Top Three Enforcement Issues

- Failure to Follow Procedures
- Operator Qualification Issues
- LPG Systems – NFPA 58 Violations
Failure to Follow Procedures

- Plastic Pipe Joining Issues
  - Oversights or shortcuts?
  - Often hand-in-hand with OQ issues
    - Do personnel have the necessary qualification record, but lack adequate training?
Failure to Follow Procedures

(Continued)

**Routine O&M Matters**

- Failure to conduct at required interval
- Failure to follow steps in a procedure
  - Oversights or intentional shortcuts?
- Are personnel adequately trained?
Operator Qualification Issues

- Inadvertent lapses of qualifications
- Failure to follow the procedures for a task for which an individual has the OQ documentation
  - Do personnel have the necessary qualification records, but lack adequate training?
  - Oversights or intentional shortcuts?
Operator Qualification Issues (Continued)

- New Technology
  - Do proper OQ Tasks exist?
  - What supplemental/specialty training is required?
NFPA 58 Violations

- With very few exceptions, all violations found on jurisdictional LPG systems pertain to NFPA 58

- What does this mean?
  - The systems wouldn’t be compliant, even if they were not jurisdictional.
What Can Be Done to Reduce Procedural and OQ Violations?

- Effective QA/QC Programs (as req’d by Maine’s Rule)
- Improved Training
- Robust Inspection Program w/Accountability
- Communication from Designers/Engineers on down to Supervisors, Inspectors, & Installers/Technicians
- Other Suggestions?
Distribution and Transmission Integrity Management Programs

Threat Assessment Beyond the Basic
Integrity Management

**Threat Identification**

- Threats to system segments are often identified through investigation of leaks, damages, and other issues.

- There are other places to look for help with threat identifications.
Integrity Management

§192.1007(b) – Basic Threat Categories

- Corrosion
- Natural Forces
- Excavation Damage
- Other Outside Force Damage
- Material or Weld Failure
- Equipment Failure
- Incorrect Operations
- Other Threats
Integrity Management

Other Threat Identification Resources


- Company Records / Resources
  - Corrosion
  - Patrons and Inspections
  - SME Interviews and Questionnaires
  - Issues Identified in Enforcement Cases with Other Operators
Integrity Management

Other Threat Identification

Resources

- PHMSA Advisory Bulletins
  - Example: ADB-11-02 (Snow and Ice Damage)
    All operators should review their systems
  - Example: ADB-07-01 (Brittle Cracking Older Plastic)
    Only operators with applicable material need review

- PHMSA FAQ
  - Emphasis on potential danger from cross-bores
Integrity Management

Other Threat Identification

Resources

- Industry/Agency Committee Reports and White Papers
  - American Gas Association
  - Interstate Natural Gas Association of America
  - Gas Piping Technology Committee
  - National Transportation Safety Board
  - National Association of Corrosion Engineers
  - Etc.
Integrity Management

Other Threat Identification

Resources

- PHMSA Enforcement Guidance Mentions:
  - Future Infrastructure Projects
  - Discovery of material not previously known to be in system
  - Overpressurization events
  - Right-of-Way infringements
  - Near misses / pipeline damage without release
  - Pipe materials subject to brittle failure modes
Integrity Management

Threat Assessment

- Any threats which are ruled out must be documented
Thank You!