

# Nuclear Regulatory Commission Monitoring Plans and Activities

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# NRC Monitoring of DOE

- In coordination with the State, NRC will monitor DOE disposal actions to assess compliance with performance objectives and report any noncompliance
- Monitoring implementation will be addressed in:
  - Specific monitoring plans for individual sites
  - Overall monitoring approach
  - Annual reports

# NRC's General Approach to Monitoring

- Risk-informed and performance-based philosophy
- Technical Evaluation Report (TER) establishes key areas for monitoring
- Monitoring includes technical reviews and on-site observations
  - A few site visits per year
  - Coordination with States

# NRC's Monitoring Plan at INL

- Five key monitoring areas (KMAs) determined by NRC staff
  1. Residual Waste Sampling
  2. Grout Formulation & Performance
  3. Hydrological Uncertainty
  4. Monitoring During Operations
  5. Engineered Surface Barrier/Infiltration Reduction

# NRC's Monitoring Plan at SRS

- Eight key factors identified by NRC staff
  1. Oxidation of Saltstone
  2. Hydraulic Isolation of Saltstone
  3. Model Support
  4. Erosion Control Design
  5. Infiltration Barrier Performance
  6. Feed Tank Sampling
  7. Tank 48 Wasteform
  8. Waste Removal Efficiencies

# NRC's Role in Assessing Compliance

- NRC will evaluate compliance of DOE's 3116 disposal actions with performance objectives in 10 CFR Part 61, Subpart C:
  - The performance assessment model
  - The actual materials, inventory, structures and disposal system for consistency with the predictive model
  - Environmental data

# Noncompliance Reporting by NRC

- NRC required to notify Congress, the State, and DOE
- Noncompliance can result from:
  - Performance objectives not being met
  - NRC no longer has reasonable assurance that performance objectives will be met in the future
  - Insufficient information to assess compliance with the performance objectives

# Current Status of NRC Monitoring Activities

- Issued monitoring plans for SRS Saltstone (ML070730363) and INL tank closure (ML070650222)
  
- INL Tank Closure
  - Completed first on-site observation in April (ML071300222)
  - Planning second for August/September
  
- SRS Saltstone
  - Monitoring on hold until waste processing activities start



# Concluding Thoughts

- Monitoring: on-going & dynamic
- DOE interactions: frequent & coordinated
- State coordination: frequent & collaborative

# Background

# 10 CFR Part 61

## Performance Objectives

- Protection of the general population from releases of radioactivity §61.41
- Protection of individuals from inadvertent intrusion §61.42
- Protection of individuals during operations §61.43
- Stability of the disposal site after closure §61.44