

## Regulatory Guide Periodic Review

Regulatory Guide Number: **4.18, Revision 0**

Title: **Standard Format and Content of Environmental Reports for Near-Surface Disposal of Radioactive Waste**

Office/division/branch: **NMSS/DUWP/LLWB**

Technical Lead: **Jeffrey Cruz**

Staff Action Decided: **Reviewed with issues identified for future consideration**

### 1. **What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?**

RG 4.18, "Standard Format and Content of Environmental Reports for Near-Surface Disposal of Radioactive Waste," was published in June 1983 to provide specific and detailed guidance for the preparation of environmental reports for land disposal facilities. The guide identifies the information needed by the NRC staff to assess the potential environmental effects of the proposed land disposal facility and establishes an acceptable format for presenting it. While the text is applicable to the current regulations in 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," certain text is out-of-date and certain references in the guide are outdated.

For example, RG 4.18 references 10 CFR 20.3(a)(14) regarding the definition of a "Restricted Area." 10 CFR Part 20, "Standards for Protection Against Radiation," has been revised and "Restricted Area" is now defined in 20.1003, "Definitions."

None of the following NUREGs referenced in the document appear on the lists of NRC's NUREGs found at: <http://www.nrc.gov/reading-rm/doc-collections/nuregs/>:

- NUREG-0902, "Site Suitability, Selection and Characterization"
- NUREG/CR-2700, "Parameters for Characterizing Sites for Disposal of Low-Level Radioactive Waste"
- NUREG/CR-3038, "Tests for Evaluating Sites for Disposal of Low-Level Radioactive Waste"

Furthermore, NUREG/CR-2700 and NUREG/CR-3038 are not available in ADAMS. Such copies may be obtained by e-mailing at [DISTRIBUTION.Resource@nrc.gov](mailto:DISTRIBUTION.Resource@nrc.gov) requesting a copy.

As of September 2016, the NRC is evaluating whether to implement changes to the regulations on low-level waste disposal, including the regulations in 10 CFR 61.50, "Disposal site suitability requirements for land disposal," and Subpart C of Part 61, "Performance Objectives," for which RG 4.18 provides guidance. If these regulations will be revised as a result of the ongoing rulemaking effort, the staff may consider revision of RG 4.18 to address these changes.

The benefits to stakeholders of updating and consolidating all low-level waste guidance into one NUREG were identified during the Programmatic Assessment of the low-level radioactive waste regulatory program, which will be documented in a Commission paper that is in the final stages of concurrence. Activities within the programmatic assessment were prioritized as “high,” “medium,” or “low.” This activity was ranked as “medium.”

**2. What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?**

The NRC does not anticipate licensing a new near surface disposal facility under 10 CFR Part 61 within the next five years; therefore, not updating the RG to address the known issues would have essentially no impact on the NRC’s internal and external stakeholders. Also, RG 4.18 does not provide guidance that impacts inspection activities.

**3. What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent (FTE) and contractor resources?**

An estimate of the effort needed to correct the identified issues is between 0.10 full-time equivalent (FTE) and 0.20 FTE.

**4. Based on the answers to the questions above, what is the staff action for this guide?**

Reviewed with issues identified for future consideration.

**5. Provide a conceptual plan and timeframe to address the issues identified during the review.**

As discussed in Management Directive (MD) 6.6, “Regulatory Guides,” the NRC staff periodically reviews RGs to ensure that these guides continue to provide useful guidance. The staff will consider potential changes to 10 CFR Part 61 that may be brought about by the rulemaking effort during the next periodic review of the guide.

**NOTE: This review was conducted in September 2016 and reflects the staff’s plans as of that date. These plans are tentative and are subject to change.**

