



# Regulatory Update

---

# Incident Cost

---

## §191.3 – Incident definition

- Estimated property damage
  - Loss to operators and others, or both, but excludes gas loss
- Cost may be adjusted annually
  - July 1, 2022 – increase to **\$129,300**
  - July 2, 2023 – increase to **\$139,700**
  - posted to PHMSA website 4/26/2023
  - <https://www.phmsa.dot.gov/incident-reporting>
- States may have lower monetary thresholds for reporting incidents or accidents

# Drug and Alcohol

---

December 23, 2022

- Reduce rate of testing for covered employees to 25% for calendar year 2023
- Positive drug test rate below 1.0% for 2 consecutive calendar year
  - Information submitted through PHMSA portal

# Drug and Alcohol

---

- May 2, 2023
  - Added oral fluid specimen testing to Part 40
  - Effective June 1, 2023
  - No laboratory currently qualified to perform

# ADB 22-01

---

Potential for Damage to Pipeline Facilities cause by Earth Movement and Other Geological Hazards

- 2020 accident in Satartia, MS
- Changing weather patterns may affect integrity
- Between 2015 and 2023 WV and OH lead in pipeline events due to land movement



# ADB 22-01

---

## Potential for Damage to Pipeline Facilities cause by Earth Movement and Other Geological Hazards

- Provide 9 actions to ensure pipeline safety
  - Operations and maintenance activities to monitor movement
  - May be considered both preventative and mitigative measures
  - May be used as P&M measures for integrity management purposes
- Movement may be reportable as safety related conditions under §§191.23 and 195.55

# Gathering Line Rule

---

Safety of Gas Gathering Pipelines: Extension of Reporting Requirements, Regulation of Large, High-Pressure Lines, and other Related Amendments

- Amdts 191-30, 192-129,
  - corrections in 191-31, and 192-131
- Issued November 2, 2021
- Effective May 16, 2022
- Compliance deadlines of May 16, 2023
- Amdt. 192-132 some exceptions for all gathering lines

# Gathering Line Rule

---

- Created new Type C lines, and Type R lines
  - Determine status of lines by November 16, 2022
  - Reporting required March 15, 2023 for lines operated in 2022
- Limited stay of enforcement for small diameter line
- Not required to perform any inspection in 2023



# Gathering Line Rule

---

➤ PHMSA working on FAQ's, inspection forms and enforcement guidance

➤ Batch 1 gathering FAQ's issued 5/10/23

<https://www.phmsa.dot.gov/faqs/gathering-pipelines-faqs>

➤ GPTC working on guide material

➤ Verification of Type C lines as we perform other inspections



# Gathering pipelines

---

National gathering miles reported on 2022 Annual Report (March 15, 2023)

Type A	Type B	Type C	Type R
8,121	4,402	92,019	230,892



# Gathering pipelines

State Name	Type A	Type B	Type C	Type R
TEXAS	4590.7	1000.659	38270.985	91776.506
OKLAHOMA	264.43	688.095	16537.375	55684.251
NEW MEXICO	241.05	96.201	7418.091	21480.018
WYOMING	29.621	0.125	5264.07	8566.393
LOUISIANA	498.83	26.834	5210.766	4492.84
COLORADO	553.81	67.541	4174.74	7020.527
PENNSYLVANIA	601.64	264.17	3522.94	3923.202
NORTH DAKOTA	26.42	23.275	2681.771	8963.764
WEST VIRGINIA	210.54	194.918	2491.507	3456.739
OHIO	424.97	1724.165	1937.272	1817.123
KANSAS	17.725	11.549	1208.427	9696.334
Total	7459.7	4097.532	88717.944	216877.697

# Valve Rule

---

## Valve Installation and Minimum Rupture Detection Standards

- Amendments 192-130 and 195-105
- Issued April 7, 2022
- Effective October 5, 2022
- Applies to newly constructed or replaced pipelines installed after April 10, 2023

# Valve Rule

---

## Valve Installation and Minimum Rupture Detection Standards

- Applies to gas transmission lines and Type A gathering lines  $\geq 6$ " in diameter and
- HL transmission and gathering lines  $\geq 6$ " in diameter that span water crossings  $>100$  feet, and HL low stress lines subject to §195.260(e)

# ➤ **Valve Rule §192.3**

Rupture-mitigation valve (RMV)

Minimize the volume of a release and mitigate the consequences

- Automatic shut-off valve (ASV)
- Remote-control valve (RCV)
- Alternative equivalent technologies



# Valve Rule

---

- Newly constructed or “entirely replaced” pipelines must be equipped with rupture mitigation valves or alternative equivalent technology
  - Entirely replaced 2 or more miles of pipe, in the aggregate, that have been replaced within 5 contiguous miles in a 24 month period (§§192.3, 195.2)
- New valve spacing requirements for gas transmission and hazardous liquid pipelines based on class location and HCAs

# Valve Rule

---

- Release of product representative of a notification of potential rupture, as soon as practicable but within 30 minutes operator must:
  - Identify the rupture
  - Fully close any RMV or alternative technology to mitigate the rupture



# Valve Rule

---

- Develop written procedures regarding identification and confirmation of ruptures
- Maintenance and drill requirements for equivalent technology to ensure 30 minute valve closure
- Investigation following rupture with any lessons learned implemented in system

# Valve Rule

---

- Language added to §§ 192.615 and 195.402(e) regarding emergency notification
  - Notice to the appropriate public safety answering point
    - 911 call center
    - State or county emergency management or coordinating agencies

# **Emergency Plans**

## **§§ 192.615 & 195.402**

---

### 9-1-1 notification requirements

- Liaison with and contact appropriate public safety answering point if available – if not, liaison with and contact appropriate local emergency coordinating agencies
- Learn responsibilities, resources, jurisdictional areas, emergency contact numbers for those government organizations that may respond to emergencies involving pipeline facilities

# Valve Rule

---

- Language added to §§ 192.615(a)(1) & (8) and 195.402(e)(1) & (7) regarding emergency notification
- Applies to ALL operators, not just transmission
- Written procedures for coordinating and sharing information
- Notification of appropriate public safety answering point for ruptures
  - §§192.635 and 195.417 provide methods to determine rupture

# §192.617

---

- No longer just failure investigation
- Changes in failure and incident investigation
  - Establish and follow procedures of investigating and analyzing failures and incidents
  - Post-failure and incident lessons learned from post-failure or incident review incorporated into training and qualification, design construction testing maintenance
  - Additional requirements for transmission lines and events involving RMVs.

# Transmission Rule

---

Safety of Gas Transmission Pipelines: Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments

- Amendment 192-132
- Referred to as Rin 2 of Megarule
- Issued August 24, 2022
- Effective May 24, 2023
- Technical corrections issued April 24, 2023

Issued to improve the safety of onshore gas transmission lines

# Transmission Rule

---

## Definitions in §192.3

### Transmission line –

- *Pipeline or connect series of pipelines*
- Transports gas from gathering line to a distribution center, storage facility, or large volume customer not downstream from distribution center
- *MAOP  $\geq$  20% SMYS*
- Transports gas in a storage field, or
- *Is voluntarily designated by the operator*

# Transmission Rule

---

## Definitions in §192.3

### Distribution Center

initial point where gas enters piping used primarily to deliver gas to customers who purchase it for consumption, as opposed to customers who purchase it for resale, for example:

- (1) At a metering location;
- (2) A pressure reduction location; or
- (3) Where there is a reduction in the volume of gas, such as a lateral off a transmission line

NAPSR petitioned for stay of enforcement



# Transmission Rule §192.3

---

## Dry Gas

- Gas above its dew point and without condensed liquids

Electrical Survey – series of closely spaced P/S readings which are analyzed to identify where current is leaving the pipeline

Close Interval Survey – series of closely and properly spaced pipe to electrolyte potential measurements to:

- assess the adequacy of CP,
- identify location where current is leaving the pipeline, or
- quantifying IR drops

# Transmission Rule §192.3

---

## ILI – in line inspection

- Inspection of pipeline from interior of pipe using an inspection tool
- Included tethered and self propelled tools

## In-line inspection tool or instrumented internal inspection device

- Uses a non-destructive testing technique to inspect pipe from the inside to identify and characterize flaws



# Transmission Rule §192.3

## Wrinkle bend

- Means a bend in the pipelines formed during construction
- Amplitude of bend,
- Formula for length



# Transmission Rule

---

§192.7 New incorporated by reference documents

- ASME B31.8S – 2004
- NACE Standards for
  - ILI (SP 0102-2010)
  - SCCDA (SP0204-2008),
  - Dry Gas ICDA (SP0206-2006)
  - ECDA (SP0502-2010)

# Transmission Rule

---

## §192.13(d) – Management of change process

- Evaluate and mitigate significant changes that pose a risk to safety or the environment through a MOC process
- Outlined in ASME/ANSI B31.8S Section 11
- For non-HCAs implemented by February 26, 2024

# Transmission Rule

---

Inspection of coating on transmission lines after construction

- §§192.319, 192.461
- $\geq 1000$  feet of new pipelines, must promptly but within 6 months perform assessment for coating damage
- ACVG, DCVG, or other technology
- Other technology must notify PHMSA 90 days in advance
- Repair any coating damage classified as severe within 6 months after in service or no later than 6 months after permits
- Technical correction issued 4/24/23

# Transmission Rule

---

## Monitoring and remediation §192.465

- Promptly correct any deficiencies indicated by tests
- Must develop remedial plan and apply for permits within 6 months
- Remedial action completed promptly, no later than next inspection cycle – 1 calendar year, or 6 months after permits
- Must determine extent of the area of inadequate CP
- Investigate and mitigate non-systemic causes
- Conduct CIS to address systemic causes

# Transmission Rule

---

## Interference Currents §192.473

- Transmission lines must investigate stray currents though co-located pipelines, structures, high voltage lines
- Remedial plan where interference current  $\geq 100$  amps per meter squared alternating current, or impedes the safe operation, or adversely impact environment or public safety
- Technical correction issued 4/24/23



# Transmission Rule

---

## Internal Corrosion §192.478

- Transmission lines with corrosive gas must develop and implement a program to mitigate the corrosive effects of:
  - Carbon dioxide, hydrogen sulfide, sulfur, microbes, water
- Internal corrosion plan must include gas monitoring, technology to mitigate corrosion such as inhibitors, cleaning, separators, annual review



# Transmission Rule

---

## Continuing Surveillance - §192.613

Within 72 hours of the end of an event such as natural disasters or extreme weather events operator must inspect facilities to detect conditions that could adversely affect the safe operation of the pipeline

Prompt and appropriate remedial action such reducing pressure, shutting in the pipeline, repairing or replacing damaged facilities, additional patrols, implementing emergency response activities

# Transmission Rule

---

Repair and Remediation - §§192.711, 192.714

Establish time frames for evaluation, remediation and repairs of certain conditions in non-HCA areas

Calculate predicted failure pressures of anomalies, follow schedule in B31.8S

Immediate repairs, two year conditions, and monitored conditions

Must perform in situ direct examination for crack like defects,

# Transmission Rule

---

Remaining Strength and critical strain levels - §§192.485, 192.712

- §192.712 – Analysis of predicted failure pressure and critical strain levels
- Requires analysis of metal loss, calculate remaining strength for corrosion anomalies
- Dents and mechanical damage must perform engineering critical analysis
- Cracks – must determine predicted failure pressure using proven fracture mechanics model

# Transmission Rule

---

## IM Changes

- §§192.911, 192.917, 192.923, 192.927, 192.929, 192.933, 192.935, and 192.941 (low stress reassessments)
- Additional data to collect and assess and integrate into threat identification and risk assessment
- Most are adding NACE standards to direct assessment sections

# **NPRM – Leak Detection**

---

Part 191 – change incident definition and added large volume reporting, NPMS reporting for gathering

Part 192 changes include

- Add definitions for hazardous leaks, LEL, wall to wall pavement
- Requirements for blow down locations and to minimize release
- Leak grades and leak inspection requirements with advanced leak detection equipment
- Transmission patrolling 12 times a year

# **NPRM – Leak Detection**

---

Proposed changes to gathering lines

- NPMS
- Adding requirements for O&M manuals for Type B and C lines
- Emergency manuals for Type B
- Configure relief devices for proper operation and minimize releases



# **Safety of Gas Distribution Pipelines (RIN: 2137-AF53)**

---

- Addresses Leonel Rondon Act within the PIPES Act of 2020
- Major topics under consideration
  - Sections 202; 203; 204 and 206 – DIMP Plans, Emergency Response Plans, Records, presence of qualified employees, safety of district regulator stations, operations and maintenance
- Transmitted to DOT Secretary on 2/14/23
- Next action: 2023 NPRM





# Pipeline Operational Status

## (RIN: 2137-AF52)

---

- Idled Pipelines
- PIPES Act of 2020 defines an “idled pipeline”
  - Will not resume service in 180 days
  - Has been isolated from all sources of hazardous liquid, natural gas and has been purged.
- API RP 1181; addresses idled pipelines
- Next action: 2023 NPRM



# Class Location Change Requirements

---

- NPRM published 10/14/20
- Current Requirements when class locations change
  - Valve spacing for class changes addressed in valve rule
- Major Topics include option of management type approach vs pipe replacement, examination of additional options,
- PIPES Act 2020 mandate to have a GPAC meeting
- Anticipate 2023 Final Rule



# Standards update I and II

---

## ■ Standards Update I

- NPRM published 1/15/2021
- Steel pipe and other steel fittings, API 1104, NFPA. B31.8 and B31.8S

## Standards Update II

- NPRM published 8/29/22;
- ILI, NACE ECDA, plastic pipe and fitting standards updates



# Unusually Sensitive Area (USA) Definition for HL Pipelines

---

- **USA Interim Final Rule** has a comment end date and effective date published on 12/27/2021
- Addresses USAs for Great Lakes, Coastal Beaches and Certain Coastal Waterways
- PHMSA recently updated its National Pipeline Mapping System (NPMS)
  - Updated to show USAs
- Effective date is 2-25-2022, limited stay of enforcement on April 21, 2022
- Waiting on final rule



# **Hazardous Liquid Pipelines Repair Criteria**

---

- This rule was split from original Hazardous Liquid NPRM published on 10/13/2015
- Repairs in HCA and non-HCA areas
- NPRM date and content to be determined
- Next action to publish NPRM



---

# Questions