

*Welcome*

*to the Joint  
Gas and Liquid Pipeline Advisory Committees  
Meeting*

# Agenda

## **Standards Update 2 NPRM**

1. Opening Remarks & Introductions
2. Background
3. Standards Availability & Standards Development Organization (SDO) Agreements
4. Summary of the Proposed Rule
5. Discussion Topics
  - a) Proposed Rule (GPAC)
  - b) Proposed Rule (LPAC)
6. API Standard 1104
7. Committee Report



U.S. Department  
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Hazardous Materials  
Safety Administration



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## Pipeline Safety: Standards Update II

### Gas and Liquid Pipeline Advisory Committees

January 16, 2025



U.S. Department of Transportation

Pipeline and Hazardous Materials  
Safety Administration

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# Rule Background

## Departmental and PHMSA Actions



# Rule Background

- Voluntary consensus standards are technical standards developed or adopted by domestic and international standards-development organizations (SDOs)
- Approximately every 2 to 5 years, these organizations use agreed-upon procedures to revise and update their published standards to reflect modern technology and technical practices
- New or updated pipeline standards often incorporate new technologies, materials, management practices, and other innovations that improve the safety and operations of pipelines and pipeline facilities



# Rule Background

- National Technology Transfer and Advancement Act (NTTAA) of 1995
  - The NTTAA (15 U.S.C. 3701 et seq.) directs federal agencies to, “when practical and consistent with applicable laws, use technical standards developed by voluntary consensus standard bodies instead of government-developed technical standards.”
- Per the NTTAA, PHMSA incorporates standards into the pipeline safety regulations in the Code of Federal Regulations.
  - Standards-development organizations updated many of these standards in the time since they were originally incorporated
  - The updated standards incorporate new technologies and methodologies that can improve public safety while providing protection for the environment
  - PHMSA used the NPRM to recommend standards updates that would make the pipeline safety regulations more consistent with current technology and would, therefore, promote the safe transportation of hazardous liquids, natural and other gases, and liquefied natural gas by pipeline.



# Rule Background

- OMB Circular A-119: Federal Participation in the Development and Use of Voluntary Standards
  - The Office of Management and Budget (OMB) sets the policy for federal use and development of voluntary consensus standards in OMB Circular A-119: Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities



# Rule Background

- PHMSA incorporates more than 80 standards and specifications by reference into the pipeline safety regulations (PSRs), which are located in 49 Code of Federal Regulations (CFR) Parts 190-199
- PHMSA regularly reviews newer editions of currently referenced consensus standards and amends the regulations to incorporate updated standards that will enhance or maintain pipeline safety
  - This ensures that the PSRs incorporate and facilitate use of the latest safety innovations and improved safety standards
- Adopting more recent editions of consensus standards can improve regulatory certainty, particularly when pipeline operators and their suppliers may already voluntarily comply with the latest standards



# Rule Background

- The most recent standards update rule, “Pipeline Safety: Periodic Updates of Regulatory References to Technical Standards and Miscellaneous Amendments”(Standards Update I) published on April 29, 2024.
- A technical correction for the rule was published June 28, 2024.
- A Stay of Enforcement was also issued for Standards Update I, which effectively extends the compliance deadline to January 1, 2025.



# Rule Background

- PHMSA published the Periodic Standards Update II Notice of Proposed Rulemaking (NPRM) on August 29, 2022 (87 FR 52713)
  - This rule is commonly referred to as “Standards Update II”
  - The comment period closed on October 28, 2022
  - PHMSA proposed to incorporate by reference all or part of more than 20 updated consensus standards
  - PHMSA also proposed miscellaneous non-substantive edits



# Next Standards Update Rule

- PHMSA is currently reviewing more than 20 standards that are currently incorporated by reference for potential inclusion in a future standards update rulemaking.
- The third standards update NPRM will likely publish sometime in the third quarter of 2025.



# Standards Availability & Standards Development Organization Agreements



# Availability of Standards

- Section 24 of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, specified the following:
  - “Beginning *1 year* after the date of enactment of this subsection, the Secretary may not issue *guidance or* a regulation pursuant to this chapter that incorporates by reference any documents or portions thereof unless the documents or portions thereof are made available to the public, free of charge, *on an Internet Web site.*” 49 U.S.C. 60102(p).
- On August 9, 2013, Public Law 113-30 revised 49 U.S.C. 60102(p) to read as follows:
  - “Beginning *3 years* after the date of enactment of this subsection, the Secretary may not issue a regulation pursuant to this chapter that incorporates by reference any documents or portions thereof unless the documents or portions thereof are made available to the public, free of charge.”



# Availability of Standards

- On November 7, 2014, the Office of the Federal Register issued a final rule, 79 FR 66267, that revised 1 CFR § 51.5 to require that every federal agency must:
  - “Discuss, in the preamble of the proposed rule, the ways that the materials it proposes to incorporate by reference are reasonably available to interested parties or how it worked to make those materials reasonably available to interested parties.”



# SDOs with Agreements

- PHMSA successfully negotiated agreements with all but two of the SDOs whose standards PHMSA incorporates by reference in the PSRs to provide viewable copies of the standards to the public at no cost.
- The following SDOs provide viewable copies of the standards that PHMSA incorporates by reference:
  - American Petroleum Institute (API)
  - The American Gas Association (AGA)
  - ASTM International
  - The Gas Technology Institute
  - The Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS)
  - The Association for Materials Protection and Performance (AMPP) (formerly NACE)
  - The National Fire Protection Association (NFPA)
  - The Plastics Pipe Institute (PPI)



# SDOs w/o Agreements

- PHMSA was unable to obtain an agreement with two SDOs, ASME and ASNT.
- However, ASME makes standards associated w/ proposed rules available to the public during open comment periods.
- In compliance with 49 U.S.C. 60102(p), PHMSA provides temporary access to physical copies of ASME and ASNT standards to the public upon request. For temporary access to standards, please email [phmsaphpstandards@dot.gov](mailto:phmsaphpstandards@dot.gov).
- PHMSA will not adopt standards that we are unable to provide to the public for free.



# PHMSA's SDO Participation

- PHMSA participates in meetings held by approximately 25 national SDOs that address the design, construction, maintenance, inspection, operation, and repair of pipeline facilities.
- PHMSA attends meetings with these SDOs to ensure that the agency's safety priorities are considered and to avoid the need to develop separate, government-unique standards.
- PHMSA's participation does not imply that the agency agrees with or endorses all decisions reached by such organizations.



# Summary of Proposed Rule



# Miscellaneous Edits: Part 191

- PHMSA proposed several minor editorial amendments and corrections to the PSRs
- Miscellaneous edits in Part 191 include:
  - Removing “telephonic” from § 191.5(c), thereby allowing either method of reporting, which includes telephone and electronic submission noted in § 191.5(b) to apply in § 191.5(c);
  - Amending § 191.22(c)(1)(i) to change “of” to “or” in the following phrase: “Construction of any planned rehabilitation,” thereby rectifying a typographical error;



# Standards Proposed for Incorporation in Part 192

PHMSA proposed the incorporation of 23 standards into Part 192.

▪ **American Society of Mechanical Engineers**

- ASME B16.40-2019, February 11, 2019

▪ **American Society for Nondestructive Testing**

- ASNT ILI-PQ 2017, January 1, 2018

▪ **Association for Material Protection and Performance**

- ANSI/NACE SP0502, June 24, 2010
- NACE SP0102-2017, March 10, 2017

▪ **Plastics Pipe Institute, Inc.**

- PPI TR-3/2021, June 16, 2021
- PPI TR-4/2021, June 16, 2021

▪ **National Fire Protection Association**

- NFPA 30, August 31, 2020

▪ **American Society for Testing and Materials**

- ASTM A372/A372M-20e1, March 1, 2020
- ASTM A578/A578M-17, November 1, 2017
- ASTM A672/A672M-19, November 1, 2019
- ASTM D2513-20, December 1, 2020
- ASTM D2564-20, August 1, 2020
- ASTM F1055-16a, November 15, 2016
- ASTM F1924-19, August 1, 2019
- ASTM F1948-20, February 1, 2020
- ASTM F1973-13, February 1, 2018
- ASTM F2145-13, February 1, 2018
- ASTM F2600-09, February 1, 2018
- ASTM F2620-20ae2, December 1, 2020
- ASTM F2767-18, April 1, 2018
- ASTM F2785-21, July 1, 2021
- ASTM F2817-13, May 1, 2019
- ASTM F2945-18, September 1, 2018



# Miscellaneous Edits: Part 192

- Miscellaneous edits in Part 192 include:
  - Correcting the reference in § 192.327(g) from § 192.612(b)(3) to § 192.612(c)(3)
  - Adding § 192.620(d) to the list of reference locations for NACE SP0502, which is currently listed in § 192.7(h)(4)
  - Amending § 192.620(d)(7)(ii) to reference “NACE SP0502” instead of “NACE RP-0502-2002;”
  - Amending appendix B to part 192 to remove version numbers from the referenced standards
  - Amending appendix B to part 192 to standardize the structure of the references



# Standards Proposed for Incorporation in Part 195

PHMSA proposed the incorporation of 10 updated standards in Part 195

- **American Petroleum Institute**
  - API RP 652, May 1, 2020
  - API RP 2003, September 1, 2015
  - API Spec 12F, January 1, 2019
  - API Std 510, May 1, 2014
  - API Standard 2510, August 2020
- **American Society of Mechanical Engineers**
  - ASME B31.4, November 1, 2019
- **American Society for Nondestructive Testing**
  - ASNT ILI-PQ-2017, January 1, 2018
- **Association for Material Protection and Performance**
  - NACE SP0102-2017, March 10, 2017
- **American Society for Testing and Materials**
  - ASTM A672/A672M, November 1, 2019
- **National Fire Protection Association**
  - NFPA 30, August 31, 2020



# Miscellaneous Edits: Part 195

- Miscellaneous edits in Part 195 include:
  - Amending § 195.54 to add DOT Form 7000–2 as an option for accident reporting.



# Requests from the Proposed Rule

- PHMSA requested comments on the potential incorporation of the 22<sup>nd</sup> edition of API Std 1104
- PHMSA believes that incorporating the 22<sup>nd</sup> edition, which includes extensive changes and expanded requirements compared to its predecessors, will require additional resources and training for industry.
- PHMSA also specifically requested comments regarding Section 10 of the 22<sup>nd</sup> edition and its impact on the PSRs; in particular, on §§ 192.245 and 195.230.

2  
3



# Comment Summary



# NPRM Comment Summary

- PHMSA received nine comment submissions for the NPRM from a diverse group of stakeholders:
  - **Industry Trades:** American Gas Association (AGA), American Petroleum Institute (API), American Public Gas Association (APGA), GPA Midstream Association (GPA), Interstate Natural Gas Association of America (INGAA), American Fuel & Petrochemical Manufacturers (AFPM), Association for Materials Protection and Performance (AMPP), National Fire Protection Association (NFPA), Plastics Pipe Institute (PPI).
  - **Industry/Operator:** Dresser Utility Solutions
  - **Other Commenters:** Three comments from two individuals and an anonymous commenter.

2  
5



# General Comments

## ■ **NPRM Comment:**

- API encouraged PHMSA to continue to review standards periodically but on a more frequent basis to ensure the best utilization of industry leading practices
- API questioned the absence of API Recommended Practice (RP) 1162, Public Awareness Programs for Pipeline Operators, Third Edition, which was not included in the NPRM

## ■ **PHMSA Notes:**

- PHMSA appreciates the support



# API 1104

## ■ **NPRM Comments:**

- INGAA, APGA, AGA, GPA, and PPI (the Associations) noted that the 22<sup>nd</sup> Edition would be difficult to implement and were concerned with the potential incorporation by reference of sections 5, 6, and 10 of the 22<sup>nd</sup> Edition.
- The Associations suggested that PHMSA assess the impacts prior to proceeding with incorporating the 22<sup>nd</sup> Edition.

## ■ **PHMSA Notes:**

- PHMSA will assess the potential impacts in a future rulemaking.
- We will have a further discussion on this topic later in our preceding.



# ASTM F1948

## ■ **NPRM Comment:**

- Dresser Utility Solutions suggested that PHMSA consider delaying the update of ASTM F1948 until it is clear exactly how the strength test specified in the 2020 edition can be completed in compliance with the prescriptive language.

## ■ **PHMSA Notes:**

- PHMSA does not see a need to delay the update of ASTM F1948.



# Public Comment

- 29



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# GPAC Vote: Proposed Rule

- 30



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# Proposed Rule (GPAC)

- The proposed rule, as published in the Federal Register, and the Draft Regulatory Evaluation, with regard to the standards and miscellaneous amendments related to 49 CFR Part 191 and 192, Pipeline Safety: Periodic Standards Update II, is technically feasible, reasonable, cost-effective, and practicable.



# LPAC Vote: Proposed Rule

- 32



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# Proposed Rule (LPAC)

- The proposed rule, as published in the Federal Register, and the Draft Regulatory Evaluation, with regard to the standards and miscellaneous amendments related to 49 CFR Part 195, Pipeline Safety: Periodic Standards Update II, is technically feasible, reasonable, cost-effective, and practicable.



# Topic:

## API 1104 (Joint PAC)



# API 1104 Background

- Current Incorporated Edition: API 1104, 21<sup>st</sup> edition: Welding of Pipelines and Related Facilities (Standards Update 1)
- Location of Incorporation: 192.225(a); 192.227(a); 192.229(b) and (c); 192.241(c); Section II of Appendix B in part 192; 195.214(a); 195.222(a) and (b); and 195.228(b)
- Description of Standard:
  - covers the gas and arc welding of butt, fillet, and socket welds in carbon and low-alloy steel piping used in the compression, pumping, and transmission of crude petroleum, petroleum products, fuel gases, carbon dioxide, nitrogen and, where applicable, covers welding on distribution systems.
    - applies to both new construction and in-service welding
    - covers the procedures for radiographic, magnetic particle, liquid penetrant, and ultrasonic testing
  - This standard is used for qualifying welders, welding procedures, and welding operators, and interpreting the results of nondestructive tests.
- PHMSA requested comments regarding whether incorporation of the 22nd edition was appropriate



# API 1104 22<sup>nd</sup> Edition

- 22nd edition includes a method to consider weld toughness and hardness in the development of welding procedures.
  - For welding procedure development there are now two categories
    - Category 1 is similar to the 21<sup>st</sup> edition
    - Category 2 includes hardness and toughness considerations
    - Developing safe welding procedures for CO<sub>2</sub> and H<sub>2</sub> pipelines will require hardness and toughness considerations



# API 1104 Comments

- **NPRM Comments:**
- The joint comment from INGAA, APGA, AGA, GPA, and PPI (the Associations)
  - Supported the incorporation of the 2021 edition of API 1104, but suggested that PHMSA assess the impacts prior to proceeding with incorporating the 22nd Edition
  - Noted concerns with the potential incorporation by reference of section 10 of the 22nd Edition (Repair and Removal of Weld Defects)
    - Noted that the 22nd edition would affect regulations beyond 49 CFR 192.245 (Repair or removal of defects), impacting 49 CFR 192.225 (Welding procedures), and 49 CFR 192.227 (Qualification of welders and welding operators).
    - PHMSA should recognize and examine the compliance burdens that sections 5 and 6 would impose
  - Recommended that PHMSA should only incorporate the 21st Edition of API 1104 at this time



# API 1104 PHMSA Notes

## ■ PHMSA Notes:

- PHMSA appreciates the committee's discussion and will assess the potential impacts in a future rulemaking.
- We are not looking for a committee recommendation on the incorporation by reference of the 22<sup>nd</sup> edition of API 1104, but we are looking for feedback on the adoption of API 1104.



# Public Comment:

## API 1104



# Joint PAC Discussion: API 1104



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# Report of the Proceeding (GPAC)



# Committee Report (GPAC)

## Committee Voting Slide

The transcript of this meeting (duly recorded and accurately transcribed), together with the presentation slides documenting the Committee's votes during this meeting, represent the report of this proceeding.



# Report of the Proceeding (LPAC)



# Committee Report (LPAC)

## Committee Voting Slide

The transcript of this meeting (duly recorded and accurately transcribed), together with the presentation slides documenting the Committee's votes during this meeting, represent the report of this proceeding.



*Thank You!*

