Pipeline AWARENESS™

lume 11, Issue 1 - Summer, 2016

SAFETY INFORMATION FOR PUBLIC OFFICIALS

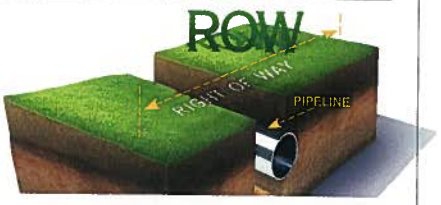
Pipeline Association for Public Awareness

HOW PIPELINES SERVE OUR COMMUNITIES

2

PIPELINE MARKERS 2

3 PIPELINE SAFETY & RIGHT OF WAY PROTECTION



New Federal Regulations for State Damage Prevention Programs and Excavators 5

4

NPMS IMPROVEMENTS

FOR FEDERAL, STATE AND LOCAL GOVERNMENT OFFICIALS & EMERGENCY RESPONDERS

FARMING AND PIPELINES WHAT PUBLIC OFFICIALS NEED TO KNOW

8

Included in this issue:

How Pipelines Serve Our Communities	2
Pipeline Safety & Right of Way Protection	3
What is PIPA	4
New Federal Regulations for State Programs	5
Know the Possible Hazards	6-7
Farming and Pipelines	8
Damage Prevention/811 Keeps Communities Safe	9
Emergency Preparedness	10
Prevention Measures Taken/An Ounce of Prevention	11
How to Get Additional Information	12

6

SAFETY INFORMATION FOR PUBLIC OFFICIALS

Please share this newsletter – an electronic version is available at: http://www.pipelineawareness.org/2016-public-official-newsletter/

HOW PIPELINES SERVE OUR COMMUNITIES

"The invisible highway" refers to America's network of more than 2.6 million miles of pipelines. In addition to being the safest and most efficient way of transporting energy resources, the use of pipeline infrastructure results in less pollution, road congestion and damage to roads.

For example, it would require 1,500 tanker truckloads every day (a load delivered every minute around the clock) to transport the same amount of product as a single pipeline transporting 300,000 barrels of liquid material per day. In the case of natural gas, there is no practical alternative available to transport it, other than through pipelines.

A pipeline system is a network of buried pipelines and aboveground facilities — including storage tanks, pumps and compressor stations — that carry natural gas, crude oil and other petroleum products (such as gasoline, diesel, jet fuel and home heating oil) from areas of production or processing facilities to end consumers.

The size of pipelines varies, ranging from as small as one inch in diameter to as large as 48 inches in diameter.

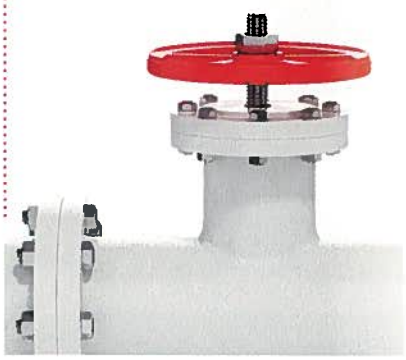
TYPES OF PIPELINES

- **Distribution pipelines** deliver natural gas to manufacturing, commercial and residential customers to produce electricity, provide heat, cook food and help maintain comfort in our lives.
- **Transmission pipelines*** carry larger quantities of energy resources, such as oil and natural gas, longer distances, as these resources are not always produced near where they are refined or consumed.
- **Gathering pipelines** collect oil and natural gas from production areas. These pipelines are generally located in rural areas.

The general location of all transmission pipelines can be viewed in the National Pipeline Mapping System at* **www.npms.phmsa.dot.gov

PIPELINES DELIVER PRODUCTS THAT...

- Heat homes
- Dry agricultural crops
- Supply power generation facilities
- Are ingredients in plastics and pharmaceuticals
- Support military exercises and initiatives
- Fuel planes, cars and truck transportation



PIPELINE MARKERS

Pipelines are buried in an area called a "right of way." Pipeline markers are used to designate the general route of a pipeline. In addition, markers are found where a pipeline crosses a street, railroad or waterway, as well as areas where a pipeline emerges from the ground.

Markers come in different shapes and sizes, but always:

- **Contain the words "Warning," "Danger" or "Caution"**
- **Identify the material being transported**
- **Provide an emergency phone number for the pipeline operator**
- **Include the name of the pipeline operator**

BE AWARE: **Pipeline markers do not designate the exact location, depth or number of pipelines in an area, nor do they designate a straight line between adjacent markers.**

PIPELINE SAFETY
& RIGHT OF WAY PROTECTION

A right of way (ROW) is secured from a landowner, utility or other government entity through an **"easement agreement,"** which provides the right to cross or otherwise use someone else's land for a specified purpose. This agreement governs the activities permitted by both the landowner and the pipeline operator.

When discussing pipeline safety you will often hear the term **"right of way"** used when talking about easements. Not all right of ways are the same size. Some are "defined" with specific sizes and boundaries, while others are undefined. There are many factors that determine the width of a ROW, including the number of pipelines located within the ROW, the size of the pipeline, and the wishes of the landowner, the pipeline operator or influences from state statutes and decisions made by regulatory agencies.

While exact terms vary, it is typical for an easement agreement to contain certain restrictions for the use of the ROW. **"Encroachment"** is a term that refers to the unauthorized use of a right of way in violation of the terms by which the right of way was established.

Public safety is of the utmost importance to pipeline companies. As part of ongoing maintenance programs, it is occasionally necessary for a pipeline company to trim or remove trees, shrubs and other structures located on both private and public property within the pipeline ROW. Pipeline companies do this to visually monitor and maintain access to the pipeline. This ensures the integrity of both the pipeline and the environment.

MANAGING AND PROTECTING THE RIGHT OF WAY IS KEY:

It provides easy access to the facility if an emergency situation occurs.

It keeps the area clear for routine pipeline monitoring and maintenance.

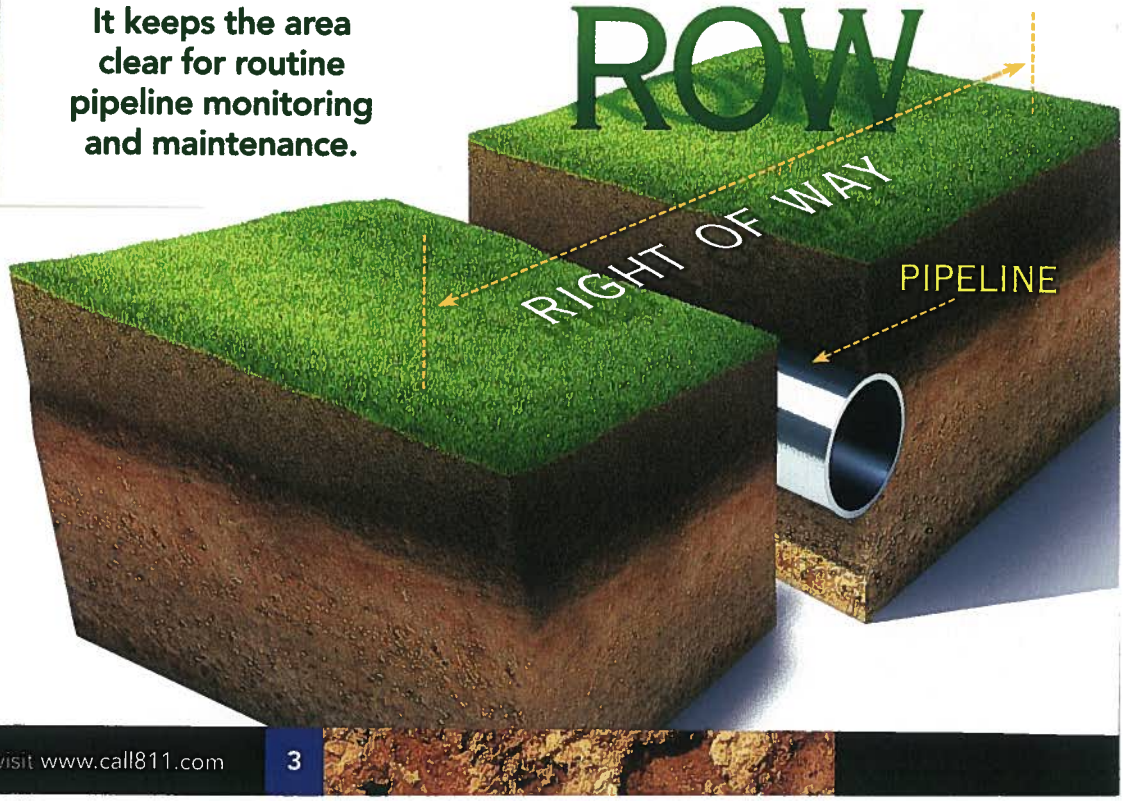
EXAMPLES
OF ROW ENCROACHMENT INCLUDE:

- Building fences or other structures such as sheds or barns – either permanent or temporary
- Pouring a driveway
- Adding a swimming pool or sprinkler system
- Storage of vehicles and flammable materials or equipment
- Major landscaping activities: adding trees and shrubs, planting a garden and removing tree stumps

These activities normally require the express consent of the pipeline company to help protect the integrity of the pipeline and the safety of the surrounding community.

As a public official...

you may be involved with general planning, zoning and land-use decisions that impact pipeline ROWs. Educated decisions and proper planning ensure the safe, efficient and reliable delivery of energy resources and other utility services to your residents, businesses and communities.



What is PIPA?

The Pipelines and Informed Planning Alliance (PIPA) is a collaborative effort of pipeline safety stakeholders. Reducing risk and improving community and pipeline safety can be challenging. It is important to know the risks that transmission pipelines can present to a community and the increasing risks that can be presented by changes in land use and development near those pipelines. PIPA has recommended practices to help communities make risk-informed decisions for land use planning and development adjacent to transmission pipelines.

pipa
Pipelines and Informed Planning Alliance
PIPA-info.com

The Role of Local Government in Pipeline Safety

Local governments have a key role in ensuring safety and the protection of people, property and the environment. PIPA Recommended Practices can enhance safety by guiding and promoting more effective stakeholder communications when planning land use changes and development occurs near existing transmission pipelines. Communities across the country have begun to adopt many of the PIPA Recommended Practices.

For more information regarding PIPA Recommended Practices visit: http://www.PIPA-info.com, or email info@PIPA-info.com

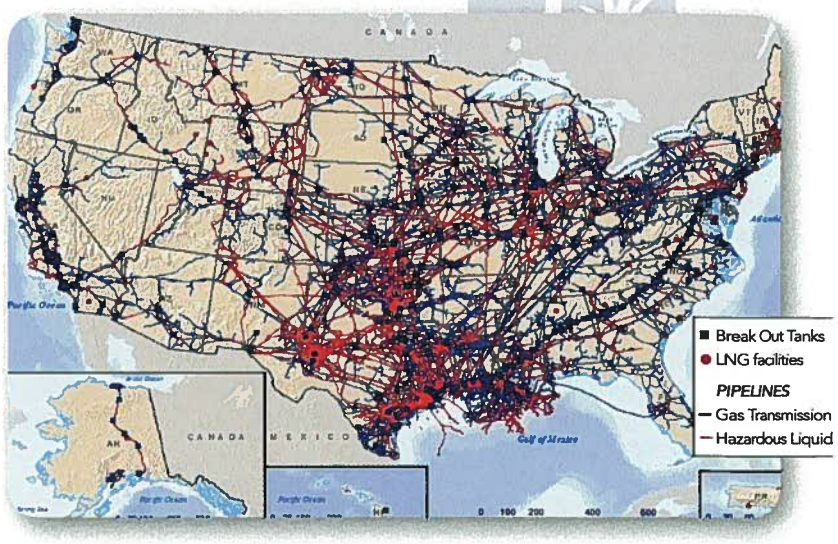


Image courtesy of the National Pipeline Mapping System (NPMS):
www.npms.phmsa.dot.gov

Hazard Mitigation Planning: Practices for Land Use Planning and Development near Pipelines...

is a primer for incorporating pipeline hazards into hazard mitigation plans. The document's goal is to provide emergency managers, planners and others involved with developing hazard mitigation plans with a knowledge and understanding of how pipelines operate, common products that may be transported through transmission and distribution pipeline systems, the potential impacts (risks) of pipeline incidents and mitigation strategies they can implement to reduce these risks. There are no new requirements set forth in the primer, but it provides suggestions for sector-specific considerations in mitigation plans. This document was prepared by PIPA, and is sponsored by the Department of Transportation (DOT) and PHMSA, in coordination with the Federal Emergency Management Agency's Risk Analysis Division. PIPA contributors include state, federal and local government officials, as well as industry representatives.

For more information please visit:
www.fema.gov/media-library/assets/documents/101688on

NPMS IMPROVEMENTS

FOR FEDERAL, STATE AND LOCAL GOVERNMENT OFFICIALS & EMERGENCY RESPONDERS

The National Pipeline Mapping System (NPMS) recently made improvements to the Pipeline Information Management and Mapping Application (PIMMA) to assist government officials and emergency responders. PIMMA is the password-protected web-based mapping application accessible from the "Government Official" portion of the NPMS website: www.npms.phmsa.dot.gov.

NPMS information is used by government officials, pipeline operators and the general public for a variety of tasks including emergency response, smart growth planning, critical infrastructure protection, environmental protection and analysis.

IMPROVEMENTS CONTINUED ON NEXT PAGE ☛

New Federal Regulations for State Damage Prevention Programs and Excavators

Excavation damage is the leading cause of natural gas and hazardous liquid pipeline incidents. The Pipeline and Hazardous Materials Safety Administration (PHMSA) has issued new regulations for both state damage prevention programs (part 198) and for excavators (part 196). More effective enforcement of state excavation damage prevention laws, such as the requirement to "Call Before You Dig," is a key to reducing pipeline excavation damage incidents.

Though all states have a damage prevention program, some states may not adequately enforce their state law. PHMSA developed specific criteria and procedures for determining whether a state's enforcement of its excavation damage prevention laws is adequate. There are two basic questions PHMSA will ask:

1. **Does the state have the authority to enforce its state excavation damage prevention law?**
2. **Has the state designated a state agency or other body as the authority responsible for enforcement of the state excavation damage prevention law?**

If the answer to either of these questions is **"no,"** then enforcement at the state level is inadequate. If the answer is **"yes,"** then the following additional criteria will be reviewed:

- Is the state assessing civil penalties and other appropriate sanctions?
- How does the enforcement authority learn about damages?
- How does the enforcement authority determine who is the responsible party?
- What are the specific reporting requirements in the law?
- Does the state law limit exemptions for excavators?

If PHMSA determines the enforcement of a state's damage prevention laws is inadequate, then PHMSA may conduct enforcement proceedings against an excavator who violates the federal excavation standards. Both civil and criminal penalties may be imposed, including fines up to $200,000 per day and jail time.

Additional information, including the new federal standards for excavators, can be found on PHMSA's website: http://phmsa.dot.gov/pipeline/safety-awareness-and-outreach/excavator-enforcement

CONTINUED FROM PAGE 4

IMPROVEMENTS TO PIMMA:

- **Streamlined interface, larger map area and new query tools**
- **Google imagery and street map backgrounds, faster performance and a more flexible address/landmark search**
- **Enhanced queries for displaying gas transmission and hazardous liquid pipeline maps and attributes**
- **Query and view:**
  - **Pipeline accidents/incidents which occurred on gas transmission or hazardous liquid pipelines**
  - **The history of a pipeline (see how a pipeline has changed operatorship, commodity and if it has been spatially corrected)**
- **Ability to create map bookmarks to quickly return to places of interest**

PIMMA was developed by the Department of Transportation (DOT) and PHMSA. The application does not contain information on gas distribution or gas gathering pipelines.

Government officials and emergency responders with existing PIMMA accounts can continue to use their assigned username and password. Those interested in accessing PIMMA for the first time will need to apply by visiting: www.npms.phmsa.dot.gov and clicking on the 'Apply for PIMMA access' link.

For security reasons, the general public does not have access to the same detailed level of information, but can use a public viewer found on the same website.

Products and Facilities

SAFETY INFORMATION FOR PUBLIC OFFICIALS

NATURAL GAS is the predominant product found in gas distribution pipelines, and with few exceptions, is transported via pipelines in its gaseous form. Like crude oil, it is a naturally occurring resource formed millions of years ago as a result 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 centers or distribution pipeline systems. The main ingredient in natural gas is methane (94 percent). Natural gas is odorless, colorless, tasteless and nontoxic in its natural state. When transported via transmission pipelines, natural gas typically does not have odorant added. 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, which are easily liquefied under pressure and are used for residential or commercial heating and other industrial applications. Propane and butane are often stored and transported under pressure as liquid (LPG) in portable containers for use as fuel for heating and cooking applications. LPG is usually transported through hazardous liquid transmission pipelines and may also be identified as Highly Volatile Liquids (HVLs) or Natural Gas Liquids (NGLs). Vaporized propane and butane may also be found in small distribution systems. LPG is a tasteless, colorless and odorless gas. When transported via transmission pipelines it typically will not have odorant added. Odorant is added when LPG is offloaded to a distribution pipeline system or transport tanks to facilitate leak detection.

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 normally transported from wells to refineries through gathering pipelines. Refined petroleum products are normally 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 located in the Midwest 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.

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.

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 a simple asphyxiant.

"SOUR" CRUDE OIL AND "SOUR" GAS products containing little or no sulfur are often referred to as "sweet," whereas, products containing high concentrations of sulfur and hydrogen sulfide are commonly referred to as "sour." Hydrogen sulfide (H_2S) 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

	Natural Gas	Petroleum Gas	Petroleum Liquids	Anhydrous Ammonia	Carbon Dioxide	Ethanol	Hydrogen Gas	Sour Gas (H_2S)	Sour Crude Oil (H_2S)	Liquids & Natural Gas
INDICATIONS OF A LEAK										
An odor like rotten eggs or a burnt match	1	1						●	●	1
A loud roaring sound like a jet engine	●							●		●
A white vapor cloud that may look like smoke		●		●						
A hissing or whistling noise	●	●		●	●		●	●		●
The pooling of liquid on the ground			●			●			●	●
An odor like petroleum liquids or gasoline		●	●			●			●	●
Fire coming out of or on top of the ground	●	●					●	●		●
Dirt blowing from a hole in the ground	●	●		●	●		●	●		●
A sheen on the surface of water		●	●						●	●
An area of frozen ground in the summer	●	●			●	●	●	●		●
An unusual area of melted snow in the winter	●	●			●		●	●		●
An area of dead vegetation	●	●	●				●	●	●	●
Bubbling in pools of water	●	●			●		●	●		●
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			●		●	●	●	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				●	●			●	●	

1 These products are naturally odorless and only certain pipeline systems may be odorized.

FARMING AND PIPELINES
WHAT PUBLIC OFFICIALS NEED TO KNOW

Excavation is the leading cause of damage to pipelines and other underground facilities. Farmers, ranchers and landowners are key 'digging' audiences who need to be kept aware of safe digging practices and understand the importance of pipeline right of ways/easements. Hitting a pipeline not only affects the safety of the farmer, but can also potentially impact neighboring communities through the loss of fuel, heat and other utilities.

Modern farming equipment and practices allow for far deeper tillage. Over time, factors like weather and soil erosion could impact the depth of the pipeline. **Considering the fact that pipelines do not necessarily follow a straight line between markers, this can be a potential for disaster.**

In the race against Mother Nature to plant and harvest fields, it is important to adhere to safe tillage practices. For example, drain tiles are installed in parts of the country to help recover fields prone to flooding or standing water. Professional drain tile installers are accustomed to contacting 811; however, some farmers buy and install drain tile without contacting 811.

OTHER IMPORTANT MESSAGES:

1. Call, Click or Connect with 811 for any excavation project. Either call 811 or visit www.call811.com and request to have utilities (including pipelines) marked before any digging occurs – this process will take between one to three business days.
2. As farms and ranches grow, the addition of sheds, decks, barns, fences and other structures should be carefully planned to minimize interference with pipeline right of way.

PIPELINE CONSIDERATIONS FOR PUBLIC OFFICIALS:

- **Know where pipelines are located in your community:**
  - *Meet with pipeline companies operating in your area and collect their contact information*
  - *Respect pipeline easements*
  - *Require that applications for building projects include an 811 ticket number prior to issuing a permit*
- **Recognize signs of a pipeline leak and understand proper response during an emergency**
- **Understand the importance of contacting 811 and enforce safe digging practices**
  - *Are local government employees and contractors required to contact 811 prior to digging?*
  - *Register your municipality's underground facilities with 811 for any new facilities being built, or existing facilities being replaced or upgraded*
  - *Incorporate pipelines into your emergency response plans and training drills*
- **Promote awareness in April for National Safe Digging Month and on August 11th for 811 Day**

RESOURCES – DIGGING DEEPER FOR MORE INFORMATION:

- **www.call811.com**
- **Common Ground Alliance – agricultural safety video: https://www.youtube.com/watch?v=laLlhzbljlo**
- **National Pipeline Mapping System* (NPMS)**

*NPMS only maps transmission pipelines https://www.npms.phmsa.dot.gov

EXCAVATION ACTIVITIES THAT POSE A RISK TO PIPELINES:

- **Building a waterway, creek maintenance or digging a pond or well**
- **Clearing land**
- **Ditching**
- **Installing drain tile**
- **Land contouring**
- **Leveling**
- **Plowing (chisel plowing or deep plowing)**
- **Ripping (deep ripping)**
- **Roads, walking paths & other transportation-related development**
- **Scraping**
- **Soil sampling**
- **Sub-soiling**
- **Terracing**
- **Tilling (deep tilling)**
- **Trenching**
- **Using backhoes or bulldozers**

Call, Click or Connect...

811 Keeps Communities Safe

Public officials play an essential role in ensuring the safety of their communities. The Pipeline and Hazardous Materials Safety Administration (PHMSA), a division of the U.S. Department of Transportation, recognizes public officials as key stakeholders in safety — as a result, all pipeline operators with pipelines running through your municipality are required to share with you critical information on pipeline safety.

Damage caused by excavation is the most common cause of pipeline incidents.

Did you know that even the simplest task of installing a mailbox, privacy fence, flagpole or storage building can pose a hazard to the safety of your community? Damage caused by excavation is the most common cause of pipeline incidents, and in most cases, this damage could have been prevented if contractors, construction companies and homeowners were aware of the location of underground utilities prior to digging.

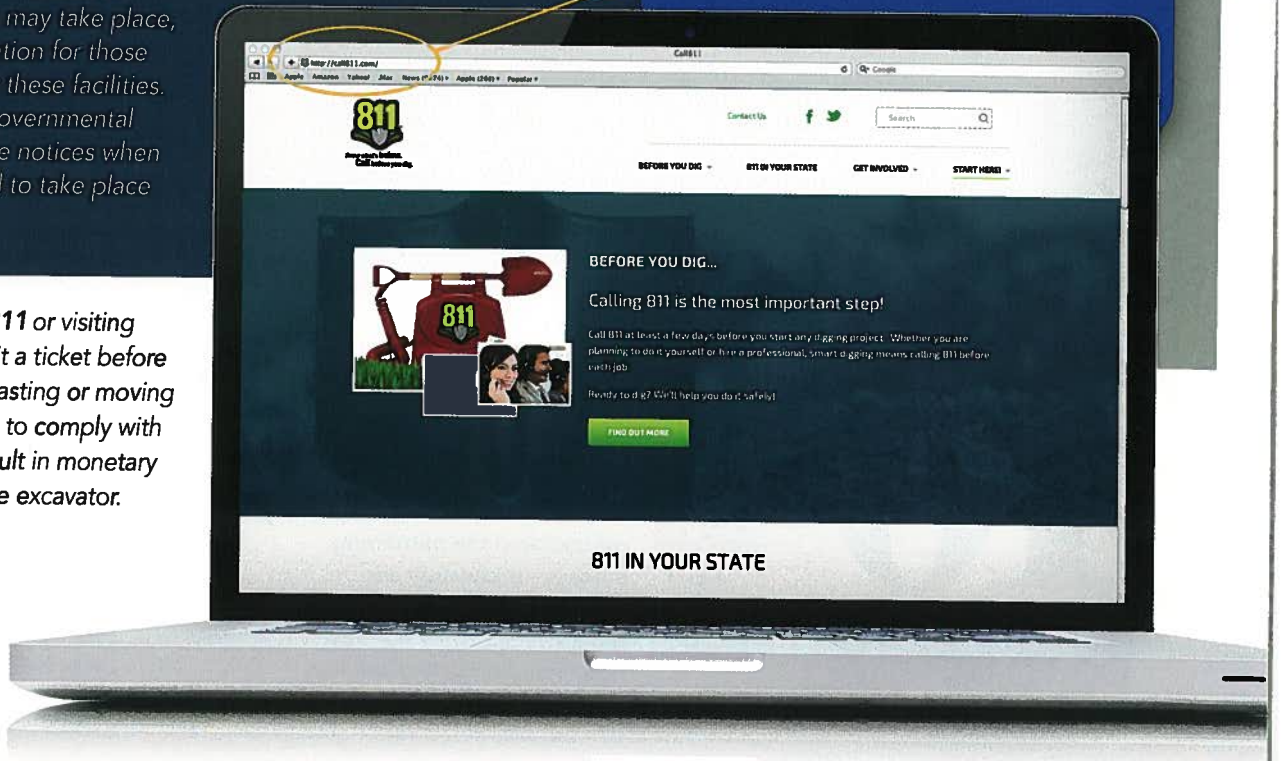
Placing a free "one call" request to have underground lines marked can save lives, and is as simple as calling or clicking to connect! You may dial 811, the national "Call Before You Dig" *phone number from any state, or visit www.call811.com to submit an online request to have utilities marked before digging. While the longtime message of "call before you dig" continues to resonate, online requests to have lines marked have become increasingly popular. Now more than 70 percent of all requests to have lines marked are made online.*

Unfortunately, many local laws exempt publicly owned utilities from the requirement to register their locations with the state one call center. As a result, it is common for underground facilities owned and operated by local governments to not be registered. When municipalities fail to register their facilities, there is no way for others to know whether there are underground pipelines, cables or wires buried in areas where excavation may take place, creating an unsafe situation for those working and living near these facilities. In addition, the same governmental agencies will not receive notices when excavation is scheduled to take place near their facilities.

As a Public Official You Can Help Ensure Safety By:

- **Encouraging all local public utilities to register their facilities with your state's one call center**
- **Actively promoting safe excavation practices, including the importance of calling 811 (your state's one call center) or submitting an online request to have utilities marked before starting excavation within your community**
- **During the designing or permitting/planning processes, require that the local one call center be contacted so the location of all underground pipelines can be considered**

Please visit www.call811.com to learn more



*Contact **811** by dialing **811** or visiting **www.call811.com** to submit a ticket before you start digging, drilling, blasting or moving any dirt or concrete. Failure to comply with these requirements can result in monetary fines being levied on the excavator.*

811.
Know what's **below.**
Call before you dig.

EMERGENCY PREPAREDNESS

Does Your Plan Address Pipelines?

Emergency response planning is an important responsibility at all levels of government. Public officials plan for many different types of events that could affect the safety of their communities. Local utilities and other critical infrastructure should be addressed in emergency planning efforts so that your community has a comprehensive plan in place for local emergency response needs.

The Hazardous Materials Cooperative Research Program (HMCRP) Report 14, a "Guide for Communicating Emergency Response Information for Natural Gas and Hazardous Liquid Pipelines" released in November, 2014 addresses the primary components of pre-incident emergency response planning.

The report also identifies that taking action in the first few minutes is critical. Pipeline operators and 911 emergency communication centers have the biggest impact on emergency response times.

THE REPORT STATES:

"The findings from the pipeline incident reports showed that delays in the initial notification to both emergency responders and/or pipeline operators are dominant, but that on-scene issues of coordination or proper action on the part of pipeline operators or emergency services also occurred at over 20 percent of incidents. Improved communications, both during the planning and response phase of incidents, would influence nearly all of the deficiencies noted."

It is important that your community is identifying important resources, establishing communication roles and is putting practices in place so your community is prepared to respond to a pipeline emergency.

CONSIDERATIONS:

- **Pipeline operators, emergency responders and 911 center personnel should all be involved.** *Have all of these entities officially met and exchanged information?*
- **Is there more than one 911 communication center for your community?** *If so, is a representative from each center involved?*
- **As part of the planning effort, pipeline company representatives should identify products carried in their pipelines. They should also have a clear understanding of the impact to sensitive areas (highly populated areas, drinking water sources, environmentally sensitive areas) if an emergency was to occur.** *Have your planning efforts clearly identified the presence and implications of pipelines in and around your community?*
- **The roles and responsibilities of each entity should be clearly specified; this stage of the planning process allows for the identification of resources to effectively respond to an event.** *Has your community made such an effort?*
- **You may want to address in-person meetings, drills, training exercises, as well as collaborative meetings with local pipeline companies.** *Are these efforts happening?*

By answering yes to these questions, you are well on your way to effectively addressing pipelines in your emergency planning efforts.

HMCRP Report 14 is considered a pre-incident planning tool for pipeline operators and public safety agencies. The guide is intended to help identify information needs, and either begin, or improve the communication of information to benefit emergency response planning. To view the report, visit: http://www.pipelineawareness.org/wp-content/uploads/2015/02/HMCRP_rpt_014.pdf

10 THINGS YOU CAN DO TO IMPROVE PIPELINE SAFETY

1. Become a member of your local one call system – visit www.call811.com to learn more
2. Require notification to the one call center in the permitting process – excavators and construction companies should include their one call ticket number on any building or construction permit issued
3. Ensure employees are contacting 811 to have utility lines (including pipelines) marked before they dig
4. Ensure that appropriate staff are aware of pipelines, including public and government officials; city and county managers; planning boards; zoning boards; licensing departments; public utility boards; local governing councils, permitting departments and building code enforcement departments

"An ounce of prevention is worth a pound of cure," states Benjamin Franklin's age-old truism. This applies to many different facets of life, including pipeline operators, who are committed to protecting their pipelines, just as we maintain our homes, vehicles and other important assets to safeguard our investments.

AN OUNCE OF PREVENTION

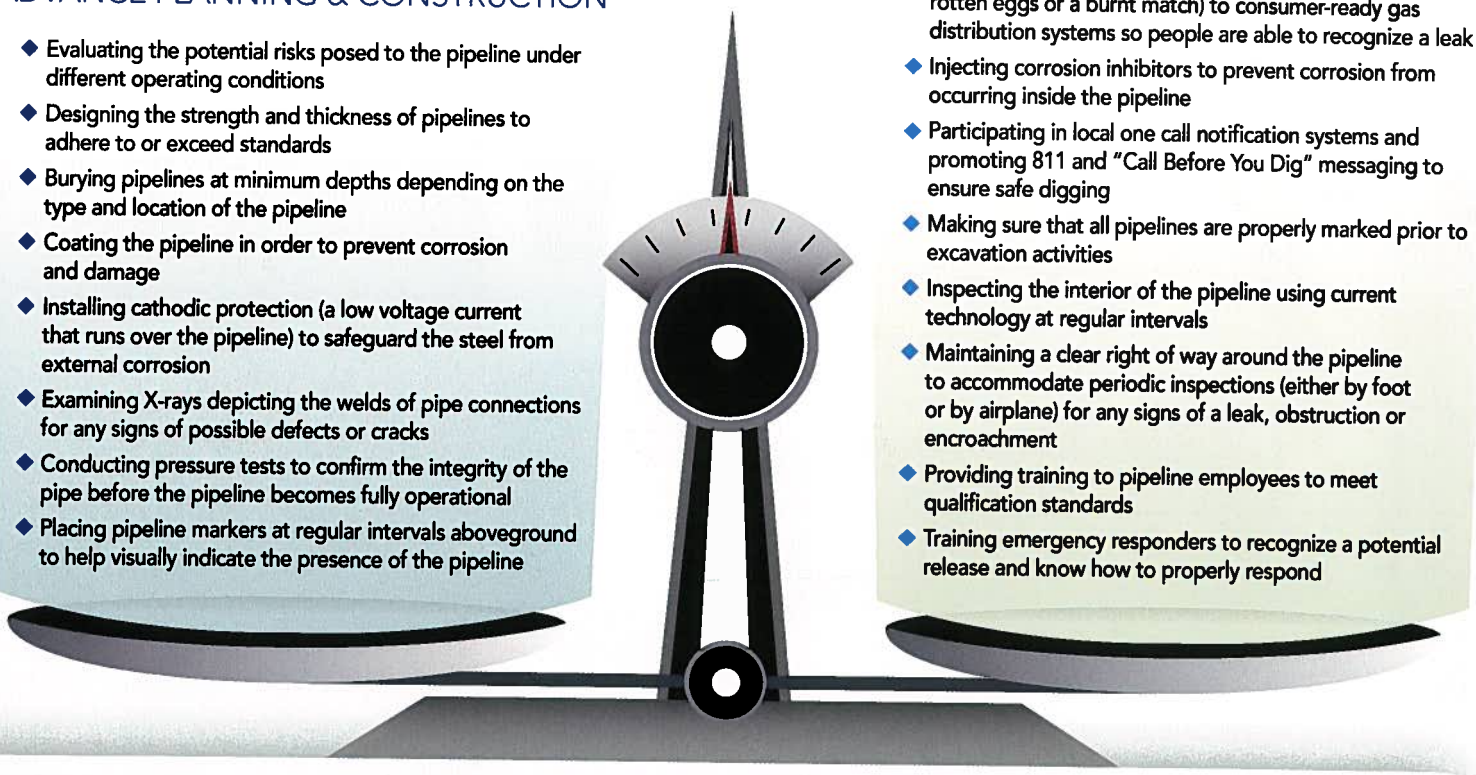
DID YOU KNOW it costs, on average, MILLIONS OF DOLLARS to construct a pipeline in the United States?

Pipeline operators are proactive in taking critical steps to protect the integrity of their pipelines — beginning from the time they are designed, throughout the building process and continuing with comprehensive integrity management programs as the lines become operational. The operator's ongoing commitment to safety protects not only those who live and work near the pipeline but the environment, as well as the pipeline itself.

MOST OPERATORS TAKE THE FOLLOWING STEPS TO ENSURE THE SAFETY OF THEIR LINES:

ADVANCE PLANNING & CONSTRUCTION

- Evaluating the potential risks posed to the pipeline under different operating conditions
- Designing the strength and thickness of pipelines to adhere to or exceed standards
- Burying pipelines at minimum depths depending on the type and location of the pipeline
- Coating the pipeline in order to prevent corrosion and damage
- Installing cathodic protection (a low voltage current that runs over the pipeline) to safeguard the steel from external corrosion
- Examining X-rays depicting the welds of pipe connections for any signs of possible defects or cracks
- Conducting pressure tests to confirm the integrity of the pipe before the pipeline becomes fully operational
- Placing pipeline markers at regular intervals aboveground to help visually indicate the presence of the pipeline



ONGOING PREVENTATIVE EFFORTS

- Monitoring pressure and flow inside the pipeline
- Adding an odorant with a distinctive smell (normally like rotten eggs or a burnt match) to consumer-ready gas distribution systems so people are able to recognize a leak
- Injecting corrosion inhibitors to prevent corrosion from occurring inside the pipeline
- Participating in local one call notification systems and promoting 811 and "Call Before You Dig" messaging to ensure safe digging
- Making sure that all pipelines are properly marked prior to excavation activities
- Inspecting the interior of the pipeline using current technology at regular intervals
- Maintaining a clear right of way around the pipeline to accommodate periodic inspections (either by foot or by airplane) for any signs of a leak, obstruction or encroachment
- Providing training to pipeline employees to meet qualification standards
- Training emergency responders to recognize a potential release and know how to properly respond

5. **Follow recommended PIPA guidelines and consider the location of existing pipelines during permitting and planning processes for new development**
6. **Get to know pipeline operators in your area – understand the scope of their operations; where their pipes are located; any additional facilities they have in the area; what materials they carry and their capability to respond to emergencies**
7. **Confirm that pipeline emergencies and security efforts are addressed in your emergency response plans – consider coordinating with local operators to train on pipeline-specific emergencies**
8. **Make sure local 911 and emergency dispatchers know how to coordinate emergency response situations involving pipelines**
9. **Address pipelines in local Community Emergency Response Team (CERT) training**
10. **Provide information on pipeline safety and security to the general public (for example pipeline leak recognition and response) in community newsletters, websites, etc.**

Additional Information:

Company Contacts in Your Area

If you received this newsletter with a cover letter, the participating member companies in your area are listed on the back of the letter. A non-emergency phone number is included for each company.

A listing of member company contacts for your area is available on the PAPA website by clicking on **"Pipeline Member Directory"** at the bottom of the home page. Select your state/county and then click on the member name for detailed contact information (see example below).

Pipeline Integrity Management Plans

Member companies will provide additional information about their integrity management program upon request. This information may be posted on their website, or it may be obtained through the company contact person listed in the **Pipeline Member Directory**.

Copies of Materials Provided to the General Public or Emergency Response Officials

Pipeline members will send you copies of the materials they provide to the general public or emergency officials in your area. Just email your request to the company contact person listed in the **Pipeline Member Directory**.

Pipeline AWARENESS

RESOURCES:

www.pipelineawareness.org

http://phmsa.dot.gov/pipeline/safety-awareness-and-outreach/excavator-enforcement

https://primis.phmsa.dot.gov/comm/pipa/landuseplanning.htm

www.call811.com

www.commongroundalliance.com

www.nena.org

www.npms.phmsa.dot.gov

www.pipeline101.com

PHMSA resources for pipeline safety stakeholders include:

- PHMSA Stakeholder Communications Website: http://primis.phmsa.dot.gov/comm/
- National Pipeline Mapping System (NPMS): www.npms.phmsa.dot.gov
- Community Assistance and Technical Services (CATS): http://primis.phmsa.dot.gov/comm/CATS.htm

If you have questions about the Pipeline Association for Public Awareness (PAPA), our programs or need more information from any of our members, please email:

jeff.farrells@pipelineawareness.info

Pipeline Association for Public Awareness

16361 TABLE MOUNTAIN PKWY
GOLDEN, CO 80403

www.pipelineawareness.org

Please share this newsletter – an electronic version is available at:
http://www.pipelineawareness.org/2016-public-official-newsletter/