**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, [and either (b) (c) or (d) below apply] 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

([e]d) the disposal of the waste would result in an unanalyzed condition not considered in [the development of 10 CFR 61.55]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]4) The [specific technical information]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[<u>-and-changing lake</u> <u>levels</u>]. 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, 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.

([2]5)(a) Notwithstanding R313-25-8(1), [A]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, 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([2]5)(a).

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

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