



U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

**Hot Topics and Emerging Issues in US
Commercial Low-Level Radioactive
Waste Management --An NRC
Perspective**

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Topics

- **Unique waste streams rulemaking**
- **Blending**
- **Concentration Averaging Branch Technical Position**
- **Comprehensive revisions to 10 CFR Part 61**

Unique Waste Streams Rulemaking

- Significant quantities of DU from commercial enrichment
- Not considered in 10 CFR Part 61
- “Unique waste stream”
- Commission direction in Memorandum and Order CLI-05-20
- NRC staff evaluation in SECY-08-0147

SECY-08-0147

- **4 options for Commission consideration**
 - **Generic communication on need for site-specific evaluation**
 - **Rulemaking to specify site-specific analysis**
 - **Determine DU classification within existing framework**
 - **Re-examine waste classification framework**
- **Commission decision**
 - **Limited rulemaking and guidance**
 - **Budget to re-examine waste classification in long-term**
- **Technical basis for rule**
- **Rulemaking working group**

Unique Waste Streams Rulemaking

- **Require site-specific analysis**
- **Conduct stylized human intrusion analysis**
- **Reduce ambiguity and facilitate implementation**
- **Provide guidance**

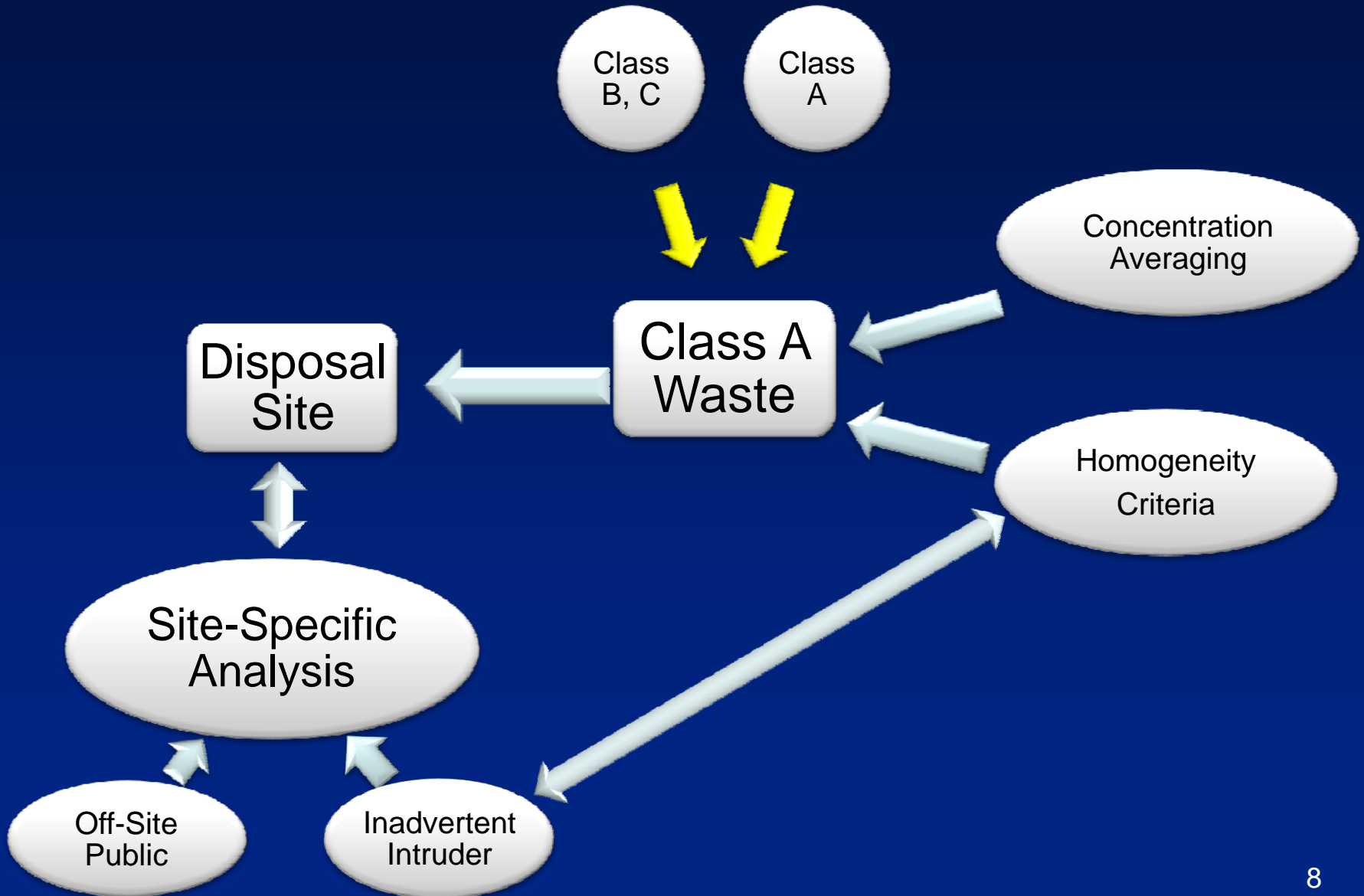
Unique Waste Rulemaking (cont.)

- **“As a longer term action, in a future budget request the staff should propose the necessary resources for a comprehensive revision to risk-inform the 10 CFR Part 61 waste classification framework . . .”**
- **Staff currently addressing (March 4, 2011, DOE/NRC workshop)**
- **Impact of comprehensive Part 61 SECY (Information Paper)**

Blending

- **SECY-10-0043 LLW Blending Commission paper**
- **Staff recommended blending position be risk-informed, performance-based**
 - **Add blended waste to unique waste streams rulemaking**
 - **Revise blending position in Concentration Averaging BTP**
 - **Revise Volume Reduction Policy Statement**
 - **Issue Interim Guidance to Agreement States**

Blending Class A & B/C Waste (cont.)



Concentration Averaging Branch Technical Position (BTP)

- **Strategic Assessment of NRC LLW Program (SECY-07-0180)**
- **RI/PB the CA BTP--high priority ranking**
- **Sandia effort –RI/PB positions and improve clarity**
- **Chairman request on blending issue**
- **Commission decision on blending**

Scope

- **Improve clarify, make user-friendly**
- **RI/PB all BTP provisions**
- **RI/PB blending, consistent with Commission direction**

BTP Components

- Mixing of homogeneous waste streams
- Solidified and absorbed liquids
- Mixing of activated materials
- Contaminated materials
- Mixing of cartridge filters
- Waste in high-integrity containers
- Encapsulation of solid material
- Mixing of dissimilar waste streams

Recent Public Workshop

- **Federal Register Notice**
- **Panel members and participants**
- **Outcome**
- **Path forward**

Maximizing Stakeholder Input

Milestone	Date
Conduct public workshop on CA BTP	Feb. 24, 2011
DOE/NRC workshop on Part 61	March 4, 2011
Issue blending Interim Guidance	March 31, 2011
Close comment period on CA BTP	April 15, 2011
Brief ACRS on CA BTP	June 2011
Complete Commission paper on VRPS	August 2011
Complete Commission paper on UWS proposed rule	October 2011
Issue draft VRPS for public comment	October 2011
Issue draft CA BTP for public comment	October 2011
Conduct public workshop on CA BTP (New Mexico)	October 2011
Issue Commission paper with proposed final VRPS	December 2011
Issue Final CA BTP	June 2012
Issue Commission paper with proposed final UWS rule	October 2012
Commission paper on Part 61 revisions	December 2012

Risk-Informing 10 CFR Part 61

- **SECY-08-0147 Commission direction**
- **Additional Commission direction**
 - June 17, 2010, meeting with staff and stakeholders on blending
 - “the staff should provide the Commission with the staff’s approach to initiate activities related to a risk-informed, performance-based comprehensive revision to Part 61, including the resources and the timeline for completing the rulemaking”
- **SECY-10-0165, Comprehensive Revisions to 10 CFR Part 61**

SECY-10-0165 Options

- **Risk-inform the current Part 61 waste classification framework**
- **Comprehensive revision**
- **Site-specific waste acceptance criteria**
- **International alignment**
- **Supersede Direction in SECY-08-0147**

Staff Recommendation

- **Solicit stakeholder views**
- **DOE/NRC joint workshop, March 4**
- **Subsequent workshops in 2011 and 2012**
- **Results and recommendation to Commission after public input**
- **Goal is to maximize public input**

Conclusions

- **Significant changes to Part 61 underway**
- **Update RI/PB operational guidance (BTP)**
- **Maximize stakeholder input**
- **Further changes per Commission direction?**