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

March 10, 2011

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 Change In Proposed Rule to Utah Radiation Control Rule, R313-25-8, "License Requirements for Land Disposal of Radioactive Waste – Technical Analysis".

The changes in this revision incorporate comments received from stakeholders during the public comment period beginning December 1, 2010 and ending on January 4, 2011. 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 March 1, 2011, Utah State Bulletin. To access the Utah State Bulletin, go to http://www.rules.utah.gov/publicat/bulletin/2011/20110301/34240.htm. The first possible effective is March 31, 2011. 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.

Sincerely,

Rusty Lundberg

Rusty Lundberg, 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

DAR File No. 34240

This rule was published in the March 1, 2011, issue (Vol. 2011, No. 5) of the Utah State Bulletin.

Environmental Quality, Radiation Control

Section R313-25-8

Technical Analyses

Change in Proposed Rule

DAR File No.: 34240
Filed: 02/15/2011 11:41:33 AM

RULE ANALYSIS

Purpose of the rule or reason for the change:
The purpose of this change in proposed rule is to further clarify when a site-specific performance assessment is required to be submitted to the Executive Secretary for approval regarding radioactive waste receipt and disposal based on the incorporation of comments received during the public comment period and approval of the proposed changes during the February 2011 Radiation Control Board meeting.

Summary of the rule or change:
Subsection R313-25-8(1)(a) adds language that clarifies when a performance assessment would be required by stating the waste was not part of the development of the limits on Class A waste and not included in the Draft Environmental Impact Statement prepared by the U.S. Nuclear Regulatory Commission for the development of Federal Rule 10 CFR 61. "Licensing Requirements for Land Disposal of Radioactive Waste." Item 1a of the proposed rule becomes item 1(b), and item 1(b) becomes item 1 (c). In addition, item 1(d) is added to include a condition for waste that would result in an unanalyzed condition not considered in Rule R313-25 "License Requirements for Land Disposal of Radioactive Waste - General Provisions." Additionally, the words "the development of 10 CFR 61.55" was removed from 1(d). And lastly, the phrase "and changing lake levels" was removed from Subsection R313-25-8(4)(a). (DAR NOTE: This change in proposed rule has been filed to make additional changes to a proposed amendment that was published in the December 1, 2010, issue of the Utah State Bulletin, on page 48. 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.)

State statutory or constitutional authorization for this rule:

- Subsection 19-3-104(4)

Anticipated cost or savings to:
the state budget:
The State of Utah receives fees from licensees that dispose of radioactive waste under Section 19-3-106. Currently, EnergySolutions, LLC is the only radioactive waste disposal facility that accepts and disposes of radioactive waste. If this rule is promulgated, certain wastes may not be accepted at the facility until it has completed a site-specific performance assessment and it is approved by the Executive Secretary. The financial impacts on waste fees received by the State of Utah are difficult to specify because the impact depends on the following information that is not known at this time: when a site-specific performance assessment will be submitted and when it will be approved; when the rule takes effect it may cause waste receipts to be delayed; or whether there are competitors for the waste such that EnergySolutions could lose receipts altogether.

local governments:
Tooele County collects impact fees from waste facilities, including EnergySolutions. Tooele County's budget is therefore likely to be affected. Because of the reasons described above, the specific impact cannot be known at this time. However, the proposed change will not impact wastes that are currently approved for disposal and for which disposal fees are paid.

small businesses:
No small business in Utah will be directly impacted. This amendment changes a rule that is specific to companies or licensees that dispose of radioactive waste. As a result of this narrow scope, there should be no direct impact on small businesses.

persons other than small businesses, businesses, or local governmental entities:
The Board is not aware of any direct impact on other entities. This amendment changes a rule that is specific to companies or licensees that dispose of radioactive waste. As a result of this narrow scope, there should be no direct impact on other persons.

Compliance costs for affected persons:
A radioactive waste disposal facility may have to incur the cost of preparing a site-specific performance assessment under this rule, and may also bear the cost of the Division of Radiation Control's review of that performance assessment. The cost of a performance assessment is likely to be over $1,000,000 initially, however, the licensee has initiated a performance assessment prior to this rule change and therefore, depending on the waste stream, may only have to modify a previous performance assessment and therefore, costs could be substantially lower.

Comments by the department head on the fiscal impact the rule may have on businesses:
If the rule is promulgated, one Utah business - EnergySolutions, LLC - may be unable to accept certain wastes until it has submitted a site-specific performance assessment and the performance assessment has been approved. The impact of this rule is hard to ascertain, because the Division of Radiation Control does not know when EnergySolutions will submit a performance assessment and when it will be approved, when EnergySolutions would otherwise have received certain wastes that would require them to prepare and submit a performance assessment, and whether or not future waste shipments will require a site-specific performance assessment prior to receipt. However, if a performance assessment is required, EnergySolutions will bear the cost of carrying out, preparing, and submitting the performance assessment which could be substantial.

Amanda Smith, Executive Director

The full text of this rule may be inspected, during regular business hours, at the Division of Administrative Rules, or at:

Environmental Quality
Radiation Control
195 N 1950 W
SALT LAKE CITY, UT 84116-3085

Direct questions regarding this rule to:

- Rusty Lundberg at the above address, by phone at 801-536-4257, by FAX at 801-533-4097, or by Internet E-mail at rlundberg@utah.gov

Interested persons may present their views on this rule by submitting written comments to the address above no later than 5:00 p.m. on:

This rule may become effective on:
03/31/2011

Authorized by:
Rusty Lundberg, Director

RULE TEXT

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

(1) The licensee or applicant shall conduct a site-specific performance assessment and receive Executive Secretary approval prior to accepting any radioactive waste if:

(a) the waste was not considered in the development of the limits on Class A waste and not included in the analyses of the Draft Environmental Impact Statement on 10 CFR Part 61 "Licensing Requirements for Land Disposal of Radioactive Waste," NUREG-0782. U.S. Nuclear Regulatory Commission. September 1981, or

(b) the waste is likely to result in greater than 10 percent of the dose limits in R313-25-19 during the time period at which peak dose would occur, or

([~~b~~]c) the waste will result in greater than 10 percent of the total site source term over the operational life of the facility, or

([~~c~~]d) the disposal of the waste would result in an unanalyzed condition not considered in [~~the development of 10 CFR61.55~~]R313-25.

(2) A licensee that has a previously-approved site-specific performance assessment that addressed a radioactive waste for which a site-specific performance assessment would otherwise be required under R313-28-8(1) shall notify the Executive Secretary of the applicability of the previously-approved site-specific performance assessment at least 60 days prior to the anticipated acceptance of the radioactive waste.

(3) The licensee shall not accept radioactive waste until the Executive Secretary has approved the information submitted pursuant to R313-25-8(1) or (2).

(4) The licensee or applicant shall also include in the specific technical information 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[~~, and changing lake levels~~]. 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, surface drainage of the disposal site, and the effects of changing lake levels. The analyses shall provide reasonable assurance that there will not be a need for ongoing active maintenance of the disposal site following closure.

(5)(a) Notwithstanding R313-25-8(1), any facility that proposes to land dispose of significant quantities of concentrated depleted uranium (more than one metric ton in total accumulation) after 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 shall be a minimum of 10,000 years. Additional simulations shall be performed 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(5)(a).

(c) For purposes of this R313-25-8(5) 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: [~~October 13, 2010~~]2011
Notice of Continuation: October 5, 2006
Authorizing, and Implemented or Interpreted Law: 19-3-104; 19-3-108

Additional Information

The Portable Document Format (PDF) version of the Bulletin is the official version. The PDF version of this issue is available at http://www.rules.utah.gov/publicat/bull-pdf/2011/b20110301.pdf. The HTML edition of the Bulletin is a convenience copy. Any discrepancy between the PDF version and HTML version is resolved in favor of the PDF version.

Text to be deleted is struck through and surrounded by brackets (e.g., [~~example~~]). Text to be added is underlined (e.g., example). Older browsers may not depict some or any of these attributes on the screen or when the document is printed.

For questions regarding the *content* or *application* of this rule, please contact Rusty Lundberg at the above address, by phone at 801-536-4257, by FAX at 801-533-4097, or by Internet E-mail at rlundberg@utah.gov. For questions about the *rulemaking process*, please contact the Division of Administrative Rules.

Home | Publications | Utah State Bulletin | 03/01/2011 Contents | File No. 34240

2011 © Division of Administrative Rules
4120 State Office Building / Capitol Hill Complex / 450 North State Street / Salt Lake City, UT 84114
Phone: 801-538-3764 / Fax: 801-359-0759