



State of Utah

GARY R. HERBERT  
*Governor*

GREG BELL  
*Lieutenant Governor*

Department of  
Environmental Quality

Amanda Smith  
*Executive Director*

DIVISION OF RADIATION CONTROL  
Rusty Lundberg  
*Director*

July 8, 2010

Terrance Reis, Deputy Director  
Division of Materials Safety and State Agreements  
Federal & State Materials & Environmental Management (FSME)  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Mr. Reis:

Enclosed is a copy of the proposed final revision to the Utah Radiation Control Rule, R313-25-8, "License Requirements for Land Disposal of Radioactive Waste – Technical Analysis".

The changes in this revision incorporate the comments made by the Nuclear Regulatory Commission in a letter dated January 21, 2010. The Division of Administrative Rules (DAR) has yet to publish the finalized version of R313-25-8 outside of the Utah State Bulletin. However, the final rule may be found in the May 1, 2010, Utah State Bulletin. To access the Utah State Bulletin, go to [http://www.rules.utah.gov/publicat/bull\\_pdf/2010/b20100501.pdf](http://www.rules.utah.gov/publicat/bull_pdf/2010/b20100501.pdf). The effective date of this rule is June 2, 2010. When the final rule is published by DAR, the Division of Radiation Control will provide the NRC with a copy of the final rule.

We believe that adoption of this revision satisfies the compatibility and health and safety categories established in the Federal & State Materials & Environmental Management (FSME) Procedure SA-200. If you have any questions, please feel free to contact me at (801) 536-4250 or John Hultquist at (801) 536-4263 or [jhultquist@utah.gov](mailto:jhultquist@utah.gov).

Sincerely,

Craig W. Jones, Acting Executive Secretary  
Utah Radiation Control Board

cc: Kathleen Schneider, State Regulation Review Coordinator  
Division of Materials Safety and State Agreements  
Federal & State Materials & Environmental Management (FSME)  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Environmental Quality, Radiation  
Control  
R313-25-8  
Technical Analyses**

DAR FILE NO.: 33267  
FILED: 04/14/2010

**RULE ANALYSIS**

**PURPOSE OF THE RULE OR REASON FOR THE CHANGE:** At the 04/13/2010 Radiation Control Board meeting, the Board approved changes to a proposed rule based on comments received during the public comment period 01/02/2010 through 02/02/2010.

**SUMMARY OF THE RULE OR CHANGE:** Three changes were made to the proposed rule. These changes involved the addition of the word "concentrated" before the words "depleted uranium" throughout the proposed rule. The word "shall" replaced the word "will" in Subsection R313-25-8(2)(a) of the proposed rule, and the last sentence in Subsection R313-25-8(2)(a) was revised for clarity purposes. Specifically, the words "a qualitative analysis for" were deleted and the following words were added "and the results shall be analyzed qualitatively" to the sentence. (DAR NOTE: This change in proposed rule has been filed to make additional changes to a proposed amendment that was published in the January 1, 2010, issue of the Utah State Bulletin, on page 21. Underlining in the rule below indicates text that has been added since the publication of the proposed rule mentioned above; strike-out indicates text that has been deleted. You must view the change in proposed rule and the proposed amendment together to understand all of the changes that will be enforceable should the agency make this rule effective.)

**STATUTORY OR CONSTITUTIONAL AUTHORIZATION FOR THIS RULE:** Subsection 19-03-104(4)

**ANTICIPATED COST OR SAVINGS TO:**

- ◆ **THE STATE BUDGET:** The Agency has determined that the minor language change does not affect the budget that was described in the proposed rule filing.
- ◆ **LOCAL GOVERNMENTS:** The Agency has determined that the minor language change does not affect the budget that was described in the proposed rule filing.
- ◆ **SMALL BUSINESSES:** The Agency has determined that the minor language change does not affect small business as it was described in the proposed rule filing.
- ◆ **PERSONS OTHER THAN SMALL BUSINESSES, BUSINESSES, OR LOCAL GOVERNMENTAL ENTITIES:** The Agency has determined that the language change does

not affect other persons as it was described in the proposed rule filing.

**COMPLIANCE COSTS FOR AFFECTED PERSONS:** The changes to the proposed rule will not impact the affected persons anymore than as described in the proposed rule.

**COMMENTS BY THE DEPARTMENT HEAD ON THE REGULATORY ACTION:** The Department Head has no comments on the proposed rule.

THE FULL TEXT OF THIS RULE MAY BE INSPECTED, DURING REGULAR BUSINESS HOURS, AT:  
ENVIRONMENTAL QUALITY  
RADIATION CONTROL  
ROOM 212  
168 N 1950 W  
SALT LAKE CITY, UT 84116-3085  
or at the Division of Administrative Rules.

**DIRECT QUESTIONS REGARDING THIS RULE TO:**

◆ Dane Finerfrock by phone at 801-536-4250, by FAX at 801-533-4097, or by Internet E-mail at dfinerfrock@utah.gov

INTERESTED PERSONS MAY PRESENT THEIR VIEWS ON THIS RULE BY SUBMITTING WRITTEN COMMENTS NO LATER THAN AT 5:00 PM ON

THIS RULE MAY BECOME EFFECTIVE ON: 06/01/2010

AUTHORIZED BY: Dane Finerfrock, Director

**R313. Environmental Quality, Radiation Control.  
R313-25. License Requirements for Land Disposal of  
Radioactive Waste - General Provisions.  
R313-25-8. Technical Analyses.**

(1) The specific technical information shall also include the following analyses needed to demonstrate that the performance objectives of R313-25 will be met:

(a) Analyses demonstrating that the general population will be protected from releases of radioactivity shall consider the pathways of air, soil, ground water, surface water, plant uptake, and exhumation by burrowing animals. The analyses shall clearly identify and differentiate between the roles performed by the natural disposal site characteristics and design features in isolating and segregating the wastes. The analyses shall clearly demonstrate a reasonable assurance that the exposures to humans from the release of radioactivity will not exceed the limits set forth in R313-25-19.

(b) Analyses of the protection of inadvertent intruders shall demonstrate a reasonable assurance that the waste classification and segregation requirements will be met and that adequate barriers to inadvertent intrusion will be provided.

(c) Analysis of the protection of individuals during operations shall include assessments of expected exposures due to routine operations and likely accidents during handling, storage, and

disposal of waste. The analysis shall provide reasonable assurance that exposures will be controlled to meet the requirements of R313-15.

(d) Analyses of the long-term stability of the disposal site shall be based upon analyses of active natural processes including erosion, mass wasting, slope failure, settlement of wastes and backfill, infiltration through covers over disposal areas and adjacent soils, and surface drainage of the disposal site. The analyses shall provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure.

(2)(a) Any facility that proposes to land dispose of significant quantities of concentrated depleted uranium[;] (more than one metric ton in total accumulation[;]) after [~~the effective date of this change~~]June 1, 2010, shall submit for the Executive Secretary's review and approval a performance assessment that demonstrates that the performance standards specified in 10 CFR Part 61 and corresponding provisions of Utah rules will be met for the total quantities of concentrated depleted uranium and other wastes, including wastes already disposed of and the quantities of concentrated depleted uranium the facility now proposes to dispose.

Any such performance assessment shall be revised as needed to reflect ongoing guidance and rulemaking from NRC. For purposes of this performance assessment, the compliance period [~~with~~]shall be a minimum of 10,000 years. Additional simulations [~~with~~]shall be performed for [~~a qualitative analysis for~~]the period where peak dose occurs and the results shall be analyzed qualitatively.

(b) No facility may dispose of significant quantities of concentrated depleted uranium prior to the approval by the Executive Secretary of the performance assessment required in R313-25-8(2)(a).

(c) For purposes of this R313-25-8(2) only, "concentrated depleted uranium" means waste with depleted uranium concentrations greater than 5 [~~%~~]percent by weight.

**KEY: radiation, radioactive waste disposal, depleted uranium**  
**Date of Enactment or Last Substantive Amendment: 2010**  
**Notice of Continuation: October 5, 2006**  
**Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-3-108**

**End of the Notices of Changes in Proposed Rules Section**