



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



Organization and Regulatory Overview



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**Pipeline and
Hazardous Materials
Safety Administration**



PHMSA's Mission Statement

To ensure the **safe, reliable, and environmentally sound** operation of the nation's pipeline transportation system.



PHMSA Regions





PHMSA Inspector Training and Qualifications Division

Providing Training For:

- **State and Federal Pipeline Inspectors** (Courses in OKC)
- **Industry Personnel via Seminars**





PHMSA TQ

Oklahoma City, OK





PHMSA TQ

Oklahoma City, OK





PHMSA TQ

Oklahoma City, OK



TQ regrets that Lane Miller has left his position as Director of the Inspector Training and Qualifications Division for PHMSA.

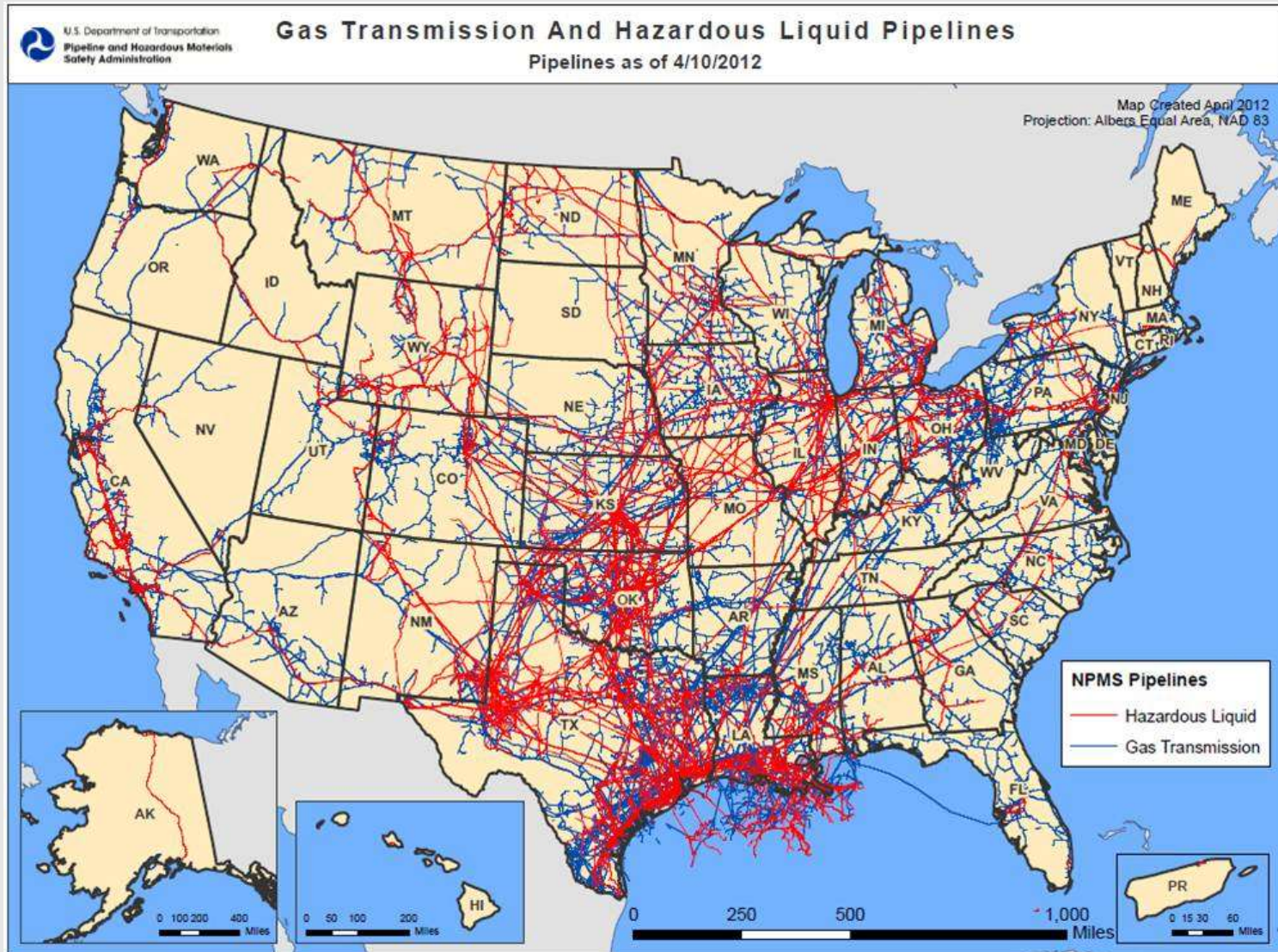
His vast knowledge of the pipeline industry and dedication to enhance the Pipeline Safety Program's inspector training and education will be missed.

However Lane will be returning to TQ in the future as an associate instructor!





U.S. Pipeline Transportation System





Pipeline Mileage

- **Hazardous Liquid Pipelines** 192,388 miles
- **Natural Gas Transmission** 302,811 miles
- **Natural Gas Gathering** 17,437 miles
- **Gas Distribution Pipelines** 2,149,382 miles
- **Liquefied Natural Gas (LNG)** 118 Facilities

(Based on 2013 Annual Mileage Reports)



PHMSA Strategic Focus

- Improve the safety of the Nation's pipelines
 - Reduce the number of serious incidents causing death & injury
 - Reduce the likelihood of incidents in high consequence areas
 - Reduce the potential for hazardous liquids spills into unusually sensitive areas
- Provide the basis for increased public confidence in pipeline safety



Pipeline Safety Challenges

- [September 09, 2010 San Bruno, CA](#)
- 30'' 1956 Vintage Natural gas transmission line ruptured, ignited, and burned, for approx. 90 minutes
- 28'ft section of pipe ripped from the ground at the failure site
- Rupture created a crater approx. 72' ft long and 26' ft wide
- 8 fatalities and multiple people injured.
- 38 homes destroyed and 70 others damaged
- Multiple miter joints and unknown pipe at failure location
- Longitudinal seam failure due to inadequate weld





Pipeline Safety Challenges



- [December 11, 2012 Sissonville, WV](#)
- 20" 1967 Vintage Natural Gas Transmission Line ruptured and burned for approx. 1 hour.
- 20' ft. section of pipe was ejected 40' ft.
- Several people treated, no serious injuries, no fatalities.
- 800' ft. of Interstate 77 was shut down for approx. 18 hours. The pavement, guard rails, and exit ramp were burned and required repair and replacement.
- 3 homes were destroyed and several others damaged.
- Preliminary investigation found external corrosion and approx. 70% wall loss.
- Several lawsuits are still pending.



Pipeline Safety Challenges



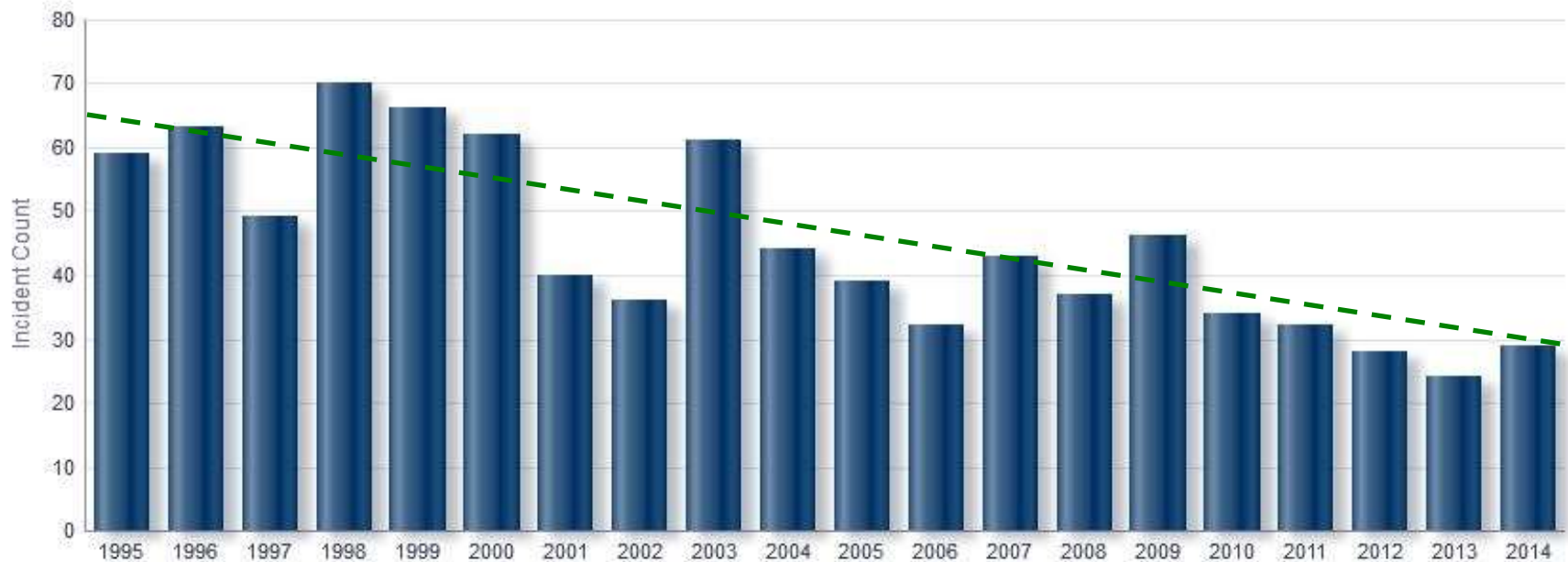
- [March 12, 2014, New York City \(Harlem\), NY](#)
- 8" 1887 Vintage Cast Iron Main Line with 1991 Vintage 1 ½" Copper Service line.
- 2 multi-use, five story buildings explode and collapse.
- 8 people were killed.
- 48 people were injured.
- Gas leak reported 18 minutes before explosion.
- NTSB preliminary investigation found no definite cause. Main, service line, and water line samples being analyzed. Investigation ongoing.
- Recent break on 1897 vintage water line in area being investigated.



Serious Incidents

All Pipelines

PHMSA Pipeline Incidents: Count (1995-2014)
Incident Type: Serious System Type: ALL State: ALL

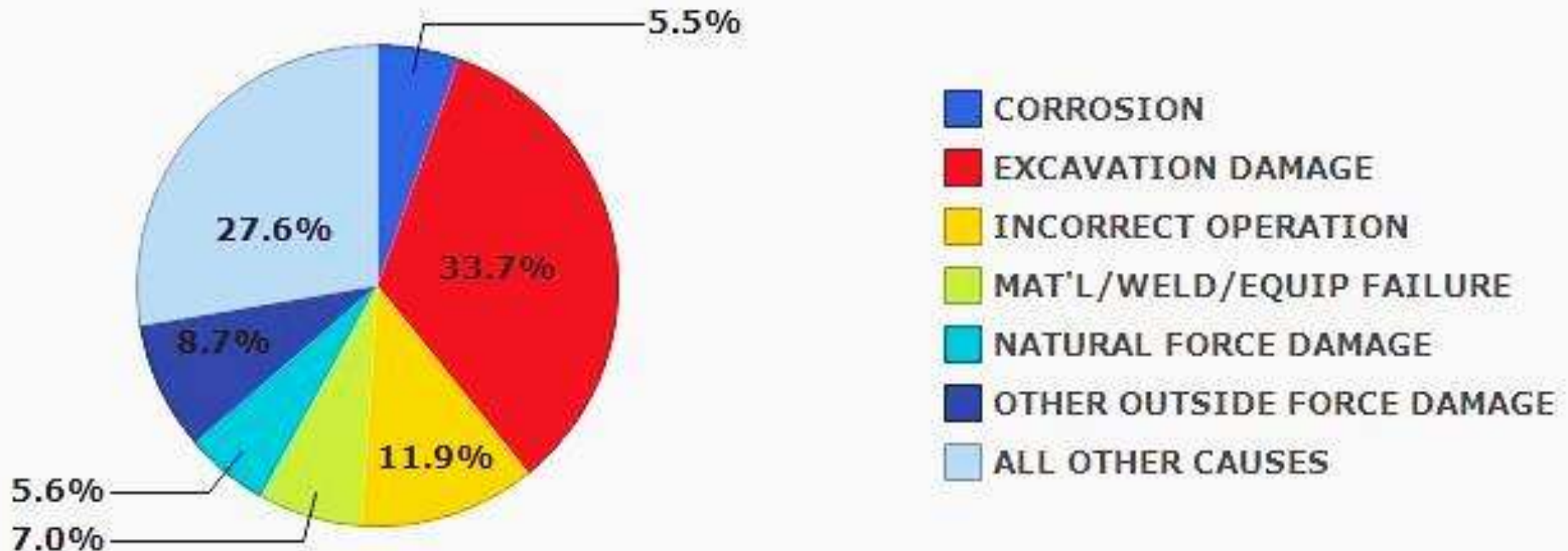




Causes of Serious Incidents

All Pipelines

Serious Incident Cause Breakdown
National, All Pipeline Systems, 1994-2013

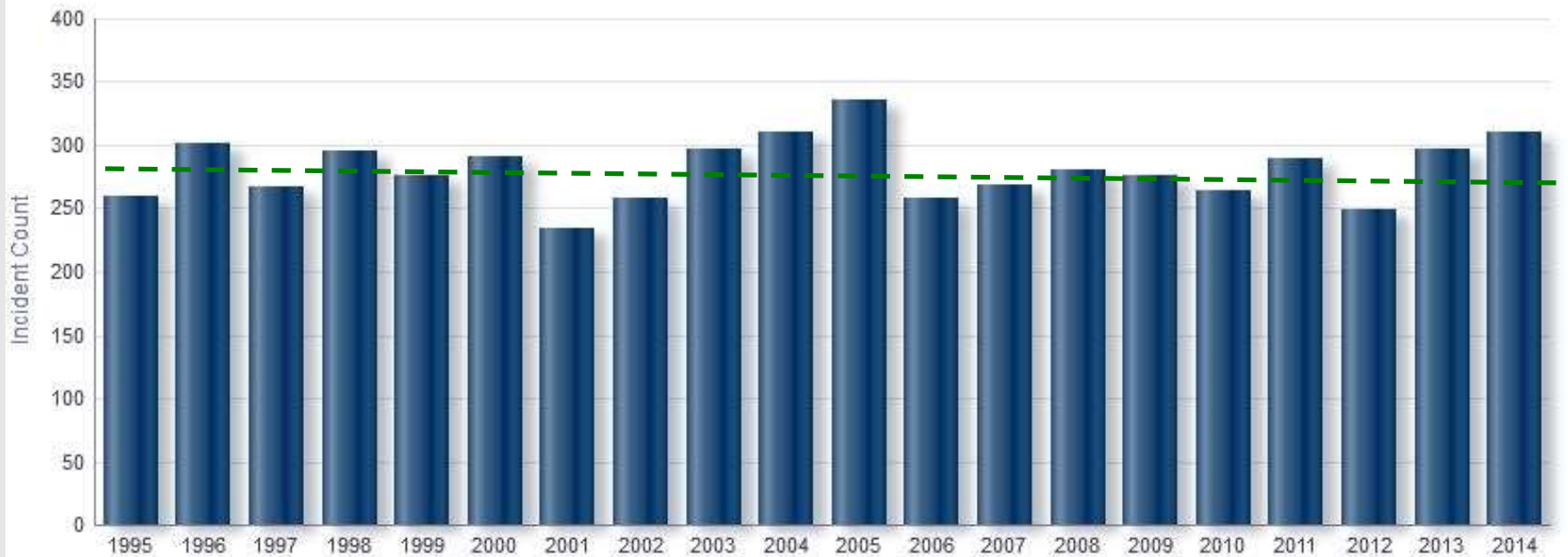


Source: PHMSA Significant Incidents Files, Sept 3, 2014



Significant Incidents

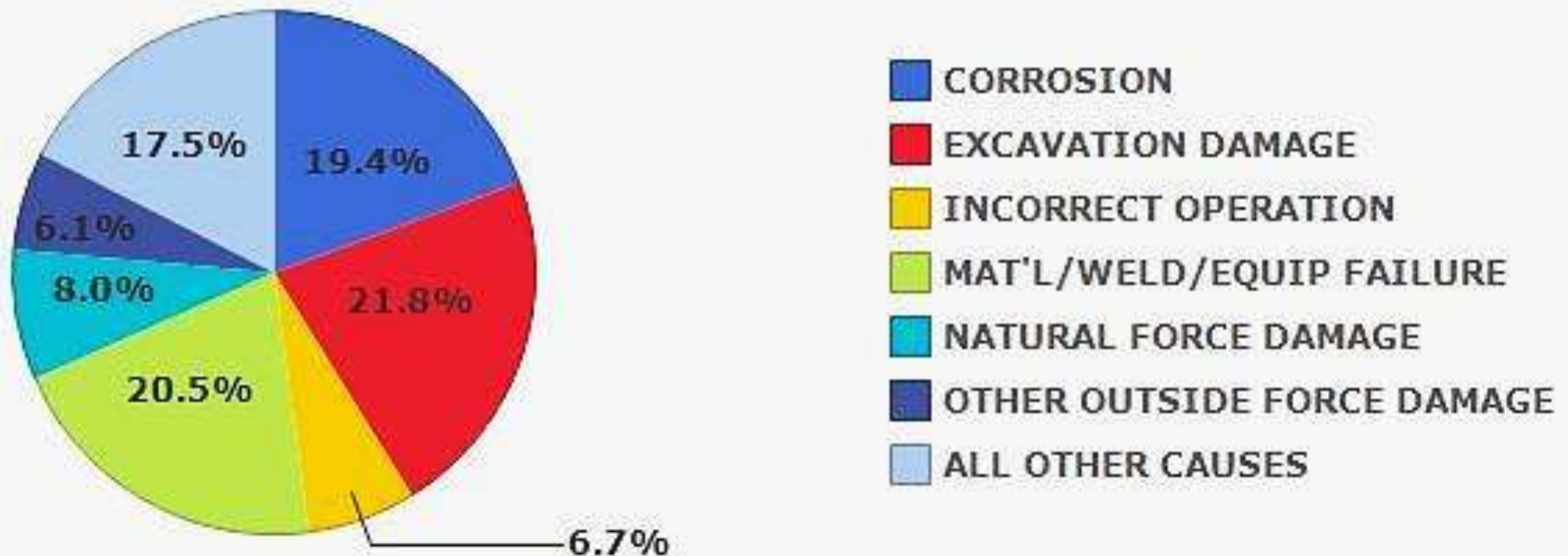
PHMSA Pipeline Incidents: Count (1995-2014)
Incident Type: Significant System Type: ALL State: ALL





Significant Incidents by Cause

Significant Incident Cause Breakdown
National, All Pipeline Systems, 1994-2013



Source: PHMSA Significant Incidents Files, Sept 3, 2014



Data Driven Organization

- More focus on root cause analysis of incidents
- Integration of inspection findings across regions
- Significantly improve availability of information through OPS web site:



Enforcement Transparency

- PHMSA Website displays Enforcement data
- Statistical summaries 2002 onward
- Enforcement documents from 2007 onward
 - Initial OPS Letter
 - Operator Response (optional)
 - Final OPS Letter
 - Warning Letters, Notices of Probable Violation, Corrective Action Orders



PHMSA

Rule Update



Public Workshop on Pipeline Safety Management Systems

Docket No. PHMSA-2014-0014

Meeting Date: Wednesday, April 22, 2015

8:00 a.m. to 4:30 p.m. CST

Pipeline Safety: Natural Gas and HL Pipeline Operators

- This notice is announcing a one-day public workshop to discuss the recent Pipeline Safety Management Systems (SMS) national consensus standard. The meeting will include participation from all major pipeline sectors, state and Federal regulators, and public safety advocates.
- This workshop will detail the development process of the SMS standard. The workshop will also emphasize the core elements of the standard including: leadership and management commitment; risk management; emergency preparedness and response; competence awareness and training; management review and continuous commitment, and the critical role of safety culture.



Public Workshop on Pipeline Safety Management Systems

Docket No. PHMSA-2014-0014

Meeting Date: Wednesday, April 22, 2015

8:00 a.m. to 4:30 p.m. CST

Pipeline Safety: Natural Gas and HL Pipeline Operators

- The workshop will be held at the Westin Galleria, 5060 West Alabama Street, Houston, TX 77056.
- The meeting agenda and any additional information will be on the PHMSA web site (**<http://www.phmsa.dot.gov/pipeline>**)
- Information on registration and public comments can be found on the meeting page web site at:
<https://primis.phmsa.dot.gov/meetings/MtgHome.mtg?mtg=102>.
- The meeting will be webcast and those watching and attending in person are urged to register to ensure accommodations are adequate.



Advisory Bulletin No. ADB-2012-02

Issued February 23, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Post Accident Drug and Alcohol Testing.

- Part 199 requires pipeline operators and operators of LNG facilities to conduct post- accident drug and alcohol tests of covered employees within the mandated timelines after a reportable pipeline accident or incident.
- **Operators must test each covered employee whose performance either contributed to, or cannot be completely discounted as, a contributing factor to the accident or incident.** The term “accident” in Part 199 includes both “incidents” reportable under Part 191 and “accidents” reportable under Part 195.
- **Operators must determine an employee’s contribution to the accident or incident promptly to meet the timelines for testing required by the regulations.** This was further emphasized by the National Transportation Safety Board (NTSB) in its report of the September 9, 2010, incident in San Bruno, California.



Advisory Bulletin No. ADB-2012-03

Issued March 06, 2012

Pipeline Safety: Natural Gas Operators

Drisco 8000 HD Poly - Potential for Material Degradation

- PHMSA is issuing this advisory bulletin to alert operators using Driscopipe 8000 High Density Polyethylene Pipe (Drisco8000) of the potential for material degradation.
- Degradation has been identified on pipe between one-half inch to two inches in diameter that was installed between 1978 and 1999 in desert-like environments in the southwestern United States.
- However, since root causes of the degradation have not been determined, PHMSA cannot say with certainty that this issue is isolated to these regions, operating environments, pipe sizes, or pipe installation dates.



Advisory Bulletin No. ADB-2012-04

Issued March 21, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Implementation of the Operator Identification Registry

This notice provides updates to the information contained in a PHMSA Advisory Bulletin published on January 13, 2012 (77 FR 2126).

- **PHMSA has decided that master meter and small LPG operators established after December 31, 2011, will be required to obtain an OPID in accordance with 49 CFR 191.22. On May 1, 2012, PHMSA will modify ODES to allow these master meter and small LPG operators to request an OPID. The requirement to request an OPID continues to not apply to master meter and small LPG operators in existence prior to December 31, 2011.**



Advisory Bulletin No. ADB-2012-05

Issued March 23, 2012

Pipeline Safety: Natural Gas Pipeline Operators Cast Iron Pipe (Supplementary Advisory Bulletin)

- PHMSA is issuing an advisory bulletin to owners and operators of natural gas cast iron distribution pipelines and state pipeline safety reps. Recent deadly explosions in Philadelphia and Allentown, Pennsylvania involving cast iron pipelines installed in 1942 and 1928, respectively, highlight the need for continued safety improvements to aging gas pipeline systems. **This bulletin is an update of two prior Alert Notices (ALN-91-02; October 11, 1991 and ALN-92-02; June 26, 1992) covering the continued use of cast iron pipe in natural gas distribution systems.** This bulletin reiterates two prior Alert Notices which remain relevant, urges owners and operators to;
 1. conduct a comprehensive review of their cast iron distribution pipelines and replacement programs.
 2. accelerate pipeline repair, rehabilitation and replacement of high-risk pipelines.
 3. requests state agencies to consider enhancements to cast iron replacement plans and programs.



Advisory Bulletin No. ADB-2012-05

Issued March 23, 2012

Pipeline Safety: Natural Gas Pipeline Operators Cast Iron Pipe (Supplementary Advisory Bulletin)

4. alerts owners and operators of the pipeline safety requirements for the investigation of failures.
- The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, became law on January 3, 2012. Section 7 requires U.S. D.O.T. to measure the progress owners and operators have made in adopting and implementing their plans for the safe management and replacement of cast iron gas pipelines.
- December 31, 2013, the Secretary of Transportation submitted a report to Congress that -- (1) Identified the total mileage of cast iron gas pipelines in the United States; and (2) evaluated the progress that owners and operators have made in implementing their plans for the safe management and replacement of cast iron gas pipelines.



Advisory Bulletin No. ADB-2012-06

Issued May 06, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Verification of Records

- PHMSA is reminding operators to verify their records relating to operating specifications for maximum allowable operating pressure (MAOP) required by 49 CFR 192.517 and maximum operating pressure (MOP) required by 49 CFR 195.310.
- Information needed to support establishment of MAOP and MOP is identified in Sec. 192.619, Sec. 192.620 and Sec. 195.406. **An owner or operator of a pipeline must meet the recordkeeping requirements of Part 192 and Part 195 in support of MAOP and MOP determination.**
- PHMSA required gas pipeline operators to submit data regarding mileage of pipelines with verifiable records and mileage of pipelines without records in the annual reporting cycle for 2013.



Advisory Bulletin No. ADB-2012-06

Issued May 06, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Verification of Records

- On April 13, 2012, PHMSA published a Federal Register Notice titled: “Information Collection Activities, Revision to Gas Transmission and Gathering Annual Report, Gas Transmission and Gathering Incident Report, and Hazardous Liquid Pipelines Systems Accident Report.”
- **PHMSA plans to use info from the 2013 Gas Transmission and Gathering Annual Report to develop potential rulemaking for cases in which the records of the owner or operator are insufficient to confirm the established MAOP of a pipeline segment within Class 3 and Class 4 locations and in Class 1 and Class 2 locations in HCAs.**
- Owners and operators should consider the guidance in this advisory for all pipeline segments and take action as appropriate to assure that all MAOP and MOP are supported by records that are traceable, verifiable and complete.



Advisory Bulletin No. ADB-2012-06

Issued May 06, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Verification of Records

- Section 192.619(a)(3) allows gas transmission operators to establish MAOP of pipe installed before July 1, 1970, by use of records noting the highest actual operating pressure to which the segment was subjected during the five years preceding July 1, 1970.
- **PHMSA notes that on September 26, 2011, NTSB issued Recommendation P-11-14: Eliminating Grandfather Clause.** The recommendation requests that PHMSA delete Sec. 192.619(a)(3), also known as the “grandfather clause,” and require gas transmission pipeline operators to reestablish MAOP using hydrostatic pressure testing.

(Grandfather Clause is actually in 192.619 (c))



Advisory Bulletin No. ADB-2012-06

Issued May 06, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Verification of Records

- PHMSA reminds operators that this recommendation will be acted upon following the collection of data, including information from the 2013 Gas Transmission and Gathering Pipeline Systems Annual Report, which will allow PHMSA to determine the impact of the requested change on the public and industry in conformance with our statutory obligations.**



Advisory Bulletin No. ADB-2012-07

Issued May 06, 2012

Pipeline Safety: Natural Gas Distribution Pipeline Operators Mechanical Fitting Report Form – Leak Causes

- Per Sec. 192.1009, operators of all gas distribution pipeline facilities are required to report any mechanical fitting failure that results in a hazardous leak on a Mechanical Fitting Failure Report Form (PHMSA F 7100.1-2). The report is required for all failures regardless of the material composition, type, manufacturer, or size of the fitting. Operators are to report all mechanical fitting failures regardless of the cause.
- Reporting requirements also apply to failures resulting from the use of a fitting and may include failures in the body of mechanical fitting, failures in the joints between the fitting and the pipe, indications of leakage from the seals associated with the fitting, and partial or complete separation of the pipe away from the fitting.



Advisory Bulletin No. ADB-2012-07

Issued May 06, 2012

Pipeline Safety: Natural Gas Distribution Pipeline Operators Mechanical Fitting Report Form – Leak Causes

- PHMSA does not seek information related to failures of cast iron bell and spigot joints unless the leak resulted from a failure of a mechanical fitting used to repair or reinforce a joint.



Advisory Bulletin No. ADB-2012-08

Issued July 31, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Mechanical Fitting Report Form – Leak Causes

- PHMSA is issuing this advisory bulletin as a reminder for pipeline owners and operators to appropriately inspect and protect pipeline facilities following railroad accidents that occur in pipeline right-of-ways.
- Buried pipelines are susceptible to damage even when depth- of-cover protection exceeds minimum Federal requirements. Pipeline owners and operators should inspect their facilities following a railroad accident or other significant event occurring in right-of-ways to ensure pipeline integrity.



Advisory Bulletin No. ADB-2012-08

Issued July 31, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Mechanical Fitting Report Form – Leak Causes

- Also, during response operations, pipeline owners and operators need to inform rail operators and emergency response officials of the presence, depth and location of the pipelines so that the movement of heavy equipment on the right-of-way does not damage or rupture the pipeline or otherwise pose a hazard to people working in, and around, the accident location.
- PHMSA encourages pipeline owners and operators, as a part of their public awareness program, to inform rail operators and emergency response officials of the benefits of using the 811 “Call Before You Dig” program to identify and notify underground utilities that an incident has occurred in the vicinity of their buried facilities.



Advisory Bulletin No. ADB-2012-09

Issued October 11, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Communication During Emergency Situations

- PHMSA reminds operators that they should immediately and directly notify the Public Safety Access Point (PSAP) that serves the communities and jurisdictions where their pipelines are located when there are indications of a pipeline facility emergency.
- Operators should have the ability to immediately contact PSAP(s) along their pipeline routes and to as many jurisdictions as is necessary if there is an indication of an emergency to determine if the PSAP has information which may help confirm an emergency or to provide assistance and information to public safety personnel.



Advisory Bulletin No. ADB-2012-09

Issued October 11, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Communication During Emergency Situations

- **A direct-inbound ten-digit number must be used for the specific PSAP, a call to 9-1-1 would only be routed to the PSAP for the caller's location.**
- PHMSA believes that immediate contact and conversation should be established between pipeline facility operators and PSAP staff when there is any indication of an emergency which may have a potential adverse impact on public safety or the environment.
- PHMSA recommends that operators inquire of the PSAP(s) if there are any other reported indicators of possible pipeline emergencies such as odors, unexplained noises, product releases, explosions, fires, etc., as these reports may not have been linked to a possible pipeline incident by the callers contacting the 9-1-1 emergency call center.



Advisory Bulletin No. ADB-2012-10

Issued December 05, 2012

Pipeline Safety: Natural Gas and HL Pipeline Operators Using Meaningful Metrics in Conducting Integrity Management Program Evaluations

- PHMSA is issuing an Advisory Bulletin to remind operators of their responsibilities, under Federal integrity management regulations, to perform evaluations of their integrity management programs using meaningful performance metrics.
- To further enhance PHMSA's safety efforts and as an initial step in addressing NTSB Recommendations P-11-18 and P-11-19, PHMSA is issuing this Advisory Bulletin concerning operator integrity management program evaluation using meaningful metrics.



Advisory Bulletin No. ADB-2013-01

Issued January 30, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Telephonic Notification Time Limit to NRC

- Owners and operators of gas and hazardous liquid pipelines and LNG facilities are reminded that the pipeline safety regulations already require operators to make a telephonic report of an incident to the NRC in Washington, DC at the earliest practicable opportunity (usually one-to-two hours after discovering the incident). However, under Section 9(b)(1) of the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011, **PHMSA is required to issue regulations requiring owners and operators to notify the NRC within one hour of discovery of a pipeline accident or incident.**



Advisory Bulletin No. ADB-2013-01

Issued January 30, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Telephonic Notification Time Limit to NRC

- The 2011 Act requires PHMSA to establish a time limit for telephonic or electronic notification of an accident or incident to require such **notification at the earliest practicable moment following confirmed discovery of an accident or incident that is not later than one hour following the time of such confirmed discovery.**
- PHMSA will issue a proposed rule at a later date, but encourages owners and operators of the gas and hazardous liquids pipeline systems and LNG facilities, as a practice, to report such accidents and incidents within one hour of confirmed discovery.



Advisory Bulletin No. ADB-2013-01

Issued January 30, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Telephonic Notification Time Limit to NRC

- The information required to be reported includes the name of the operator, the name and telephone number of the person making the report, the location of the incident, the number of fatalities and injuries, and all other significant facts that are relevant to the cause of the incident or extent of the damages.



Advisory Bulletin No. ADB-2013-02

Issued July 12, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding

- Severe flooding can adversely affect the safe operation of a pipeline. Operators need to direct their resources in a manner to determine the potential effects of flooding on their pipeline systems. Operators are urged to take the following actions to prevent and mitigate damage to pipeline facilities and ensure public and environmental safety in areas affected by flooding:
 - 1. Evaluate the accessibility of pipeline facilities that may be in jeopardy, such as valve settings, needed to isolate water crossings or other sections of a pipeline.
 - 2. Extend regulator vents and relief stacks above the level of anticipated flooding, as appropriate.



Advisory Bulletin No. ADB-2013-02

Issued July 12, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding

- 3. Coordinate with emergency and spill responders on pipeline location and condition. Provide maps and other relevant information to such responders.
- 4. Coordinate with other pipeline operators in the flood area and establish emergency response centers to act as a liaison for pipeline problems and solutions.
- 5. Deploy personnel to be in position to take emergency actions, such as shut down, isolation, or containment.
- 6. Determine if facilities that are normally above ground (e.g., valves, regulators, relief sets, etc.) have become submerged and are in danger of being struck by vessels or debris and, if possible, mark such facilities with an appropriate buoy and Coast Guard approval.



Advisory Bulletin No. ADB-2013-02

Issued July 12, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding

- 7. Perform frequent patrols, including appropriate over flights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Determine if flooding has exposed or undermined pipelines as a result of erosion or scouring.
- 8. Perform surveys to determine the depth of cover over pipelines and the condition of any exposed pipelines, such as those crossing scour holes. Where appropriate, surveys of underwater pipe should include the use of visual inspection by divers or instrumented detection. Information gathered by these surveys should be shared with affected landowners. Agricultural agencies may help to inform farmers of the potential hazard from reduced cover over pipelines.



Advisory Bulletin No. ADB-2013-02

Issued July 12, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding

- 9. Ensure that line markers are still in place or replaced in a timely manner. Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover.
- If a pipeline has suffered damage, is shut-in, or is being operated at a reduced pressure as a precautionary measure due to flooding, the operator should advise the appropriate PHMSA regional office or state pipeline safety authority before returning the line to service, increasing its operating pressure, or otherwise changing its operating status. **Furthermore, reporting a Safety Related Condition as prescribed in Sec. Sec. 191.23 and 195.55 may also be required.**



Advisory Bulletin No. ADB-2013-03

Issued October 25, 2013

Pipeline Safety: LPG and Utility LP Gas Plants

Applicability of Part 192 to Owners and Operators of LPG and Utility Gas Plants

- When ANSI/NFPA 58 or 59 (2004) does not address a specific subject, then a conflict has not occurred and the operator must follow Part 192 requirements. Part 192 covers areas that are not addressed in ANSI/NFPA 58 or 59 (2004). These areas include:
 - Inspection requirements for distribution mains (Sec. Sec. 192.305 and 192.307).
 - Backfill requirements for installing pipe in a ditch (Sec. 192.319).
 - Underground pipe clearance requirements (Sec. 192.325).
 - Valve requirements for service lines (Sec. Sec. 192.363 and 192.365).
 - Continuing surveillance (Sec. 192.613).



Advisory Bulletin No. ADB-2013-03

Issued October 25, 2013

Pipeline Safety: LPG and Utility LP Gas Plants

Applicability of Part 192 to Owners and Operators of LPG and Utility Gas Plants

- Public awareness (except for small LP-gas systems) (Sec. 192.614).
- Operator qualification (except for small utility LP-Gas systems) (Subpart N).
- Distribution Pipeline Integrity Management (Subpart P).
- Because ANSI/NFPA 58 and 59 (2004) do not have specific language on these topics, there is no conflict, and therefore Part 192 applies in these areas.
- **Supersedes the July 18, 2003 Advisory Bulletin by correcting a typographical error in the sixth bullet and removing the exemption for small utility LP gas systems from Subpart N (Qualification of Pipeline Personnel) from the bulleted list.**



Advisory Bulletin No. ADB-2013-04

Issued August 28, 2013

Pipeline Safety: Natural Gas and HL Pipeline Operators Recall on Leak Repair Clamps Due to Defective Seal

- TDW has deemed its Leak Repair Clamps defective due to the seal in every clamp not maintaining adequate pressure causing the clamp to fail, which may cause a leak that could result in a fire, explosion, injury, or death. TDW asks all of its customers to stop using the LRC immediately, return it, and follow up with TDW's recall procedures for the LRC.
- PHMSA advises pipeline operators to take the following measures:
 - Verify records to determine if a TDW LRC is installed.
 - Stop using the TDW LRC immediately.
 - Contact TDW and follow up with its recall process.
 - TDW Web site: <http://lrc.tdwilliamson.com/>.
 - TDW phone number: 888-770-7085.



Advisory Bulletin No. ADB-2014-02

Issued May 6, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Lessons Learned From the Release at Marshall, Michigan

- To inform all pipeline owners and operators of the deficiencies identified in Enbridge's integrity management (IM) program that contributed to the release of hazardous liquid near Marshall, Michigan, on July 25, 2010.
- Pipeline owners and operators are encouraged to review their IM programs for similar deficiencies and take corrective action. Operators should also consider training their control room staff as teams to recognize and respond to emergencies or unexpected conditions.
- The advisory encourages operators to evaluate their leak detection capabilities to ensure adequate leak detection coverage during transient operations and assess the performance of their leak detection systems following a product release to identify and implement improvements as appropriate.



Advisory Bulletin No. ADB-2014-02

Issued May 6, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Lessons Learned From the Release at Marshall, Michigan

- Additionally, operators are encouraged to review the effectiveness of their public awareness programs and whether local emergency response teams are adequately prepared to identify and respond to early indications of ruptures.
- Finally, this advisory reminds all pipeline owners and operators to review NTSB recommendations following accident investigations.
- Owners and operators should evaluate and implement recommendations that are applicable to their programs.



Advisory Bulletin No. ADB-2014-03

Issued September 12, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Notification(s) Required Prior to Certain Construction-Related Events

- PHMSA needs to be aware of certain construction-related events to have sufficient time to schedule reviews of pipeline construction plans and inspections.
- Timely construction plan reviews and inspections could help operators avoid costly modifications, repairs and/or additions to achieve compliance with the regulations.
- PHMSA strongly encourages operators to provide construction-related notification(s) not later than 60 days prior to whichever occurs first:
 - Material purchasing and manufacturing;
 - right-of-way acquisition;
 - construction equipment move-in activities;
 - onsite or offsite fabrications;
 - or right-of-way clearing, grading and ditching.



Advisory Bulletin No. ADB-2014-03

Issued September 12, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Notification(s) Required Prior to Certain Construction-Related Events

- PHMSA also strongly encourages operators to provide notification(s) for the construction of 10 or more miles of a new pipeline for a pipeline that:
 - (1) Did not previously exist; and
 - (2) for the replacement of 10 or more contiguous miles of line pipe in an existing pipeline.
- Construction or any planned rehabilitation, replacement, modification, upgrade, uprate, or update of a facility, other than a section of line pipe, that costs \$10 million or more.



Advisory Bulletin No. ADB-2014-04

Issued September 18, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Guidance for Pipeline Flow Reversals, Product Changes and Conversion to Service

- PHMSA is alerting operators of the potential significant impact flow reversals, product changes and conversion to service may have on the integrity of a pipeline.
- Failures on natural gas transmission and hazardous liquid pipelines have occurred after these operational changes.
- Describes specific notification requirements and general operating and maintenance (O&M) and integrity management actions regarding flow reversals, product changes and conversion to service.
- Recommends additional actions operators should take when these operational changes are made including the submission of a comprehensive written plan to the appropriate PHMSA regional office regarding these changes prior to implementation.



Advisory Bulletin No. ADB-2014-05

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Guidance for Strengthening Pipeline Safety Through Rigorous Program Evaluation and Meaningful Metrics.

- PHMSA is informing operators that they have developed guidance on the elements and characteristics of a mature IM program evaluation process using meaningful metrics.
- The guidance document titled “Guidance for Strengthening Pipeline Safety Through Rigorous Program Evaluation and Meaningful Metrics,” is available on PHMSA's public Web site at <http://phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Pipeline/Regulations/IMPEG.pdf> and should be used when operators develop and perform IM program evaluations.
- The guidance document provides additional specificity to several of the topics detailed in a previously issued Advisory Bulletin, ADB-2012-10, “Using Meaningful Metrics in Conducting Integrity Management Program Evaluations.”



Advisory Bulletin No. ADB-2014-05

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Guidance for Strengthening Pipeline Safety Through Rigorous Program Evaluation and Meaningful Metrics.

- Operators are required to perform program evaluations and use meaningful metrics. The guidance builds on existing standards and regulations to provide a more detailed and comprehensive description of the steps involved in program evaluations as well as the selection of meaningful performance metrics to support these evaluations and clarifies PHMSA's expectations for operator processes when measuring IM program effectiveness.
- PHMSA inspectors will use the program evaluation guidance within the guidance document as criteria when evaluating the effectiveness of operator IM program evaluations to assure operators are developing sound program evaluation processes and are developing and applying a robust and meaningful set of performance metrics in their program evaluations.



Advisory Bulletin No. ADB-2015-01

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding.

- Severe flooding can adversely affect the safe operation of a pipeline. Operators need to direct their resources in a manner that will enable them to determine and mitigate the potential effects of flooding on their pipeline systems in accordance with applicable regulations.
- Operators are urged to take the following actions to prevent and mitigate damage to pipeline facilities and ensure public and environmental safety in areas affected by flooding:
 1. Utilize experts in river flow, such as hydrologists or fluvial geomorphologists, to evaluate a river's potential for scour or channel migration at each pipeline river crossing.



Advisory Bulletin No. ADB-2015-01

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding.

2. Determine the maximum flow or flooding conditions at rivers where pipeline integrity is at risk in the event of flooding (e.g., where scour can occur) and have contingency plans to shut down and isolate those pipelines when those conditions occur.
3. Evaluate the accessibility of pipeline facilities and components that may be in jeopardy, such as valve settings, which are needed to isolate water crossings or other sections of pipelines.
4. Extend regulator vents and relief stacks above the level of anticipated flooding as appropriate.
5. Coordinate with emergency and spill responders on pipeline locations, crossing conditions, and the commodities transported. Provide maps and other relevant information to such responders so they can develop appropriate response strategies.
6. Coordinate with other pipeline operators in flood areas and establish emergency response centers to act as a liaison for pipeline problems and solutions.
7. Deploy personnel so that they will be in position to shut down, isolate, contain, or perform any other emergency action on an affected pipeline.



Advisory Bulletin No. ADB-2015-01

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding.

8. Determine if facilities that are normally above ground (e.g., valves, regulators, relief sets, etc.) have become submerged and are in danger of being struck by vessels or debris and, if possible, mark such facilities with U.S. Coast Guard approval and an appropriate buoy.
9. Perform frequent patrols, including appropriate overflights, to evaluate right-of-way conditions at water crossings during flooding and after waters subside. Report any flooding, either localized or systemic, to integrity staff to determine if pipeline crossings may have been damaged or would be in imminent jeopardy from future flooding.
10. Have open communications with local and state officials to address their concerns regarding observed pipeline exposures, localized flooding, ice dams, debris dams, and extensive bank erosion that may affect the integrity of pipeline crossings.
11. Following floods, and when safe river access is first available, determine if flooding has exposed or undermined pipelines because of new river channel profiles. This is best done by a depth of cover survey.



Advisory Bulletin No. ADB-2015-01

Issued October 15, 2014

Pipeline Safety: Natural Gas and HL Pipeline Operators Potential for Damage to Pipeline Facilities Caused by Severe Flooding.

12. Where appropriate, surveys of underwater pipe should include the use of visual inspection by divers or instrumented detection. Pipelines in recently flooded lands adjacent to rivers should also be evaluated to determine the remaining depth of cover. You should share information gathered by these surveys with affected landowners. Agricultural agencies may help to inform farmers of potential hazards from reduced cover over pipelines.
 13. Ensure that line markers are still in place or are replaced in a timely manner. Notify contractors, highway departments, and others involved in post-flood restoration activities of the presence of pipelines and the risks posed by reduced cover.
- If a pipeline has suffered damage or is shut-in as a precautionary measure due to flooding, the operator should advise the appropriate PHMSA regional office or state pipeline safety authority before returning the line to service, increasing its operating pressure, or otherwise changing its operating status. Furthermore, reporting a Safety-Related Condition as prescribed in §§ 191.23 and 195.55 may also be required.



Final Rule Issued September 18, 2013
49 CFR Part 190, 192, 193, 195, and 199
Docket ID: PHMSA-2012-0102

Pipeline Safety: Administrative Procedures; Updates and Technical Corrections

- **Effective January 3, 2012, the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011 (Pub. L. 112-90) (the Act) increased the maximum administrative civil penalties for violation of the pipeline safety laws and regulations to \$200,000 per violation per day of violation, with a maximum of \$2,000,000 for a related series of violations.**
- The Act also imposed certain requirements for the conduct of informal administrative enforcement hearings including, among other things: convening hearings before a presiding official, an attorney on the staff of the Deputy Chief Counsel;



Final Rule Issued September 18, 2013
49 CFR Part 190, 192, 193, 195, and 199
Docket ID: PHMSA-2012-0102

Pipeline Safety: Administrative Procedures; Updates and Technical Corrections

- providing an opportunity for a respondent to arrange for a hearing transcript; ensuring a separation of functions between agency employees involved with the investigation or prosecution of an enforcement case and those involved in deciding the case; and prohibiting ex parte communications.
- The Act also provided PHMSA with new enforcement authority for oil spill response plan compliance under section 4202 of the Oil Pollution Act of 1990 (33 U.S.C. 1321(j)).



Final Rule Issued September 18, 2013
49 CFR Part 190, 192, 193, 195, and 199
Docket ID: PHMSA-2012-0102

Pipeline Safety: Administrative Procedures; Updates and Technical Corrections

- In accordance with the Act, PHMSA updated the administrative civil penalty maximums and the informal hearing process for enforcement matters to conform to current law and to amend other administrative procedures; amend the criminal enforcement provisions to conform to current law and practice; make corrections to the special permit provisions in the procedures for adoption of rules; implement the new enforcement authority for Part 194 oil spill response plans; and make certain technical amendments and corrections.

(The effective date of the amendments, October 25, 2013)



Final Rule Issued September 25, 2013
49 CFR Part 190, 192, 193, 195, and 199
Docket ID: PHMSA-2012-0102

Pipeline Safety: Administrative Procedures; Updates and Technical Corrections

- PHMSA has amended the pipeline safety regulations to update the administrative civil penalty maximums for violation of the safety standards to reflect current law, to update the informal hearing and adjudication process for pipeline enforcement matters to reflect current law, and to make other technical corrections and updates to certain administrative procedures.
- The amendments do not impose any new operating, maintenance, or other substantive requirements on pipeline owners or operators.

(The effective date of the amendments, October 25, 2013)



Final Rule Issued January 5, 2015
49 CFR Part 192, 193, 195, and 199
Docket ID: PHMSA-2011-0337

**Pipeline Safety: Periodic Updates of Regulatory References to
Technical Standards and Miscellaneous Amendments**

- PHMSA is amending the pipeline safety regulations to incorporate by reference (IBR) all or parts of new, updated, or reaffirmed editions of voluntary consensus standards that are available on the Internet, free-of-charge, to the public.
- PHMSA is also making non-substantive edits and to clarify regulatory language in certain provisions. These proposed changes are relatively minor, and will not require pipeline operators to undertake any significant new pipeline safety initiatives. (Removal of 199.111 which conflicts with CFR Part 40, changing title of welder to welder operator, etc.)



Final Rule Issued January 5, 2015
49 CFR Part 192, 193, 195, and 199
Docket ID: PHMSA-2011-0337

**Pipeline Safety: Periodic Updates of Regulatory References to
Technical Standards and Miscellaneous Amendments**

- **New Standards Incorporated by Reference (Fully or Partially)**
 - **API RP 5LT**, “Recommended Practice for Truck Transportation of Line Pipe” (First edition) (March 1, 2012). (API RP 5LT) - Referenced in §192.65 and §195.207.
 - **ASTM D2513-09a**, “Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings,” (December 1, 2009), (**except section 4.2 pertaining to rework material**) (ASTM D2513) - Referenced in §§ 192.59 (d); 192.63 (a); 192.123 (e); 192.191 (b); 192.281 (b); 192.283 (a); Item 1, Appendix B to Part 192.
 - Changes include a new requirement for **outdoor storage of PE pipe, three years for yellow pipe and 10 years for black pipe**; new high performance PE pipe material designation codes, with increased long-term performance requirements; and more stringent requirements for use of rework material in PE gas pipe.



Final Rule Issued January 5, 2015
49 CFR Part 192, 193, 195, and 199
Docket ID: PHMSA-2011-0337

**Pipeline Safety: Periodic Updates of Regulatory References to
Technical Standards and Miscellaneous Amendments**

- **New Standards Incorporated by Reference (Fully or Partially)**
 - PHMSA proposes for other non-PE plastic materials to continue to reference the ASTM D2513-87 (for § 192.63 only, marking of materials) and ASTM D2513-99 (except section 4.2 pertaining to rework material) for §§192.59 (d); 192.191(b); 192.281(b)(2); 192.283(a)(1)(i); and Item 1, Appendix B to Part 192).



Final Rule Issued January 5, 2015
49 CFR Part 192, 193, 195, and 199
Docket ID: PHMSA-2011-0337

**Pipeline Safety: Periodic Updates of Regulatory References to
Technical Standards and Miscellaneous Amendments**

§192.321 Installation of plastic pipe.

(g) Uncased Plastic pipe may be temporarily installed above ground level under the following conditions:

- (1) The operator must be able to demonstrate that the cumulative aboveground exposure of the pipe does not exceed the manufacturer's recommended maximum period of exposure or 2 years, whichever is less.**



Final Rule Issued January 5, 2015
49 CFR Part 192, 193, 195, and 199
Docket ID: PHMSA-2011-0337

**Pipeline Safety: Periodic Updates of Regulatory References to
Technical Standards and Miscellaneous Amendments**

- Updated Editions **Not** To Be Incorporated by Reference
 - API Recommended Practice 1162, “Public Awareness Programs for Pipeline Operators,” (2nd edition)
 - API Standard 653, “Tank Inspection, Repair, Alteration, and Reconstruction” (4th edition) and Addendum (2010)

(Effective Date: March 6, 2015)



Final Rule Issued March 26, 2015

49 CFR Part 191, 192, 195, 198

Docket ID: PHMSA- 2010-0026

Pipeline Safety: Miscellaneous Changes to Pipeline Safety Regulations

- PHMSA is making miscellaneous changes to the pipeline safety regulations that are relatively minor, will impose minimal (if any) burden, and will clarify the existing regulations.

Issues addressed:

- Responsibility to Conduct Construction Inspections
- Leak Surveys for Type B Gathering Lines
- Qualifying Plastic Pipe Joiners
- Mill Hydrostatic Tests for Pipe to Operate at Alternative MAOP



Final Rule Issued March 26, 2015

49 CFR Part 191, 192, 195, 198

Docket ID: PHMSA- 2010-0026

**Pipeline Safety: Miscellaneous Changes to Pipeline Safety
Regulations**

Issues addressed:

- Regulating the Transportation of Ethanol by Pipeline
- Limitation of Indirect Costs in State Grants, Transportation of Pipe, Threading Copper Pipe
- Offshore Pipeline Condition Reports, Calculating Pressure Reductions for Hazardous Liquid Pipeline Integrity Anomalies
- Testing Components other than Pipe Installed in Low- Pressure Gas Pipelines
- Alternative MAOP Notifications



Final Rule Issued March 21, 2015

49 CFR Part 191, 192, 195, 198

Docket ID: PHMSA- 2010-0026

**Pipeline Safety: Miscellaneous Changes to Pipeline Safety
Regulations**

Issues addressed:

- National Pipeline Mapping System
- Welders vs. Welding Operators
- Components Fabricated by Welding
- Odorization of Gas
- Editorial Amendments

(Effective Date: October 1, 2015)



Current Rulemakings in Process

Safety of Gas Transmission and Gathering Lines

- ❑ NPRM moved past PHMSA
- ❑ ANPRM Published 8/25/2011
- ❑ **Major Topics under consideration:**
 - Expansion of IM requirements beyond HCA's
 - Repair criteria for both HCA and non-HCA areas
 - Assessment methods
 - Corrosion control
 - Gas gathering



Current Rulemakings in Process

Safety of Gas Transmission and Gathering Lines

(Continued)

- ☐ Integrity Verification Process
- ☐ Recommendations from NTSB
 - ☐ Elimination of the Grandfather clause
 - ☐ Minimum pressure test
- ☐ Congressional mandate requiring either pressure testing or alternative equivalent means such as ILI (internal line inspection) program for pipe not previously tested or for those that have incomplete records to verify their MAOP
- ☐ Other problematic or “legacy” pipe



Current Rulemakings in Process

EFV Expansion beyond Single Family Residences

- ❑ NPRM moved past DOT
- ❑ ANPRM published 11/25/2011
- ❑ **Major Topics under consideration:**
 - Rule will propose to require EFVs for:
 - branched service lines serving more than one single family residence
 - multi-family residential dwellings
 - commercial buildings



Current Rulemakings in Process

Excavation Damage Prevention

- ☐ Final Rule moved past PHMSA
- ☐ Adv. Committee approval vote December 2012
- ☐ NPRM published 4/2/2012
- ☐ Major Topic
 - Enforce damage protection laws in States that have inadequate enforcement to protect safety. Complies with PIPE's Act 60114(f).



Current Rulemakings in Process

Operator Qualification, Cost Recovery and Other Pipeline Safety Proposed Changes

- ☐ NPRM moved past PHMSA
- ☐ **This rule will address issues related to:**
 - Operator Qualification for new construction
 - Incident Reporting
 - Cost Recovery
 - Renewal process for special permits
 - Other issues to be determined



Current Rulemakings in Process

Plastic Pipe

- ❑ **Drafting NPRM to address the following plastic pipe topics:**
 - Authorized use of PA-12
 - AGA petition to raise design factor from 0.32 to 0.40 for PE pipe
 - Enhanced Tracking and traceability
 - Miscellaneous revisions for PE and PA-11 pipelines
 - Additional provisions for fittings used on plastic pipe



Current Rulemakings in Process

Rupture Detection and Valve Rule

(NPRM stage)

- ❑ Will establish and define rupture detection and response time metrics including the integration of Automatic Shutoff Valves (ASV) and Remote Control Valve (RCV) placement, 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: Auto Safety Valve/Remote Control Valve 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



Current Rulemakings in Process

Rupture Detection and Valve Rule

(NPRM stage)

- ❑ Section 8: Require operators of hazardous liquid pipeline facilities to use leak detection systems and establish standards for their use.
 - NTSB Recommendation P-11-10 (gas) which requires transmission and distribution operators to equip SCADA systems with tools to assist with recognizing and pinpointing leaks.



Rule Process

- Where can I find information on the Status of Significant rulemakings?
 - **DOT**
 - Report on DOT Significant Rulemakings (Monthly reports)
 - www.dot.gov/regulations
 - **OMB (Office of Management and Budget)**
 - www.reginfo.gov



Notice Concerning Required Reporting to the National Response Center (NRC)

- The National Response Center (operated by the US Coast Guard) has taken down it's online reporting webpages.
- All required reports must be reported to the NRC by phone until further notice.
- NRC Phone Number: **1-800-424-8802**
- In Washington, DC: **(202) 267-2675**

<http://www.nrc.uscg.mil>



Gas Transmission, Gas Gathering Annual Reports.

- Links to: Annual Report Instructions
- Online submission via PHMSA Portal is required unless an alternative reporting method is granted by PHMSA.
- PHMSA Portal <https://portal.phmsa.dot.gov/portal>
- See Online Submission Registration Requirements at http://opsweb.phmsa.dot.gov/portal_message/PHMSA_Portal_Registration.pdf



Information Websites

PHMSA Inspector Training and Qualifications

<http://www.phmsa.dot.gov/pipeline/tq>

PHMSA Pipeline Safety Regulations

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

PHMSA Rulemaking

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

PHMSA Inspector Enforcement Guidance

<http://www.phmsa.dot.gov/foia/e-reading-room>



Fun Fact: March 10, 2015

HAPPY 75TH BIRTHDAY
CHUCK NORRIS!

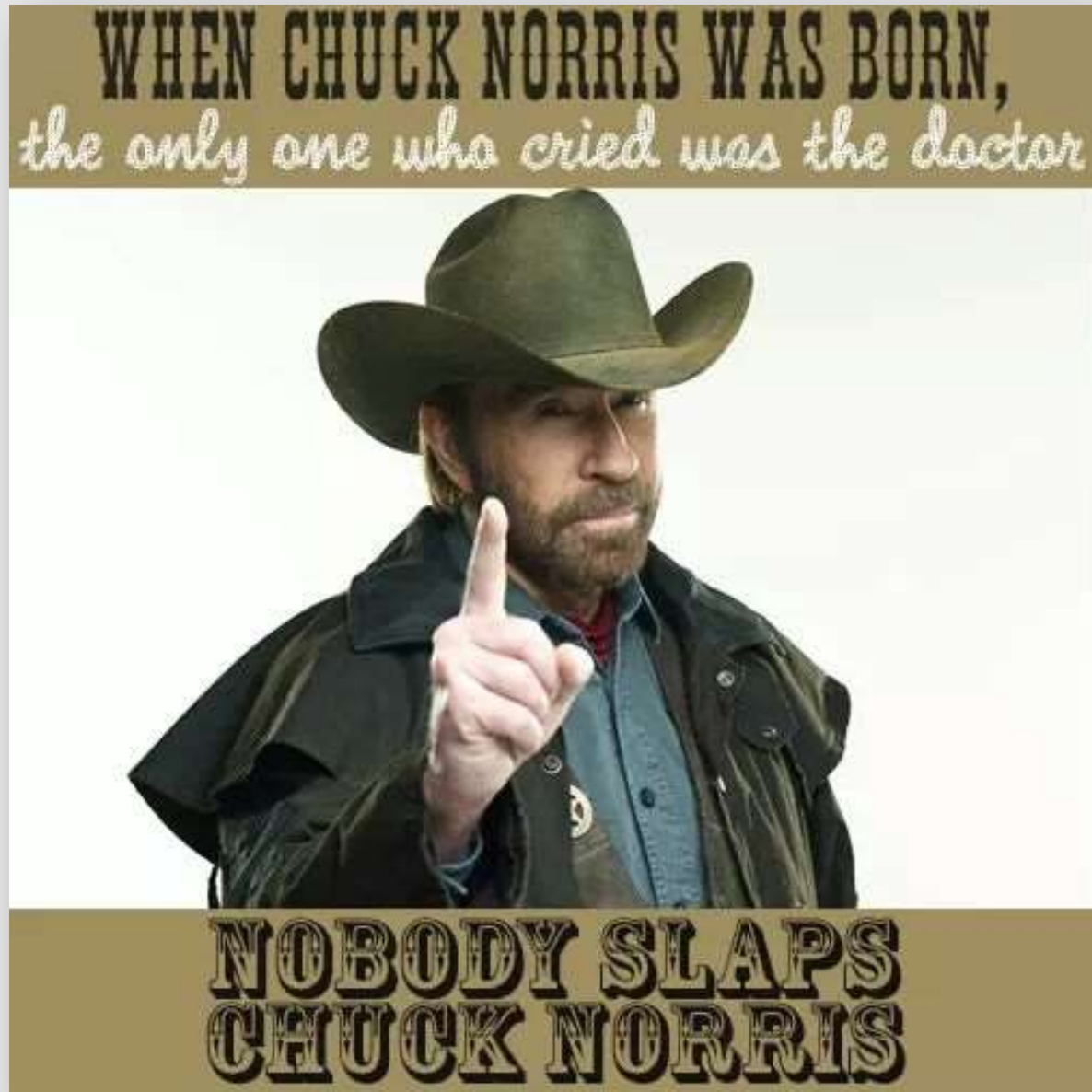


FACT:

Chuck norris has a grizzly bear carpet in his room.
It's not dead, it's just afraid to move.



Fun Fact





PHMSA Inspector Training and Qualifications

**We're with the Government
and We're Here to Help!**