

Eighth Annual RadWaste Summit

**Las Vegas, Nevada
September 3, 2014**



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Overall State Priorities

- **Assure that process of transporting and disposing of LLW at the EnergySolutions Clive facility is done with ultimate protection of public health and the environment**
- **Operate a regulatory framework that is transparent and predictable**
- **Assure that adequate planning and resources are in place for long-term stewardship of the site**
- **Institute agency/program efficiencies**



Utah Perspective – Regulatory Framework

- **Depleted uranium**
- **Site-specific performance assessments**



Class A Disposal Embankments



Utah – Depleted Uranium (DU) Rule

- **December 2009:**

- Utah Radiation Control Board Action:**

- **Approves changes requiring DU Performance Assessment and approval by the Division Director before disposal**

- **January 2010:**

- **Public participation / comment**



Utah – Depleted Uranium (DU) 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

○ May 2010:

- R313-25-8 Final Rule published in the Utah State Bulletin

○ June 2, 2010:

- Effective Date of Final Rule



Utah

Depleted Uranium (DU) – 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**



Utah

Depleted Uranium (DU) – Final Rule

- **Demonstrate that the**
 - **Performance standards specified in 10 CFR Part 61 and corresponding provisions of Utah rules will be met for:**
 - **Total quantities of concentrated DU and other wastes, including wastes already disposed of and**
 - **Quantities of concentrated DU the facility now proposes to dispose**



Utah

Depleted Uranium (DU) – Final Rule

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



Utah Performance Assessments Rule

○ November, 2010

Utah Radiation Control Board action:

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

○ February, 2011

Utah Radiation Control Board action:

- Approved additional changes based on comments



Utah Performance Assessments Rule

- **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 is likely to result in > 10% of the dose limits during the time period at which peak dose would occur**



Utah

Performance Assessments Rule

- **Conditions for requiring a PA**
 - **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 R313-25 (10 CFR 61.55)**



Utah Perspective

NRC Part 61 Rulemaking

- **Stakeholder participation**
- **Inadvertent Intruder**
- **Compliance Period**
- **Period of Performance**
- **WAC and Waste Classification**
- **Compatibility**



Inadvertent Intruder

- **Draft NRC rulemaking @ 10 CFR 61**
 - 10,000 year analysis
 - 500 mrem/yr dose limit
- **Existing NRC rules: dose to public (unrestricted area)**
 - 10 CFR 61.41: 25/75/25 mrem/yr
 - 10 CFR 20.1301(a)(1): 100 mrem/yr TEDE
- **Scenario to use for EnergySolutions Clive facility**
 - Most restrictive
 - Something less



Compliance Period

- **Utah LLRW Rules – UAC R313-25-9**
 - **Depleted Uranium**
 - **Compliance Period – 10,000 years**
 - quantitative PA analysis
 - **Beyond 10,000 years = qualitative analysis**
 - Similar to NRC Performance Period
 - **PA Rule – Other LLRW radionuclides trigger a PA**
 - **Previous performance assessment at the Clive Site**
 - **500 years** (established in early 1990s)



Period of Performance

- **Utah LLRW Rules: UAC R313-25-8**
 - **“Qualitative” analysis for period > 10,000 years**
- **Utah Closed System In-growth Calculations**

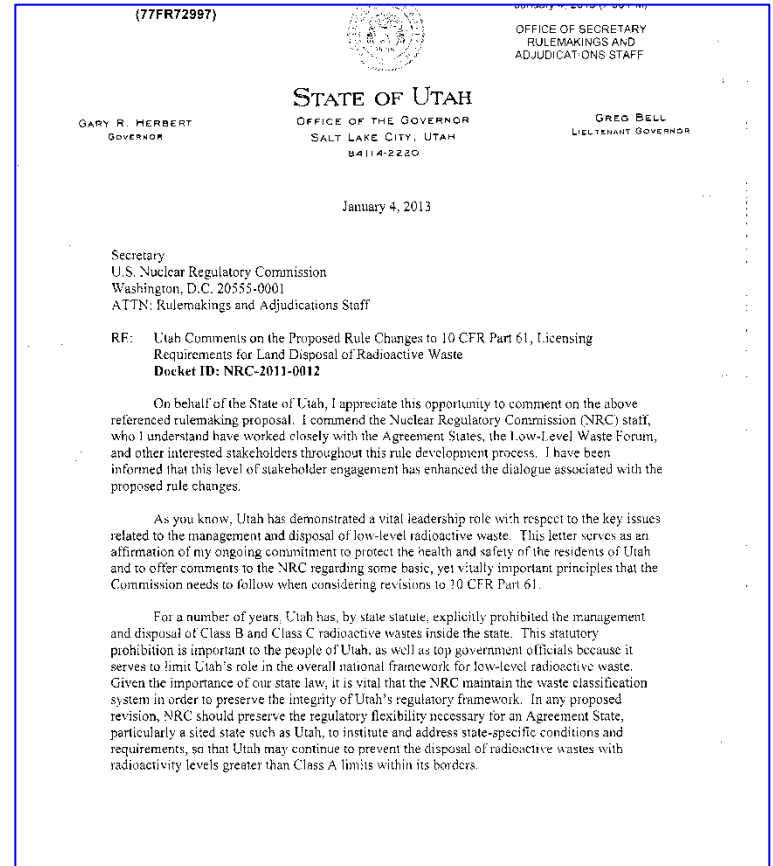


WAC & Waste Classification

“This proposed revision must not either explicitly or by interpretation be a means to by-pass the existing waste classification requirements of Subpart 61.55.”

“It is vital to Utah's Class B and Class C prohibition that the existing classification system of low-level radioactive waste remain in place, with the ability of a state, such as Utah, to enforce state prohibitions on wastes with higher radioactive levels.”

-- Gov. Gary R. Herbert



WAC & Waste Classification

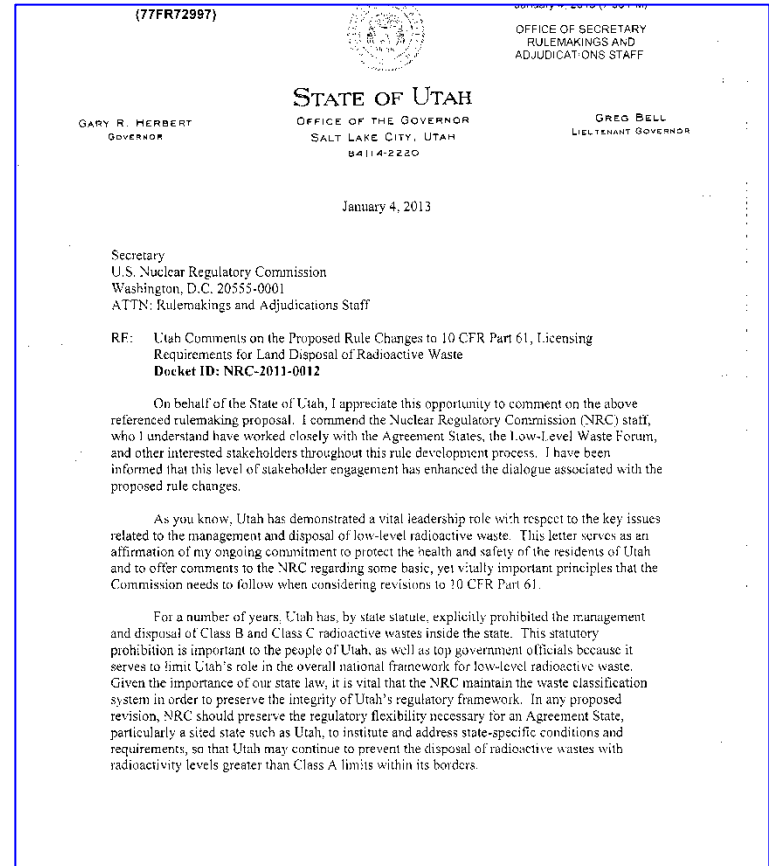
- **Site-specific WACs**
 - **Preserve LLRW Classification System**
 - **Adds confirmation burden to Host States**

- **Utah Radiation Control Board**
 - **Proposed rule changes – public comment now underway**
 - **Point-of-Origin inspections**



Compatibility

- Flexibility for Host States
 - State waste classification requirements
 - Performance assessments (DU)
 - In progress / Completed



Contact Information

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