

Pipeline Emergency Response Resources

Pennsylvania Pipeline Infrastructure Task Force
Wednesday, September 23, 2015
1:00 PM

Sam Hall

Program Manager, U.S. DOT/PHMSA/OPS
804/556-4678, sam.hall@dot.gov



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



The Goal

- Awareness of pipeline safety issues among all stakeholders, including public officials, emergency responders, excavators, and the public
- Community preparedness in the event of a major pipeline emergency



The Challenge

- Pipelines are out of sight, out of mind
- Public safety officials have many competing concerns and limited resources
- “Odor of gas” calls may be common, but major pipeline incidents are relatively rare
- Catastrophic pipeline incidents are low probability, high consequence events



PHMSA Regulations

- PHMSA regulations require pipeline operators to maintain liaison with emergency responders
- PHMSA regulations require operators to conduct public awareness outreach to:
 - affected public
 - **local public officials**
 - excavators
 - **emergency officials**
- NOTE: Public awareness regulations do not require anything of audience groups



PHMSA's Partnership with Pennsylvania

- PHMSA's partner is the Pennsylvania PUC
 - PHMSA covers up to 80% of the costs of state pipeline safety program through PHMSA's State Pipeline Safety Grants
- The PUC conducts public awareness & other regulatory inspections for:
 - Natural gas distribution pipelines
 - Class 1-4 intrastate natural gas transmission pipelines
 - Class 2, 3, & 4 gathering pipelines



Public Safety Officials' Responsibilities

- Effective pipeline emergency response is a **shared responsibility**
 - State and local public safety officials have a responsibility to engage, understand their role
- **Communication before an incident** occurs is the most important aspect of effective pipeline emergency response
- Communication on-scene is essential during an incident response (ICS is effective)

6



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



How do we get local governments to pay attention?

- Create **sustainable** pipeline awareness solutions
 - Pursue initiatives that *require* and *empower* local governments to engage through **existing channels**
 - Training standards for public safety personnel
 - Include pipelines in hazard mitigation plans
 - Regulation (one-call enforcement, pipeline safety regulations, etc.)
 - Communications through existing channels – messages to specific stakeholders through organizations they trust
- **Resources** for local governments
 - Training materials
 - Information resources
 - Common messages that apply to all pipelines

7



Forward Progress: Resources

- Training standards
 - National Fire Protection Association (NFPA) Standard 472 – Competencies for hazmat responders
 - National Emergency Number Association (NENA) Standard 56-007 – Pipeline emergency protocol for 911 call-takers
- Multiple local, regional, and national efforts to institutionalize local government engagement (some with PHMSA Technical Assistance Grant support – <http://primis.phmsa.dot.gov/tag>)
- PHMSA’s Public Awareness Program Working Group
- Industry efforts (API/AOPL, INGAA, AGA, APGA)
 - API Recommended Practice 1174



Forward Progress: Resources

- PHMSA's Stakeholder Communications Website
 - <https://primis.phmsa.dot.gov/comm/>
- Article on Pipeline Emergency Response
 - <http://www.firefighternation.com/article/hazardous-material-cbrn/pipeline-emergency-planning-response-tools>
- National Pipeline Mapping System
 - <http://www.npms.phmsa.dot.gov>
- *Pipeline Emergencies* Training Curriculum
 - <http://www.pipelineemergencies.com>
- Call 811 Before You Dig
 - <http://www.call811.com>



Forward Progress: Resources

- Hazard Mitigation Planning: Practices for Land Use Planning and Development near Pipelines
 - <https://www.fema.gov/media-library/assets/documents/101688>
- Pipelines and Informed Planning Alliance
 - <http://primis.phmsa.dot.gov/comm/pipa>
- Emergency Response Guidebook
 - <http://phmsa.dot.gov/hazmat/library/erg>
- Landowner's Guide to Pipeline Safety
 - <http://pstrust.org/about-pipelines1/landowners-guide-to-pipelines>
- Georgia Pipeline Emergency Response Initiative (GPERI)
 - <http://www.gpstc.org/training-divisions/georgia-pipeline-emergency-response-initiative-gperi-training>
- Case Study: Lafayette, IN Natural Gas Pipeline Explosion
 - <http://youtu.be/y1TibjFOToM>



Signs of a Pipeline Leak/Rupture

- Hissing, roaring, or explosive sound
- Flames appearing from the ground or water (perhaps very large flames)
- Vapor cloud/fog/mist
- Dirt/debris/water blowing out of the ground
- Liquids bubbling up from the ground or bubbling in water
- Distinctive, unusually strong odor of rotten eggs, skunk, or petroleum
- Discolored/dead vegetation or snow above a pipeline right-of-way
- Oil slick or sheen on flowing/standing water

11



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



Basics of Pipeline Emergency Response

- Immediately evacuate area and move far away – upwind and away from flames
- If no flames present, do not introduce sources of ignition
- Abandon equipment used in/near area
- Do not drive into vapor clouds
- Call 911
- Notify pipeline operator
- Never attempt to extinguish flame before shutting off supply, as this can cause formation of explosive mixtures of air and hazardous materials
- Never attempt to operate pipeline valves, as this could prolong/worsen incident—or cause another pipeline leak

12



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation



Thank You

Sam Hall

(804) 556-4678

sam.hall@dot.gov



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment From the Risks of
Hazardous Materials Transportation

