Amendments
Final Rule
Amendments 191–23; 192–120; 195–100

Miscellaneous Amendments to the Pipeline Safety Regulation

Proposals Addressed in This Final Rule

- Responsibility to Conduct Construction Inspections ($192.305).
- Leak Surveys for Type B Gathering Lines ($192.9(d)(7))
  - Leak detection equipment
  - Promptly repair hazardous leaks
- Qualifying Plastic Pipe Joiners ($192.285(c))
  - Once each calendar year not to exceed 15 months
  - Re-qualify after a single joint fails under test (three failures prior)
- Mill Hydrostatic Tests for Pipe to Operate at Alternative MAOP
- Regulating the Transportation of Ethanol by Pipeline ($195.2; added to HL definition)
- Limitation of Indirect Costs in State Grants
- Transportation of Pipe
- Threading Copper Pipe ($192.279; no change to code)
- Offshore Pipeline Condition Reports
• Proposals Addressed in This Final Rule Cont’d...
  
  - Calculating Pressure Reductions for Hazardous Liquid Pipeline Integrity Anomalies
    o Consider other methods to calculate remaining strength
    o In the case where “no suitable … method can be identified” implement minimum 20% pressure reduction
  
  - Testing Components other than Pipe Installed in Low-Pressure Gas Pipelines
    o §192.503 – new paragraph (e) is added “If a component other than pipe is the only item being replaced or added to a pipeline, a strength test after installation is not required,…” under certain conditions, based on the manufacture of the component.
    o §192.505 – paragraph (d) has been removed, but a reference to (e) remains in paragraph (c). Fabrications and short sections where post-installation test is impractical, pre-installation strength test for 4 hours is allowed. (8 hours otherwise)

-Alternative MAOP Notifications (§192.620(c)(1); notification to PHMSA 180 days before start of construction)
- National Pipeline Mapping System
  - §§191.29, 195.61
  - NPMS submissions to be NLT March 15 for applicable gas facilities and June 15 for HL facilities.
  - Advisory bulletin ADB-08-07 (73 FR 44800), 07/31/2008
- Welders vs. Welding Operators
  - §§ 192.225, 192.227, 192.229, 195.214, 195.222
  - Acknowledges welding operators?
- Components Fabricated by Welding (§ 192.153, new paragraph (e) added, requiring pressure test to 1.5 times MAOP).
- Odorization of Gas
  - §192.625, odorize gas in transmission lines unless “At least 50 percent of the length of the line downstream from that location is in a Class 1 or Class 2 location”.
  - no change, PHMSA will reevaluate
- Editorial Amendments

NOTICE: 09/30/2015 Docket PHMSA-2010-0026

Final Rule

“The effective date of the amendment to 49 CFR 192.305, published at 80 FR 12779, March 11, 2015, is delayed indefinitely.” (80 FR 58633)
Final Rule

Amendment 192-121

Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences

- Operators are required to install EFV’s on new and replaced residential service lines 02/10/2010
- Requirement is expanded to include:
  - New or replaced branch service lines to SFR’s
  - New or replaced branch service lines to multi-family residences
  - Small commercial entities consuming less than 1,000 SCFH
- Expanded to install manual service valves or EFV’s (if appropriate) on new or replaced service lines exceeding 1,000 SCFH
- Operators must notify customers of right to request an EFV be installed on an existing service line with cost to be set initially by operator (in Indiana)
Interim Final Rule
Amendments 191–24; 192–122;

Safety of Underground Natural Gas Storage Facilities

• Address critical safety issues related to downhole (vertical) facilities
  - Wells
  - Wellbore tubing
  - Casings

• Section 12 of the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016

• Aliso Canyon, CA Incident 10/23/2015

• IBR
  - API RP 1170, “Design and Operation of Solution-mined Salt Caverns used for Natural Gas Storage” 07/2015
  - API RP 1171, “Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs” 09/2015

• All intrastate transportation-related underground gas storage facilities will become subject to minimum federal safety standards
  - PHMSA
  - State agency: Indiana Department of Natural Resources

• PHMSA will require an agreement with the state agency, no different from IURC
Related Advisory Bulletin
Safe Operations of Underground Storage Facilities for Natural Gas

• **Summary:** PHMSA is issuing this advisory bulletin to remind all owners and operators of underground storage facilities used for the storage of natural gas, as defined in 49 CFR part 192, to consider the overall integrity of the facilities to ensure the safety of the public and operating personnel and to protect the environment.

• Operators should have comprehensive and up-to-date processes, procedures, mitigation measures, periodic assessments and reassessments, and emergency plans in place to maintain the safety and integrity of all underground storage wells and associated facilities whether operating, idled, or plugged.

• Operators’ O&M procedures and processes should be reviewed annually at a minimum.
Final Rule


Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Pipeline Safety Changes

• Accident/Incident Reporting (§§ 191.5, 195.52)
  - One hour after confirmed discovery
  - 48 hours after confirmed discovery: Revision or confirmation

• Cost recovery fee for design review of new pipelines
  - Design and construction costs >= $2.5B
  - “New and novel technologies”

• Address NTSB recommendation to clarify control room personnel training requirements (§§ 191.5, 195.52)

• Renewal procedures for expiring special permits (formerly waivers) (§190.341)

• Farm taps not allowed in DIMP (§§192.740, 192.1003)

• Operators are to report to PHMSA product change or “permanent” flow reversal > 30 days (§§191.22, 195.64)
Final Rule

Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Pipeline Safety Changes Cont’d...

• Assessment tool selection for SCCDA Part 195
  - §195.588

• Electronic reporting of D&A testing results RE: Part 199

• Modifying criteria to make decisions about post-accident/incident D&A testing

• Protection of confidential commercial info submitted to PHMSA

• IBR API 1104 Appendix B: In-service welding
  - § 192.225 Welding procedures.
  - § 192.227 Qualification of welders

• Minor editorial corrections
Notices and Advisory Bulletins
Verification of Records

Summary: PHMSA is issuing an Advisory Bulletin to remind operators of gas and hazardous liquid pipeline facilities to verify their records relating to operating specifications for maximum allowable operating pressure (MAOP) required by 49 CFR 192.517 and maximum operating pressure (MOP) required by 49 CFR 195.310. This Advisory Bulletin informs gas operators of anticipated changes in annual reporting requirements to document the confirmation of MAOP, how they will be required to report total mileage and mileage with adequate records, when they must report, and what PHMSA considers an adequate record.
Mechanical Fitting Failure Reports

• **Summary:** This notice provides clarification to owners and operators of gas distribution pipeline facilities when completing the Mechanical Fitting Failure Report Form, PHMSA F 7100.1-2.

  - 49 CFR 192.1009
  - Report hazardous leaks only on form PHMSA F 7100.1-2
  - Report regardless of material composition, type, manufacturer, or size of the fitting
  - Report regardless of cause
  - Cast iron bell and spigot joints are exempt unless a mechanical fitting used in repair or reinforcement of joint was used and failed
Reporting of Exceedances of Maximum Allowable Operating Pressure

Summary: PHMSA is issuing this Advisory Bulletin to inform owners and operators of gas transmission pipelines that if the pipeline pressure exceeds maximum allowable operating pressure (MAOP) plus the build-up allowed for operation of pressure-limiting or control devices, the owner or operator must report the exceedance to PHMSA on or before the fifth day following the date on which the exceedance occurs. If the pipeline is subject to the regulatory authority of one of PHMSA’s State Pipeline Safety Partners, the exceedance must also be reported to the applicable state agency.

- Gas Transmission operators
- Section 23 (a) of Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 led to a change in U.S.C. Chapter 60139 (b) (2)
- The reporting exemptions for SSCR listed in § 191.23(b) do not apply; all reports must be submitted within five days
- Can be submitted via email much as a Safety Related Condition Report
Clarification of Terms Relating to Pipeline Operational Status

**Advisory:** PHMSA regulations do not recognize an “idle” status for a hazardous liquid or gas pipelines. The regulations consider pipelines to be either active and fully subject to all parts of the safety regulations or abandoned.

- Abandoned means permanently removed from service - §192.3 – Definitions
- §192.727 - Abandonment or deactivation of facilities.
- §195.402(c)(10) - Procedural manual for operations, maintenance, and emergencies.
- Disconnected from all sources of product, purge all combustibles and seal facilities left in place
- Any pipeline or facility that is not “permanently removed from service still falls under the regulations
- “Idled,” “inactive,” or “decommissioned” does not mean “abandoned”
Safeguarding and Securing Pipelines from Unauthorized Access

Summary: PHMSA is issuing this Advisory Bulletin in coordination with the Department of Homeland Security's (DHS), Transportation Security Administration (TSA), to remind all pipeline owners and operators of the importance of safeguarding and securing their pipeline facilities and monitoring their Supervisory Control and Data Acquisition (SCADA) systems for abnormal operations and/or indications of unauthorized access or interference with safe pipeline operations. Additionally, this Advisory Bulletin is to remind the public of the dangers associated with tampering with pipeline system facilities.
Safeguarding and Securing Pipelines from Unauthorized Access Cont’d...

- TSA Pipeline Security Guidelines
- If You See Something, Say Something™
- Relationships With Local Law Enforcement
- Increased Security Patrols
- Protection of Facilities
- SCADA System Monitoring
- Incident and Accident Reporting

TSA recommends in its Pipeline Security Guidelines that pipeline operators notify the Transportation Security Operations Center via phone at 866-615-5150 or email at TSOC.ST@dhs.gov as soon as possible to report security concerns or suspicious activity.
High Consequence Area Identification Methods for Gas Transmission Pipelines

• **Summary:** PHMSA is issuing this advisory bulletin to remind gas transmission pipeline operators of certain previously issued guidance and provide operators with additional guidance for the identification of High Consequence Areas (HCAs) along pipeline right-of-ways.

• Bulletin was published to meet NTSB Recommendation P-15-06, “…assess the limitations associated with the current process for identifying high consequence areas, and disseminate the results of [the] assessment to the pipeline industry, inspectors, and the public.”

• PHMSA’s intent in publishing the bulletin was to provide operators with additional guidance on how to improve the accuracy of their class location identification process.
In addition, PHMSA notes that proper identification of an HCA and periodic verification relies on two key types of information:

- Pipeline-specific information that includes the accurate location of the centerline of the pipeline, the nominal diameter of the pipeline, and the pipeline segment's MAOP
- All the structures and their usage (including occupancy) located along the pipeline

Bulletin provides suggestions for:

- Accurately mapping and integrating HCA data
- Documenting how mapping systems are used
- Periodically verifying and updating their mapping systems
- Utilizing buffer zones (tolerances) to provide additional protection around the calculated potential impact radius
- Ensuring the accuracy of class locations
Deactivation of Threats

Summary, to paraphrase:

- Guidance on threat identification and the minimum criteria to deactivation of threats
- Guidance to gas transmission pipeline operators regarding documenting their rationale of analyses, justifications, determinations, and decisions related to threat deactivation
Deactivation of Threats

ASME B31.8S-2004, Section 2.2 requires that an operator must consider nine individual threat categories as part of an IM program.

- These nine threats are divided into time-dependent and time-independent.
- Section 5.10 allows an operator to provide criteria for eliminating a threat from consideration during a risk assessment.
- PHMSA, however, does not allow for the permanent elimination of threats.
- An operator must continually consider all threats in the evaluation of their IM program through periodic reviews and assessments.
- Threats to a pipeline are not static, but vary over time.
Deactivation of Threats

• A mature IM plan must include the re-analysis of the nine threat categories to determine status changes for active or inactive threats.

• A threat determined to be inactive during one assessment may change into an active threat prior to the next assessment.

• A threat cannot be eliminated because of a lack of data.

• Bulletin goes on further to provide guidance for determining the status of the nine threats, divided into time-dependent and time-independent threats. PHMSA has also added cyclic fatigue as a threat worthy of discussion because it interacts with all other threats to magnify the likelihood of the stand-alone threat.
Guidance on Training and Qualifications for the Integrity Management Program

Summary: PHMSA … is issuing this Advisory Bulletin to remind operators of their responsibility to include qualification requirements for IM personnel, as required by PHMSA regulations and discussed in the American Society of Mechanical Engineers (ASME) ASME B31.8S-2004.

Specifically, PHMSA requires IM programs to assure certain persons have appropriate training or experience to be considered qualified for their areas of responsibility. These requirements apply to operator and contractor personnel (contractors, suppliers, vendors, etc.) who perform certain IM-related tasks.
Guidance on Training and Qualifications for the Integrity Management Program Cont’d...

• For supervisory personnel, § 192.915 requires that the IM program must ensure that:

  - Each supervisor whose responsibilities relate to the IM program possess and maintain a thorough knowledge of the IM program and the elements for which the supervisor is responsible; and

  - Any person who qualifies as a supervisor for the IM program has appropriate training or experience in the area for which that person is responsible.
Guidance on Training and Qualifications for the Integrity Management Program Cont’d...

• For personnel performing IM-assigned tasks, the rule requires an operator's IM program to provide criteria for their training and qualifications. The elements of IM covered under § 192.915 apply to individuals who:
  - Conduct assessments;
  - Review and analyze results from integrity assessments; or
  - Make decisions on actions to be taken based on these assessments.

• The program must also include criteria for the qualification of individuals who:
  - Implement preventive measures and mitigative measures to carry out the requirements of the rule, including the marking and locating of buried structures; or
  - Directly supervise excavation work carried out in conjunction with an integrity assessment.

*PHMSA inspectors will use this Advisory Bulletin to clarify the intent of existing regulatory language when evaluating operator IM program personnel training and qualification effectiveness.