



THE RESPONDER

Natural Gas Pipeline Information for Emergency Responders in Kinder Morgan Communities

New & Expanded Pipeline Systems: What it Means for First Responders & Communities

According to the United States Energy Information Administration, pipeline companies added more than 20,000 miles of new natural gas transmission lines in the United States between 1998 and 2008.

New drilling techniques provide access to previously impenetrable natural gas fields expanding domestic gas production and reducing dependency on foreign energy. As natural gas is harvested from new areas, pipeline infrastructure is required to transport the gas from wells to processing facilities, homes and businesses.

An interstate natural gas pipeline construction or expansion project is, on average, a three-year project from the time the project is announced until gas begins flowing through the new line.

Safety is the key focus during and after construction. Companies adhere to specific design and construction procedures outlined in the American Society of Mechanical Engineers Standard (ASME B31.8) and the United States Department of Transportation (DOT) Regulations 49 CFR Part 192.

Once construction is complete, pipeline operators, like Kinder Morgan, monitor their pipeline systems 24-hours a day and follow regular maintenance procedures. In addition, operators regularly meet with local emergency response officials and provide emergency preparedness information regarding their pipelines in the community.

As pipeline infrastructure expands, it is important for first responders to know where pipelines are located in their jurisdiction. The National Pipeline Mapping System is a free online resource managed by the federal government that provides maps of transmission pipelines. Pipeline operators are required to submit pipeline location data on an annual basis. To search for pipelines in your area, or to download GIS maps, visit <http://www.npms.phmsa.dot.gov/>.

Emergency Medical Care at the Scene of a Natural Gas Incident

When responding to a potential natural gas pipeline incident, emergency responders should be aware of potential hazards and emergency medical care needs. When released in a confined space, natural gas can be an asphyxiate. If ignited by a spark, it can cause burns. Continued exposure to natural gas can cause headaches, nausea, drowsiness, central nervous system depression and respiratory arrest.

When arriving at the scene of a natural gas pipeline incident, park upwind at a safe distance from the leak. Move people to a safe place, identify anyone in need of medical care and notify the incident commander.

Emergency medical technicians (EMTs), paramedics or other trained medical professionals provide medical care at the scene of a pipeline incident. Medical teams arriving on the scene will typically check-in with the incident commander for information on confirmed medical issues and the location of anyone who is injured or sick.

The "Pipeline Emergency Response Guidelines" published by the Pipeline Association for Public Awareness and the Material Safety Data Sheet (MSDS) for natural gas recommend the following tips for emergency medical care at the scene of a natural gas pipeline incident:

- Move patients to fresh air.
- Assess the nature of a patient's health and gather information on pre-existing conditions.
- If a patient has inhaled natural gas, and is not breathing, apply artificial respiration.
- If a patient has had eye or skin contact with natural gas, flush eyes thoroughly with water and wash skin with soap.
- If a patient has ingested natural gas, do *not* induce vomiting.
- If spontaneous vomiting occurs, hold the victim's head lower than his hips to prevent aspiration.

If additional care is necessary, EMT/paramedics will transfer patients to emergency hospital care.

Kinder Morgan recommends that first responders review the natural gas Material Safety Data Sheet (MSDS) and have copies available for reference by dispatchers, first responders, EMTs and paramedics.

The MSDS describes the characteristics of natural gas, lists potential hazards and provides response guidance. Download a copy of the natural gas MSDS by visiting Kinder Morgan's web site at http://www.kindermorgan.com/public_awareness/AdditionalInformation/msds/default.cfm.

Planning & Coordinating a Community Drill, Part 3: Using Feedback to Improve Response Capability

Part 1 and 2 of this series focused on planning and implementing a community drill, but perhaps the most important step is actually collecting, analyzing and implementing lessons learned during the drill. Read part 1 and 2 of this series by visiting The Responder archives at http://www.kne.com/public_awareness/The_Responder/2009-02/archived_issues.cfm.

During the drill, facilitators should observe the response of participants. As soon as possible following the completion of the drill, encourage participants to document their observations and impressions.

Facilitators may consider providing a short questionnaire designed to capture specific information such as feedback regarding response time, availability of equipment or inter-agency communication and coordination. Questionnaires provide a confidential way to capture feedback that may not be shared during the drill debrief session.

If you identified opportunities for improvement during the drill, the debrief session is key to implementing change. Host a drill debrief session to collect feedback and provide opportunity for discussion. During the debrief, facilitators will want to:

- Review the entire scenario and the goals of the exercise with the group
- Bring copies of emergency response plans and procedures for reference during discussion
- Review participants' questions and comments that were noted during the drill
- Lead discussion designed to identify why there were gaps in response time, unexpected inefficiencies or uncertainty with regard to response tactics, etc.

Once the initial evaluation is complete, schedule a time for following up and consider planning another drill in the future to test those changes.

Pipeline Emergency Self-Assessment for Response Agencies

At the scene of a potential natural pipeline incident, prior training and access to equipment and resources enable responders to act quickly to protect life, property and the environment.

Take a short self-assessment and gage your agency's preparedness to respond. Download a copy of the self-assessment at http://www.kindermorgan.com/public_awareness/AdditionalInformation/TrainingMeetings.cfm and share the results with your department and local emergency planning committee.