

WM2016 Conference Panel Report

PANEL SESSION 76: “Industry and Public Feedback Site-Specific Performance Assessment – US NRC 10 CFR 61 Rulemaking”

Co-Chairs: **Larry Camper**, *Advoco Professional Svcs.*
Tom Magette, *PricewaterhouseCoopers.*

Panel Reporter: **Rateb (Boby) Abu Eid**, *US NRC*

Panelists:

1. **Gregory Suber**, *Branch Chief, U.S. Nuclear Regulatory Commission (NRC)*
2. **Lisa Edwards**, *Senior Program Manager, LLW & Radiation Management, Electric Power Research Institute (EPRI)*
3. **John Greeves**, *Sr. Regulatory and Environmental Consultant, Talisman International*
4. **Scott Kirk**, *Vice President, Licensing and Regulatory Affairs, Waste Control Specialists (WCS)*
5. **Matt Pacenza**, *Executive Director, HEAL Utah*
6. **Susan Jenkins**, *Program manager, Infectious and Radioactive Waste South Carolina Department of Health and Environmental Control (SCDHEC)*
7. **Charles Maguire**, *Director, Radioactive Materials Division, Texas Commission on Environmental Quality (TCEQ)*

This panel session focused on the industry and public stakeholders’ reactions and inputs on the USNRC 10CFR61 Site-Specific performance assessment rulemaking as a result of several NRC conducted public meetings including Commission briefing to address the proposed rulemaking.

Summary of Presentations

Gregory Suber

Mr. Gregory Suber indicated that the “Final Part 61 Rule” is expected to go to the Commission by 05/31/2016. He informed that NRC received approximately 850 comments. He added that resolution of the 850 comments can be indexed/binned in 12 categories that will be included in the “Final” rule package; Mr. Suber presented the following status summary:

- Three main areas of changes wanted:
 - Compatibility
 - Applicability
 - Time-scales
- Next Steps for NRC staff:
 - Issue Final rule
 - Evaluate need to change the waste classification tables
 - Prepare regulatory basis for disposal of Greater Than Class C (GTCC) low-level waste (LLW)

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Lisa Edwards

Ms. Lisa Edwards focused on the need for sound technical basis to assess hazard/risk of LLW, from EPRI's perspective. In this context, she presented the following conclusions:

- EPRI agrees with concept of site-specific performance assessment (PA)
- EPRI believes that the current waste classification tables are based on outdated science
 - Tables need to be updated or deleted
 - If updated, then limits for nuclides in the tables are expected to either increase or decrease
 - Updated tables are important for decommissioning and cleanup of radiological dispersal device
- EPRI believes that the concept of Very LLW (VLLW) or Low Activity Waste (LAW) should be addressed

John Greeves

Mr. John Greeves addressed the "Proposed Part 61 Rule" overreach pertaining to:

- 61.7 Concepts
- 61.13 Technical Analysis
- 61.44 10,000-year time period
- 61.xx Defense-in-Depth

Subsequently, he suggested the following changes:

- Replace 3 tier with 2 tier
- Clarify 61.1, so that it wouldn't be applicable for existing sites that do not intend to take waste like depleted uranium (DU)
- Remove Defense-in-Depth rule language
- Add transuranic waste to definition of LLW

Mr. Greeves emphasized that there is unfinished business that needs to be addressed particularly:

- DU classification
- Disposal of GTCC LLW (e.g., who regulates disposal, response to TCEQ letter)

Scott Kirk

Mr. Scott Kirk emphasized that WCS wants to have:

- 3 tier approach
- Appropriate radiation dose limits
- Appropriate disposal of DU with more stringent requirements

He added that WCS is in agreement with, and its site is good for 10,000 years, due to arid location and engineering design. Further, WCS site is good for disposal at greater than 30 meters depth from surface in Modular Concrete Canisters. TCEQ requires performance of site for 1,000 years or peak dose; whichever time period is greater, and WCS can, or did, clearly demonstrate compliance.

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Matt Pacenza

Mr. Matt Pacenza made the following remarks, or conclusions, in his presentation:

- HEAL Utah is non-profit advisory organization about nuclear waste issues in Utah and has been in existence for more than 10 years and has more than 15,000 supporters;
- HEAL benefits “form” letters/postcards/e-mail public comments;
- Part 61 needs clarification between who decides on what is safe when different outcomes arise from using the waste classification tables vs. using the site-specific PA; HEAL Utah believes that State should decide, not the licensee and not the Federal Government
- NRC staff was overruled by the Commission with respect to:
 - Change in time period from 20,000 years to 1,000 years; and
 - Change in applicability from future disposal sites to all disposal sites.
 - By overruling the NRC staff, the Commission has reduced public confidence; for example, deciding on path forward for disposal of DU from waste classification tables to site-specific PA should be open to public debate and public understanding.
- HEAL Utah expects that Utah will not make a decision on disposal of DU until NRC specifically classifies DU as more than “class A” LLW.

Susan Jenkins

Ms. Susan Jenkins indicated that Barnwell disposal site opened in 1971, with disposal until 06/30/2007 capped/closed, and later through an overall planned closure in 2038. Regarding SCDHEC comments on the proposed Part 61 rule, their focus was on the following aspects:

- Applicability:
 - In 1982, important for case-by-case basis applicability of new rule for current facilities
 - With current rule changes, flexibility is more important now than for 1982 for South Carolina.
 - Ms. Jenkins questioned of what would be applicable for waste already buried? and
 - What would be applicable to waste already buried, capped, and closed?
- Stability: 10,000 years not the same for near-surface disposal
- Backfit: NRC needs to do an appropriate backfit analysis

Charles Maguire

Mr. Charles Maguire indicated that WCS is the first LLW disposal site in U.S. opened under the Compact System. He emphasized that WCS was licensed using risk-based approach for site selection and used community consent-based siting. He added that TCEQ regulates with top priority for public health safety and protection of the environment, and has onsite inspectors to ensure safety and protection. He noted that community consent must be continuing during construction, operating, and future closure. The risk-based approach can be used for future types of disposal: DU and GTCC.

TCEQ comments on proposed Part 61 rule was focused on flexibility; Mr. Maguire believes that TCEQ rules are more stringent than NRC proposed rule because WCS needs to show performance and peak dose in PA for all types of disposal before TCEQ will approval the disposal.

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Questions and Answer & Conclusions

On-Stage Panel members Qs &As:

A great deal of discussion and comments were made between the panel members. The following synopses are provided:

Gregory Suber (NRC) made comments to to Matt Pacenza (HEAL Utah) that NRC appreciates his clarification about “form” comments. John Greeves (Talisman) made queries/comments to Gregory Suber (NRC) as given below:

- Will the Final rule:
 - Address the 4 identified concerns?
 - Add “transuranic waste” to definition of LLW in Part 61?
 - Have 2 tiers not 3 tiers?
 - Clarify 61.1, so that it is not applicable for existing sites that do not intend to take waste like DU; and
 - Will remove Defense-in-Depth rule language?

Mr. Suber responded: I cannot answer because the Commission will decide what is in the Final rule. He noted the changes at NRC over the years while Part 61 rule was being developed as:

- Changes from managers through the Commission.
- Changes in direction with multiple Staff Requirements Memoranda from the Commission.

Larry Camper (Advoco/NRC Retired Manager) added the following clarifications about NRC roles:

- Commission makes policy;
- NRC staff proposes approaches to the Commission; and
- Commission may agree, disagree, or change the NRC staff’s recommended proposed approach.

Tom Magette (PWC) commented to Gregory Suber (NRC) about applicability as given below:

- The rule started out as disposal of DU but it may not be in Final rule
- What happens when answer from waste classification tables is different than the answer from a site-specific PA? Does one trump the other? and
- What is expressly allowed or not allowed for current sites?

Mr. Suber responded: NRC staff did consider unintended consequences, so staff put flexibility in the Final rule for State regulators for such things as specific details of addressing impact of long-lived radionuclides now and in the future.

Ms. Edwards (EPRI) asked Mr. Matt Pacenza (HEAL Utah) about HEAL Utah reaction to the new waste classification tables. Mr. Pacenza responded that HEAL would accept changes to classification tables as long as Utah is allowed to continue to decide what can be disposed, such as keeping ban on anything above Class A LLW that is based on the hazard to the state.

Mr Greeves (Talisman) asked: If tables are redone, then Utah could end up like S. Carolina with above Class A already disposed of and then what would happen?

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Mr. Pacenza responded that he believes we should not have to dig up something already disposed of particularly when considering potential risk of exposures.

Tom Magette (PWC) asked Susan Jenkins (SCDHEC): What does S. Carolina think about retrospective application to Barnwell? Ms. Jenkins responded: Based on health and safety it does not make sense to dig up something already disposed of. Mr. Maguire (TCEQ) commented: "Flexibility is vitally important in implementation of Part 61; you also need to continue with community consent with all stakeholders."

Mr. Camper asked Gregory Suber: What other LLW items are going to be worked on by the NRC staff? He responded: the NRC staff is currently directed by the Commission to:

- Develop the regulatory basis for GTCC disposal and provide to the Commission
 - Commission will decide on path forward on GTCC disposal
- Add transuranic waste to the definition of LLW in Part 61
- Determine whether the waste classification tables should be updated
 - Commission will decide on path forward on updating the tables

Tom Magette (PWC) commented: The NRC public participation process for the revision of the Branch Technical Position on Concentration Averaging and Encapsulation was outstanding, so same process should be used for future LLW-related updates to NRC activities.

Members of the Public Qs & As:

After on-stage discussion among panel members the following Q's and A's, or comments were raised/made during Session 76 discussion:

- Public: What is minimal expectation for how long new Part 61 will exist before it is changed again?
 - Public Comment: The waste classification tables are important and need to be updated and issued as soon as possible, not only to businesses, but to others such as the US Department of Transportation and IAEA. NRC needs to put out new tables and then we will see who uses them. Ms. Lisa Edwards (EPRI) commented: The tables are for disposal of current and future waste and if the science changes then the tables should be changed and used by all.
- Public: How can anyone demonstrate performance for 10,000 years?
- Public Comment: A site-specific PA is a demonstration of safety and its use should be decided by both the licensee and the regulator, not decided solely by the Federal Government.
 - Public: Does TCEQ favor future disposal of long-lived radionuclides (e.g., DU) at WCS? Mr. Charles Magurie (TCEQ) responded: There is no rush to determine that now.

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In summary, Session 76 was well organized, comprehensive, and covered several aspects and issues related to USNRC 10CFR Part 61 Site-Specific Performance Assessment Rulemaking as well as communications and harmonization among State authorities, stakeholders, and the public. The panel members' presentations and discussion showed good illustrations of potential future actions and recommendations from different perspectives to demonstrate compliance using site-specific analysis to ensure public health safety and environmental protection.