Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Presented by:

Pipeline and Hazardous Materials Safety Administration

Docket No: PHMSA-2010-0229

Amdt No 195-102

Held at the:

Sugar Land Marriott

February 26, 2020

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Safety Notes

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Setting the Stage

Morning Session: HL Rule Implementation

- From now to roughly noon
- Will take a 15 minute hard break @ 10:00

Afternoon Session: Safety Management System

- 1:00 pm – 5:00 pm

Tomorrow: Gas Transmission Rule Implementation

- 8:00 am – 5:00 pm

Safety of Hazardous Liquid Pipelines Final Rule

Publication Date: October 1, 2019

Effective Date: July 1, 2020 [9 months from publication date]

Various Regulatory Dates: (Examples)

- Reporting: 6 and 12 months after Effective Date
- CPM: New 1 year, Existing 5 years after Publication date
- Inspection Following Weather: Immediate.
- Pipeline Assessments: 10 years from Publication Date (5 years for Pre 70)
- IM DATA Analysis: 3 years form Publication

Hazardous Liquid Rule Implementation Strategy for New Rules

Implementation Team

- Rod Seeley – Team Lead
- Tiffany Baker – Southern Region
- Chris McLaren – State Programs Office
- David Barrett – Central Region

Begin Development of Implementation Plan

- Initial Team Meeting held October 28.

Hazardous Liquid Rule Implementation Strategy for New Rules

Major Deliverables

- Inspection Approach and Content
- Outreach and Training
  - Develop FAQs for understanding

Hazardous Liquid Rule Implementation Strategy for New Rules

Inspection Approach

- New content being developed for Inspectors
- Expectation is that the oversight will flow into the Integrated Inspection process.
  - No specialized inspection approach, no separate teams
  - As different rule effective dates are met the new parts of the regulation will be inspected.

Hazardous Liquid Rule Implementation Strategy for New Rules

Outreach and Training:

- Public Meeting: February 2020
  - Opportunities for more meetings
- State NAPSR Meetings:
  - Summer 2020: Face to Face sessions with NAPSR through Region Meetings
- PHMSA Outreach:
  - Face to Face Sessions with each PHMSA region
- Work with PHMSA TQ office to update all appropriate training material

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

We are here to present the material but also to hear from you. We are looking for feedback.

FAQs:

- We developed an initial set of FAQs, were included in the announcement, are posted on the docket.
- If you have comments or additional areas for FAQs please:
  - Submit to the Docket
    - https://www.regulations.gov/docket?D=PHMSA-2019-0225
  - See a team member

If you think additional presentations would be helpful (Trade Association Meeting or other pipeline safety forum?) please see a team member

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Specific Presentations to Follow:

- Reporting requirements (195.13 and 15)
- Expanded use of Leak Detection Systems (195.134 and .444)
- Increased use of in-line inspection tools (195.120)
- Periodic assessments of pipelines not subject to IM (195.416)
  - Break 15 min hard restart
- IM revisions and clarifications
  - Prioritizing Repair (195.401(b)(3))
  - Information Analysis (195.452(g))
  - Required Actions (195.452(h))
  - Verifying Covered Segments (195.452(j)(2))
- Extreme weather events and natural disasters (195.414)
- Self Executing Provisions
  - MSDS requirements (195.65)
  - Underwater Inspection (195.454)
- Final Q&A

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Following the specific topical sessions we will have

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

New Reporting Requirements
And
Revised Leak Detection Regulations

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

- New Code section: §195.13
- Important Dates:
  - Annual Reporting Effective Date: March 31, 2021
  - Accident/SRC Reporting Effective Dates: Jan 1, 2021
- High Level Overview:
  - Adds new reporting requirements for transportation hazardous liquids by gravity.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Purpose

The purpose of this new code section is to cover gravity lines that are longer than the typical short line within a tank farm or other facility. The congressional intent is to capture gravity lines that can build up large amounts of pressure because they traverse areas with significant elevation changes, which could have significant consequences in the event of a release.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Pipelines transporting hazardous liquids by gravity must comply with the reporting requirements of subpart B of this part.

§195.49 Annual Report (March 31, 2021)
§195.50, .54 Accident Reports (Jan 1, 2021)
§195.55, .56, .58 Safety Related Condition Reports (Jan 1, 2021)

Updated forms will be located at:
https://www.phmsa.dot.gov/forms/operator-reports-submitted-phmsa-forms-and-instructions

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Exceptions

A gravity line that meets the definition of a **low-stress pipeline**, travels no farther than **1 mile from a facility boundary**, and does not cross any waterways used for commercial navigation.

The reporting requirements in §§ 195.52, 195.61, and 195.65 do not apply to the transportation of a hazardous liquid in a gravity line.

The drug and alcohol testing requirements in part 199 of this subchapter do not apply to the transportation of a hazardous liquid in a gravity line.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

PHMSA Information Gathering

- PHMSA focused on the data elements that will enable the agency to assess the risk posed by these lines and determine whether requirements that are more stringent are warranted in the future.
- Since gravity lines are excluded from §195.1 they are not subjected to any part of this part except for reporting requirements.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Operator will need to:

- Ensure that all gravity lines that are required to be reported are identified.
- Ensure compliance with the prescribed dates in the regulations.
- Make sure that the correct/updated annual reporting form is utilized to capture the proper gravity line data.
- Gravity lines only have a reporting requirement at this time and are not subject to any other subpart of this part.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

New Inspection Content

- Screening questions will be added to assist in gathering information for planning the appropriate questions.
- New IA questions in Reporting Group will be created. (P, R, O)
  - Check to ensure that all gravity lines have been identified.
  - Will require a mapping review during inspection.
- Ensure all reporting requirements are met for these pipelines within the system being inspected by the prescribed dates of the rule.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Potential Issues or stumbling blocks

Section 195.2 – **Definitions:** There was no update to this paragraph to define what a gravity line is.

- Gravity pipelines carry product by means of gravity. No pumps or other mechanical assistance.

- On January 1, 2021 all operators that own gravity lines, that are not excepted, are required to start submitting accident and safety-related condition reports.

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Potential Issues or stumbling blocks

- On March 31, 2021, **(Initial year only),** all operators that own gravity lines, that are not excepted, are required to have an annual report submitted from the previous calendar year(2020). The calendar year for 2020 will start January 1, 2020 to the end of the calendar year (December 31,2020) although the rule won't be effective until July 1, 2020.

- On June 15, 2022 all operators that own gravity lines, that are not excepted, are required to have an annual report submitted for the previous calendar year (2021).

Hazardous Liquid Rule

New Reporting Requirements – Gravity Lines

Potential Issues or stumbling blocks

- The exception states that "…this section does not apply to the transportation of a hazardous liquid in a gravity line that meets the definition of a **low-stress pipeline**, **travels no farther than 1 mile from a facility boundary**, **and** **does not cross any waterways used for commercial navigation".**

- Does this mean that for a pipeline to be excluded from the reporting requirement using this section that it has to meet all 3 of these exceptions? The answer is **YES**. The pipeline must contain all 3 to be an exception under this paragraph.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

- New Code section: 195.15
- Important dates:
  - Annual Reporting Effective Date: March 31, 2021
  - Accident/SRC Reporting Effective Dates: Jan 1, 2021
- High Level Overview:
  - Adds new reporting requirements for regulated-only gathering lines.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

Purpose

The purpose of this new code section is to collect items in the annual report that primarily include the mileage count for those **gathering lines currently unregulated**, the **diameters** of those lines, and whether they are operating at **greater or less than 20 percent SMYS**. The goal of collecting this specific information is to provide PHMSA with a better understanding of the scope of the Nation's gathering pipeline infrastructure.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

Gathering lines that do not otherwise meet the definition of a regulated rural gathering line and any gathering line not already covered under § 195.1(a)(1), (2), (3) or (4) must comply with the reporting requirements of subpart B of this part.

§195.49 Annual Report (March 31, 2021)
§195.50, .54 Accident Reports (Jan 1, 2021)
§195.55, .56, .58 Safety Related Condition Reports (Jan 1, 2021)

Updated forms will be located at:
https://www.phmsa.dot.gov/forms/operator-reports-submitted-phmsa-forms-and-instructions

Hazardous Liquid Rule

Regulated-Only Gathering

Exceptions.

This section does not apply to those gathering lines that are otherwise excepted under § 195.1(b)(3), (b)(7), (b)(8), (b)(9), or (b)(10).

The reporting requirements in §§ 195.52, 195.61, and 195.65 do not apply to the transportation of a hazardous liquid in a gathering line.

The drug and alcohol testing requirements in part 199 of this subchapter do not apply to the transportation of a hazardous liquid in a gathering line.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

PHMSA Information Gathering

- PHMSA is collecting data that includes the underlying cause for the accident, where the accident was located and how it was reported to the operator, and a value for any property damage caused. This data will be essential to understanding and managing risk.

- PHMSA focused on the data elements that will enable the agency to assess the risk posed by these lines and determine whether requirements that are more stringent are warranted in the future.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

Operator will need to:

- Ensure that all gathering lines that are required to be reported are identified.
- Ensure compliance with the prescribed dates in the regulations.
- Make sure that the correct/updated annual reporting form is utilized to capture the proper gathering line data.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

New Inspection Content

- Screening questions will be added to assist in gathering information for planning the appropriate questions.
- New IA questions in Reporting Group will be created. (P, R, O)
  - Check to ensure that all gravity lines have been identified.
  - Will require a mapping review during inspection.
- Ensure all reporting requirements are met for these pipelines within the system being inspected by the prescribed dates of the rule.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

Potential Issues or stumbling blocks

Targeting the correct gathering lines that meet the criteria for the 195.15.

- Refer to 195.11 (Regulated rural gathering lines) and 195.1(a)(1), (2), (3), or (4) and capture the lines that are not covered by these paragraphs.

Hazardous Liquid Rule

New Reporting Requirements Regulated-Only Gathering

Potential Issues or stumbling blocks

- On March 31, 2021, **(Initial year only),** all operators that own gravity lines, that are not excepted, are required to have an annual report submitted from the previous calendar year(2020). The calendar year for 2020 will start January 1, 2020 to the end of the calendar year (December 31,2020) although the rule won't be effective until July 1, 2020.

- On June 15, 2022 all operators that own gravity lines, that are not excepted, are required to have an annual report submitted for the previous calendar year (2021).

Hazardous Liquid Rule

New Reporting Requirements - Forms

- **Annual Reporting Form** – The revised form will be available in 2021 for reporting of CY 2020 data.
- **Incident Reporting Form** – New form will be available in the PHMSA portal on 7/1/2020.
- **Gravity and Reporting-Regulated Hazardous liquid accident report form (New)** – This form is new and does not impact the current HL incident reporting form. These 2 forms are separate.
- **SRCR Forms** – There is no OMB approved at this time.
- **Updated forms will be located at:** https://www.phmsa.dot.gov/forms/operator-reports-submitted-phmsa-forms-and-instructions

Hazardous Liquid Rule

Leak Detection

- Revised Code sections: §195.134 & §195.444
- Important Dates:
  - Pipelines constructed prior to Oct. 1, 2019: Oct. 1, 2024.
  - Pipelines constructed on or after Oct. 1, 2019: Oct. 1, 2020.
- High Level Overview:
  - **§195.134** design requirements leak detection systems.
  - **§195.444** performance requirements for effective system for detecting leaks.

Hazardous Liquid Rule

Leak Detection

Purpose

The purpose of the update to these code sections is to require that all new covered pipelines, in both HCAs and non-HCAs, have leak detection systems within 1 year, and all covered pipelines constructed prior to the rule's publication have leak detection systems within 5 years after this rule is published.

Also to require operators to evaluate the capability of its leak detection system to protect the public, property, and the environment and modify it as necessary to do so.

Should an operator decide to utilize a Computation Pipeline Monitoring leak detection system it must comply with API 1130 (not a new requirement)

Hazardous Liquid Rule

Leak Detection

§195.134 Leak Detection

- For each pipeline constructed prior to October 1, 2019. Each pipeline must have a system for detecting leaks that complies with the requirements in §195.444 by October 1, 2024.
- For each pipeline constructed on or after October 1, 2019. Each pipeline must have a system for detecting leaks that complies with the requirements in §195.444 by October 1, 2020.

Hazardous Liquid Rule

Leak Detection

§195.444 Leak detection.

- A pipeline must have an effective system for detecting leaks.
- An operator must evaluate the capability of its leak detection system to protect the public, property, and the environment and modify it as necessary to do so.
  - At a minimum, an operator's evaluation must consider the following factors—length and size of the pipeline, type of product carried, the swiftness of leak detection, location of nearest response personnel, and leak history.
- Each computational pipeline monitoring (CPM) leak detection system must comply with API RP 1130 in operating, maintaining, testing, record keeping, and dispatcher training of the system.

Hazardous Liquid Rule

Leak Detection

Operators will need to develop processes for:

- Identifying the process for and conducting the evaluation of capability and ensure that all of the factors listed in 195.444 are considered at a minimum.
- Selection and installation of effective leak detection system for all of its pipelines.
- Ensure that the leak detection method chosen is adequate for the system being inspected.
  - Need to establish performance criteria of LD system
  - Need to establish alarm thresholds, response action and timeframes
- Establish testing criteria and frequency
- Training Program for controllers.
- If CPM is the chosen leak detection method ensure compliance with API RP 1130 design requirements have been met.

Hazardous Liquid Rule

Leak Detection

Operators will need to maintain records for:

- The evaluation of capability and ensure that all of the factors listed in 195.444 are considered at a minimum.
- Selection and installation of effective leak detection system for all of its pipelines.
- Performance of the leak detection system.
  - Alarms and response action
- If CPM is the chosen leak detection method ensure compliance with API RP 1130 for design, operating, maintaining, testing, record keeping, and dispatcher training requirements.

Hazardous Liquid Rule

Leak Detection

Revised Inspection Content

- Updated IA questions will be created. Will include appropriate P, R, O and SRN questions.

Hazardous Liquid Rule

Leak Detection

Inspection Points of Interest

- Check to ensure that some form of leak detection is implemented in a plan or procedure. Also check records for any method chosen for leak detection.
- While reviewing the operators method of leak detection ensure it is adequate for the particular system being inspected.
- Review the operators evaluation of capability of the chosen leak detection method.
- Ensure the operators are compliant with the dates in the rule and that all lines in non-HCA areas are included.
- If CPM is used check section 4.2 of API RP 1130 for design requirements and check API RP 1130 to ensure compliance with the requirements in 195.444.

Hazardous Liquid Rule

Leak Detection

Potential Issues or stumbling blocks

Confusion about the difference between paragraph (C) of sections 195.134 and 195.444.

195.134(C) – requires that CPM leak detection systems be **designed** in accordance with section 4.2 of API RP 1130 and any other applicable design criteria in that standard.

Hazardous Liquid Rule

Leak Detection

Potential Issues or stumbling blocks

195.444 (C) – requires that CPM leak detection systems comply with API RP 1130 for **operating, maintaining, testing, record keeping, and dispatcher training** of the system,

Keep in mind that these are two different requirements. 195.134 is for the design of the system under subpart C of this part (Design Requirements). 195.444 is for Subpart F of this part (Operations and Maintenance).

Hazardous Liquid Rule

Leak Detection

New FAQ:

Do I need to have a computational pipeline monitoring (CPM) leak detection system over all of my pipelines?

No. While all operators must have an effective system for detecting leaks as set forth in §195.444, operators have the option to install a CPM leak detection system to comply with that requirement. PHMSA amended §195.444 to require a means for detecting leaks on all portions of a hazardous liquid pipeline system, including non-HCA lines, and to require that operators perform an evaluation to determine what kinds of systems must be installed to adequately protect the public, property, and the environment. The factors that must be considered during that evaluation include (but are not limited to) the characteristics and history of the affected pipeline, the capabilities of available leak detection systems, and the location of emergency response personnel. However, where an operator selects the use of a CPM leak detection system, the system must comply with API 1130.

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Increased Use of ILI Tools
And
Periodic Assessments of Pipelines not Subject to IM

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

- New Code section: § 195.120
- Effective Date: July 1, 2020
- High Level Overview:
  - Each new pipeline and each main line section of a pipeline where the line pipe, valve, fitting or other line component is replaced must be designed and constructed to accommodate the passage of instrumented internal inspection devices in accordance with NACE SP0102 (Standard Practice, Inline Inspection of Pipelines, revised March 13, 2010).

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

§ 195.120 Exceptions:

1. Manifolds;
2. Station piping such as at pump stations, meter stations, or pressure reducing stations;
3. Piping associated with tank farms and other storage facilities;
4. Cross-overs;
5. Pipe for which an instrumented internal inspection device is not commercially available; and
6. Offshore pipelines, other than lines 10 inches (254 millimeters) or greater in nominal diameter, that transport liquids to onshore facilities.
7. Impracticability *(next slide)*

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

§195.120 (c) Impracticability exception

An operator may file a petition under § 190.9 for a finding that the requirements in §195.120 (a) should not be applied to a pipeline for reasons of impracticability.

- §190.9 is a petition to the PHMSA Administrator for finding and approval of an action that deviates from Parts 192, 193, or 195
- Each petition must refer to the rule authorizing the action sought and contain information or arguments that justify the action
- All petitions must be received at least 90 days prior to the date by which the operator requests the finding or approval to be made

For operators seeking a finding or approval involving intrastate pipeline transportation, petitions must be sent to the State agency certified to participate under 49 U.S.C. 60105

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

§ 195.120 (d) Emergencies

An operator need not comply with paragraph (a) of this section in constructing a new or replacement segment of a pipeline in an emergency.

- Within 30 days after discovering the emergency, the operator must file a petition under § 190.9 for a finding that requiring the design and construction of the new or replacement pipeline segment to accommodate passage of instrumented internal inspection devices would be impracticable as a result of the emergency

If PHMSA denies the petition, within 1 year after the date of the notice of the denial, the operator must modify the new or replacement pipeline segment to allow passage of instrumented internal inspection devices.

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

Operator will need to develop processes for:

Implementing design standards such that after July 1, 2020 each new pipeline and each main line section of a pipeline where the line pipe, valve, fitting or other line component is replaced is designed and constructed to accommodate the passage of instrumented internal inspection devices

Ensuring that Construction Specifications (§ 195.202) for new sections provide for pipeline sections that accommodate the passage of instrumented internal inspection devices

Hazardous Liquid Rule

Passage of In-Line Inspection (ILI) Tools

Operator will need to maintain construction records (Per § 195.266):

For the life of the pipeline documenting that the new section is able to accommodate the passage of instrumented internal inspection devices

Operators will need to maintain records of any exceptions applied to a section of pipeline that results in it not being able to accommodate the passage of instrumented internal inspection devices

Hazardous Liquid Rule

FAQ's relating to Passage of In-Line Inspection (ILI) Tools

No FAQ's identified at this Time

§ 195.120 is prescriptive in its requirements and explicit for its exemptions and methodologies for exceptions.

Discussion / Comments is appreciated on any areas that would benefit from FAQ's and clarifications.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

- New Code section: § 195.416
- Effective Date: July 1, 2020
- High Level Overview:
  - Assess non-HCA (i.e. non-IM) pipeline segments with an inline inspection (ILI) tool at least once every 10 calendar years. Initial assessment of segments to be completed by October 1, 2029.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What segments does § 195.416 apply to?

Onshore, non-gathering pipelines that are NOT subject to § 195.452 (i.e. could-not affect an HCA)

Those segments above that can accommodate ILI tools

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

When must initial assessment of segments be completed?

Initial assessments to be completed by October 1, 2029

Operator must plan his assessments to ensure all segments are assessed by Oct. 1, 2029

How often must the assessments be completed?

Not to exceed the lesser of:

- Every 10 calendar years
- As otherwise necessary to ensure public safety or protection of the environment.

Hazardous Liquid Rule

FAQ related to § 195.416(b)

FAQ-6: For purposes of § 195.416(b), how often must assessments be performed for piggable non-gathering onshore line pipe not subject to IM requirements of § 195.452?

Section 195.416(b) requires assessments to occur once every 10 calendar years from the year of the previous assessment or a shorter interval where necessary to ensure public safety or the protection of the environment. For example, an operator completing an assessment in calendar year 2021 must complete the next assessment no later than calendar year 2031.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What assessment method(s) are to be used per § 195.416(c)?

- In Line Inspection Tool(s) are the preferred method of assessment
- Appropriate ILI tool(s) for the range of relevant threats to the segment must be used.
- The methods an operator selects to assess low-frequency electric resistance welded pipe, pipe with a seam factor less than 1.0 as defined in § 195.106(e) or lap-welded pipe susceptible to longitudinal seam failure must be capable of assessing seam integrity, cracking, and of detecting corrosion and deformation anomalies.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What is pipe "susceptible to seam failure"? Applies to:

- Low-frequency ERW
- Lap-welded
- Pipe with seam factor less than 1.0 [see § 195.106(e)]

Determination of susceptibility is also based on:

- Excavation findings, physical examinations, pressure test results, ILI and remediation results, operating history, manufacturing history of pipe vintage, and the line pipe's history of seam leaks and failures

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What are the requirements when conducting in line inspection?

Follow § 195.591 (i.e. API 1163, ASNT ILI-PQ, NACE SP0102-2010)

What if ILI is impracticable in the line segment?

"Impracticable" means it is impossible in practice to carry out an ILI based on operational limits:

- Operating pressure
- Low flow
- Pipeline length
- Unavailable of ILI tool technology for the pipe diameter

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

When ILI is impracticable, alternative assessment methods are:

- Subpart E pressure test
- External corrosion direct assessment (ECDA)
- Other technology --- submit 90-day advance notification to OPS, and receive “no objection” response

Hazardous Liquid Rule

FAQ related to § 195.416(d)

FAQ-3: Can I proceed with using other Technology without receiving a response from PHMSA under § 195.416(d)?

No, an operator must receive a notice of "no objection" from PHMSA prior to implementing the "other technology" option under § 195.416(d).

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What are the requirements for analyzing assessment results? § 195.416(e)

- Analyzed by a person qualified by knowledge, training, and experience.
- Analysis must explicitly consider uncertainties in the reported results in identifying anomalies
- The analysis must determine conditions that could adversely affect safe operation [i.e. make “discovery” for purposes of § 195.401(b)(1)]

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

When does discovery of a condition occur?

- When operator has adequate information to determine a potential threat to pipeline integrity exists on the line.
- Sufficient information must be obtained promptly, but no later than 180 days after assessment to make determination.

What if the 180-day interval is impracticable to make a determination about a condition?

- Notify PHMSA, including expected date when adequate information will be available.
- Notify per § 195.452(m).

Hazardous Liquid Rule

FAQ related to § 195.416(f)

FAQ-4: Is "discovery" of a condition for non-HCAs (§ 195.416(f)) the same as for "could affect" HCAs (§ 195.452(h)(2))?

Yes, operators of both HCA lines and non-HCA lines will have equal requirements for the ''discovery'' of conditions, which occurs when an operator has adequate information about a condition to determine that it presents a potential threat to the integrity of the pipeline. Under the regulation, an operator must promptly, but no later than 180 days after an integrity assessment, obtain sufficient information about a condition to make that determination, unless the operator can demonstrate that the 180-day period is impracticable.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

Remediation of a Condition § 195.416(g)

"An operator must comply with the requirements in § 195.401 if a condition that could adversely affect the safe operation of a pipeline is discovered in complying with paragraphs (e) and (f) of this section."

Current § 195.401(b)(1) covers "Non Integrity Management Repairs"

New § 195.401(b)(3) for prioritizing repairs requires an operator to consider the risk to people, property, and the environment in prioritizing the correction of any conditions referenced in paragraphs (b)(1) and (2) of this section.

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

What about the consideration of information?

An Operator must consider all relevant information for assessment, threat identification, ILI tool selection(s), determination of potential threats, data analysis of ILI results, and discovery of conditions

§ 195.416(h) requires that "Operator must consider all relevant information about a pipeline in complying with the requirements in paragraphs (a) through (g) of this section."

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

Operator will need to develop processes for:

- Identifying the relevant threats for their pipeline segments.
- Identifying the appropriate assessment tool(s) for the different threats.
- Scheduling and executing the assessments.
- Identifying the response, repair and mitigation criteria
- Need to identify the appropriate actions following assessments
  - For example, Data Analysis, Discovery, repair criteria …
- Notification process

Hazardous Liquid Rule

Periodic Assessment of Pipelines NOT subject to IM rules

Operator will need to maintain documentation and records for:

- Record of assessments.
- Record of actions taken as a result of the assessments
- Record of remedial actions taken to make pipeline facility safe, as needed.
- Record of any notification made the PHMSA.

Hazardous Liquid Rule

FAQ related to § 195.416

FAQ-5: Must I use the same procedures for conducting assessments and making repairs on anomalies discovered under assessments performed under the new regulation § 195.416 as I use for § 195.452?

No, an operator is not required to use the same procedures and repair criteria as they use for anomalies discovered on sections of pipe that could affect an HCA and performed under § 195.452. An operator may opt to utilize the same criteria but are not required to do so. Any anomaly discovered following an assessment performed under § 195.454 must be repaired pursuant to the repair criteria developed for compliance with § 195.401(b)(1). Operators must comply with the other provisions in Part 195 in implementing the requirements in § 195.416. That includes having appropriate provisions for performing periodic assessments and any resulting repairs in an operator's procedural manual (see § 195.402); adhering to the recordkeeping provisions for inspections, tests, and repairs (see § 195.404); and taking appropriate remedial action under § 195.401(b)(1).

Hazardous Liquid Rule

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Repair Criteria
And
Revised Integrity Management Regulations

Hazardous Liquid Rule

Remediation Prioritization & Integrity Management

Changes for Non-IM and IM Repairs

- 195.401(b)
- 195.452 (h)

Changes to 195.452 Integrity Management

- 195.452(b) IM program
- 195.452(c) & (d) Baseline Assessment Plan
- 195.452 (g) Information Analysis
- 195.452 (h) Addressing integrity issues
- 195.452 (j) Verifying IM-covered segments
- 195.452 (n) Accommodation of instrumented internal inspection devices
- Seismicity – 195.452(e), (g), (i)

Hazardous Liquid Rule

Repair Criteria – IM & non-IM

- New Code section: 195.401(b)(3)
- Effective Date: July 1, 2020
- High Level Overview:
  - PHMSA retained existing repair language. New section to consider of life, property, and the environment when prioritizing remediation of conditions.

Hazardous Liquid Rule

Repair Criteria – IM & non-IM

Background

- PHMSA decided to separate the repair criteria provisions from this final rule.

- Clearly require operators to consider risk to life, property, and the environment in prioritizing remediation, whether in an HCA or not.

Hazardous Liquid Rule

Repair Criteria – IM & non-IM

For non-IM and IM pipelines:

- PHMSA retained existing 195.401(b)(1), 195.401(b)(2), and 195.452(h) language.

For both IM and non-IM pipelines:

- New 195.401(b)(3) requires consideration of risk to people, property, and the environment in prioritizing the correction of conditions.

Hazardous Liquid Rule

Repair Criteria – IM & non-IM

Prioritizing repair / correction of conditions

- Operators will need to develop procedures for 195.401(b)(3) regarding prioritizing the correction of conditions in non-IM and IM pipeline segments.
- For IM segments, special requirements for scheduling remediation already exist for certain types of conditions [immediate, 60-day, 180-day]; therefore, repair within existing timeframes. Additionally, prioritize repairs considering risk to people, property, and environment.
- Documentation to show that 195.401(b)(3) prioritization requirement for correcting conditions was applied.

Hazardous Liquid Rule

Integrity Management - Overview

Updated code sections:

- 195.452(b) IM program
- 195.452(c) & (d) Baseline Assessment Plan
- 195.452 (g) Information Analysis
- 195.452 (h) Addressing Integrity Issues
- 195.452 (j) Verifying IM-covered segments
- 195.452 (n) Accommodation of instrumented internal inspection devices
- Seismicity – 195.452(e), (g), (i)

Hazardous Liquid Rule

Existence of an Integrity Management Program

- Revised code section: §195.452 (b)
- Effective Date: July 1, 2020
- Overview

  Newly constructed or converted pipelines (aka "Category 3" pipelines) must have an IM program no later than the date the pipeline begins operation.

  - This requirement better corresponds with other sections that require HCA segment identification and baseline assessment be completed by the date a pipeline begins operation.

Hazardous Liquid Rule

Baseline Assessment Plan

- Revised code section: §195.452 (c)
- Effective Date: July 1, 2020
- Overview:
  - Inline inspection (ILI) is required
  - If impracticable to use ILI, then other appropriate method(s) must be used.
  - Additional language on crack-related threats
  - Explicit consideration of uncertainty of ILI results to identify anomalies

Hazardous Liquid Rule

Baseline Assessment Plan

Basis for the changes

- ILI tools are generally more effective than other methods at detecting integrity issues.
- Infrequent but severe failures attributed to longitudinal seam defects continue to occur.
- Be consistent with paragraphs in 195.416 for ILI in non-HCAs.

Hazardous Liquid Rule

Baseline Assessment Plan – Assessment Methods

- §195.452 (c)(1)(i) was revised to require assessing integrity of line pipe using ILI tool(s).
- Added seam factor <1.0 [see 195.106(e)] as another factor to determine need to assess pipe seams.
- Must use ILI tool(s) for the range of relevant threats.
- If impracticable to use ILI tool technology, Then use appropriate method(s) described in §195.452 (c)(1)(i)(B), (C), or (D).
- Clarified the need to explicitly consider uncertainties in ILI tool results.

Hazardous Liquid Rule

Baseline Assessment Plan – Assessment Methods (ILI tools)

§195.452 (c)(1)(i)(A) for ILI assessment methods was revised

- For those segments with identified or probable risk or threat related to cracks (pipe body or weld seams) based on the risk factors specified in paragraph (e), then must use ILI tool capable of detecting crack anomalies.
- When using ILI method must explicitly consider uncertainties in reported results in identifying anomalies.
- Determining uncertainties
  - Tool tolerance
  - Anomaly findings
  - Unity chart plots
  - or equivalent

- Procedures will need to be updated, as needed, for selection of ILI tool(s) to address range of threats, including cracking.
- Consideration of uncertainties has been an expectation for obtaining adequate information for discovering and addressing anomalous conditions. Now it is explicitly required to be explained in procedures, and documentation must show how the uncertainties were considered in identifying anomalies.

Hazardous Liquid Rule

Baseline Assessment Plan – Assessment Methods (ILI tools)

Pipe "susceptible to seam failure"

- PHMSA has interpreted and intended "susceptible to seam failure" to apply to low frequency ERW and lap-welded pipe.
- The assessment provisions have expanded the assessment provisions to use tool or tools capable of assessing seam integrity, cracking, and detecting corrosion and deformation anomalies on low-frequency ERW, lap-welded pipe, and pipe with seam factor <1.0 [as defined in 195.106(e)].
- PHMSA explicitly requires use of these tools when these types of pipe are determined by the operator to be susceptible based on:
  - Excavation findings
  - Examinations
  - Leaks, failures
  - Pressure tests
  - Inline inspections
  - Other operating history
  - Manufacturing history of the pipe vintage and its history of seam leaks and failures.

Hazardous Liquid Rule

Baseline Assessment Plan – Assessment (other methods)

When is ILI tool "impracticable"?

- It's based upon the construction of the pipeline;
  - *e.g.,* diameter changes, sharp bends, and elbows
- Or upon operational limits;
  - Including operating pressure, low flow, pipeline length
- Or availability of in-line inspection tool technology for the pipe diameter
- Will need to update procedures for selection of assessment method(s) other than ILI, and documentation requirements demonstrating when ILI is impracticable.

Hazardous Liquid Rule

Baseline Assessment Plan – Deadlines [195.452(d)]

Removed obsolete language related to prior assessments occurring before promulgation of the IM rules.

- However, operators must continue to maintain documentation showing compliance with baseline assessment requirements.

Clarified the requirements for new or conversion-to-service lines

- Complete the baseline assessment before a new or conversion-to-service pipeline begins operation, through:
  - the development of procedures
  - identification of high consequence areas
  - and pressure testing of could-affect high consequence areas in accordance with §195.304.

Hazardous Liquid Rule

Integrity Management - Information Analysis

- Revised code section: §195.452 (g)
- Effective Date: July 1, 2020
- High Level Overview:
  - In periodically evaluating the integrity of each pipeline segment (see §195.452 (j)), an operator must analyze all available information about the integrity of its entire pipeline and the consequences of a possible failure along the pipeline. This rule adds more detail to what information must be included in the analysis.

Hazardous Liquid Rule

Integrity Management - Information Analysis

Compliance Dates

- Operators must continue to comply with the data integration elements specified in § 195.452(g) that were in effect on October 1, 2018, until October 1, 2022.

- Operators must begin to integrate all the data elements specified in this section starting October 1, 2020, with all attributes integrated by October 1, 2022.

Hazardous Liquid Rule

Integrity Management - Information Analysis

Basis

- PHMSA is concerned that a major benefit to pipeline safety intended in the IM rule is not being realized because of inadequate information analyses.
  - i.e. collecting information but not affording it sufficient consideration, or not promptly evaluating information gathered following events that have increased risk
- Operators must account for interaction between threats when setting priorities for dealing with identified issues.
- For this reason, PHMSA is adding specificity to paragraph (g) by establishing several pipeline attributes that must be included in these analyses and requiring explicitly that operators integrate analyzed information.
- PHMSA is also requiring operators to consider explicitly any spatial relationships among anomalous information.

Hazardous Liquid Rule

Integrity Management - Information Analysis

(g) What is information analysis? In periodically evaluating the integrity of each pipeline segment

(1) Integrate information and attributes about the pipeline that include, but are not limited to:

(i) Pipe diameter, wall thickness, grade, and seam type;
(ii) Pipe coating, including girth weld coating;
(iii) Maximum operating pressure (MOP) and temperature;
(iv) Endpoints of segments that could affect high consequence areas (HCAs);
(v) Hydrostatic test pressure including any test failures or leaks—if known;
(vi) Location of casings and if shorted;
(vii) Any in-service ruptures or leaks—including identified causes;
(viii) Data gathered through integrity assessments required under this section;
(ix) Close interval survey (CIS) survey results;
(x) Depth of cover surveys;
(x) Corrosion protection (CP) rectifier readings;
(xii) CP test point survey readings and locations;
(xiii) AC/DC and foreign structure interference surveys;
(xiv) Pipe coating surveys and cathodic protection surveys.
(xv) Results of examinations of exposed portions of buried pipelines (i.e., pipe and pipe coating condition, see § 195.569);
(xvi) Stress corrosion cracking (SCC) and other cracking (pipe body or weld) excavations and findings, including in- situ non-destructive examinations and analysis results for failure stress pressures and cyclic fatigue crack growth analysis to estimate the remaining life of the pipeline;
(xvii) Aerial photography;
(xviii) Location of foreign line crossings;
(xix) Pipe exposures resulting from repairs and encroachments;
(xx) Seismicity of the area; and
(xxi) Other pertinent information derived from operations and maintenance activities and any additional tests, inspections, surveys, patrols, or monitoring required under this part

Hazardous Liquid Rule

Integrity Management - Information Analysis

This analysis must: *(continued)*

(2) Consider information critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline;

(3) Consider how a potential failure would affect high consequence areas, such as location of a water intake.

(4) Identify spatial relationships among anomalous information (e.g., corrosion coincident with foreign line crossings; evidence of pipeline damage where aerial photography shows evidence of encroachment). Storing the information in a geographic information system (GIS), alone, is not sufficient. An operator must analyze for interrelationships among the data.

Hazardous Liquid Rule

Integrity Management - Information Analysis

Updated §195.452(g)(2) same as old §195.452(g)(1).

- Operators processes should be mature and comprehensive – this requirement has been in effect since Amendment 195-70, 65 FR 75406, Dec. 1, 2000.
- Expect comprehensive procedures detailing data gathering and data integration requirements
- Procedures should detail the information that the operator identifies as critical to determining the potential for, and preventing, damage due to excavation, including current and planned damage prevention activities, and development or planned development along the pipeline

Hazardous Liquid Rule

Integrity Management - Information Analysis

Updated §195.452(g)(3) same as current §195.452(g)(4)

- Operators processes should be mature and comprehensive – this requirement has been in effect since Amendment 195-70, 65 FR 75406, Dec. 1, 2000.
- Expect comprehensive procedures detailing how each HCA is to be considered for potential failures – could be integrated into the Preventive and Mitigative Measures procedures (§195.452 (i)).
- Procedures should detail an operator's consideration of how a potential failure would affect high consequence areas, such as location of a water intake.

Hazardous Liquid Rule

Integrity Management - Information Analysis

New §195.452(g)(4)

- Operator will need to implement procedure(s) that identifies spatial relationships among anomalous information, for example:
  - Corrosion coincident with foreign line crossings;
  - Evidence of pipeline damage where aerial photography shows evidence of encroachment
  - Other interactive threats
- Storing the information in a geographic information system (GIS), alone, is not sufficient.
- An operator must analyze for interrelationships among the data and document the results of their analysis
- This is a prescriptive requirement for task we have expected to be accomplished in past

Hazardous Liquid Rule

Integrity Management - Information Analysis

Operator will need to maintain records (Per 195.452(l)(ii)):

§195.452(l) What records must an operator keep … (1) An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At a minimum, an operator must maintain the following records for review during an inspection:

… (ii) Documents to support the decisions and analyses, …

- Expectations are for complete records of the analyses performed, decisions made, and justifications for actions to comply with the information analysis requirements.

Hazardous Liquid Rule

Addressing integrity issues – IM

- Revised code section: §195.452 (h)
- Effective Date: July 1, 2020
- Overview:
  - Added clarification to provide consistency with 195.416 and 195.401(b)
  - NTSB recommendation – in cases where a determination about pipeline threats has not been obtained within 180 days following internal inspection, that PHSMA be notified and provided the expected date when adequate information will be available.

Hazardous Liquid Rule

Addressing integrity issues – IM

For IM pipelines: 195.452(h)(1)

- Must evaluate and remediate as required by this part. [revised language to be consistent with 195.416 and 195.401(b)(3)]
- Repairs made in a safe manner to prevent damage to persons, property, or the environment. [Revised language similar to existing 195.422(a) and consistent with 195.416 language]
- Calculation method(s) for anomaly evaluation must be applicable for the range of threats.
  - Evaluation of anomalies is a long-standing IM requirement, and procedures should be comprehensive regarding the applicable calculation method(s) to be used for each threat or combination of threats.
  - Similarly, IM documentation requirements per 195.452(l)(1) shall demonstrate compliance with 195.452(h) for anomaly evaluation.

Hazardous Liquid Rule

Addressing integrity issues – IM (delayed "discovery")

For IM pipelines: 195.452(h)(2)

- Requirement remains to obtain sufficient information to determine that a condition presenting a potential threat to integrity exists within 180 days after an assessment.
- Added requirement to notify PHMSA if operator believes that 180 days is impracticable. Consistent with new 195.416 requirements for notification when discovery will be >180 days.
  - As with other IM notifications, make notification per 195.452(m).
  - It has been a long-standing requirement that operators have procedures and maintain documentation demonstrating when the 180-day period for discovery is impracticable.
  - Notification to PHMSA is an added step. Procedures and documentation requirements must be updated to include this added step, along with expected date when adequate information will be available.

Hazardous Liquid Rule
Verifying Covered Segments

- New Code section: §195.452(j)(2)
- Effective Date: July 1, 2020
- High Level Overview:
  - An operator must verify the risk factors used in identifying pipeline segments that could affect a high consequence area on at least an annual basis not to exceed 15 months.
  - An operator must complete the first annual verification under this paragraph no later than July 1, 2021.

Hazardous Liquid Rule

Verifying Covered Segments

- PHMSA is requiring operators to verify their pipeline segment identification (as HCAs or otherwise) annually by determining whether factors considered in their analysis have changed.
- Section 195.452(b) currently requires that operators identify each segment of their pipeline that could affect an HCA in the event of a release, but there is no explicit requirement that operators assure that their identification of covered segments remains current.

Hazardous Liquid Rule

Verifying Covered Segments

Basis for Change:

- Construction activities or erosion near the pipeline could change local topography in a way that could cause product released in an accident to travel farther than initially analyzed.
- Changes in agricultural land use could also affect an operator's analysis of the distance released product could be expected to travel.
- Changes in the deployment of emergency response personnel could increase the time required to respond to a release and result in a release affecting a larger area if the original segment identification relied on emergency response in limiting the transport of released product.

Hazardous Liquid Rule

Verifying Covered Segments

- The change that PHMSA is adopting does not automatically require operators to re-perform their segment analyses.
- It requires operators to first identify the factors considered in their original analyses, determine whether those factors have changed, and consider whether any such change would likely affect the results of the original segment identification.

Hazardous Liquid Rule

Verifying Covered Segments

- If a change in circumstance indicates that the prior consideration of a risk factor is no longer valid or that an operator should consider new risk factors, an operator must perform a new integrity analysis and evaluation to establish the endpoints of any previously identified covered segments.
- The integrity analysis and evaluation must include consideration of the results of any baseline and periodic integrity assessments (*see* §195.452 (b), (c), (d), and (e)), information analyses (*see* §195.452 (g) of this section), and decisions about remediation and preventive and mitigative actions (*see* §195.452 (h) and (i) of this section).
- Appendix C of Part 195 provides additional guidance on factors that can influence whether a pipeline segment could affect a high consequence area.

Hazardous Liquid Rule

Verifying Covered Segments

The new requirements prescribes an annual performance of this task, not to exceed 15 months, rather than the previous requirement that the evaluation be performed “as frequently as needed”

Hazardous Liquid Rule

Verifying Covered Segments

- The consideration and validation of risk factors for the covered segment(s) is a prescribed step now
- If an operator should consider new risk factors based on the evaluation, an operator must perform a new integrity analysis and evaluation to establish the endpoints of any previously identified covered segments
- Risk factors must be accounted for and documented and the correct “tool” must be employed as an integrity assessment method to account for the threat (risk factor)

Hazardous Liquid Rule

Verifying Covered Segments

- The integrity analysis and evaluation must include consideration of the results of any baseline and periodic integrity assessments (*see* §195.452 (b), (c), (d), and (e)), information analyses (*see* §195.452 (g) of this section), and decisions about remediation and preventive and mitigative actions (*see* §195.452 (h) and (i) of this section).
- This is the same as the previous requirement in §195.452 (j)(2)
- Processes and procedures should be mature and comprehensive and may need revisions to account for the new requirements in §195.452 (j)(2)

Hazardous Liquid Rule

Verifying Covered Segments

- If a change in circumstance indicates that the prior consideration of a risk factor is no longer valid or that an operator should consider new risk factors, an operator must perform a new integrity analysis and evaluation to establish the endpoints of any previously identified covered segments.
- This is new prescriptive language to require operators to look for changes in the environment along the covered segment as well as new risk factors
- The procedure must document the circumstances and their criteria for action by the operator and what the expected actions would be
- The procedure must include a documentation requirement

Hazardous Liquid Rule

Verifying Covered Segments

Operator will need to develop processes and procedures (per §195.452 (j)(2) for:

- To verify the risk factors used in identifying pipeline segments that could affect an HCA – ensure requirement to conduct verification at least on an annual basis not to exceed 15 months.
- Procedure must include details of the change in circumstance(s) that indicates that the prior consideration of a risk factor is no longer valid or that an operator should consider new risk factors.
- Integrity analysis and evaluation must include consideration of the results of any baseline and periodic integrity assessments (*see* §195.452 (b), (c), (d), and (e)), information analyses (*see* §195.452 (g) of this section), and decisions about remediation and preventive and mitigative actions (*see* §195.452 (h) and (i) of this section)
  - Note this is the same as previous §195.452 (j)(2) so processes and procedure(s) should be mature and comprehensive

Hazardous Liquid Rule

Verifying Covered Segments & Integrity Evaluation

Operator will need to maintain records (Per 195.452(l)(ii)):

§195.452(l) What records must an operator keep to demonstrate compliance? (1) An operator must maintain, for the useful life of the pipeline, records that demonstrate compliance with the requirements of this subpart. At a minimum, an operator must maintain the following records for review during an inspection:

… (ii) Documents to support the decisions and analyses, including any modifications, justifications, deviations and determinations made, variances, and actions taken, to implement and evaluate each element of the integrity management program listed in paragraph (f) of this section.

- Expectations are for complete records of the analyses performed, decisions made, and justifications for actions to comply with the verification of covered segments requirements.
- Documentation that first annual verification for each covered segment occurred no later than July 1, 2021

Hazardous Liquid Rule

Accommodating Inline Inspection in HCAs

- New Code section: §195.452(n)
- Effective Date: July 1, 2020
- High Level Overview:
  - Ensure pipelines that could-affect HCAs are modified to accommodate internal inspection within 20 years (by July 2, 2040).

Hazardous Liquid Rule

Accommodating ILI for IM-covered pipelines

Basis for change

- ILI tools are generally more effective than other methods at detecting integrity issues.
- ILI takes advantage of state-of-the-art technology allowing operators to identify and prioritize anomalies.
- ILI tools provide a higher level of detail to provide information about anomalies that could deteriorate over time.
- Annual report data suggests that vast majority of pipeline miles are currently assessed using ILI tools.

Therefore, to further facilitate gradual elimination of pipelines that are not capable of accommodating smart pigs, PHMSA is requiring remainder of HCA pipeline mileage be modified to accommodate usage of ILI tools within 20 years.

Hazardous Liquid Rule

Accommodating ILI for IM-covered pipelines

- Does not apply to pipeline facilities listed in §195.120(b); for example…
  - Manifolds, crossovers…
  - Pump station piping, meter stations; …
  - Piping associated with tank farms and other storage facilities
- Ensure each pipeline is modified to accommodate passage of instrumented internal inspection device by July 2, 2020.
- If a pipeline could affect newly identified HCA [see 195.452(d)(2)] after July 2, 2035, then must modify for passage of ILI within 5 years of identification or prior to performing baseline assessment, whichever is sooner.

Hazardous Liquid Rule

Accommodating ILI for IM-covered pipelines (limited circumstances)

Operators may petition under §190.9 for a finding that:

- Basic construction of pipeline cannot be modified to accommodate ILI, or
- Operator determines it would abandon or shut-down pipeline as a result of the cost to comply with the requirement.

Operators may also petition under §190.9 for a finding that:

- Pipeline cannot be modified as a result of an emergency.
- For these instances the petition must be filed within 30 days after discovering the emergency.
- If denied, the operator must modify the pipeline within 1 year after the date of notice of denial.

Hazardous Liquid Rule

Accommodating ILI for IM-covered pipelines

Some Expectations

- Operators should already understand what pipelines in the IM Program do not accommodate ILI as reflected in the assessment plan [195.452(c)(1)(ii) and (c)(1)(iii)].
- Procedures will need provisions to modify line pipe for ILI passage when a newly identified HCA could affect an existing pipeline that does not already accommodate ILI. [195.452(n)(3)]
- Procedures will need to include provision for determining if a petition is necessary to be filed within 30 days as a result of an emergency. [195.452(n)(5)]

Hazardous Liquid Rule

Seismicity in Integrity Management

- Revised Code sections: §195.452(e), (g), and (i)
- Effective Date: July 1, 2020
- High Level Overview:
  - Explicitly consider seismicity as a factor for establishing assessment schedules (e), performing information analyses (g), and implementing additional preventive and mitigative measures (i).

Hazardous Liquid Rule

Seismicity in Integrity Management

Pipeline Safety Act requires operators consider seismicity when evaluating pipeline threats.

Seismicity already mentioned in guidance in Appendix C.

Expectation is that seismicity factor be explicitly included in procedures that implement 195.452(e), (g), and (i); including;

- Describe sources of seismicity data, and how they are gathered and updated
- As a local environmental factor, how seismicity is used when establishing assessment schedules – 195.452(e)
- Integrating seismicity of the area when performing information analysis – 195.452(g)(1)
- When identifying the need for additional preventive measures, fully describe how seismicity is used as a risk factor – 195.452(i)(2)
- When identifying the need for additional mitigative measures, fully describe how seismicity is used as a risk factor – 195.452(i)(2)

Per 195.452(l) documentation should show how seismicity was accounted for in assessment schedules, information analysis, and P&M measures

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

New Extreme Weather Requirements
And
Self Executing Provisions

Hazardous Liquid Rule

Pipelines Affected by Extreme Weather and Natural Disasters

- New Code section: §195.414
- Effective Date: July 1, 2020
- High Level Overview:
  - After certain events the operator must inspect their facilities, assess the damage and then, as necessary, remediate its pipeline facilities.

Pipelines Affected by Extreme Weather and Natural Disasters

Following certain events the operator must inspect their pipeline facilities. - §195.414(a)

Events include:

- named tropical storm or hurricane;
- a flood that exceeds the river, shoreline, or creek high-water banks in the area of the pipeline;
- a landslide in the area of the pipeline; or
- an earthquake in the area of the pipeline
- Or other similar events

Pipelines Affected by Extreme Weather and Natural Disasters

Initial Inspection must begin with 72 hours following the event - §195.414(b)(c)

- Operator determines when it is safe to access the facility.
- The inspection must "*visually*" observe the facility in question.
- The inspection must be able to determine and identify damage.
- The inspection must provide detailed information to identify the need for and the appropriate assessment method.

Pipelines Affected by Extreme Weather and Natural Disasters

Initial Inspection must begin with 72 hours following the event - §195.414(b)(c)

- If this timeline cannot be met the operator **must** notify the appropriate **Region Director**
  - Recommend Email to Region Director to document notification.
    - Reason for not commencing, projection of when it will commence.

Pipelines Affected by Extreme Weather and Natural Disasters

If additional assessments are identified as a result of the initial inspection these need to be performed and any resulting remedial actions taken. - §195.414(b)

These could include:

- In Line Assessments
- Pressure Test
- Additional test

Pipelines Affected by Extreme Weather and Natural Disasters

Remediation must begin promptly after the inspection.

These are in addition to the need for additional assessments.

Remediation must restore the pipeline facility to a safe operational state. - §195.414(d)

Possible remediation actions:

- Reducing the operating pressure or shutting down the pipeline;
- Modifying, repairing, or replacing any damaged pipeline facilities;
- Preventing, mitigating, or eliminating any unsafe conditions in the pipeline right-of-way;
- Performing additional patrols, surveys, tests, or inspections;
- Implementing emergency response activities with Federal, State, or local personnel; and
- Notifying affected communities of the steps that can be taken to ensure public safety.

Pipelines Affected by Extreme Weather and Natural Disasters

Operator will need to develop processes (per §195.402(a)) for:

- Identifying and tracking events
- When it is safe to enter the facility in order to perform inspection:
  - Who makes the call,
  - What do they consider when making the call.
- Identify inspection types for different facilities
  - Could identify different types for ROW (flyover) v. facilities (walking tank farms, pump stations).
  - Must be able to assess damage with choice.
- Identifying follow-up assessment methods and when they are necessary
  - Eg, In line assessment

Pipelines Affected by Extreme Weather and Natural Disasters

Operator will need to develop processes (per §195.402(a)) for:

- Need to identify the appropriate remedial actions following assessments
  - Eg, If ILI … repair criteria/schedule
- Process for implementing the remedial actions (this is to make it safe … not following the assessments.)
- How will the operator document of all actions.

Pipelines Affected by Extreme Weather and Natural Disasters

Operator will need to maintain records (Per §195.404(c)) for:

- The timetable of the event:
  - Event over, inspection begin
- Record of the initial inspection and observations
- Record of additional assessment, if needed.
- Record of actions taken as a result of the assessments
- Record of remedial actions taken to make pipeline facility safe, as needed.
- Record of any notification made the PHMSA.

Pipelines Affected by Extreme Weather and Natural Disasters

New FAQs

FAQ-11. Is the operator required to inspect its facilities under § 195.414 following a heavy rain?

No, extreme weather events would not include rain events that do not exceed the high-water banks of the rivers, streams or beaches in proximity to the pipeline; rain events that do not result in a landslide in the area of the pipeline; storms that do not produce winds at tropical storm or hurricane level velocities; or earthquakes that do not cause soil movement in the area of the pipeline.

FAQ-12. Is the operator required to perform inspections under § 195.414 following every Extreme Weather event or Natural disaster?

It depends. Under this requirement, an operator must inspect all potentially affected pipeline facilities following a hurricane, flood, landslide, earthquake, or other natural disaster that has the likelihood to damage infrastructure to detect conditions that could adversely affect the safe operation of the pipeline. The regulation also states the operator must consider the nature of the event and the physical characteristics, operating conditions, location, and prior history of the affected pipeline in determining whether the event necessitates an inspection as well as the appropriate method for performing the inspection. If the event creates a likelihood that there is damage to pipeline infrastructure, the operator must commence an inspection within 72 hours after the cessation of the event.

Pipelines Affected by Extreme Weather and Natural Disasters

New Inspection Content

- Screening questions will be added to assist in gathering information for planning the appropriate questions.
- New IA subgroup will be created. (P, R, O)
- A new process created to receive, process and store the notifications

Hazardous Liquid Rule

Self Executing Provisions – Safety Data Sheets

- New Code section: 195.65
- Effective Date: July 1, 2020
- High Level Overview:
  - Operators must present MSDS sheets to On Scene Coordinators, and local responders.

FAQ-1. What is the effective date for the new § 195.65 safety data sheets section?

The requirement to submit safety data sheets on any spilled hazardous liquid is a self-executing provision of the PIPES Act of 2016. Accordingly, this requirement was effective on June 22, 2016, the date that the PIPES Act of 2016 was signed into law. PHMSA is amending the PSR by codifying the statutory language of this provisions.

Hazardous Liquid Rule

Integrity Assessment for Certain Underwater HL pipeline facilities located in a HCA

- New Code section: 195.454
- Effective Date: July 1, 2020
- High Level Overview:
  - Certain pipelines will have to be assessed every 12 months.

FAQ-10. What is the effective date for the new § 195.454 Underwater Assessment section?

The requirement to assess certain underwater hazardous liquid pipelines is a self-executing provision of the PIPES Act of 2016. Accordingly, this requirement was effective on June 22, 2016, the date that the PIPES Act of 2016 was signed into law. PHMSA is amending the PSR by codifying the statutory language of this provisions.

Integrity Assessment for Certain underwater HL pipeline facilities located in a HCA

Pipeline Facilities must:

- be located onshore
- In an HCA
  - (Direct intersect not could affect)
- Located at depths 150 ft. below the water surface.

"… any underwater hazardous liquid pipeline facility located in a high consequence area that is not an offshore pipeline facility and any portion of which is located at depths greater than 150 feet under the surface of the water …"

Integrity Assessment for Certain underwater HL pipeline facilities located in a HCA

Assessment must target integrity threats.

Assessment must be:

- Appropriate ILI tool (§195.454(a))
  - e.g. corrosion tool for corrosion threat, and if you also have crack threat you need to assess using crack detection tool.
  - Must occur every 12 months. No grace period
- And Integrity assessment using route surveys, depth of cover, pressure tests … "that the operator demonstrated can further the understanding …" (§195.454(b))
  - Must be performed on a schedule based on risk.
  - Operator determined

Integrity Assessment for Certain underwater HL pipeline facilities located in a HCA

Operator will need to develop processes (per 195.402(a)) for:

- Identifying facilities
- Identifying the threats to be assessed
- Identifying the appropriate assessment tool(s)
- Identifying the appropriate remedial actions following assessments
  - E.g., repair criteria
- Setting the schedule for other assessments
- How the operator will document all actions

- These can be same as IM processes.

Integrity Assessment for Certain underwater HL pipeline facilities located in a HCA

Operator will need to maintain records (Per 195.404(c)) for:

- Facilities that this is applicable to.
- Threat identification and decisions
- Details of the assessment(s).
- Actions taken as a result of the assessments (repairs)

Public Meeting on the New Regulations: Safety of Hazardous Liquid Pipelines

This concludes the formal presentation portion of the meeting: