



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



PHMSA
Your Safety
Our Mission

Underground Natural Gas Storage

**Southern Gas Association
August 01, 2018**

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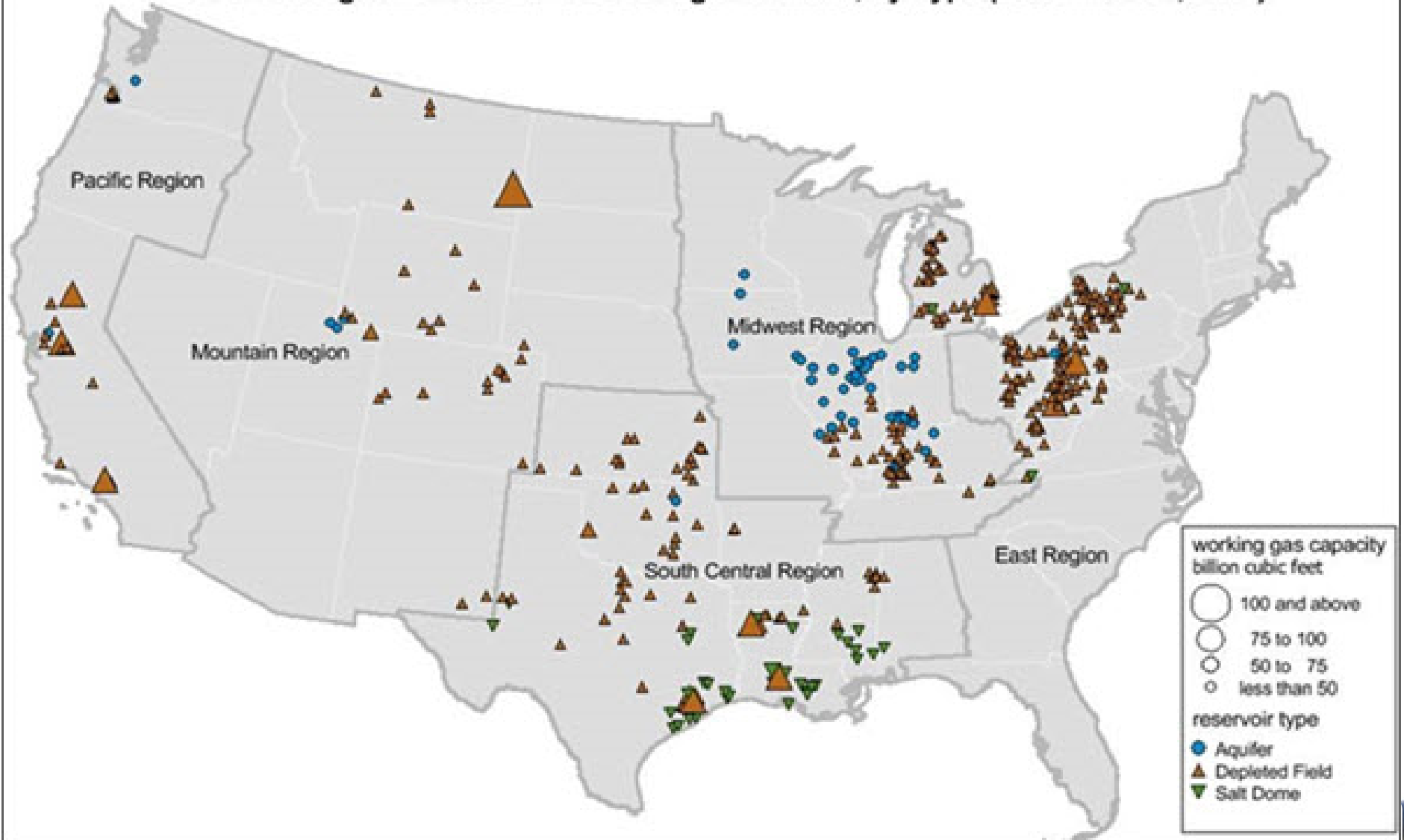


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“To protect people and the environment by advancing the safe transportation of energy and other hazardous materials that are essential to our daily lives.”



U.S. Underground Natural Gas Storage Facilities, by Type (December 31, 2015)



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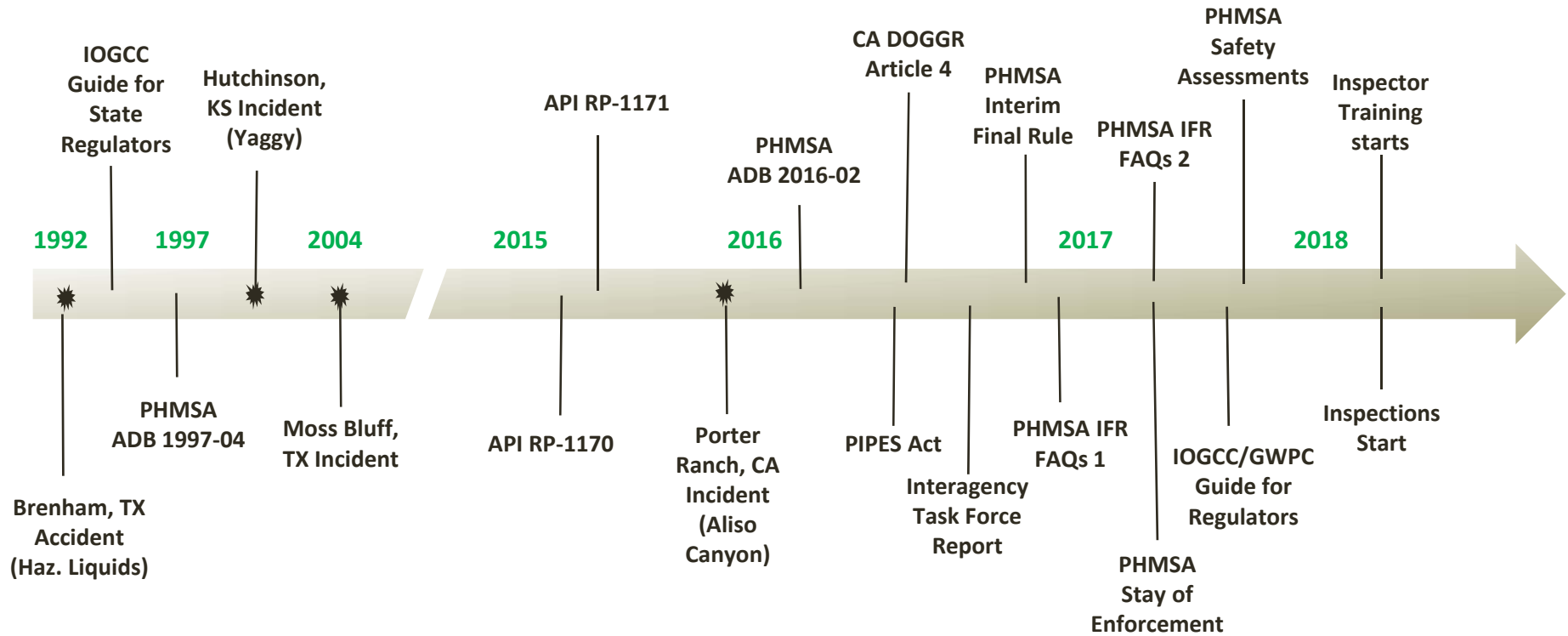
General Statistics

- 128 Operators
- 4800 BCF Working Capacity
- ~390 Storage Fields, Split Inter/Intra
- 85% Reservoir-Aquifer, 15% Salt Domes
- 17000 Wells
- Tally based on EIA Information
- First Annual Reports were due March 15, 2018

- ~12% increase in PHMSA inspection burden



Timeline of Significant Events



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Pipes Act of 2016

- Protecting our Infrastructure of Pipelines and Enhancing Safety, Section 12
- Establish regulations and inspection program for Underground Natural Gas Storage
- Develop inspection criteria and related training for both federal and state inspectors
- Interagency Task Force
 - Well Integrity, Public Health, Energy Supply



Interim Final Rule

- Docket No. PHMSA-2016-0016
- Published December 19, 2016
- Effective January 18, 2017
- General Compliance January 18, 2018



States Statistics

---- Top 10 States ----

- UGS facilities in 31 States
 - 25 with intrastate assets
 - 6 with only interstate assets

Number of Storage Facilities

1. Pennsylvania
2. Michigan
3. Texas
4. Illinois
5. West Virginia
6. New York
7. Kentucky
8. Ohio
9. Indiana
10. Louisiana

Combined Working Gas Capacity

1. Michigan
2. Texas
3. Louisiana
4. Pennsylvania
5. California
6. Illinois
7. West Virginia
8. Ohio
9. Mississippi
10. Montana



States Participation

- State Regulators mostly not the agencies responsible for topside pipelines
- Similar, but separate Program, for State Partners
- States in initial 2018 Partnering Program
 - Certification : AR, MN, PA
 - Agreement : CA, IL, KS
- Other states expected to join



UGS Inspection Program, Initial Conditions

- ~ 390 facilities requiring inspection
- 6 States participating in 2018, with ~62 intrastate facilities
- More states may participate in future years
- ~ 330 facilities currently within federal inspection responsibility
- Nationalized Team inspections, no region boundaries
- States invited to observe PHMSA inspections
- Initial inspection of all facilities within 5 years



Number of Facilities by PHMSA Region Based on PHMSA and State Partners in 2018

Region	PHMSA Responsibility			States Responsibility	
	Interstate Facilities	Intrastate Facilities	Total	Intrastate Facilities	Agent States
Eastern	114	0	114	10	PA
Central	49	44	93	29	KS, IL, MN
Southwest	22	36	58	9	AR
Western	19	12	31	14	CA
Southern	17	16	33	0	
Totals	221	108	329	62	



Initial Regulatory Inspections

- Initial inspections by PHMSA or States
- Based on Interim Final Rule, less Stay of Enfr.
- Focus on written procedures and implementation plans
- General Compliance Date : January 18, 2018
- Inspections started in March-2018



Inspection Questions

- Shared with operator prior to start of inspection
- To be generally published in August
- An inspection :
 - Would include those questions appropriate for the type and characteristics of the specific facility
 - May be specialized, focusing on only certain topical areas



Operators demonstrate compliance through inspections

- Question set will guide inspection thoroughness in each topical area
- Inspections will be a blend of traditional OM&E and framework of integrity programs
- More detailed IM inspection content is forthcoming
- Discussion between Inspectors and Operator personnel is expected, but those discussions need to be supported by procedures, documented analysis and records
- Some time will be spent on field observations



Wide variability of operating practices in the storage industry

- Regulations are objectives to be achieved by the Operator through programs, procedures, records
- These regulations are generally performance-based requirements
- Operators are expected to personalize their programs to site-specific equipment, history, operating and environmental conditions



Risk Analysis & Assessments

- Account for a realistic assortment of factors
- Defensible choice of risk factors
- Unknown or missing information raises risk
- Scope of risks broader than facility history
- Observable field conditions do not contradict
- Preserve the importance of consequences



Frequently Asked Questions

- Clarify, explain, and promote better understanding
- Often tied to a specific application as an example
- Help the public understand how to comply
- If an operator's practice is aligned with the FAQ, then compliance is likely attained
- If an opposing course of action is taken, the operator could expect questions during an inspection



Final Rule in Development

- Take broad assortment of comments into consideration
- Will account for the final disposition of non-mandatory aspects of the RPs
- Interim Final Rule in play until the content and effective date of the Final Rule are issued



What's next for the remainder 2018 and 2019 ?

- 2018
 - Transition from Word Inspection Form to Inspection Assistant
 - Compliance Cases begin, and are posted
 - Inspector Training
 - State Tag-Alongs
- 2019
 - Integrity Management requirements kick in
 - Final Rule
 - Revised FAQs
 - Revised Inspection Questions with IMP Content
 - Sustained TQ classes
 - Public Workshop & start of Annual UGS Conference



PHMSA : Web Links

- <http://opsweb.phmsa.dot.gov>
 - Operator Notifications
 - Event Reporting
- <https://primis.phmsa.dot.gov/ung/index.htm>
 - Major Incidents
 - Key Documents
 - FAQs
 - Locations Map



Contact Information

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