




WM2011 Symposia
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Panel Session 15

Hot Topics & Emerging Issues in
US Commercial Low-Level Radioactive
Waste Management


Rusty Lundberg
Utah Division of Radiation Control



Utah Program Activities

- *Policy on Blending*
- *Regulatory*
 - Depleted Uranium
 - Performance Assessments
 - Byproduct Material Expanded Definition (NRC)
 - Administrative Procedures
- *Performance Assessment Stakeholder Workshop*

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Utah Program Activities

- *Radiation Control Board*
 - Policy Statement on Blending
 - Depleted Uranium Rulemaking
 - Performance Assessments Rulemaking
- *Division of Radiation Control*
 - Byproduct Material Rulemaking
 - Administrative Procedures Revisions
 - Performance Assessment Education & Discussion Stakeholder Workshop

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WASTE BLENDING POLICY

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Utah Radiation Control Board Position Statement -- Blending

The Utah Radiation Control Board recognizes that down-blended radioactive waste does not pose any unique health and safety issues to the public that are not observed in other classes of low-level radioactive waste.

The Board is also aware that down blending may appear to some persons as a process to circumvent Utah law, which prohibits any entity in Utah from accepting Class B or Class C low-level radioactive waste for commercial storage, treatment or disposal.

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Utah Radiation Control Board Specific Position Statements

1. The Board is opposed to waste blending when the intent is to alter the waste classification for the purposes of disposal site access.
2. Dilution of radioactive wastes with uncontaminated materials should be explicitly prohibited.

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Utah Radiation Control Board Specific Position Statements

3. Current guidance documents dealing with concentration averaging and mixing should be updated to address the current understanding of the possible down-blending issues. Important matters dealing with waste blending, such as prohibition of certain practices, currently in guidance should be put into regulation.

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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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BYPRODUCT MATERIAL EXPANDED DEFINITION

RULE DEVELOPMENT

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Byproduct Material Rulemaking

- *NRC Expanded Definition of Byproduct Material (72 FR 55864 – 10/1/2007)*
 - Discrete sources of NORM / NARM
- *Utah has regulated NORM / NARM for over 20 years*
- *Created a definition for “diffuse sources” in order to continue to regulate NORM / NARM not covered by NRC’s “discrete sources”*

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Byproduct Material Rulemaking

- *Address Utah law related to stringency of state environmental rules compared to corresponding federal regulations*
(§ 19-3-104, Utah Code Ann.)
 - To adopt more stringent rules
 - Requires a written finding that federal regulations are not adequate to public health and environment
- *Utah Radiation Control Board Finding*
 - Discrete and Diffuse sources have similar hazards


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Byproduct Material Rulemaking

- *Utah Radiation Control Board Finding*
 - No corresponding federal regulation exists for “diffuse sources”
 - Discrete and Diffuse sources have similar hazards
- *Board approved rule changes:*
 - Oct. 12, 2010 made effective Oct. 13, 2010


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ADMINISTRATIVE PROCEDURES REVISIONS

RULE DEVELOPMENT


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Administrative Procedures Revisions

- *SB 70 – 2009 General Session*
 - Authorizes the executive director of the DEQ appoint an administrative law judge;
 - Requires an administrative law judge to conduct all adjudicative proceedings within the department, except an emergency adjudicative proceeding;

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Administrative Procedures Revisions

- *SB 70 – 2009 General Session (cont.)*
 - Establishes powers, duties, and qualifications for an administrative law judge; and
 - Amends or repeals the powers of boards within DEQ regarding hearings, adjudicative proceedings, and hearing officers or examiners

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Administrative Procedures Revisions

- *Proposed rule changes*
 - Incorporate newly required ALJ step prior to environmental board (Radiation Control Board)
 - Establish uniform & consistent process throughout DEQ
 - Clarify procedural steps

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Administrative Procedures Revisions

- *Rulemaking Process*
 - Consolidated rule for all of DEQ (R305-6) Utah Administrative Code
 - Tentative schedule
 - Publish proposed rule changes in Utah State Bulletin (March 15)
 - Public Hearing – Mid-April
 - Final Adoption / Change to Proposed Rule – Individual environmental boards – June, 2011
 - Change published in the Utah Bulletin – July 15
 - Final Adoption – August, 2011

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Administrative Procedures Revisions

- *Rulemaking Process*
 - Concurrent rule changes for individual programs in DEQ
Div. of Radiation Control (R313-17, Admin. Procedures)
Tentative schedule
 - Publish proposed rule changes in Utah State Bulletin (May 1)
 - Public Comment Ends – May 31
 - Final Adoption / Change to Proposed Rule – Individual environmental boards – June, 2011
 - Change published in the Utah Bulletin – July 15
 - Final Adoption – August, 2011

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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

The screenshot shows the Utah Department of Environmental Quality website. The 'Issues' section is circled in red, and a red arrow points from it to the 'Energy' section. The 'Energy' section includes a link to 'Energy' and a list of related topics.

Stakeholder Involvement

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

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Contact Information

Rusty Lundberg
 Utah Division of Radiation Control

rlundberg@utah.gov
www.radiationcontrol.utah.gov

 801-536-4257