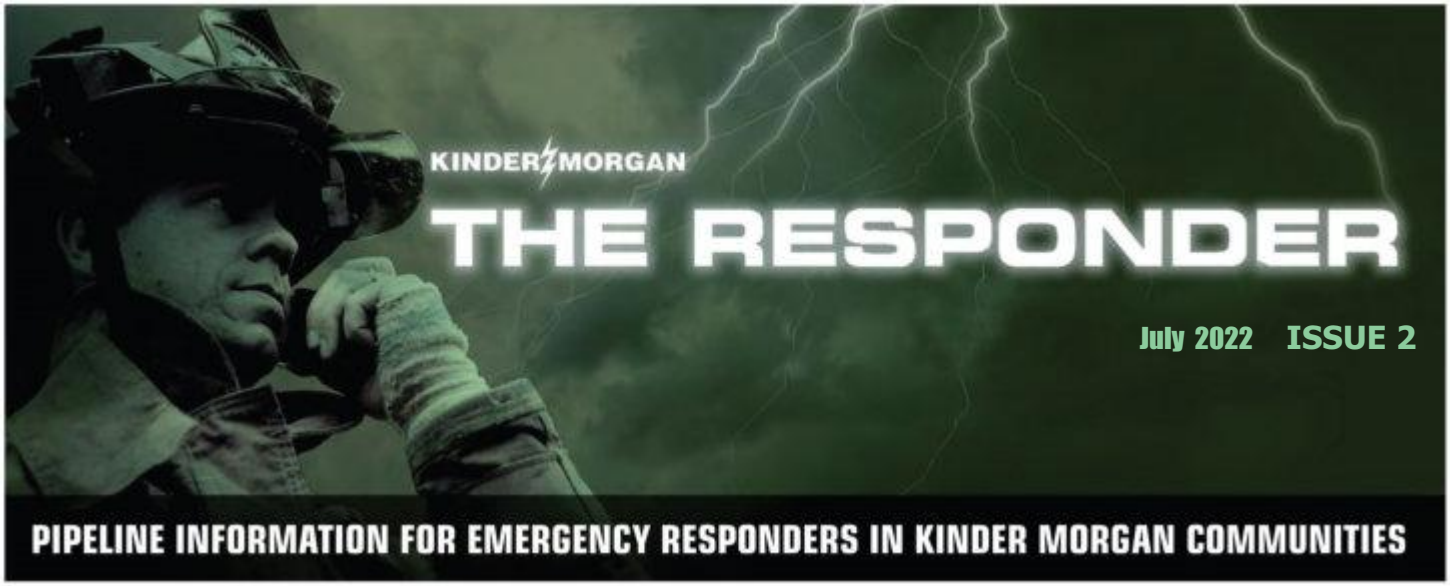
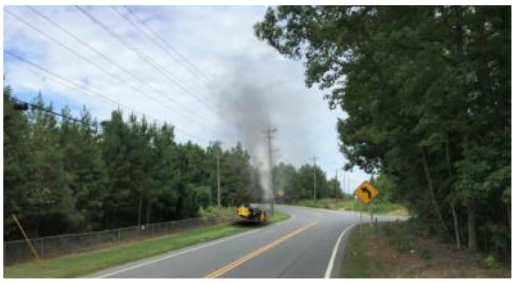
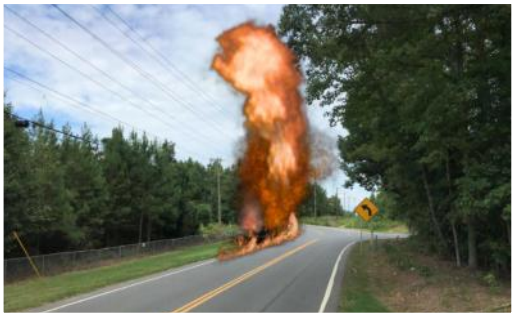


Tailboard Scenario for a Natural Gas Incident

The tailboard scenario below is meant to be a conversation point for discussion of key response actions and considerations to a potential real-life scenario.

It's 7:30 a.m. on a Friday morning. Jackleg Utility Services, a directional drill contractor, is conducting a directional drill operation to install communications fiber at a crossing under Highway 5. The drill rig crew is behind schedule due to recent excessive rainfall and did not call 811 for utility locates for this latest round of work.





While nearing completion of the bore, a six-inch steel high pressure natural gas distribution line operating at 250 pounds per square inch gauge (psig) is struck. Natural gas is immediately being released and migrating from the pipeline through the drill space and back to the drill rig.

Two employees of Jackleg Utility Services that were standing near the rig sustain serious burns from the ensuing fire. The rig is fully engaged in fire and brush around the site begins to ignite. Fire Department assets arrive on scene and establish a command post. Employees from Blue Flame Natural Gas, the pipeline operator arrive on scene and report to the Incident Commander.

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Kinder Morgan Tabletop Drill Guides

Hazardous Liquids and Natural Gas
https://www.kindermorgan.com/Safety-Environment/Public-Awareness/index#tabs-government_&_safety_officials

Best Practices

"We include pipeline locations and information about them (owner, contact numbers, material carried) in the public safety layers of our GIS map that is installed on our fire, police and EMS laptops."

"We discuss with our deputies repose tactics to assist with pipeline emergencies, and how to safely respond to pipeline incidents."- **Sheriff Valdez, Rusk County Sheriff's Office, Rusk County, TX**

"We attend annual trainings through MLGPA and individual pipeline companies."

(continued from page 1)

The Fire Department Incident Commander is advised by the pipeline operator representatives that the pipeline is dual flow and must be isolated by operating valves at multiple locations.

A reporter from the local paper and two television reporters and camera crews have arrived on site and are asking to get an update from Fire Department personnel and Blue Flame Natural Gas.

Traffic on Highway 5 is becoming congested with commuters and parents transporting children to the nearby Hillcrest Middle school.

Telephone calls begin to flood the 911 Center from concerned school parents and nearby residents reporting the incident. Several calls are received from residents of the Lake View Subdivision located a ¼ mile from the incident site reporting a smell of gas in the area.

Discussion Questions

- What are the safety concerns and tactical response priorities based on the initial scene size-up?
- If applicable, what guidance is provided for this incident from your pipeline emergency response standard operating procedure (SOP)?
- What additional information is needed from the pipeline operator representatives?
- What additional resources (besides initial fire response and gas company personnel) are needed?
- How are the information requests from the news media addressed? How is coordination between the Fire Department Public Information Officer (PIO) and the Blue Flame Natural Gas Company spokesperson coordinated?
- How are the reports of the odor of gas from nearby residents addressed?
- What does the Incident Command System structure look like for this incident?

Joint Training Opportunities between Pipeline Operators and Emergency Responders

While pipeline emergencies are rare, they can occur and warrant training and coordination between public sector emergency responders and pipeline operator personnel. 49 CFR Parts 192 and 195 state that pipeline operators should establish and maintain liaison with appropriate emergency officials with emergency response and/or public safety jurisdiction along the pipeline route. One way in which pipeline operators meet this requirement is through face-to-face meetings. These interactions provide an

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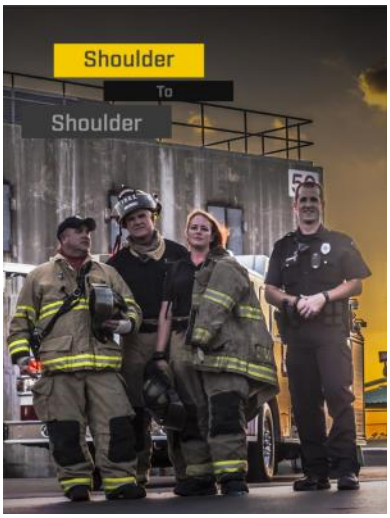
First Responder Training Video Series

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**



Link to request additional information or a training opportunity with Kinder Morgan-

https://www.kindermorgan.com/Safety-Environment/Public-Awareness/Request-Form

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opportunity for both parties to become familiar with one another and to exchange critical information that may be needed in the event of an emergency.

In the past, training for pipeline emergencies was almost exclusively classroom based and typically focused solely on physical properties of the materials being transported, high level orientation on pipeline facilities, and response recommendations. In a recent shift, pipeline operators and public sector responders have recognized the benefits of joint training that is realistic, tailored to the local area, and scenario based. Collaborative efforts also provide excellent opportunities for emergency responders and pipeline operators to train together and discuss strategic and tactical response to pipeline incidents.

Exercises & Drills

Tabletop exercises and mock emergency drills are two categories of evolutions that are well suited for joint pipeline emergency coordination and training. Tabletop exercises are designed to be "stay in the room" incident simulations that are typically executed using a series of exercise inputs that generate discussion and assessment of procedural adequacy. Mock emergency exercises or full scale drills are field response focused and intended to assess mobilization, procedural compliance, and coordination with internal and external entities. Both tabletop exercises and mock emergency drills involving pipeline incidents require ample planning and coordination to ensure realism and effectiveness.

When planning exercises, goals and objectives should be established initially and drive the development of the scenario and other aspects of the simulation. One of the key benefits of conducting an exercise involving both pipeline operators and public sector responders is the opportunity to assess coordination and working within a unified Incident Command System structure. Discussing tactical response capabilities, limitations, and standard operating procedures by each participating entity in real time can prove immensely valuable for future incident response pre-planning. Exercise "hot washes" (high level exercise debriefs immediately following the conclusion of an exercise) are critical to capture areas for improvement while fresh on the minds of the participants.

Kinder Morgan has a robust emergency exercise program and welcomes participation by outside responders. For more information regarding pipeline emergency exercises, please visit **https://www.kindermorgan.com/Safety-Environment/Public-Awareness/index#tabs-government_&_safety_officials.**

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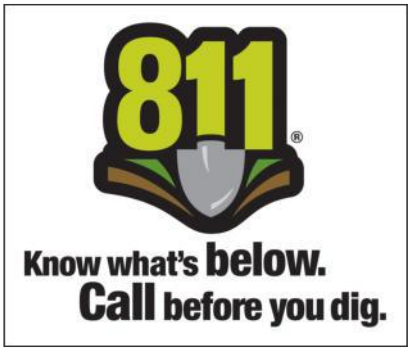
Need to Locate Pipelines in Your Area?

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

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!**



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Collaborative Efforts

In addition to exercises and drills, participation in collaborative efforts related to training can be extremely beneficial. Kinder Morgan is a member of many local, state and national organizations that facilitate regular meetings with emergency responders and public officials. These local meetings allow emergency responders to meet many of the pipeline operators in their areas of operation and exchange important emergency response and contact information. These collaborative efforts often involve a realistic tabletop scenario for a pipeline emergency for first responders and pipeline operators to jointly participate in. These collaborative efforts lead to enhanced communication and familiarity, with the overriding goal of a more efficient response in the event of an actual incident. Joint participation in exercises is an invaluable tool in ensuring preparedness and successful coordination between both parties.

For more information on how to request information on upcoming meetings or to conduct a joint training session with Kinder Morgan please fill out the form found **here.**

What is a Control Center and How Does it Work?

Pipeline operations utilize highly-sophisticated electronic equipment to monitor and oversee operations called control centers. These facilities function in much the same manner as Air Traffic Control is used by air travel, or Mission Control used in space operations; namely as a “nerve center” for capturing key information and controlling key processes.

Specialized equipment, known as Supervisory Control or Data Acquisition, or SCADA, is employed at Control Centers to perform such critical tasks as monitoring pressures, flow rates, and operating compressor/pump stations or other facilities along the pipeline systems remotely. Control centers have a vital role in an operator’s safety and emergency response capabilities. First, the ability to monitor and control flows and pressures which allows the controller to isolate and shut in any operating issue promptly versus dispatching personnel to various locations to manually operate valves which, in some instances, takes more time. SCADA equipment is designed with a series of alarms that alerts controllers to a problem or issue. In the unlikely event that product flow needs to be stopped or

(continued on page 5)

WISER

NEW- WISER 6.2 Released for iOS, Android and WebWISER! It includes:

*The 2020 ERG with limited Spanish translations for ERG-Specific content
*Fire-specific scenario data can now be plotted on protective distance maps

A set of WISER tutorial videos can be viewed **here.**

WISER
Wireless Information System for Emergency Responders

NPMS for PIMMA and Updates

The National Pipeline Mapping System **(NPMS)** now includes Coastal Ecological Unusually Sensitive Areas (Coastal Eco USA) GIS data is now available for download. New HCA **updates** have been added by PHMSA.

(continued from page 5)

altered, those sections of pipe that are automated can be isolated with a touch of a button.

Individuals who work in these control centers are often referred to as controllers or control room operators and can serve a role in facilitating emergency communications. In the event of an emergency, first responders are urged to immediately contact pipeline company Control Room personnel via the toll-free numbers on nearby pipeline markers (for more information on pipeline markers, please read the following article on Damage Prevention Programs) to provide notice and to initiate emergency response actions. Controllers are typically responsible for interpreting multiple sources of information to identify if a leak or issue has occurred. These individuals, or their supervisors, are amongst those responsible for making critical notifications to emergency response agencies, as well as regulatory bodies. In addition to their role in operational control and emergency response, controllers also provide important communications links with their customers.

Kinder Morgan, as well as other operators in the pipeline industry, are governed by regulations from The Department of Transportation's (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). This body prescribes standards and safety requirements for controllers, control centers and SCADA systems, with a strong focus on control room management practices. Kinder Morgan has multiple control rooms across the company, with the main Gas and Products Pipeline Control rooms located at company headquarters in Houston, overseeing their operations along the company's entire footprint that includes over 80,000 miles of natural gas and hazardous liquids pipelines.

Damage Prevention Programs- Keeping Our Pipelines Safe

The overarching goal of pipeline damage prevention programs is to prevent damage to the pipeline before it occurs. These programs are multifaceted and are centered around right-of-way patrols, pipeline markers and public awareness.

Since the vast majority of pipelines are underground, pipeline markers are often the first clue that there are pipelines in the area. Pipeline markers clearly define the path of the pipeline but are intentionally not placed exactly over the pipeline. Markers should never be used to identify the exact location of the pipeline as the rights-of-way can be over 50 feet in width. In addition to marking the pipeline path, they also provide important information on who the pipeline operator is, their number in the event of an emergency, and the product being transported. Federal laws stipulate that pipeline markers be placed at all road and railroad crossings and aboveground facilities.

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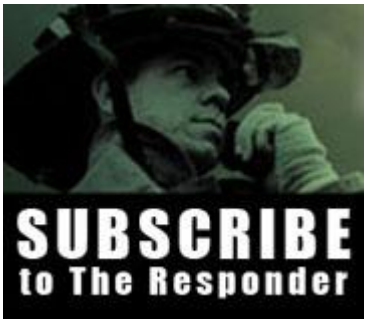
NOTE

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** or call us at 800-276-9927.



Have you Noticed Right-of-Way Encroachment?

If so please contact us at **http://PAinforequest.kindermorgan.com**

Suggest an Article for The Responder!

Is there a topic you'd like to see featured in the next issue?! Please click **here** to suggest your topic for The Responder newsletter!

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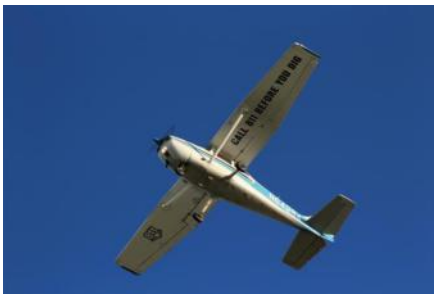
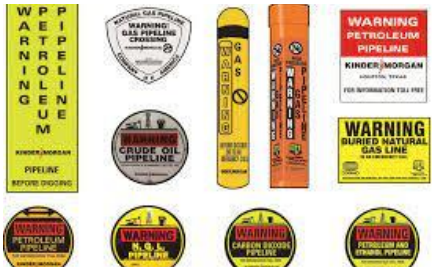
One of the most important ways we keep pipelines safe is through right-of-way (ROW) patrols of our pipelines. With over 2.6 million miles of pipeline in the United States, aerial patrols are the most efficient means of looking for pipeline encroachments along rights-of-way. These patrols are typically conducted by a small plane or helicopter surveying the route of the pipeline to look for signs of ground disturbances or excavation activity, heavy equipment near the pipeline, and potential signs of leaks. If aerial patrol identifies an area of concern, it is reported to local operations who will send personnel to investigate the area.





While aerial patrols are the most commonly used method of viewing large portions of the pipeline, in areas with heavy, dense tree cover preventing a clear view of the pipeline, ground patrols may be necessary. Ground patrols involve personnel physically walking or riding along a pipeline segment looking for the same signs that an aerial patroller would. Ground patrols are commonly used in environmentally sensitive areas where the trees and shrubs cannot be cut or trimmed to increase visibility from the air.

We are all partners in pipeline safety and damage prevention. The potential risks of encroachments to pipelines without operator notification or calling 811, puts all of us at risk. If you see an encroachment, suspicious activity near the pipeline, or a damaged or missing pipeline marker, please contact us at **http://PA-inforequest.kindermorgan.com.** ■

NOTE

To be added to *The Responder* distribution list, please email **publicawarenesscoord@kindermorgan.com**

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