

PHMSA Damage Prevention Update



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

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Topics

- Why is Emergency Responder Training important
- Case study in Georgia
- Successes
- Ongoing Challenges
- Benefits



Our Mission

To protect people and the environment from the risks inherent in transportation of hazardous materials – by pipeline and other modes of transportations.



Underlying Principles

- It is the responsibility of pipeline operators to understand and manage the risks associated with their pipelines
- PHMSA's primary role is to establish minimum safety standards (defined by required risk control practices) and to ensure that operators perform to these standards
- PHMSA also strives to impact operator performance beyond mere compliance with the regulations



Strategic Goals: Pipeline Safety

- Reduce risk of serious pipeline incidents through use of strong risk-based integrity management approach
- Sharpen focus on key risks using data
- Develop solutions to detect/characterize these risks
- Promote systematic management of risk through standards
- Inspect and enforce integrity management standards
- **Build capacity of communities to carry out their respective roles in living safely with the energy pipelines**



A photograph of four firefighters in full protective gear, including helmets and jackets with reflective stripes. They are positioned in front of a large, intense fire that fills the left side of the frame with bright yellow and orange light. The firefighter on the far right has "EAST LINCOLN RESCUE SQUAD" printed on the back of their jacket. They appear to be managing a large black hose on a wet, reflective surface.

Georgia Pipeline Emergency Response Initiative/Program (GPERI)

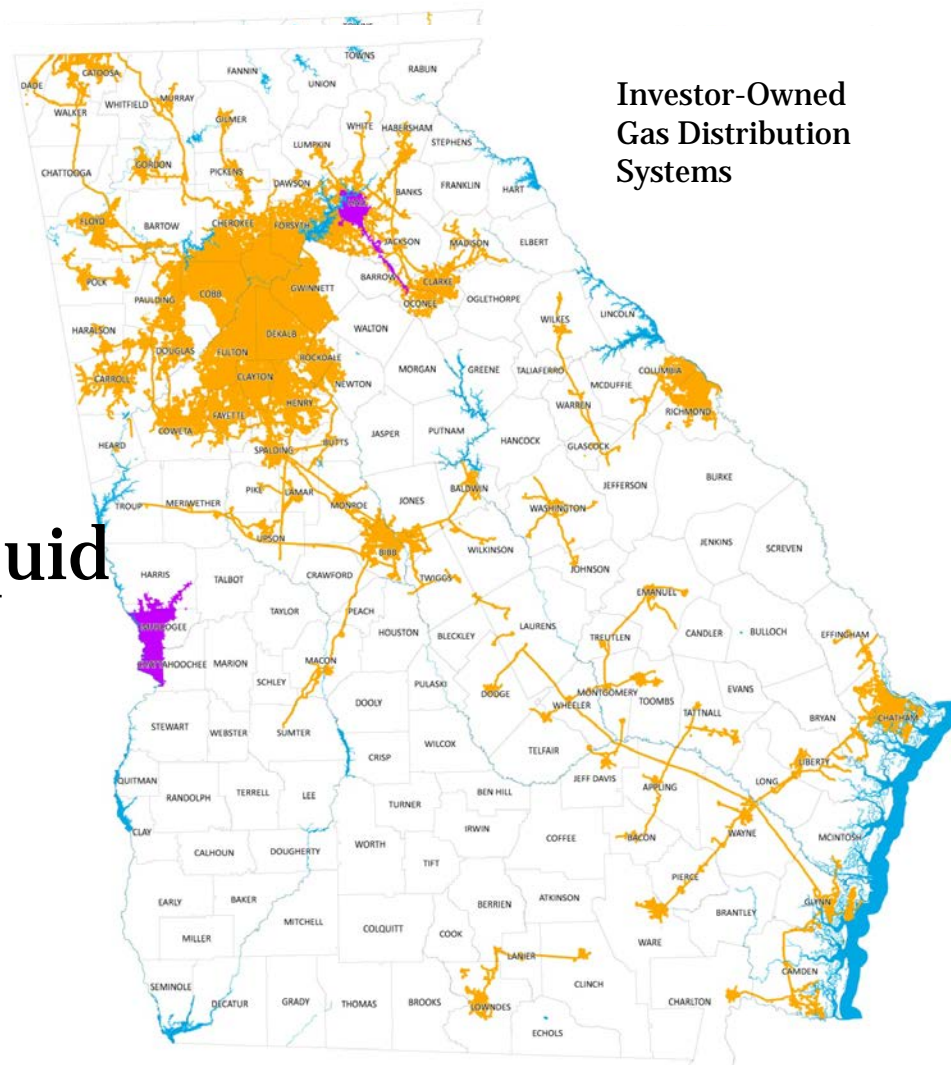
Improving pipeline safety in Georgia
(And an opportunity for the Nation?)

**SD/ND Pipeline Safety Seminar
May 15, 2014**



Pipelines in Georgia

- Over 89,000 miles of pipeline in Georgia:
 - Interstate Natural Gas Transmission Lines:
4,561 miles
 - Interstate Hazardous Liquid Transmission Lines:
2,124 miles
 - Intrastate Natural Gas Distribution Systems:
82,808 miles



Investor-Owned
Gas Distribution
Systems



U.S. Department of Transportation

Pipeline and Hazardous Materials
Safety Administration

To Protect People and the Environment

Hazardous Materials Transportation





Drivers for Change

Firefighters squeezing off gas lines when ruptured in AGLR footprint
Need to change behaviors

JULY 2010 Meeting of GPSC, GA Association of Fire Chiefs: No firefighter involvement on the issues affecting them

Increased industry focus on effectiveness of ER training & liaison

2007 2008 2009 2010 2011 2012

MARCH, 2008
GA Public Service Commission issues Final Rule: County-wide Gas Safety Plans to reduce confusion/ duplication of efforts

SEPTEMBER 9, 2010
San Bruno: "What pipeline?"
Are GA firefighters adequately informed?

MAY 15, 2012
First-ever GA Emergency Response Group Meeting



Drivers for Change in Georgia

2007-2009 Fire Fighters squeezing off natural gas pipelines; little success with changing behaviors despite training & outreach

2008 GA Public Service Commission issues Final Rule: County-wide Gas Safety Plans to reduce confusion/duplication of efforts

2010 Meeting of GA Public Service Commission & GA Association of Fire Chiefs: No firefighter involvement on the pipeline issues affecting them

2010 San Bruno: “What pipeline?”
Are GA firefighters adequately informed?

2012 **First-ever GA Pipeline Operators & Emergency Responder Meeting**





Georgia Emergency Response Group Kick-Off

- May 15, 2012: (PHMSA/AGLC/GPSC) Brought together pipeline stakeholders to discuss ways to improve emergency response.
 - State and federal regulators
 - Pipeline operators
 - Emergency Responders: fire, police
- Discussed gaps, needs, concerns and capabilities that could be leveraged to improve response and two way communication.
 - 192.615(c)/195.402 – Liaison
 - 192.616/195.440 – Public Education (Emergency Responders)
- Formed a Steering Team charged with developing a comprehensive program for educating GA first responders





GA Emergency Response Steering Team

Name

Company

Representing

RESPOND

Chief David Wall	GA Public Safety Training Ctr	GA State Fire & Police Training
Chief Jackie Gibbs	Marietta Fire Dept.	GA City Fire Department
Chief Jack McElfish	Sandy Springs Fire Dept.	GA City Fire Department
Inspector Doug Brown	Sandy Springs Fire Dept.	GA City Fire Department

PIPELINE

Gentry Wade	City of Buford	Natural Gas Local Distribution Company (Municipal)
Rick Lonn	AGL Resources	Natural Gas Local Distribution Company
Jacob Zillak	AGL Resources	Natural Gas Local Distribution Company
Dona Harrington-Burns	Colonial Pipeline	Refined Liquids Pipeline
Richard Calmes	Dixie Pipeline	Highly Volatile Liquids Pipeline
Dave Williams	Williams Pipeline/Transco	Interstate Natural Gas Pipeline
Gregg Hammond	Williams Pipeline/Transco	Interstate Natural Gas Pipeline
Larry Hjalmarson	Williams Pipeline/Transco	Interstate Natural Gas Pipeline (retired)

REGULATOR

Michael Khayata	PHMSA	US DOT Pipeline/Hazardous Material Enforcement
Arthur Buff	PHMSA	US DOT Pipeline/Hazardous Material Enforcement
Jason Allen	Office of State Fire Marshal	GA State Hazardous Materials Enforcement
Jeff Baggett	GA Public Service Commission	GA Pipeline Safety Enforcement
Chris Swan	GA Public Service Commission	GA Pipeline Safety Enforcement





Mission Statement

Advance the ability of Georgia's emergency responders to manage pipeline emergencies through improved training, cooperation and communication with pipeline operators.





A New Approach to Training Responders



- Enlist the assistance of the **GA Public Safety Training Center (Forsyth, GA)** to provide pipeline safety training for Georgia responders
 - Use NASFM *Pipeline Emergencies* Course as basis for training (Modified during review)
- Establish a modular approach based on needs, rank & responsibility
 - **4 hr. course** – for law enforcement, EMS, emergency managers, fire chiefs
 - **8 hr. course** – for rank and file firefighters (volunteer or paid)
 - **16 hr. course** - for hazmat teams, command officers



Outside - In: A Flawed Approach

- GA pipeline operators have been trying to “push” critical safety information to responders for years
- Approach did not address the responder’s reality
- Missed opportunities to ask:
 - What information do you need?
 - Who needs to receive the information?
 - Is there a difference in the level of information required by position/job duties?
 - What is the best way to ensure real knowledge transfer?

Responders not part of the solution



Inside-Out Approach to Training Responders



- GA Pipeline operators partner with the **Georgia Association of Fire Chiefs (GAFC)** to sponsor pipeline emergencies training for emergency responders
 - GAFC administers program
- Enlist the assistance of the **GA Public Safety Training Center (Forsyth, GA)** design/train pipeline safety training
 - Use NASFM “*Pipeline Emergencies*” Course as basis for developing training modules



GPERI: A Shared RESPONSIBILITY



Pipeline Expertise

Training Expertise

COMPLIANCE FRAMEWORK
State and Federal laws for ER outreach



GPERI Training Plan

■ TRAINING DELIVERY

- Train 624 Georgia fire departments over a three-year period and develop appropriate intervals for recertification.
- 4, 8 and 16-hr modules based on position/title and need for information
- Training delivery at GPSTC, by local training officers, by qualified GAFC trainers at remote locations, CDT

■ DELIVERY PRIORITIZED BASED ON RISK

- Identify areas of greatest risk
- Counties with largest number/miles of pipelines
- Look at potential exposures
- Large planned pipeline projects



GPERI Training Plan

- **TAKE ADVANTAGE OF EFFICIENCIES**
 - Use the 8 GEMA/GAFC regions to subdivide training, and optimize marketing, scheduling and attendance

- **CONDUCT TRAINING SURVEYS TO EVALUATE EFFECTIVENESS**
 - Survey ERs within the state of GA to measure knowledge improvement/retention



GPERI Funding Structure

- **Baseline Funding** from Georgia pipeline operators
 - Interstate Gas
 - Interstate Liquids
 - Local Distribution Companies (Investor owned)
 - Local Distribution Companies (Municipal owned)
- **50/50 Cost Allocation** between interstate pipeline operators & LDCs, assuming full participation by the major operators in each group.
- **Multi-tiered Structure** for allocation of costs
 - Interstate operators: Based on the number of Georgia counties in which their pipelines operate
 - LDCs: based on number of service lines per operator



Why It Works

A firefighter in a white t-shirt and dark pants, wearing a yellow helmet, stands next to a fire truck. He is giving a thumbs up with both hands. The fire truck has a red hose and a red fire extinguisher visible. The background is a grassy field.

**BECAUSE EVERYONE
BENEFITS**

For Responders ...



KNOWLEDGE

Improved understanding of pipeline operation, products, and hazards improves responder safety



INFLUENCE OVER PROCESS

The right level of information, tailored to the right level, delivered to meet responders' needs



NEW FUNDING SOURCE

Operators provide a new funding source for responders for enhanced emergency training



PARTNERSHIPS

Safety & business partners; improved liaison, understanding, & trust



For Operators ...



CREDIBILITY

Leverage established command and training structures provided by GAFC and GPTSC to conduct training



EFFECTIVENESS

Documentation - courses require a post-measure of knowledge comprehension



INSIDE-OUT MARKETING

Fire Chiefs own the program and have the lead on promoting attendance



PARTNERSHIPS

Safety & business partners; improved liaison, understanding, & trust



Unanticipated Benefits

▪ Active support from GA Fire Chiefs for preventing pipeline incidents

- New content on “prevention” incorporated into Pipeline Emergencies content
- Pursuing city zoning & planning to link permit issuance to evidence of one call
- Emergency responders and other city and local officials (e.g. city planners, inspectors, etc.) may approach excavators to ask to see one call tickets



Know what's below.
Call before you dig.

Prevent the Incident You Would Otherwise Have to Respond To



Where We Are Now?



- Began teaching/testing “Pipeline Emergencies” course at GPSTC in March of 2013
- 52 responders qualified to trainer level; 7 trainers working across the state
- Trainers tour GA operator facilities/control rooms and make field visits to pipeline projects to enhance pipeline experience





NIMS/ICS

A four (4) hour course that is designed for 911 call takers, dispatchers, and their supervisors who are the “gatekeepers” of information when a pipeline incident occurs. *(Coming Soon)*

**GPRI
Training can
be
scheduled
through the
GPSTC**



Field Training Request

In an effort to best serve Georgia's local fire agencies, GPSTC's Georgia Fire Academy Division provides training at local departments provided that they meet certain requirements. Please complete the [Field Request Training Form](#) and return it by mail or fax to:

The Georgia Fire Academy
Georgia Public Safety Training Center
1000 Indian Springs Drive
Forsyth, GA 31029
Fax: (478) 993-4671



Where We Are Now?

- **Approximately 600 responders trained 2014 – YTD 2015**
- Ongoing, and dynamic exchange of information about pipelines, pipeline incidents among responders and operators
- Working with GPSTC to plan natural gas and liquids “pipeline emergency training props” at their 1,000-acre training campus
 - Provide hands-on experience to enhance classroom training
 - Allow operators & responders to “practice” response techniques





Questions?

For additional information
about GPERI:

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





A New Approach to Training Responders

- Planned training delivery methods:
 - Direct Classroom
 - At GA Public Safety Training Center campus
 - Classroom-in-the-field with VFDs
 - Train the Trainer for larger fire departments
 - Online for on-demand and refresher training
- Goal is to train all 630 Georgia fire departments over a three-year period and develop appropriate intervals for recertification.





So Where are we now?

- GA Fire Chiefs are actively promoting the program within their ranks
 - Appointed a Program Manager (former Chief & Inspector) to be the point person for marketing, managing, and maintaining the program (\$100k seed money)
 - Pipeline Operators played a significant role in recent GA Fire Chiefs conference





So Where are we now?

- Reviewed/revise Pipeline Emergencies Course: 16-hour course
 - Course has been previewed with firefighters at GPSTC
 - Two train the trainer sessions have been recently held
- Business Plan - developed
- Scope of work by Fire Chiefs defined
- Funding Mechanism Developed that will sustain this state level
- Established permanent non-profit board committee to oversee the program under the GA Fire Chiefs Association.
- Program Rollout meeting – May 15th





Partnership Has Its Rewards

■ PREVENTION TRUMPS RESPONSE

- Active support from GA Fire Chiefs for preventing pipeline incidents (*prevent the incident you would have otherwise had to respond to*)
 - Requested & now have a seat on GUCC Legislative
 - Looking at requiring city zoning & planning to link permit issuance to evidence of one call
 - Discussing using emergency responders and other city and local officials (e.g. city planners, inspectors, etc.) to approach excavators to ask about one call tickets
 - Active support for ROW Watch Program

Authority to question diggers



**Know what's below.
Call before you dig.**



CHALLENGES

- ❖ **DEVIL IN THE DETAILS** - a challenge to establish a framework
 - Allows the fire service to deliver training under the management of the GA Association of Fire Chiefs, and
 - Operators to pay for the service.
 - Real work to be done on the practical side to establish a workable system.
 - Rely on operator legal teams to review contracts and charters,
 - Wasn't planned or identified when they started down the GPERI path.
- ❖ **DOCUMENTATION** - In GA, level of documentation required for GPERI exceeds what the state requires for responder qualification.
 - Thank PHMSA! - pipeline industry requires a fair amount of documentation.
 - It has been a learning process for Fire Training Center , how best to make the information available to operators for easy access.
 - Operators currently must request documentation from the GPERI Program Manager.



CHALLENGES

- ❖ **PIPELINE EMERGENCIES TRAINING IS NOT REQUIRED** - inside-out approach to pipeline emergencies training and leveraging the command structure of the fire service
 - challenged to get responders into training. There is a lot of competition for training time.
 - This approach uses a number of options for training,
 - classroom training at the GA Public Safety Training Center,
 - train the trainer options for local training officers to deliver the program to their own departments
 - trainers working directly for GA Association of Fire Chiefs that can deliver regional training in rural areas (for VFDs).
 - one size fits all approach didn't work
- ❖ **In our second year of GPERI - dealing with growing pains**
 - We just lost our Program Manager, who took a better job as a Fire Marshal within the state.
 - looking for a replacement and trying not to lose momentum with training schedules.
 - Fortunately, we are committed to making this program work for GA.
 - That is key to a successful GPERI-type program in any state.



BENEFITS

- **Improved Communication and RELATIONSHIPS**
 - Number one benefit of the GPERI program
 - Process of considering a GPERI-type program and talking across the various segments of the responder audience,
 - Incredibly valuable. At least once or twice a quarter, Frequent questions about pipeline safety from some responder or responder groups
 - We copy trainers and responders on the answers to help spread the word.
 - The questions reflect the improved awareness responders have for pipelines and the natural curiosity that arises from that increased awareness.
 - There may be easier ways to train responders (ex: online training), but GPERI improves relationships. That is invaluable.



BENEFITS

- **PREVENTION** - While the focus of GPERI was originally to improve emergency response
 - After two years of planning and discussion, emergency responders hit on the one thing that serves all of us best: prevention.
 - Interestingly enough, it came from the responders, not the pipeline industry.
 - It's important to teach how to safely respond to an emergency, but even more important to recognize the signs of a pipeline incident in progress.
 - have amended the pipeline emergencies curriculum in the state to include a focus on responders serving as extra eyes in the community



BENEFITS

- **INSIDE-OUT** - Having the fire service deliver pipeline emergencies training to their own,
 - Greatly increased the credibility of the message.
 - For many years, the industry has been trying to reach responders by talking to (at) them
 - Essentially trying to bribe them to attend “meetings” with chicken dinners and flashlights.
 - Using the command and control structure of the fire service gives provides an “in” that we would otherwise never have.
- **Fire Chiefs have influence!**



Review

- Why is Emergency Responder Training important
- Case study in Georgia
- Successes
- Ongoing Challenges
- Benefits



A photograph of firefighters at night, silhouetted against a large, intense fire. The fire is a bright, glowing yellow and orange mass on the left side of the frame. Several firefighters in full protective gear are visible, with one firefighter on the right wearing a jacket that says "EAST LINCOLN RESCUE SQUAD". They are holding a hose that extends from the bottom left towards the fire. The scene is dark, with the fire providing the primary light source.

Questions?