

Public Safety

Pipeline Leak Recognition and Response

How to Recognize Where a Pipeline Is

Many buried pipelines used in the transportation of petroleum products and natural gas are identified by above ground pipeline markers. Some pipelines transport other hazardous products such as chemicals, highly volatile liquids, and anhydrous ammonia, or carbon dioxide. Pipeline markers are located along certain pipeline routes that identify the approximate location of the pipeline.

Every pipeline marker provides critical information to the general public and emergency responders such as the company that operates the pipeline, product transported, and a phone number that should be called in the event of an emergency. Markers may be seen where a pipeline intersects a street, highway, or railway.



How to Recognize a Pipeline Release

Knowing how to recognize and respond to a possible leak or release is a key factor in pipeline safety. A leak or release can be recognized by:



Sight: Liquid pools, discolored or abnormally dry soil/vegetation, continuous bubbling in wet or flooded areas, an oily sheen on water surfaces, vaporous fogs, blowing dirt around a pipeline area, or fire coming from the ground or appearing to burn aboveground can all be indicative of a pipeline leak. Dead or discolored plants in an otherwise healthy area of vegetation or frozen ground in warm weather are other possible signs including exposed pipeline, possibly caused by a natural disaster such as flood or earthquake.



Sound: Volume can range from a quiet hissing to a loud roar depending on the size of the leak.



Smell: An unusual smell, petroleum odor, or gaseous odor will sometimes accompany pipeline leaks. Some companies provide odorant sample cards to be sent to businesses or residence upon request; and, some offer additional information about natural gas.

- Gas transmission/gas gathering pipelines are odorless, but may contain a hydrocarbon smell.

- Gas distribution systems are odorized with the chemical mercaptan or other similar chemicals. Mercaptan is a harmless non-toxic chemical that is added to make it easier to detect a gas leak due to its skunk like odor.
- Highly Volatile Liquids (HVL's) can be odorless and colorless in their natural state and most are considered irritants to eyes and nose. Commercial odorants are added to many HVLs to assist in detection of a leak.
- Landfill gas, which is becoming a popular source of natural gas, has a more pungent and unpleasant odor similar to the smell of rotting garbage.

What to DO in the event of a suspected or detected leak

To ensure your safety and the safety of those in the vicinity of a pipeline, the following guidelines should be followed if a pipeline leak is suspected or detected:

- **Turn off** gas appliances.
- **Leave the area** by foot immediately. Do not try to locate the source of the odor or leak. Try to direct other individuals to leave the area. Attempt to stay upwind.
- **Call 911 from a safe location**; then, notify the pipeline company and or your local emergency response number if known. Provide the emergency operator your name, phone number, a brief summary of the incident, and the location.



What Not to Do in the Event a Leak Were to Occur

- DO NOT come into direct contact with any escaping liquids or gas.
- DO NOT attempt to operate any pipeline valves yourself. You may inadvertently route more product to the leak or cause a secondary incident.
- DO NOT cause any open flame or other potential source of ignition such as an electrical switch, vehicle ignition, light a match, etc. Do not start motor vehicles or electrical equipment.
- DO NOT use telephone or cell phone. If inside a home or business, do not pull plugs from electrical outlet or open an automatic garage if the vehicle is parked inside.
- DO NOT ring doorbells to notify others of the leak. Knock with your hand to avoid a potential spark from metal knockers.
- DO NOT drive into a leak or vapor cloud while leaving the area.
- DO NOT attempt to extinguish a natural gas fire. Wait for local firemen and other emergency professionals trained to deal with such emergencies.

What Does the Pipeline Company Do in the Event of a Leak

Upon notification of an incident or leak, the pipeline company will immediately dispatch trained personnel to isolate the pipeline emergency, minimize the amount of product that leaks out and assist public and safety officials in their response to the emergency.

Pipeline Company Communication on Public Awareness

Pipeline companies are required to conduct public awareness programs to regularly educate and communicate with the people who live and work around pipelines on the possible hazards associated with a pipeline leak and the steps that should be taken for public safety. If you live near a pipeline and have not received any public awareness information from the pipeline company, consider calling them to discuss good safety habits for you and your family including the use of home gas detectors.