

# Distribution Integrity Management

Some PUC inspection perspectives  
and findings

# PHMSA overall Observations from Audits

- The rule – a Biggie!
- 49 CFR §192.1007 What are the required elements of an integrity management plan?
- A written integrity management plan must contain procedures for developing and implementing the following elements:

# PHMSA overall Observations from Audits

- (a) Knowledge. An operator must demonstrate an understanding of its gas distribution system developed from reasonably available information. (5 sub-elements)
  - - Characteristics of system
  - - Past design, O & M
  - - Identify additional info
  - - Plan reviewed periodically
  - - Provide for the capture and retention of data on any new pipeline installed

# PHMSA overall Observations from Audits

- (b) Identify threats. The operator must consider the following categories of (7 items).....and other concerns that could threaten the integrity of its pipeline.....An operator must consider reasonably available information to identify existing and potential threats.

# PHMSA overall Observations from Audits

- (c) Evaluate and rank risk. An operator must evaluate the risks associated with its distribution pipeline.
- (d) Identify and implement measures to address risks.
- (e) Measure performance, monitor results, and evaluate effectiveness.

# PHMSA overall Observations from Audits

- (f) Periodic Evaluation and Improvement. An operator must re-evaluate threats and risks on its entire pipeline and consider the relevance of threats in one location to other areas.
- (g) Report results.

# PHMSA OBSERVATIONS

- Specific source data and documents used in development and implementation of DIMP must be included in DIMP.
- Threats the Operator has not previously experienced, but identified from industry or PHMSA information
- Threats that endangered facilities but have not resulted in a leak
- Non-Leak Threats

# PHMSA OBSERVATIONS

- Consideration of near miss events and abnormal operating condition events is needed
- Over pressurization
- Regulator malfunction
- Cross-bores
- Materials, Equipment, Practices, etc. with identified performance issues
- Incorrect maintenance procedures or faulty components

# PHMSA OBSERVATIONS

- Distribution Operators should look to their Leak and Incident history and Operations and Maintenance history to identify interactive threats specific to their system.

# PHMSA OBSERVATIONS for instance

- Slow crack growth in older plastics where non-modern construction practices were used
- Water main leakage areas or areas of soil subsidence with cast iron mains
- Installation of mechanical fittings without restraint (category 2 & 3) in soils or conditions (excavation damage) that cause pipe to pull out of fitting

# PHMSA OBSERVATIONS

- Procedures are required in 192.1007, and plans must contain adequate procedural documentation.
- Procedure means a fixed, step-by-step sequence of activities or course of action (with definite start and end points) that must be followed in the same order to correctly perform a task.

# PUC ACTUAL FINDINGS

- Plan does not identify a means to collect the customer service data from the curb valve to the meter.
- No process to collect information on the customer service that includes but not limited to material of the service and the location of the service.

# PUC ACTUAL FINDINGS

- DIMP plan does not provide additional measures for unprotected coated steel pipe in the distribution system. There are no additional measures that reduce the corrosion risk for the unprotected coated mains, services and portions of the service from the curb to the meter

# PUC ACTUAL FINDINGS

- DIMP plan does not provide measures to reduce the risk of third party damage for plastic services from the curb valve to the meter that are not able to be located.

# PUC ACTUAL FINDINGS

- Failing to use metrics to justify risk rankings
- Failing to focus on the threat categories based on pipe material, pipe size and pressures instead of pipe material only

# PUC ACTUAL FINDINGS

- DIMP plan does not provide sufficient details in the procedures to understand the implementation of the required elements
- The processes used to gather knowledge and information about pipeline system were not adequately documented

# PUC ACTUAL FINDINGS

- Failing to consider incident data in a comprehensive manner... there was no evidence that an analysis of past incident data (materials, components, cause, etc.) was performed.
- could not justify threat and sub-threat categories due to the lack of detail in the procedures.

# Questions?

- Thank You for your attention!



LETS GO METS!!!!

