Repair Criteria, Integrity Management Improvements, Cathodic Protection, Management of Change, and Other Related Amendments

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Why did this Rulemaking Occur?

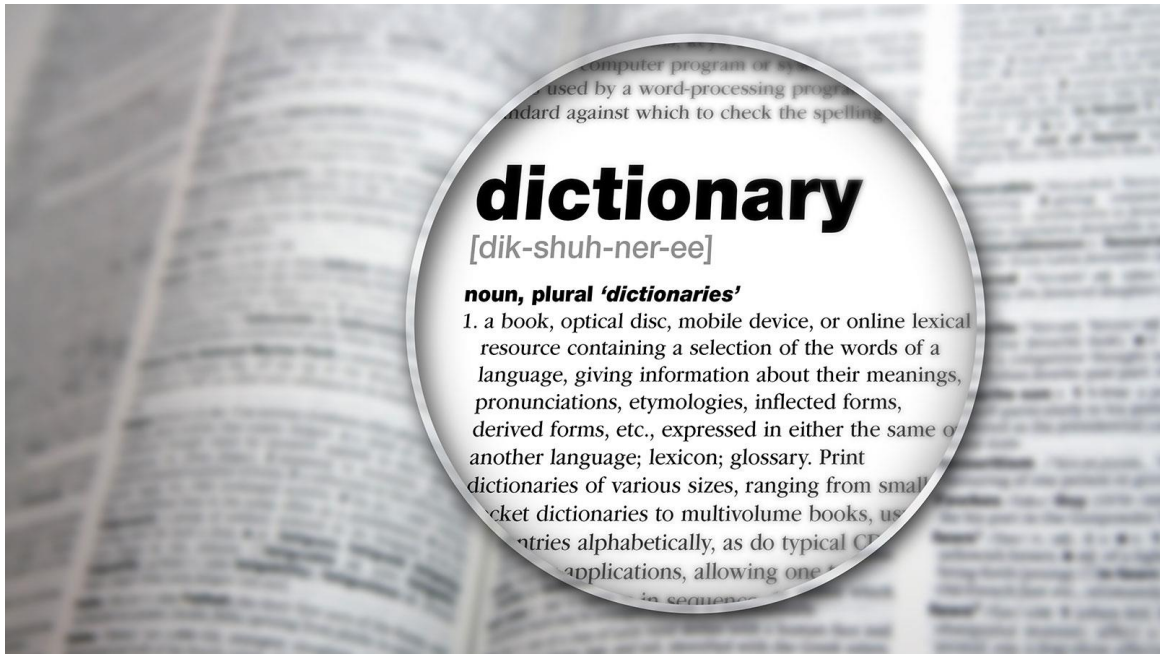
San Bruno, CA – September 9, 2010

- 8 people killed
- 51 injured
- Destroys 38 homes
- Damaged 70 homes
- 47 MMCF of Gas
- 95 Minutes

MAJOR PROVISIONS

- Definitions—§192.3
- Management of Change—§§ 192.13, 192.911
- Corrosion Control—§§ 192.319, 192.461, 192.465, 192.473, 192.478, 192.935
- Inspections Following Extreme Weather §192.613
- Repair Criteria—§§ 192.714, 192.933
- IM Clarifications—§§ 192.917, 192.935
- Strengthening Assessment Methods—§§ 192.923, 192.927, 192.929

DEFINITIONS §192.3



- Transmission Line
- Distribution Center
- Close Interval Survey
- Dry Gas or Dry Natural Gas
- Hard Spot
- In-line Inspection
- In-line Inspection Tool or Instrumented Internal Inspection Device
- Wrinkle Bend

The definitions clarify technical terms used in part 192 or in this rulemaking.

MANAGEMENT OF CHANGE[7] §§ 192.13 AND 192.911

- Establishes requirements for the Management of Change process in ASME/ANSI B31.8S, section 11.
- Previously management of change needed for High Consequence Areas (HCAs) only.
- 18-month compliance period for non-HCAs
- Evaluate and mitigate significant changes.
- Reason for change, authority for approving changes, analysis of implications, acquisition of required work permits, etc.

POST CONSTRUCTION INSPECTION COATING INSPECTION §§ 192.319 AND 192.461

- Requires operators to perform an above-ground indirect assessment (ACVG/DCVG/"other technology") after backfilling is completed and remediate any coating damage found.
- In both O&M and construction sections

INTERFERENCE CURRENTS (192.473)

- Requires interference surveys when potential monitoring indicates significant increase in stray current or when new potential stray current sources (pipelines, HVAC power lines, etc.) are introduced.
- Analysis of results of survey to determine cause of interference and whether it could cause significant corrosion, impede safe operation, or adversely affect environment or public.
- Development of remedial action plan and remediation within 12 to 15 months after completing survey.

INTERNAL CORROSION CONTROL – ONSHORE TRANSMISSION MONITORING AND MITIGATION (§192.478)

- Requires operators of GT pipelines with corrosive constituents in the gas to monitor for gas quality, evaluate gas monitoring data yearly, and evaluate IC monitoring and mitigation program yearly.

INSPECTIONS FOLLOWING EXTREME EVENTS - §192.613

- Transmission pipeline facilities after events that have the likelihood of damaging pipeline facilities and taking appropriate remedial action.
- Inspection must commence within 72 hours after the point in time when the operator reasonably determines the affected area can be safely accessed by personnel and equipment, and such personnel and equipment are available. If unable, must notify PHMSA Region Director as soon as practicable.

REPAIR CRITERIA - IMMEDIATE (§§ 192.714 & 192.933)

- Anomalies where the metal loss is greater than 80 percent of wall thickness.
- Metal loss anomalies with a PFP ≤ 1.1 x MAOP.
- A topside dent that has metal loss, cracking, or a stress riser ("unless" ECA in accordance w/§192.712).
- Anomalies where there is an indication of metal loss affecting certain longitudinal seams.
- Cracks or crack-like anomalies meeting specified criteria.
- Indications of anomalies that require immediate action.

REPAIR CRITERIA – SCHEDULED (1-YEAR / 2-YEAR CONDITIONS)

- Smooth topside dents with a depth greater than 6% of the pipeline diameter ("unless" ECA [...]).
- Dents greater than 2% of the pipeline diameter located at a girth weld, longitudinal, or spiral seam weld ("unless" ECA [...]).
- Bottom side dent with metal loss, cracking, or stress riser ("unless" ECA).

REPAIR CRITERIA - MONITORED

- Bottomside dents with depth greater than 6% (§192.714) and where ECA shows critical strain levels are not exceeded (§192.933).
- Dents with depth greater than 2% that affects pipe curvature at a girth weld or longitudinal or helical seam weld, and "where" ECA […].
- Dents with metal loss, cracking, or a stress riser, and "where" ECA […].
- Certain metal loss anomalies and cracks with a PFP ≥ 1.39 x MAOP in Class 1 locations or where Class 2 locations have uprated pipe, and that has a PFP ≥ 1.5 x MAOP in all other Class 2, Class 3, and Class 4 locations.

SUMMARY OF CHANGES TO IM CLARIFICATIONS §§ 192.917 (A) – (D) & 192.935(C)

- Inserts specific attributes from ASME/ANSI B31.8S into the regulations for risk assessments.
- Specifies operators must perform risk assessments that are adequate for evaluating the effects of interacting threats. Account and compensate for uncertainties in the model and data used.
- Requires operators use validated information and data as inputs and validate their risk models considering incident, leak, and failure history, and other historical information.
- Provides specific examples of integrity threats for plastic pipe that must be addressed.

SUMMARY OF CHANGES TO ICDA AND SCCDA §§ 192.923, 192.927, & 192.929

- Incorporates NACE SP0206-2006 into the regulations for ICDA and establishes additional requirements for ICDA for covered segments.

- Incorporates NACE SP0204-2008 into the regulations for SCCDA and establishes additional requirements for SCCDA.

IMPORTANT DATES:

- **Rule Effective Date: May 24, 2023**
- Management of Change – February 26, 2024
- IM Threats May 24, 2023 complete Feb 26, 2024
- IM Risk Assessment Feb 26, 2024

Anyone have a friend who owns a pipeline?