



How to Effectively Prepare for a Pipeline Incident

Pre-planning is the first step in preparing for a pipeline incident. During this phase, emergency responders should identify the products being transported, and the pipeline facilities traversing their jurisdiction. To locate pipelines in your area go to www.npms.phmsa.dot.gov/PublicViewer.aspx. First responders should become familiar with underground pipeline facilities, as well as those above ground such as compressor or pump stations, gas processing plants, breakout tanks, etc.

Face-to-face meetings and site visits between pipeline operations personnel and first responders ensures familiarity with a facility and its local operations prior to an incident. During these meetings, contact information for personnel should be exchanged and detailed site diagrams should be shared. Discussions that are imperative to effectively planning for a pipeline incident should include evacuation/rally points, HAZMAT storage, shutdown procedures, and associated response tactics.



Development of Standard Operating Procedures (SOPs) allows for the establishment of predetermined and approved procedures for tasks. SOPs typically allow for scaling of an incident based upon severity and incorporate checklists. Effective SOPs will be centered on a unified command system structure and will take pipeline operator expectations, as well as mutually agreeable response actions by first responders, into consideration.

Emergency responders should also be aware of High Consequence Areas (HCAs) and identified sites in their communities. These are

Best Practices

“We ask for any information the pipeline companies can give us. Webinars, seminars, in person training. The pipeline companies have been great with keeping us up to date with anything new.”- Duane Rodgers Chief, Sam's Point VFD, OK

“We hold annual tabletop drills, do pre-incident surveys of the area pipelines, and attend local pipeline operator-sponsored training meetings.” - Jamie Sullivan Fire Chief Camilla Fire Department

“Exercising with pipeline operators is our opportunity to develop relationships (meeting our friends before we need them), for the operators to learn the expectations of local authorities, and local authorities and first responders to learn the response expectations of the pipeline operator.”

(continued from page 1)

typically areas of congregation and may include schools, hospitals, recreational areas, places of worship, prisons, nursing homes, and ecologically sensitive areas. Regular internal review of these sites with input from pipeline operations personnel is important component of this process.

One of the most effective pre-planning tools is a joint tabletop or full-scale mock emergency exercise between pipeline personnel and emergency responders. These drills allow both parties to utilize their knowledge and receive hands-on training in a real life scenario. When conducting emergency response drills, it's always a good idea to hold a debrief afterwards to receive feedback on what worked during the incident response, and what can be improved upon.

Preparing for a pipeline incident is the best way to ensure a successful response. For information on locating Kinder Morgan personnel in your area, or conducting a tabletop or mock emergency drill, please go to <http://PA-inforequest.kindermorgan.com>.

Pipeline Emergency Response Tactics: Identifying a Gas or Product Leak and the Associated Potential Hazards



Fundamental and of critical importance to any response involving hazardous materials is to identify the product involved and the associated hazards.

Incidents involving pipelines are no exception. Pipelines transport a variety of products providing energy

and feedstock for manufacturing processes critically needed for our country. Pipelines are the safest mode of transportation and, while rare, a release of product can occur, so it's important to understand how to properly identify the product type.

When responding to a reported pipeline incident, identifying the operator, contact information, and the product being transported are primary objectives. Federal pipeline safety regulations require signage and markings along the rights-of-way and at above ground facilities that identify the name of the operator, the product being transported, and an emergency telephone number that is manned 24/7. When responding to a possible release of product,

(continued on page 3)

First Responder Training Video Series

Learn how to safely and effectively respond to a pipeline emergency, how pipelines work, how different products impact response, response leading practices, how to better prepare to respond to pipeline incidents and roles in pipeline response. Videos feature interviews with pipeline and emergency response experts, covering a wide variety of emergency response disciplines.

* Videos available at https://www.youtube.com/channel/UCLQv4arPbGluPt7j_JuETWw



Potential Hazards Associated with Pipeline Leaks:

<http://pa123.kindermorgan.com>

(continued from page 2)

understanding how to identify the signs of a leak is critically important. The chart below outlines some of the most common signs of a release based on product type.

Gas Pipelines	Liquids Pipelines
<ul style="list-style-type: none"> • Localized brown or dying vegetation • Vapor cloud near pipeline right of way • Ice ball around a pipeline • Fire at ground level • Bubbles emanating from bodies of water • Dirt being blown up into the air • Odor of rotten eggs or a burnt match • Hissing or roaring sound in proximity to a pipeline 	<ul style="list-style-type: none"> • Multicolored sheens on bodies of water • Dead or dying vegetation • Petroleum type odors • Dirt being blown up into the air • Bubbles appearing on the surface of water • Fire at ground level • Pools of liquid • Vapor cloud in/near a pipeline right of way

Identifying the material involved in a pipeline release is an important, initial step in the response process. Once the product is identified, obtaining information regarding hazards and recommended mitigation actions should be implemented. The best source for detailed information regarding a hazardous material is the associated safety data sheet (SDS) provided by the manufacturer or distributor. Copies of SDS' for transported materials can be obtained from the pipeline operators who have facilities within your jurisdiction.

If in the event of a pipeline incident, a safety data sheet for the product is not readily available, the U.S. Department of Transportation's Emergency Response Guidebook (ERG) is a useful tool especially when responding in the early stages of a hazardous materials incident. Published every four years, the ERG contains 63 individual guides that provide hazard and protective measure recommendations for a myriad of hazardous materials – including those transported by pipeline. The ERG also provides several pages of pipeline safety and emergency response information that can be very useful. The ERG is provided free of charge to emergency response organizations, typically through state emergency management agencies. It is also available in an electronic format via android and iPhone applications. For more information on the ERG, please visit:

<https://www.phmsa.dot.gov/hazmat/erg/emergency-response-guidebook-erg>

(continued on page 4)

Need to Locate Pipelines in Your Area?

To assist identification of transmission pipelines in your area go to the **National Pipeline Mapping System (NPMS)**.

NOTE

If you would like to request additional information, or to schedule a presentation or tabletop drill with Kinder Morgan, please fill out the form found at <http://PAinforequest.kindermorgan.com>



Products Transported by Kinder Morgan

Kinder Morgan transports a wide variety of products. To see the Products we transport by pipeline, click [here](#).

(continued from page 3)

As always, responders should be aware of the potential hazards associated with response to a pipeline release involving gases or petroleum products. Depending on the product, gases can pose flammable, inhalation/toxicity, and oxygen deficiency hazards. For example, propane, while transported as a liquid, will quickly vaporize back into its gaseous form when released into the atmosphere. Propane is inherently heavier than air and can displace oxygen and can be a flammability hazard. Like propane, petroleum liquid releases can pose flammability risks as well as various environmental contamination hazards, especially to surrounding bodies of water. Each product has its own unique properties and characteristics that should be well understood before attempting defensive or offensive tactical operations.

Case Study of Sabotage – A Growing Risk to Critical Infrastructure

Recent incidents have highlighted the risks posed by sabotage to energy pipelines and our nation’s critical infrastructure. One such event took place in late December of 2020 around Aspen, Colorado where three separate facilities operated by a gas pipeline and distribution company were tampered with. One of the sites was within the city limits of the winter resort town of Aspen, the other two were in unincorporated Pitkin County.



The vandalism, which appeared to be well coordinated, was first detected by the gas company on Dec. 26. The pipeline operator first discovered a problem just after 8:00 p.m. when pressure on the line was noted as non-existent. Two hours later, a nearby

resident near the same location called authorities reporting unusual noises that sounded like a gas leak.

When company personnel and law enforcement arrived on scene, they found that the outside barrier to the valves had been broken, and that locks securing the gas valves had been cut. A quick examination at the two other sites yielded similar findings. On above-ground gas lines at two of the locations, the perpetrators wrote the words “Earth First!” in what appeared to be a black marker.

At first, the issue did not seem to have major operational impacts,

(continued on page 5)

WISER

NEW- WISER 6.1 Released for iOS, Android and WebWISER! It includes:

- *The 2020 ERG with limited French translations
- *Updated transportation search criteria for the Help Identify Chemical Tool
- *Updated Android API’s

A set of WISER tutorial videos can be viewed **here** and videos can also be found in the training section of the NLM YouTube Channel.



NPMS iPhone app for PIMMA and Updates

The National Pipeline Mapping System (NPMS) now offers Tribal Government applications for PIMMA applicants and GIS Data requests. Tribal Lands are now viewable on a pipeline map in PIMMA or the **NPMS** Public Map Viewer.

(continued from page 4)

as technicians from the company were able to promptly restore gas flow to the affected sites. The real magnitude of the issue became apparent the next day when the operator realized that they would have to manually turn off gas meters at approximately 3,500 residences, re-pressurize the system, test the lines, and then re-light each of the customer's systems again, a massive undertaking in the middle of winter.

All told, as temperatures dipped into the single digits, these homes would remain without heat or hot water for three days, a potentially dangerous situation as a major winter storm zeroed in on Colorado. Local police and the Pitkin County Sheriff's office established a multi-agency task force and coordinated with the F.B.I. in collecting evidence from the three crime scenes, although to date, the perpetrators have not been apprehended.

"This was a targeted attack on the city," said Aspen Police Department spokesperson Rick Magunson, who added that the nature of the attack likely took special knowledge. "Any person on the street would not know how to find these stations or how to turn them off."

"It's almost, to me, an act of terrorism," added Pitkin County Commissioner Patti Clapper, who was without heat at her Aspen-area home. "It's trying to destroy a mountain community at the height of the holiday season. This wasn't a national gas glitch. This was a purposeful act."

While Earth First! is a recognized movement that describes itself as a "decentralized, autonomous network of groups and individuals around the world" investigators into the Aspen incident have not been able to tie any group or individual to the act. "It's possible someone from Earth First! Is involved, although they've denied it. Or it could be a red herring," said Magnunson.

The operator estimates that costs related to repair and restoration from the sabotage totaled over \$1.4 million.

When coupled with the recent ransomware attack on Colonial Pipeline that crippled the nation's supply of gasoline for several days last May, the Aspen event demonstrates the need for increased vigilance by pipeline operators, law enforcement and the emergency response community.

(continued on page 6)

To view the latest version of the Emergency Response Guidebook, please go to <https://www.phmsa.dot.gov/hazmat/erg/erg2020-english>

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Did you know ...

811 is the nationally recognized three digit number to provide notification of pending excavation activity so that utilities can properly locate underground assets. Help us spread the word for safety ...**Call 811 before you dig!**



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

(continued from page 5)

Emergency Responder Spotlight- Fairfax County, VA Fire and Rescue

Emergency responders conduct extensive training to ensure that they are prepared and ready to respond to a wide array of incidents and hazardous materials events. Preparing for pipeline emergencies is no different.

The Fairfax County (VA) Fire and Rescue Department believes that an open line of communication with pipeline operators in their area is the first step in successfully preparing for a pipeline emergency. Their department requests that utility operators in their county inform them prior to conducting any scheduled maintenance or excavation activity. This information is then communicated to all the first responders in the county so they are aware of the activity in case there are calls from the public or in the event of an incident.

In addition to regular communication, Fairfax County's Fire and Rescue Hazmat Team conducts annual training sessions focused specifically on responding to and mitigating pipeline emergencies. Their Hazmat Team makes time to attend pipeline safety training meetings that are provided by operators in the county. These face-to-face interactions not only lead to familiarity between first responders and pipeline operations personnel, but also offer the opportunity to become more aware of facilities and products in the area, emergency response procedures and capabilities, and the Incident Command System (ICS).

Trice Burgess, Emergency Management Specialist for Fairfax County Fire and Rescue, believes that face-to-face meetings and participation in joint exercises prior to an actual pipeline incident, are key to a successful and timely response. Each of the three shifts at their department, as well as the Hazmat Team, participate in a full scale exercise with pipeline partners at regular intervals. These exercises ensure that all members of the department are familiar with the products transported in their area, as well as the unique response measures required for the various pipelines. Several of the pipeline operators in their area have become members of the Fairfax Joint Local Emergency Planning Committee (LEPC) and are able to provide information pertaining to high consequence areas (HCAs) and operations.

With COVID-19 posing unique challenges to annual face-to-face meetings with operators, many trainings and meetings in 2020 and 2021 have been conducted via phone or virtually. Virtual meetings through Microsoft Teams, Skype etc., have provided a platform for trainings and allowed operators and first responders to continue this critical interface.

NOTE

To be added to *The Responder* distribution list, please email [http://PA-inforequest.kindermorgan.com](mailto:PA-inforequest.kindermorgan.com)

(continued from page 5)

Being familiar with pipeline facilities and local operations personnel is an important part of effectively responding to an incident. Through trainings, LEPC meetings, pipeline operator-sponsored events, and face-to-face meetings, we are all better prepared to respond to an emergency. To contact Kinder Morgan to schedule a tabletop drill, exercise or to request additional information, go to <http://PA-inforequest.kindermorgan.com>. ■

Special thanks for Trice Burgess and the Fairfax County Fire and Rescue Department for their assistance with this article.

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