



# School pipeline safety information

SCAN THIS  
PAGE  
WITH PAV\*



\*Instructions on back



Know what's below.  
Call before you dig.

Please share  
this important  
information  
within your  
school/district

## Pipelines are near you

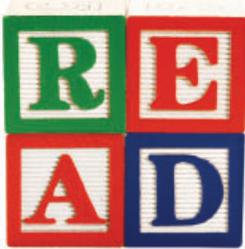
You have received this information because of the presence of pipelines and/or facilities near you. These pipelines, operated by the companies whose **fact sheets** accompany this booklet, are part of the network of over 2.6 million miles of gathering, transmission, and distribution pipelines in the United States, transporting two-thirds of the energy we use each year.



High Consequence Area

## How you can help keep pipelines safe

While no other method of transporting natural gas and petroleum products is as safe as pipelines, you can help by:



- Becoming familiar with the operators of pipelines and pipeline facilities in your area and keeping the enclosed **fact sheets** for future reference.
- Reporting any suspicious activity or unauthorized excavation taking place near pipelines or facilities by calling 911 **and** the pipeline company.
- Completing and returning the enclosed postage-paid survey.

## Pipeline emergency pre-planning

The location of pipelines and/or facilities in your area, products transported, and wind direction should all be taken into consideration with planning emergency evacuation procedures for your school. Contact the pipeline companies near you to address any issues specific to your school.

Please refer to Emergency School Guidelines for a Pipeline Release in the back of this booklet.



Pipeline Construction/Maintenance

## Call before you dig

99%\* of all incidents involving injury, damage and service outages can be avoided by making a FREE CALL to 811. Your call should be made at least two to three business days prior to excavating. Examples of some activities that require a call to 811 include:



- Constructing additional classrooms or buildings
- Building a fence
- Installing a sprinkler system
- Adding a playground

Once your underground utilities have been marked, you will know their approximate location and can safely begin your dig, following safe excavation practices.

\* CGA Dirt Report 2013

## How to recognize the location of a pipeline



*TriView™ Marker, Dome Marker, Flat Marker, Round Marker, Aerial Marker, Casing Vent Markers.*

Markers are located in the pipeline right-of-way and indicate the approximate location, but not the depth, of a buried pipeline.

Although not present in certain areas, these can be found at road crossings, fence lines, and street intersections. The markers display the product transported in the pipeline, the name of the pipeline operator, and a telephone number where the operator can be reached in the event of an emergency.

## Digging safely around pipelines

State laws require you to maintain minimum clearance, or tolerance zone, between the point of excavation and a marked pipeline.

Even the most minor damage to a pipeline can have serious consequences. If you cause, witness or suspect even minor damage to a pipeline or its protective coating:

- Evacuate the area, call 911 **and** the pipeline company immediately
- Do not excavate further
- Do not cover up or backfill
- Do not inspect or investigate
- Do not attempt to move the equipment, even if it appears to be lodged

### Tolerance Zone



**For more information on the tolerance zone requirements in your state, please visit:**  
<https://primis.phmsa.dot.gov/comm/DamagePreventionSummary.htm>

The Tolerance Zone is a defined horizontal space from the outside wall or edge of an underground line or pipe. Some state laws and/or pipeline operators require excavators to notify the pipeline operator when they are digging within a specific number of feet of the pipeline, for example, 25 feet. However, the exact footage requirement can vary. Be familiar with your state law and local pipeline operator requirements.

## Pipeline rights-of-way



Rights-of-way are often recognizable as corridors that are clear of trees, buildings or other structures except for the pipeline markers. Encroachments upon a pipeline right-of-way inhibit the pipeline operator's ability to reduce the chance of third party damage, provide right-of-way surveillance and perform routine maintenance and required federal/state inspections. Keeping trees, shrubs, buildings, fences, structures and any other encroachments well away from the pipeline ensures that the pipeline integrity and safety are maintained.

# How to recognize a pipeline leak



## Sight

Natural gas and Highly Volatile Liquids (HVL) are colorless and nearly invisible to the eye. Small leaks can be identified by looking for dying or discolored vegetation in a naturally green area. Hazardous liquids produce a strong sheen or film standing on a body of water.

An HVL leak may be identified by a fog-like vapor cloud in areas of high humidity. Natural gas is colorless, but blowing dirt around a pipeline area may be observed, or vapor and "ground frosting" may be visible at high pressures, regardless of temperature. Other ways to recognize a leak may include: water bubbling up or standing in an unusual area, a mist or vapor cloud, a powerful fire or explosion with dense smoke plumes, or an area of petroleum-stained ground.



## Sound

The volume of a pipeline leak can range from a quiet hissing to a loud roar, depending on the size and nature of the leak.



## Smell

An unusual smell, petroleum or gaseous odor will sometimes accompany pipeline leaks. Natural gas and HVLs are colorless, tasteless and odorless unless odorants, such as Mercaptan, are added.

Most HVLs contain a slight hydro-carbon or pungent odor. Most are nontoxic; however, products such as ammonia are considered a toxic chemical and can burn the senses when it seeks out moisture (eyes, nose or lungs). If inhaled, HVLs may cause dizziness or asphyxiation without warning.



*Vapor Cloud*



*Sheen on Water*



*Dead Vegetation*

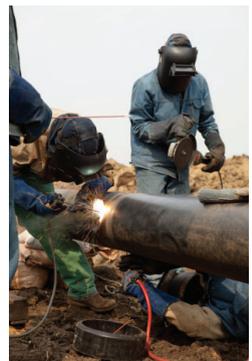


*Bubbling Water*

## Maintaining safety and integrity of pipelines

Pipeline companies invest significant time and capital maintaining the quality and integrity of their pipeline systems. Most active pipelines are monitored 24 hours-a-day via manned control centers. Pipeline companies also utilize aerial surveillance and/or on-ground observers to identify potential dangers. Control center personnel continually monitor the pipeline system and assess changes in pressure and flow.

They notify field personnel if there is a possibility of a leak. Automatic shut-off valves are sometimes utilized to isolate a leak. Gas transmission and hazardous liquid pipeline companies have developed supplemental hazard and assessment programs known as Integrity Management Programs (IMPs). IMPs have been implemented for areas designated as "high consequence areas" in accordance with federal regulations. More specific information on HCA's in your area may be available from your local pipeline operator(s) by contacting them directly.



*Pipeline Construction/  
Maintenance*

## If you suspect a pipeline leak\*

### Do:

- Make sure gas appliances are turned all the way OFF.
- Leave the area.
- Telephone 911 **and** the pipeline company from a safe location upwind, well away from the location of the leak.
- If it is safe to do so, warn others against entering the leak area and/or creating ignition sparks.

### Do not:

- Start or stop an engine of any kind.
- Strike matches or create a flame of any kind.
- Use a telephone or cell phone, unless from a safe location upwind, well away from the location of the leak.
- Turn on or off any light switches, garage door openers or other electrical switches.
- Touch, breathe or make contact with leaking product.
- Drive into a leak or vapor cloud area.

\* <http://primis.phmsa.dot.gov/comm/EmergencyResponse.htm>

## 911 and Telephone Text (TTY)\*

The Americans with Disabilities Act requires that people with disabilities who use TTY or other devices have direct, equal access to emergency response services. In the event of an emergency, TTY users should call 911 directly.



Pipeline Company  
Control Center

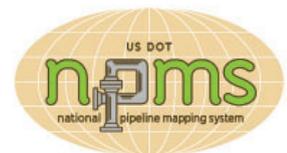
\* A TTY (Telephone Text) also called a TDD (Telecommunication Device for the Deaf), is a special device that lets people who are deaf, hard of hearing, or speech-impaired use the telephone to communicate, by allowing them to type text messages.

## What a pipeline company does if a leak occurs

To prepare for the event of a leak, pipeline companies regularly communicate, plan, and train with local emergency responders. Upon notification of an incident or leak, the pipeline company will immediately dispatch trained personnel to assist emergency responders. Pipeline companies and emergency responders are trained to protect life, property, and facilities in the case of an emergency. Pipeline companies will also take steps to minimize the amount of product that leaks out and to isolate the pipeline emergency.

## National Pipeline Mapping System (NPMS)

To view and download maps of transmission pipelines in your county, see the National Pipeline Mapping System website, [npms.phmsa.dot.gov](http://npms.phmsa.dot.gov). This online platform 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, and environmental protection.



# Emergency School Guidelines for a Pipeline Release

Schools and/or School Districts may consider the following guidelines when reviewing their emergency response plans as they relate to a pipeline release. Should you seek additional information from pipeline operators in your area, see the enclosed **fact sheets** for contact information. Schools may also contact their State Fire Marshals Office, State Emergency Management Agency, and Local Emergency Planning Committee's in developing emergency response plans.

## School Guidelines

If a pipeline release is witnessed or suspected:

- Leave the area immediately.
- Move away in an upwind direction and warn others to stay away.
- Call 911 **and** the pipeline operator from a safe place to report the release.
- Do not operate school buses, or any vehicles, mechanical equipment, cellular phones, electronic devices or any item that could create a spark.
- Do not use lighters or matches near a suspected release.
- Avoid contact with liquids or gases coming from the pipeline.
- Do not attempt to operate valves on pipelines.
- Follow your school's notification and evacuation/shelter-in-place procedures.

## Bus Driver Guidelines

If a bus driver suspects a pipeline release, he or she should:

- Refrain from driving into a suspected release area.
- If in a suspected release area, unload the bus and leave the area immediately, moving by foot in an upwind direction.
- Do not turn any machinery on or off or use a cellular phone near a suspected release site.
- Call 911 **and** the pipeline operator from a safe place to report the release.
- Contact appropriate parties. This may include affected schools and school district.

## Protection Methods

Once the extent of the pipeline emergency has been determined, school personnel can decide what response actions may be required. The most common immediate response actions for pipeline emergencies are:

- Shelter-In-Place (stay indoors)
- Evacuation

The decision to shelter-in-place or evacuate is based upon multiple factors including; location of the release, exposure to the release during evacuation, anticipated duration of the emergency and advice from Emergency Responders and/or pipeline operator personnel. If exposure to the release is imminent, or if evacuation is likely to expose individuals to hazards, then sheltering in-place would be the most suitable strategy. If advised to evacuate, or if it is safe for students and staff to leave the affected area, then evacuation procedures should be followed.

# Always follow the direction of emergency response personnel to execute either the shelter-in-place or evacuation procedure.

## General Shelter-In-Place Guidelines:

- Notify all staff and students of the need to Shelter-In-Place.
- Keep students in the classroom until further instructions are given. If outside, students will proceed to their classrooms if it is safe to do so. If not, direct students and staff into nearby classrooms or school buildings. When considering where to house staff and students inside the school it is important to consider the location and proximity to the identified pipeline release and ensure that shelter rooms are located as far from the release site as possible.
- Secure individual classrooms as per school procedures.
- Other staff members, including Security/Utilities personnel, could consider the following:
  - Shut down the classroom/building(s) HVAC system;
  - Turn off local fans in the area;
  - Close and lock doors and windows;
  - Seal gaps under doors and windows;
  - Seal vents if possible, and turn off sources of ignition, such as pilot lights;

## General Evacuation Guidelines:

- Notify all staff and students of the need to evacuate.
- Instruct students to evacuate the building, using designated routes, and to assemble in assigned muster points. If the assigned muster point is deemed unsafe then alternative location(s) should be determined and communicated. If required to evacuate to an off-site location determine the appropriate route and mode of transportation. This may include walking, or if safe, the use of buses.
- The student roster should be retrieved when leaving the building and attendance should be taken once the class is assembled in a safe location as per school procedure.
- Once assembled, students will remain in place until further instructions are given.
- In the event clearance is received from appropriate agencies, staff members may authorize students to return to the classrooms.



**Download** the Pipeline Awareness Viewer™ (PAV) app for important emergency response information. Use PAV to:



- How to find transmission pipelines in your area



- The 811 process



- How to recognize a pipeline leak



- An overview of the pipeline industry



- How to recognize the location of a pipeline



- Take online survey

## How to use PAV:

- Launch the app on your device.
- Review the brief instructions.
- Tap the SCAN button and aim your camera at the brochure cover.\*
- When the buttons appear, tap the lock icon  to view the available content.
- Tap the buttons to view important pipeline safety information.



*\*For best results, enable Wi-Fi on your device prior to using the PAV app.*