

Low-Level Waste - Programmatic Assessment Overview

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2016 LLW Programmatic Assessment

Q: Why did NRC perform this assessment?

A: To address the constantly evolving nature of LLW issues.



Programmatic Assessment Background

- In mid-1990s, Commission placed low-level waste program in maintenance mode
- Department of Energy decided to utilize commercial disposal site for LLW
- Barnwell announced intent to close to out of compact waste generators
- In 2007 these emerging policy issues resulted in need for Strategic Assessment to determine priorities for staff's work

2007 Strategic Assessment

- Rationale: respond to new pressures; prioritize work
- Rigorous analysis of 20 issues
- Seven high priority tasks were identified
- Tied to agency's strategic goals



Status of the 2007 Assessment's Activities

- 2007 Assessment's 7 high priority activities
 - ✓ Review and Update Guidance on Extended Storage
 - * Develop Guidance on 10 CFR 20.2002 Alternate Disposal Requests
 - * Determine if disposal of large quantities of Depleted Uranium would change waste classification tables
 - ✓ Update Branch Technical Position on Concentration Averaging and Encapsulation
 - * Develop guidance on alternate waste classification (10 CFR 61.58).
 - ✓ Develop Procedures for Import/Export Reviews
 - ✓ Perform scoping study of the need to revise/expand byproduct material financial assurance

✓ Completed, * In progress

Need for Updated Assessment

- Some tasks have been completed or nearing completion
- Some of the assumptions in 2007 are no longer valid
 - Closure of Barnwell was offset by Waste Control Specialists opening their disposal site
 - Large volume of waste from decommissioning reactors was not realized; however, recent plant decommissioning announcements have renewed interest in disposal of this type of waste

Public Outreach Started for Updated Assessment

- Public meeting on March 7, 2014, in Phoenix, AZ
- Federal Register notice soliciting comments on proposed activities
- Comment period extended to September 15, 2014
- Webinar soliciting comments on updating Programmatic Assessment held on June 17, and July 8, 2014

Stakeholder Comments

- Numerous comments were received, including comments on:
 - Low-activity waste (i.e., very-low level waste)
 - Waste classification
 - Clearance
 - Disposal capacity
 - Gap analysis
 - New waste streams
 - Sealed sources
 - Waste attribution

Stakeholder Comments (cont'd)

- Many comments were similar, but there were also conflicting comments
 - some wanted to make it easier to dispose of low-activity waste (LAW) to sites that do not allow LLW
 - others wanted the NRC to require that disposal of LAW be done only at LLW sites
- Other comments addressed issues that are outside the scope of this programmatic assessment

Evaluation of Comments (cont'd)

- Evaluated whether the need for the task was short, medium, or long term
- Considered potential costs and benefits and availability of disposal options
- Comments outside the scope of this assessment and comments on tasks that have been recently completed are not addressed

Additional Stakeholder Engagement Used to Develop Updated Assessment

- Draft list of 14 tasks was published in the Federal Register on March 13, 2015
- Comment period expired on April 13, 2015
- Staff evaluated additional comments received
- Results of staff's assessment have been presented to the Commission in an information SECY paper (SECY-16-0118, ADAMS Accession No. ML15208A305)

Results – High Priority Tasks

1. Complete and implement Site-Specific Analysis Rulemaking
2. Address update to the 10 CFR Part 61 Waste Classification Tables
3. Implement the updated Concentration Averaging and Encapsulation BTP
4. Prepare a regulatory basis and conduct potential rulemaking for GTCC and transuranic waste disposal
5. Finalize internal procedure/Standard Review Plan for 10 CFR § 20.2002 requests to improve alternate disposal process
6. Update NUREG/BR-0204, Rev. 2 (July 1998), “Instructions for Completing NRC’s Uniform Low-Level Radioactive Waste Manifest”

Next Steps

- Complete high priority tasks
- As tasks are completed, move to next tasks
- If significant changes in assumptions used in latest assessment occur, perform updated assessment

Questions?

