

PIPELINE SAFETY INFORMATION

for Emergency Response Officials

**FOR MORE INFORMATION PLEASE VISIT
WWW.KINDERMORGAN.COM/PUBLIC_AWARENESS**

Keep with emergency response training and reference materials.

Kinder Morgan Cares About Your Safety

We want you to be aware of our pipelines. We ask for your help in preventing accidental damage to pipelines. Kinder Morgan supports the Nation's Homeland Security efforts and Kinder Morgan encourages you to immediately notify and report any suspicious persons and/or activities near the pipeline to your local law enforcement authorities by calling 911.

Working Together To Protect Pipelines & Right-of-Ways

In addition to 24-hour monitoring and on-going safety and security procedures, Kinder Morgan relies on you, the local emergency responder, to notify Kinder Morgan when you observe potential right-of-way restriction violations or potential damage to our facilities, which could endanger public safety. We support your enforcement of "Call Before You Dig" requirements in states where they apply.

Excavation activity is the most common cause of serious pipeline damage. In most states, residents, excavators and farmers are required by law to call 811 or their local One-Call center at least two or three working days before starting an excavation project to have underground utilities marked. Refer to your state-specific One-Call laws for more information.

Unauthorized use, such as building or planting, in the pipeline right-of-way is known as encroachment. Kinder Morgan regularly conducts maintenance to trim trees and remove shrubs or structures that prohibit the company from clearly viewing the pipeline corridor during aerial or foot patrols and regular maintenance activities.

Please contact us if you know of places where trees, plants or structures are located on the pipeline right-of-way or if you see individuals digging in areas where underground utilities are not marked with flags.

Signs of a Pipeline Leak or Rupture

The following are indications of a possible pipeline leak:

- Brown or discolored vegetation amid healthy plants
- Dirt being blown into the air
- Colorful sheens on water surfaces
- Fire at or below ground level
- Stains or pools of hydrocarbons not usually present in the right-of-way
- Bubbles coming from bodies of water
- A loud roar or hissing sound
- Distinctive petroleum type odors or the smell of mercaptan or sulfur (rotten eggs)
- A dense white cloud or fog

On occasion, a pressure-relieving device may activate at a natural gas or CO₂ aboveground pipeline facility. **These devices are acting as designed to relieve pressure on the system to prevent over pressurization.** Under no circumstances should a pressure relieving device be capped or valved off.

Pipeline Incident Response Tactics

The list below summarizes emergency response tactics to implement when you respond to a pipeline incident.

1. Assess the situation

- ❑ Approach with caution from upwind location.
- ❑ Isolate and secure the area.
- ❑ Employ ICS.
- ❑ Identify hazards.
- ❑ Identify and contact the pipeline operator using the emergency number listed on the pipeline marker.

2. Protect people, property & the environment

- ❑ Establish isolation zones and set up barriers.
- ❑ Rescue and evacuate people (if needed).
- ❑ Eliminate ignition sources.
- ❑ Stage apparatus and equipment based on atmospheric monitoring and weather conditions.
- ❑ If liquid products are involved, use appropriate defensive Hazardous Waste Operations & Emergency Response (HAZWOPER) procedures such as installing dikes and dams, if trained and equipped.
- ❑ Control fires, vapor and leaks. Do not extinguish burning fires. Protect exposures and coordinate isolation operations with pipeline personnel.
- ❑ Do not operate (open or close) valves or other pipeline equipment.
- ❑ Employ containment techniques if personnel are trained, equipped and it is safe to do so.
- ❑ Designate a safe location for bystanders and the media.

3. Call for assistance as needed

- ❑ Contact your local emergency response organization and/or national resources if needed.

Refer to PHMSA's Emergency Response Guidebook at <http://hazmat.dot.gov/pubs/erg/guidebook.htm> for additional information.

Additional Information:

National Pipeline Mapping System

www.npms.phmsa.dot.gov

NASFM's "Pipeline Emergencies"

www.pipelineemergencies.com

PHMSA Emergency Response Guidebook

<http://hazmat.dot.gov/pubs/erg/guidebook.htm>

Kinder Morgan Public Awareness

www.kindermorgan.com/public_awareness

Potential Hazards Associated With Pipeline Leaks

The following chart outlines potential hazards associated with the release of specific products that may be transported by Kinder Morgan:

| Product | Description | Fire Hazard | Health Hazard | Response (Extinguishing Method) |
|---|--|---|--|---|
| Benzene – Typical | Colorless liquid, characteristic odor | Extremely flammable. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if swallowed, inhaled or absorbed through skin. | Dry chemical or foam. Cover liquid spills with foam. |
| Butane – Typical (Butane, Normal Butane, Isobutane Mix) | Colorless liquid, characteristic odor | Flammable gas. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, carbon dioxide (CO ₂) |
| CO₂ – Typical | Colorless, odorless gas | Nonflammable gas | Avoid direct contact with liquid product. Can cause frostbite. Vapors are nontoxic but can serve as an asphyxiant. | Isolate the area and monitor oxygen levels. |
| Crude – Heavy | Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if mercaptan is present. | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam |
| Crude – Sour | Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if mercaptan is present. | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam |
| Crude – Sweet | Amber to black liquid with a mild hydrocarbon odor – like rotten eggs if mercaptan is present. | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam |
| Denatured Ethanol-Typical | Colorless, water white liquid, with a mild fragrant odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Alcohol resistant foam, dry chemical or carbon dioxide |
| Ethane – Typical | Colorless, odorless gas | Flammable gas. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, carbon dioxide (CO ₂) |
| Ethane/Propane Mix – Typical (E/P Mix) | Colorless, odorless gas | Flammable gas. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam or carbon dioxide (CO ₂) |
| Gasoline – Typical (Unleaded Gasoline) | Clear (may be dyed) liquid with a gasoline odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam, carbon dioxide (CO ₂) or water fog |
| High Sulfur Diesel – Typical (petroleum hydrocarbons) | Clear (may be dyed) liquid with a hydrocarbon odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if swallowed, inhaled or absorbed through skin | Dry chemical, foam, carbon dioxide (CO ₂) or water fog. Water may be ineffective but should be used to keep fire exposed containers cool. |
| Kerosene – Typical | Clear (may be dyed) liquid with a petroleum or solvent odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam or carbon dioxide (CO ₂). For larger fires, use water spray or fog. |
| Low Sulfur and Ultra Low Sulfur Diesel – Typical | Clear yellow liquid with a petroleum odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam, carbon dioxide (CO ₂) or water fog |
| Natural Gas Compressed Gas – Typical (Flammable) | Residue gas, sales gas | Flammable gas. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical or carbon dioxide (CO ₂) |
| Natural Gas Condensate – Typical | Colorless liquid with a hydrocarbon odor — like rotten eggs if mercaptan is present | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical, foam or carbon dioxide (CO ₂) |
| Propane – Typical (HD-5, Liquefied Propane Gas, LP-Gas, LPG) | Colorless, odorless liquefied gas | Flammable gas. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if inhaled or absorbed through skin | Dry chemical or carbon dioxide (CO ₂) |
| Transmix – Typical (T-034; T-035; OHSDU545) | Pink to bronze liquid with a gasoline odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if swallowed, inhaled or absorbed through skin | Dry chemical, foam, carbon dioxide (CO ₂) or water fog |
| Turbine Fuel – Typical | Clear watery-white liquid with a faint hydrocarbon odor | Flammable liquid. Keep away from heat, sparks, open flames and other ignition sources. | Harmful or fatal if swallowed, inhaled or absorbed through skin | Dry chemical, foam, carbon dioxide (CO ₂), water fog or vaporizing liquid type extinguishing agents |

For specific information about each product, download the Material Safety Data Sheets (MSDS) from Kinder Morgan's Web site at www.kindermorgan.com/public_awareness/AdditionalInformation/msds

Basic Pipeline Information

Kinder Morgan's pipelines are typically underground, but they are located aboveground in select climates and at compressor stations, pumping stations, valve sites and terminals.

Kinder Morgan operates pipelines in your community. Pipeline's are the backbone of our nation's energy transportation infrastructure. According to the National Transportation Safety Board, pipelines are the safest mode of fuel transportation, both for the public and the environment.

Pipelines are constructed in a corridor of land called the **pipeline right-of-way** that includes the land over and around the pipeline, typically 25 feet on each side. Right-of-way agreements limit how the corridor is used to protect the pipeline and allow operators to monitor and inspect the pipeline.

Kinder Morgan monitors its pipeline system 24-hours a day from its state-of-the-art System Control Center. We ensure public safety and safe pipeline operations through employee training, regular testing, aerial and right-of-way foot patrols and adherence to our comprehensive Integrity Management plan and procedures.

There are three primary types of pipelines: gathering, transmission and distribution. **Gathering pipelines** transport natural gas, CO2 and petroleum products from the wellhead and production areas to processing facilities. **Transmission pipelines**, like those operated by Kinder Morgan, transport natural gas, CO2 and hazardous liquids to marketing and distribution terminals. Transmission pipelines are typically large, high-pressure pipelines.

Distribution systems for natural gas and hazardous liquids differ. Liquids products are stored and transported to their final destination by tanker trucks. Natural Gas is transported from storage locations to residential and business customers by smaller, low-pressure pipelines.

Locating Pipelines in Your Community

Pipeline markers are located along the right-of-way, at road intersections, waterways, railroad crossings and all aboveground facilities. These signs identify the general area but not the exact location of the pipeline. They specify the type of product transported, the operator's name and emergency contact number.

The federal government provides access to maps of transmission pipelines in your community through the **National Pipeline Mapping System** at www.npms.phmsa.dot.gov. Government and safety officials can access additional information and download electronic files to import into emergency preparedness GIS mapping systems.



Examples of Kinder Morgan pipeline markers.

Please ensure that the following phone numbers are included in your emergency contact system

When calling a non-toll free number, call collect.

| | |
|--|--|
| Natural Gas | SFPP, LP 714-560-4411 |
| KM Interstate Gas Transmission 888-763-3690 | Southeast Terminals LLC 800-510-5678 |
| KM Louisiana Pipeline 800-733-2490 | West Coast Terminals LLC 714-560-4411 |
| KM North Texas Pipeline 800-633-0184 | CO2 |
| KM Tejas Pipeline 800-568-7512 | Kinder Morgan CO2 Company, LP 877-390-8640 |
| KM Texas Pipeline 800-633-0184 | Crude |
| Midcontinent Express Pipeline 800-733-2490 | Kinder Morgan Pipelines (USA) Inc. 888-449-7539 |
| Natural Gas Pipeline Company of America 800-733-2490 | Kinder Morgan Wink Pipeline, LP 866-784-6494 |
| Rockies Express Pipeline LLC 877-436-2253 | Trans Mountain Pipeline (Puget Sound) LLC 888-876-6711 |
| Trailblazer Pipeline Company 800-733-2490 | Liquid Terminals |
| TransColorado Gas Transmission 800-944-4817 | Kinder Morgan Liquids Terminals LLC |
| Products | Argo, Illinois 866-499-2746 |
| CalNeV Pipe Line Company 714-560-4411 | Carteret, New Jersey 732-541-5161 |
| Central Florida Pipeline Company 800-510-5678 | Galena Park, Texas 713-455-1231 |
| Kinder Morgan Cochin LLC 800-265-6000 | Pasadena, Texas 713-475-9235 |
| Kinder Morgan Energy Partners, LP (Cypress Pipeline) 800-265-6000 | Perth Amboy, New Jersey 732-826-1144 |
| Plantation Pipe Line Company 800-510-5678 | St. Gabriel, Louisiana 877-217-5243 |
| | Corporate Headquarters |
| | NON-EMERGENCY INQUIRIES ONLY 500 Dallas St., Suite 1000 Houston, TX 77002 713-369-9000 |

Kinder Morgan's Public Awareness Program, developed under the guidance of federal public awareness, damage prevention and integrity management regulation; is a single administered program for all applicable business units or entities. The Program is administered by Kinder Morgan's DOT Technical Working Group. For more information regarding Kinder Morgan's Public Awareness Program visit www.kindermorgan.com/public_awareness.