Maryland Society of Professional Engineers

Annual Conference

November 14, 2019





Originating Industry Event

"On September 13, 2018, an accident occurred after high-pressure natural gas was released into a low pressure distribution system in the northeast region of the Merrimack Valley (Massachusetts). One person was killed and 22 people, including three firefighters, were transported to area hospitals. The system over-pressure damaged 131 structures, including five homes that were destroyed. The NTSB noted, as part of the probable cause, that a low pressure natural gas distribution system designed and operated without adequate overpressure protection contributed to the accident." (taken from NTSB News release 9/24/19)

The NTSB was the lead in investigating the accident, and on November 15, 2019 issues 5 Urgent Safety Recommendations as the investigation of Merrimack Valley gas explosions and fires continued.









NTSB had numerous (5) recommendations for PHMSA, Massachusetts, Multiple States and the Utility









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To the Commonwealth of Massachusetts:



Eliminate the professional engineer license exemption for public utility work and require a professional engineer's seal on public engineering drawings (P-18-5)

To the State of Maryland :



Remove the exemption so that all future natural gas infrastructure projects require licensed professional engineer's approval and seal





Massachusetts Legislative Action

Response to NTSB Recommendation:



An Act to Ensure the Safety and Soundness of the Commonwealth's Natural Gas Infrastructure

Section 2 Chapter 164 of the General Laws....Section 146

Any engineering plans or specifications for engineering work or services that could pose a material risk to public safety,<u>developed by or on behalf of</u> a gas company shall bear the stamp of approval of a professional engineer....

Signed into law in December 31, 2018





New York State Legislative Action

Response to NTSB Recommendation:



Senate Bill S2935-A : An Act to amend the education law and the public service law, in relation to certain plans or specifications for engineering work or services that could pose a material risk to public safety

Summary(excerpts from bill language)

Require engineering plans ...(performed by or on behalf of a gas company that distributes and sells gas within the state) that could pose a material risk to public safety must bear the stamp of approval of a professional engineer, and authorizes the public service commission to promulgate rules and regulations relating to such requirement...

Passed New York State Senate and awaiting approval by the Assembly, then to the Governor for signature







Federal Legislative Action



In Response to NTSB Recommendations, Federal legislation (House and Senate) was introduced to address identified issues, including use of PE approvals for gas system changes. <u>Leonel Rondon Pipeline Safety Act (Warren/Markey)</u>

Subsequently this legislation was combined with active Pipeline Safety Reauthorization legislation to move forward as the "<u>Protecting Our Infrastructure</u> <u>of Pipelines Enhancing Safety (PIPES) Act of 2019"</u>

"relevant qualified personnel, <u>such as an engineer with a professional engineer licensure</u>, subject matter expert or other employee who possesses the necessary knowledge, experience and skills regarding natural gas distribution systems, review and certify construction plans for accuracy, completeness, and correctness."

(bill out of Senate Committee waiting full approval in both houses)







Maryland Regulations



Annotated Code of Maryland Business Occupations and Professions Title 14. Professional Engineers Subtitle 1. Definitions; General Provisions 14-103. Engineering documents; design coordination

Signature, seal, and date requirements for documents

(a) All engineering documents prepared in connection with, project, public or private utility, or facility in the built or economic environment....





Maryland Regulations



In general (a)an individual shall be licensed by the board....may practice engineering in the state.

Exceptions (b)(2) employee of a public utility company.....that the State or federal government regulates to safeguard life, health and property





Timeline/Process

Pending Federal legislation (passage in 2019)

PHMSA potential for Federal rulemaking (2020 +)

States actions and interpretations – licensing and PSC Guidance

Consulting engineering community awareness





Thank You

Questions/Comments



