2018 Pipeline Training Grant



Pipeline Safety Training Grant

• \$134,000 in pipeline training funding through the office of State Representative Carolyn Comitta and the Pennsylvania Department of Education.



- Two grant-funded training opportunities:
- Texas A&M / TEEX firefighter / HAZMAT classroom and experiential training, College Station, TX.
- US DOT / PHMSA /
 Transportation Safety Institute
 classroom training Oklahoma
 City, OK.



- College Station, Texas
- Texas A&M Engineering Extension Service
- Provides training for firefighters, EMS, pipeline workers and oil rig workers.
- Internationally renowned training facility.

State of the art training campus just west of Texas A&M campus



State of the art training facilities for all disciplines of emergency professional first responders



Facility also known as "Disaster City"



Real-world firefighting training activities



Pipeline firefighting simulations using realistic flammable natural gas



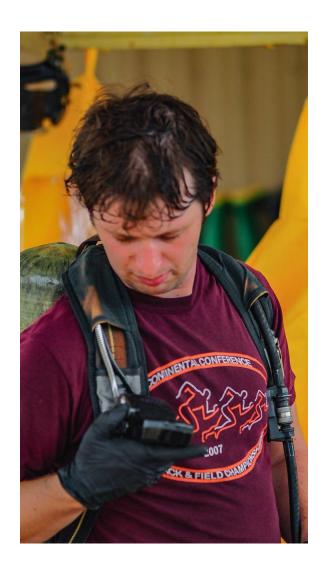
Provided line personnel and supervisory training to 25 West Chester Fire Company and Chester County HAZMAT personnel.



Provided pipeline-specific training opportunity with classroom and "real" training, as seen here.



Our personnel suited up daily to encounter real-life conditions.



Personnel were put through training scenarios with "props" to realistic training exercises.



Township personnel from Chester County "pipline" municipalities attended.

3-day US DOT / PHMSA training in Oklahoma City,



N.S. Department of Transportation

Transportation Safety Institute Certificate

Casey LaLonde

successfully completed

U.S. DOT Pipeline Safety Compliance Liquid

> Conducted in Oklahoma City, OK November 6-8, 2018

Manayer, Multi-Modal Safety Division

Director, Transportation Safety Institute

Training conducted by two US DOT / PHMSA trainers over the course of 3 days to over 25 municipal employees and Chester County HAZMAT employees.

- 796 page instruction manual.
- 2 live DOT trainers for the 3 full days of training.
- Training took place on US
 Department of Transportation facility in Oklahoma City, OK.
- No photos allowed!

- Classroom instruction.
- Informational and illustrative quizzes and problems.
- Historical overview of pipelines in the United States.
- Current pipeline regulations, specifically regarding HVL pipelines.
- Overview of industrial accidents and releases over the last several decades.
- 796 page instruction manual.
- Manual will be posted on Township's website under the Sunoco page.

Products transmitted through pipelines:

Crude oil; refined petroleum products; liquid carbon dioxide; natural gas; water & sewer



Pipeline materials:

Steel

Thermoplastics (PVC)

Thermosetting (fiberglass)

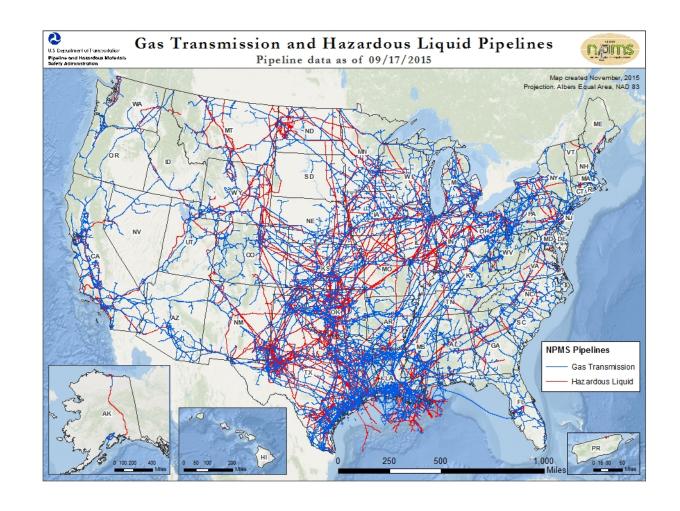
Newer composites

Cast & ductile iron

Ceramic materials

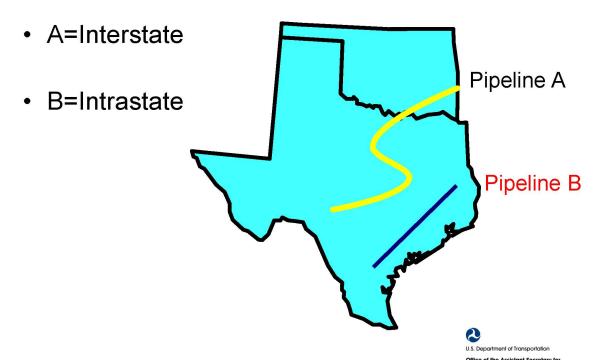


2015 – Gas transmission& Hazardous LiquidsPipelines



Interstate vs. Intra-state pipeline definitions

Interstate v. Intrastate Pipelines



Interstate v. Intrastate

Interstate and Intrastate Pipelines

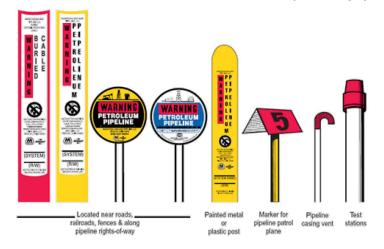
- Interstate pipelines (typically gas transmission and liquid pipelines) are covered under federal regulations of various agencies.
- Intrastate pipelines (gas distribution, and gas and small liquid midstream companies) fall under the auspices of state agencies, which may have adopted the federal regulations or have their own more stringent versions.



Pipeline markers

How to identify pipeline locations?

- Signs or markers located near road and railroad crossings and along pipeline right-of-ways
- Signs identify company, product, and 24/7 emergency phone number
- Signs do not mark exact location or depth of pipeline





Public Awareness Involvement

Public Awareness Involvement



Government Agencies
Pipeline Oversight

- PHMSA Pipeline and Hazardous Materials Administration
- FERC Federal Energy Regulatory Commission
- Pennsylvania Public Utility Commission (PUC)



U.S. Department of Transportation
Office of the Assistant Secretary for Research and Technology

Pipeline Integrity
Management Program

Integrity Management Programs



Threat Identification by pipeline operators

Threat Identification

Nine Identified Threats:

- 1. External Corrosion
- 2. Internal Corrosion
- 3. Stress Corrosion Cracking
- 4. Manufacturing Related Defects
- 5. Welding/Fabrication Related Defects
- 6. Equipment Failures
- 7. Third Party/Mechanical Damage
- 8. Incorrect Operations
- 9. Weather Related and Outside Force



Approved Assessment Methods

Approved Assessment Methods

- In-Line Inspection
- Hydrostatic Testing
- Direct Assessment for Corrosion Threats
 - ECDA (external corrosion direct assessment)
 - ICDA (internal corrosion direct assessment)
- Other if Approved by PHMSA

* Assessment method must be capable of detecting the suspected threat

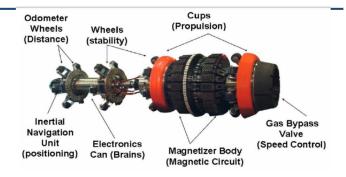
"Smart pig" technology and other assessment measures

Integrity Management Program (IMP)

IMP Assessments











Online PHMSA Resources

PHMSA Internet Resources

- PHMSA http://www.phmsa.dot.gov/pipeline
 - All things PHMSA.
 - Gateway to reporting, regulations, interpretations, program information, forms.
- Additional Resources
 - Stakeholder communications
 - National pipeline mapping system
 - Inspection and enforcement
 - State programs



The entire 796 page US DOT / PHMSA training manual is available at www.westgoshen.org under the "Sunoco Pipeline" tab



Presented by the U.S. Department of Transportation



Transportation Safety Institute

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