



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



RECENT EVENTS AND THE ROAD TO REAUTHORIZATION



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Advisory Bulletin No. ADB-10-06

August 03, 2010

Personal Electronic Device Related Distractions

- Remind owners and operators pipeline facilities of the increased risks associated with the use of personal electronic devices (PEDs) by individuals performing operations and maintenance activities on a pipeline facility
- Recommend that operators integrate into their written procedures for operations and maintenance appropriate controls regarding use of PEDs, and provide guidance and training about the risks associated with PEDs



Reauthorization

- PIPES 2006
- Scheduled reauthorization in 2010

THEN.....



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

Deepwater Horizon





- Reauthorizations hearings
 - Eight hearings
 - 5 in 2010
 - 3 in 2011
 - Data requests





2010 Incidents

Third Party Damage

- Cleburne and Darrouzett, Texas 6/10
- Thompson, Georgia 7/10





Lessons Learned

- Damage Prevention and locating
- Line Marking
- Public Awareness



Liquid Accidents

- **Marshall, MI**
6/10
- **Red Butte Creek, UT**
6/10, 11/10
- **Chicago, IL**
9/10





Marshall, MI

- Reporting
- IM
- CRM
- Emergency Response
- Waiting NTSB report





Red Butte Creek, UT

- Damage Prevention and One Call
- Electrical isolation
- Patrolling and Leak Detection





Red Butte Creek, UT

- Second Release





Red Butte Creek, UT

- O&M procedures – particularly during cold weather
- Leak detection
- Valve inspection and maintenance



Chicago, IL

- Two-inch diameter hole was found in the bottom of the pipe directly above a water main that passes perpendicular to the pipe
- Two holes were found in the top of the water main
- Fault Current issue



San Bruno September 2010





San Bruno





San Bruno





Advisory Bulletin No. ADB-10-08

October 28, 2010

Emergency Preparedness Communications

- Operators need to share emergency response plans with emergency responders to ensure prompt, effective, and coordinated response to emergencies involving a pipeline facility
- Requirement of both emergency response and public awareness



Advisory Bulletin No. ADB-11-01

January 10, 2011

Establishing MAOP/MOP using Record Evidence, and Integrity Management Risk Identification, Assessment, Prevention and Mitigation

- Reminding operators to perform detailed risk analyses that integrate accurate data and information from their system, especially when calculating MAOP, and utilizing risk analyses in the identification of appropriate assessments, and preventative and mitigative measures.



NTSB Report – San Bruno September, 2011

- Secretary of Transportation – 4
- PHMSA – 13
- Governor of California – 1
- California PUC – 2
- PG&E – 8
- AGA and INGAA – 1

Far reaching in breadth and depth



NTSB Report – San Bruno September, 2011

Final Report provided recommendations to PHMSA

- Provide system-specific information to the emergency response agencies, including pipe diameter, operating pressure, product transported, and potential impact radius.
- Ensure control room operators immediately and directly notify the 911 emergency call center(s)



NTSB Report – San Bruno September, 2011

- Require all operators equip their supervisory control and data acquisition systems with tools to assist in recognizing and pinpointing the location of leaks, including line breaks
- Amend §192.935(c) to directly require that automatic shutoff valves or remote control valves in HCAs and class 3 and 4 locations.



NTSB Report – San Bruno September, 2011

- Amend § § 199.105 and 199.225 to eliminate operator discretion with regard to testing of covered employees. Require D&A testing of each employee whose performance either contributed to the accident or cannot be completely discounted as a contributing factor to the accident.



NTSB Report – San Bruno September, 2011

- Require that all natural gas transmission pipelines be configured so as to accommodate in-line inspection tools, with priority given to older pipelines.
- Delete grandfather clause (§192.619(c)) and require all pre-1970 gas transmission lines to be hydrotested



NTSB Report – San Bruno September, 2011

- Revise integrity management inspection protocol to
 - (1) incorporate a review of meaningful metrics;
 - (2) require auditors to verify that the operator has a procedure in place for ensuring the completeness and accuracy of underlying information;
 - (3) require auditors to review all reported IM performance measures and compare the leak, failure, and incident measures to the operator's risk model; and
 - (4) require setting performance goals for pipeline operators at each audit and follow up on those goals at subsequent audits.



NTSB Report – San Bruno September, 2011

- Develop and implement standards for IM and other performance-based safety programs that require operators of all types of pipeline systems to regularly assess the effectiveness of their programs using clear and meaningful metrics, and to identify and then correct deficiencies; and make those metrics available in a centralized database.



NTSB Report – San Bruno September, 2011

- Work with state public utility commissions to (1) implement oversight programs that employ meaningful metrics to assess the effectiveness of their oversight programs and make those metrics available in a centralized database, and (2) identify and then correct deficiencies in those programs.



Final Rule

Amdt.192-114

August 11, 2010

Updates to Referenced Technical Standards and Miscellaneous Edits

- Updated some incorporated by reference documents
- Moved and added definitions
- Changes to Subpart F – Joining by other than Welding
- Transmission repair procedures IM clarifications



Final Rule

Amdt. 192-115

November 25, 2010

Updates to Pipeline and LNG Reporting Requirements

- Incident definition**
- IM reporting requirements**
- Operator ID numbers**



Detroit, MI 12-10





Philadelphia, PA January, 2011





Fairport Harbor, January, 2011

- Multiple Fires
- No injuries





Village of Fairport Harbor

- A series of fires that occurred in the Village of Fairport Harbor, Ohio on January 24, 2011 beginning at approximately 6:37a.m. Eleven homes were severely damaged,
- 150 homes required appliance repair or replacement resulting from what was identified as a major gas leak.' Thirteen local fire departments responded;' estimated property damage of the incident was nearly \$1,300,000: Operator provided telephone notice of the incident to the chief of gas pipeline safety, at approximately 9:30a.m. on January 24, 2011.



Fairport Harbor

- Double regulator failure off high pressure transmission line
- Additional inspections
- Add relief valve to setting





1/25/2011

Picture 7



1/25/2011

Picture 26



Allentown, PA 2-11





ADB - 2012 - 05

Cast Iron Pipe (Supplementary Advisory Bulletin)

- Advising to owners and operators of natural gas cast iron distribution pipelines and state pipeline safety representatives
- update of two prior Alert Notices (ALN-91-02; 10/11/91 & ALN-92-02; 6/26/92)





ADB - 2012 - 05

Cast Iron Pipe (Supplementary Advisory Bulletin)

- urges owners and operators to conduct a comprehensive review of their cast iron distribution pipelines and replacement programs and accelerate pipeline repair, rehabilitation and replacement of high-risk pipelines





ADB - 2012 - 05

Cast Iron Pipe (Supplementary Advisory Bulletin)

- requests state agencies to consider enhancements to cast iron replacement plans and programs
- alerts owners and operators of the pipeline safety requirements for the investigation of failures.





ADB - 2012 - 05

Cast Iron Pipe (Supplementary Advisory Bulletin)

- Also gives as information the latest survey and reporting requirements of cast iron pipelines required by the Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011





Allentown, PA 2-11





Liquid Accidents

- **Yellowstone River,
Montana
7/11**





- **ADB-11-02, February 3, 2011**

- Dangers of Abnormal Snow and Ice Build-up on Gas Distribution Systems

- **ADB-11-04, July 27, 2011**

- Potential Damage to Pipeline Facilities Caused by Severe Flooding

- **ADB-11-05, September 1, 2011**

- Potential for Damage to Pipeline Facilities Cause by Hurricanes



Cupertino, CA 8-11





Aldyl "A"

- **Had \$2million put in rate base to study Aldyl "A" in 2009**
- **Never conducted the Study.**
- **Had several Failures on Aldyl "A" piping system.**
- **Keys to DIMP?**



Seattle, WA 9-11













Common theme of all four pipe failures

- A separate metallic facility intersected in close proximity to each gas service at each point of failure.
 - All gas services were in close proximity but in no case were touching the intersecting facility.
 - One copper water line
 - One steel water line
 - One below ground oil tank vent line
 - One ductile iron sewer pipe



ANPRM

August 25, 2011

Safety of Gas Transmission Pipelines

- Requesting comments regarding some changes to Integrity Management (IM) requirements, including
 - adding more prescriptive language
 - other issues related to system integrity should be addressed by strengthening or expanding non-IM requirements



ANPRM

August 25, 2011

Safety of Gas Transmission Pipelines

- Requesting comments regarding some changes to Integrity Management (IM) requirements, including:
 - HCA definitions
 - ILI requirements
 - Modifying repair criteria
 - Proscriptive requirements for data integration



ANPRM

August 25, 2011

Safety of Gas Transmission Pipelines

- Requesting comments regarding some changes to Integrity Management (IM) requirements, including
 - Requirements for automatic valves
 - Corrosion control
- Due January 20, 2012



ANPRM

November 22, 2012

- Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences
 - Practicable to implement?
 - Cost factors
 - Use of technical standards and guidance for EFVs
- Comments due March 19, 2012



NPRM

November 29, 2012

Miscellaneous Changes to Pipeline Safety Regulations

- National Pipeline Mapping System
- Welding and Welding Operator Definitions
 - Welding and welding operator procedures, qualifications and weld inspection and testing
- Plastic pipe qualifications (15 months)
- Construction inspection by person not involved in construction



NPRM

November 29, 2012

Miscellaneous Changes to Pipeline Safety Regulations

- Changes to Subpart J, testing requirements
 - Clarification of lateral for odorization requirements
 - Alternate MAOP changes
-
- Comments due by March 6, 2012



The Pipeline Safety, Regulatory Certainty, and Job Creation Act of 2011

- Signed January 3, 2012
- Funds programs of the Pipeline and Hazardous Materials Safety Administration (PHMSA) through fiscal year 2015.
- Addresses National Transportation Safety Board recommendations resulting from recent pipeline incidents



Reauthorization

Pipeline Safety, Regulatory Certainty and Job Creation Act (January 3, 2012)



- Doubles maximum fines for safety violations
- New standards for remote closure valves
- Two to three year period to study impact of new regulations regarding leak detection and expansion of HCA's among others.



Reauthorization

➤ Fines

- ✓ Maximums increased to \$200,000 and \$2,000,000.

➤ Automatic / Remote Shut Off Valve

- ✓ Regulations to require for new (or replaced) transmission lines by 2014.

➤ HCA Emergency Response Time

- ✓ Comptroller General report due by 2013.



Reauthorization

➤ Integrity Management

- ✓ Expanding IMP requirements outside HCA's?
- ✓ Report due 2014 to include evaluation of public safety enhancement, risk reduction and incremental cost factors.
- ✓ Findings / future rulemaking?



Reauthorization

- Leak Detection (Liquids)
 - ✓ Evaluation of limitations of current technology.
 - ✓ Establish standards for capabilities of leak detection systems?
 - ✓ Report due in 2013.
 - ✓ Findings / future rulemaking?



Reauthorization

- Accident and Incident Notification
 - ✓ Post discovery, one hour maximum time to notify NRC.
- Study of Transportation of Diluted Bitumen
 - ✓ Report due mid 2013.
- Excess Flow Valves
 - ✓ NTSB recommendation.
 - ✓ Regulations for multi-family dwellings?



Reauthorization

➤ MAOP Records Verification

- ✓ Complete by mid 2012 for Class 3 & 4 locations and Class 1 & 2 HCA's.
- ✓ Identify all pipelines with insufficient records by mid 2013.
- ✓ Regulations for confirmation of material strength of transmission lines located in HCA's by mid 2013.



Reauthorization

- Cover Over Buried Pipelines (Liquids)
 - ✓ Study of accidents at inland water body crossings.
 - ✓ Report due 2013 to include evaluation of depth of cover as a contributing factor.
 - ✓ Findings / legislative recommendations?



2013 Budget

- \$67 million increase for PHMSA
 - 150 new employees, including 120 new inspectors



ADB-2012-01

January 13, 2012

Implementation of the National Registry of Pipeline and Liquefied Natural Gas Operators

<u>ACTION</u>	<u>Submission Expected</u>
OPID requests	Begins February 1, 2012
OPID validation	June 30, 2012
60 day before notifications for 1/1/12 – 3/30/12	January 31, 2012
60 day before notifications after March 30, 2012	60 days prior to commencement
60 day after notifications	60 days after event



ADB-2012-04

March 21, 2012

Implementation of the National Registry of Pipeline and Liquefied Natural Gas Operators

- updates to ADB- 2012-01
- On January 27, 2012, the Online Data Reporting System (ODES) became functional for requesting a new OPID.
- PHMSA is entering the pdf versions of OPID request forms into ODES and will notify requestors when the OPID has been assigned



ADB-2012-04

March 21, 2012

- Master meter and small LPG operators established after December 31, 2011, will be required to obtain an OPID in accordance with §191.22
- 5/1/12 PHMSA will allow these MM/LPG operators to request an OPID.
- Requirement to request an OPID continues to **not apply** to master meter and small LPG operators in existence prior to 12/31/11.

The background of the slide features a photograph of a pipeline with a red sign that has the number '1203' on it. The sign is tilted and appears to be part of a larger structure. The overall scene is somewhat blurred and has a warm, golden light.

ADB-2012-04

March 21, 2012

- On March 27, 2012, operators will be able to complete the OPID validation process online.
- How to submit reports to PHMSA are available at <http://opsweb.phmsa.dot.gov>



Notice

January 18, 2012

Notice of Minimum Annual Percentage Rate for Random Drug Testing.

Minimum random drug testing rate for covered employees will remain at 25 percent during calendar year 2012.



ADB - 2012 - 02

Post Accident Drug and Alcohol Testing

- Recommendation in the NTSB San Bruno final report
- Conduct post-accident drug and alcohol testing of all potentially involved personnel despite uncertainty of the circumstances of the accident



ADB - 2012 - 02

Post Accident Drug and Alcohol Testing

- Covered employees include:
 - Operator and contractor employees performing operations, maintenance, or emergency response functions
 - Emergency responders, pressure control technicians, temp employees, and control room operators



ADB - 2012 - 02

Post Accident Drug and Alcohol Testing

- Review and update as necessary, plans and procedures governing post-accident drug and alcohol testing, and train personnel
- §§ 199.105, 199.225(a), 199.221, 199.103(a) and 199.223
 - Performance cannot be completely discounted as contributing factor
 - Two hour window, or maintain file while not done



ADB - 2012 - 03

Driscopipe 8000

High Density Polyethylene Pipe

- Advising operators using Driscopipe 8000 of the potential for material degradation
 - Contact manufacturer for updates
 - Determine if their systems susceptible to degradation
 - PHMSA cannot provide specific guidance on how to address issue
 - Conservative approach to discovery and repair of systems



API expands access to its safety standards

- The American Petroleum Institute announced it would provide free online public access to a large group of key industry standards, including a broad range of safety standards.
- 160 standards are be available online, and represent almost one-third of all API standards.
- Will include all that are safety-related or have been incorporated into federal regulation.



Should or May

versus

Shall or Must

Incorporated by Reference documents, “should” is “must” unless documented why not practicable/necessary



Enforcement Guidance

Various enforcement guidance is available at:

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

- Includes O&M, OQ, Corrosion, Public Awareness



PHMSA Information Websites

PHMSA Training and Qualification

<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](http://www.phmsa.dot.gov/pipeline/regs/rulemaking)