Washington UTC Pipeline Safety Seminar - DOT PHMSA Update -

National Association of Pipeline Safety Representatives
&
US DOT PHMSA Office of Pipeline Safety
June 6, 2018

PHMSA Organizational Updates

- **Elaine Chao –** USDOT Secretary
- **Skip Elliot** – Administrator
- **Drue Pearce** – Deputy Administrator
- **Howard (Mac) McMillan** – Executive Director
- **Alan Mayberry -** Associate Administrator (OPS)
- **Linda Daugherty** – Deputy Associate Administrator for Operations
- **Vacant** – Deputy Associate Administrator for Policy and Programs

PHMSA Western Region Update

- Western Region Director - Kim West
- 30/90 day Inspection Briefing Report (Exit Interview)
- Inspection Scoping Forms continue to be completed for each PHMSA unit during inspections
- O&M Procedures team inspections taking place across regions (similar to before)
- All Operators MUST be members of one-call programs
- Integrated Inspections continue

Who Regulates Pipelines

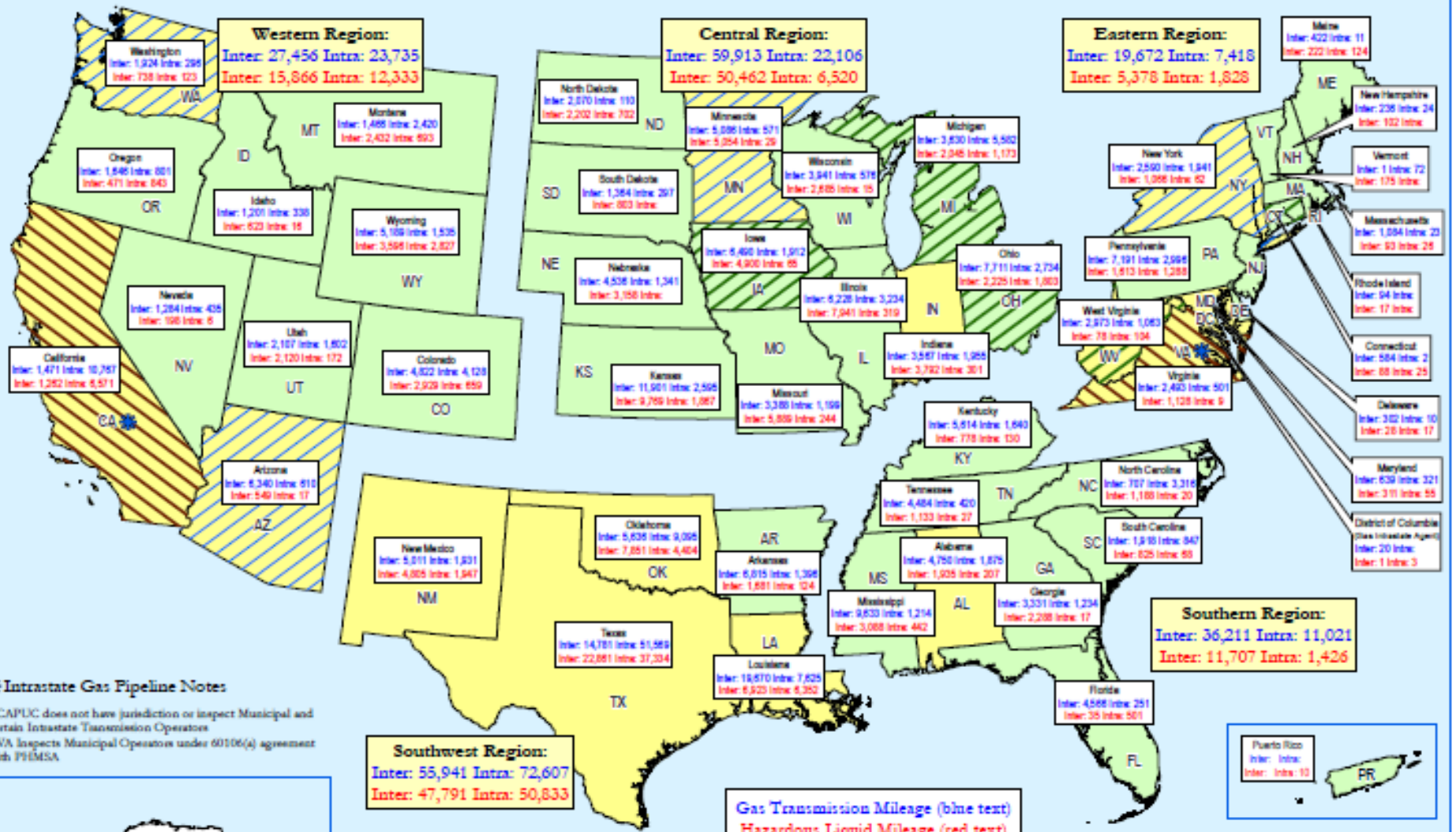
- Individual States
- U.S. DOT PHMSA Office of Pipeline Safety

In Washington:

- WA UTC Regulates **Intrastate** and **Interstate** Gas and Hazardous Liquids Pipelines:
  - Intrastate Gas Pipelines that are within the boundaries of one state (WA)
  - Interstate Gas Pipelines cross the boundaries of a state
  - Municipal gas distribution systems
- PHMSA delegates its Regulatory Authority to WA UTC and handles interstate enforcement cases

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

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



Intrastate Gas Pipeline Notes

- CAPUC does not have jurisdiction or 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 April 2012.

U.S. Department of Transportation
Pipeline and Hazardous Materials Safety Administration
Projection: Albers Equal-Area Conic
Map Produced: April 2012

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

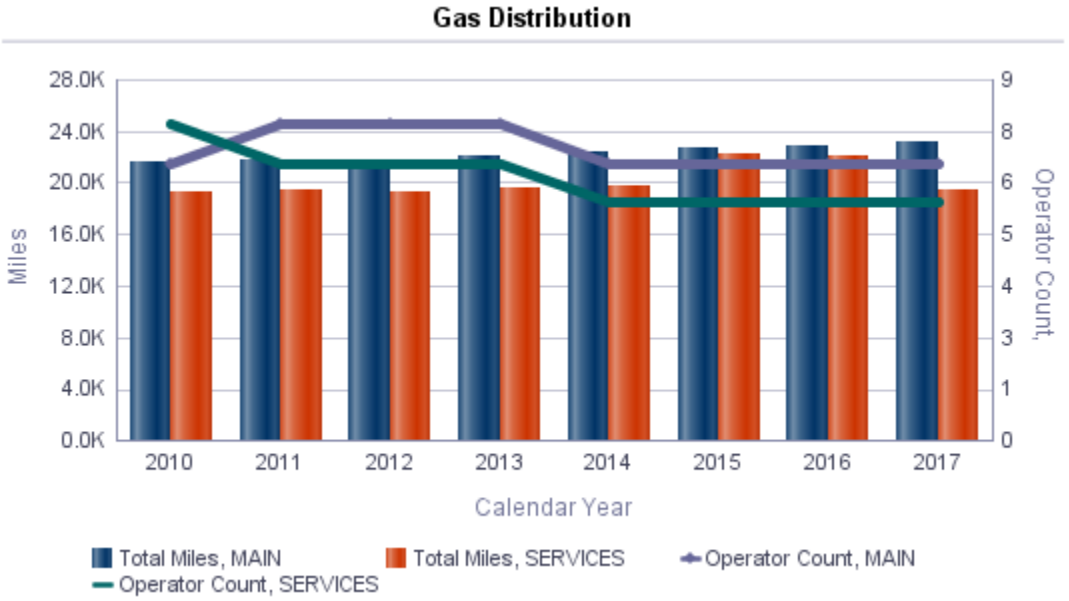
Common Questions from Public

- Who is responsible for approving pipeline routes?
  - Gas – FERC/State
  - Liquid – local County/City and County Commissioners
- Who enforces Encroachment on ROW?
  - Legal agreement between operator and landowner
  - Local county planning departments
- Does PHMSA require operators to clear cut and remove vegetation on the pipeline rights-of-way?
  - Only if an integrity threat
  - PHMSA requires Operators to perform surveillance and leak surveys by any means necessary
- Who handles noise complaints regarding pipeline facilities?
  - PHMSA if noise is related to system integrity
  - Local noise ordinances
  - FERC permit requirements

PHMSA Accident Investigation Division (AID)

- Screens & Evaluates all NRC reports of incidents/accidents
- Conducts Accident Investigations
- Conducts Root Cause Determinations
- Captures and actively shares lessons learned safety finding with internal and external stakeholders.
- Conducts education and outreach to help advance pipeline safety
- Evaluates and identify emerging safety trends

Washington Pipeline Stats



	MAIN		SERVICES		Total Miles	Operator Count
Calendar Year	Total Miles	Operator Count	Total Miles	Operator Count		
2017	23,081.2	7	19,379.6	6	**42,460.8**	**7**
2016	22,855.2	7	22,020.0	6	**44,875.2**	**7**
2015	22,704.3	7	22,166.8	6	**44,871.1**	**7**
2014	22,276.4	7	19,743.0	6	**42,019.5**	**7**
2013	22,069.9	8	19,598.1	7	**41,668.1**	**8**
2012	21,754.3	8	19,281.2	7	**41,035.5**	**8**
2011	21,686.2	8	19,359.7	7	**41,045.9**	**8**
2010	21,576.9	7	19,283.1	8	**40,860.0**	**8**

Washington Pipeline Stats
Gas Transmission

	INTERSTATE				INTRASTATE				Onshore Miles	Offshore Miles	Total Miles	Operator Count
Calendar Year	Onshore Miles	Offshore Miles	Total Miles	Operator Count	Onshore Miles	Offshore Miles	Total Miles	Operator Count				
2017	1,653.5	0.0	1,653.5	4	312.4	0.0	312.4	13	1,965.9	0.0	1,965.9	16
2016	1,653.5	0.0	1,653.5	4	313.5	0.0	313.5	13	1,967.0	0.0	1,967.0	16
2015	1,653.5	0.0	1,653.5	4	313.7	0.0	313.7	13	1,967.2	0.0	1,967.2	16
2014	1,653.4	0.0	1,653.4	4	242.3	0.0	242.3	13	1,895.7	0.0	1,895.7	16
2013	1,653.0	0.0	1,653.0	4	242.8	0.0	242.8	13	1,895.8	0.0	1,895.8	16
2012	1,656.4	0.0	1,656.4	4	268.8	0.0	268.8	13	1,925.2	0.0	1,925.2	16
2011	1,656.2	0.0	1,656.2	4	269.4	0.0	269.4	13	1,925.5	0.0	1,925.5	16
2010	1,655.2	0.0	1,655.2	4	288.4	0.0	288.4	13	1,943.5	0.0	1,943.5	16

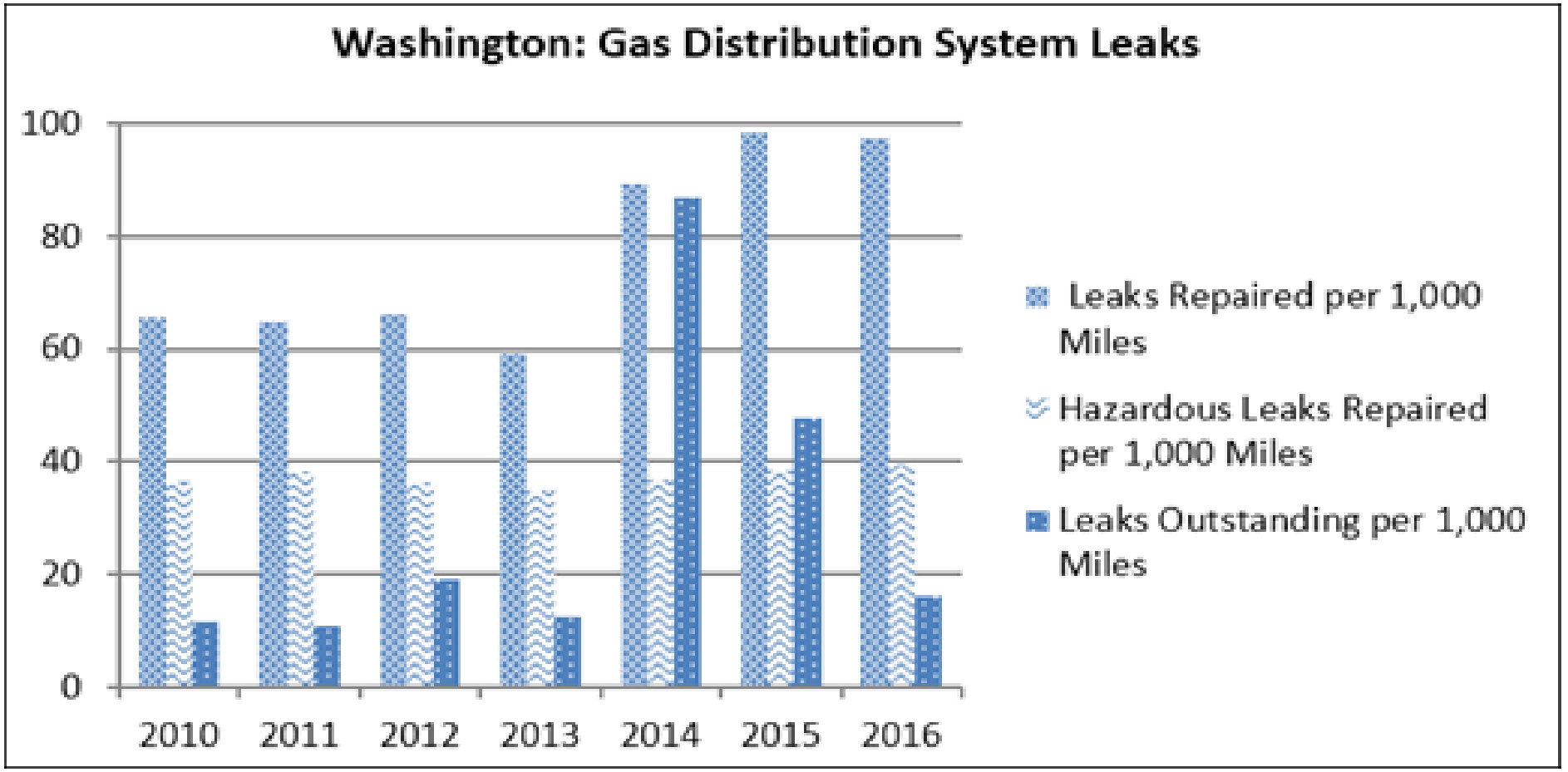
Washington Pipeline Stats
Hazardous Liquid Transmission

	INTERSTATE				INTRASTATE							
Calendar Year	Total Miles	Miles of Gathering	Total Breakout Tanks	Operator Count	Total Miles	Miles of Gathering	Total Breakout Tanks	Operator Count	Total Miles	Miles of Gathering	Total Breakout Tanks	Operator Count
2016	726.2	0.0	57	5	80.4	0.0	26	7	806.6	0.0	83	11
2015	725.7	0.0	58	5	80.2	0.0	26	7	805.9	0.0	84	11
2014	727.6	0.0	60	5	75.2	0.0	23	7	802.7	0.0	83	11
2013	708.5	0.0	59	5	74.8	0.0	22	7	783.3	0.0	81	11
2012	728.1	0.0	59	5	72.1	0.0	22	6	800.2	0.0	81	9
2011	728.1	0.0	60	5	72.1	0.0	20	6	800.1	0.0	80	10
2010	725.6	0.0	54	4	72.0	14.0	26	7	797.6	14.0	80	10

Leak Management - Distribution

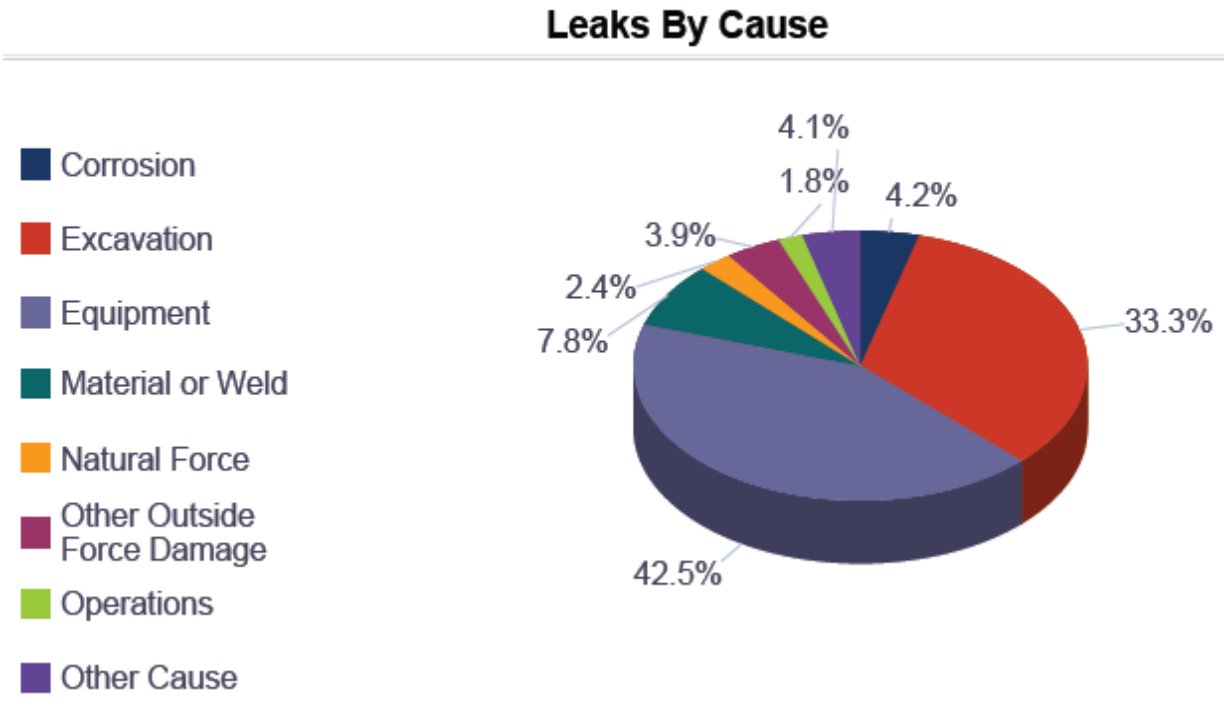
Leak management provides an overview of the status of gas systems

- Total number of leaks repaired per mile
- Total number of hazardous leaks repaired per mile
- Total leaks scheduled for repair per mile



Calendar Year 2017

Washington Pipeline Stats



Gas Distribution Leaks by Cause

Time run: 4/21/2018 8:59:27 PM

SMART Data as of **4/18/2018 6:43:10 PM**
Portal Data as of **4/19/2018 3:25:10 AM**

Geo Region: (All Column Values) Geo State: WASHINGTON

Leak Cause	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Corrosion	353	285	360	210	174	148	173	189	153	139	143	155	162
Natural Force	7	24	264	74	134	62	68	47	52	70	79	54	94
Equipment	1,201	514	993	1,021	390	476	511	598	504	670	492	636	1,648
Material or Weld	109	226	264	216	246	316	309	301	238	335	332	304	301
Excavation	2,602	2,559	2,079	1,842	1,342	1,083	1,088	1,055	1,093	1,112	1,289	1,310	1,290
Operations	0	12	17	52	85	71	74	77	60	103	154	76	68
Other Outside Force Damage	6	11	15	99	84	124	98	121	96	109	100	124	153
Other Cause	394	808	324	407	1,255	402	337	325	271	1,218	1,822	1,753	159

Trends in Gas Distribution Leaks by Cause - State or Region Specific data -

Geo Region: WESTERN Geo State: WASHINGTON

Gas Distribution Hazardous Leaks by Cause

Time run: 4/22/2018 12:17:47 PM

Portal Data as of **4/19/2018 3:25:10 AM**

Geo Region: WESTERN Geo State: WASHINGTON

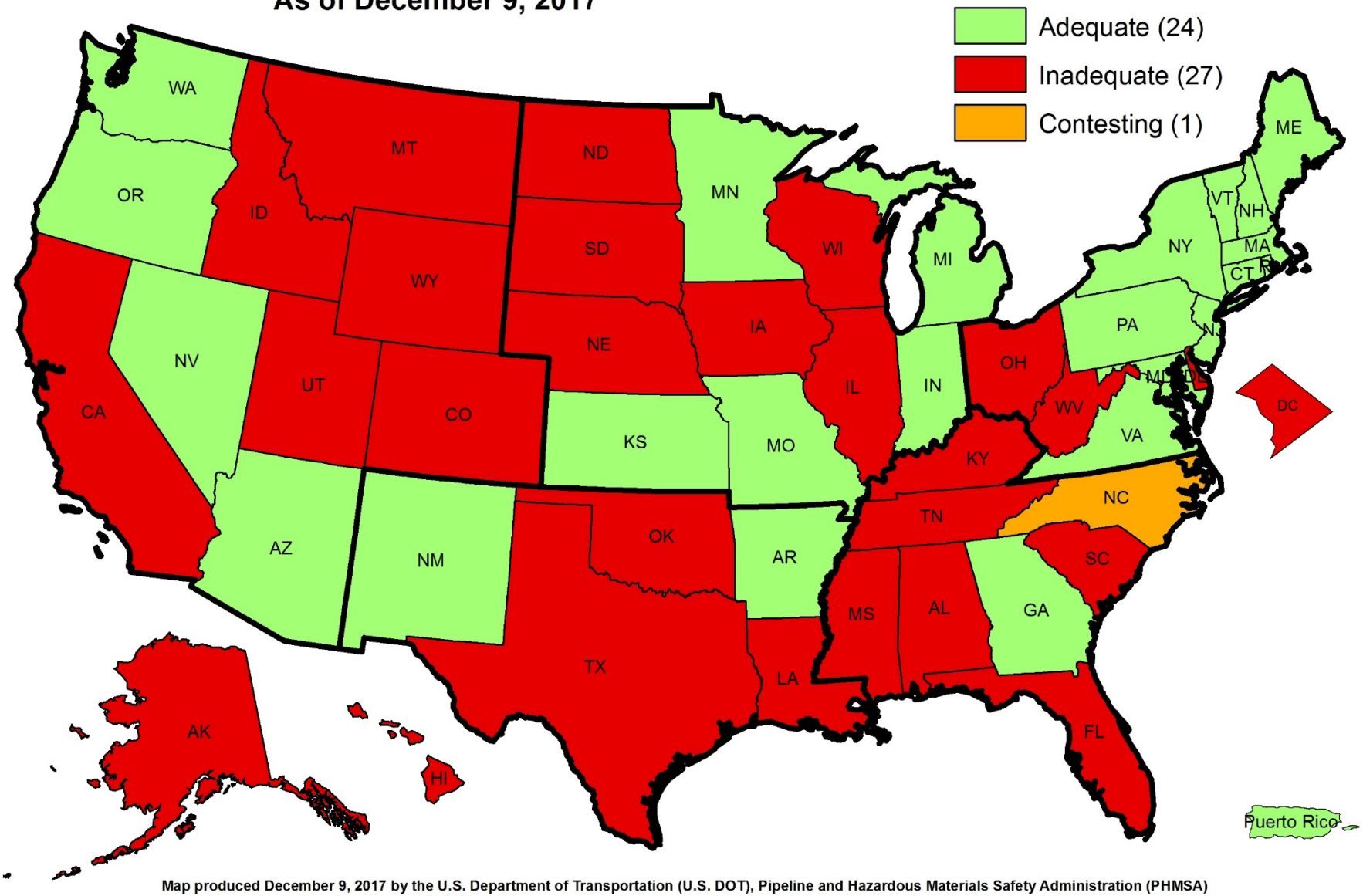
Leak Cause	2010	2011	2012	2013	2014	2015	2016	2017
Corrosion	75	70	66	48	50	51	42	44
Natural Force	32	47	33	35	34	54	35	60
Equipment	71	110	87	53	70	33	66	104
Material or Weld	135	137	119	114	117	114	119	106
Excavation	917	949	982	1,039	1,086	1,226	1,279	1,254
Operations	37	31	26	30	31	24	27	27
Other Outside Force Damage	80	68	91	87	98	83	105	125
Other Cause	142	157	85	44	61	145	117	49

State Excavation Damage Evaluation Criteria

- State have enforcement authority with civil penalties and use it?
- Have a reliable means of learning about damages?
- State require:
  - Excavators must call 811 before digging
  - Excavators must “respect the marks”
  - If damage to a pipeline occurs…
    - Excavator must report damage to operator at earliest practical moment
    - If release occurs, excavator must call 911
- Are exemptions from the DP law limited? Written justification of exemptions is required.

Adequacy of One-Call Law Enforcement Programs

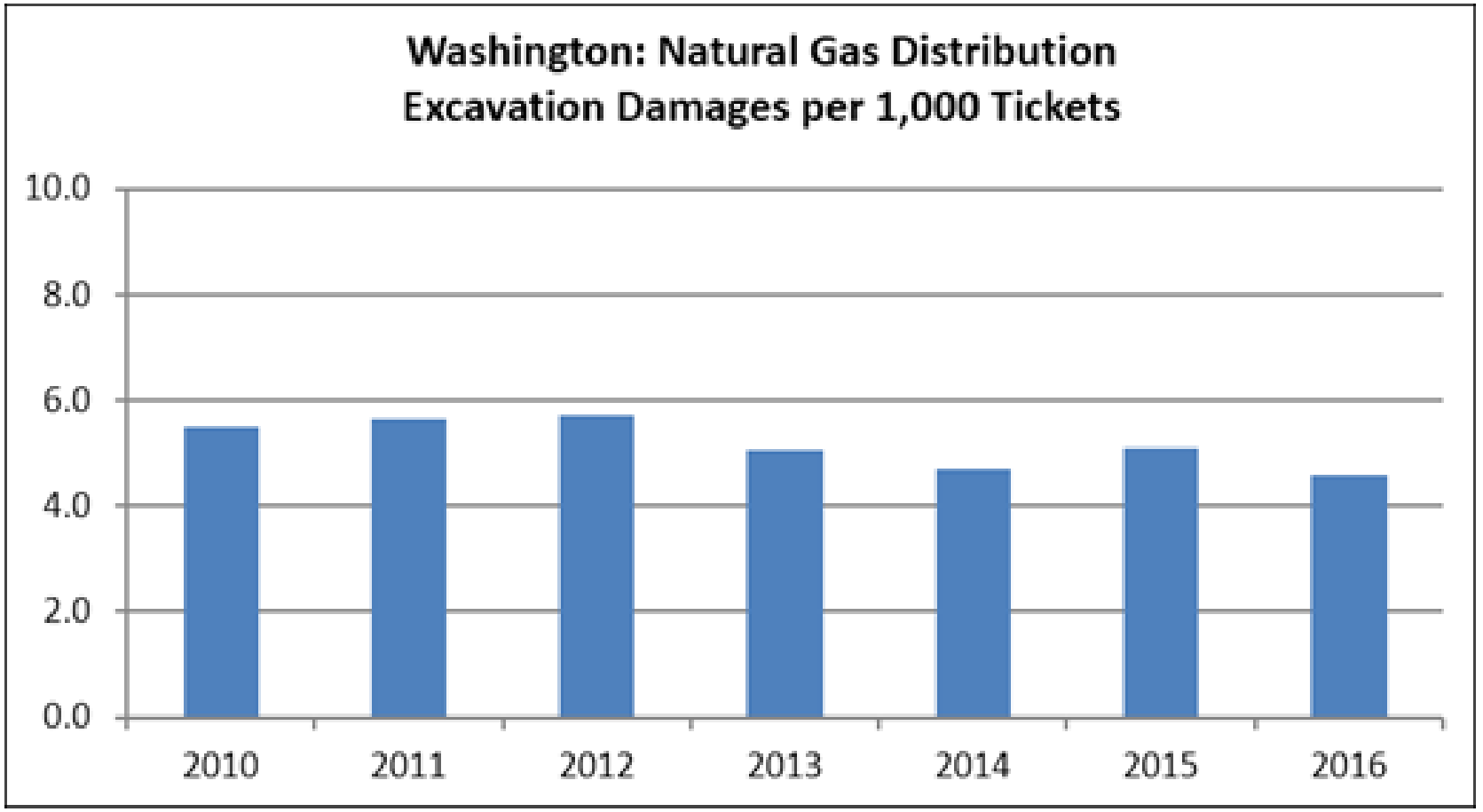
As of December 9, 2017



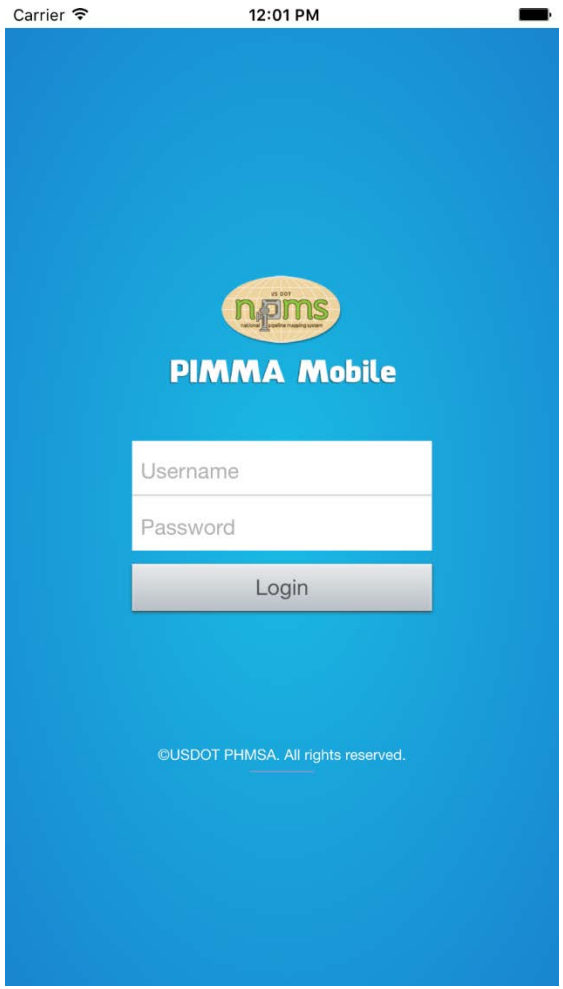
Map produced December 9, 2017 by the U.S. Department of Transportation (U.S. DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA)

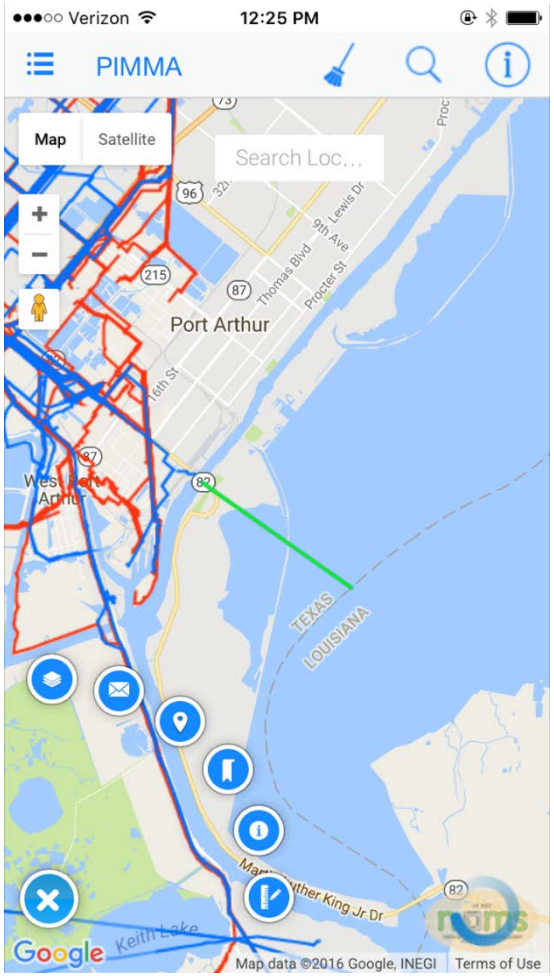
Map provided as a reference only. PHMSA makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to this map for any purpose. PHMSA expressly disclaims liability for errors and omissions in the contents of this map.

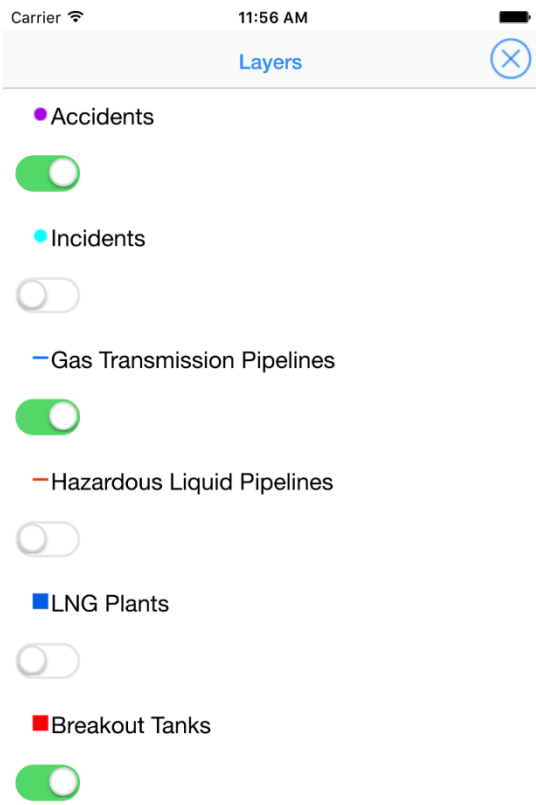
Washington Pipeline Stats



PIMMA iPhone app: search “pipeline information” in app store





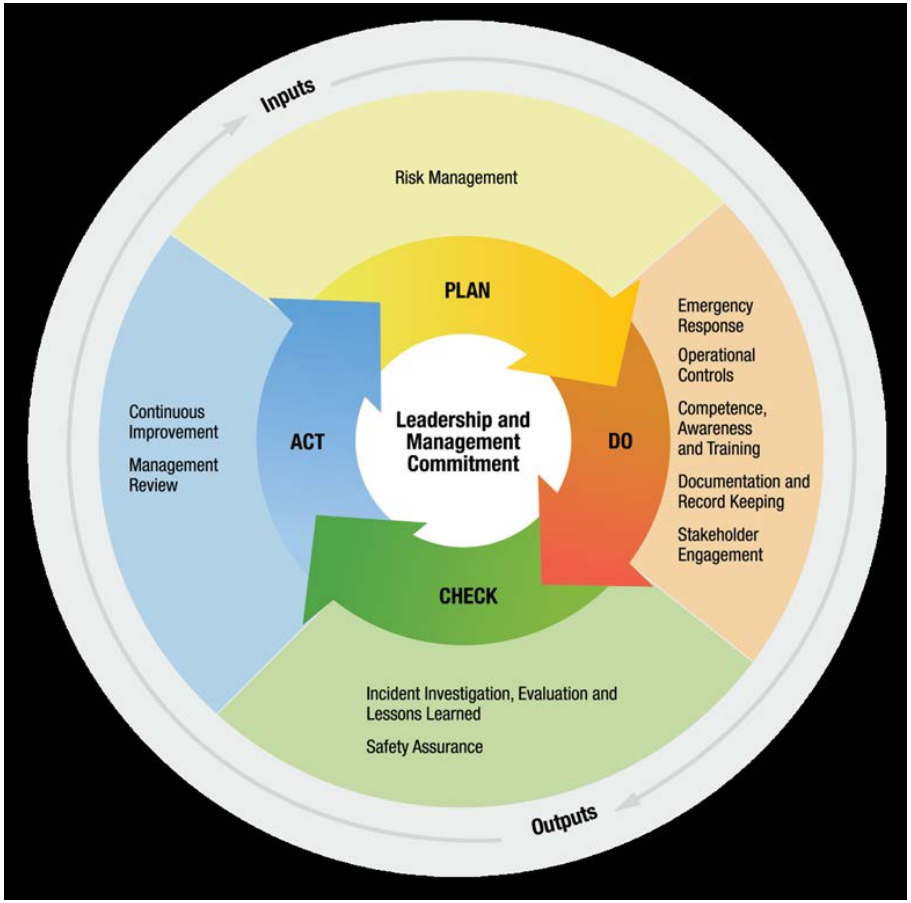


Safety Management Systems (SMS) PHMSA's Regulatory Expectations

- PHMSA does not intend to incorporate API RP 1173 by reference into the federal regulations. However, we are one bad accident away from Congress mandating SMS.
- As part of corrective actions following an incident or safety investigation, PHMSA may "order" a company to implement a SMS.
- Volunteer, Non-Punitive Pilot Audits.
- All SMS standards have very similar requirements. PHMSA does not care which flavor of SMS you choose.
- SMS and OSHA's PSM are not the same.
- SMS focuses more on organizational leadership and commitment, stakeholder engagement, safety culture and continuous learning.

Pipeline Operators, No Matter Their Size, Can Benefit From a PSMS

- PSMS is centered around Safety Leadership at ALL levels and Management Commitment.
- PSMS fosters and requires continual improvement.
- Learn from other industries:
  - https://www.youtube.com/playlist?list=PL4wHDsuQ-uKm7Mz20uvkeagVu2u_Cro6o
  - Search PHMSA + SMS



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Publicly Available Information on the Status of Rulemakings

Final Active Rules:

- www.phmsa.dot.gov/regulations-fr/rulemaking

Proposed Rules:

- www.reginfo.gov
  - Unified Agenda
    - Current Unified Agenda and Regulatory Plan
  - Select Agency Department of Transportation
  - Scroll down to DOT/PHMSA for a list of rules with links

Recently Issued Final Rules

Reminder

- *The following PHMSA regulatory updates are simply an overview*
- *Details can be found in the Federal Register postings*
- *https://www.phmsa.dot.gov/regulations-and-compliance*

Random Drug Testing Rate

- Effective Date: CY 2018 (Docket No: PHMSA–2018–0137)
- Raised to 50% random test rate (up from 25%)
- PHMSA Drug & Alcohol Program Manager: Wayne.Lemoi@dot.gov

Addition of Certain Schedule II Drugs (OPIOIDS)

- Effective Date: January 1, 2018 (Docket No: DOT–OST–2016–0189)
- Past 5 drugs tested: marijuana, cocaine, amphetamines, PCP, & opiates
  - Opiates include: codeine, morphine, and heroin
- OPIOIDS (pain killers) are synthesized from natural opiates.
- Effective 1/1/2018 DOT drug tests include the four semi-synthetic opioids:
  - Oxycodone, Oxymorphone, Hydrocodone, and Hydromorphone

Recently Issued Final Rules
Excess Flow Valves (EFV) for Multi-Residential and Commercial Applications

- Effective Date: April 14, 2017 (Docket No: PHMSA-2011-0009)
- § 192.383(b) Operators must install an EFV on new or replaced service lines that:
  - Branch to an Single Family Residence
  - Serve multifamily residences where the known load is ≤ 1,000 SCFH
  - Serve single, small commercial customers where the known load is ≤ 1,000 SCFH
    - Exceptions: < 10 psig, contaminants in gas stream, interference with O&M activities, EFV unavailable
- § 192.383(d) Existing customers have a right to request EFV installation
- § 192.383(e) Operators must notify customers of their right to request EFVs & this notice must be available for PHMSA inspection
- § 192.385(b) Each operator must install either a manual shut-off valve or, if possible and based on sound engineering analysis, an EFV, on new or replaced service lines > 1,000 SCFH
- § 192.385(c) Manual shut-off valves must be installed to allow accessibility during emergencies & are subject to maintenance consistent with the valve manufacturer's specification

Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Changes

- Effective Date: March 24, 2017 (Docket No: PHMSA-2013-0163)
- Specifies an operator's **accident and incident** reporting time to **within 1 hour**.
- Sets up a **cost recovery** fee structure for design review of new gas and hazardous liquid pipelines.
- Provides a renewal procedure for expiring **special permits**.
- Excludes **farm taps** from the DIMP requirements.
  - Under §192.740, Farm taps **must** be inspected and tested at least once every 3 calendar years
- Requires pipeline operators to report to PHMSA permanent **reversal of flow**.
- Provides methods for **assessment tool** selection by incorporating consensus standards by reference in part 195 for stress corrosion cracking direct assessment.

Recently Issued Interim Final Rule
Safety of Underground Natural Gas Storage Facilities

- Effective Date: January 18, 2017 (Docket No: PHMSA-2016-0016)
- Operators of underground natural gas storage facilities must submit 4 reports:
  - Annual reports (2017 due in March 2018)
  - Incident reports
  - Safety-related condition reports
  - National Registry information
- Incorporates by reference
  - API RP 1170, “Design and Operation of Solution-mined Salt Caverns used for Natural Gas Storage” (July 2015), and
  - API RP 1171, “Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs” (September 2015).

PHMSA Rules in Progress

- Pre-Rule Stage - Class Location Requirements 2137-AF29
- Proposed Rule Stage - Amendments to Parts 192 and 195 to Require Valve Installation and Minimum Rupture Detection Standards 2137-AF06
- Proposed Rule Stage - Standards Update Rule--2015 and Beyond 2137-AF13
- Final Rule Stage - Safety of Hazardous Liquid Pipelines 2137-AE66
- Final Rule Stage - Gas Transmission 2137-AE72
- Final Rule Stage - Issues Related to the Use of Plastic Pipe in Gas Pipeline Industry (RRR) 2137-AE93
- Final Rule Stage - Underground Storage Facilities for Natural Gas 2137-AF22
- Final Rule Stage - Enhanced Emergency Order Procedures 2137-AF26

Pre-Rule Stage – Pipeline Safety

- Class Location Requirements RIN 2137-AF29
  - Seeking comments on alternatives to current class location requirements
  - Next step: ANPRM

Proposed Rule Stage – Pipeline Safety

- Amendments to Parts 192 and 195 to Require Valve Installation and Minimum Rupture Detection Standards RIN 2137-AF06
  - Define rupture, outline performance standards for isolation
  - specific valve maintenance and inspection requirements, and 9-1-1 notification
  - Next step: NPRM
- Standards Update Rule--2015 and Beyond RIN 2137-AF06
  - Update references to standards
  - Next step: NPRM

Common Topics Between PHMSA and Docket Comments

- Regulatory Reform rulemaking topics
  - Plastic pipe operational limits
  - Class location and MAOP
  - Farm taps
  - Boiler pressure vessel code safety factors
  - API 653 risk-based inspections
  - Update IBR's – phased approach
  - Reporting thresholds and information collection activities

Hazardous Liquid Rule – Final Rule

- Revisiting "pulled back" final rule
  - Can only look at items related to the 2015 NPRM
- Major topic still under consideration:
  - Assessments beyond HCAs
    - Transmission/regulated gathering assessments
  - Repair criteria in HCAs and non-HCAs
  - Pig ability of lines in HCAs - timeline
  - Reporting requirements for gathering lines
  - Reporting requirements for gravity lines

Gas Transmission final rule / GPAC update

- Gas rule will be finalized by breaking it into three separate rulemakings

1. Congressional mandates including MAOP reconfirmation, related MAOP requirements, material documentation, records, and assessments outside HCAs
2. Repair criteria, strengthen assessment methods, IM clarifications
3. Gas gathering – GPAC meeting in 09/2018

Questions and Comments?

Thank you for your participation in Pipeline safety!