

**Public Service Commission  
West Virginia**



# **Pipeline Safety**



Xidomega

# **Pipeline Safety**

Protecting the public and the environment by ensuring the safe and secure movement of gas and hazardous liquids

# **Pipeline Safety**

Safe, reliable, and environmentally sound operation during the transportation of gas and hazardous liquid by pipelines

# Historical Overview

- 1968 – Natural Gas Pipeline Safety Act
  - Basis of current Part 192 code
  - Amended 120 times to correct, modify, and add requirements
- 1968 – Hazardous Material Regulations
  - Originally proposed as 49 CFR Part 180 for the transportation of hazardous materials and petroleum products in liquid form
  - Renumbered as Part 195
  - Amended 99 times

# **Pipeline Safety Regulations**

**PROMOTE PUBLIC  
SAFETY**

For hazardous liquids, also protect the  
environment

# USDOT

- Office of Pipeline Safety (OPS) was established to administer requirements of Natural Gas Pipeline Safety Act and the Hazardous Liquid Program
- Now part of Pipeline and Hazardous Material Safety Administration (PHMSA)
- Act covers all aspects of pipelines that deliver natural or other gases, including down hole
- OPS only focuses on hazardous liquid and gas transmission, gas distribution, and certain gas and liquid gathering lines as defined in Parts 192 and 195.

# USDOT

- Pipeline and Hazardous Materials Safety Administration (PHMSA) – OPS
  - Relates to public safety, governs materials, design, construction, operations and maintenance activities
  - Applies to transmission, distribution or regulated production/gathering (as defined in Parts 192 and 195)

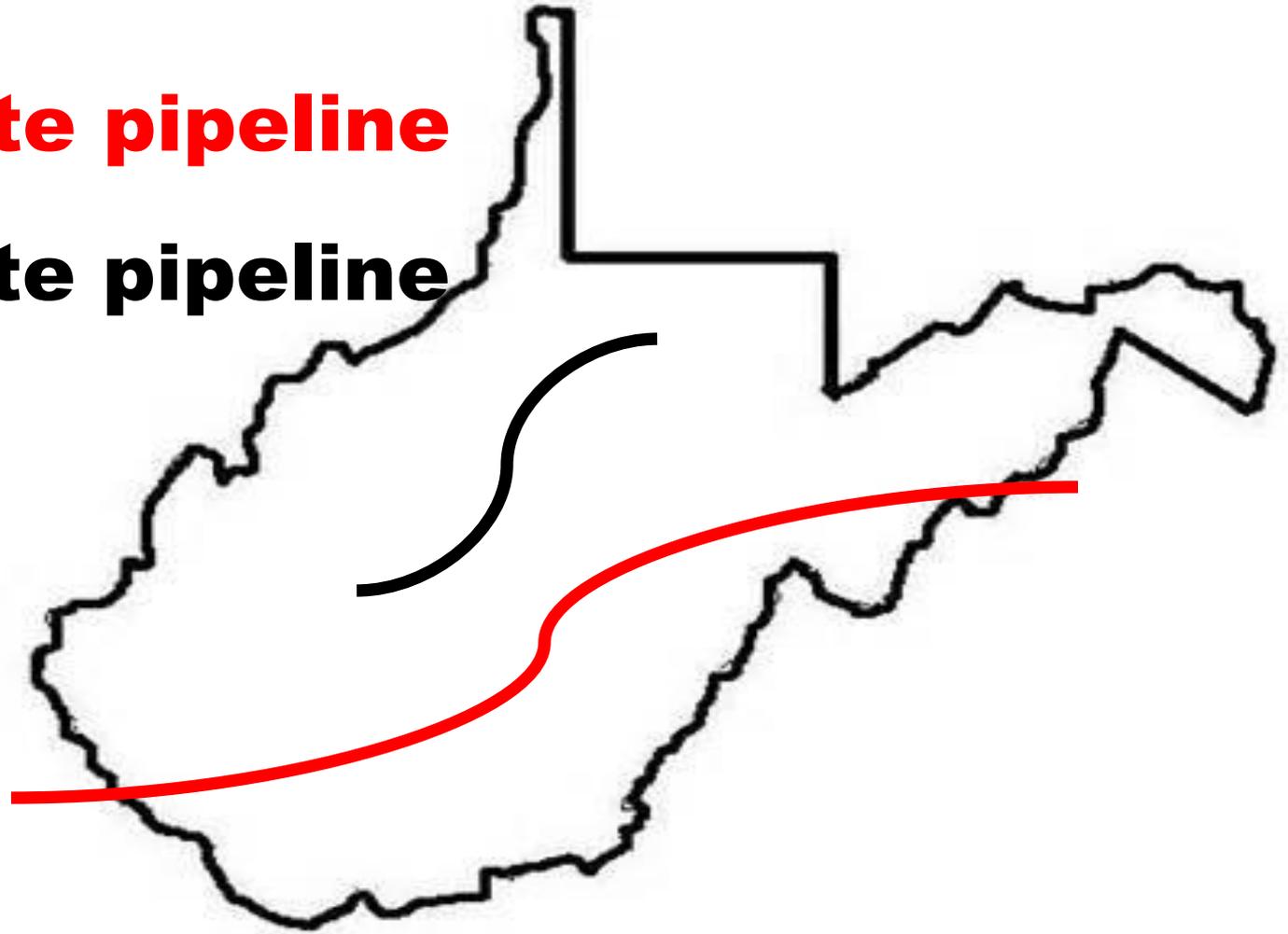
# Overview

- Federal Energy Regulatory Commission (FERC)
  - Relates to public necessity, capacity, and rates
  - Classified transmission or storage
  - Pipelines regulated by FERC are, by definition, interstate pipelines

**Pipelines can have different DOT and FERC classifications**

**Interstate pipeline**

**Intrastate pipeline**



# **PSCWV Regulated Pipelines**

- Intrastate gas and hazardous liquid transmission pipelines
- Gas distribution systems, including master meters
- Some gathering lines as defined by:
  - §§192.8 and 192.9
  - §§195.1 and 192.11

# WV Regulated Pipelines

<b>TYPE of PIPELINE</b>	<b>2014 MILEAGE</b>
Hazardous liquid	165
Gas Transmission (Intrastate only)	250
Regulated Gathering <sup>(1)</sup>	431
Gas Distribution	
Mains	10,707
Services	2,575
<b>TOTAL</b>	<b>14,128</b>

<sup>1</sup> – Number may not represent all regulated gathering

# **What PSCWV does not regulate**

- Routine inspections for interstate gas and hazardous liquid transmission pipelines (Federal jurisdiction)
- Unregulated gas and hazardous liquid gathering pipeline
- Customer piping

# **FEDERAL PIPELINE CODES**

49 CFR 190 – Enforcement

49 CFR 191 – Reporting Requirements

49 CFR 192 – Gas Pipelines

49 CFR 193 – LNG

49 CFR 194 – Emergency Response Oil

49 CFR 195 – Hazardous Liquids

49 CFR 196 – One-Call Enforcement  
(effective 1/1/16)

49 CFR 199 – Drug Testing

# Regulated Products

Part 192 regulates pipelines carrying natural gas, flammable gas, or gas which is toxic or corrosive.

- Includes propane, hydrogen, hydrogen sulfide, and carbon dioxide (CO<sub>2</sub>) if transported in gaseous state
- Does not include gases such as helium, oxygen or nitrogen since these are not flammable, toxic or corrosive.

Part 195 regulates pipelines transporting petroleum, petroleum products, anhydrous ammonia, highly volatile liquids (HVLs) and carbon dioxide

- Ethanol not currently covered

# Pipeline Safety Regulations

- Represent minimum safety standards or requirements
- Operators may choose to exceed requirements
- Intrastate operators also subject to requirements of §150 CSR 4 (WV)

# **INCORPORATED by REFERENCE**

- List of standards usually for materials and construction
- Must follow standards as if specifically written in code
- Must be same edition as code references
  - i.e. – ANSI/NFPA 70 – “National Electrical Code”, 2008

# **OTHER PHMSA DOCUMENTS**

- PHMSA Code Interpretations
- PHMSA Alert or Advisory Bulletins
- PHMSA Waivers or Special Permits
- PHMSA Enforcement Documents
- Preambles to Amendments
- FAQ's

# Interagency Agreements

- Memorandum of Understanding (MOU) with OSHA
  - Specific clarification letters stating certain PHMSA safety regulations are not pre-empted by OSHA

# **OTHER DOCUMENTS**

- GPTC (Gas Piping Technology Committee)
- ASME standards, including B31.8
- Association standards
  - NACE, ASTM, API, NFPA

# WV Regulations

- §150CSR4 – Rules for the Government of Gas Utilities and Gas Pipeline Safety
  - Adopt Federal Regulations as State standards
    - Include 49 CFR 191, 192, 195 and 199
  - Pipeline Safety – Section 9 and 11
    - Some additional requirements

# Pipeline Safety Regulations

## 49 CFR 192 and 195

Cover the design of pipelines

- materials
- appurtenances
- pressure vessels
- fabricated units



# Design also includes:

- Pipe replacements
- Repairs such as leak clamps, sleeves
- Component replacements such as valves, regulators, fittings or other appurtenances
- Hot taps



# Pipeline Safety Regulations

Cover construction, welding and joining, and testing of pipelines



# Pipeline Safety Regulations

Operations and maintenance activities such as:

- Leakage surveys
- Patrolling
- Valve inspections
- Corrosion control
- Emergency response
- Damage prevention



# Pipeline Safety Regulations

Operator qualification, drug and alcohol, integrity management



# Reporting Requirements

- Annual Reports
- Incident/Accident Reports – based on deaths, overnight hospitalizations, property damage
- Safety Related Conditions
- Additional State requirements, but none for accidents

# **Other Regulations**

- Operator must comply with all regulations, including FERC, OSHA, EPA and DEP





**No ladder  
for egress**

**No hard hats**

**No shoring of trench**

**No fire watch**



# Some Identifiable Hazards:

Securing Ladders, Extending 3 ft. above the Trench

Spoil Pile not 2 ft. back from the ledge

Caught In Between

Employee On the Pipe

Safe Means of Access/Egress w/in 25 ft.

Water Accumulation

Sloping of the Bell Hole

Trip Hazards



# Questions