



Pipeline and Hazardous Materials Safety Administration (PHMSA)

Office of Pipeline Safety

2024 AMPP Rocky Mountain Short Course PHMSA and Western Region Updates

January 19, 2023

Tom Finch



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



Introduction

Who is PHMSA?

U. S. Department of Transportation (DOT)



Who is PHMSA



The CL Team



*“Trusted, unified voice
of Pipeline Safety”*

HEADQUARTERS	
Karen Lynch, Program Manager	
EASTERN REGION	
Karen Gentile <i>Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, Vermont</i>	Nita Raju <i>Delaware, Maryland, Ohio, Pennsylvania, Virginia, Washington DC, West Virginia</i>
SOUTHWEST REGION	
James ‘Jay’ Prothro <i>Arkansas, Oklahoma, Texas (North)</i>	Bill Lowry <i>Louisiana, New Mexico, Texas (South)</i>
SOUTHERN REGION	
Tiffany Baker <i>Georgia, North Carolina, South Carolina, Tennessee, Puerto Rico</i>	James Kelly <i>Alabama, Florida, Kentucky, Mississippi</i>
CENTRAL REGION	
Angela Pickett <i>Kansas, Missouri, Iowa, Illinois, Michigan, Minnesota</i>	Sean Quinlan <i>North Dakota, South Dakota, Indiana, Nebraska, Wisconsin</i>
WESTERN REGION	
Tom Finch <i>Arizona, California, Colorado, Hawaii, Nevada, Utah</i>	Dave Mulligan <i>Alaska, Idaho, Montana, Oregon, Washington, Wyoming</i>



PHMSA Regulated Pipeline Facilities OPS and States

Pipeline Facilities by Regulation and System Types – CY 2022 Annual Reports			
Safety and Reporting Regulated	Miles	% Miles	# Operators
Hazardous Liquid/CO₂	229,290	8%	524
Gas Transmission	300,850	10%	1,070
Gas Gathering	111,411	4%	512
Gas Distribution	2,336,957	78%	1,332
	subTotal	2,978,508	
Reporting-Regulated-Only	Miles	% Miles	# Operators
Hazardous Liquid	37,423	14%	125
Gas Gathering	234,293	86%	483
	subTotal	271,716	
	Total	3,250,224	

Data as-of 7-9-2023

Hazardous Liquid Breakout Tanks	8,519 Tanks, 241 Operators
Liquefied Natural Gas	171 Plants, 243 Tanks, 91 Operators
Underground Natural Gas Storage	400 Facilities, 16,630 Wells, 126 Operators



Pipeline Information Collections With Forms for Reporting to PHMSA

OMB #	Form(s) for Reporting to PHMSA	Expires
2137-0047	HL Accident and GRR HL Accident	4/30/2026
	Proposing HL Accident instruction revisions around accident date and tank events – Implementing July 2023	
2137-0635	GD, GG GT UNGS, LNG, and RR GG Incident	3/31/2025
	Proposing instruction changes around accident date, adding Confirmed Discovery, and updating excavation damage reporting – waiting for OST to send to OMB	
2137-0614	HL Annual	3/31/2026
	Proposing excavation damage reporting additions and changes around rural miles – OMB approved and implementing for CY 2024 reports collected during 2025	
2137-0522	GG GT, LNG, UNGS, and RR GG Annual	3/31/2025
	In GG GT Annual, proposing addition of excavation damage reporting - waiting for OST to send to OMB - and repair categories for §192.710 segments – OMB approved and implementing for CY 2024 reports collected during 2025	
2137-0629	GD Annual	5/31/2024
	Proposing update of excavation damage reporting and removal of EFV and curb valve data - waiting for OST to send to OMB	
2137-0627	National Registry Notif and OpID Assign Request	3/31/2025
2137-0596	National Pipeline Mapping System (NPMS)	3/31/2026
	Proposing addition of Medium Consequence Area (MCA) and §192.710 Assessment - OMB approved and implementation in phases	

updated
7-10-2023



Categories of Incident Reports

Reporting-Regulated-Only hazardous liquid and gas gathering are excluded from **Serious** and **Significant** Incidents

Serious – fatality or injury requiring in-patient hospitalization, but **Fire First** are excluded

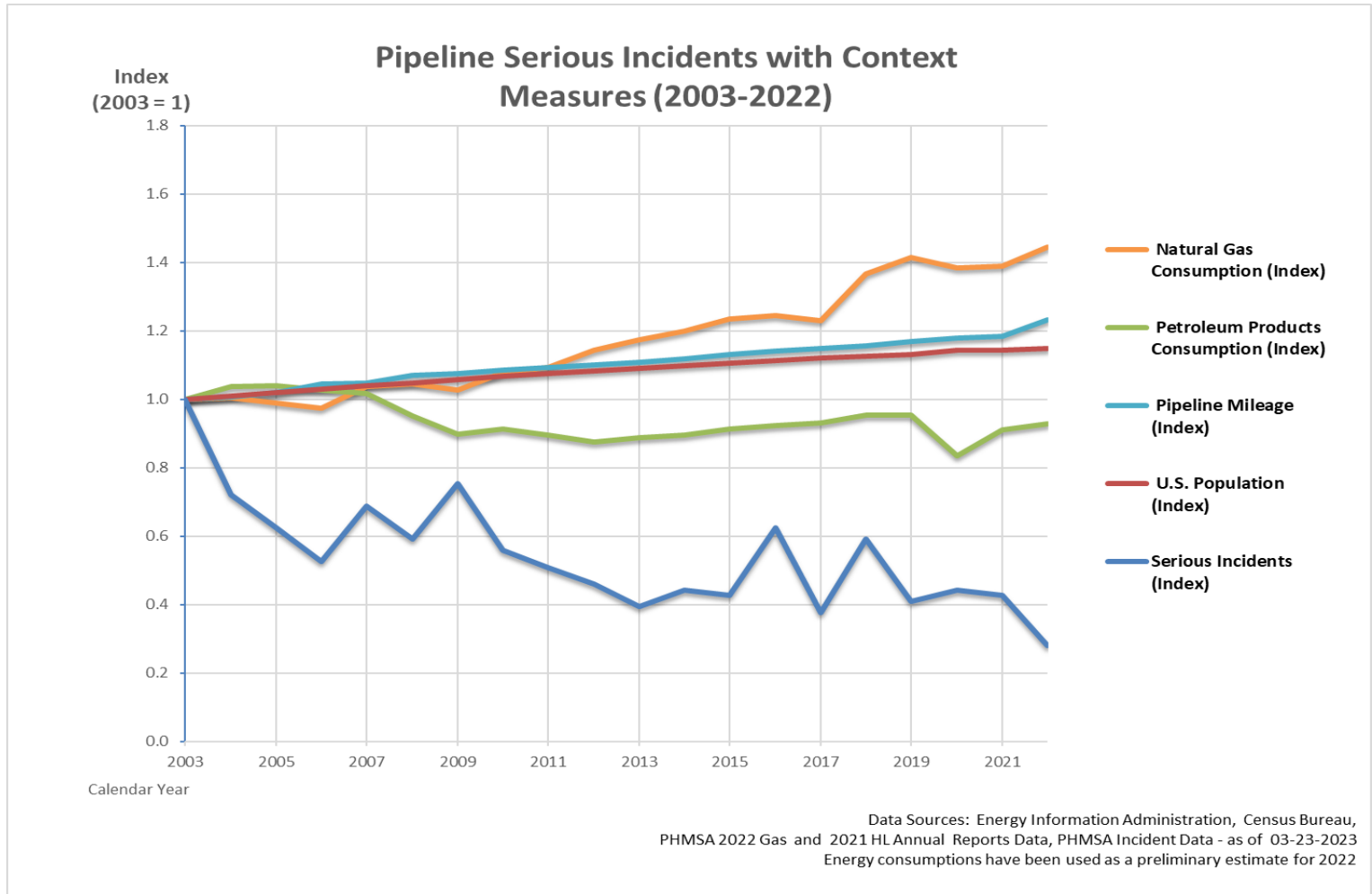
Fire First are gas distribution incidents with a cause of “Other Outside Force Damage” and sub-cause of “Nearby Industrial, Man-made, or Other Fire/Explosion”

Significant include any of the following, but **Fire First** are excluded:

1. Fatality or injury requiring in-patient hospitalization
2. \$50,000 or more in total costs, measured in 1984 dollars
3. Highly volatile liquid (HVL) releases of 5 barrels or more
4. Non-HVL liquid releases of 50 barrels or more
5. Liquid releases resulting in an unintentional fire or explosion



Pipeline Serious Incidents with Context Measures 2003-2022



Who Regulates Pipeline Safety?

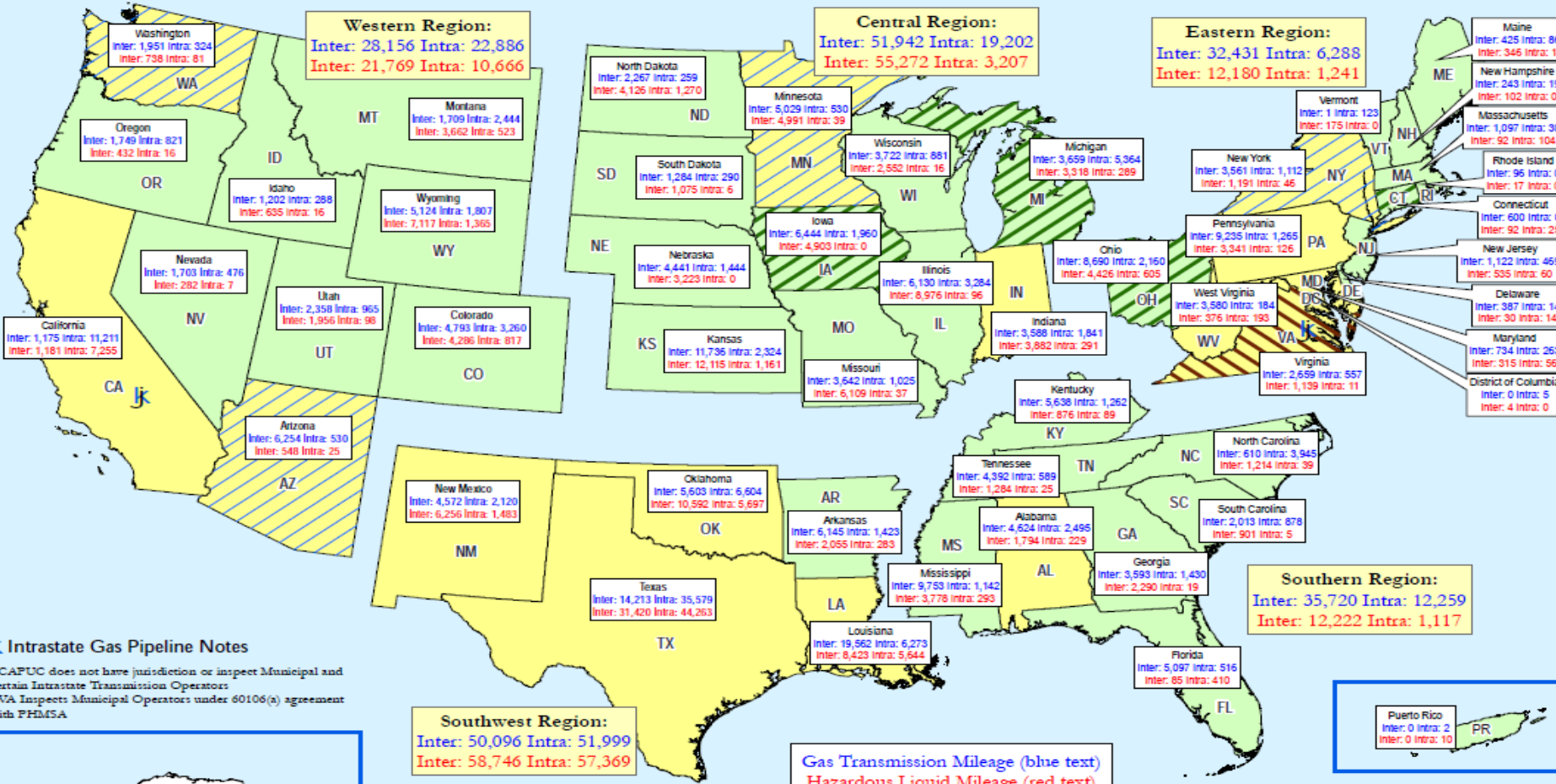
- Individual state
- U.S. DOT , PHMSA

In Colorado:

- Natural Gas Pipelines:
 - COPUC Regulates **Intrastate** pipelines
 - PHMSA regulates **Interstate** pipelines
- Hazardous Liquid Pipelines
 - PHMSA regulates **Intrastate** pipelines
 - PHMSA regulates **Interstate** pipelines
- Underground Gas Storage
 - COGCC and PHMSA

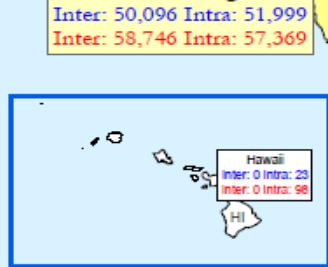
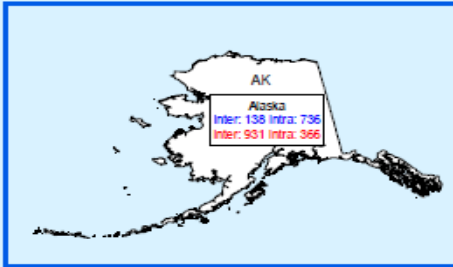


Gas Transmission and Hazardous Liquid Pipeline Safety Programs Participating States in the Federal/State Cooperative Partnership



jk Intrastate Gas Pipeline Notes

- CAPUC does not have jurisdiction to inspect Municipal and certain Intrastate Transmission Operators
- VA Inspects Municipal Operators under 60106(a) agreement with PHMSA



Gas Transmission Mileage (blue text)
 Hazardous Liquid Mileage (red text)

Mileages depicted reflect all onshore data that has been incorporated into the National Pipeline Mapping System (NPMS) as of February 2021.

U.S. Department of Transportation
 Pipeline and Hazardous Materials Safety Administration
 Projection: Albers Equal-Area Conic
 Map Produced: February 2021

STATE JURISDICTION: INTERSTATE AGENTS

- Gas and Hazardous Liquid Pipelines
- Hazardous Liquid Pipelines: Only
- Gas Pipelines: Only

STATE JURISDICTION: INTRASTATE AGENTS

- Gas and Hazardous Liquid Pipelines: 60105(a) Certification
- Gas Pipelines: Only: 60105(a) Certification
- Not Participating



Pipeline Safety Act 2020

- Protecting our Infrastructure of Pipelines and Safety (PIPES) Act
- Signed December 27, 2020
- Through fiscal year 2023 and includes mandates for:
 - Staffing
 - Reviews/studies/reports
 - Rulemaking



PIPES Act Highlights

- Workforce development
 - Inspectors, SMEs for rulemaking, distant learning
- Improve Gas Distribution Pipeline Safety – “Leonel Rondon Pipeline Safety Act”
 - Improve emergency response coordination
 - Require the use of qualified employees, such as professional engineers
 - Promote best industry practices for holistic safety management
 - Mandate on-site monitoring of gas system pressure by qualified employees during construction
 - Require distribution system operators to assemble traceable, reliable, and complete maps and records.



PIPES Act Highlights

- Update LNG Regulations
- Expands USA definition to include coastal beaches, marine coastal waters and the Great Lakes
- Expands whistleblower protections to cover former employees
- Issue final rule on Gas Gathering and report progress of outstanding mandates every 30 days
- Issue rule on Idle Pipelines



PIPES Act Highlights

- PIPES Act of 2020 Overview
 - <https://www.phmsa.dot.gov/legislative-mandates/pipes-act-2020-overview>
- PIPES Act Web Chart
 - <https://www.phmsa.dot.gov/legislative-mandates/pipes-act-web-chart>



Hydrogen Pipelines

Natural Gas Vs. Hydrogen:

- Differences in blended gas compositions and hydrogen ratios, versus pure hydrogen gas, and if use involves GT or GD, will all affect risk and consequence. Important to understand how it will be used.
- PIR, flammability, energetics of rupture, dissipation difference for pure or blended hydrogens
 - Hydrogen gas blended in small amounts may not change these particular issues greatly, but pure hydrogen gas will ignite in a broader range than natural gas alone, which could affect gas distribution systems, where leakage is more likely.
- Differences in Class Location effectiveness
- Gas interchangeability/compatibility for distribution to services and customers with legacy natural gas pipelines/components/appliances
- A comprehensive study of existing research needed to better understand unique consequences for failure of hydrogen and hydrogen blended pipelines. Support with R&D efforts.

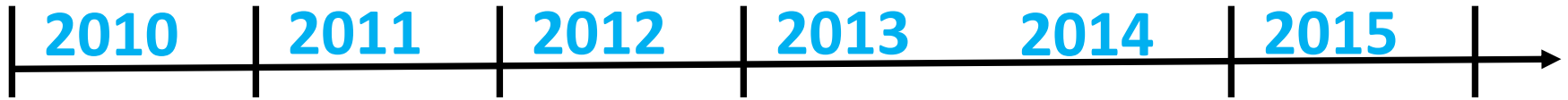


New Rules - Discussion Areas

- **Rule History**
- **What's PHMSA Working On?**
- **FAQs and Definitions**



PHMSA Rule History



2010

**San Bruno, CA
Incident
9/9/10**

2011

**NTSB
Report
8/30/11**

**ANPRM
8/25/11**

2012

**Sissonville,
WV Incident
12/11/12**

**PSA of 2011
1/3/12**

2013

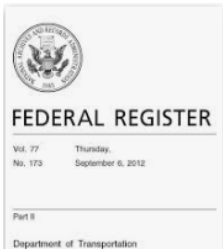
**NTSB Report
2/19/14**



2014



2015



2016

**NPRM
4/8/16**

2017

**GPAC Meetings (5)
1/17 – 3/18**

2018

2019

2020



PHMSA Western Region Update



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



PHMSA Western Region

Western Region Staff:

- Region Director - Dustin Hubbard
- Denver/Lakewood, Ontario, Anchorage offices

Challenges:

- Staff Churn
- Retirement
- New hire training



PHMSA Field Updates

- No mini scoping form inspections
- All scheduled Integrated Inspections
- Expect 2-3 PHMSA inspectors per each inspection (cross training/new hires)
- Control Room Management inspections for all operators (next 2 years)
- Drug/Alcohol inspections performed centrally (Wayne Lemoi)
- LNG focused inspection team to inspect LNG



PHMSA Field Updates

- No inspection forms sent to operators before inspections
- All inspection question forms available for download at: <https://www.phmsa.dot.gov/forms/pipeline-forms>. (subjects organized alphabetically)
- **Region regulating territory was changed**
 - operators may be regulated by a different region rather than by location
- Drug random testing remains at 50%
- Tribal notification letters required for tribal land on-site inspections
- 30-day exit interview (last day of each week)
- 90-day email preliminary written findings report
- Expediting enforcement cases
 - No response within 30 days – automatic final order issued.



Regulatory Updates



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



Gas Pipeline Regulatory Reform

- Final Rule published 1/11/2021
- **Effective Date Change was – 3/21/2021**
- Multiple topics included:
 - Definitions
 - Reporting
 - Corrections
 - Standards updates
 - Requirements



Regulatory Reform Major Topics

- Incident reporting property damage threshold
 - \$122k (was \$50k)
 - Each year changes with consumer price index
- Multiple incorporated by reference standards updates
- Design of plastic pipe
 - Joining procedures and qualifying persons
- Fabricated pressure vessels (design, construct, tested)



Regulatory Reform Major Topics

- CP Rectifiers – remote and physical inspection
- Atmospheric corrosion monitoring:
 - Every 3 years (except service lines)
 - Every 5 years for service lines
- Farm taps
 - DIMP or § 192.740
 - Excludes production/unregulated gathering
- Remove mechanical fitting reporting



**Safety of Gas Transmission Pipelines
*Repair Criteria, Integrity Management
Improvements, Cathodic Protection,
Management of Change, and
Other Related Amendments***
(referred to as RIN 2)

Docket No. PHMSA–2011–0023

RIN: 2137-AF39

Published August 24, 2022; Effective Date May 24, 2023



Major Areas Revised

- Definitions (§ 192.3)
- Management of Change (§§ 192.13 & 192.911)
- Corrosion Control (§§ 192.319, 192.461, 192.465, 192.473, 192.478, 192.935)
- Inspections Following Extreme Events (§ 192.613)
- Repair Criteria (§§ 192.711, 192.714, 192.933)
- IM Clarifications (§§ 192.917 (a) – (d), 192.935(a))
- Strengthening Requirements for Assessment Methods (§§ 192.923, 192.927, 192.929)



- **Adds new definitions for:**

- **Close Interval Survey**
- Dry Gas or Dry Natural Gas
- Hard Spot
- In-line Inspection
- In-line Inspection Tool or Instrumented Internal Inspection Device
- Wrinkle Bend



Definitions & Additional Questions

§192.3 Definitions:

Distribution line means a pipeline other than a ***gathering*** or ***transmission line***.

Gathering Line means a pipeline that transports gas from a current production facility to a transmission line or ***main***.

Transmission line means a pipeline, other than a gathering line, that: (1) Transports gas from a gathering line or storage facility to a distribution center, storage facility, or large volume customer that is not down-stream from a distribution center; (2) operates at a hoop stress of 20 percent or more of SMYS; or (3) transports gas within a storage field.

NOTE: A large volume customer may receive similar volumes of gas as a distribution center, and includes factories, power plants, and institutional users of gas.



Current Rulemakings in Process



Liquefied Natural Gas

- NPRM Stage
- Major Topics under consideration
- PIPES Act 2020 (Section 110; PSM)



Standards Update

- NPRM Stage
- NPRM published 1/15/2021
 - Comment period ended 3/16/2021
- Major Topics under consideration
- Standards Update II (upcoming rule)
 - Significant vs Non-Significant rulemakings



Frequently Asked Questions (FAQs)

Name	Status
Gas Transmission Batch-1 FAQs	Finalized/Posted on website September 2020
Hazardous Liquid Rule FAQs	Finalized/Posted on website December 2020
Farm Tap FAQs	Proposed in Federal Register on 4/20/2020; comment period closed 6/19/2020
Mid Stream FAQ	Proposed in Federal Register on 11/5/2020; comment period closed 2/4/2021
Operator Qualification FAQs	Proposed in Federal Register on 1/15/2021; comment period closed 2/16/2021
Gas Transmission Batch-2 FAQs	Proposed in Federal Register on 1/15/2021; comment period closed 3/16/2021



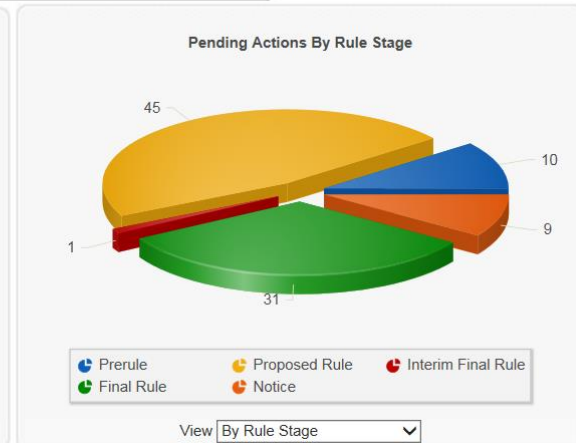
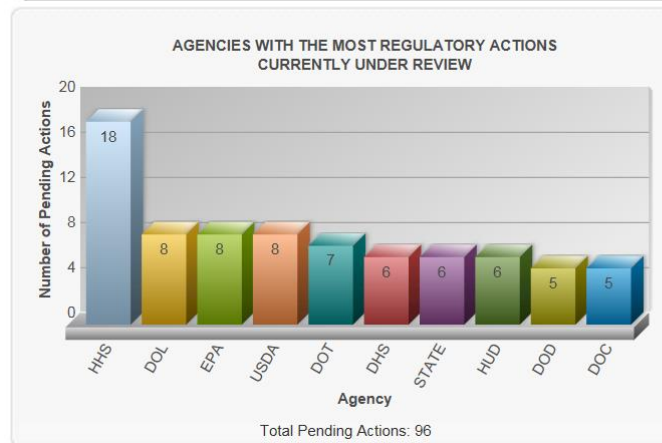
Office of Information and Regulatory Affairs Office of Management and Budget

OFFICE of INFORMATION and REGULATORY AFFAIRS
OFFICE of MANAGEMENT and BUDGET
EXECUTIVE OFFICE of the PRESIDENT

U.S. General Services Administration GSA

Search: Agenda Reg Review ICR

Home | Unified Agenda | **Regulatory Review** | Information Collection Review | FAQs / Resources | Contact Us



REGULATORY REVIEW

Executive Order 12866 directs agencies to follow certain principles in rulemaking, such as consideration of alternatives and analysis of benefits and costs, and describes OIRA's role in the rulemaking process.

- [Regulations under EO 12866 Review](#)
- [Regulatory Reviews Completed in Last 30 Days](#)

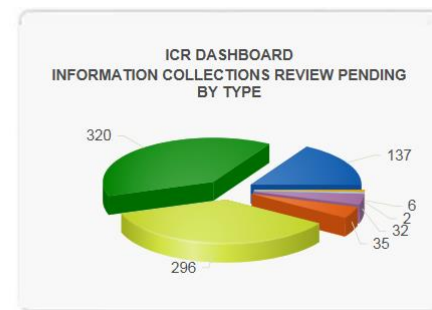
[More about Regulatory Review >>](#)

UNIFIED AGENDA and REGULATORY PLAN

The Unified Agenda and Regulatory Plan provide uniform reporting of data on regulatory and deregulatory actions under development throughout the Federal government, covering over 60 departments, agencies, and commissions.

- [The 2018 Fall Agenda was published on 10/17/2018](#)

[More about Agenda >>](#)



<https://www.reginfo.gov>



Pipeline Standards and Rulemaking

PHMSA
Pipeline and Hazardous Materials
Safety Administration

Search PHMSA site

[ABOUT PHMSA](#) [SAFETY](#) [REGULATIONS AND COMPLIANCE](#) [RESOURCES](#)

Home » Standards and Rulemaking » Pipeline

Pipeline Standards & Rulemaking Overview

Pipeline Advisory Committees

Recently Published Rulemakings

Archived Rulemakings (pre-1995)

Special Permits & State Waivers

Interpretations

Notices and Advisory Bulletins

Standards and Rulemaking Overview

The Office of Pipeline Safety's Standards & Rulemaking division periodically issues rulemaking documents that propose or adopt changes to the regulations. You may participate in the rulemaking process by filing written comments on any rulemaking document that asks for comments, attending a public meeting, or by filing a petition for rulemaking that asks us to add, amend, or delete a regulation.

In addition to proposing and finalizing rules, the division posts notices, advisory bulletins, special permits and state waivers, interpretations, and NTSB recommendations issued to the Office of Pipeline Safety.

This site does not include all the documents associated with a particular rulemaking. If you want to review all the documents associated with a particular rulemaking or if you want to comment on a rule, please visit <http://www.regulations.gov>.

Pipeline Safety Laws, Regulations, and Rulemaking

- Pipeline Safety Regulations (Title 49 CFR Parts 190 - 199)
- Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011
- Pipeline Inspection, Protection, Enforcement and Safety (PIPES) Act of 2006
- Pipeline Safety Statutes (49 U.S.C. Chapters 601 & 603)
- PHMSA Federal Register Page
- Federal Dockets ([Regulations.gov](http://www.regulations.gov))

Standards Incorporated by Reference

PHMSA currently incorporates by reference more than 60 standards and specifications published by standard developing organizations (SDO's) into 49 CFR Parts 192, 193, and 195. For more information, please visit the [Standards Incorporated by Reference](#) page.

Related Links

- [Electronic Code of Federal Regulations](#)

Contact Us

Pipeline Standards and Rulemaking
U.S. Department of Transportation,
Pipeline and Hazardous Materials Safety
Administration
1200 New Jersey Avenue, SE
Washington, DC 20590
United States

Phone: 202-366-4595
Fax: 202-366-4566

Business Hours:
9:00am-5:00pm ET, M-F

Share

[f](#) [t](#) [G](#) [+](#)

<https://www.phmsa.dot.gov/standards-rulemaking/pipeline/standards-and-rulemaking-overview>



Miscellaneous Updates



U.S. Department of Transportation
Pipeline and Hazardous Materials
Safety Administration

PHMSA: Your Safety is Our Mission



Safety Management Systems (SMS)

01 REACTIVE

Develops strategies that respond to past incidents and accidents



02 PROACTIVE

Actively collects data to identify and address current hazardous conditions

03 PREDICTIVE

Systematically analyzes safety risk data and performs forward-looking data analytics to identify potential/future problems



Pipeline Data Mart (PDM)

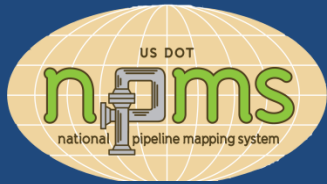
- Update your contacts in the PHMSA Portal
- www.portal.phmsa.dot.gov
- View your data
- Check for updates on cases
- Ask for volunteer to see what we see (dashboard):
<https://portal.phmsa.dot.gov/PHMSAPortal2/faces/UIShellPortalHome>.



PHMSA Transparency

- Publicly Available:
 - All PHMSA issued enforcement cases
 - Operator Annual Report
 - NPMS general location (county)
- NOT Publicly Available (Available by FOIA):
 - Operator enforcement case responses
 - NPMS detailed data



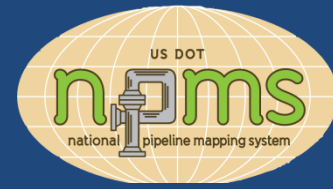


NPMS Updates

- [Operator Webinar](#) is available to assist operators in making submission
(YouTube – Search “NPMS Operator Webinar”)
- Tribal Government Applications and Map Layer
- Offshore Pipelines Available on the Public Map Viewer
- Ecological Unusually Sensitive Area (USA) data updated (hazardous liquid pipeline operators)
- Commercially Navigable Waterway Data Updated
- Great Lakes USA Data



NPMS Common Errors

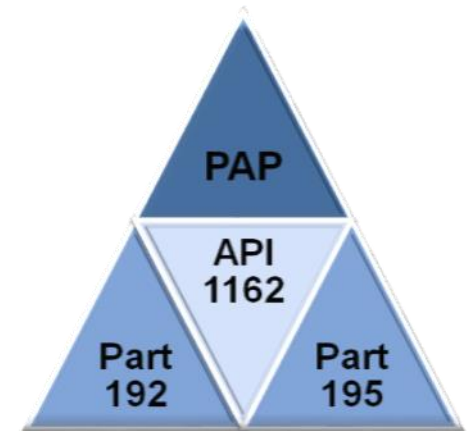
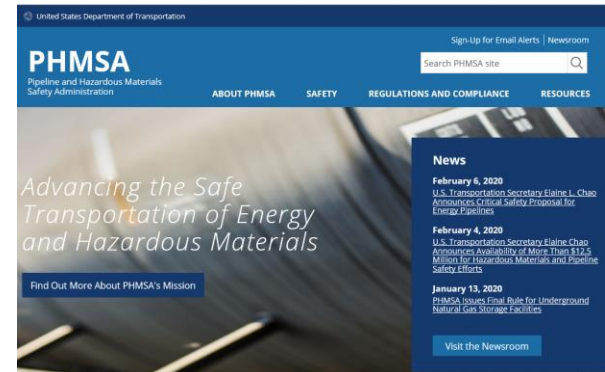


- Annual Report mileage does not match NPMS mileage. Discrepancies should be resolved before submitting to PHMSA.
- Missing pipelines unintentionally/missing the requested information to explain why a pipeline should be removed.
- Duplicate or additional pipelines either unintentionally or without the requested explanation.
- Did not complete the Revision Code attribute correctly.
- Operators need to be more responsive when PHMSA finds errors in their submissions, and they need to put procedures in place to stop repeating the same errors every year.
- NPMS Submission status table open to public - <https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages>.



Public Awareness

- Website updates and enhancements; expanding information
- Active participant on American Petroleum Institute (API) Recommended Practice (RP) 1162, Public Awareness Programs for Pipeline Operators, 3rd Edition, Task Group
 - PHMSA is evaluating for possible Incorporation by Reference



Top 10 Stakeholder Concerns

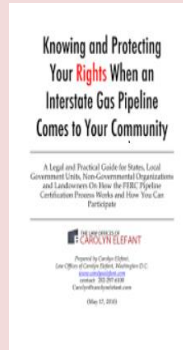
(1) Proposed Pipelines and Siting



(2) New Pipeline Construction and Construction Safety



(3) Public Awareness



(4) Exposed/Shallow and Abandoned Pipelines



(5) Liquefied Natural Gas Siting and Jurisdiction



(6) ROW and Easements



(7) Jurisdictional Issues



(8) Active Pipelines



(9) Emergency Plans

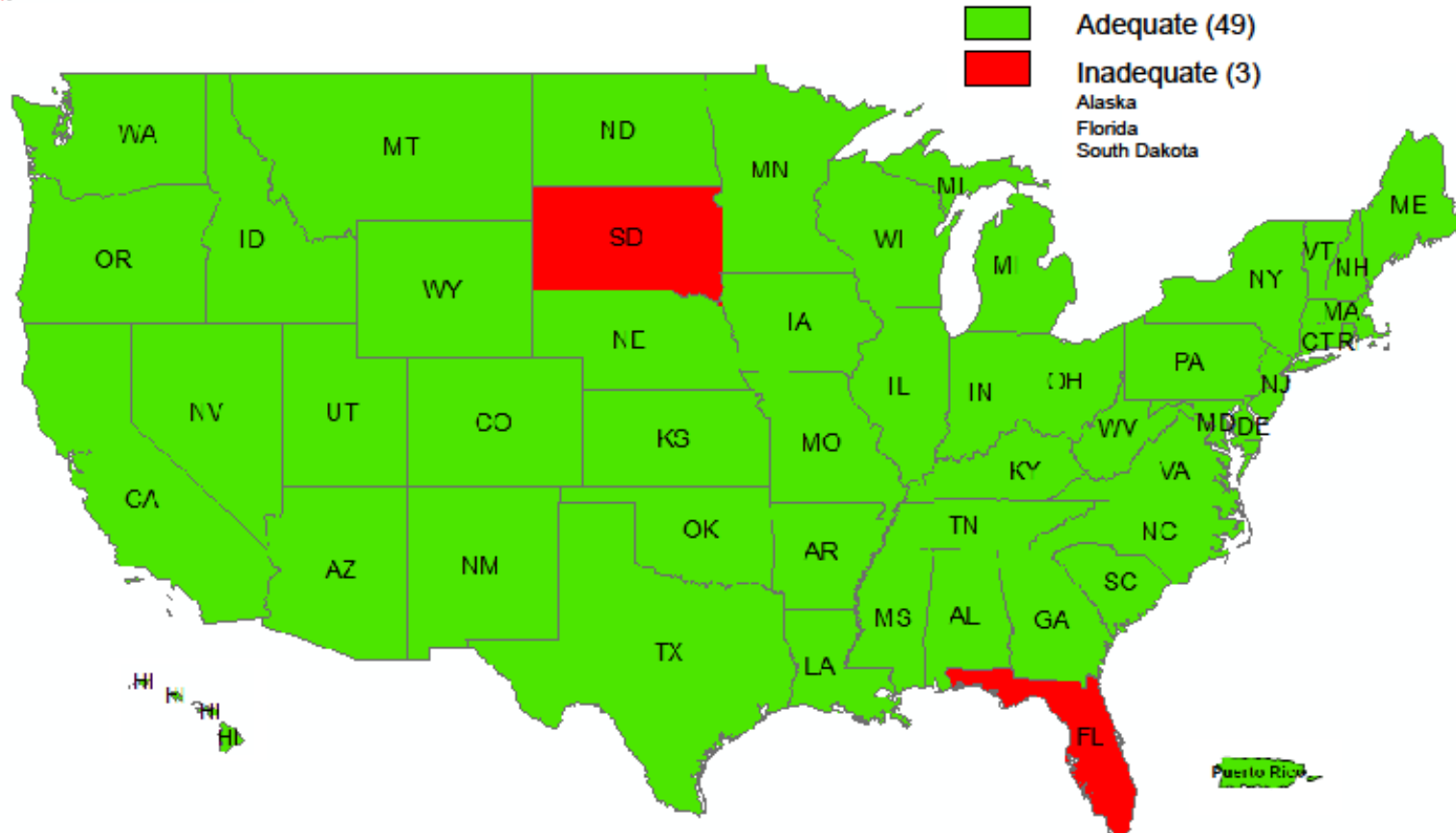


(10) Environmental Issues



Determinations of Adequacy of One-Call Law Enforcement Programs from 2022 Audits

As of March 13, 2023



Map produced March 13, 2023, by the U.S. Department of Transportation (U.S. DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA). Map provided as a reference only. PHMSA makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to this map for any purpose. PHMSA expressly disclaims liability for errors and omissions in the contents of this map.



Reflection

- Congress and the Public do NOT usually distinguish between different types of pipeline systems.
- If one liquid or gas system fails, all have failed. Pipeline companies are judged as an industry – the oil and gas industry.



Questions?





Thank You!

Tom Finch

Community Liaison/Engineer

Western Region

(303) 807-7200

thomas.Finch@dot.gov

<https://www.phmsa.dot.gov/>

