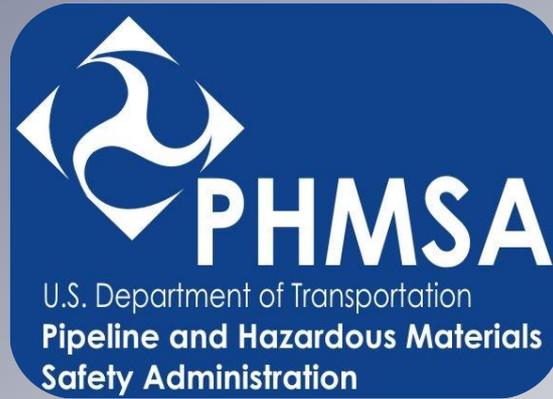




U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration



History of the Pipeline Safety Regulations





HISTORY

1880 – ASME was founded for engineers to discuss concerns brought on by industrialization and mechanization

1884 - ASME established the Boiler Testing Code



HISTORY

1905 – A boiler explosion at the Grover Shoe Factory disaster in Brocton Massachusetts killed 58 and injured 117.

1915 – ASME established the Boiler and Pressure Vessel Code



HISTORY

1916 - The American Institute of Electrical Engineers (now IEEE) invited the American Society of Mechanical Engineers (ASME), the American Society of Civil Engineers (ASCE), the American Institute of Mining and Metallurgical Engineers (AIME) and the American Society for Testing Materials (now ASTM International) to join in establishing an impartial national body to coordinate standards development, approve national consensus standards, and halt user confusion on acceptability. These five organizations, who were themselves core members of the United Engineering Society (UES), subsequently invited the U.S. Departments of War, Navy and Commerce to join them as founders



HISTORY

1919 - The American Engineering Standards Committee (AESC) was founded by six Stanton engineering societies and three government agencies.

1928 – Renamed the American Standards Associations, (ASA)

1935 – ASA issued the document, B31.1 American Tentative Standard Code for Pressure Piping, it later became B31.8 – Gas Transportation Piping



HISTORY

On March 18, 1937, a large natural gas pipeline explosion in a schoolhouse in New London, Texas killed 298 children. As a result of that accident, Texas passed a law requiring that odorants be added to natural gas. Soon thereafter, many other states passed laws similar to the Texas odorant requirements.



HISTORY

1938 – The Natural Gas Act gave the Federal Power Commission authority over the interstate natural gas industry mainly to control monopolistic pricing



HISTORY

1966 – ASA is renamed the United States of America Standards Institute (USASI)

1969 – Finally renamed the American National Standards Institute (ANSI)



HISTORY

During the peak period of pipeline construction (late 1950's through the mid-1960's), several states, counties, and municipalities adopted regulations for pipelines, especially for liquid pipelines, as they were built across their areas.





HISTORY

Most states that had adopted pipeline safety codes for gas pipelines used the ANSI Code B31.8 "Pressure Piping, Gas Transmission and Distribution Systems."





HISTORY

Because of the many conflicting local regulations, representatives from the liquid pipeline industry appeared before the Senate Commerce Committee in 1964 to request a single federal regulation.





HISTORY

The Natural Gas Pipeline Safety Act (NGPSA) was adopted August 12, 1968, as a result of a catastrophic gas pipeline failure that resulted in 17 deaths in Natchitoches, LA.

Established the authority for government to oversee and regulate pipelines transporting natural gas and other gases by pipeline.





HISTORY

On August 11, 1970, OPS removed Part 190 and published the first issue of Part 192, titled "Transportation of Natural and Other Gas by Pipeline; Minimum Federal Safety Standards."





HISTORY

Some of the requirements established in the NGPSA included:

- ▣ An enforcement group to oversee pipelines (OPS).
- ▣ Adopt interim regulations for all gas pipelines.
- ▣ Adopt "minimum safety standards" for all gas pipelines.
- ▣ A certification process with states to oversee and enforce the regulations for gas pipelines within that state.
- ▣ Enforcement actions and civil penalty limits.
- ▣ Technical Pipeline Safety Standards Committee (TPSSC).





Transportation Act

In 1994, Congress repealed all of the individual transportation Acts and compiled them into a single Act (Public Law 103-272) to incorporate all modes of transportation. Subtitle VIII for pipelines combined the requirements of the NGPSA and the HLPISA into one document.



PIPES ACT OF 2016

The **Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016**, was passed by Congress and signed into law on June 22, 2016

It authorizes funding for PHMSA from 2016 to 2019



HISTORY

Since the adoption of the industry standards (ASME B31.8) as the original federal regulations in the late 60's, the development of new regulations for pipelines has been predominantly driven by identified issues that have caused accidents.



HISTORY

This does not mean that every new regulation has been written or an existing regulation changed every time there has been a pipeline accident.

Often an addition or change of a regulation is attributed directly to a pipeline accident.



HISTORY

New regulations may also be proposed because of changes in technology, new materials, Congressional mandates or other issues that have caused accidents.



Regulation Development Request

Most of the new regulations, such as the integrity management initiative, have come from mandates through the PSIA. (Pipeline Safety Improvement Act)





Regulation Development Request

The recommendations that are submitted to Congress from NTSB are usually included in the PSIA as a mandatory requirement to develop a regulation or to conduct a study for the need of a regulation.





Regulation Development Regulation Need

The first step in the process of developing a regulation is to determine the need for a new regulation. If an operator is having a problem, this does not mean that every operator is having the same problem.





Regulation Development Regulation Need

The need for a regulation that will affect every operator would not be justified. But if it is determined that several operators are having the same problem, then a new regulation or a change to a regulation may be warranted.





Regulation Principles

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

What We Regulate

Pipeline Facilities by System Type data as-of 3/27/2017
 CY 2016 for Gas and CY 2015 for Liquid

System Type	Miles	% Miles	# Operators
Hazardous Liquid	208,616 7,578 Tanks	< 8%	483
Gas Transmission	299,945	11%	1,009
Gas Gathering	17,478	< 1%	342
Gas Distribution (Mains & Services)	2,204,025	81%	1,263
Total	2,730,064	100%	2,555 unique OpID
Liquefied Natural Gas	153 Plants	228 Tanks	83



**PHMSA's goal is to improve
the overall integrity of
pipeline systems and
reduce risks.**