

NRC Monitoring of the Saltstone Facility

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Presentation Outline



- Overview of NRC Monitoring under Section 3116 of the National Defense Authorization Act for Fiscal Year 2005 (NDAA)
- October 2007 Observation Visit
- March 2008 Observation Visit
- Periodic Compliance Monitoring Report for 2007

Overview of NDAA Monitoring



- Monitoring role for NRC specified in 3116(b) of the NDAA
- NRC monitoring is focused on whether there is reasonable assurance that DOE can meet the performance objectives of 10 CFR Part 61
- A detailed description of NRC's monitoring program is provided in Chapter 10 of NUREG-1854, "NRC Staff Guidance for Activities Related to U.S. Department of Energy Waste Determinations" (August 2007)

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Overview of NDAA Monitoring (continued)



Some Elements of NRC's Monitoring Program

- Monitoring Plan for each DOE Waste Determination
- Observation reports are issued after each visit
- Other monitoring activities are described in a Periodic (Annual) Compliance Monitoring Report
- If NRC staff were to find that one or more performance objectives are not or will not be met, it would issue a notification letter to DOE and South Carolina stating its concerns.
- If NRC staff were to find that DOE's response is not adequate, it would issue a non-compliance letter to Congress, the State, and DOE.

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October 2007 Observation Visit Objectives



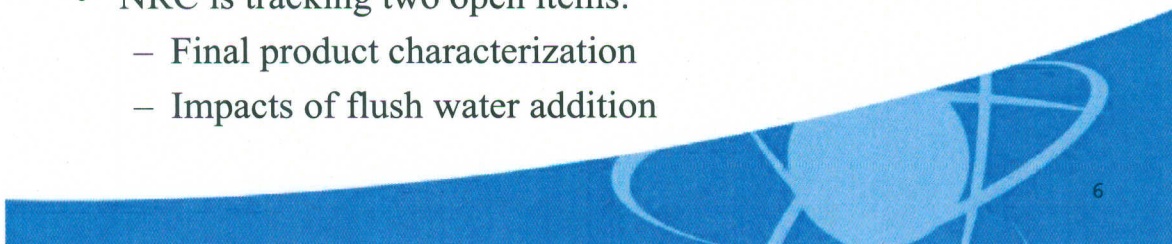
- Grout Formulation and Placement
- Vault Construction
- Waste Sampling
- Radiation Protection Program



October 2007 Observation Visit Grout Formulation



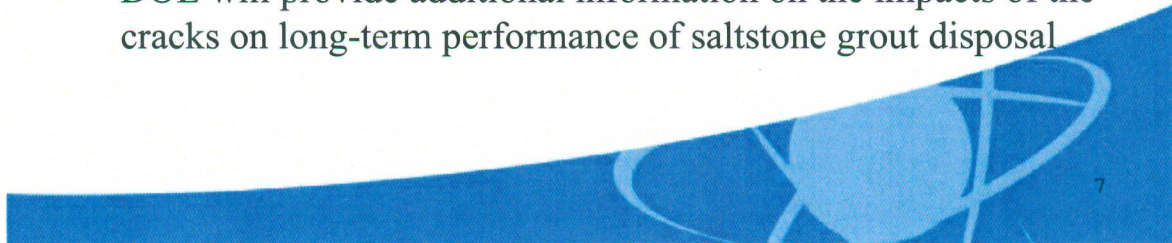
- NRC staff observed operations at the Saltstone Production Facility and Saltstone Disposal Facility
- Effective QA Program
- NRC recommended independent testing of a grout ingredient
- NRC is tracking two open items:
 - Final product characterization
 - Impacts of flush water addition



October 2007 Observation Visit Vault Construction



- Vault 4 was being filled during the NRC observation visit
- NRC staff observed wet cracks on the vault wall
- NRC staff requested information on whether the presence of cracks is consistent with DOE's performance assessment
- DOE will provide additional information on the impacts of the cracks on long-term performance of saltstone grout disposal



October 2007 Observation Visit Waste Sampling



- NRC staff did not observe sampling activities, but reviewed sampling procedures
- NRC staff recommended that DOE monitor the amount of solids present in waste transfers to the Saltstone Production Facility.



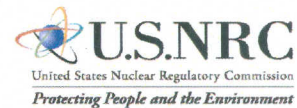
October 2007 Observation Visit Radiation Protection



- NRC staff reviewed worker dose monitoring records
- NRC staff did not observe environmental sampling activities, but reviewed sampling procedures and results for groundwater and air effluent monitoring
- No issues were identified, and NRC staff will continue monitoring activities related to environmental monitoring and radiation protection.

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March 2008 Observation Visit Objectives



- Waste Sampling
- Inventory
- Environmental Monitoring
- Saltstone Characterization and Testing
- Vault Characterization, Operating Experience, and Assessment
- Next steps. . .

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Periodic Compliance Monitoring Report



- This “periodic” report is currently an annual report
- Summarizes NRC monitoring of both INL and SRS disposal actions
- Summarizes open issues and recommendations
- First report is planned to be published in Spring 2008 for CY 2007.