



RIC 2011
10 CFR Part 61:
Time for an Update?

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How Did Part 61 Come to Be?

- **Early LLW Disposal Practices**
 - Disposal at sea
 - Shallow-land burial at a Federal Reservation
- **Key Events/Milestones**
 - 1960s: Shift from sea to commercial land disposal
 - 1973: AEC invites GAO review of commercial disposal practices
 - 1976: GAO and National Academies reports
 - 1977: NRC develops LLW Program Plan

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Part 61 Development Process

- **Challenge ...**
 - Commercial LLW stream not uniform
 - 36 waste streams and 24 radionuclides
 - Radionuclides both short- and long-lived
- **Elements of NRC Decision-Making**
 - NEPA Analysis
 - Draft and Final EIS
 - Public meetings
 - 4 Regional workshops
 - 3 Technical meetings
 - Several technical analyses

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Part 61 Regulatory Approach

- **Integrated Regulation**
 - Design tied to site characteristics
 - Minimum engineering requirements
 - Waste stabilization
 - 3-tier classification
 - Compliance with Subpart C performance objectives
- **Consistent with Commission Principles**
 - ALARA
 - Defense-in-depth
 - Risk-informed/performance-based*

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Recent Events

- **Depleted Uranium Decision-Making**
 - DU is Class-A LLW
 - NRC amending Part 61 to explicitly include a performance assessment requirement (per SECY-08-0147)
- **NRC Reprocessing Regulatory Initiative**
 - New, emerging LLW streams
- **Revise DOE Order 435.1-1**
 - Includes Government-owned LLW
- **Update NRC Concentration Averaging BTP**
 - Includes blending of LLW (per SECY-10-0043)

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SECY-10-0165

- **Comprehensive Revision to Part 61**
 - Requested by Commission
 - Directed staff to outline an approach
 - Outcome that was RI/PB
- **Staff Recommended that it ...**
 - Seek stakeholder views on possible approaches
- **Staff Identified 5 Potential Options**

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Rulemaking Options

1. **Risk-Inform Current Part 61 Waste Classification Framework Option**
 - Re-evaluate § 61.55 waste classification tables
 - Apply updated ICRP dosimetry
2. **Comprehensive Revision Option**
 - Blank slate approach
 - Re-do earlier Part 61 studies
 - Rely on new information and updated assumptions

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Options Continued

3. **Site-Specific Waste Acceptance Criteria Option**
 - Modeled after DOE Order 435.1-1
 - Performance-based directive based on specific site and design
 - Does not rely on generic waste classification tables (§ 61.55)
4. **International Alignment Option**
 - Based on IAEA Geologic Safety Guide-1
 - Focuses on all radioactive waste streams, including LLW
5. **Maintain status quo**
 - No further action

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Summary

- **First Public Meeting on March 4, 2011**
 - Joint DOE/NRC workshop
 - Phoenix Hyatt Regency Hotel
- **Proposed Additional Public Meetings**
 - Rockville, MD
 - Salt Lake City, UT
 - *Schedule depends upon resource availability*
- **November 2012 SECY Paper**
 - Summarize stakeholder views
 - Commission votes on option

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Abbreviations

AEC Atomic Energy Commission	IAEA International Atomic Energy Agency
ALARA As low as reasonable achievable	ICRP International Commission on Radiation Protection
BTP Branch Technical Position	LES Louisiana Energy Services
DOE US Department of Energy	LLW Low-level radioactive waste
DU Depleted uranium	NEPA National Environmental Policy Act of 1969
EIS Environmental Impact Statement	RIPB Risk-informed/performance-based
GAO General Accounting Office	



References

NUREG-1853
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1853/>

LES Decision
<http://www.nrc.gov/reading-rm/doc-collections/commission/orders/2005/2005-05c11.pdf>

IAEA GSG-1
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SECY-08-147
<http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2008/secy2008-0147/2008-01473scy.pdf>

SECY-10-0043
<http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2010/secy2010-0043/2010-0043scy.pdf>

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