

NRC's Alternative Disposal Request Guidance Document Revision

**November 16, 2017
NRC Webinar
NRC Headquarters, TWFN Auditorium**

**Robert Lee Gladney, Project Manager
Adam Schwartzman, Risk Analyst
Division of Decommissioning, Uranium Recovery and Waste
Programs (DUWP)
Office of Nuclear Material Safety and Safeguards (NMSS)**

Very Low-Level Waste

- Very low-level waste (VLLW)
 - Material containing some residual radioactivity, including naturally occurring radionuclides.
 - Contains a small fraction of the concentrations of Class A limits.
 - Primary disposal pathway option is in a licensed low-level radioactive waste facility.
- Licensees can utilize Alternative Disposal Options
 - 10 CFR 20.2002
 - 10 CFR 40.51(b)(3) and 40.13(a)
- Increased VLLW volumes expected in the near-term due to reactor decommissioning.

Method for obtaining NRC approval of proposed disposal procedures 10 CFR 20.2002

- Case-by-case evaluation.
- NRC Licensee must request approval for alternate disposal.
- Disposal facility operator must be granted an exemption from NRC regulations.

Additional Exemption Options

In addition, other regulations address disposal options for radioactive material.

- 10 CFR 40.13 exempts from the licensing requirements in 10 CFR Part 40 uranium and thorium in "unimportant quantities."
- 10 CFR 40.51(b)(3) provides licensees a mechanism for transfer of unimportant quantities of source material exempt from licensing under 40.13(a).

Alternative Disposal Request Guidance

- Original version issued in 2009 (ADAMS Accession No. ML092460058)
 - Primarily focused on 20.2002, but also included 40.13(a).
 - First single procedure covering safety and security reviews, the preparation of an environmental assessment, and coordination with stakeholders for alternative disposal requests.
 - Draft interim procedure issued with plan to finalize after implementation, use, and feedback.

Guidance Revision

- Need for guidance revision determined as a High Priority in LLW Programmatic Assessment – 2016 ([SECY-16-0118](#)).
- Purpose for revising draft guidance
 - Providing more clarity, consistency, and transparency.
 - Clarifying the definition of disposal in 10 CFR 20.2002 to include recycle and reuse.
- Draft issued for public comment (ADAMS Accession No. ML17229B588)
 - Seeking comments from stakeholders, including professional organizations, licensees, Agreement States, and the public.
 - Comments will be considered in development of the final guidance document.
- Final issuance expected in 1st Qtr 2018

Stakeholder Outreach

- Organization of Agreement States (OAS)
 - OAS Call (July)
 - Meeting Presentation and Discussion (August)
- Updated information on VLLW is on the NRC Website:
<https://www.nrc.gov/waste/llw-disposal.html>
- LLW Forum (October)
- *Federal Register* notice for ADR guidance
 - Issued Federal Register Notice requesting public input with 60 day public comment period (October 19 – December 18).
 - Public meeting and webinar at NRC Headquarters (October 19th).
 - Second webinar on the guidance (November 16th)

Summary of Primary Revisions

- Clarification of "a few millirem."
- Clarification of responsibilities for approvals by the NRC and Agreement States.
- Information added specific to the Regions and Offices and their roles in the 20.2002 review process, including OGC, NMSS, NRR, and Regions.
- Consolidated guidance, including lists of key documents/references that serve as the source for specific requirements.
- Clarification of the definition of disposal in 10 CFR 20.2002 to include recycle and reuse.

Reuse and Recycle

- Licensees or applicants may request approval to reuse or recycle licensed materials under 10 CFR 20.2002.

Evaluations may include:

- Consideration of dose to members of the public and transport of the material to facilities that may reuse or recycle the material.
- Consideration of reasonably foreseeable chemical, physical or other material processing activities that may lead to unique worker exposure scenarios.
- Consideration of all reasonably foreseeable disposition paths of the radioactively contaminated material.
- Reuse and recycle requests are not clearance and are subject to strong regulatory controls, such as a case-by-case review of the proposed uses of the material and a determination that public doses would be below a few millirem.

Reuse and Recycle (cont.)

- NRC's approach generally does not allow recycle and reuse into consumer products, including food preparation, personal items, household items, and products used by children.
- Generally, only certain acceptable restricted industrial uses have been approved in which direct contact of solid materials with the public can be minimized and/or avoided.
- Examples of industrial applications that have previously been approved
 - Example 1 → Concrete retaining wall (ADAMS Accession No. ML060250492)
 - Example 2 → Industrial Oil (ADAMS Accession No. ML16214A159)

Submitting Comments to the NRC

- **Electronically:**

82 FR 48727; October 19, 2017

Go to <http://www.regulations.gov> and search on Docket ID [NRC-2017-0198](#).

- **If you have technical questions on the *Federal Register* notice:**

Contact Robert L. Gladney at
Robert.Gladney@nrc.gov or
301-415-1022.

Questions

