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July 24, 2015

Secretary  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

ATTN: Rulemaking and Adjudications Staff

Subject: Docket ID NRC-2011-0012 (Proposed Rule Changes, 10 CFR Part 61)  
Filed Online via [www.regulations.gov](http://www.regulations.gov)

Dear Madam Secretary:

The Utah Division of Waste Management and Radiation Control appreciates the opportunity to comment on the U.S. Nuclear Regulatory Commission's (NRC) proposed changes to Title 10, *Code of Federal Regulations* (CFR), Part 61. We commend the NRC's efforts to engage stakeholders throughout the entire rule development process.

We especially appreciate the recent public meetings NRC held during the public comment period in each of the sited states of South Carolina, Texas, Utah, and Washington. This afforded the public in each of these states an opportunity to meet or interact directly with the NRC staff who have been closely involved with this rulemaking proposal. This type of public/stakeholder involvement certainly fosters greater public awareness and understanding of important regulatory matters associated with the proper management of low-level radioactive waste (LLRW) in the U.S. Public outreach, information availability, and overall government transparency are key elements of our agency's efforts and commitment to protect the health and safety of the residents of Utah. We also commend the NRC staff for their extensive work and tireless dedication in preparing the proposed changes to Part 61 as well as the accompanying technical guidance document and regulatory analysis.

Following this letter are our comments on the proposed changes to the radioactive waste land disposal requirements found in Part 61. Additionally, as a member of the Part 61 Working Group of the Low-Level Waste Forum, we also express support for the comments submitted by that group.

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We further express appreciation to the NRC for its time and consideration of our comments in developing the final rule changes. Please feel free to contact me regarding any questions regarding our comments.

Sincerely,



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Enclosure: UDWMRC Comments

**UTAH DIVISION OF WASTE MANAGEMENT AND RADIATION CONTROL  
COMMENTS ON THE PROPOSED CHANGES TO 10 CFR PART 61  
(DOCKET ID: NRC-2011-0012)**

The Utah Division of Waste Management and Radiation Control (UDWMRC) appreciates the opportunity to provide the following comments that address the proposed changes to 10 CFR Part 61 as published in the *Federal Register* on March 26, 2015 (80 FR 16082).

**GENERAL COMMENTS**

As noted in the cover letter, the UDWMRC is a member of the Low-Level Waste Forum's Part 61 Working Group and as such expresses support for the comments submitted by the working group.

PART 61 CHANGES

The proposed rule changes incorporate the need for various technical analyses, including a site-specific performance assessment in order to determine appropriate waste acceptance criteria, particularly for low-level radioactive waste (LLRW) that was not considered in the development of the current rules governing LLRW disposal. In comparison, the existing rules establish a regulatory framework that, in part, is premised on a LLRW classification system that serves as a means to ensure protection of the public health and safety with respect to the management and disposal of LLRW. More specifically, the waste classification system is designed to protect an individual who unknowingly encounters the contents of a closed LLRW disposal site from a potential unsafe exposure to radioactive material. In constructing the waste classification system, various generalized assumptions were made in order to provide a level of confidence and consistency in the requirements governing the actual disposal of LLRW.

The NRC is now proposing to revise the existing disposal requirements in order to provide a less "generic" approach by taking advantage of various site-specific analyses to determine the acceptability of LLRW for disposal at a commercial facility.

It is well known that for about a decade, Utah has had in place a law that prohibits the receipt, management, and disposal of Class B and Class C LLRW. Consequently, the waste classification system is vital to Utah's low-level radioactive waste management program. Given this importance, we support NRC's proposed "hybrid" approach that allows the use of waste acceptance criteria (WAC) derived from the proposed technical analyses requirements while preserving the use of the existing waste classification system for determining the acceptability of LLRW for disposal at a commercial facility. The proposed hybrid approach will allow Utah the ability to maintain its reliance on the waste classification system in administering its LLRW program.

Although a licensee or license applicant can determine whether to develop waste acceptance criteria as a result of the technical analyses or use the current waste classification system, as

noted in the preamble to the proposed rulemaking, the appropriate regulatory agency, in accordance with the proposed language of § 61.58, will have the authority to approve (or disapprove) the licensee's or applicant's waste acceptance approach.

We believe that the national implementation of the hybrid approach has the potential to create a significant resource impact on a sited state. LLRW generators and brokers will have a choice in commercial disposal options that may differ in their waste acceptance requirements, i.e., waste classification based or waste acceptance criteria based. This has the potential to create some confusion among waste generators and brokers in complying with the applicable waste classification and packaging requirements and may result in added oversight resources for monitoring incoming shipments.

### COMPATIBILITY

The rulemaking proposal identifies several changes to the compatibility designation for selected areas of Part 61. As an Agreement State, Utah supports the need for national consistency among state programs. However, it is equally vital to afford states the ability to address and tailor regulatory standards and requirements that are not less stringent than the NRC in order to meet specific or unique needs and circumstances that exist within a state.

Such was the case when the Utah Radiation Control Board adopted two important rule changes related to performance assessments. Both rulemakings are similar in nature to NRC's proposed Part 61 rulemaking. The first rulemaking specifically addresses depleted uranium and the second establishes criteria for when other performance assessments are required—such as LLRW not previously analyzed in the development and adoption of the radioactive waste land disposal requirements. Based on NRC evaluations of the rules, both were determined to meet NRC's criteria of being adequate and compatible.

Specifically, for this proposed rulemaking, UDWMRC requests the NRC to re-designate those areas that are compatibility category B to category C in order to preserve the flexibility necessary to maintain our existing performance assessment rules. This will provide greater public confidence in our efforts to address a proposal to dispose of large quantities of depleted uranium and a separate proposal to dispose of large quantities of wastewater treatment resins near the Class A limits. Similarly, compatibility category C will avoid having to redo, at a significant cost, the technical analyses (performance assessments) now nearing completion. To perform a complete re-evaluation of these analyses within the relatively short time horizons proposed by the rulemaking will not be productive, beneficial, or more protective of health and safety.

### POTENTIAL WASTE CLASSIFICATION CHANGES

During the recent public meetings the NRC held in each of the sited states, NRC staff noted that the Commission expressed an interest in receiving comment on the need for a second rulemaking addressing the waste classification system and more specifically, the classification of depleted uranium. We appreciate the Commission's ongoing interest in addressing such an important and

critical matter for Utah with respect to LLRW management in the U.S. The management and disposal of unique waste streams, such as depleted uranium, at commercial facilities places the importance of this matter at the forefront of the regulatory agenda.

While the current approach is to complete the site-specific performance assessment rulemaking before initiating a waste classification rulemaking, we believe it is more reasonable to pursue and complete the waste classification rulemaking, or at least the classification of depleted uranium, in advance of the current site-specific rulemaking. NRC staff have stated the reason for the current sequence of the rulemakings is that completing the site-specific rulemaking will serve to inform the need for and/or determine the scope of the waste classification rulemaking.

However, we believe that the overwhelmingly significant differences in the radioactive characteristics of depleted uranium (tens of thousands of years of increased radioactivity due to progeny ingrowth) and traditional Class A LLRW (one or two hundred years of decreased radioactivity), including other long-lived radionuclides, justifies the need to determine the classification of depleted uranium before completing the site-specific rulemaking. Classifying depleted uranium will actually better inform the site-specific rulemaking since depleted uranium is used so frequently as the primary example of how the site-specific rulemaking proposes to address long-lived radionuclides. The unique nature of depleted uranium compared to all other LLRW, particularly Class A wastes, seems to compel the need for an earlier waste classification action rather than later.

## **SPECIFIC COMMENTS**

### § 61.1 PURPOSE AND SCOPE

During the recent public meetings the NRC held in each of the sited states, NRC staff stated that although no specific changes are being proposed to § 61.1 for the current rulemaking proposal, the requirements of paragraph (a) newly apply to the proposed changes. Although noted above and for added emphasis, UDWMRC concurs with the comments of the Low-Level Waste Forum Part 61 Working Group on this matter.

### § 61.2 DEFINITIONS

COMPLIANCE PERIOD – UDWMRC recommends that the definition for compliance period be revised to indicate that for purposes of applying the required analyses for the performance period, the compliance period is considered to be a minimum of 10,000 years.

### § 61.7 CONCEPTS

While helpful and instructive in setting the context of the Part 61 requirements, the proposed changes emphasize the value of placing this entire section within the accompanying guidance document (“Guidance for Conducting Technical Analyses for 10 CFR Part 61,” NUREG-2175). The section could possibly then be retitled and used to reference the guidance document.

The proposed revisions to this section, particularly paragraph (f) regarding waste classification and near-surface disposal, underscore the need to perform the waste classification of depleted uranium in advance of completing this proposed rulemaking. It is clear that depleted uranium does not fit within or is consistent with the waste classification description within this section.

#### § 61.12 SPECIFIC TECHNICAL INFORMATION

Paragraph (j)(2) – Requiring the submittal of a “description of the quality assurance program...for the development of technical analyses” is overly broad and ambiguous and will create confusion in its implementation. A suggested revision would be:

“(2) The development of the applicable technical analyses required in § 61.13; and”

#### § 61.13 TECHNICAL ANALYSES

##### Performance Assessment (PA)

From our experience, we recognize the difficulty in conducting a technical analysis over extreme time periods that inherently create a significant level of variability and uncertainty. We appreciate the flexibility in addressing such critical factors. While § 61.13 does not explicitly prescribe the analytical approach (i.e., deterministic vs. probabilistic), the regulatory agency will need the authority to approve (or disapprove) the approach selected by the licensee or applicant.

Paragraph (3) may be difficult to address since a licensee or applicant is required to consider the likelihood of disruptive or other unlikely items.

Paragraph 61.13 (a)(9) “consider alternative conceptual models” How to address and evaluate, as a regulator and how to determine the acceptability of the licensee’s or applicant’s consideration?

The UDWMRC concurs with the value of performing a site-specific technical analysis since it moves away from a more generic or one-size-fits-all approach and fosters greater confidence in the results.

Exclusions, limits, or boundaries are based on site conditions and critical or key dynamics over the appropriate time periods associated with a given waste. This is especially valid for depleted uranium.

The UDWMRC supports requiring a PA at closure, but only to capture any significant changes such as the source inventory or key dynamics associated with the operational life of the facility, but should not be automatically required if the waste inventory primarily consisted of traditional LLRW envisioned and analyzed at the time of the development of Part 61 (61.28)

Table A – may be difficult to implement due to the likelihood of incorrectly determining the appropriate/applicable waste concentration.

§ 61.41 PROTECTION OF THE GENERAL POPULATION FROM RELEASES OF RADIOACTIVITY

The UDWMRC recommends for those paragraphs where the proposed compatibility category is designated as category A or B to be revised to category C in order to allow the flexibility an Agreement State will need in order to address site-specific needs/conditions, as described in additional detail in the “Compatibility Section” above.

§ 61.42 PROTECTION OF INADVERTENT INTRUDERS

The UDWMRC recommends for those paragraphs where the proposed compatibility category is designated as category A or B to be revised to category C in order to allow the flexibility an Agreement State will need in order to address site-specific needs/conditions, as described in additional detail in the “Compatibility Section” above.

§ 61.58 WASTE ACCEPTANCE

The UDWMRC recommends the compatibility category of this section be revised from the proposed category B to category C in order to allow the flexibility an Agreement State will need in order to address site-specific needs/conditions, as described in additional detail in the “Compatibility Section” above.

Paragraph 61.58(f) – UDWMRC recommends requiring the licensee to prepare a report of the annual review of the required items and submit the report to the Commission (Agreement State) in order to determine the adequacy of the licensee’s implementation and determine any necessary revisions.

Paragraph 61.58(h) – As currently written, the proposed changes in paragraph 61.58(h) create at least four important concerns. First, it inappropriately predetermines the outcome of a decision about the use of waste acceptance criteria by using the phrase “will be approved.” Second, with the apparent certainty in the approval of the waste acceptance criteria, it limits flexibility and undermines the ability to exercise the option proposed by the hybrid approach, which allows for the continued use of the existing waste classification system. Third, it creates regulatory confusion by implying that with the approval of waste acceptance criteria, application of the waste classification system is unnecessary or even completely moot. Fourth, the reference to applying the criteria of § 61.23 is overly broad and should at least specifically exclude paragraph (h), which addresses financial surety, and is not directly tied to a determination of the approval of waste acceptance criteria. Additionally, given the proposed language in § 61.7, “Concepts,” regarding waste acceptance, the reference to using the criteria of § 61.23 is inconsistent. As described in § 61.7, waste acceptance is based on meeting the performance objectives and is not specifically linked to the criteria of § 61.23.

## **REGULATORY ANALYSIS**

In association with the proposed rule changes to Part 61, the NRC prepared a regulatory analysis to evaluate the potential costs of the proposed changes. Based on our experience with evaluating and reviewing a performance assessment for the potential disposal of large quantities of depleted uranium in a near-surface disposal facility, the implementation cost estimate for Agreement States is significantly understated. The NRC should re-evaluate the rationale and assumptions made to determine the implementation costs since such costs can be difficult to cover under state budgets.

As frequently noted in the proposed rulemaking, the various site-specific technical analyses that will be required are complex, complicated and typically encompass large amounts of data and information. Consequently, the resources associated with the review and evaluation process are extensive and easily exceed the estimated costs in the regulatory analysis. Additional implementation costs also stem from public and stakeholder outreach efforts. Perhaps equally important are the potential added costs incurred by a sited state to enhance its compliance oversight of incoming shipments from LLRW generators and brokers that may be confused as to which waste acceptance requirements (waste classification limits or WAC) apply at a given commercial disposal facility.