

# Buried Piping



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UNITED STATES NUCLEAR REGULATORY COMMISSION  
*Protecting People and the Environment*

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## Purpose

- Meeting
  - Discuss the Buried Piping Integrity Initiative
  - Prior meeting actions
    - Initiative scope
    - Deviation process
    - Risk Ranking
- Background
  - History
  - Current actions



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## Issue

- Groundwater incidents in the 2005 timeframe led to improved groundwater monitoring by the industry
- Several leaks from buried piping in 2009 and 2010 resulted in groundwater contamination



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## NRC Actions

- September 3, 2009, Chairman Jaczko tasked the staff with providing a summary of activities related to buried pipe
- December 3, 2009, SECY 09-0174 (ML093160004)
- May 18, 2010, Buried Piping Action Plan (ML101480739)
- September 14, 2010, Buried Piping Action Plan update (ML102590171)
- Meetings with industry 10/22/2010, 2/24/2010
- Letter to industry August 18, 2010 (ML102300270)



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## Buried Piping Action Plan

- Data collection
  - Historical rate of incidence
  - Affected systems
  - System classifications
  - Tritium releases
- Program assessment
  - Assess Buried Piping Integrity Initiative
  - Temporary instruction for inspection of buried piping
  - Initiative details (scope, risk ranking, inspection techniques)
- Codes and standards
- Regulatory activities
  - License renewal
  - Commitments
  - Recommendations for rulemaking



- ASME Code
  - Met with ASME, Section XI August 6, 2008
- NACE International (formerly National Association of Corrosion Engineers)
  - Task group meeting this week



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## NRC Actions

- Inspection
  - Temporary Instruction for inspection of buried piping activities
    - Expect decision this week
    - If decision is to proceed draft by end of year
    - Implementation by June 2011
- License renewal
  - Revised buried piping aging management program



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## Industry Activities

- Buried Piping Integrity Initiative
  - Monitoring scope
  - Seeking to understand details
    - Risk ranking processes
    - Inspection techniques and processes
      - Guided wave
      - Excavations





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## Performance

- Seeking to establish a pre-2009 incidence rate for leaks as a performance baseline
- Monitoring operating experience
- Evaluating need for commitments for initiative



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## Conclusions

- NRC's objectives related to buried piping
  - Maintenance of intended function
  - Releases remain below regulatory limits
- Current regulations and industry activities are compatible with these objectives
- NRC is monitoring current events related to buried piping
- NRC is performing action plan activities