PHMSA Safety of Gas Gathering and Transmission Rule

A.K.A – The “Mega Rule”

Are you Ready?

WRGC
August, 2019
Safety Moment
Mega Rule

Why is this Rulemaking Occurring?
History of the Gas Rule

September 9, 2010 – San Bruno, CA

- 8 people killed
- 51 injured
- Destroys 38 homes
- Damages 70 homes
Sissonville, West Virginia

- December 11, 2012
- Columbia Gas Transmission
- 20” natural gas service
Legislation Activities

Reauthorization Hearings

- Eight hearings
  - 5 in 2010
  - 3 in 2011
- Data requests
What Did the Pipeline Safety Act 2011 Require?

§60139

a) (1) … verification of the records of the owner or operator relating to the interstate and intrastate gas transmission pipelines … in class 3 and class 4 locations and class 1 and class 2 high-consequence areas

b) … purpose of the verification shall be to ensure that the records accurately reflect the physical and operational characteristics of the pipelines described in paragraph (1) and confirm the established MAOP
What Did the Pipeline Safety Act 2011 Require?

§60139

b) (1) … for which the records of the owner or operator are insufficient to confirm the established maximum allowable operating pressure

d) (1) … Not later than 18 months … issue regulations for conducting tests to confirm the material strength of previously untested …
DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 191 and 192

[Docket No. PHMSA–2011–0023]

RIN 2137–AE72

Pipeline Safety: Safety of Gas Transmission and Gathering Pipelines

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.
How Will This Affect You?

- More detailed records & records mgmt. practices
- New “areas” along the pipeline to identify and assess
- Corrosion control
- Confirmation of MAOP
- Material Verification of unknown pipe attributes
How Will This Affect You? - Continued

- Reporting All Gathering
- Gathering of a Certain Diameter Becoming Regulated
PHMSA is splitting this rulemaking into 3 different rulemakings -
1st - MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related

- 6-month grace period for 7-calendar-year reassessment intervals
- Seismicity
- MAOP exceedance reporting
- Material verification, MAOP reconfirmation, & amendments related to §192.619
- Non-HCA assessments and MCA definition

Summer 2019
- Repair criteria (HCA and non-HCA)
- Inspections following extreme events
- Safety features on ILI launchers and receivers
- Management of change
- Corrosion control
- Integrity management clarifications
- Strengthened assessment requirements
3rd - Safety of Gas Gathering Pipelines

- Reporting requirements
- Appropriate safety regulations for gas gathering lines in Class 1 locations
- Definitions related to gas gathering
GPAC Meetings

• Gas Pipeline Advisory Committee

• Technically feasible, reasonable, Cost-effective, and Practicable

• 5 Meetings so far..next one is June 25th, 2019
1. Know your Pipeline System….

Identifying what’s in your system
- Pipe Specifications
- Component Specifications
- Pressure Test
- Have Traceable, Verifiable, and Complete records
Definitions

- Delete “legacy pipe” and “legacy construction” - 😂
- Revise the definition for “transmission line” to read as follows:
  - *Transmission line* means a pipeline or connected series of pipelines, other than a gathering line, that: (1) transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not down-stream from a distribution center; (2) has an MAOP of 20 percent or more of SMYS; or (3) transports gas within a storage field; or (4) is voluntarily designated by the operator as a transmission line.

Note: A large volume customer may receive similar volumes of gas as a distribution center, and includes factories, power plants, and institutional users of gas.
2. Know where your Pipeline System is…

Identifying where you pipeline is in relation to people.
- Class Location Study
- High Consequence Areas
- Moderate Consequence Areas
Definitions

- **Moderate Consequence Area (MCA)** - as proposed would include; a PIR containing 5 or more BIHOs, an Occupied Site; or referenced highways

- **Definition of Occupied Site** - as proposed includes outdoor congregations 5/50/12 & a single building with occupancy by 5 people, 5 days, ten weeks/yr (but without a clear indication of where it will go)
3. Pressure Test/Reduction to Confirm MAOP

- Pipelines w/o TVC Pressure Test Records
- Established by the Grandfather Clause (§192.619(c))
  - HCAs
  - Class 3 and 4 Locations
4. Verify Pipeline Material if no TVC Records

- HCAs
- Class 3 and 4 Locations
  - Diameter
  - Wall Thickness
  - Grade (yield and ultimate tensile)
  - Chemical Composition
  - Coating Type
  - Seam
5. Have to Keep Records: Going Forward…For Life of Pipe

- Materials
- Pipe Design
- Class Location Studies and Determination
- Pipeline Components
- Welder Qualification
- Coating Surveys
- MAOP Confirmation
6. Assess Pipelines in Class 3 and 4, MCAs

- Existing - Complete within 15 years
- New - Within 4 years
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| Expansion of Integrity Management principles beyond HCAs | Identify Moderate Consequence Areas (MCAs) to be assessed. | • MCA identification  
• GIS and records management  
• Structures verification  
• IMP process development  
• ILI or other Integrity Assessment  
• Permitting |
| MAOP Validation Requirements for Grandfathered Pipelines | Pipelines who have established MAOP on high 5 must pressure test or other means to reconfirm MAOP. | • TVC records analysis  
• GIS and records management  
• Engineering analysis  
• Permitting |
| Material Validation Requirements | All applicable pipe without records in HCAs or Class 3 or 4 locations. Require verification of records used to establish MAOP to ensure they accurately reflect the physical and operational characteristics of the pipelines | • TVC records analysis  
• GIS and records management  
• Positive Material Identification  
• Permitting |
<p>| Record Keeping | Collection of all pipeline information | • GIS and records management |</p>
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<td>Assessment to ensure integrity of the coating after construction</td>
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<td>Interference Currents</td>
<td>Interference surveys for a pipeline system to detect the presence and level of any electrical stray current.</td>
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<td>Internal Corrosion</td>
<td>Monitoring and mitigation program for potentially corrosive constituents</td>
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<td>• Records management</td>
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<td>Risk Models</td>
<td>Must include evaluation of the effects of interacting threats</td>
<td>• Risk algorithm development</td>
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<td>Repair Criteria</td>
<td>Increase in criteria for HCAs and added criteria for MCA’s</td>
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<td>Management of Change</td>
<td>Incorporate Manage of Change processes for all areas of Part 192</td>
<td>• Development/Implementation of Processes</td>
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Questions?

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