

**U.S. DOT  
Pipeline and Hazardous Materials  
Safety Administration**

**PHMSA Rulemaking Update**

**2017 South Dakota/North Dakota/Wyoming  
Pipeline Safety Conference**

**Thursday, March 30, 2017**

**8:00-9:00 AM**



# Today's Agenda

- **PHMSA Update**
- **PHMSA Rulemaking**
- **PHMSA Advisory Bulletins**



# 2017: What is happening

**Rulemaking action continues**

**Covering all Congressional mandates /  
NTSB recommendations**

**Significant policy development underway:**

**Integrity Verification Process for HL and  
GT pipelines**

**LNG; small scale applications to fuel  
transportation**

**Reauthorization completed**

**Recruiting, developing and retaining people**



# Rulemaking

- Excavation Damage Prevention **(Final Rule Complete)**
- Miscellaneous Rulemaking **(Final Rule Complete)**
- EFV Expansion beyond Single Family Residences **(FR)**
- Operator Qualification, Cost Recovery and Other Pipeline Safety Proposed Changes **(Final Rule)**
- Underground Storage Facilities for Natural Gas **(IFR)**
- Safety of On-Shore Hazardous Liquid Pipelines **(NPRM – Final Rule retracted for review)**
- Plastic Pipe **(NPRM)**
- Safety of Gas Transmission and Gathering Lines **(NPRM)**
- Rupture Detection and Valve Rule **(NPRM)**

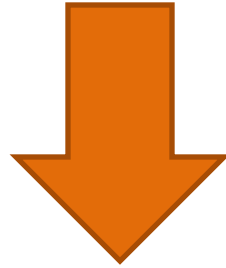


# Other Regulatory Developments

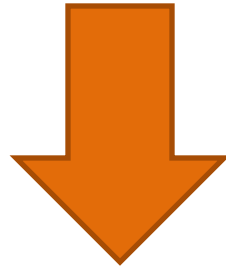
- **NPMS Information Collection Activity**
- **Advisory Bulletins:**
  - **Reversals, Product Changes, Conversions**
  - **Use of metrics in measuring IMP effectiveness**
  - **Construction Notification**
  - **Hurricane Preparation and Damage**
  - **More to come from responses to NTSB Gas IM Safety Study**



Gas NPRMs can be found here



**FEDERAL REGISTER**  
The Daily Journal of the United States Government



or linked on the PHMSA website

# PHMSA Website Locations for Regulatory Status

Interpretations (Search by date or regulation)

<http://www.phmsa.dot.gov/pipeline/regs/interps>

Special Permits and State Waivers

<http://www.phmsa.dot.gov/pipeline/regs/special-permits>

Rulemakings (tabular with links to detail)

<http://www.phmsa.dot.gov/pipeline/regs/rulemaking>

Advisory Bulletins (tabular with links to detail)

<http://www.phmsa.dot.gov/pipeline/regs/advisory-bulletin>

And more ....





# PHMSA Technical Advisory Committee Meeting

- <http://www.phmsa.dot.gov/pipeline/june1-to-june3-2016-gas-liquid-and-joint-committee-meetings>
- **DATES:** Currently, the committees will meet as follows:
  - Wednesday, June 1, 2016, from 1:00 p.m. to 5:00 p.m., ET – GPAC only
  - Thursday, June 2, 2016, from 8:30 a.m. to 5:00 p.m., ET – Joint Meeting (GPAC/LPAC)
  - Friday, June 3, 2016, from 8:30 a.m. to 12:30 p.m., ET. – LPAC only
- **Key Gas Topics from June meeting included:**
  - Plastic Pipe Proposed Rule
  - Operator Qualification Proposed Rule
  - Gas Transmission and Gas Gathering Proposed Rule





## June 1-3, 2016 - Gas, Liquid and Joint Committee Meetings

### Related Downloads

**Pipeline Safety:** Meeting of the Gas Pipeline Safety Advisory Committee and the Liquid Pipeline Safety Advisory Committee

**Register here:** <https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=113>

### Meeting Details and Agenda

The Pipeline and Hazardous Materials Safety Administration will hold meetings of the GPAC and LPAC. The GPAC will be considering and voting on the notice of proposed rulemaking (NPRM) titled: Pipeline Safety: Plastic Pipe Rule (80 FR 29263; May 21, 2015), and in a joint meeting of the GPAC and LPAC, members will consider and vote on the NPRM titled: Pipeline Safety: Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Pipeline Safety Proposed Changes (80 FR 39916; July 10, 2015). Other topics of discussion will include the regulatory agenda and agency and stakeholder priorities. A briefing on the NPRM, titled: Pipeline Safety: Safety of Gas Transmission and Gathering Pipelines (81 FR 20722; April 8, 2016), will also be presented to both committees and the public.

The agenda will be published to include committee discussions and votes on the two rules mentioned above. PHMSA staff will also brief the committees on several regulatory and policy initiatives.

**DATES:** The committees will meet as follows:

- o Wednesday, June 1, 2016, from 1:00 p.m. to 5:00 p.m., ET – GPAC only

- [Final Agenda - June 1-3, 2016 - Gas and Liquid Advisory Committee Meeting](#)
- [Member Portfolio - rosters, charters, NPRMs, RIAs, comment summaries and more](#)
- [Plastic Pipe Presentation](#)
- [Operator Qualification Presentation](#)
- [SMS Briefing](#)
- [Public Outreach - Bridging Divide](#)
- [NAS PBSR Study](#)
- [Gas Transmission NPRM](#)

## Gas Pipeline Advisory Committee (GPAC) on January 11-12, 2017

### **\*\*Notice\*\***

The Pipeline and Hazardous Materials Safety Administration will hold a public meeting of the Technical Pipeline Safety Standards Committee, also known as the Gas Pipeline Advisory Committee (GPAC) on January 11-12, 2017 (previously scheduled for December 5 & 6). The meeting will take place from 8:30 a.m. to 5:00 p.m. The GPAC will be discussing the proposed rule, "Safety of Gas Transmission and Gathering Pipelines" published in the Federal Register on April 8, 2016, (81 FR 20722), and the associated regulatory analysis.

The meeting will be held at the Hilton Arlington, 950 North Stafford Street, Arlington, VA. Additional information regarding hotel and meeting registration and the agenda will be published on the following pipeline advisory committee meeting and registration page: <https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=121>. The meetings will not be web cast.

# VISS (ILI Data Sharing) Committee

- PHMSA's Voluntary Information-sharing System (VIS) Working Group is mandated by law, section 10 of the Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016.
- Provide recommendations on the development of a voluntary information-sharing system to encourage collaborative efforts to improve inspection information feedback and information sharing with the purpose of improving gas transmission and hazardous liquid pipeline facility integrity risk analysis.



# <http://www.phmsa.dot.gov/pipeline/regs/technical-advisory-comm/voluntary-information-sharing-system-working-group>

# PHMSA

Pipeline and Hazardous Materials  
Safety Administration

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## Voluntary Information-Sharing System Working Group

### The Voluntary Information-Sharing System Working Group

#### ✚ About the Voluntary Information-Sharing System Working Group

PHMSA's Voluntary Information-sharing System (VIS) Working Group is mandated by law, section 10 of the Protecting our Infrastructure of Pipelines and Enhancing Safety (PIPES) Act of 2016 (Public Law 114-183), the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., App. 2, as amended), and 41 CFR 102-3.50(a). The Secretary of Transportation must convene a working group by December 19, 2016 to consider the development of a voluntary information-sharing system to encourage collaborative efforts to improve inspection information feedback and information sharing with the purpose of improving gas

ABOUT STANDARDS & RULEMAKING

• PIPELINE ADVISORY COMMITTEES

▪ Voluntary Information-Sharing System Working Group

RULEMAKING

SPECIAL PERMITS & STATE WAIVERS

INTERPRETATIONS

ADVISORY BULLETINS

NOTICES



# Risk Modeling Work Group

- The PHMSA Pipeline Risk Modeling Work Group was formed as a follow up to the September 2015 Pipeline Risk Modeling Methodologies Public Workshop.
- The purpose of the group is to provide technical, integrity management and operational input to PHMSA to aid in the development of a pipeline system risk modeling technical guidance document.



<https://primis.phmsa.dot.gov/rmwg/index.htm>



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



## Pipeline Technical Resources

[Return to Pipeline Safety Community](#)

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Alt  
MAOP

Cased  
Crossings  
and GWUT

Class  
Location

CRM

DIMP

Gas IM

HL IM

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Volume  
EFV

Low  
Strength  
Pipe

LNG  
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Underground  
Natural Gas  
Storage

### Risk Modeling Work Group

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The PHMSA Pipeline Risk Modeling Work Group was formed as a follow up to the September 2015 Pipeline Risk Modeling Methodologies Public Workshop. The purpose of the group is to provide technical, integrity management and operational input to PHMSA to aid in the development of a pipeline system risk modeling technical guidance document.

PHMSA is seeking a wide range of input and consensus as part of the development of this technical guidance, both from within, and from applicable stakeholders. This work group provides a forum to obtain the combined perspective of industry, regulators, public, and risk services providers, and will also provide a mechanism for eventual public input/comment.

Note: The scope of the work group is specifically limited to risk modeling. This effort is not intended to address the broader topic of overall risk management of pipeline operations, such as safety management systems (SMS) or comprehensive integrity management programs, that are separately covered by other Industry developed standards and recommended practices.

- Regulations
- Advisory Bulletins
- Interpretations

# Current Rulemakings in Process







# Current Rulemakings in Process

## **PIIPES ACT of 2016**

- ❑ Signed by the President on June 22, 2016
- ❑ Contains a number of mandates - those related to rulemakings are:
  - Emergency Orders
  - Underground Storage
  - LNG – siting of small scale
  - Changes in HL HCA definition
  - 12 month assessments of certain HL lines
  - Reporting requirement for unfinished mandates



# Report on DOT Significant Rulemakings

- <https://www.transportation.gov/regulations/report-on-significant-rulemakings>
- The Significant Rulemakings Report provides a summary and the status for all significant rulemakings that DOT currently has pending or has issued recently.



# **Pending approval to publish.**

- **Plastic Pipe Rule**
- **Inflation Adjustment of Maximum Civil Penalties**
- **Advisory Bulletin with Guidance on Training and Qualifications for the Integrity Management Program**
- **Advisory Bulletin on Deactivation of Threats for conduct of integrity assessments (just published)**



# **Published in the Federal Register on January 23, 2017**

- **Operator Qualification, Cost Recovery, Accident and Incident Notification, and Other Pipeline Safety Changes**
- **Effective 60 Days after Publication**
- **Effective Date Postponed for extra 90 Days**



# Safety of Gas Transmission and Gathering Lines

- ❑ NPRM published 4/8/2016
  - ❑ Comment period closed 7/7/2016
- ❑ Major Topics under consideration:
  - Expansion of assessments beyond HCA's – MCA's
  - Repair criteria for both HCA and non-HCA areas
  - Assessment methods
  - Corrosion control
  - Gas gathering; additional reporting and regulations
  - Assessment methods for GT Lines
  - Grandfathered pipe/pipe records/legacy - IVP



# Gas IM NPRM Webinar – Be Informed

- Materials from the June 8<sup>th</sup> Webinar are posted at <http://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=117>



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## Safety of the Nation's Gas Transmission Pipelines - NPRM

[Register Here...](#)

WEBINAR: PLEASE REGISTER ASAP. CUT OFF DATE TBD.

### Meeting Information

<i>Status</i>	Scheduled
<i>Starts</i>	Jun 8, 2016 at 1:30 PM EDT
<i>Ends</i>	at 3:00 PM EDT
<i>Virtual Information</i>	This information will be posted 1 week before meeting.
<i>On-Line Registration</i>	<a href="#">Register Here...</a>
<i>Purpose &amp; Summary</i>	<p>This public webinar is being hosted by the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) to discuss the proposed rulemaking for the safety of the nation's gas transmission pipelines. learn more about the proposed rule on gas transmission pipelines by attending one of the two planned webinars. At the sessions, PHMSA senior staff will present factual information about the regulatory proposal and will answer clarifying questions intended to help you comment more knowledgeably.</p> <p>Among a number of topics in the rulemaking proposal, PHMSA is proposing to update integrity management (IM) requirements and to address issues related to non-IM requirements for natural gas transmission and gathering pipelines.</p>

### Additional Information

PHMSA is extending the comment period from June 7, 2016, to July 7, 2016. All members of the public can submit comments by any of the following methods referencing Docket No. PHMSA-2011-0023:  
E-Gov Web Site: <http://www.Regulations.gov>. This site allows the public to enter comments on any Federal Register notice issued by any agency.

Fax: 1-202-493-2251

Mail: DOT Docket Management System: U.S. DOT, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590-0001.

Hand Delivery: U.S. DOT Docket Management System; West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE, Washington, DC 20590-0001, between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays.

Instructions: You should identify the Docket No. PHMSA-2011-0023 at the beginning of your comments. If you submit your comments by mail, please submit two copies. To receive confirmation that PHMSA received your comments, include a self-addressed stamped postcard. Internet users may submit comments to the Docket at <http://www.regulations.gov>.

Note: Comments are posted without changes or edits to <http://www.regulations.gov>, including any personal information provided.

### Agenda

TBD

[Register Here...](#)

# EFV Expansion beyond Single Family Residences

- ❑ NPRM published 7/15/2015; Comment period ended 9/14/2015
- ❑ Final rule October 14, 2016
- ❑ **Effective April 14, 2017**
- ❑ *Major Topics*
  - *Rule proposes to require EFVs for:*
    - *branched service lines serving more than one single family residence*
    - *multi-family residential dwellings*
    - *commercial buildings*





# Operator Qualification, Cost Recovery and Other Pipeline Safety Proposed Changes

- ❑ NPRM published 7/10/15; comment period ended 9/8/2015
- ❑ This rule will address reauthorization issues related to:
  - Operator Qualification for new construction
  - Incident Reporting
  - Cost Recovery
  - Farm Taps
  - Assessment methods for HL lines (NACE petition)
  - Renewal process for special permits
  - API 1104 and in-service welding
- PAC meeting June 1-3, 2016
- Published January 23, 2017 – Effective 60 days - Extended 90 days



# Plastic Pipe

## (FR stage)

- ❑ NPRM published May 21, 2015; Comment period ended 7/31/2015
- ❑ Address the following plastic pipe topics:
  - Authorized use of PA12
  - AGA petition to raise D.F. from 0.32 to 0.40 for PE pipe
  - Tracking and traceability
  - Miscellaneous revisions for PE and PA11 pipelines
  - Additional provisions for fittings used on plastic pipe
- GPAC meeting for June 1-3, 2016
- **Pending approval to publish**
- Effective 60 days after publication



# Rupture Detection and Valve Rule - Mitigation -

- ❑ This rule would establish and define rupture detection and response time metrics including the integration of Automatic Shutoff Valves (ASV) and Remote Control Valve (RCV) placement as necessary, with the objective of improving overall incident response
- ❑ This rule responds to requirements of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (The Act):
  - Section 4: ASV/RCV or equivalent technology be installed on newly constructed or entirely replaced natural gas and hazardous liquid transmission pipelines 2 years after the act was issued
  - Section 8: Require operators of hazardous liquid pipeline facilities to use leak detection systems and establish standards for their use.
  - The Act also mandated two studies of leak detection and response, one by the GAO, and one by PHMSA.
- ❑ Also - Two NTSB Recommendations related to valves and leak detection



# Rupture Detection and Valve Rule - Mitigation -

Projected Date for NPRM Publication- 2017

- Require Valve installation and Minimum Rupture Detection Standards
- **Overall intent is that rupture detection metrics** will be integrated with ASV and RCV placement with the objective of improving overall incident response
- **Propose installation of automatic shutoff valves, remote controlled valves, or equivalent technology** and establish performance based meaningful metrics for rupture detection for gas and liquid transmission pipelines



# Enhanced Emergency Order Procedures

- **ACTION:** Interim Final Rule. (IFR)
- Establishes regulations implementing the emergency order authority conferred on the Secretary of Transportation (Secretary) by the “Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016” (PIPES Act).
- Establishing procedures for the issuance of emergency orders that will be used to address an unsafe condition or practice, or combination of unsafe conditions or practices, that pose an imminent hazard to public health and safety or the environment.
- Enhance PHMSA’s existing enforcement authority to respond immediately to conditions or practices that exist in a subset of, or across, the pipeline industry.
- PHMSA is issuing this IFR because the PIPES Act directs PHMSA to first issue temporary regulations.
- PHMSA invites comments prior to the issuance of a final rule, which the agency must issue, by statute, no later than 270 days following enactment of the PIPES Act.



# Underground Storage Facilities for Natural Gas

## (Interim Final Rule stage)

- ❑ This rule would require operators of underground storage facilities for natural gas to comply with minimum safety standards, including compliance with:
  - ❑ API RP 1171, Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs
  - ❑ API RP 1170, Design and Operation of Solution-mined Salt Caverns Used for Natural Gas Storage
  - ❑ Annual and Incident reporting requirements
- ❑ PHMSA is considering adopting the non-mandatory provisions of the RPs in a manner that would make them mandatory, except that operators would be permitted to deviate from the RPs if they provide justification.





# Workshop on U/G Natural Gas Storage

- Solicit input and obtain background information concerning U/G natural gas storage safety.
- The public workshop held on July 14, 2016 in Broomfield, Colorado -  
<http://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=115>
- Currently, throughout the US, approximately 400 interstate and intrastate underground natural gas storage facilities are operating with more than four trillion cubic feet of natural gas working capacity
- API RP 1170 & 1171 are standards in place that cover design and mechanical integrity topics





<https://primis.phmsa.dot.gov/ung/index.htm>



The image shows the top navigation bar of the PHMSA Pipeline Technical Resources website. It features the PHMSA logo on the left, the text 'U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration', and a diamond-shaped warning sign with the number '1203' in the center. To the right, the title 'Pipeline Technical Resources' is displayed, along with a link 'Return to Pipeline Safety Community'. Below this is a grid of 17 navigation buttons: Home, Alt MAOP, Cased Crossings and GWUT, Class Location, CRM, DIMP, Gas IM, HL IM, High Volume EFV, Low Strength Pipe, LNG Facility Siting, OQ, Pipeline Construction, Public Meetings, R&D, RMWG, and Underground Natural Gas Storage (which is highlighted in a darker green).

## Underground Natural Gas Storage

### UNGS Menu

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This site is administered by the Pipeline and Hazardous Materials Safety Administration (PHMSA). It provides information concerning Safe Operations of Underground Gas Storage Facilities for Natural Gas.

### Interim Final Rule

On December 19, 2016, PHMSA published in the Federal Register an interim final rule (IFR) that revises the Federal pipeline safety regulations to address critical safety issues related to downhole facilities, including wells, wellbore tubing, and casing, at underground natural gas storage facilities. This IFR responds to Section 12 of the Protecting our Infrastructure of Pipelines and Enhancing Safety Act of 2016, which was enacted following the serious natural gas leak at the Aliso Canyon facility in California on October 23, 2015. This IFR incorporates by reference two American Petroleum Institute (API) Recommended Practices (RP): (1) API RP 1170, "Design and Operation of Solution-mined Salt Caverns used for Natural Gas Storage," issued in July 2015, and (2) API RP 1171, "Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs," issued in September 2015.

Open either of the links below for more detailed information or a pdf copy of the rule:

- <https://www.federalregister.gov/documents/2016/12/19/2016-30045/pipeline-safety-safety-of-underground->

# **Inflation Adjustment of Maximum Civil Penalties**

## **(Interim Final Rule Stage)**

- Interim Final Rule Published 6/30/2016
- Revise references in its regulations to the maximum civil penalties for violations of the Federal Pipeline Safety Laws, or any PHMSA regulation or order issued thereunder.
- Under the “Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015,” which further amended the “Federal Civil Penalties Inflation Adjustment Act of 1990,” federal agencies are required to adjust their civil monetary penalties effective August 1, 2016, and then annually thereafter, to account for changes in inflation.
- PHMSA found good cause to amend the regulation related to civil penalties without notice and opportunity for public comment.
- Pending Approval to Publish – Effective January 15, 2017



# Standards Update

## (NPRM stage)

### □ Major Topics:

- Addresses the set of IBR standards throughout PHMSA's part 192, Part 193 and Part 195 code with updated revisions of standards from all standard organization bodies.
- This NPRM would impact approx. 20 of the 60+ standards that we currently IBR.
- Per recent statute (Section 24, revised) all IBR standards pertaining to PSR must be available for free to the public. (Most SDOs comply)
  - ANSI IBR portal – [ibr.ansi.org](http://ibr.ansi.org)
- Miscellaneous amendments to PSR
  - **GPTC petitions**
  - Agency initiative
  - MFFR name changed to Mechanical Joint Failure Reporting



# State Certification

## (NPRM stage)

- ❑ Rulemaking would amend 49 CFR Part 198 by incorporating into PHMSA's regulations existing statutory procedures in the Federal pipeline safety laws regarding the certification of State authorities to regulate intrastate gas and hazardous liquid pipelines
- ❑ Address the process by which PHMSA and State authorities may enter into interstate-agent and other agreements for State authorities to assist PHMSA in the regulation and inspection of both interstate and intrastate pipelines.
- ❑ The proposed rule also establishes more formal procedures for suspending, modifying, or rejecting both the certification of State authorities to regulate intrastate pipelines and for terminating interstate-agent and other agreements between PHMSA





# Damage Prevention Final Rule

## Pipeline Damage Prevention Programs

- Effective January 1, 2016
- Affects 49 CFR Parts 196 and 198
  - Sets criteria for State damage prevention laws
  - If States can't or don't meet criteria PHMSA can take over jurisdiction
  - Exceptions are possible, however they must be approved and justified



# Damage Prevention Final Rule

*“For the reasons discussed above, PHMSA is not considering alternatives 1 and 3. Under alternative 2, PHMSA will enforce a minimum Federal safety requirement against any excavator who violates applicable damage prevention requirements in a State with an excavation damage prevention enforcement program determined to be inadequate.”*



# **PHMSA Safety Advisory Bulletins 2016 – 2017 (so far)**





# ADB–2016–01

- **Potential for Damage to Pipeline Facilities Caused by Severe Flooding.**
- **Similar to ADB-2015-01 as these events continue to occur – titled “Potential for Damage to Pipeline Facilities Caused by Flooding, River Scour, and River Channel Migration”**
- **Several ADBs on this topic, and please review them all if applicable to your operations**



# ADB 2016-01

## Events referenced include:

- July 1, 2011, ExxonMobil Pipeline Company experienced a pipeline failure near Laurel, Montana 63,000 gallons of crude oil spilled into the Yellowstone River
- July 15, 2011, NuStar Pipeline Operating Partnership, L.P. reported a 4,200 gallon (100 barrels) anhydrous ammonia spill in the Missouri River in Nebraska
- August 13, 2011, Enterprise Products Operating, LLC discovered a release of 28,350 gallons (675 barrels) of natural gasoline in the Missouri River in Iowa
- January 17, 2015, a breach in the Bridger Pipeline Company's Poplar System resulted in another spill into the Yellowstone River near the town of Glendive, Montana, releasing an estimated 28,434 gallons of crude oil into the river and impacting local water supplies



# ADB 2016-01

- ADB 2016-01 reiterates those actions that an operator should take prior to, during, and following abnormal events.
- As shown in these events, river bottom scour and channel migration may occur due to seasonal flooding, increased stream velocities, and manmade and natural river bank restrictions.
- Additionally, the safety of valves, regulators, relief sets, pressure sensors, and other facilities normally above ground or above water can be jeopardized when covered by water



# ADB–2016–02

- **Subject: To Owners and Operators of Underground Pipeline and Storage Facilities regarding the Safe Operation of Underground Storage Facilities for Natural Gas**
- **Operators of underground storage facilities used for the storage of natural gas, as defined in 49 CFR Part 192, should review their O,M & ER activities to ensure the integrity of underground storage facilities are properly maintained**



# ADB–2016–02

- In addition, operator's O&M processes and procedures should be reviewed and updated at least annually, unless operational inspections for integrity warrant shorter review periods.
- O&M processes and procedures should include data collection and integration, risk assessments, monitoring, operational limits, mitigation measures, and record keeping for any underground storage facility threat that could impact public safety, operating personnel, or the environment due to leakage, failure, or abnormal operating conditions whether above ground or underground.



# ADB-2016-03

- **Owners and Operators of Petroleum Gas and Natural Gas Facilities in Areas Subject to Heavy Snowfall or Abnormally Icy Weather**
- **Subject: Dangers of Abnormal Snow and Ice Build-up on Gas Distribution Systems**
- **To remind owners and operators of the need to (1) monitor the potential impact of excessive snow and ice on these facilities; and (2) inform the public about possible hazards from snow and ice accumulation on regulators and other pipeline facilities**





# ADB-2016-03

- Notify customers and other entities of the need for caution associated with excessive accumulation and removal of snow and ice
- Pay attention to snow and ice related situations that may cause operational problems for pressure control and other equipment
- Monitor the accumulation of moisture in equipment and snow or ice blocking regulator or relief valve vents which could prevent regulators and relief valves from functioning properly





# ADB-2016-03

- The piping on service regulator sets is susceptible to damage that could result in failure if caution is not exercised in cleaning snow from around the equipment
- Remind the public to contact the gas company or designated emergency response officials if there is an odor of gas present or if gas appliances are not functioning properly



# ADB–2016–04

- **Subject - Ineffective Protection, Detection, and Mitigation of Corrosion Resulting From Insulated Coatings on Buried Pipelines**
- **PHMSA' failure investigation of the Plains Pipeline May 19, 2015, accident in Santa Barbara, CA**
- **Operators are reminded to review their pipeline operations to ensure that pipeline segments that are both buried and insulated have effective coating and corrosion-control systems to protect against cathodic protection shielding, conduct in-line inspections for all threats, and ensure in-line inspection tool findings are accurate, verified, and conducted for all pipeline threats.**



# ADB–2016–04

- The need for coatings and CP systems to be designed, installed, and maintained so as not to foster an environment of shielding and moisture that can lead to excessive external corrosion growth rates and pipe steel cracking such as stress corrosion cracking
- Coatings for buried, insulated pipelines that may result in cathodic protection “shielding” yet still comply with 49 CFR Part 192, Subpart I or 49 CFR Part 195, Subpart H. Inadequate corrosion prevention may be addressed through any one or more methods, or a combination of methods described in ADB–2016–04



# ADB–2016–04

- Employ ILI data analysis techniques to account for the potential growth of Corrosion Under Insulation, including interaction criteria for anomaly assessment
- ILI data, subsequent analysis of the data, and pipeline excavations should:
  - Confirm the accuracy of the ILI data to characterize the extent and depth of the external corrosion and ILI tolerances and unity charts
  - Follow the ILI guidelines of API Standard 1163
  - Use additional or more frequent reassessment intervals and confirmations
  - Assess and mitigate operational and environmental conditions in shielded and insulated coatings that lead to excessive corrosion growth rates, pipe steel cracking, and all other threats.



# ADB-2016-05

- **Subject: Clarification of Terms Relating to Pipeline Operational Status**
- **PHMSA regulations do not recognize an “idle” status for a hazardous liquid or gas pipelines. The regulations consider pipelines to be either active and fully subject to all parts of the safety regulations or abandoned.**



# ADB-2016-05

- The process and requirements for pipeline abandonment are captured in §§ 192.727 and 195.402(c)(10) for gas and hazardous liquid pipelines, respectively. Pipelines abandoned after the effective date of the regulations must comply with requirements to purge all combustibles and seal any facilities left in place.
- The last owner or operator of abandoned offshore facilities and abandoned onshore facilities that cross over, under, or through commercially navigable waterways must file a report with PHMSA.
- PHMSA regulations define the term “abandoned” to mean permanently removed from service.





# ADB–2016–06

- PHMSA issued this ADB in coordination with TSA to remind all pipeline owners and operators of the importance of safeguarding and securing their pipeline facilities and monitoring their SCADA systems for abnormal operations and/or indications of unauthorized access or interference with safe pipeline operations.
- Additionally, this Advisory Bulletin is to remind the public of the dangers associated with tampering with pipeline system facilities.





# ADB–2016–06

- **Subject: Safeguarding and Securing Pipelines from Unauthorized Access**
  - Pipeline Safety and Security
  - If you see something, Say something
  - Relationships with Law Enforcement
  - Increased Security and Patrols
  - Protection of Facilities
  - SCADA System Monitoring
  - Incident And Accident Reporting



# ADB-2016-07

- **Subject: High Consequence Area Identification Methods**
- **Inform owners and operators of gas transmission pipelines that PHMSA has developed guidance on the identification and periodic verification of HCAs, including the application of a buffer zone to the PIR, and information regarding the accuracy of class locations**



# ADB-2016-07

- PHMSA recommends operators frequently and consistently review their data—including class location data for potential inaccuracies or limitations, and add a buffer zone to the calculated PIR to help ensure proper HCA identification.
- The purpose and usage of buildings, open structures, and outside areas can shift over time, changing the number of “identified sites” in a PIR, and therefore, whether an area is an HCA.
- PHMSA believes that if operators review class location and PIR data on an annual basis as a part of their IM programs, the accuracy of HCA determinations will be greatly improved.





# Advisory Bulletin on Deactivation of Threats

- ADB to inform owners and operators of gas transmission pipelines that PHMSA has developed guidance on
  - threat identification and
  - establishment of minimum criteria for deactivation of threats.
- Provides guidance regarding documenting their rationale of
  - analyses, justifications, determinations, and decisions
  - related to threat deactivation.
- This Advisory Bulletin satisfies NTSB Recommendation P-15-9.



# ADB-2017-01 Deactivation of Threats

- The threats identified in ASME B31.8S–2004 may be considered active or inactive, but are never permanently eliminated
- ASME B31.8S–2004, Appendix A, identifies the information an operator must collect and analyze for threats, which must demonstrate an individual threat is not acting on the pipe before an operator can properly declare the threat inactive for each assessment period.



# ADB-2017-01 Deactivation of Threats

- Time-Dependent Threats - External Corrosion, Internal Corrosion, Stress Corrosion Cracking
- Static or Stable Threats – Manufacturing, Construction, Equipment
- Time Independent Threats - Third-Party Damage, Incorrect Operations, Weather-Related and Outside Forces
- Cyclic Fatigue





# Advisory Bulletin on Guidance on Training and Qualifications for the Integrity Management Program

- Pending approval to publish. – PHMSA published the gas transmission pipeline integrity management (IM) rule on December 15, 2003
- Established requirements for supervisory and other personnel with IM program functions under § 192.915.
- PHMSA has recognized inconsistencies in how the requirements of § 192.915 have been implemented by operators and is issuing this **Advisory Bulletin** to remind operators of their responsibility to include the training and qualification requirements for IM personnel as required by § 192.915 and ASME B31.8S. This Advisory Bulletin satisfies NTSB Recommendation P-15-14.



# Any Questions??

