

Depleted Uranium - Additional Options Evaluated

In addition to the options discussed in the paper, staff evaluated the possible use of 10 CFR 61.58 “Alternate requirements for waste classification and characteristics” to require that a site-specific analysis be performed prior to disposal of large quantities of DU. 10 CFR 61.58 states:

The Commission may, upon request, or on its own initiative, authorize other provisions for the classification and characteristics of waste on a specific basis, if, after evaluation of the specific characteristics of the waste, disposal site, and method of disposal, it finds reasonable assurance of compliance with the performance objectives in subpart C of this part.

10 CFR 61.58 is an exception provision that allows the Commission, either upon request or on its own initiative, to authorize alternate provisions for classification or characteristics of LLW.¹ The requirements for waste classification and characteristics are found in §§ 61.55 and 61.56, respectively.² Such alternate provisions could be authorized after an evaluation showing that the specific waste, disposal site, and disposal method being proposed would provide reasonable assurance of compliance with the performance objectives in Subpart C of Part 61.

Under Option 1, the staff would issue a generic communication clarifying the need to demonstrate compliance with the performance objectives prior to the disposal of large quantities of DU. Therefore, § 61.58 does not apply.

Under Option 2, which is the staff’s recommended option, the staff is proposing that disposal facility licensees be required to perform an analysis in order to confirm that near-surface disposal of large quantities of DU, and other “unique waste streams,” can be undertaken at specific sites in conformance with the performance objectives in Subpart C to 10 CFR part 61. This would be accomplished via rulemaking to modify 10 CFR 61.55. On the other hand, use of an exception provision like § 61.58 to *require* an additional site-specific study on certain Class A waste streams, without any associated rule change, seems inconsistent with the basic premise of an exception. Specifically, the purpose of building an exception into a generally applicable rule is to allow an activity that would not otherwise be permitted, rather than to impose an additional requirement (e.g., performance of a site-specific study) on an activity that is already permitted (e.g., near-surface disposal of Class A waste). Thus, if § 61.58 were utilized to approve an alternate classification or characteristic, such action would provide additional options for a licensee, but would not require use of a particular option. Compliance with the approved alternative would not be the only method of compliance. Therefore, if the staff intended to use § 61.58 in order to develop an alternate waste classification or alternate characteristics for a Class A waste stream such as DU, and to require licensees to conform to the alternate classification or characteristics as the sole method of

¹ 10 CFR 61.58 is analogous to 10 CFR 61.54, “Alternate Requirements for design and operations,” which provides similar flexibility with regards to the technical requirements specified in §§ 61.51, 61.52 and 61.53.

² 10 CFR 61.56(a) describes minimum requirements for all classes of waste that are intended to facilitate handling at the disposal site and provide protection of health and safety of personnel at the disposal site. 10 CFR 61.56(b) provides stability requirements for Class B and C waste.

compliance in place of (as opposed to as an alternative to) the existing regulations, a rule change would be necessary.³

The staff also considered whether the Commission could, on its own initiative, undertake a site-specific analysis for large quantities of DU pursuant to § 61.58. While the language of § 61.58 certainly provides for such a Commission-initiated analysis, as discussed above, performance of such an analysis pursuant to § 61.58 alone, without an associated rule change, would not replace the existing regulations as the sole method of compliance. In addition, a Commission evaluation undertaken pursuant to § 61.58 would likely have no direct effect on Agreement State licensees, as any alternate waste classification or characteristics would need to be evaluated and authorized by the Agreement State under its analog to § 61.58 or § 61.6 (general exemption provision), neither of which are currently required for compatibility.

While ineffective for Option 2, § 61.58 could play a role if the Commission were to direct the staff to implement Option 3 or 4, depending on how DU was ultimately classified. For example, if large quantities of DU were reclassified generically as Class C or GTCC using a “reference LLW disposal site assumed to be sited in a humid eastern environment” under Option 3, NRC licensees — or the Commission itself — could use § 61.58 to provide an alternate classification after performing an evaluation showing that the specific waste, disposal site, and disposal method being proposed would provide reasonable assurance of compliance with the performance objectives in Subpart C of Part 61. In this example, the waste in question could then be disposed of in accordance with the general reclassification developed under Option 3 or 4 (e.g., Class C or GTCC), or in accordance with the alternate classification authorized pursuant to § 61.58. But, as described above, such a § 61.58 analysis would likely have no direct effect on Agreement State licensees, as any alternate waste classification would need to be evaluated and authorized by the Agreement State under its analog to § 61.58 or § 61.6 (general exemption provision).

³ This is consistent with the discussion of § 61.58 in NUREG-1854, “NRC Staff Guidance for Activities Related to U.S. Department of Energy Waste Determinations: Draft Final Report for Interim Use.” Specifically, NUREG-1854 states:

“10 CFR 61.58 was intended to allow the NRC the flexibility of establishing alternate waste classification schemes when justified by site-specific conditions *and does not affect the generic waste classifications established in 10 CFR 61.55.*”

Id. at 3-36 (emphasis added).