







PHMSA Safety of Gas Gathering and Transmission Rule

A.K.A – The "Mega Rule"



Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments

(2137-AE72 – existing)

This rulemaking will address the following proposals:

- 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
- Related record provisions



Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments

(2137-AF39 - new)

This rulemaking will address the following proposals:

- 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



Safety of Gas Gathering Pipelines (2137-AF38 - new)

This rulemaking will address the following proposals:

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



Other New Definitions

- Moderate Consequence Area (MCA) as proposed would include;
 a PIR containing 5 or more BIHOs, an Occupied Site SEE DEF BELOW); 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)

Class Location



• Class Location criteria proposed addition - (d) Records for transmission pipelines documenting class locations and demonstrating how an operator determined class locations in accordance with this section must be *retained for the life (?)* of the pipeline.

MOC's



• § 192.13 What general requirements apply to pipelines regulated under this part? PHMSA proposes to include a new (d) which will be requirements for transmission operators to implement MOC processes consistent with ASME B31.8S, Section 11. A new (e) is proposed, which is unclear if it is intended to be applicable to transmission only or not.

Records



• § 192.67 Records: Materials. Proposal requires operators of transmission lines to acquire and retain for the life of the pipeline the original steel pipe manufacturing records that document tests, inspections, and attributes required by the manufacturing specification in effect at the time the pipe was manufactured, including, but not limited to, yield strength, ultimate tensile strength, and chemical composition of materials for pipe in accordance with § 192.55.

Records



 § 192.127 Records: Pipe design - Proposed new requirement that would require load calculations for every piece of new transmission line. This is not retroactive.

"Each operator of transmission pipelines must make and retain for the life of the pipeline records documenting pipe design to withstand anticipated external pressures and loads in accordance with § 192.103 and determination of design pressure for steel pipe in accordance with § 192.105."

Corrosion Control



- § 192.319 Installation of pipe in a ditch Proposal requires ACVG/DCVG to be conducted within three months for new transmission and repairs within 6 month. References NACE SP0502 This is for new construction. Similar proposal below for repairs/replacements of 1000 feet or more. Gathering appears to be exempt (see 192.9)
- § 192.461 External corrosion control: Protective coating Modified
 (a)(4) Proposal adds transportation, boring, installation

Corrosion Control



- § 192.465 External corrosion control: Monitoring and remediation New (f) Proposal will require the conduct of a CIS survey in both directions from any low reading noted during annual monitoring on transmission*.
- Doesn't state how far survey must be performed, but implies until sufficient levels are detected as remediation is stated as; Remediation of areas with insufficient cathodic protection levels or areas where protective current is found to be leaving the pipeline must be performed in accordance with paragraph (d).

^{*}Appears to be recognition of reality coming here

Corrosion Control



- § 192.478 Internal corrosion control: Onshore transmission monitoring and mitigation Proposes a new requirement for all transmission to have an Internal Corrosion monitoring program, whether there is evidence or past history of IC or not. Specifies sampling and actions to be conducted at intervals 2x yr.
- Modify (b)(1) as follows: "At points where gas with potentially corrosive contaminants enters the pipeline, the use of gas-quality monitoring methods to determine the gas stream constituents."
- Change frequency of monitoring and program review from twice per year to once per calendar year, not to exceed 15 months.





■ § 192.607 Verification of Pipeline Material: Onshore steel transmission pipelines - New requirement for transmission (no specified exemption for gathering) to gather data on pipe and components for all lines in HCA and Class 3 & 4 locations where the operator does not have "*reliable*, traceable, verifiable, and complete records" If you have said materials PIPE & COMPONENTS see next steps!



- § 192.607 (c)(1) Contains the typical pipe characteristics you would expect with two additional ones Ultimate tensile strength and chemical composition
- § 192.607 (c)(2) Valve investigations must find grade of "pups" for weld ends, and condition of the bevel
- § 192.607 (c)(3) Flanges treated same as valves



- § 192.607 (d)(3)(i) Sampling rate is established at
 - (A) 150 excavations; or
 - (B) If the segment is less than 150 miles, a number of excavations equal to the population's pipeline mileage (i.e., one set of properties per mile), rounded up to the nearest whole number. The mileage for this calculation is the cumulative mileage of pipeline segments in the population without reliable, traceable, verifiable, and complete material documentation



- § 192.624 New requirement to "re-verify MAOP" if certain conditions are met. Those located in one of the following locations:
 - (i) An HCA;
 - (ii) A class 3 or class 4 location; or
 - (iii) The new MCA areas
 - (2) Pressure test records for segments in HCA, MCA, and CI 3&4 are not verifiable....
 - (3) MAOP was established using 192.619(c) and is in one of the 3 areas



- § 192.624(b) Identify all pipe described above
 - Develop a plan within 1 year to test all pipe
 - Test 50% within 8 years from effective date of rule
 - Test remaining NTE 15 years from effective date of rule
 - * Complete within 15 years asap or 4 years for Class location change affected segments



- For Method 5 \leq 8 + \leq 30%:
 - Delete the size and pressure criteria. The applicability would be based solely on a PIR of ≤ 150 feet.
 - Strike ECDA, Crack Analysis Program, odorization, and fracture mechanics analysis requirements.
 - Change frequency of patrols and surveys:
 - In class 1 and 2 locations to 4 times per year.
 - In class 3 and 4 locations to 6 times per year.



- Clarify that the MAOP records requirements proposed in § 192.619(f) would apply only to onshore, steel, gas transmission pipelines.
- Clarify the MAOP records requirements at § 192.619(f) only apply to records needed to demonstrate compliance with § 192.619(a) (d). Move examples of MAOP documents to the preamble and guidance materials.
- Clarify that the MAOP records requirements proposed under section § 192.619 are not retroactive, similar to the proposal that the committee voted on at the March 2, 2018 meeting.
 - Existing records on pre-existing P/L must be retained for P/L life.
 - New pipelines must make and retain records for life of pipeline.
 - Other sections such as § § 192.624 and 192.917 would require when, and for which pipeline segments, missing MAOP records must be verified in accordance with § § 192.624 and/or 192.607.
 - MAOP records would be required for any pipeline placed in service after the effective date of the rule.





- Revise the listing of pipeline attributes in 192.917(b)(1) to be more consistent with existing regulations and B31.8S. Add language to require operators collect data that is "pertinent" (and that a prudent operator would collect).
- Implementation timeframe beginning in year 1 with full incorporation by 3 years.

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.

Definitions



- Include a definition for "distribution center" and consider revising the definition per the definition provided by the industry and read aloud by member Allen during the meeting on March 27, 2018, as follows:
- "Distribution center" means the initial point where gas enters piping used primarily to deliver gas to customers who purchase it for consumption as opposed to customers who purchase it for resale, for example:
 - (1) at a metering location,
 - (2) a pressure reduction location, or
 - (3) where there is a reduction in the volume of gas, such as a lateral off a transmission line.

What's Proposed - Gathering?



 Proposed change to § 191.1 to require reporting for all gathering which will remain as "unregulated" after implementation of this proposal as a final rule.

- MAOP
- Pipe specs
- Leaks Repaired

What's Proposed - Gathering?



- Moving and Modifying Definitions
 - Gathering Line (onshore) to Eliminate reliance on API RP-80
 - Production Facility / Operation
 - Gas Processing Facility
 - Gas Treatment Facility

What's Proposed - Gathering?



- How are onshore gathering lines and regulated onshore gathering lines determined? Proposal is to require identification within six months, which would include the proposed new sections in Class 1 locations. While likely existing, there is an identified loophole being closed "maintain records documenting the beginning and endpoints of each gathering line". Is six months enough?
- Table (c)(2) Area column Class 1 location with a nominal diameter of 8 inches or greater





Questions?

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