



# THE RESPONDER

Natural Gas Pipeline Information for Emergency Responders in Kinder Morgan Communities

## Pipelines 101: Compressor Stations

Compressor stations are typically the largest and most complicated above-ground facilities associated with natural gas transmission pipelines. Understanding what compressor stations do and how their safety systems operate is important for emergency responder pre-planning and emergency response training.

Info for fire & police

### Compressor stations—pushing gas through pipelines

Compressor stations, also known as pumping stations, compress natural gas by raising the pressure to “push” gas through the pipeline. Gas enters a series of scrubbers and strainers, is compressed by the compressor, cooled and then continues through the pipeline until it is delivered to a customer or reaches the next compressor station.

### Built-in shutdown and detection safety systems

Compressor stations incorporate sophisticated gas detection, fire detection and emergency shutdown (ESD) systems in the unlikely event of an operational disruption or emergency. These detection systems quickly trigger shut-off valves that cause gas to bypass the compressor station. This process cuts off the flow of gas to the station, and in most cases, will extinguish a fire or stop a leak.

If the ESD is triggered and a fire continues once the gas source is cut off, it is possible that the fire was caused by an alternate source. If the source of the fire is not natural gas, emergency responders may need to execute strategies to identify the source and extinguish the fire. Kinder Morgan field supervisors can provide an orientation to the ESD system during facility tours.

### Locating compressor stations in your jurisdiction

Contact your local Kinder Morgan field supervisor to determine if there are any compressor stations in your jurisdiction or to request additional information. (If you do not know how to contact the Kinder Morgan field supervisor in your area, e-mail [publicawareness@kindermorgan.com](mailto:publicawareness@kindermorgan.com))

## 12 Tactical Tips For Responding to a Natural Gas Pipeline Emergency

Do you know how to appropriately respond to a pipeline emergency? Here are 12 Tactical Tips to help you minimize, control or isolate a natural gas pipeline release.

1. Use a combustible gas indicator (CGI) to determine where gas is in the incident area. A CGI should always be used before entering a building.
2. Eliminate all ignition sources including cell phones, vehicles, pagers, light switches and radios when a pipeline leak is suspected.
3. Use Incident Command System (ICS) structure.
4. Stage apparatus and equipment upwind, uphill and upstream of incident.
5. Immediately notify the pipeline company if no operating personnel are present. Pipeline personnel need to assist emergency responders at the scene. The name and phone number for the appropriate pipeline company is located on nearby pipeline markers.
6. Conduct critique sessions with other emergency responders and pipeline personnel following an incident.
7. DON'T force ventilate excavations or structures that have natural gas accumulation. Forced ventilation, using attic fans, can lead to the introduction of oxygen in an uncontrolled manner. Always use natural ventilation to dissipate natural gas.
8. DON'T put water on an uncontrolled natural gas fire. Allow flammable gas fires to burn until the flow of product is controlled.
9. DON'T attempt to isolate pipeline valves on transmission or distribution lines unless approved by pipeline personnel.
10. DON'T attempt to restrict PRVs (pressure relief valves). These valves are naturally loud when they are working correctly.
11. DON'T operate vehicles or equipment in an area where a natural gas leak is suspected. Car engines and other ignition sources can cause a spark, which can ignite a natural gas fire.
12. DON'T cap or valve off controlled natural gas releases. Natural gas is lighter than air and will dissipate in the atmosphere.

## Markers Identify Pipeline Operator and Emergency Phone Number

Pipeline markers and warnings signs are placed along the pipeline right-of-way. They do not mark the exact location of the pipeline, but they do provide important information for emergency responders including the name of the pipeline operator and an emergency phone number. Markers also identify the specific product in the pipeline. Pipeline markers are typically yellow, black or red.

## Local Pipeline Maps Available for Emergency Responders on NPMS

Want to know more about pipelines located in your jurisdiction? The National Pipeline Mapping System (NPMS) was created by the Pipeline and Hazardous Materials Safety Administration (PHMSA) to provide state and local officials, including emergency responders, information about pipelines in their community.

Pipeline operators and federal, state and local government officials can all apply for access to the Pipeline Integrity Management Mapping Application (PIMMA) by filling out an online application. State and local officials are only granted access to the jurisdiction in which they are employed. To access the National Pipeline Mapping System go to [www.npms.phmsa.dot.gov](http://www.npms.phmsa.dot.gov)

## Early Recognition of Pipeline Leak Enables Rapid Response

Being able to quickly recognize the signs of a pipeline leak is the key to a quick, effective response. Here are some common signs of a pipeline leak:

Info for dispatch & training managers

- Gas bubbling out of a stream, lake or river
- Rainbow sheen on water
- Fire emerging from the ground
- Fuel seeping out of the ground
- Brown or dead vegetation in an otherwise green area
- Fire coming from the pipeline
- A white cloud or fog
- Unusual blowing of dirt or dust
- Pools of liquids
- Hissing or roaring sound
- Pungent odor like rotten eggs