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EMERGENCY RESPONDER FORUM

State Pipeline Safety Perspective

National Association of Pipeline Safety Representatives (NAPSR)

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Emergency Responder Stakeholders

- **First Responders**
- **9-1-1 Dispatchers**
- **State Pipeline Safety Personnel**
- **Pipeline Operators**



Issues for First Responders

- **Planning**
- **Training**
- **Response**



Planning Considerations

- Fully staffed Fire House or volunteer force
- Focus on pipeline products in your District
- Type of response equipment / equip. partnering
- Hazmat Response - Designated Stations only
- Entry into combustible gas atmosphere
- Is entry really necessary–risk exposure justified
- Excavation damage related 9-1-1 calls



Remember – there are Different Types of “Pipelines” to consider in pre-planning:

- Not regulated by PHMSA:

- Pressurized water
- Pressurized sewer
- Steam
- Chilled Water



Regulated Pipelines and/or Effecting State Safety Programs

- Transmission : Natural gas pipelines
- Transmission : Hazardous liquid (ethanol, NGL, liquid CO₂, gasoline, diesel, jet fuel, propane, LNG, hydrogen)
- Distribution : City Stations > gas mains and services
- Oil and Gas Gathering Systems (high vs. low pressure)
- Customer-owned fuel lines (beyond the meter)
- Oil and Gas Production flow lines (wellhead to storage tanks)



Training Considerations

- Train-the-trainer or use in-house training officer
- Multiple Station real time training through live video link
- How to address different shifts – record Presentations and Share Q&A's w/ all shifts
- Responder's experiences are not the same
- Make safe criteria – if evacuating a building have you considered where the people go?
- Pipeline Operator - Live Gas Fire / "Leak City"



Training Considerations (continued)

- Train for expected situations:
 - response to excavation damage
 - structure fire involving natural gas/electricity
 - CO Calls – Red Tag situations
 - possibility of 100% LEL situations



Training Considerations (continued)

- Train for rare situations:
 - when is a full Command Center required?
 - derailments at or near pipeline crossings
 - threats from heavy equip. during clean up
 - *CNG Fill Stations (privately owned piping)
 - Use of Lessons Learned when arriving
prior to ignition: Prince George Maryland 2009,
Ghent Virginia 2007, Belgium 2004

* Compressed Natural Gas (CNG)



Response Considerations

- Dealing w/ a natural gas or haz. liquids pipeline
- Large scale or "smaller" gas leak event
- High Pressure and Large Diameter pipeline(s)
- Punctured, severed, or pulled out gas leak situation
- Is leak accessible or covered by burning equipment
- Ground Cover(asphalt, frozen) > migrating gas/liquid
- Valves: above ground / below ground. Do I know if I have a two way or single way feed ?
- Squeeze jacks: Dangers of pinching steel vs plastic pipelines



Response Considerations (continued)

- Blowing or Burning – different response plan
- Is there a dual pipeline (loop line) feet away
- Joint electric/gas trench installation
- Shut off gas or wait for the operator to arrive
- Where is the gas coming from – second leak ?
- Where is the gas going ?
- Could some gas be getting into the sewer, french drain, or all venting to the atmosphere?
- Will my response be different for Propane vs. Natural Gas



9-1-1 Dispatchers

Training area



Dispatcher Training Considerations

- Know meaning of industry terms:
 - No, I said a controlled blow down not an explosion
 - No, I meant a vent stack not a leak
 - No, I meant a flare stack not a fire
 - By the way, my gas is not odorized
 - By the way, my gas is odorized and you may get a lot of odor/leak calls
 - Really, I did mean a tank problem !



What kind of tank did you say?

Bleve threat vs "Killdozer"



Type of "tank" in Your District



Pipeline Operator Considerations

- Pipeline sighting challenges-green belt/
bike path options, easements, public
ROW's, landowner contracts/agreements
- Other Design challenges-location of
emergency valve(s), pressure regulator
stations, compressor stations, protected
residential meter location w/ safe access
to service valve



Preplanning with the Operator

Which Meter to Shut off ?

Where is the meter ?



Joint Operator/First Responder Hands-On Training



Plan of Attack

Flowing source vs. point source

Natural Gas Pipeline



Propane Tank



Jurisdictional Roles During Investigations

(State: PUC, Fire Marshal, Arson Squad, Fed: PHMSA, NTSB, ATF)
And the Operator



Protecting Evidence

Who moved what / custody transfer



Construction threats-shoring



Everyone's Goal

PUBLIC SAFETY



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