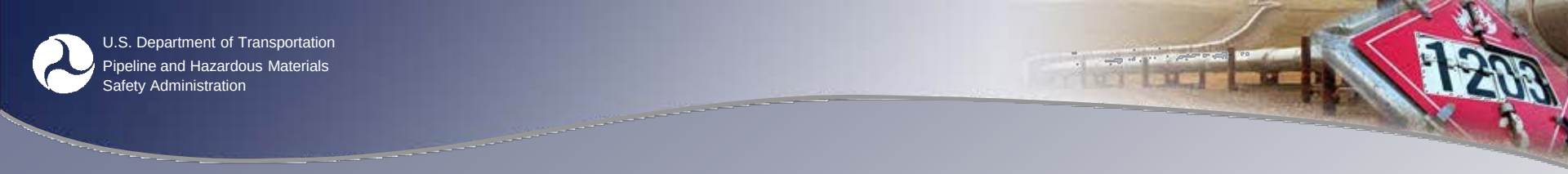
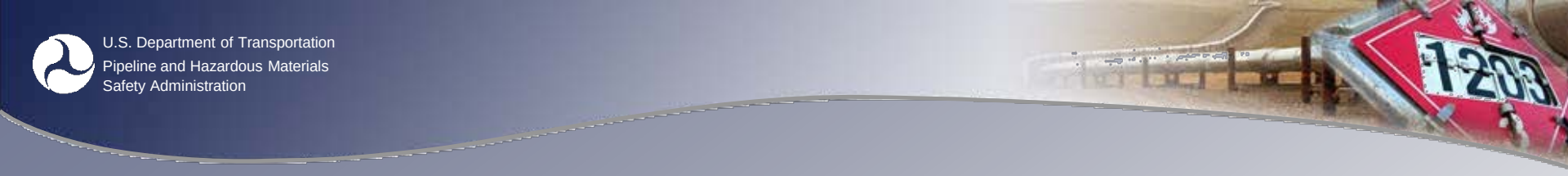


DIMP IMPLEMENTATION

National Association of Pipeline Safety Representatives

US DOT PHMSA Office of Pipeline Safety

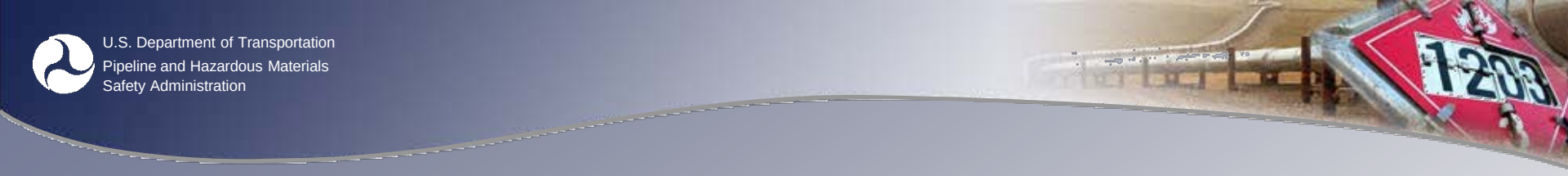


Topics for Session 2

- Mechanical Fitting Failure Report Data/Analysis
- DIMP Website and Performance Measures Reporting
- DIMP Inspection Forms
- Pipeline Safety Initiatives
- NTSB Findings and Recommendations
- Current Regulatory Topics for Distribution Operators
- Questions and Answers

Mechanical Fitting Failures

Reporting and Data Analysis



MFFR Reporting

- **§ 192.1009 What must an operator report when a mechanical fitting fails?** (a) Except as provided in paragraph (b) of this section, each operator of a distribution pipeline system must submit a report on each mechanical fitting failure, excluding any failure that results only in a nonhazardous leak, on a DOT Form PHMSA F–7100.1–2. The report(s) must be submitted in accordance with § 191.12.
- (b) The mechanical fitting failure reporting requirements in paragraph (a) of this section do not apply to the following: (1) Master meter operators; (2) Small LPG operator as defined in § 192.1001; or (3) LNG facilities.

MFFR Reporting (continued)

- **§ 191.12 Distribution Systems: Mechanical Fitting Failure Reports.** Each mechanical fitting failure, as required by § 192.1009, must be submitted on a MFFR Form PHMSA F–7100.1–2.
- Must submit for previous calendar year.
- May elect to submit its reports throughout the year.
- Must also report this information to the State pipeline safety authority if applicable.

Mechanical Fitting Failures
Reporting and Data Analysis

- Communication of Performance Data through DIMP web page

- The MFFR instructions have been revised to better communicate that Operators are to report all failures of mechanical fittings and compression type couplings, regardless of material, that result in a hazardous leak.

- Failures resulting from a construction or installation defect should be identified with the “Incorrect Operations” leak cause and not the “Material or Welds/Fusions” leak cause category (as is described in PHMSA F 7100.1-2 and the Instructions).

MFFR Data Analysis

- **2011 Data submitted by March 15, 2012 has been collected.**

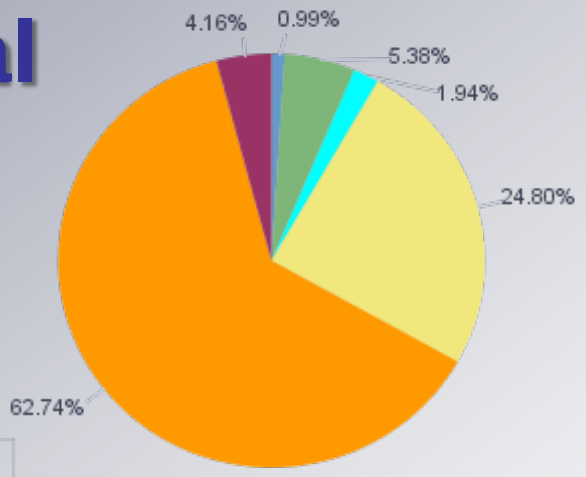
- **Approximately 8300 MFF reports have been submitted**

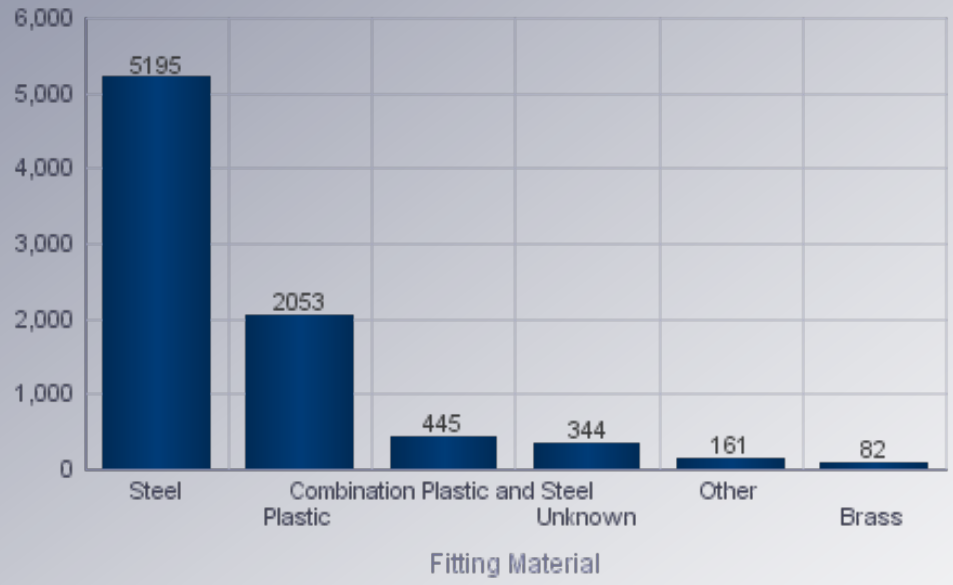
INSTRUCTIONS FOR COMPLETING FORM PHMSA F 7100.1-2

- Make an entry in each block for which data are available. Some companies may have very old pipe for which installation records do not exist. *Estimate data if necessary*. ***Avoid entering "Unknown" if possible.***

Mechanical Fitting Failures by Material

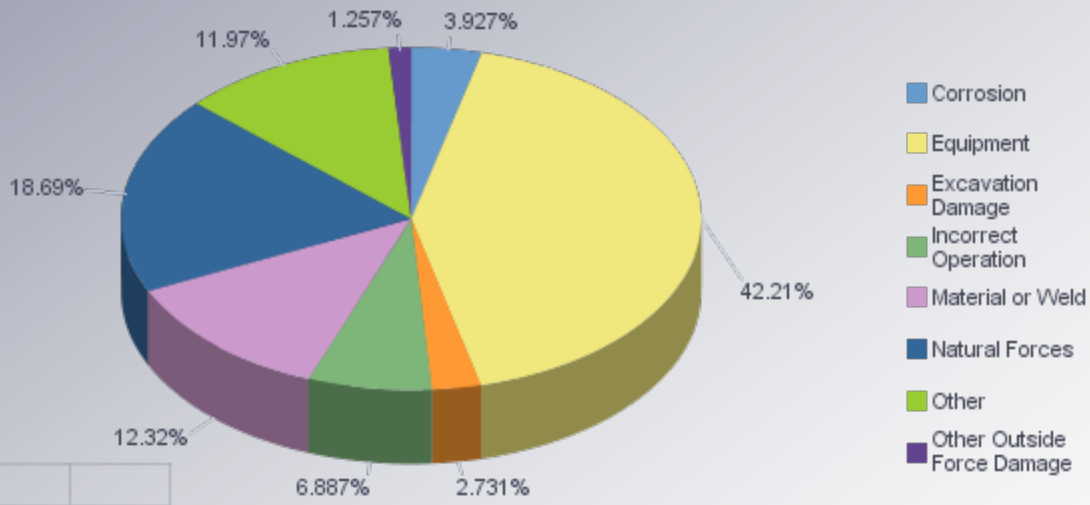
as of 3/21/2012

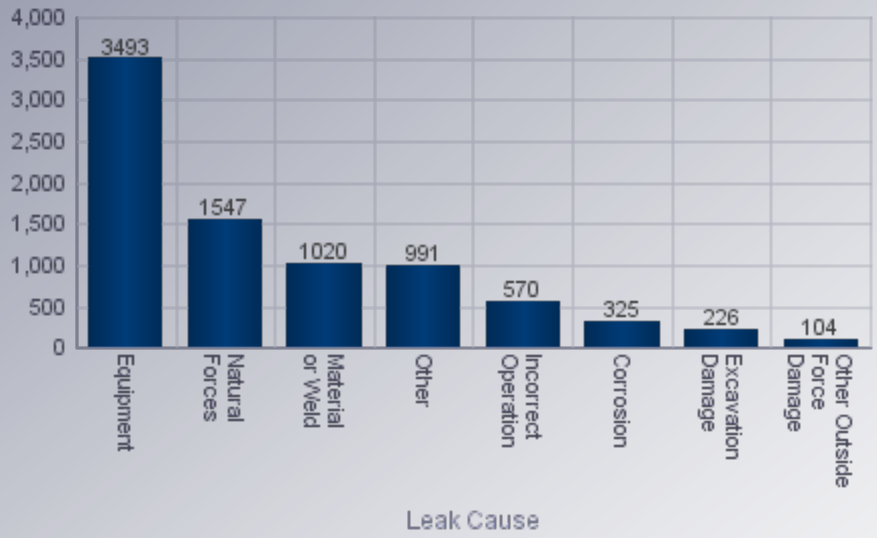




Mechanical Fitting Failures by Cause

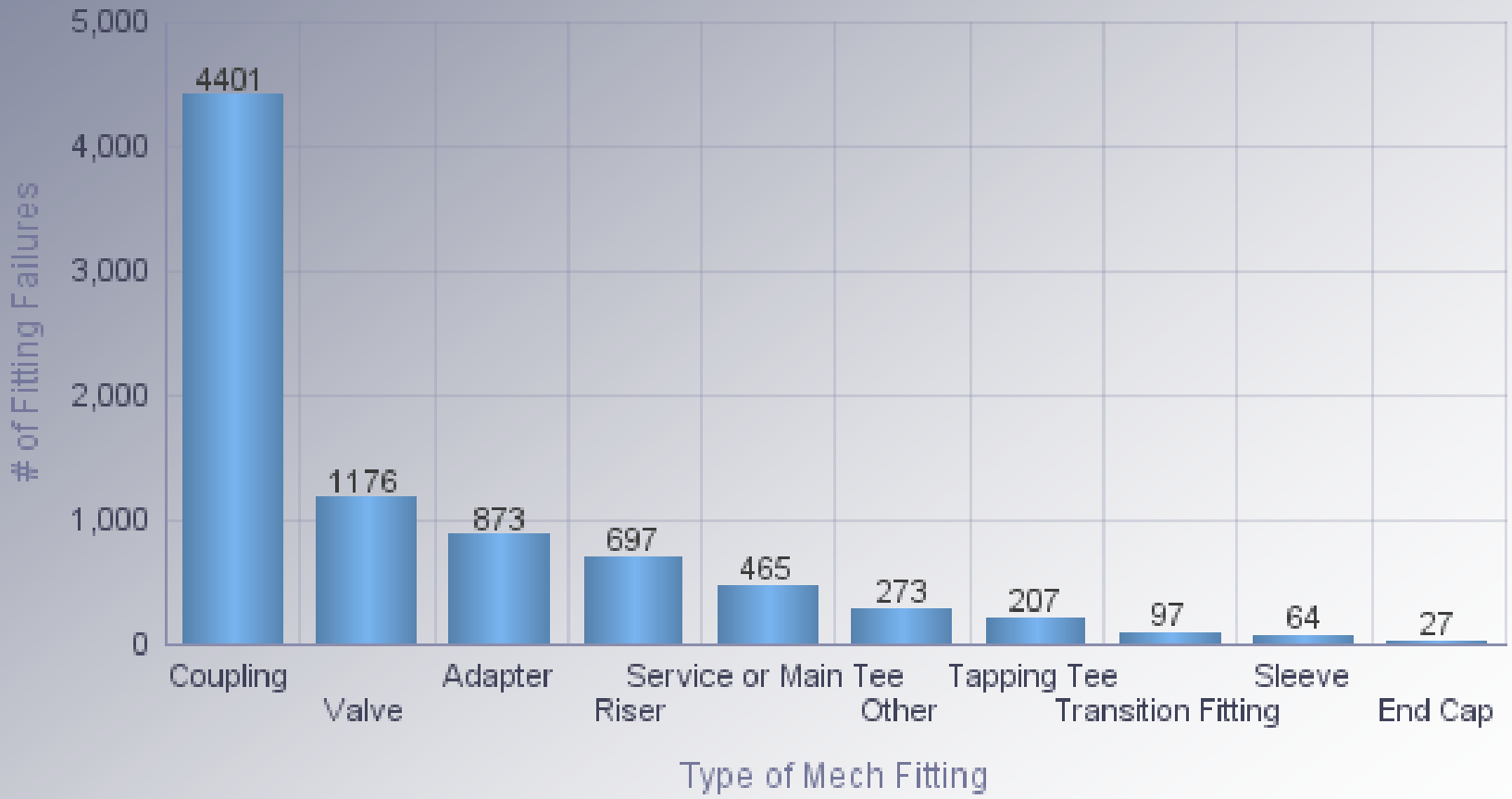
as of 3/21/2012





Mechanical Fitting Failure by Type of Mechanical Fitting

as of 3/21/2012

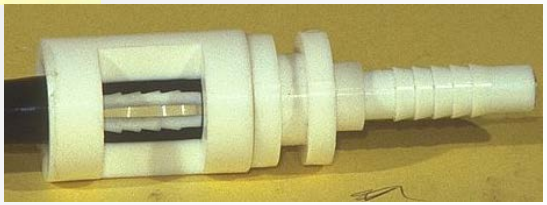


Specify the Mechanical Fitting Involved

Stab Type

Nut Follower

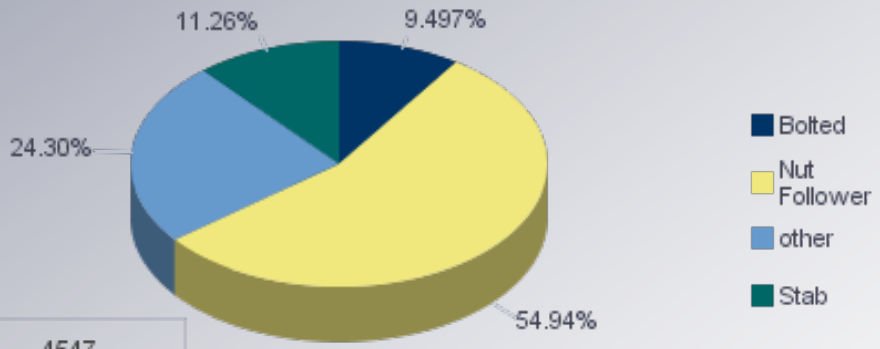
Bolt Type

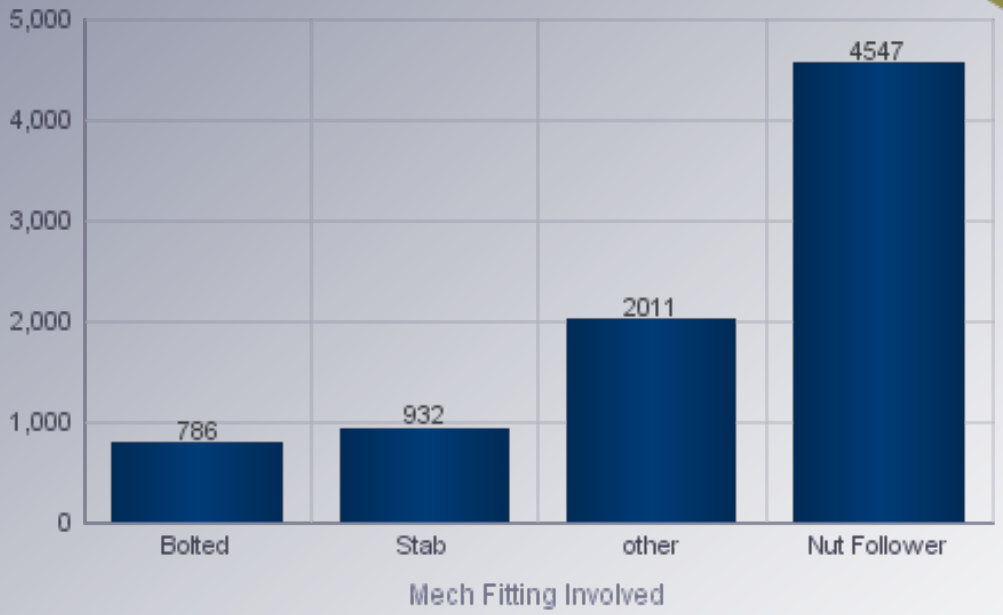


Other(s)

Mechanical Fitting Failures by Type

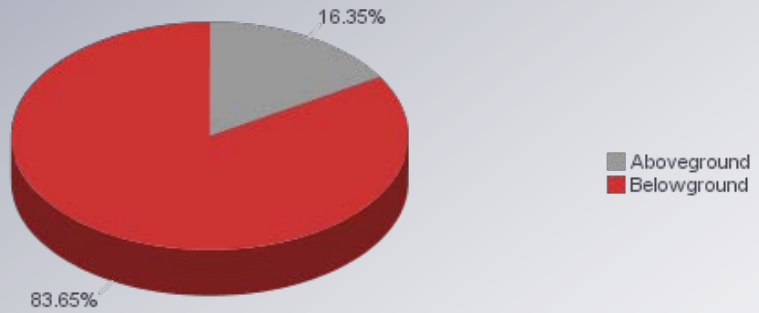
as of 3/21/2012

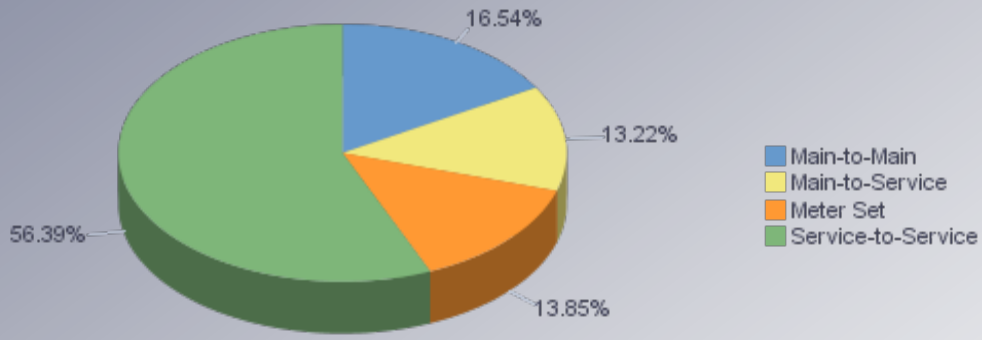


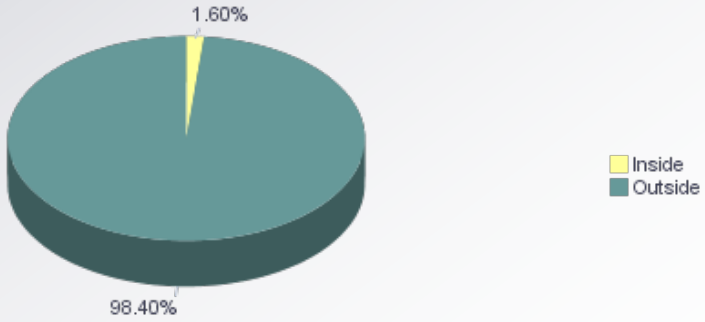


Mechanical Fitting Failures by Location in System

as of 3/21/2012







Manufacturer's Information for Mechanical Fittings

- The PPDC's manufacturer database file shows historical and current listings of manufacturers for plastic pipe and fittings used in natural gas distribution systems. The file is available on the PPDC website.
- AGA's Plastic Materials Committee's coupling database website is in the final stages of development. The coupling database has been developed for informational purposes only, and does not contain any information regarding the performance of the included couplings.

MFFR Data Analysis (continued)

- Raw data received by March 21, 2012 is presented here.
- MFFR Team has begun QA/QC the data and initiated analysis.
- Preliminary analysis of the data should be completed and posted on the DIMP Website.
- Results of the MFFR data analyses will be a topic at the June 27th DIMP Workshop.

Farm Taps

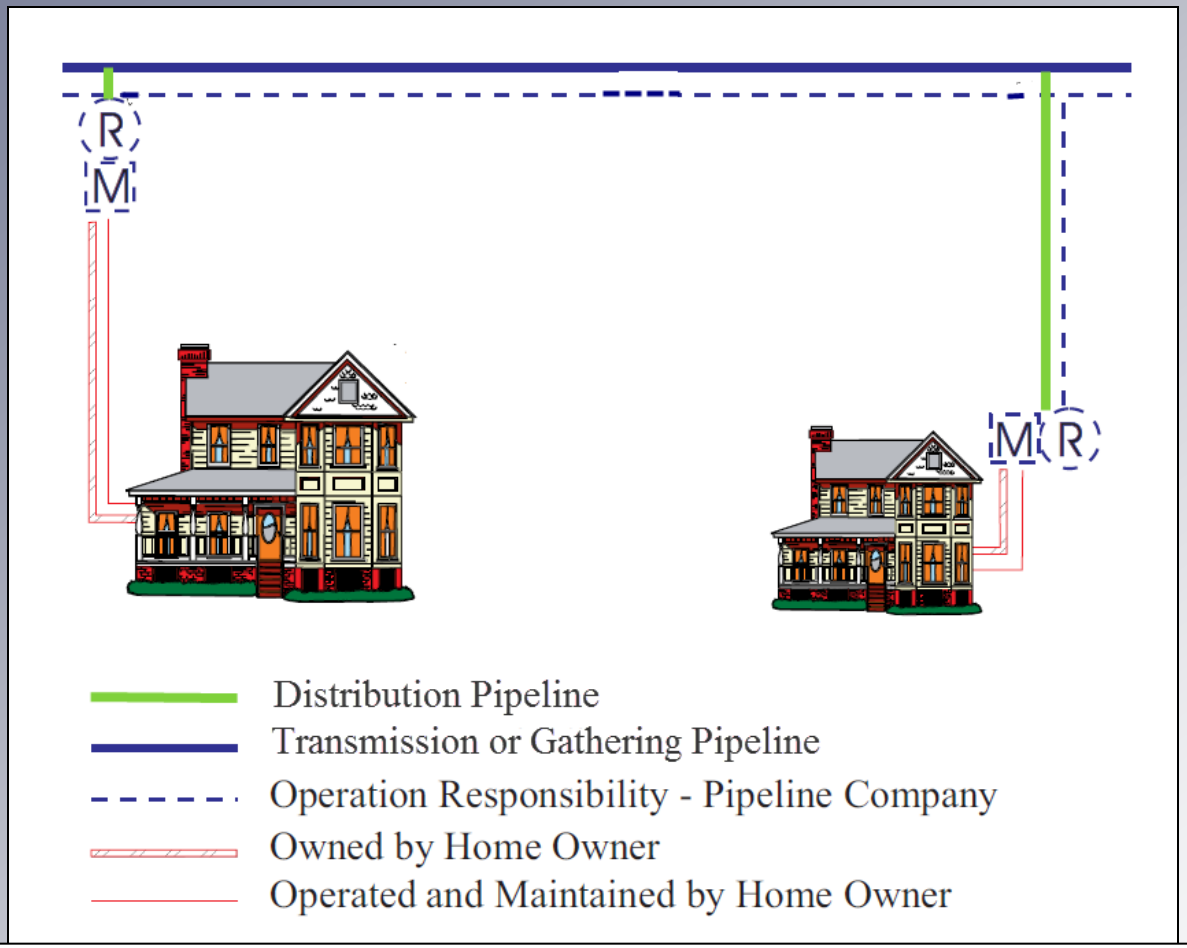
Farm Taps

Quotes from preamble materials in "Customer-Owned Service Lines", 60 Fed. Reg. 41821, 41823 (August 14, 1995):

PHMSA has defined a 'farm tap' as "industry jargon for a pipeline that branches from a transmission or gathering line to deliver gas to a farmer or other landowner."

"… Some operators primarily engaged in the gathering or transmission of gas also operate distribution pipelines. They do so when they deliver gas directly to customers through farm taps and industrial taps. In fact, because portions of these delivery lines qualify as service lines, gathering and transmission operators report them as distribution pipelines under 49 CFR 191.13. Moreover, farm and industrial tap customers are not immune from harm by potential hazards that could occur on their piping. And surely not all farm and industrial tap customers know enough about gas piping safety to make even a single maintenance notice unnecessary."

Farm Taps [from June 8, 2011]



- Do the facilities meet the definition of Gathering? No.
- Do they meet the definition of transmission? No.
- If No to both,

Then the facilities are distribution.

The “farm tap” is pipeline upstream of the outlet of the customer meter or connection to the customer piping, whichever is further downstream, and is responsibility of the operator. The pipeline downstream of this point is the responsibility of the customer. Some States require the operator to maintain certain portions of customer owned pipeline. The pipeline maintained by the operator must be in compliance with 49 Part 192.

Treatment of Farm Taps in DIMP

We have discussed the treatment of farm taps in DIMP FAQ C.3.7 (issued 08/02/2010) and in the 3 DIMP Webinars.

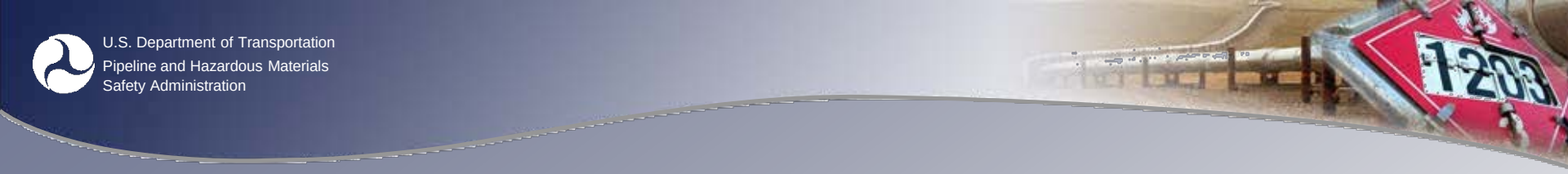
PHMSA's position is that since a farm tap is neither a transmission pipeline or a gathering pipeline it is a distribution pipeline

From 192.3 Definitions:

- "Gathering Line means a pipeline that transports gas from a current production facility to a transmission line or main."
- "Transmission line means a pipeline, other than a gathering line, that: (1) transports gas from a gathering line or storage facility to a gas distribution center, storage facility, or large volume customer that is not down-stream from a gas distribution center; (2) operates at a hoop stress of 20 percent or more of SMYS; or (3) transports gas within a storage field."

Treatment of Farm Taps in DIMP

- PHMSA continues to meet with and talk to industry groups to gather information, understand the need for change, and discuss solutions.
- The Farm tap discussion involves regulated and unregulated production, gathering, transmission, and distribution pipeline operators.
- PHMSA takes Industry's concerns on the treatment of Farm Taps and their inclusion in DIMP very seriously, but there is a process that we have to go through in this matter. It is not a simple matter, and there are ramifications in each option that we discuss with Industry.
- As a result of the many scenarios in which Farm Taps occur, all of the various operator's positions must be considered to come to an appropriate solution for the handling of Farm Taps in DIMP.



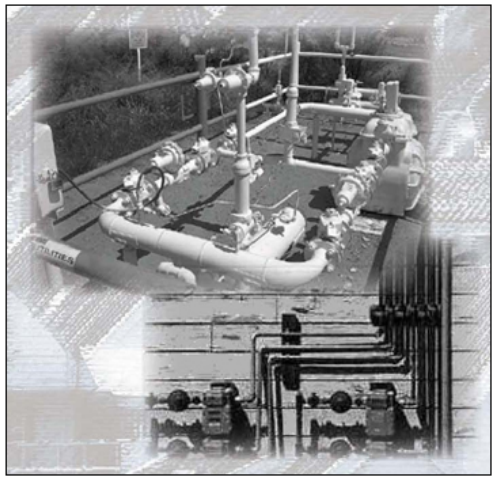
DIMP Website and Posting of DIMP Performance Measures

DIMP Home

U.S. Department of Transportation

- DIMP Home
- DIMP Communications: Public Meetings, Webinars, Webcasts, and State Seminars
- DIMP History
- DIMP Resources
- FAQs
- Performance Measures
- Questions and Comments for OPS
- Regulator Contacts

Distribution Integrity Management



The Pipeline and Hazardous Materials Safety Administration (PHMSA) published the final rule establishing integrity management requirements for gas distribution pipeline systems on December 4, 2009 (74 FR 63906). The effective date of the rule is February 12, 2010. Operators are given until August 2, 2011 to write and implement their program.

PHMSA previously implemented integrity management regulations for hazardous liquid and gas transmission pipelines. These regulations aim to assure pipeline integrity and improve the already admirable safety record for the transportation of energy products. Congress and other stakeholders expressed interest in understanding the nature of similarly focused requirements for gas distribution pipelines. Significant differences in system design and local conditions affecting distribution pipeline safety preclude applying the same tools and management practices as were used for transmission pipeline systems. Therefore, PHMSA took a slightly different approach for distribution integrity management, following a joint effort involving PHMSA, the gas distribution industry, representatives of the public, and the National Association of Pipeline Safety Representatives to explore potential approaches.

The regulation requires operators, such as natural gas distribution companies to develop, write, and implement a distribution integrity management program with the following elements:

- Knowledge
- Identify Threats
- Evaluate and Rank Risks
- Identify and Implement Measures to Address Risks
- Measure Performance, Monitor Results, and Evaluate Effectiveness
- Periodically Evaluate and Improve Program
- Report Results

The DIMP Inspection Forms as well as other resources to support operators implement their program are on the DIMP Resources page and through PHMSA's Pipeline Safety website.

PHMSA has developed and continues to enhance guidance to help the public and the affected industry understand the requirements of the final rule in the form of FAQs.

DOT Website | PHMSA Website | Privacy Policy | FOIA

http://primis.phmsa.dot.gov/dimp/index.htm

DIMP Performance Measures

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Webcast

Integrity Management Performance Measures for Operators of Gas Distribution Pipelines in the United States

Performance Measure Reporting and Quick Facts

Protecting America's Gas Distribution Pipelines

Gas distribution pipeline operators are required to submit annually performance measure reports on their Integrity Management (IM) programs and on their pipeline infrastructure. PHMSA and State Pipeline Safety Programs use these reports – due on March 15 for the previous calendar year – to monitor and report on industry progress in meeting the requirements of the Distribution IM Rule (which took effect in August of 2011), and to respond to inquiries about both PHMSA's and individual State's oversight programs.

The Distribution IM performance measure reports have only been required beginning in 2010, and these measures provide key information pertaining to operators' IM programs, including the total number of leaks either eliminated or repaired by cause, the number of hazardous leaks eliminated or repaired by cause, the number of excavation damages, and the number of excavation tickets (based on One-Call notifications).

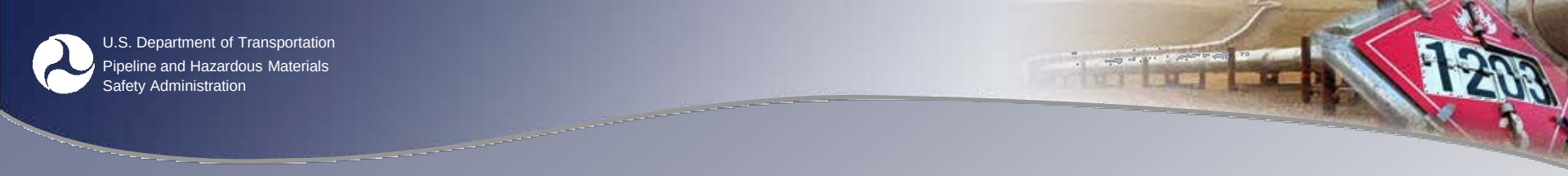
For a basic overview of the progress being made under the Distribution IM Rule, please refer to the Quick Facts below.

Quick Facts on Performance Measures for Distribution Integrity Management

The table below, entitled "Summary of Gas Distribution Pipeline Performance", depicts the new Distribution IM data collected beginning in 2010 along with the historical leak data collected since 2005. The historical data consists of the total number of leaks which were repaired or otherwise eliminated, whereas the new Distribution IM data being collected includes this same leak count while also breaking out separately those leaks defined as hazardous.

Summary of Gas Distribution Pipeline Performance
Time run: 2/29/2012 6:14:24 AM

http://primis.phmsa.dot.gov/dimp/perfmeasures.htm



DIMP Website

Please regularly use PHMSA websites as they are a primary form of communication

PHMSA Office of Pipeline safety

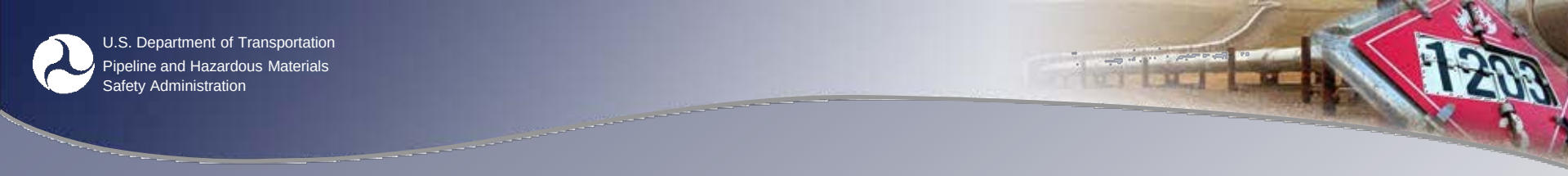
http://phmsa.dot.gov/pipeline

DIMP Home Page

http://primis.phmsa.dot.gov/dimp/index.htm

Pipeline Safety Stakeholder Communications

http://primis.phmsa.dot.gov/comm/



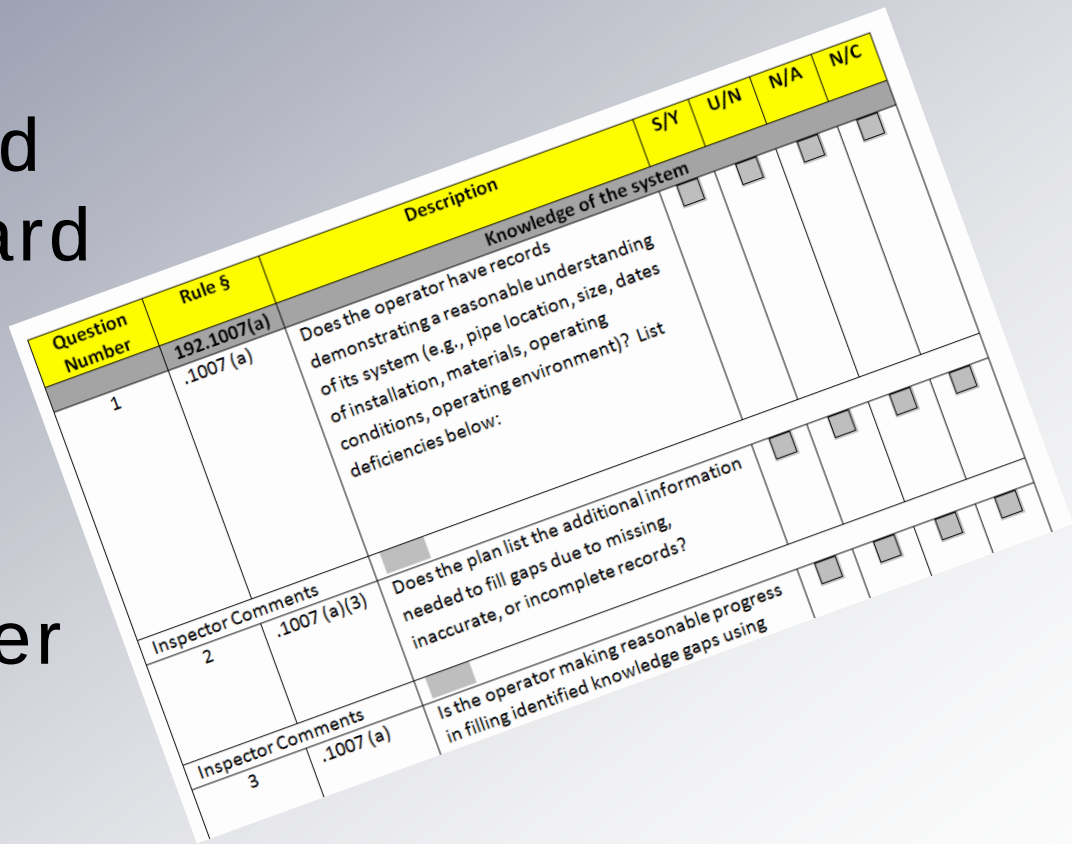
DIMP Inspection Forms

DIMP Inspection Forms

- PHMSA DIMP Inspection Forms for 192.1005 and 192.1015 distribution operators are available at http://primis.phmsa.dot.gov/dimp/resources.htm
- Revisions were implemented in September, 2011 that made the forms more user friendly for Inspectors. No changes were made to the wording of the questions.

Record and Field Inspection Form

- Draft developed per NAPSR Board request – In Review
- Intended for inspections after initial DIMP inspections



Question Number	Rule §	Description	S/Y	U/N	N/A	N/C
	192.1007(a)	Knowledge of the system				
1	.1007 (a)	Does the operator have records demonstrating a reasonable understanding of its system (e.g., pipe location, size, dates of installation, materials, operating conditions, operating environment)? List deficiencies below:				
Inspector Comments						
2	.1007 (a)(3)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?				
Inspector Comments						
3	.1007 (a)	Is the operator making reasonable progress in filling identified knowledge gaps using				

Pipeline Safety Initiatives

PHMSA Advisory Bulletins

- **Advisory Bulletins**
  - **ADB-12-05 - Cast Iron Pipe**
  - **ADB-12-03 - Driscopipe® 8000 High Density Polyethylene Pipe (Drisco8000) of the potential for material degradation**
  - **ADB-12-02 - conduct post accident drug and alcohol testing of all potentially involved personnel despite uncertainty about the circumstances of the accident**
  - **ADB -11-01 - Establishing Maximum Allowable Operating Pressure or Maximum Operating Pressure Using Record Evidence**
  - **ADB-10-08 - Emergency Preparedness Communications**

Proposed Regulatory Changes

- **NPRMs**
  - **77 FR 5472 - Feb 3, 2012, PHMSA-2011-0009; Pipeline Safety: Expanding the Use of Excess Flow Valves in Gas Distribution Systems to Applications Other Than Single-Family Residences; Advance notice of proposed rulemaking (ANPRM); extension of comment period.**
  - **77 FR 5472 - Feb 3, 2012, PHMSA-2010-0026; Pipeline Safety: Miscellaneous Changes to Pipeline Safety Regulations; Notice of proposed rulemaking (NPRM); Extension of comment period.**
  - **76 FR 70953 - Nov 16, 2011, Pipeline Safety: Safety of Gas Transmission Pipelines - Advance notice of proposed rulemaking; extension of comment period**

NTSB Findings on San Bruno, CA Incident on September 9, 2010

NTSB Findings on San Bruno, CA Incident on September 9, 2010

- The NTSB identified certain deficiencies and areas for improvement in Pipeline Safety Integrity Management Programs.
- PHMSA is working to address the NTSB recommendations
- A finding discussed in several recommendations is that without effective and meaningful metrics in performance-based pipeline safety programs, neither the Operator nor the Regulator was able to effectively evaluate or assess the Operator's pipeline system and detect the inadequacies of the Operator's pipeline integrity management program.

NTSB Findings

- Relevant to Integrity Management Programs NTSB also made the following comments:
  - The IM Program was based on incomplete and inaccurate pipeline information
  - The IM Program did not consider the design and materials contribution to the risk of a pipeline failure.
  - The structure of the IM Program led to internal assessments of the program that were superficial and resulted in no improvements.

NTSB Recommendations

- Several Recommendations directly included Distribution Operators:
  - Operators should provide system-specific information about their pipeline systems to the emergency response agencies of the communities and jurisdictions in which those pipelines are located. [P-11-8]
  - Operators immediately and directly notify the 911 emergency call center(s) for the communities and jurisdictions in which those pipelines are located when a possible rupture of any pipeline is indicated. [P-11-9]
  - Operators should conduct post accident drug and alcohol testing of all potentially involved personnel despite uncertainty about the circumstances of the accident. [P-11-12 & P-11-13]

NTSB Recommendations

- NTSB has discussed with PHMSA several key topics that impact distribution operators:
  - Pressure excursions
  - Appropriate records
  - QA/QC to ensure validity of records/assumptions
  - Identification of information gaps
  - Knowledge of what information is unknown
  - Documentation of replacements and decisions made
  - Performance metrics that provide meaningful insight
- Operators should be aware that NTSB's concerns include ensuring adequate oversight of the operator and adequate field inspections.

Current Regulatory Topics for Distribution Operators

ANPRM on Expanding the Use of Excess Flow Valves

- ANPRM on Expanding the Use of Excess Flow Valves (EFVs) in Gas Distribution Systems to Applications Other Than Single-Family Residences has been issued, and the comment period was extended to March 19, 2012.
- The NTSB made a safety recommendation (P-01-02) to PHMSA that EFVs be installed in all new and renewed gas service lines, regardless of a customer's classification, when the operating conditions are compatible with readily available valves.
- The ANPRM sought public comment on several issues related to expanding the use of EFVs in gas distribution systems. PHMSA also sought comment from gas distribution system operators on their experiences using EFVs, particularly from a cost-benefit perspective.

Distribution Annual Report Revisions

Distribution Annual Report modifications to align leak causes with the Incident Report have initiated and should be completed in time for the 2012 Annual Report submittals.

Other modifications are being discussed and solutions identified for their implementation, and these include:

- Easier data input fields for mileages and services
- Definition of the type of operator
- Definition of the commodity transported.
- Added input fields for Sections on EFV's and Excavation Damage

DIMP Enforcement Guidance

- DIMP Enforcement Guidance is being drafted.
- When completed, this guidance will be made publicly available and posted on PHMSA's website with the other Enforcement Guidance documents currently posted at http://www.phmsa.dot.gov/foia/e-reading-room
- This posting will allow Operators to understand Regulators' expectations with regards to the DIMP Regulation

DIMP's Regulatory required "Near Miss Initiative"

- Existing and Potential Threats – 192.1007(C)
- In the evaluation and ranking of risk, an operator must consider each current and potential threat
- Existing threats that have not resulted in a leak must be considered
- Potential threats identified from in Industry and PHMSA published materials must be considered, as appropriate

DIMP Public Meeting

- **NAPSR/PHMSA DIMP Public Meeting on June 27, 2012**
  - Location - DFW / Webcast for those who cannot attend
  - Presentations will discuss:
    - Expectations of implemented DIMP programs
    - Current versions of DIMP inspection forms
    - Observations from DIMP Inspections conducted
    - MFFR Data Results from 1st year (2011)
    - Methodologies that Industry is employing
    - Discussion of areas of concern and current topics
  - Opportunity for Q&A

Questions and Answers