

DEPLETED URANIUM PERFORMANCE ASSESSMENT RULE
Proposed Rule as recommended to the Radiation Control Board
for April 2010 Board Meeting

Note: Strikeout and underline show changes from rule as proposed on January 1, 2010.

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 [effective date of rule] 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 ~~will~~ shall be a minimum of 10,000 years. Additional simulations ~~will~~ 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 R. 313-25-8(2)(a).
 - (c) For purposes of this R. 313-25-8(2) only, "concentrated depleted uranium" means waste with depleted uranium concentrations greater than 5 percent by weight.