DOT PHMSA R&D Forum

Industry Topics for Discussion

Topics of Conversation

- Updates to 49 CFR Part 193
- Differences between import, export, peakshaver, and small scale facilities with respect to compliance
- Guidance on PHMSA inspections
- Pressure Relief Valve Testing
- Risk based approach to hazards and maintenance/inspection
- Hazard detection and fire protection

Updates to 49 CFR Part 193

- PHMSA and FERC involved in 2019 version of NFPA 59A
- Major updates to siting to match PHMSA's FAQ
  - Significant increase in requirements compared to NFPA 59A (2001)
- Major updates to small scale chapter
  - Help with siting small scale facilities
- Major updates to Risk Based Siting (QRA) Chapter
  - Alternative measure for siting LNG facilities
- PHMSA's plan to update 49 CFR Part 193?
  - Workshop in Washington DC May 18-19, 2016
  - Adopt NFPA 59A (2019) vs. selection vs. stand alone 49 CFR Part 193?

Differences Between Large and Small Facilities

- Large Facilities (Import/Export)
  - Large facilities typically owned by major oil and gas producers – apply many aspects of PSM
  - Have difficulty with timing of certain regulatory requirements (each calendar year for control system testing)
    - 49 CFR Part 193 originally written for import terminals/peakshavers
  - Cybersecurity? Plant staffed 24/7
  - Need to go through FERC process, need PHMSA review, then PHMSA review again during construction
    - Numerous agencies (sometimes the same agency twice) review the same/overlapping information.
    - DOT PHMSA may have different requirements between HQ and regional offices

Differences Between Large and Small Facilities

- Small Facilities (Peakshaver/Small Scale)
  - Owned by smaller utility companies
  - May not have difficulty meeting 49 CFR Part 193 requirements due to nature of operations
    - 49 CFR Part 193 written for import terminals / peakshavers
  - Cybersecurity? Some plants un-manned
  - Interstate facilities need to go through FERC process (which includes PHMSA), intrastate facilities do not have PHMSA involvement until construction.
  - Intrastate facilities do not have overlapping agencies reviewing the same information – PHMSA only reviews as part of its 193 compliance inspections.
- Update 193 to recognize differences in operating requirements for small vs. large facility?
  - Make requirements more risk based?
  - Make different timings for large and small facilities?

Guidance on PHMSA Inspections

- PHMSA regions perform inspections based on geographic location
- Some inspectors may review compliance with certain 193 requirements differently
  - How to test control systems
  - How to test input/output signal functionality
  - Full vs partial stroke
  - Keeping up to date with DC HQ approvals
- Enforcement guidance for operators on what each requirement in 49 CFR Part 193 means?
- Guidance for inspectors to ensure consistent compliance requirements?

Pressure Relief Valve Testing

- Best practices for industry
- Manufacturers maintenance requirements/suggested testing intervals?
- Harm in testing too frequently (put facility in constant abnormal operating state?)
- Acceptable testing intervals
- Acceptable criteria for identifying testing intervals and how to ensure PHMSA inspects “evenly” across regional offices?

Risk based approach to hazards and maintenance/inspection

- Data
  - Do we have reliable data?
  - What data is specific to LNG?
  - Does this data need to be updated?
- Regulations
  - How to craft regulations based on risk?
  - How to inspect based on risk?

Hazard detection and fire protection

- Best practices for detection placement, protection
  - Elevation? Location? Distance away?
  - Guidance vs. code requirement?
- Risk based approach
  - Criteria for placing detection and fire protection based on risk?
  - What is acceptable criteria?
- New and emerging technologies
  - Does code promote the use of newest technologies?
  - How to know a technology is “proven”?