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Panel Session 60

Disposal of Large Quantities of Depleted Uranium
– Role of Site Specific Performance Assessment


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Utah Program Activities

- *Regulatory*
 - Depleted Uranium
 - Performance Assessments
- *Performance Assessment Stakeholder Workshop*


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DEPLETED URANIUM

UTAH RULE DEVELOPMENT


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Depleted Uranium (DU)
Utah Rule

- *August 2009:*
NRC RECOMMENDED INTERIM ACTION:
 - Facility disposing DU should develop a site-specific PA which should be evaluated against criteria in SECY-08-0147 prior to disposal of large quantities of DU


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Depleted Uranium (DU) Utah Rule

- *September 2009:*
Utah Radiation Control Board Action:
 - Passes motion to insert specific requirements for DU disposal into EnergySolutions' Radioactive Materials License


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Depleted Uranium (DU) Utah Rule

- *October 2009:*
Utah Radiation Control Board Action:
 - Considers and votes to make changes to the License requirements for Depleted Uranium disposal at EnergySolutions
 - Board is in favor of requiring a PA and to have the PA approved by the Executive Secretary before DU is accepted


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Depleted Uranium (DU) Utah Rule

- *November 2009*
Utah Radiation Control Board Action:
 - Approve motion to rescind the actions of the Board in October 2009
 - Accept the License amendment as was submitted to the Board in September 2009
 - Enter a rulemaking procedure to adopt those changes made during the October 2009 Board meeting with a draft document for the Board's December 2009 Meeting

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Depleted Uranium (DU) Utah Rule

- *December 2009:*
Utah Radiation Control Board Action:
 - Approves changes requiring DU Performance Assessment and approval by the Executive Secretary before disposal

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Depleted Uranium (DU) Utah Rule

- *December 2009 – Proposed DU rule filed with Utah Division of Administrative Rules*
- *January 2010 – Proposed DU rule out for 30-day Public Comment Period (January 1, 2010 to February 2, 2010)*
- *Public Hearing held January 26, 2010*

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Depleted Uranium (DU) Utah Rule

- 84 written comments were received during the 30-day public comment period
- 15 verbal comments were received during the public hearing

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Depleted Uranium (DU) Utah Rule

- *April 2010:*
Utah Radiation Control Board action:
 - Approves changes to the proposed rule based on comments received
 - Change in Proposed Rule filed with the Utah Division of Administrative Rules

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Depleted Uranium (DU) Utah Rule

- *May 2010:*
R313-25-8 Final Rule published in the Utah State Bulletin
- *June 2, 2010:*
Effective Date of Final Rule

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Depleted Uranium (DU) Utah – Final Rule

- "Concentrated DU" means waste with DU concentrations greater than 5% by weight
- Land disposal of significant quantities of concentrated DU (> 1 metric ton in total accumulation) after June 1, 2010, shall submit a PA
- PA revised as needed to reflect ongoing guidance and rulemaking from NRC

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Depleted Uranium (DU) Utah – Final Rule

- Demonstrates that the performance standards specified in 10 CFR Part 61 (corresponding Utah rules) will be met for the total quantities of concentrated DU and other wastes, including wastes already disposed of and the quantities of concentrated DU the facility now proposes to dispose

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Depleted Uranium (DU) Utah – Final Rule

- PA compliance period a minimum of 10,000 years. Additional simulations performed for the period where peak dose occurs and the results shall be analyzed qualitatively
- No facility may dispose of significant quantities of concentrated DU prior to the approval by the Executive Secretary of the performance assessment

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PERFORMANCE ASSESSMENTS

RULE DEVELOPMENT

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Performance Assessments Rulemaking

- *November, 2010*

Utah Radiation Control Board action:

- Approves proposed revisions to establish conditions when a PA is required

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Performance Assessments Rulemaking

- *Proposed conditions for requiring a PA*

- Waste is likely to result in > 10% of the dose limits during the time period at which peak dose would occur
- Waste will result in > 10% of the total site source term over the operational life of the facility
- Waste would result in an unanalyzed condition not considered in the development of 10 CFR 61.55

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Performance Assessments Rulemaking

- *February, 2011*

Utah Radiation Control Board action:

- Approved additional changes based on comments


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Performance Assessments Rulemaking

- *Revised proposed conditions for requiring a PA*

- Waste was not considered in the development of the limits on Class A waste and not included in the analyses of the Draft EIS for 10 CFR Part 61
- Waste would result in an unanalyzed condition not considered in the development of R313-25 ~~10 CFR~~ 61.55

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PERFORMANCE ASSESSMENT

EDUCATION & DISCUSSION STAKEHOLDER WORKSHOP


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WORKSHOP INTRODUCTION

- *New stakeholder participation process*
- *Provide feedback on technical issues*
- *Two days*
 - Day 1: Instructional/Educational
 - Day 2: Discussion/Dialogue format
- *Third session: Follow-up to key items from Sessions 1 & 2*
- *Future opportunities for comment and input*


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Session Objectives

- *Provide an opportunity to involve interested stakeholders in matters related to the disposal of low-level radioactive waste in Utah*
- *Become informed about components of performance assessment*

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Session 3 Objectives

- *Discuss topics identified*
 - Parking Lot from previous sessions
 - Follow-up comments
- *Presentation from Neptune*
- *Receive input on considerations for PA review*

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Parking Lot Items

- *“Long-term modeling”*: what does it look like up to 10,000 years into the future, and beyond?
- *Performance Objectives (protection) Components*
- *Other considerations of public interest / public protection*
- *Quality Assurance and Transparency*

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Stakeholder Involvement

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Stakeholder Involvement

- *Improved information dissemination*
- *Web site*
- *Listserv*
- *Sessions 1 & 2*
 - Video archive
 - Presentations
- *Session 3*
 - Presentations

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Contact Information

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