

10 CFR Part 61.55 Waste Classification Scheme

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What do we have today?

Is the Waste Classification Scheme state of the art?

- No.

Technical shortcomings

- Assumptions about the waste stream are outmoded and non-representative
- Fate and transport modeling at a non-representative hypothetical site
- Outdated dose conversion weighting factors
- Advancements in disposal techniques

Are any changes warranted?

Where are we headed?

Site-Specific Assessment Rulemaking

- **SECY-13-0075 as modified by Commission**
- **Site-Specific Waste Acceptance Criteria**
 - “... provide assurance that public health and safety can be protected, while offering the possibility for the relief of unnecessary regulatory burdens for facilities with superior site characteristics, design, and operational practices.”
- **Agreement State Compatibility Category B**
- **Inadvertent Intruder Analysis**
 - Explicit dose limit – 500 mrem
 - 10,000 year time period
 - “... based on intrusion scenarios that are realistic and consistent with expected activities in and around the disposal site at the time of site closure.”

Where are we headed?

Site-Specific Assessment Rulemaking

- Three-tier review
 1. 1,000 year Compliance Period
 2. 10,000 year Protective Assurance Analysis

“...reflect changes in features, events, and processes of the natural environment ... only if scientific information compelling such changes from the compliance period is available.”
 3. >10,000 year Performance Period

“...demonstrate how the facility design will mitigate long term impacts.”
- Guidance for Conducting Technical Analyses
 - Staff should focus on ensuring a thorough review by licensees, Agreement States, interested public, broader scientific and academic community and government agencies with disposal experience

Where do we go next?

What constitutes an improvement over site-specific approach?

- Update of tables in 61.55?

What about regulatory stability?

- “Once established, regulation should be perceived to be reliable and not unjustifiably in a state of transition.”

How long will it take?

- *Expedited* site-specific assessment rulemaking: 2008-16(?)
- Update classification tables: 2016-2025(??)

How do we address future changes that occur?

- Update the tables again in another generation?

Where we go next....

There is no need for another Part 61 rulemaking.

No generic limits will be superior to a site-specific approach.

Future changes in waste streams, disposal technologies, and radiobiology should not necessitate regulatory changes.

The waste classification tables in 10 CFR 61.55 should be considered ***a***, but not ***the***, preferred regulatory approach.

- Tables = compliance
- Site-specific WAC = excellence