



Pipeline Emergency Preparedness & Training: First Responders and Pipeline Operators – Working Together

Two-way communication between emergency responders and pipeline operators is a critical component in promoting pipeline safety. At Kinder Morgan, we strive to not only communicate with first responders, but also to ensure we are providing them with the information and tools they need to effectively respond to a pipeline incident.



Face-to-face or Local Emergency Planning Committee (LEPC) meetings, group luncheons, damage prevention presentations, mock emergency drills, training, and Common Ground Alliance (CGA) meetings are some of the ways we interact with first responders to enhance our relationships with emergency responders in our pipeline system. In particular, Kinder Morgan's CO₂ group has worked to develop a strong rapport with first responders. One example is their relationship with the El Paso Fire Department and Captain Ricardo Gonzalez.

In an effort to better understand what emergency responders need from pipeline operators, we recently asked Captain Gonzalez to provide feedback on Kinder Morgan's outreach efforts with first responders. He believes that the most worthwhile interaction operators can have with first responders comes through face-to-face meetings. During quarterly LEPC meetings, Captain Gonzalez who serves as Vice Chair of his LEPC, has the opportunity to engage with Kinder Morgan personnel who are also LEPC members. Not only do LEPC meetings give emergency responders and pipeline operators the opportunity to become familiar with one another, they

NEW - 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 www.shoulder2shoulder.tv



www.shoulder2shoulder.tv

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also provide a forum to discuss emergency preparedness and response capabilities.

In addition to LEPC meetings, Captain Gonzalez says he and members of his department regularly attend facility tours and damage prevention presentations held by Kinder Morgan. Tabletop and full-scale mock emergency drills are planned by Kinder Morgan personnel, and then first responders are invited to participate. During these drills, KM CO₂ conducts mutual aid meetings with third party pipeline operators in an effort to coordinate resources and response roles in the event of a pipeline emergency. Tabletop drills are an excellent opportunity for operators and first responders alike to discuss operationally-specific information, and practice a coordinated pipeline emergency response.

When asked how pipeline operators can better communicate with first responders, Captain Gonzalez believes that his department and Kinder Morgan have developed a strong rapport due to their regular meetings, trainings and annual tabletop drill and this can be the blueprint used by pipeline operators and first responders to improve communications. He states that he and his department know how to contact Kinder Morgan personnel to request additional information and resources.

Are you and your department familiar with the pipeline operators in your area? Would you know who to go to for more information? The **National Pipeline Mapping System** is a good place to find more information about CO₂, hazardous liquids and natural gas transmission pipelines in your area.

Effective communication and outreach with emergency responders is a key component of Kinder Morgan's Public Awareness program. For more information on conducting a joint tabletop drill or damage prevention presentations, go to:

http://www.kindermorgan.com/public_awareness/AdditionalInformation/RequestAdditionalInformation.aspx

Special thanks to Captain Gonzalez of the El Paso Fire Department for his assistance with this article.

Pipeline Emergency Response Tactics: Security-related Incident Procedures for Pipeline Personnel, Firefighters and Law Enforcement Officials

With the current threat of terrorism at the national and global level, increased security awareness on the part of pipeline personnel and public sector emergency responders is essential. Terrorist and

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Best Practices from Emergency Responder Peers

"We send people to all pipeline training meetings and tabletop drills in our area." - Ashland Rural Fire Rescue, Ashland, KS

"We discuss the possibilities of an emergency situation and what our main goals would be [based] on the extent of the emergency." - Chief Cole Mulloy, Sundown Volunteer Fire Department, Sundown, TX

"We host an annual Homeland Security Exercise (Full Scale). Kinder Morgan has participated in the past and continues to be a member of the LEPC in San Juan County, NM." - Mike Mestas, Coordinator, SJC Office of Emergency Management

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other extremist groups have publically expressed interest in attacking and disrupting the nation's critical infrastructure including natural gas, CO₂ and hazardous liquids pipelines. While given the expansive nature of pipeline operations security may seem like a daunting task. There are steps that we all can take to enhance security and safety of these critical facilities.

If you see something, say something...

For years, pipeline operators have encouraged neighbors and public sector responders to be their eyes and ears when it comes to leak identification and damage prevention. Now, operators are asking for help identifying security threats to their systems. Using the common mantra "if you see something, say something" everyone is encouraged to be observant and report suspicious activities to pipeline operators and law enforcement.

Public sector first responders are uniquely qualified to be partners in security awareness for a couple of reasons. First, they are usually intimately familiar with their jurisdiction and the activities that occur there on a daily basis. Second, first responders are taught to be observant and question activities that "just don't look right". Unfortunately, in today's world the general public lacks observation skills and initiative or simply suffers from apathy or a fear to get involved. That's why pipeline operators rely heavily on their safety partners to identify security threats.

What to look for...

Beyond the obvious security issues that concern any property owner, such as vandalism and theft, there are specific concerns that pipeline operators want identified and reported. Any attempt to tamper with valves or unauthorized entry into pipeline facilities would be of significant concern. Further, instances of individuals taking pictures or drawing diagrams of pipeline assets would be worthy of reporting and investigation. Seemingly abandoned vehicles on pipeline rights of way, unauthorized individuals digging and burying anything in proximity to a pipeline, or materials placed near pipeline facilities that don't seem to belong (bags, packages, etc.) are examples of instances that need further investigation.

What to do (tactically)...

While the nature of security-related incidents involving pipeline assets may vary, there are some response tactics that are fairly common that should be considered:

- **Employ thorough scene size-up during response** - While scene size-up is important during response to any type of

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WISER

The Wireless Information System for Emergency Responders (WISER) is offered as a standalone application on Microsoft Windows PCs, Apple iPhone and iPod Touch, Google Android devices and Blackberry devices.



NPMS

To access the National Pipeline Mapping System and locate pipelines in your area, please go to:

<https://www.npms.phmsa.dot.gov/default.aspx>

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emergency, when dispatched to an incident outside the ordinary, responders should be especially vigilant and observant. Could the trigger event for the incident been an intentional act? Are there bystanders that don't seem to belong? Did the pipeline operator receive any threats prior to the incident?

- **Preserve evidence** – As much as possible, when responding to an event with a suspicious cause, responders should minimize destruction of evidence such as footprints, accelerants, or signs of security breaches.
- **Contact appropriate law enforcement agencies if a security threat is suspected** – If your scene size-up results in security concerns, isolate the area and contact local law enforcement if they haven't already responded. In addition, local law enforcement can up-channel the report to the FBI and Department of Homeland security.
- **Pre-Plan with the pipeline operator** – During liaison activities or training sessions include a discussion concerning security procedures with the pipeline operator. These discussions could include an overview of the company's procedures for notification and response to security threats/incidents as well as specific issues to be aware of when responding to the facility.

Who to call...

If you observe suspicious activity near pipeline facilities, you should contact the pipeline operator immediately. You can find the number for the operator on signage and markers on the pipeline right-of-way or at pipeline facilities. When you call, be very specific concerning the nature and location of the suspicious activity. Once reported, the pipeline operator will contact local area law enforcement and operations personnel to investigate the situation.

Where to find out more...

The pipeline operators in your jurisdiction can provide you with more information concerning pipeline security awareness tips. In addition, The Transportation Security Administration of the Department of Homeland security has information for responders at: <https://www.tsa.gov/for-industry/surface-transportation> In this issue of *The Responder* we also take a look at the security measures pipeline companies, like Kinder Morgan, employ to protect their remote facilities.

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ARCHIVED ISSUES

Read more from past issues of "The Responder" online at www.kindermorgan.com/public_awareness/The_Responder/archive.aspx

First Responder Online Pipeline Training

To access the API-AOPL Emergency Response Team's free online training, please go to <https://nasfm-training.org/pipeline>

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Overview of Pipeline Systems: Liquefied Natural Gas Transportation

Due to its physical state, natural gas can be a logistical challenge to transport over long distances where pipelines do not exist or to overseas international markets. Liquefying natural gas so that it takes up less space allows for transportation by cryogenic road tankers or ships.



Natural gas is liquefied by first removing impurities and then compressing the gas by lowering the temperature to approximately -260 degrees Fahrenheit. Facilities operating large refrigeration systems lower the temperature of the gas to approximately -260 degrees Fahrenheit, thereby turning the methane present in natural gas into a liquid that is clear, odorless, non-corrosive and non-toxic. This process shrinks the volume of the gas about 600 times, making it easier and more cost effective to store and ship.

The liquefied product is then introduced into specially insulated cryogenic tankers for transport around the world. During shipping, Liquefied Natural Gas (LNG) is kept in liquid form through a process known as auto-refrigeration that limits the amount of product that boils off or evaporates. Once LNG reaches its destination, it is offloaded from the tanker and either stored, usually in insulated storage tanks, or returned to a gaseous state at facilities known as regasification plants. Thereafter, it is available for pipeline transportation for use in homes, businesses and industrial processes.

In the U.S. there are about 115 active facilities that handle LNG. Natural gas from domestic producing fields is liquefied and stored at various facilities in 25 states, with nearly 100 of these facilities connected to the natural gas pipeline grid. According to the Federal Energy Regulatory Commission (FERC), there are presently nine LNG receiving terminals, one export terminal, and four more export terminals under construction.

LNG has an exceptional long-term safety record and is transported and stored just as safely as other fuels. As a liquid, LNG is not explosive. If released, LNG vapors will warm, become lighter than air and disperse with the prevailing wind. Cold LNG vapor will appear as a white cloud until it disperses. LNG vapors do not catch fire as easily as other common fuels like propane and gasoline,

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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 before you dig!



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

April is the National Safe Digging Month!

Please help us spread awareness and reduce the risk of excavation damage. If you are planning to dig or excavate, or notice any activity along a pipeline Right-of-Way, please call 811.

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however, if LNG is released in the presence of an ignition source, a fire with intense heat will result from the continuous evaporation of the product. For this reason, safety and fire-fighting equipment are installed at terminals and onboard ships to help manage and contain any incident.

Fighting an LNG fire is very similar to a fire resulting from any hydrocarbon. Development of special dry chemical and high-expansion foam systems began with a series of industry-specific tests that allowed LNG facility designers to configure extremely reliable deterrent and fire control systems. Fire training schools, such as those at Texas A&M, and industry efforts, sponsored by groups like the Northeast Gas Association, train fire fighters and industry professionals on handling LNG.

Additional LNG Resources:

Pipeline & Hazardous Material Safety Administration's website:
<http://primis.phmsa.dot.gov/comm/LNG.htm>

North American LNG Import Terminals on FERC's website:
<http://www.ferc.gov/industries/gas/indus-act/lng.asp>

Department of Energy: <http://energy.gov/fe/science-innovation/oil-gas/liquefied-natural-gas>

Texas A&M Engineering Extension Service's LNG Emergency Response website:
<https://teex.org/Pages/Program.aspx?catID=545&courseTitle=LNG%20Emergency%20Response>

Keeping Pipelines Safe/Practices & Protocols: Security at Remote Pipeline Sites

Pipeline companies are continually seeking ways to improve security at remote, unmanned locations. Since these sites are not physically manned by pipeline personnel on a daily basis, these locations may be potential targets for terrorist or other criminal activity.

Remote locations are often targets for the theft of copper wire, batteries and solar panels. Some remote sites have even been the target of attempted attacks through the use of improvised-explosive devices (IEDs). While acts of terrorism are a very rare occurrence, remote locations may be viewed as "soft targets" or targets of opportunity by those committing criminal activity. For information on identifying and responding to security-related threats, please see *The Responder* article, "Pipeline Emergency Response Tactics:

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Kinder Morgan Social Media

Facebook:
<https://www.facebook.com/KinderMorganInc?rf=108038462610747>

Twitter:
<https://twitter.com/KinderMorgan>

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Security-related Incident Procedures for Pipeline Personnel, Firefighters and Law Enforcement Officials”.

A security incident at a remote site does not only impact pipeline operations, but can have consequences for the emergency response community, as well as the general public. Because of this, during our meetings with first responders and law enforcement, we encourage discussions related to pipeline security. By working with emergency responders to promote their understanding of facility operations, identifying components that are critical to operations, and helping them recognize “normal” infrastructure versus a suspicious device, we try to create an environment for a unified approach to security and safety at remote facilities. Additionally, Kinder Morgan voluntarily adheres to the Transportation Security Administration’s (TSA) Pipeline Security Guidelines, and strives for enhanced security measures at our remote operation sites.

During incidents at remote locations it can be challenging to identify what are normal operations for an unmanned facility. Regular outreach and visits with first responders helps to bridge that knowledge gap by sharing information necessary for first responders to identify potential security breaches. By jointly sharing our baseline expectations for securing remote locations, we strive to ensure all assets are protected against unauthorized entry and criminal activity. Utilizing the “force multiplier” effect we ask that emergency responders, local residents, visitors and other members of the community become our partners in pipeline safety, and report any suspicious activity near our facilities or pipeline rights-of-way. If you would like more information on pipeline security, or are interested in scheduling a facility tour, please contact us at publicawarenesscoord@kindermorgan.com.

To access the Transportation Security Administration’s Pipeline Security Guidelines, go to <https://www.tsa.gov/sites/default/files/tsapipelinesecurityguidelines-2011.pdf>

Special thanks to Duane Jones, Kinder Morgan Director of Security, for his assistance with this article. ■

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