Pipeline Safety Update

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PHMSA Amends Safety Regulations Applicable to Gas Transmission Pipelines, Hazardous Liquid Pipelines and Emergency Order Procedures.

On October 1, the Pipeline and Hazardous Materials Safety Administration (PHMSA) issued 3 long-awaited final rules that amend the federal pipeline safety regulations applicable to gas transmission pipelines and hazardous liquid pipelines and revise procedures implementing PHMSA's authority to issue emergency orders.

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

The Gas Transmission Rule amends Part 192 and Part 191 of PHMSA's regulations to implement the statutory directives contained in the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (2011 Act) which addressed, in particular, reconfirmation of maximum allowable operating pressure (MAOP) of certain gas transmission pipelines, the verification of pipe materials, and assessment of pipelines outside of high consequence areas (HCA). The amended regulations become effective July 1, 2020. Below is an overview of the final rule.


Applicability: An operator of an onshore steel transmission pipeline must reconfirm the MAOP of pipeline segments if the operator: (1) established the MAOP of a pipeline segment under § 192.619(a), and MAOP records, including Subpart J pressure test records required under § 192.517(a), are not traceable, verifiable, and complete and the pipe segment is located in an HCA or a Class 3 or Class 4 location; or (2) established MAOP of the pipeline segment under the grandfather clause (§ 192.619(c)) and MAOP results in a hoop stress of 30% or more of the segment’s specified minimum yield strength (SMYS) and the segment is located in an HCA, a Class 3 or Class 4 location, or a moderate consequence area that can accommodate inspection by means of instrumented inline inspection tools (ILI).

Moderate Consequence Area (MCA) (49 C.F.R. § 192.3) is an onshore area located within a potential impact circle containing 5 or more buildings intended for human occupancy or any portion of the paved surface, including shoulders, of a designated interstate, other freeway, or expressway, as well as any other principal arterial roadway with 4 or more lanes as defined by the Federal Highway Administration.

Requirements: An operator of a qualifying pipeline segment must confirm MAOP of that segment using one of the following methods:

1. **Pressure Test.** Perform a Subpart J pressure test. MAOP must equal the test pressure divided by the greater of either 1.25 or the applicable class location factor in § 192.619(a)(2)(ii). Records verifying material properties (diameter, wall thickness, seam type, and grade) must be traceable, verifiable and complete. If any record does not meet this standard, the operator must obtain the missing records in accordance with § 192.607 (material verification requirements). A “spike” pressure test for MAOP reconfirmation purposes is not required.

2. **Pressure Reduction.** Reduce pressure and limit MAOP to no more than the highest actual operating pressure sustained by the pipeline during the 5 years preceding October 1, 2019, divided...
by the greater of 1.25 or the applicable class location factor. This section also contains provisions for pipe segments that experience a class location change and allows for a longer look-back period for establishing a reduced operating pressure, subject to notification to PHMSA.

(3) Engineering Critical Assessment (ECA). Conduct an ECA. Under new § 192.632, an ECA must assess threats; loadings and operational circumstances relevant to those threats, including along the right-of-way; threat assessment outcomes; relevant mechanical and fracture properties; in-service degradation or failure processes; and initial and final defect size relevance. New § 192.712 describes how to analyze anomalies or defects to determine the predicted failure pressure and calculating the remaining life of a pipeline segment at the location of the anomaly or defect.

(4) Pipe Replacement. Replace the pipe segment.

(5) Pressure Reduction for Pipeline Segments with Small Potential Impact Radius. An operator of a pipeline with a potential impact radius of 150 feet or less may reduce MAOP to no greater than the highest actual operating pressure experienced by the pipeline during the 5 years preceding October 1, 2019, divided by 1.1, and perform patrols and conduct instrumented leakage surveys.

(6) Alternative Technology. Subject to advance notice to PHMSA, use an alternative evaluation process that provides a documented engineering analysis for establishing MAOP.

Compliance Deadlines: An operator must develop and document procedures for completing the MAOP Reconfirmation requirements by July 1, 2021; complete all required actions on at least 50% of pipeline mileage by July 3, 2028; and complete all required actions on 100% of pipeline mileage by July 2, 2035, or no longer than 4 years after the operating condition of a pipeline segment changes subjecting the segment to the requirement to reconfirm MAOP, whichever is later.

Records: An operator must retain records of investigations, tests, analyses, assessments, repairs, replacements, alterations, and other actions taken under this section for the life of the pipeline.

Verification of Pipeline Material Properties and Attributes (49 C.F.R. § 192.607). Section 192.607 describes the procedure an operator must follow to verify the material properties and attributes of a pipeline segment if required by another regulation. This is modified from PHMSA’s original proposal, which would have established an independent material verification requirement.

Assessing Areas Outside of HCAs (49 C.F.R. § 192.710). An operator must periodically assess non-HCA onshore transmission pipe segments (1) with MAOPs that produce a hoop stress of 30% or more of SMYS and (2) that are located in Class 3 or Class 4 areas or in MCAs if the pipe can accommodate inspection by means of ILI.

Assessment methods: Pipe assessment methods include ILI, a Subpart J pressure test, spike hydrostatic pressure test (conducted pursuant to § 192.506), direct examination, guided wave ultrasonic testing (GWUT) (conducted pursuant to Appendix F), or other technology, subject to prior notice to PHMSA. An integrity assessment performed under § 192.624(c) for establishing MAOP may be used as an initial assessment or reassessment. Section 192.710 describes data analysis requirements and the meaning of discovery of a condition.

Frequency: Initial assessments performed on a risk-based prioritization schedule must be completed no later than July 3, 2034, or within 10 years of when the pipe segment first meets the qualifications of § 192.710(a). Periodic assessments must be performed every 10 years thereafter.

Integrity Management (49 C.F.R. Subpart O). PHMSA made several modifications to its integrity management regulations addressing cyclic fatigue, manufacturing and construction defects, electric resistance welded pipe, and cracks. In addition, PHMSA adopted the following amendments.

Consideration of Seismicity (§ 192.917): An operator must consider the seismicity of the geographic area of a pipeline segment when identifying and evaluating potential threats.
Expanded Assessment Methods (§ 192.921(a) & 192.937(c)): The final rule specifies which types of threats can be assessed using each assessment method. Direct assessment is limited to those threats for which the specific direct assessment process is appropriate. PHMSA will permit additional assessment methods, including a “spike” hydrotest, GWUT, and excavation with direct in situ examination. An operator using ILI must comply with § 192.493.

6-month Grace Period for 7-Calendar year Reassessment Intervals (§ 192.939): Codifies a provision in the 2011 Act to permit PHMSA to extend by 6 months the deadline for performing a periodic reassessment once every 7 calendar years.

Record-keeping (49 C.F.R. §§ 192.5, 192.67, 192.127, 192.200, and 192.619). The final rule requires that a gas transmission pipeline operator maintain records documenting the current class location of each pipeline segment and demonstrating how each current class location was determined. In addition, for gas transmission pipelines installed after July 1, 2020, an operator must retain for the life of the pipeline records documenting material properties, pipe design, and pipe components. For pipelines constructed before July 1, 2020, an operator must retain for the life of the pipeline such design records that are in their possession. An operator also must retain records either reconfirming or establishing MAOP for the life of the pipeline.

ILI Requirements (49 C.F.R. §§ 192.150, 192.493, 192.750). The existing requirement to construct new and replaced transmission lines to accommodate ILI is amended to require that such lines be designed and constructed in accordance with NACE SP0102, section 7, to be incorporated by reference. An ILI inspections must be performed pursuant to industry consensus standards that will be incorporated by reference. After July 1, 2021, use of a launcher or receiver must follow specified safety requirements.

MAOP Exceedance Reporting (49 C.F.R. § § 191.23 & 191.25). The final rule codifies a provision in the 2011 Act to require that exceedances of MAOP on a gas transmission line be reported to PHMSA. An exceedance must be reported as a safety related condition, regardless of whether it is corrected within 5 days.

Safety of Hazardous Liquid Pipelines

The Hazardous Liquid Final Rule amends Part 195 of PHMSA’s pipeline safety regulations applicable to hazardous liquid pipelines. The amended regulations become effective July 1, 2020. New reporting requirements for gravity lines and unregulated gathering lines become effective in 2021.

Periodic Integrity Assessments of Non-HCA Line Pipe (49 C.F.R. § § 195.416).

Periodic Assessments. Every 10 years, an operator must assess the integrity of onshore non-gathering line pipe that can accommodate ILI and that is not located in an HCA or in an area that could affect an HCA. The operator must perform each assessment using an ILI tool appropriate to the identified risks, unless operationally impracticable. If impracticable, an operator must use either a pressure test, external corrosion direct assessment, or other technology that provides an equivalent understanding of the condition of the line pipe for the threat to be assessed. Use of other technology is subject to prior notification to PHMSA and receipt of a “no-objection” letter.

Data assessment, discovery of a condition, and remediation. Data obtained from each assessment must be analyzed by a person qualified by knowledge, training, and experience. Discovery of a condition occurs when an operator has adequate information to determine the existence of a potential threat to pipe integrity. Repairs must be performed pursuant to § 195.403, including a new requirement that an operator prioritize remediation of conditions that could adversely affect safe pipeline operations based on the risk presented to people, property, and the environment.

Proposed repair criteria not adopted. PHMSA did not adopt the repair criteria contained in the notice of proposed rulemaking because of the need to gather additional data, including information about costs and benefits and new technologies and practices. PHMSA intends to issue a supplemental notice of proposed rulemaking addressing repair criteria.
Increased Use of ILI in HCA Pipe (49 C.F.R. § 195.452(n)). Among the modifications to integrity management regulations is a new requirement that all HCA pipe, except for manifolds, station piping, pipe associated with tank farms and other storage facilities, cross-overs, pipe for which an ILI is not commercially available and offshore pipelines less than 10 inches in diameter that transport liquids to onshore facilities (see § 195.120(b)), be made capable of accommodating ILI tools by July 2, 2040, unless PHMSA finds that a pipeline’s basic construction prevents the accommodation, that an emergency renders accommodation impracticable, or that compliance costs would cause an operator to abandon or shut down the pipeline.

Leak Detection (49 C.F.R. §§ 195.134 & 195.444). On pipelines constructed on or after October 1, 2019, an operator must install leak detection systems by October 1, 2020. On pipelines constructed before October 1, 2019, leak detection systems are required by October 1, 2024. This requirement does not apply to non-HCA gathering lines, regulated rural gathering lines and offshore lines.

Reporting requirements for gravity and rural gathering lines. (49 C.F.R. §§ 195.13 & 195.15). Effective January 2021, the requirement to submit safety-related condition reports, accident reports, and annual reports will extend to hazardous liquid pipelines that transport product by gravity, unregulated rural gathering lines, and certain offshore gathering lines located in state waters. The first annual reports are due March 31, 2021. The expanded reporting requirements do not apply to low-stress gravity lines that travel no more than 1 mile from a facility boundary and do not cross a navigable waterway.

In addition, these pipelines are not required to provide immediate notification of incidents (§ 195.52), submit data to the National Pipeline Mapping System (§ 195.61), or provide safety data sheets on any spilled hazardous liquid (new § 195.65).

Transportation flow lines. Subject to further study and cost analysis, transportation flow lines, i.e., pipelines transporting oil off the grounds of the well where it originated and across areas not owned by the producer, regardless of whether and how much the oil was processed, are not subject to reporting requirements.

Inspections After Extreme Weather or Natural Disasters (49 C.F.R. § 195.414). After an extreme weather event or natural disaster that is likely to damage pipeline infrastructure by scouring or soil movement, an operator must inspect all potentially affected pipeline facilities to detect conditions that could adversely affect safe pipeline operation. An inspection must begin within 72 hours after the end of the event, i.e., the point in time when an affected area can be safely accessed by the personnel and equipment required to perform the inspection. An operator must take prompt and appropriate action, as described in the regulations, to ensure safe pipeline operations.

Definition of Hazardous Liquid (49 C.F.R. § 195.2). The definition of “hazardous liquid” is modified to conform with 49 U.S.C. § 60101(a)(4)(B) to include biofuel and to clarify that pipeline transportation of biofuel is subject to Part 195.

Safety Data Sheets (49 C.F.R. § 195.65). New § 195.65 codifies section 14 of the PIPES Act of 2016 which requires that operators of hazardous liquid pipeline facilities provide safety data sheets to the designated federal on-scene coordinator and appropriate state and local emergency responders within 6 hours of a telephonic or electronic notice of an accident to the National Response Center.

ILI Assessments of Underwater Pipelines (49 C.F.R. § 195.454). New § 195.454 codifies section 25 of the PIPES Act of 2016 and requires that an operator of a non-offshore underwater hazardous liquid pipeline located in an HCA and any portion that is located at a depth of more than 150 feet under the water’s surface perform pipeline integrity assessments using ILI at least once every 12 months. In addition, other types of assessments that can facilitate understanding of the condition of the pipeline facility are to be completed on a schedule based on the risk that the pipeline poses to the HCA where the pipeline is located.

Authority. PHMSA revised the “Authority” reference in Part 195 to add a citation to section 185(w)(3) of the Mineral Leasing Act which requires PHMSA to “cause the examination of all pipelines and associated facilities on Federal lands and shall cause the prompt reporting of any potential leaks or safety
problems.” PHMSA states that its compliance with this statutory requirement is accomplished through the issuance of its pipeline safety regulations, which require annual examinations and prompt reporting for all or most covered pipelines.

**Enhanced Emergency Order Procedures**

PHMSA issued a final rule revising its procedures for implementing its authority for issuing emergency orders to address imminent hazards caused by unsafe conditions or practices. Unlike PHMSA’s existing authorities to issue pipeline-specific corrective action orders or safety orders, an emergency order may be issued to multiple pipeline owners or operators. PHMSA exercises this authority pursuant to the Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2016 (PIPES Act). The revised procedures become effective December 2, 2019.

An emergency order may prohibit an unsafe condition or practice or impose an affirmative requirement when an unsafe condition, practice, or other activity poses a threat to life or significant harm to property or the environment. For example, an emergency order may address a natural disaster affecting many pipelines in a particular geographic region; a serious flaw discovered in pipe, equipment manufacturing, or supplier materials; or a specific unsafe industry practice revealed by a pipeline accident.

**Existing Procedures.** Before issuing an emergency order, PHMSA must consider the impacts on public health and safety, the national or regional economy or national security, and impacts on service reliability and continuity. PHMSA also must consult, as it deems appropriate, with federal and state agencies and entities knowledgeable in pipeline safety or operations, although the rule does not elaborate on the consultation process.

An entity subject to and aggrieved by an emergency order may petition PHMSA’s Associate Administrator to review the order by requesting a formal hearing before an administrative law judge (ALJ) and describing material facts in dispute. The ALJ must issue a report and recommendation containing factual findings and conclusions. Hearing procedures are modeled after existing review procedures contained in PHMSA’s regulations for hazardous materials transportation. As originally adopted, petitions that do not request a formal hearing or identify disputed material facts will be handled informally within the Office of Pipeline Safety, but the rule does not describe the applicable procedures.

**Revised Procedures.** PHMSA amended its emergency order procedures in a number of ways. Revisions and additions include the following:

- PHMSA clarified that pipeline operators subject to an emergency order will receive personal service of the emergency order.

- PHMSA added a new provision stating that if an emergency order remains in effect for more than a year, PHMSA will assess whether the imminent hazard underlying the emergency order continues to exist. If PHMSA determines that the imminent hazard no longer exists, PHMSA will rescind the order. If the imminent hazard continues to exist, PHMSA will initiate a rulemaking that proposes to codify as regulatory requirements the actions required in the emergency order.

- PHMSA eliminated the provision allowing the Associate Administrator to deny a request for a formal hearing upon finding that the petition does not state material facts in dispute. Any petition for a formal hearing will be referred to an ALJ.

- PHMSA removed the provision giving the Associate Administrator the right to request a formal hearing. PHMSA rejected, however, commenters’ requests to eliminate the Associate Administrator’s ability to consolidate petitions for review that do not seek a hearing with those that do.

- PHMSA clarified that, if warranted, PHMSA has the authority to grant expedited relief from an emergency order for a particular operator or group of operators or to grant partial relief.
Updated PHMSA Rulemakings Chart. The chart below shows the status of PHMSA’s pending pipeline safety rulemakings as reflected in (1) DOT’s August Significant Rulemaking Report, (2) PHMSA’s status Chart of legislatively mandated actions, and (3) the Office of Management & Budget’s (OMB) Office of Information and Regulatory Affairs (OIRA) Spring 2019 Unified Agenda of Regulatory and Deregulatory Actions. The Unified Agenda appears in two principal parts, Current Agenda Agency Regulatory Entries for Active Actions and Current Long Term Actions.

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## Other PHMSA Updates

PHMSA announces the award of pipeline safety and hazardous materials safety grants. On September 20, PHMSA announced it awarded a total of over $34 million in grants to states, local communities, tribal entities, territories, universities, emergency responders, and non-profit organizations to support various state and local safety programs. Pipeline safety grants included those related to State Damage Prevention, Pipeline Safety One Call, Pipeline Safety Competitive Academic Agreement Program, and Pipeline Safety Technical Assistance.

## FOR MORE INFORMATION

Van Ness Feldman counsels clients on pipeline safety compliance, enforcement, and litigation under the Pipeline Safety Laws and Regulations and related statutes. If you are interested in additional information regarding pipeline safety matters or any PHMSA or pipeline related matter, please contact Susan Olenchuk at (202) 298-1896 or sam@vnf.com, Bryn Karaus at (202) 298-1821 or bsk@vnf.com, or any member of the firm’s Pipeline & LNG practice group.

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