



PHMSA

U.S. Department of Transportation

**Pipeline and Hazardous Materials
Safety Administration**

**Pipeline
Safety**



PIPELINE SAFETY

- **The safe, reliable, and environmentally sound operation of the pipeline transportation system.**



San Bruno





Minneapolis, MN 3-17-11

- 75 psi main break
- 2 Schools and a Church evacuated

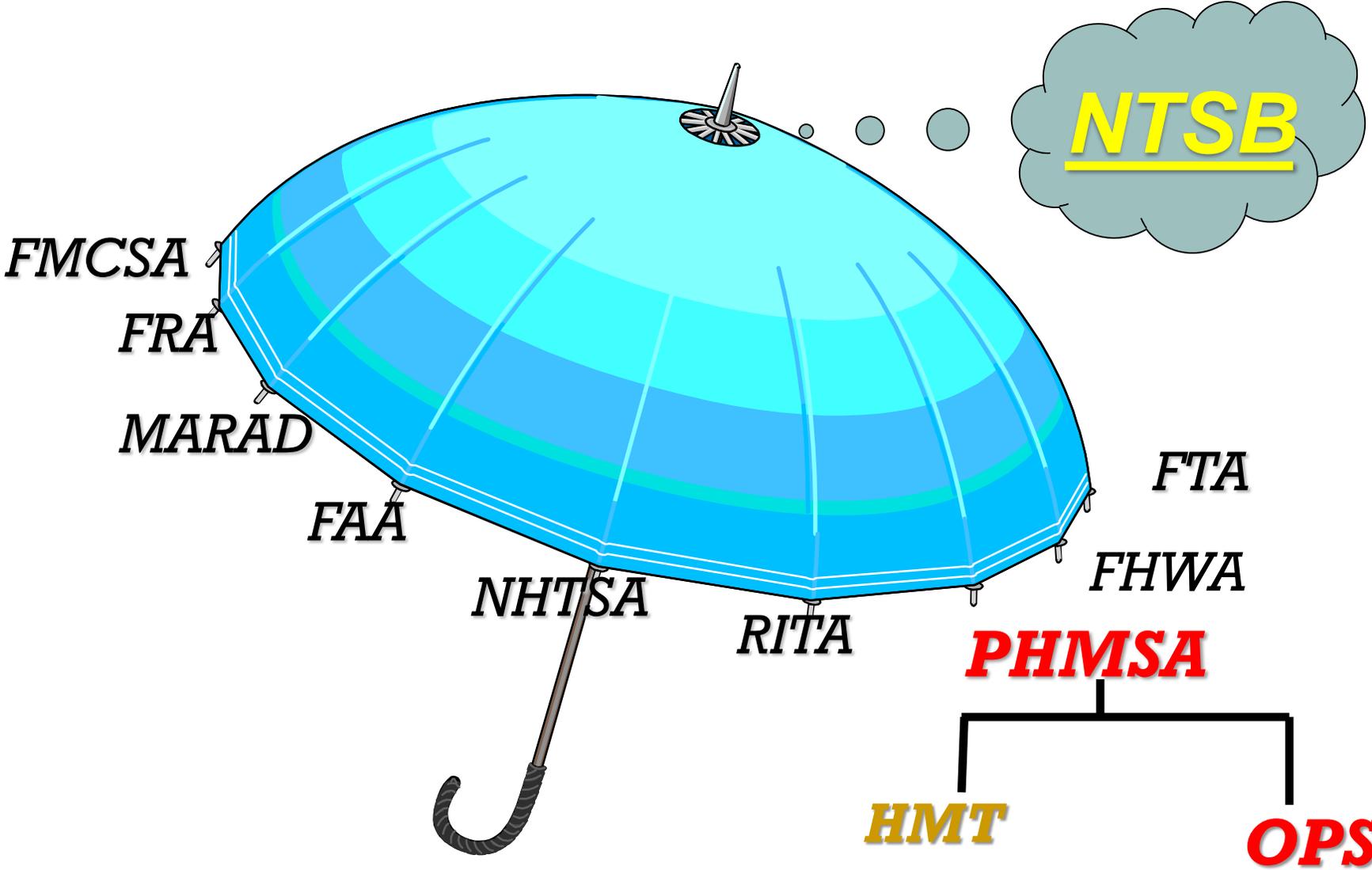




PHMSA Pipeline and Hazardous Material Safety Administration

- Office of Pipeline Safety
 - Primary Federal regulatory agency
 - Develop and implement pipeline safety regulations
 - Share regulatory responsibility with States

DOT ORGANIZATION





PIPELINE SAFETY

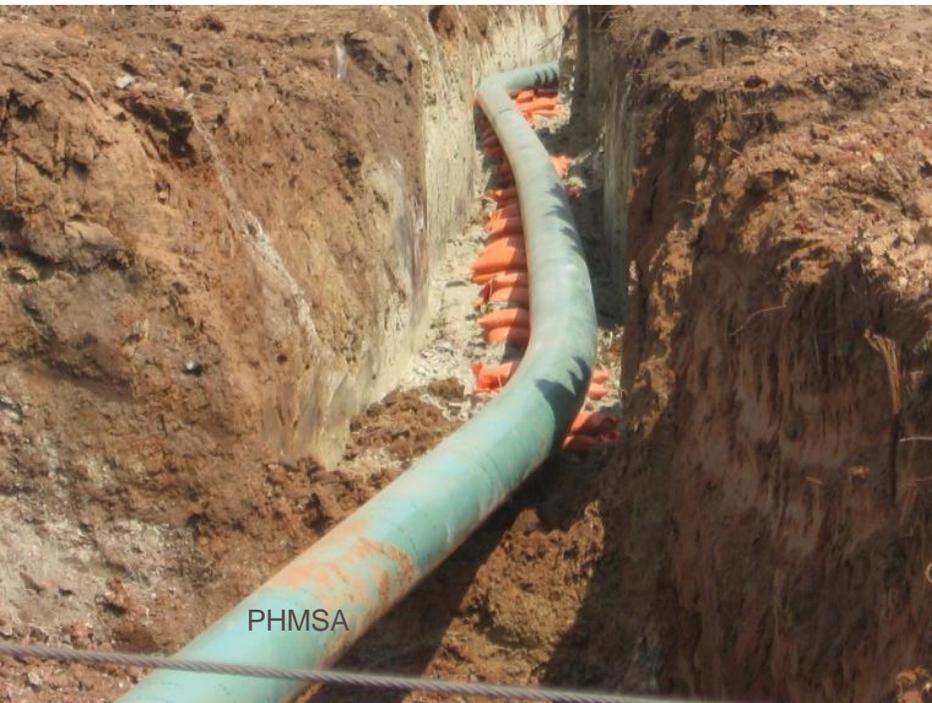
PHMSA Regulated Pipelines

- 175,000 miles of onshore and offshore hazardous liquid pipelines
- 321,000 miles of onshore and offshore gas transmission and gathering pipeline
- 2.3 miles of natural gas distribution mains and service pipelines
- 114 active LNG plants



PHMSA

- Public safety
- Oversee design, materials, construction, operations and maintenance of pipelines





Other Regulatory Agencies

- **FERC**
 - Public necessity, capacity and rates
- **OSHA**
 - Worker safety
- **BLM (Bureau of Land Management)**
 - Public lands
- **Corps of Engineers and Coast Guard**
 - Waterways

Historical Overview

- Boiler codes in the late 1800's
- First ASME pipeline standard/code in 1925 due to pipeline accidents
- Some States passed pipeline safety laws after gas pipeline incidents



Historical Overview

- ASME B31/B31.1/B31.4/B31.8 codes were only US pipeline standards until 1968
- 1968 – Natural Gas Pipeline Safety Act
 - Basis of current codes
 - Amended to correct, modify and add requirements



PIPELINE CODES

49 CFR 190 – Pipeline Safety Program Procedures

49 CFR 191 – Transportation of Natural and Other Gas by Pipeline; Reports of Leaks

49 CFR 192 – Transportation of Natural and Other Gas by Pipeline; Minimum Federal Safety Standards





PIPELINE CODES

49 CFR 193 – Liquefied
Natural Gas: Federal
Safety Standards

49 CFR 195 –
Transportation of
Hazardous Liquids by
Pipeline

49 CFR 199 – Drug and
Alcohol Testing
Regulations and
Procedures



OTHER DOCUMENTS

- PHMSA interpretations, alert bulletins, special permits and enforcement documents
- Memorandum of Understanding
 - OSHA, FERC, USCG, EPA
- Association standards
 - NACE, ASTM, API, ASME, NFPA

PHMSA Regulations

- Non-retroactive
 - Only apply from code enactment forward
 - Cannot apply to pre-existing pipelines
 - Govern design, materials, construction and testing requirements



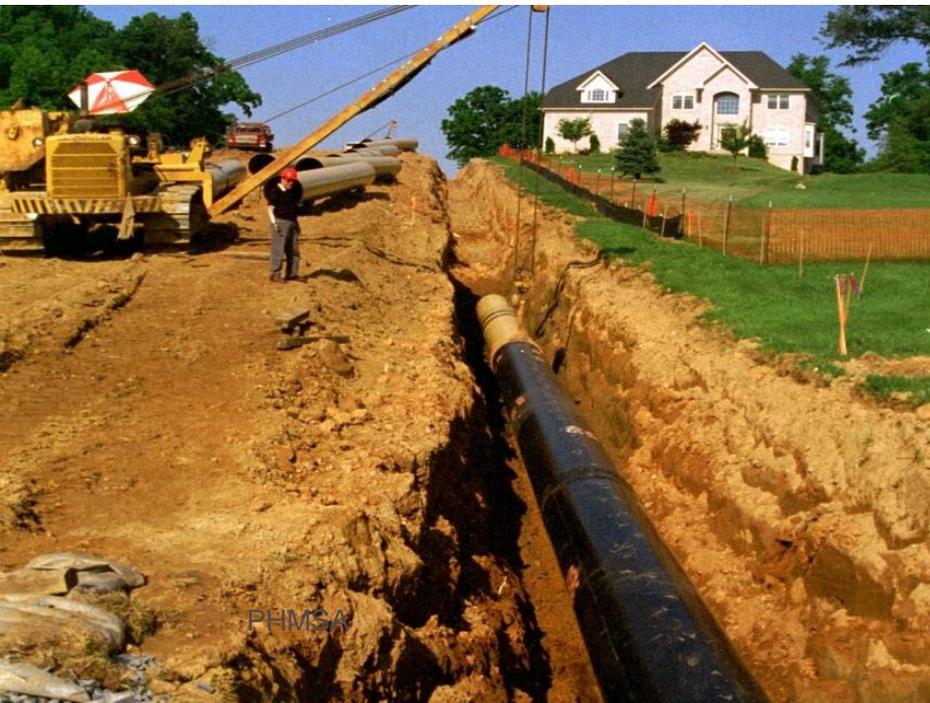
PHMSA Regulations

- Retroactive
 - All existing pipelines, regardless of the date of construction
 - Govern operations and maintenance of pipeline facilities
 - Includes operator qualification, integrity management and control room management



Common PHMSA/OSHA Activities

- Trenching and shoring
- Hazardous atmospheres
- Hot work permits
- Fire extinguishers
- Lifting/slings
- Electrical safety





Common PHMSA/OSHA Activities

- Piggings operations
- Slip, trip and fall hazards
- Hazardous materials, including asbestos
- Confined spaces
- Lock out/tag out
- PPE

