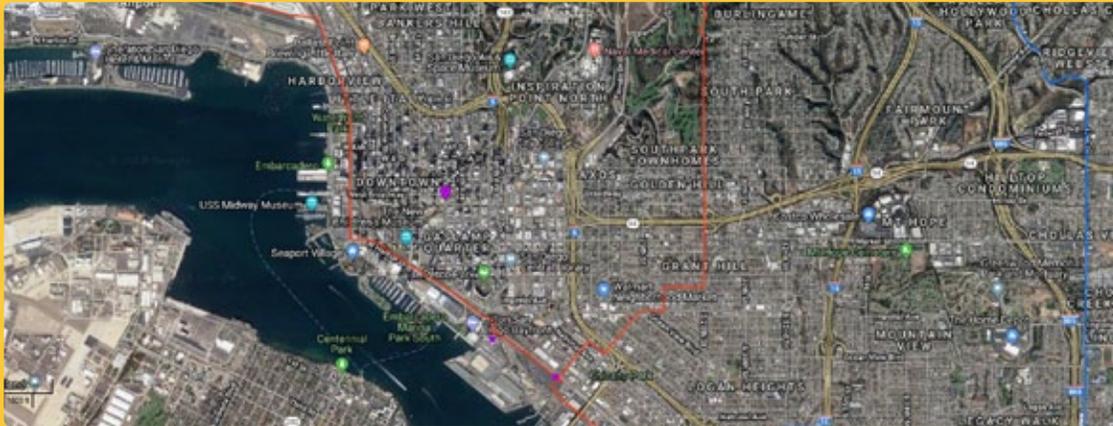
## INTEGRITY MANAGEMENT PLAN

If you have questions regarding how an individual pipeline operator in your jurisdiction inspects and maintains their lines, contact the operator's integrity management department and request an overview of their Integrity Management Plan.

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](http://pipelineawareness.org).



# PIPELINE MAPS



The red line in this image shows the location of a hazardous liquids pipeline in California and its proximity to specific roads, neighborhoods and critical facilities. Photo Credit: PHMSA

It's important to know where pipelines are located in your community. The Pipeline and Hazardous Materials Safety Administration (PHMSA) maintains pipeline maps with annual updates in the National Pipeline Mapping System (NPMS).

Local, state, tribal and federal officials can access more detailed maps showing the location of hazardous liquid and gas transmission pipelines and related facilities in their jurisdiction by registering for access to the password-protected Pipeline Information Management Mapping Application (PIMMA). PIMMA also includes spatial information related to pipeline incidents. PIMMA does not include local gas distribution or gathering pipeline maps.

Government officials can also request files to upload into their own geographic information systems.

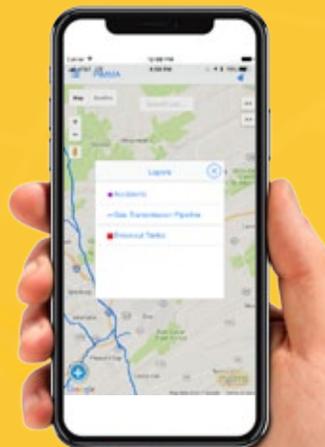
Access PIMMA and other NPMS resources at [bit.ly/PHMSA-NPMS](https://bit.ly/PHMSA-NPMS) or download the PIMMA iPhone app.

## FREE MAPPING WEBINAR

Join your peers for a training webinar led by the National Pipeline Mapping System team.

You'll learn how to:

- Apply for PIMMA access
- View and read online pipeline maps
- Request mapping files to integrate into your mapping system



## SIGN UP FOR PIMMA

Don't have access to maps through PIMMA?

The Pipeline Information Management Mapping Application (PIMMA) provides larger scale maps and additional pipeline attribute information that is not available on the NPMS website's Public Map Viewer. PIMMA is limited to local, state, tribal and federal government officials.

Apply for access at [bit.ly/AccessPIMMA](https://bit.ly/AccessPIMMA).



### DATE

Tuesday, October 13, 2020  
1 - 2 p.m. ET

### REGISTER

[pipelineawareness.org/webinars](https://pipelineawareness.org/webinars)



# Eyes in the Sky

## DRONES EXPAND SAFETY INSPECTIONS



Pipeline and utility companies are developing drone programs using larger drones, like this one operated by SkySkopes, fitted with LiDAR technology to inspect facilities and rights-of-way. Images captured by drone technology can be used to identify encroachments, leaks and changes in topography. Photo Credit: SkySkopes

Pipeline and utility operators are testing drones fitted with cameras, lasers and sensors to enhance leak detection, inspect construction projects, patrol rights-of-way, identify geohazards and quickly respond following natural disasters such as wildfires, floods or tornadoes.

**W**idespread use of unmanned aircraft systems (UAS), like drones, is currently limited for longer flights due to U.S. Federal Aviation Administration (FAA) restrictions prohibiting “beyond-visual-line-of-sight” (BVLOS) flights. However, through a special FAA waiver, Xcel Energy is expanding its use of drones and paving the way for other pipeline and utility operators to do the same.

During BVLOS flights, a drone can fly out of the view of the pilot who monitors and controls the drone and the visual observer who monitors the airspace and the surrounding area. Xcel Energy was initially granted an FAA waiver in 2016 allowing limited BVLOS drone flights in rural areas. The waiver was expanded, and today, the company’s drone program operates in all eight asset states. The company has also tested flights over the city of Grand Forks in North Dakota as part of the FAA’s UAS Integration Pilot Program.

“Drones are part of our proactive efforts to enhance safety, become more efficient and detect changes to our system,” says Eileen Lockhart, UAS program manager at Xcel Energy. “Drones allow us to fly over our lines more frequently, respond quicker to assess the impact of natural disasters and safely inspect aboveground assets.”

Xcel Energy is also using high-resolution imagery, captured during drone flights, to perform highly detailed inspections and enhance system mapping. According to Lockhart, system mapping and visualization from images captured by drones allow the company to use machine learning to detect changes to the system or surrounding environment and quickly respond.

The FAA’s Integration Pilot Program is also expanding drone inspections along transmission pipeline rights-of-way. Last August, the University of Alaska Fairbanks completed a BVLOS drone flight to inspect a 3.87-mile section of the Trans-Alaska Pipeline as part of the program.

According to Cathy Cahill, director of the drone program at the University of Alaska Fairbanks, BVLOS flights are

especially important in Alaska where remote areas often lack roads making it virtually impossible to comply with line-of-site requirements.

Pipeline companies, particularly those with rights-of-way in hard-to-reach areas, are hopeful that pilot programs like those at Xcel Energy will soon allow them to expand the use of drones in right-of-way patrol and inspection programs.



An Xcel Energy technician adjusts a drone before an inspection flight. Photo Credit: Xcel Energy

## PG&E TESTS DRONES WITH SENSORS TO IDENTIFY GAS LEAKS

A group of engineers at Pacific Gas and Electric Company (PG&E) are testing a methane gas sensor that was first developed to help look for life on Mars. The company plans to use it to look for tiny leaks in its natural gas pipelines. It may sound futuristic, but it isn’t science fiction.

The project, which has been in development since 2015, began through a partnership with PG&E, the National Aeronautics and Space Administration (NASA) and the University of California (UC) Merced. PG&E’s engineers fitted a prototype sensor to a quad-copter drone that is able to fly and maneuver into areas that would otherwise be hard to reach in ground-based surveys.

The sensor is 1,000 times more sensitive than most commercially available leak detection devices that gas companies currently use. PG&E is testing the drone and sensor in a simulated neighborhood within a training facility. The company’s research and development group believe the technology has the potential for use across the company’s 70,000-mile service area. “PG&E is continuing to work with our partners to further develop the technology and enhance the software with future commercialization expected within the coming years,” says Stephen Ramos, Engineer with PG&E’s R&D and Innovation team.



A Pacific Gas and Electric Company technician tests a methane gas sensor attached to a small drone. Photo Credit: Pacific Gas and Electric Company

This article is an excerpt of an article originally published in PG&E Currents on April 4, 2017. Reprinted with permission.



“Underground pipelines are often overlooked by schools when assessing risks. We recommend that every school determine the presence of nearby pipelines.”

(Left) A pipeline marker identifies the general location of a pipeline near a school. (Right) The School Pipeline Safety Partnership utilizes aerial maps like this one to discuss the location of a transmission pipeline (in red) adjacent to the school campus and athletic facilities.

# Non-Profit Helps Schools Improve Emergency Planning

Pipeline Awareness spoke with Sheila Caguiat, executive director of the Danielle Dawn Smalley Foundation (DDSF) about pipeline safety preparedness for schools.



The Danielle Dawn Smalley Foundation works with schools located near pipelines to improve emergency planning and preparedness.

**Q** Why does DDSF work with schools?

**A**fter a liquid butane pipeline leak took the life of 17-year-old Danielle Dawn Smalley and her friend, Danielle’s father started the Foundation to improve pipeline safety awareness.

The vehicle the two teens were driving ignited a 15-acre vapor plume in their

rural Texas community in August of 1996, just days before the new school year kicked off. The road where they were driving also served as a bus route. Limited pipeline safety resources existed at the time for schools, bus drivers and students. It was clear from the beginning that the mission of DDSF should include bridging that gap by developing and delivering school-specific pipeline safety programming.

**Q:** What's the most common question you hear from schools?

**A:** Schools commonly ask if their existing emergency plans can apply in the event of a pipeline emergency. Unfortunately, even when a school is aware of the pipeline location, their emergency plans typically lack critical details needed during a pipeline emergency such as the type of product being transported, the operator's name and emergency number and evacuation plans.

When we work with a new school, we identify and connect school and district personnel with local pipeline operators and provide critical details needed to enhance emergency planning.

**Q:** What are the best practices that you recommend to schools and districts?

**A:** Underground pipelines are often overlooked by schools when assessing risks, threats and hazards because they are buried and operate quietly underground. We recommend that every school determine the presence (or confirm absence) of nearby pipelines, gather critical pipeline information (type of product transported, associated hazards and operator contact information) and create a pipeline-specific emergency plan.

Pipeline emergencies are situational, and every campus is unique. A pipeline emergency may necessitate sheltering-in-place or evacuation. The best pipeline-specific emergency plans address both types of response scenarios. They consider obstacles that could potentially make it difficult for the school to evacuate the recommended distance in the opposite direction of the pipeline. They also provide guidance for how ignition sources will be avoided in the alert and response process.

Learn more about the Danielle Dawn Smalley Foundation at [smalleyfnd.org](http://smalleyfnd.org).

## HOW FAR SHOULD YOU EVACUATE?

School pipeline emergencies may require shelter-in-place or evacuation by foot or vehicle as directed by local emergency officials. School officials should collaborate with emergency officials and pipeline operators when developing emergency plans and during a pipeline emergency to determine appropriate actions.

The information below is intended to support the development of evacuation protocols related to a school-pipeline emergency. Distance guidance is based on information published within the Pipeline and Hazardous Materials Safety Administration's Emergency Response Guidebook (ERG).

### Recommended Evacuation Distances for Pipeline Leaks and Releases

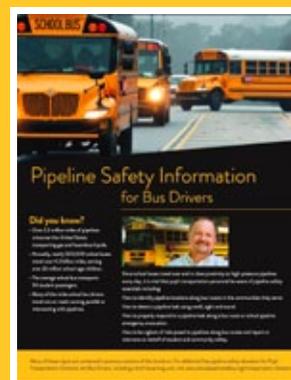
PRODUCT	INITIAL DISTANCE	POTENTIAL DISTANCE FOR A LARGE RELEASE
Natural Gas	300 feet	2640 feet (1/2 mile) or may use the nominal pipeline size in inches x 100 = distance in feet
Petroleum Gas	300 feet	2640 feet (1/2 mile)
Petroleum Liquids	150 feet	1000 feet
Anhydrous Ammonia	330 feet	1000 feet to 2.7 miles depending on conditions
Carbon Dioxide	330 feet	330 feet
Ethanol	150 feet	1000 feet
Hydrogen Gas	300 feet	2640 feet (1/2 mile) or may use the nominal pipeline size in inches x 100 = distance in feet
Sour Gas and Crude Oil (H <sub>2</sub> S)	150 feet	Up to 3.4 miles depending on H <sub>2</sub> S concentrations and site-specific conditions

For more information regarding product characteristics, indications of leak and recommended response actions refer to pages 8-9.

## RESOURCES FOR SCHOOLS

Watch, download, print and share multi-media resources for school administrators and bus drivers provided by the School Pipeline Safety Partnership at [schoolpipelinesafety.org](http://schoolpipelinesafety.org).

The School Pipeline Safety Partnership is a collaborative effort involving the Pipeline Association for Public Awareness, the Danielle Dawn Smalley Foundation, pipeline operators and school officials across the United States who are dedicated to school pipeline safety.





# KNOW THE HAZARDS

## PRODUCTS AND FACILITIES SAFETY INFORMATION FOR PUBLIC OFFICIALS

### NATURAL GAS

is a naturally occurring resource formed millions of years ago because of heat and pressure acting on decayed organic material. It is extracted from wells and transported through gathering pipelines to processing facilities. From these facilities, it is transported through transmission pipelines to distribution pipeline systems. The main ingredient in natural gas is methane (approximately 94 percent).

Natural gas is odorless, colorless, tasteless and nontoxic in its natural state. An odorant (called mercaptan) is normally added when it is delivered to a distribution system. At ambient temperatures, natural gas remains lighter than air. However, it can be compressed (CNG) under high pressure to make it convenient for use in other applications or liquefied (LNG) under extremely cold temperatures (-260° F) to facilitate transportation.

### PETROLEUM GAS

is a mixture of gaseous hydrocarbons, primarily propane, butane and ethane. These products are commonly used for cooking, heating and other industrial applications. They are easily liquefied under pressure and are often stored and transported in portable containers labeled as Liquefied Petroleum Gas (LPG). When transported in transmission pipelines they may also be identified as Highly Volatile Liquids (HVLs) or Natural Gas Liquids (NGLs). Vaporized LPG may also be found in smaller gas distribution systems. Typically, LPG is a tasteless, colorless and odorless gas. When

transported via transmission pipelines it normally will not have odorant added. Odorant is added when LPG is offloaded to a distribution pipeline system or transport tanks to facilitate leak detection. Ethylene and propylene do have a faint natural odor like petroleum.

### PETROLEUM LIQUIDS

is a broad term covering many products, including: crude oil, gasoline, diesel fuel, aviation gasoline, jet fuel, fuel oil, kerosene, naphtha, xylene and other refined products. Crude oil is unrefined petroleum that is extracted from beneath the Earth's surface through wells. As it comes from the well, crude oil contains a mixture of oil, gas, water and other impurities, such as metallic compounds and sulfur. Refinement of crude oil produces petroleum products that we use every day, such as motor oils and gasoline. Crude oil is transported from wells to refineries through gathering or transmission pipelines. Refined petroleum products are transported in transmission pipelines to rail or truck terminals for distribution to consumers. Odorant is not added to these products because they have a natural odor.

### ANHYDROUS AMMONIA

is the liquefied form of pure ammonia gas. It is a colorless gas or liquid with an extremely pungent odor. It is normally transported through transmission pipelines and is used primarily as an agricultural fertilizer or industrial refrigerant.

### CARBON DIOXIDE

is a heavy gas that is normally transported in transmission pipelines as a compressed fluid. It is a naturally occurring, colorless, odorless and tasteless gas used in the petroleum industry. Under normal conditions, carbon dioxide is stable, inert and nontoxic. However, it can act as an asphyxiant.

### ETHANOL

(also called ethyl alcohol) is a colorless liquid that is widely used as an additive to automotive gasoline. It may be transported in buried transmission pipelines. Ethanol has a natural odor similar to gasoline and will mix easily with water.

### HYDROGEN GAS

is commonly produced from the steam reformation of natural gas. It is frequently used near its production site, with the two main uses being petrochemical processing and ammonia production. Hydrogen is a flammable gas that is colorless, odorless and lighter than air. It is nontoxic, but can act as an asphyxiant.

### "SOUR" CRUDE OIL & "SOUR" GAS

refer to products containing high concentrations of sulfur and hydrogen sulfide. Products containing little or no sulfur are often referred to as "sweet." Hydrogen sulfide (H<sub>2</sub>S) is a toxic, corrosive contaminant found in natural gas and crude oil. It has an odor like the smell of rotten eggs or a burnt match. Exposure to relatively low levels of hydrogen sulfide (500 ppm) can be fatal.

# LEAK, HAZARD & EMERGENCY RESPONSE INFORMATION

## INDICATIONS OF A LEAK

	NATURAL GAS	PETROLEUM GAS	PETROLEUM LIQUIDS	ANHYDROUS AMMONIA	CARBON DIOXIDE	ETHANOL	HYDROGEN GAS	SOUR CRUDE OIL (H <sub>2</sub> S)	SOUR GAS (H <sub>2</sub> S)
<b>SEE</b> – liquid pooling on the ground			●			●		●	
<b>SEE</b> – a white vapor cloud that may look like smoke		●		●					
<b>SEE</b> – fire coming out of or on top of the ground	●	●				●		●	
<b>SEE</b> – dirt blowing from a hole in the ground	●	●		●	●	●		●	
<b>SEE</b> – a sheen on the surface of water		●	●				●		
<b>SEE</b> – an area of frozen ground in the summer	●	●			●	●		●	
<b>SEE</b> – an unusual area of melted snow in the winter	●	●			●	●		●	
<b>SEE</b> – an area of dead vegetation	●	●	●			●	●	●	●
<b>SEE</b> – bubbling in pools of water	●	●			●	●		●	●
<b>HEAR</b> – a loud roaring sound like a jet engine	●	●						●	
<b>HEAR</b> – a hissing or whistling noise	●	●		●	●	●		●	●
<b>SMELL</b> – an odor like rotten eggs or a burnt match	1	1					●	●	
<b>SMELL</b> – an odor like petroleum liquids or gasoline		●	●			●	●		
<b>SMELL</b> – an irritating and pungent odor				●			●	●	

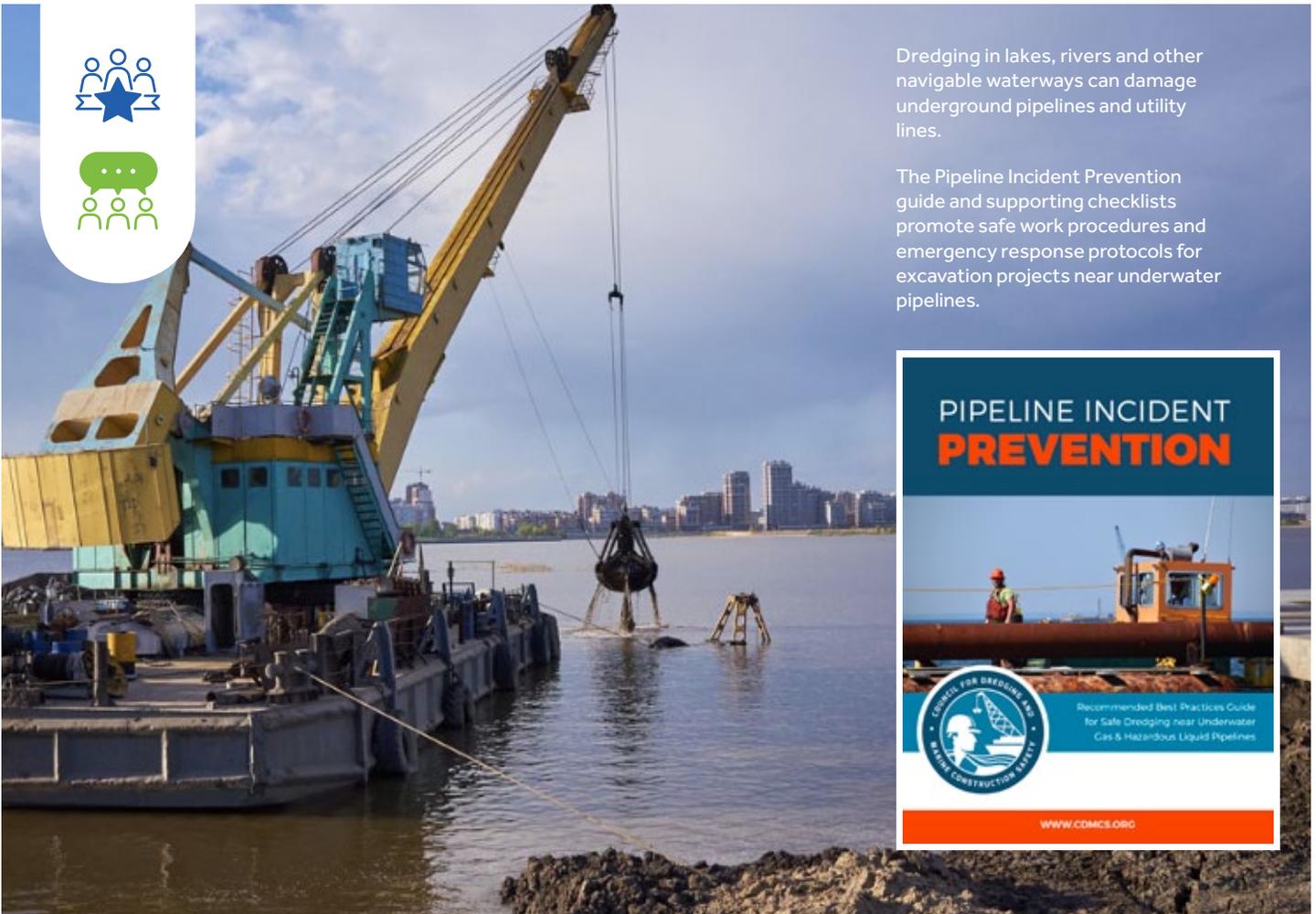
## HAZARDS OF A RELEASE

Highly flammable and easily ignited by heat or sparks	●	●	●			●	●	●	●
Will displace oxygen and can cause asphyxiation	●	●		●	●		●		●
Vapors are heavier than air and will collect in low areas		●	●	●	●	●		●	●
Contact with skin may cause burns, injury or frostbite		●	●	●	●	●		●	●
Initial odor may be irritating and deaden the sense of smell							●	●	
Toxic and may be fatal if inhaled or absorbed through skin				●			●	●	
Vapors are extremely irritating and corrosive				●			●	●	
Fire may produce irritating and/or toxic gases	●	●	●	●		●	●	●	●
Runoff may cause pollution			●	●		●		●	
Vapors may form an explosive mixture with air	●	●	●			●	●	●	●
Vapors may cause dizziness or asphyxiation without warning	1	1			●		●		
Is lighter than air and can migrate into enclosed spaces	●						●		

## EMERGENCY RESPONSE

Avoid any action that may create a spark	●	●	●			●	●	●	●
Do NOT start vehicles, switch lights or hang up phones	●	●	●			●	●	●	●
Evacuate the area on foot in an upwind and/or uphill direction	●	●	●	●	●	●	●	●	●
Alert others to evacuate the area and keep people away	●	●	●	●	●	●	●	●	●
From a safe location, call 911 to report the emergency	●	●	●	●	●	●	●	●	●
Call the pipeline operator and report the event	●	●	●	●	●	●	●	●	●
Wait for emergency responders to arrive	●	●	●	●	●	●	●	●	●
Do NOT attempt to close any pipeline valves	●	●	●	●	●	●	●	●	●
Take shelter inside a building and close all windows				2	2		2	2	

**Note (1)** The majority of these products are naturally odorless and only certain pipeline systems may be odorized.  
**Note (2)** Sheltering in place is an alternative to evacuation when the products are toxic or the risk of fire is very low.



Dredging in lakes, rivers and other navigable waterways can damage underground pipelines and utility lines.

The Pipeline Incident Prevention guide and supporting checklists promote safe work procedures and emergency response protocols for excavation projects near underwater pipelines.

# Underwater Damage Prevention

## TIPS FOR WORKING SAFELY NEAR SUBMERGED LINES

More than 35,000 miles of underwater pipeline and thousands of additional miles of utility lines cross through the Gulf Coast alone.

In response to increased dredging and recent accidents involving underwater lines, dredging contractors, pipeline operators and a variety of state and federal government agencies worked collaboratively to develop the Pipeline Incident Prevention best practice guide.

The guide and supporting checklists, published by the Council for Dredging and Marine Construction Safety, address pipeline safety, damage prevention and recommended emergency response protocols. The best practice guide also includes a complete list of federal,

regional and state regulatory agency points of contact.

“The Pipeline Incident Prevention guide does not eliminate the challenges with working around underwater pipelines, but it does help contractors navigate around them and reduce risk,” says Michael Gerhardt, managing director for the Council for Dredging and Marine Construction Safety.

The collaborative initiative brought dredging companies and pipeline operators together to develop mutual

best practices for preventing accidents with input from the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration, the Pipeline and Hazardous Materials Safety Administration and various state agencies.

Access the Pipeline Incident Prevention best practice guide and checklists at [bit.ly/Underwater-PIP](https://bit.ly/Underwater-PIP). For more safety resources including online training, visit the Coastal and Marine Operators website at [camogroup.org](https://www.camogroup.org).

# PROTECTING UNDERGROUND INFRASTRUCTURE

## FOUR WAYS TO PREVENT DAMAGE DURING COUNTY & MUNICIPAL PROJECTS



Temporary markings identify the location of an underground gas pipeline. Markings, like this one, communicate important information needed to work safely near underground infrastructure.

**A**ccording to data published by the Common Ground Alliance (CGA), work crews damaged gas utility lines on average 58 times per day in 2018 while repairing or replacing county, municipal or rural water and sewage systems.

Here are four things local official can do to prevent damage to underground infrastructure during municipal and county projects:

### 1. Require a One Call ticket for every job

Even if your agency is exempt from state One Call laws, call 811 two or three days before your project starts to notify pipeline and utility operators. Wait until they mark the location of underground lines before starting work. If you've hired a contractor, verify that they have a valid One Call ticket before starting the job.

### 2. Require consultation meetings

Large-scale or complex projects may require coordination with pipeline or utility operators during planning and

excavation. Contact operators to schedule a consultation meeting before you complete the planning phase of the project.

### 3. Require employee training

Train your employee how to read temporary markings, how to recognize a pipeline leak or damaged electric line and how to respond to stay safe and protect others.

### 4. Require use of hand tools in the tolerance zone

State laws define the tolerance zone on each side of underground lines and typically prohibit the use of mechanical digging equipment with this area. Require use of hand tools or non-mechanical excavation equipment within the tolerance zone.

Additional safe work procedures are outlined in the **CGA Best Practice Guide** available online at [bit.ly/CGA-Best-Practices](https://bit.ly/CGA-Best-Practices).

## STATE ONE CALL LAW UPDATES

State-specific 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 17 states and reference to new bills introduced in Alaska, Florida, Maine, Illinois, Missouri, New York, South Carolina, Washington and Oklahoma. Download the guide at [bit.ly/811-Updates-2020](https://bit.ly/811-Updates-2020).





# Pipelines in Your Community

## WHAT IS THE ROLE OF LOCAL GOVERNMENTS?

Pipeline construction, maintenance and permitting are predominantly regulated by federal and state laws, often leaving local leaders asking what role local governments have with respect to the pipelines in their community.

This article features communities that have implemented land use planning, zoning and other policies focused on local pipeline safety. Each represents a different approach, tailored to the local community.



### BROOKINGS COUNTY, SOUTH DAKOTA

Brookings County officials adopted a local ordinance designed to prevent pipeline damage and implement risk-based land management best practices.

The Brookings County ordinance creates a “Transmission Pipeline Risk Reduction Overlay District” that is identified in the county’s GIS mapping and referenced when reviewing building and zoning permit requests. The ordinance requires consultation meetings and collaborative planning between developers, contractors, landowners and pipeline operators before a zoning or building permit is issued for projects within the overlay district consultation and planning zones. Download a copy of the ordinance at [bit.ly/Brookings-ordinance](http://bit.ly/Brookings-ordinance) and a brochure explaining the requirements at [bit.ly/Brookings-SD-ordinance](http://bit.ly/Brookings-SD-ordinance).



### CHAMPAIGN COUNTY, ILLINOIS

Local officials in Champaign County amended an existing ordinance to define setback

distances for new structures within a “pipeline impact radius” near transmission pipelines. The ordinance defines the “pipeline impact radius” for liquids pipelines at 150 feet and utilizes the definition of potential impact radius included in federal code (49 CFR 192.90) to calculate the area for gas transmission lines.

The ordinance also requires the zoning administrator to notify landowners regarding the existence of a “pipeline impact radius” when they submit a zoning use permit application. Download a copy of the Champaign County ordinance at [bit.ly/Champaign-IL-ordinance](http://bit.ly/Champaign-IL-ordinance).



### KYLE, TEXAS

The City Council in Kyle passed an ordinance in 2019 that includes a range of local requirements related to property restoration and notification to residents, tenants and property owners when new lines are constructed in the city. It also requires noise management plans, emergency response plans, incident reporting, designated emergency contacts, consultation zones and requirements for development adjacent to the pipeline.

Development requirements include setbacks from pipelines or specific design requirements for new structures, particularly those that may require

evacuation assistance such as schools or assisted living facilities. Download a copy of the ordinance at [bit.ly/Kyle-TX-ordinance](http://bit.ly/Kyle-TX-ordinance).



### CHESTER COUNTY, PENNSYLVANIA

Chester County officials, in partnership with a non-profit organization, the Pipeline Safety Coalition, developed and designated a point-of-contact to facilitate communication and required notifications between county departments, federal and state agencies, municipalities, residents and pipeline operators.

Chester County also developed a Pipeline Information Center (PIC) that provides online access to pipeline maps, landowner resources, contact information for pipeline operators, an overview of regulatory agency responsibilities, updates on construction and maintenance projects, a model ordinance tailored for municipalities in Pennsylvania and more. Landowner resources include assistance locating copies of existing pipeline easements.

The PIC was developed through a Technical Assistance Grant from the Pipeline and Hazardous Material Safety Administration. Check out Chester County’s Pipeline Information Center and Pipeline Notification Protocol at [bit.ly/Chester-PA](http://bit.ly/Chester-PA).

For more examples of local ordinances, franchise agreements, reports and white papers for local governments, check out the local government section of the Pipeline Safety Trust website at [bit.ly/PST-ordinances](http://bit.ly/PST-ordinances).

## PEER-TO-PEER: ONE COUNCIL MEMBER'S JOURNEY

Pipeline Awareness spoke with Carl Weimer about the local pipeline safety ordinances implemented during his time on the county council in Whatcom County, Washington, and his current efforts to support other city and county councils.



Carl Weimer is the executive director of the Pipeline Safety Trust and a former county council chairman.

**Q:** Carl, how did local pipeline safety change during the 12 years you spent on the county council?

Perhaps most importantly, we started ongoing dialog within our community about pipeline safety and found ways to balance different needs. For example, the local ordinances we put in place include setbacks. But the setbacks focus specifically on hard-to-evacuate locations such as schools, hospitals, jails and

nursing homes. We found a way to balance public safety and property rights.

**Q:** Why do you believe city and county councils have the responsibility to lead local pipeline safety efforts?

Local governments, led by the city and county councils, play a practical role protecting citizens by establishing policies that can reduce the likelihood and consequences of pipeline accidents.

City and county councils influence how 811 laws are promoted and applied in their community. They determine the local ordinances that outline how permitting and planning decisions are made near pipelines. Councils also approve the budget for emergency responder training, equipment and supplies needed to respond to a pipeline emergency.

## FREE WEBINAR – THE ROLE OF CITY & COUNTY COUNCILS IN PIPELINE SAFETY

Join your peers for a webinar led by Carl Weimer, executive director of the Pipeline Safety Trust. Hear more about how city and county councils around the country are developing policies, ordinances and allocating budget to influence local pipeline safety.



### DATE

Tuesday, October 20, 2020 | 1 - 2 p.m. ET

### REGISTER

[pipelineawareness.org/webinars](http://pipelineawareness.org/webinars)

## PHMSA HELPS COMMUNITIES NAVIGATE SAFETY REGULATIONS

A team of community liaisons working for the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) are helping local communities navigate the network of agencies that enforce community safety, environment protection and pipeline reliability regulations.

PHMSA's community liaisons are located across the country. They help stakeholders access PHMSA's technical expertise, data and technology, and can identify and refer stakeholders to pipeline operators and other agencies as needed.



U.S. Department of Transportation

Pipeline and Hazardous Materials Safety Administration

### Liaisons regularly assist with the following:

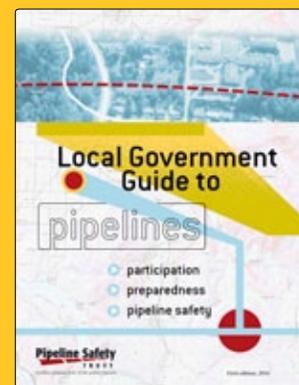
- Pipeline safety policy/programs (damage prevention, public awareness, emergency response, the Pipeline and Informed Planning Alliance, etc.)
- Pipeline stakeholder engagement and outreach
- Pipeline technical services and support (public inquiries, whistleblowers, post incident/accident communication, siting and permit initiatives)
- Questions about pipeline safety in your community

Find the PHMSA community liaison for your state at [bit.ly/Community-Liaisons](http://bit.ly/Community-Liaisons).

## LOCAL GOVERNMENT GUIDE TO PIPELINES

The Local Government Guide to Pipelines, published by the Pipeline Safety Trust, includes information and resources specifically for local officials.

Download an electronic copy at [bit.ly/Govt-Guide](http://bit.ly/Govt-Guide).



# PIPELINE RIGHT-OF-WAY: FIVE THINGS YOU SHOULD KNOW

A pipeline right-of-way is the land governed by an easement agreement between a pipeline operator and a landowner or government agency. The right-of-way allows the operator to access the pipeline for maintenance, emergency response and inspections.

## 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 and zoning officials can help prevent pipeline emergencies by encouraging builders and developers to consider the location of pipeline rights-of-way in their development plans and by encouraging property owners to call 811 and notify pipeline operators before building or digging near the right-of-way.

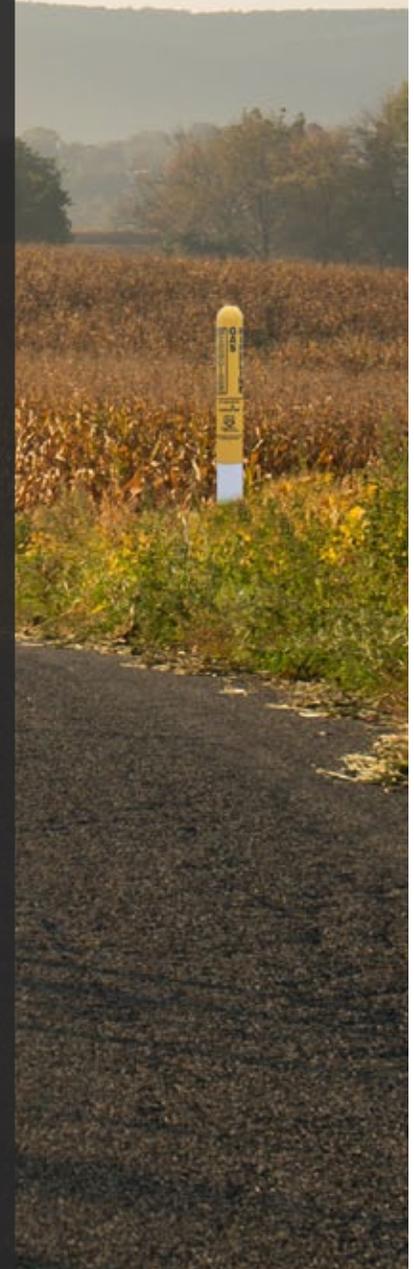
For more information visit [pipa-info.com](http://pipa-info.com).

## 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 call 811 before beginning a project near an existing pipeline right-of-way even if your agency is typically exempt from state One Call requirements.



# REQUEST INFO

Complete the form below to request additional information from pipeline companies. Your request will be forwarded to all pipeline member companies operating facilities in your state/county. **Please print the information clearly in each field. All fields must be completed to process information requests.**

STATE:	COUNTY:
FIRST NAME:	LAST NAME:
CONTACT EMAIL:	
CONTACT PHONE:	
ORGANIZATION NAME:	
REQUEST:	

# PROVIDE FEEDBACK

HOW USEFUL TO YOU IS THE CONTENT CONTAINED IN THIS EDITION?     EXTREMELY     VERY     SOMEWHAT     NOT AT ALL

ADDITIONAL TOPICS I'D LIKE TO SEE INCLUDED IN THE PUBLIC AWARENESS NEWSLETTER ARE:

## THREE WAYS YOU CAN SUBMIT THIS FORM:



### 1. ONLINE

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



### 2. EMAIL

After completing this form, scan or snap a pic and email to [info@pipelineawareness.org](mailto:info@pipelineawareness.org).



### 3. MAIL

Pipeline Association  
for Public Awareness  
16361 Table Mountain Parkway  
Golden, CO 80403



CONTINUED FROM PAGE 1

A recent survey conducted by pipeline and gas utility operators estimates that approximately half of local emergency response agencies have participated in hands-on training or drills to practice pipeline emergency response plans. Pipeline operators are working to increase access to hands-on training by inviting agencies to participate in drills at specialized training facilities, fire schools and along pipeline rights-of-way.

Transmission pipeline operators typically offer joint training opportunities along the right-of-way during full-scale spill response drills or mock line strikes. And, at Brayton Fire Training Field in College Station, TX, firefighters and pipeline personnel can practice hands-on response to a liquid pipeline and storage tank emergency. The

two-day training was developed with technical input and funding from pipeline operators.

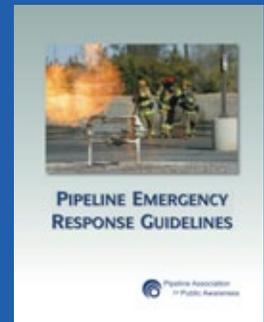
“Training together is critical, particularly when you are responding to a low frequency, high consequence event like a pipeline emergency,” says Joe Kratochvil, training specialist and hazardous material subject matter expert for the International Association

of Fire Chiefs. “Joint training is one of the most effective ways for pipeline personnel and local emergency responders to coordinate mutual response activities,” he emphasizes.

Contact the pipeline operators in your community to learn more about joint training opportunities for local emergency responders.

## EMERGENCY RESPONSE RESOURCES

The Pipeline Association for Public Awareness provides online resources for emergency response and emergency management agencies including online training modules that discuss impact zones, Potential Impact Radius (PIR) and evacuation guidance. Access online training and other resources at [pipelineawareness.org/training](http://pipelineawareness.org/training).



## PIPELINE MARKERS

**P**ipeline markers identify the general location of underground pipelines and utility lines and provide critical safety information to the public. Here are five things you should know about pipeline markers.



1. Markers include the name of the operator, the product in the pipeline or type of utility line and an emergency phone number.
2. Pipeline markers do not identify the exact location, depth or number of pipelines in the area, and pipelines do not always run in a straight line between markers.
3. Always call 811 or the local One Call center before digging to have the location of underground lines marked with temporary markings including stakes, whiskers, flags or paint.
4. Pipeline markers are located along larger transmission pipelines. They may or may not be located continuously along gathering or distribution lines. Pipeline markers are not typically used to identify the location of gas distribution service lines connected to homes and businesses.
5. Pipeline markers are protected by federal law. Intentionally damaging or removing a pipeline marker can result in a fine. Report missing or damaged pipeline markers to the pipeline operator using the number on a nearby marker so they can be replaced.

## TYPES OF PIPELINES

**GATHERING PIPELINES** collect oil and natural gas from production fields. These pipelines are generally found in rural areas and may or may not be identified with permanent pipeline markers.

**TRANSMISSION PIPELINES** carry larger quantities of energy resources like oil, natural gas and other fuels longer distances from production areas to refineries, processing plants, storage facilities and distribution system connection points. Transmission lines can be identified by looking for pipeline marker signs.

**DISTRIBUTION PIPELINES** deliver natural gas to manufacturing, commercial and residential customers to produce electricity, provide heat, cook food and run machines that make products and provide services. Distribution lines may be identified by pipeline marker signs including curb markers.