KINDER²MORGAN

THE RESPONDER

March 2022 ISSUE 1

PIPELINE INFORMATION FOR EMERGENCY RESPONDERS IN KINDER MORGAN COMMUNITIES

Engaging Public Officials in Mock Emergency Exercises

Emergency response exercises help hone your organization's response capabilities and promote teamwork, while reinforcing roles and responsibilities during a crisis. Public officials are an important group that



should be included in effective emergency response teams.

To ensure protection of the public and effective management of a high-profile incident, emergency responders, facility operators, governmental agencies and local public officials must work as a coordinated unit. Ideally, drills should test the vital synchronization between all of these groups.

When your organization is formulating an exercise that includes public officials, planners should first pinpoint what they want to test and why, then identify public officials or government bodies that best meet the objectives for the drill. Planners should reach out to those parties using established relationships that members of your organization might have. Once the officials agree to participate, they should be provided with a synopsis of the exercise and the drill's objectives. If the desired participation is with a large municipal body such as city council or county commissioners consider adding a representative from that party to the exercise planning team. When implementing the drill, those involved in planning the exercise should not be actively engaged, as this might confuse other participants during the drill as to whether that individual is a facilitator or actively engaged.

Kinder Morgan Tabletop Drill Guides

Hazardous Liquids and Natural Gas

https://www.kindermorgan.co m/Safety-Environment/Public-Awareness/index#tabsgovernment_&_safety_ officials

April is Safe Digging Month!

We want you to be aware of our pipelines and facilities and ask for your help in preventing damage to them.

As the start of digging season begins, please remember to call 811 prior to excavation activity- no job is too small to call! Immediately report any suspicious persons and/or activities, including unauthorized digging, near the pipeline to your local law enforcement authorities by calling 911.

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Planners should always be mindful of the myriad responsibilities that officials and agencies have to the public and make sure that the exercise incorporates and factors in those elements. This focus should ideally incorporate key decisions and support that the official or agency provides to constituents.

To best engage public officials, drill planners should consider challenging scenarios that include more than just an operational element. For example, scenarios about a coordinated terrorist situation, or cyberattack on a municipality would be situations where the role of public officials is paramount.

During the exercise, response organizations and public officials should coordinate on elements like responsibilities for decision making, humanitarian assistance needs, joint media and public statement policies, and establishment of joint command centers. Essentially, any items that would require a high-level of communication, coordination and teamwork should be simulated and tested during a realistic exercise.

Following the drill, the planning team should seek feedback and analysis from any participating public bodies or officials. This might include strengths of the observed response, and opportunities for improvements in coordination and cooperation between all parties.

Kinder Morgan has enhanced several of its full-scale exercises by involving both emergency response and public officials. In 2019, the company conducted an exercise in Illinois that included the area fire and sheriff's departments as well as local emergency planning groups.

Since emergency response organizations, public officials and energy sector operators all share the common goal of protecting public safety, it is vital that they work together to strengthen response performance. For this reason, consider including public officials in your next large-scale drill exercise.

How Social Media is Changing Emergency Response

The proliferation of social media has enveloped all facets of our society. It has evolved from posting pictures of family members on vacation to the place where many Americans get their daily news.

Because of its instantaneous nature and wide-spread capabilities for communications, social media presents both opportunities and challenges during emergency response activities. Mark Zuckerberg, founder of Facebook, once said, "When disasters

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/cha nnel/UCLQv4arPbGluPt7j JuE TWw



Need to Locate Pipelines in Your Area?

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

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happen, people need to know that their loved ones are safe. It's moments like this that being able to connect matters."

Utilizing social media during emergencies allows prompt and efficient communications, and it serves as an essential tool for information dissemination. Social media has the power to provide the public and local communities with crucial real-time updates, while creating opportunities for partnership between response agencies, public officials and local citizens.

According to the U.S. Department of Homeland Security, social media and collaborative technologies have become critical components in emergency preparedness, response and recovery. Information shared through social media can be used for planning response strategies, deploying resources in the field, and providing updated and accurate information to the public.

One example of effective social media use during an emergency is the response to Hurricane Isaac in 2012. When the storm plowed through the Gulf Coast, the city of New Orleans and local emergency responders effectively used various social media channels to warn and update the public. After the storm, FEMA, the city and the National Weather Service deployed a coordinated social media response that included hashtags to make information easy to find, keeping local citizens informed about flooding, transit access and road closures. Local media outlets supported the initiative by informing residents about government social media accounts and hashtags.

Other notable examples of effective social media communication efforts include the response to the Texas winter storm in 2021, California Wildfires in 2019, Hurricane Harvey in 2017, and the New Zealand earthquakes in 2011.

However, social media can also present challenges during emergency responses. It has given rise to "citizen journalists" who can instantaneously break and post unfiltered and unsourced "stories" on situations. There's also the question of credibility for information posted on social media, and negative comments or observations have the ability to spread quickly.

Social media also makes it harder for an organization to control the narrative because anyone is able to make a post. Ideally, an organization's official social pages should be the only place to get accurate, confirmed real-time data on situations to avoid any panic or confusion. However, it's easy for personal postings that may reflect opinions or speculations held by organization personnel to lead to misinformation.

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Best Practices

"We participate in the annual pipeline training and awareness seminar, then follow up with additional training and SOP review of pipeline emergencies."- *Lisbon Fire Dept., Chief Mark Hall, Lisbon, OH*

"We partner with HAZMAT and fire teams to deliver training and exercises for the local communities."

"I am lucky enough to be both an Assistant Chief and local Vol FC, as well as a safety manager/emergency response coordinator with a Natural Gas company, so I work on both sides. We conduct outreach trainings with other local FCs and I also do internal training with my Fire Company."

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Despite the challenges, the advantages of using social media during emergency response far outweigh any possible disadvantages.

Some of the key benefits are:

- Raises awareness about risks and threats
- Provides real-time alerts and warnings
- Serves as a surveillance and monitoring tool for local emergency responders to get feedback on conditions, status updates from the public, etc.
- Tracks and identifies victims and survivors
- Counterbalances rumors or inaccurate media coverage

In this day and age, it is incumbent upon everyone involved in emergency response to use all the tools in their arsenal to keep the public informed.

What Goes into Constructing a Pipeline?

Pipelines are an important component of our nation's energy infrastructure. With over 2.6 million miles of steel and plastic pipeline in the United States, it is important to know that these are an incredibly safe and efficient mode of transportation, inherently safer than other methods such as rail, barge, and truck. Transporting natural gas and liquid commodities by pipeline allows us to meet our country's growing energy demands.

Before the construction process begins, pipeline operators go through a lengthy permitting process to obtain appropriate approvals. The process may include coordination with groups like the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, Native American Tribes, and state and local authorities. Federal and state permits must be granted and in the case of Interstate Natural Gas pipelines, the Federal Energy Regulatory Commission (FERC) must deem that there is significant enough demand and need for the pipeline. Then, the proposed route is thoroughly analyzed and all reasonable effort is made to utilize existing right-of-way (ROW), avoid populated areas and minimize landowner and environmental impacts. All environmental impacts are assessed in this stage including cultural resources, land, water and air. The next stage is to obtain easement agreements with landowners or eminent domain condemnations, at which point the construction process can begin in earnest. By following the process, we can be sure that the pipelines that are needed for our energy infrastructure are safe before they are placed into service.

All phases, from the initial planning stages to the restoration phase can take a few weeks to years, depending upon the size and scope of the project.

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**.



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.

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1. Clearing & Grading

After the right-of-way (ROW) is carefully surveyed and staked, the ROW is graded. Top soil is carefully removed and searegated.

2. Trenching

A wheel ditcher or backhoe digs the trench for the pipeline. The bottom of the trench is then padded with sand to cushion the pipe.

3. Stringing Pipe

Each piece of pipe is

bending, welding and installation.

4. Field Bending Pipe

The pipe is bent, as needed, to accommo-

date elevation and

horizontal changes.

The construction crew

welds each section of

continuous length.

pipe together into one

5. Welding

laid on the ROW to

ensure proper positioning prior to





For quality assurance, technicians inspect the pipe coating prior to installation and inspect all welds using ultrasound equipment. Each weld is

then coated by a coating

6. Inspection & Coating

7. Pipe Lowering

head.

Sidebooms move together to gently lower the welded pipeline into the trench.

8. Padding & Backfill

The pipe trench is backfilled and graded.

9. Hydrostatic Testing

The pipeline is filled with water and pressurized to ensure the pipe's integrity and that it is fit for service.

10. Restoration

The pipe trench and land within the ROW are contoured and revegetated. The landowner may continue using the ROW for most purposes after restoration

CO₂ Pipeline Operations and Emergency Response

CO₂ is transported via pipeline, and serves as the preferred medium to aid in enhanced oil recovery (EOR). CO₂ is miscible, meaning it acts as a solvent with crude oil and when injected into oil reservoirs, it is able to remove the majority of the oil that otherwise would be unable to be extracted.

EOR pipelines deliver CO_2 to the oil field. The CO_2 or water is injected into wells where it travels through spaces in rock releasing the trapped oil. Produced oil, water and gas are pumped to the surface, where it is transported to a collection facility for processing. The separated and processed CO_2 is then added to new supplies that are later piped into the oil field for future injection. Kinder Morgan is an industry leader in enhanced oil recovery through the innovative use of CO₂.

The majority of enhanced oil recovery occurs in Texas, in an area (continued on page 6)

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!**

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 dia!



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known as the Permian Basin. Due to large naturally occurring supplies of CO₂ in the Four Corners region, production and transportation to support enhanced oil recovery operations has proven to be economically feasible.

There are approximately 5,000 miles of supercritical CO_2 pipelines in the United States. Just like transportation of highly volatile liquids and natural gas, pipelines are the safest mode to move CO_2 to where it is needed for enhanced oil recovery. Also, like pipelines transporting hydrocarbons, pipelines transporting CO_2 in a supercritical fluid state are regulated by the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration under 49 CFR Part 195. While statistics show that leaks and major incidents involving CO_2 pipelines are rare, they can occur and warrant awareness and pre-planning.

Emergency Responders dispatched to an incident involving a release from a CO_2 pipeline should be keenly aware of the physical properties of the material and the associated hazards. While non-flammable, colorless and odorless CO_2 does pose an asphyxiation hazard. While a vapor cloud is common with releases of CO_2 , the lack of a visible cloud should not lead to an assumption that there is sufficient oxygen in the atmosphere. Emergency responders should coordinate with operators of CO_2 pipelines for emergency response pre-planning and simulated exercises.

Key Response Considerations:

- Response personnel should arrive on scene with full turnout gear as well as self-contained breathing apparatus
- CO₂ does pose an asphyxiation hazard
- A multi-gas monitor with oxygen level monitoring capabilities should be utilized
- Oxygen level readings below 19.5% are hazardous and respirators are required
- CO₂ poses a frostbite hazard due to its inherently cold temperatures
- Physical contact with CO₂ can result in freeze burn injuries

The use of CO₂ in enhanced oil recovery has significantly contributed to the ability of the United States to meet its evergrowing energy needs now and into the future. For more information on Kinder Morgan's CO₂ EOR business please go to https://www.kindermorgan.com/Operations/CO2/Index

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.



NOTE

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

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