

# RIC 2017



## Programmatic Assessment of Low-Level Radioactive Waste Regulatory Program

### Background

- In the mid-1990s, because of decreased workload, the Commission chose to maintain a program of 5–10 full-time equivalent staff in the low-level radioactive waste (LLRW) regulatory program.
- Subsequently, the U.S. Department of Energy decided to use a commercial disposal site for LLRW.
- Also, the Barnwell disposal site announced its intent to close to out-of-compact waste generators.
- By 2007, these emerging policy issues resulted in the need for a strategic assessment of the LLRW program to allow the staff to assign the limited resources to the highest priority LLRW tasks.



### 2007 Strategic Assessment (SECY-07-0180 (ML071350291))

- Staff response to new tasks and challenges
- Staff analysis of 20 issues with public input
- Seven high-priority tasks identified
- Tasks tied to agency strategic goals



### Status of the 2007 Assessment's Activities

- Strategic assessment's seven high-priority activities:
- ✓ Review and update guidance on extended storage of LLRW
  - \* Develop guidance on 10 CFR 20.2002 alternate disposal requests
  - \* Determine whether 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 Update

- Some tasks had been completed or were nearing completion.
- Some of the assumptions from 2007 were no longer valid:
  - Closure of Barnwell offset by Waste Control Specialists opening its facility in Texas
  - Large volume of waste from decommissioning reactors not realized (however, recent plant decommissioning announcements have renewed interest in low-activity waste disposal)



### Stakeholder Engagement

- As in 2007, the staff solicited public inputs on this updated LLRW programmatic assessment.
- A public meeting took place.
- A *Federal Register* notice solicited comments on proposed activities.
- The staff held a webinar to solicit comments on updating the programmatic assessment.



### Stakeholder Comments

- Numerous comments were received and considered, including comments on:
  - Low-activity waste (LAW)/very low-level waste (VLLW)
  - Waste classification
  - Clearance
  - Disposal capacity
  - New waste streams
  - Sealed sources
  - Waste attribution
- Many comments were similar, but there were also conflicting comments, for example:
  - Some wanted to make it easier to dispose of LAW/VLLW at disposal sites that do not allow LLRW.
  - Others wanted the NRC to require that disposal of LAW/VLLW be done only at LLRW sites.



### Prioritized List

#### Evaluation of Comments

- SECY-07-0180 used the NRC's Strategic Plan to develop a strategic objective.
- For the 2016 update, the staff verified that this strategic objective is still valid:
  - The objective of the NRC's LLRW regulatory program is to provide for a stable, reliable, and adaptable regulatory framework for effective LLRW management, while maintaining safety, security, and protection of the environment.
- The staff evaluated whether the need for the task was short, medium, or long term.
- The staff considered potential costs and benefits and the availability of disposal options.
- Comments outside the scope of this assessment and comments on tasks that have been recently completed were not addressed.
- 20 items in SECY-07-0180 were the starting point.
- Items were noted as completed, combined, deleted, or added based on the staff's view of the current LLRW disposal options and on stakeholder comments.

### 2016 Prioritized List (SECY-16-0118 (ML15208A305))

1. Address update to the waste classification tables—High Priority
2. Complete and implement site-specific analysis rulemaking—High Priority
3. Implement the updated branch technical position on concentration averaging and encapsulation—High Priority
4. Prepare a regulatory basis and conduct potential rulemaking for greater-than-Class C and transuranic waste disposal—High Priority
5. Finalize internal procedure/standard review plan for 10 CFR 20.2002 requests to improve alternate disposal process—High Priority
6. Update NUREG/BR-0204, Rev. 2 (July 1998), "Instructions for Completing NRC's Uniform Low-Level Radioactive Waste Manifest"—High Priority
7. Perform LAW scoping study—Medium Priority
8. Update and consolidate LLRW guidance into one NUREG—Medium Priority
9. Examine the need for guidance on defining when radioactive material becomes LLRW—Low Priority
10. Develop and implement the national waste tracking system—Low Priority



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