



Status Update on the NRC Proposed Rule to Amend 10 CFR Part 61

Part 61 Rulemaking

Licensing Requirements for Land Disposal of LRW

- Performance objectives (Subpart C) assure safe disposal of LLRW:
 - Protection of general public
 - Protection of inadvertent intruder
 - Protection of individuals during operations
 - Stability after site closure
- Demonstrate performance via technical analysis and waste classification
- PA Low-Level Radioactive Waste Management and Disposal Regulations are in Title 25, Chapter 236

Part 61 Rulemaking: Background

- Part 61 was originally implemented in 1983
- Agreement States have been responsible for the regulation of commercial LLRW sites
- Need for change is driven by new/unanticipated waste streams
 - Large quantity of depleted uranium and DOE's use of commercial facilities
 - Blended Waste
 - Possible new waste streams associated with new technology or processes
- Opportunity to adopt the latest ICRP recommendations

*ICRP – International Commission on Radiological Protection

Part 61 Rulemaking

New Staff Requirements Memoranda (SRM) SECY-13-0075

- Commission issued new SRM-13-0075 on Feb. 12, 2014
- Approved publication of the proposed rule and draft guidance for public comment subject to several changes involving:
 - Period of Performance
 - Intruder Assessment
 - Agreement State Compatibility
 - Defense-in-Depth
 - Outreach
- The new SRM is silent on any proposed changes to 10 CFR Part 61 Waste Classification Tables (Tables 1 and 2)

Part 61 SRM: Period of Performance

Commission directs the staff to include three tiers:

- Tier 1 – Compliance period of 1000 years
 - Radiation dose limit of 25 mrem/yr for Part 61.41 (protection of general population) and 500 mrem/yr for Part 61.42 (protection of an inadvertent intruder)
- Tier 2 – Protective Assurance Analysis Period
 - Starting the end of compliance period thru 10,000 years
 - Minimize radiation dose with the goal of keeping doses below 500 mrem/yr threshold for 61.41 and 61.42
- Tier 3 – Performance Period beyond 10,000 years
 - No radiation dose limit
 - A qualitative analysis covering a performance period of 10,000 years or more after site closure

Part 61 SRM: Intruder Assessment

- A 10,000 year intruder assessment analysis, built upon the same assumptions as the compliance and protective assurance analyses
- Based on intrusion scenarios that are realistic and consistent with expected activities in and around the disposal site at the time of site closure

Part 61 SRM: Defense-in-Depth

- Proposed rule should include discussion of defense-in-depth (DID) protections
- Clearly explain how the combination of DID and performance assessment (“safety case”) should be used to support licensing

Part 61 SRM: Agreement State Compatibility

- The proposed rule should be published with a compatibility category “B” for most significant provisions of the revised rule, including:
 - Period of Compliance
 - Protective Assurance Analysis Period and its analytical threshold
 - Waste Acceptance Criteria

Category B: An agreement State should adopt program elements essentially identical to those of NRC.

Note: If there are no plans for the development of a LLRW disposal facility, Agreement States would not be required to meet the criteria for a compatible LLRW disposal program.

Part 61 SRM: Outreach Activities

- Ensure thorough review of the draft guidance by the stakeholders.
- Request comments in the *Federal Register* Notice regarding:
 - Compatibility designations assigned to the various sections of the proposed rule as modified by this SRM; and
 - 500 mrem/yr threshold for the Protective Assurance Analysis period.
- NRC Advisory Committee should continue to provide its independent review and recommendations.
- Public comment period should be extended to 120 days.

LLW Forum Part 61 Working Group Members

- Brad Broussard – Texas Commission on Environmental Quality (sited state)
- Earl Forharm – Washington State Department of Health (sited state)
- Rich Janati – Pennsylvania Department of Environmental Protection (non-sited state)
- Susan Jenkins – South Carolina Department of Health and Environmental Control (sited state)
- Rusty Lundberg – Utah Department of Environmental Quality (sited state)