



KINDER MORGAN

# THE RESPONDER

June 2017

ISSUE 2

PIPELINE INFORMATION FOR EMERGENCY RESPONDERS IN KINDER MORGAN COMMUNITIES

## Pipeline Emergency Preparedness & Training: Lower Colorado River Pipeline Functional Exercise

On April 13, 2017 Kinder Morgan facilitated a wide scale, worst-case discharge functional exercise in Yuma, Arizona. The scenario provided to participants was as follows: *Arizona has been experiencing heavy rains over the course of several days, which led to the opening of the Laguna Dam gates, subsequently raising the level of the Colorado River.*



*The local Kinder Morgan control center received low-pressure and low flow rate alarms on the 22" diesel pipeline. Following procedure the control room issued commands to close the Colorado West and East Valve stations but the commands failed to close the valves, resulting in an uncontrolled release into the Colorado River.*

*A local fisherman at an RV Park notices a sheen on the water and the smell of diesel fuel and calls 911. The fire department calls Kinder Morgan's hotline to report the fisherman's call, and responds to the scene. The Yuma Fire Department arrived at the site, and immediately notified the spill response contractor, triggering the deployment of the containment boom to the river. The boom was placed in the river to contain the spill and the environmental effects.*

The simulated diesel fuel release occurred on the lower Colorado River near the United States' border with Mexico and near Native American tribal areas, specifically the Quechan and Cocopah Tribes. The cultural and environmental sensitivities surrounding an incident in this geographic region provided company personnel,

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## Best Practices

"Sweetwater County Emergency Management hosts the Green River Basin Pipeline Association meetings, attends the WyPA Pipeline Awareness seminars, facilitates the Little America Corridor meetings and attends any training opportunities that are presented by pipeline operators."

"We read The Responder publications faithfully and share articles and training opportunities with the first responders in our area. We attend local pipeline operator-sponsored training meetings annually."

**–Gerry Beckner, Director,  
Guernsey County Emergency  
Management Agency,  
Cambridge, Ohio**

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regulatory agencies and first responders with a unique response test.

Ninety three individuals from regulatory and response agencies were in attendance, with representatives from the EPA, PHMSA, FEMA, Yuma County Police & Fire, Quechan and Cocopah Tribes, and the Organismo de Cuenca (the Mexican Government) amongst many others. Overriding goals of the exercise were to exercise the notification procedures in Kinder Morgan's local emergency response plans, engage Mexican authorities as well as local Native American Tribes, to establish the Command Post and enact the ICS structure, and to examine the ability of various response agencies to produce and disseminate information through the Public Information Officer (PIO).

After the conclusion of the eight-hour exercise a de-brief was conducted with all players, observers and facilitators. Participants were tasked with providing written evaluations to Kinder Morgan, which will be reviewed and incorporated into an after-action report offering best practices and lessons learned from the exercise.

In addition to satisfying the National Preparedness for Response Exercise Program (PREP) Guidelines and exercising response plans and procedures, the central objective of a drill of this magnitude is to foster and develop relationships between company personnel, regulatory agencies, and responding departments. Testing emergency response tactics and plans, and working with emergency responders prior to an incident is one of the most effective ways to ensure that a real incident is handled properly and efficiently.

For more information on conducting exercises and drills with Kinder Morgan, please contact <http://PA-inforequest.kindermorgan.com>.

### **Pipeline Emergency Response Tactics: Responding to a Natural Gas Pipeline Incident**

While natural gas pipeline incidents are rare, when they do occur it is important for first responders to be aware of the unique properties of natural gas and how to respond appropriately. In its original state, natural gas is colorless, odorless, non-toxic, and is a simple asphyxiant. Natural gas has a lower explosive/flammable limit (LEL/LFL) of 5% of natural gas in air and an upper explosive/flammable limit (UEL/UFL) of 15%, or a flammable range of 5–15%.

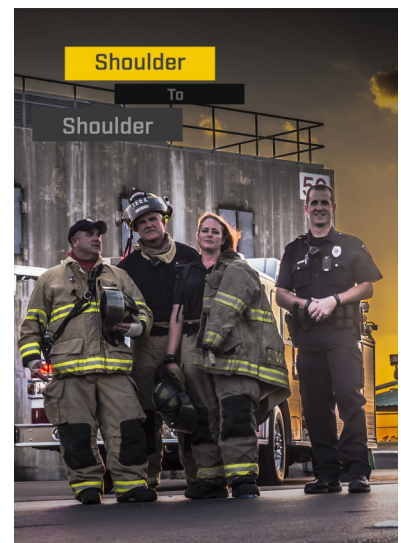
When arriving on-scene, always assess the situation first and

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### **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](http://www.shoulder2shoulder.tv)



[www.shoulder2shoulder.tv](http://www.shoulder2shoulder.tv)

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approach from an upwind, uphill location. Once it has been determined that an incident involves natural gas, first responders should secure the area, while approaching the scene with caution. If available, responders should utilize a combustible gas indicator (CGI) before entering the area. Be sure the scene is secure, and remove all ignition sources, including cell phones, vehicles, radios, flashlights, etc. First responders should employ ICS and be sure to stage all apparatus upwind, uphill and upstream from the incident. Pipeline personnel are well-versed in the Incident Command System and will be able to coordinate with the Incident Commander at the scene and provide him or her with the information needed in a timely manner.

If no pipeline operations personnel are on-scene, first responders should locate the nearest pipeline marker and notify the company at the number provided on the signage as quickly as possible. Please remember that first responders should wait for pipeline field personnel to arrive on-scene, and should NOT attempt to operate pipeline valves. The most effective way of dealing with a natural gas incident is for pipeline personnel to shut off the gas flow to the area and let the gas naturally dissipate into the atmosphere. In most cases, emergency responders should not attempt to extinguish gas, as this could cause an explosion. If the pipeline leak is in a building or other confined area such as a sewer, first responders should be sure to vent windows, doors and manhole covers accordingly to let gas naturally dissipate.

Once pipeline personnel arrive on-scene, they should work closely with emergency responders to establish the correct protective action distance by factoring in the pipeline's size, location, pressure, wind direction and time of day. If the Incident Commander deems evacuations necessary, remember to knock on doors rather than ringing doorbells, as a doorbell could be a potential ignition source.

Please regularly check your department's CGI's to ensure that they are maintained and calibrated, and that personnel who may use them have been properly trained in standard operating guidelines. Knowing the appropriate protocols for responding effectively to a natural gas incident can be the difference in life or death. For more information on physical properties of natural gas, emergency responders can reference their Emergency Response Guidebooks (ERGs). For additional information on Incident Response Tactics, please go to

[https://www.kindermorgan.com/pages/public\\_awareness/government/IncidentResponseTactics.aspx](https://www.kindermorgan.com/pages/public_awareness/government/IncidentResponseTactics.aspx)

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## WISER

NEW Update- A set of WISER tutorial videos can be viewed **here** and has been released to introduce and demonstrate WISER functionality. The videos can also be found in the training section of the **NLM YouTube Channel**. They include a dive into the information provided by a known substance as well as a demonstration of WISER's protective distance mapping feature.



## NPMS Launches iPhone app for PIMMA

The National Pipeline Mapping System has launched an iPhone app for PIMMA. It can be accessed by searching for "pipeline information" on the App store. You will need your PIMMA username and password to use the PIMMA iPhone app. To access the National Pipeline Mapping System online and locate transmission pipelines in your area, please go to <https://www.npms.phmsa.dot.gov/>

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## Overview of Pipeline Systems: Emergency Responder's Role in Pipeline Safety Management Systems as a Key Stakeholder

In July 2010, a segment of pipeline, located less than a mile downstream of a Marshall, Michigan pump station, ruptured releasing heavy crude oil into the Talmadge Creek. Along with other responding agencies, the National Transportation Safety Board (NTSB) investigated the accident.

As a result of their investigation, the NTSB published recommendation P-12-17 in July of 2012. In response to the NTSB's recommendation and thorough collaboration between the pipeline industry, regulators, and public advocates, the American Petroleum Institute (API) published *Recommended Practice (RP) 1173 - Pipeline Safety Management Systems*.

API RP 1173 contains 10 elements that represent a continuous improvement cycle (Plan, Do, Check, Act or PDCA) for safe operation of Natural Gas, Hazardous Liquids, and CO2 pipelines. The PDCA cycle embodies these 10 elements:

- Leadership and Management Commitment
- Stakeholder Engagement
- Risk Management
- Operational Controls
- Incident Investigation, Evaluation and Lessons Learned
- Safety Assurance
- Management Review and Continuous Improvement
- Emergency Preparedness and Response
- Competence, Awareness and Training
- Documentation and Record Keeping

While participation in this performance-based standard is voluntary, the pipeline industry, with the support of trade associations (API, the Association of Oil Pipelines (AOPL), the Interstate Natural Gas Association of America (INGAA), and the American Gas Association (AGA)), has committed to implementing the RP. Participants have agreed to the following goals and activities for the implementation:

- Goals - educate stakeholders and enhance safe pipeline operations through the implementation and use of API RP 1173.
- Activities - exchange ideas, information, and lessons learned about implementation in an effort to advance pipeline safety for individual companies and the industry as a whole.

Because the RP is a continuous process, pipeline companies

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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.**

### NOTE

If you would like to request additional information, schedule a presentation or tabletop drill, or subscribe to *The Responder*, please fill out the form found at <http://PA-inforequest.kindermorgan.com>

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across the industry are all at different levels of maturity in the implementation of the RP. Implementation will not be a sprint to completion, but instead a journey that will require several PDCA cycles to develop.

We are all invested in the safety of the public and the environment, and we look to the emergency responder community for your assistance. As an integral part of the emergency response and incident mitigation process, we request your feedback on these vital components of our safety and risk management programs. To request additional pipeline safety information about Kinder Morgan, to arrange for a meeting with a Kinder Morgan representative, or to provide pipeline safety feedback please fill out the online form accessed at <http://PA-inforequest.kindermorgan.com>.

### **Keeping Pipelines Safe/Practices & Protocols: Integrity Management Programs-Pipeline Company Activities in High Consequence Areas**

The Pipeline Safety Improvement Act of 2002 was developed to place requirements on transmission pipeline companies to prepare and implement integrity management programs (IMP). This law specifically tasks operators with identifying high consequence areas (HCAs) and conducting risk analysis of these areas, performing integrity assessments of each section of pipe, and inspecting the entire pipeline segment at prescribed intervals.



According to the act, the operator is responsible for classifying areas of congregation and limited mobility as “identified sites”. This includes sites such as hospitals, day care centers, nursing homes, schools, and jails. A key requirement of the IMP regulation is obtaining input and feedback from emergency responders on identified sites and HCAs in their communities. During this identification process, the operator is also tasked with conducting a risk analysis to identify specific and potential threats along the pipeline system, and to ensure there are preventative and mitigative measures in place.

IMPs utilize many in-line inspections tools (ILI) to conduct integrity assessments along the pipeline to look for potential threats. The ILI tool (a.k.a. smart pig) is inserted into the pipeline and pushed along by the flow of the product. The smart pig examines the pipe for any

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### **First Responder Online Pipeline Training**

To access the API-AOPL Emergency Response Team’s free online training, click <https://nasfm-training.org/>

### **NOTE**

To read past issues of *The Responder*, please go to the archived issues at [http://www.kindermorgan.com/pages/public\\_awareness/The\\_Responder/archive.aspx](http://www.kindermorgan.com/pages/public_awareness/The_Responder/archive.aspx)

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anomalies such as metal loss and dents. It is removed from the pipeline at a downstream location and the data obtained is then analyzed. Analysis of the ILI tool data may result in further action to enhance pipeline safety.



Another important tool used in integrity management is pressure testing. Pressure tests are utilized by operators after pipeline construction has been completed, typically before the line is placed into service, but may also be used during the pipeline's lifetime as well. A pressure test usually involves placing water into the pipeline and then pressurizing it to a level exceeding normal operating pressure using pumps or compressors. The pressure is then held for a specific amount of time to ensure that there are no leaks in the pipeline segment.

While HCAs are an important component of IMPs, it is also important to ensure that non-HCAs are assessed to assure pipeline safety for the entire system. Emergency responders can further assist pipeline operators manage pipeline integrity by working to reduce the risk of excavation damage by promoting 811 in their communities.

For more information on integrity management programs or HCAs, please request additional information at <http://PA-inforequest.kindermorgan.com>. ■

## Kinder Morgan Social Media

Facebook:

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

Twitter:

<https://twitter.com/KinderMorgan>