



UNITED STATES
NUCLEAR WASTE TECHNICAL REVIEW BOARD
2300 Clarendon Boulevard, Suite 1300
Arlington, VA 22201

AGENDA
FALL BOARD MEETING
WEDNESDAY, OCTOBER 29, 2014

AUGUSTA MARRIOTT HOTEL
2 TENTH STREET
AUGUSTA, GA 20901
Estes Hall Ballroom

8:00 a.m. Call to Order and Introductory Statement
Rod Ewing, Board Chairman

8:15 a.m. DOE-HQ Opening Remarks – Spent Nuclear Fuel (SNF) and High-Level Radioactive Waste (HLW) Management
[Jay Rhoderick](#), DOE, Office of Environmental Management

- i. What guidance has DOE-HQ provided recently to DOE-SR (and other DOE field offices) regarding the plans for packaging, storage, transportation, and disposal of DOE-held SNF and HLW? (e.g., guidance regarding the implementation of the DOE “Strategy” document of January 2013)
- ii. What is the status of DOE’s SNF Corporate Board?
 - 1) What are the charter, functions, and responsibilities of the Corporate Board?
 - 2) Who is (or will be) assigned to serve on the Corporate Board?
 - 3) Will the Corporate Board have authority to direct action and spend money to implement its recommendations?
- iii. Will the SNF Corporate Board consider the integration of HLW shipping and disposal with SNF shipping and disposal (and integration with the shipping and disposal of commercial SNF)?

8:45 a.m. Questions, discussion

Note: The questions included with each topic were provided to DOE in September 2014 by the NWTRB.

9:05 a.m.

SNF Storage in L-Basin

[Maxcine Maxted](#), DOE, Savannah River Operations Office
[David Rose](#), Savannah River Nuclear Solutions

- i. What are the projections for SNF receipts, SNF transfers to H-Canyon, and SNF inventory in L-Basin?
- ii. Will modifications to L-Basin be necessary to accommodate all expected receipts of SNF?
- iii. What SNF and storage container corrosion mechanisms are being monitored in L-Basin? Please explain the results of recent corrosion monitoring.
- iv. Do any SNF or storage container corrosion conditions require near-term action? What progress has been made to implement the augmented monitoring and corrosion assessment program?
- v. Are microbial growths still active in L-Basin? If so, what actions are being taken to mitigate or prevent the microbial growths?
- vi. Explain the ongoing structural monitoring program for the L-Basin structure.
 - 1) What portions of the program are active in 2014?
 - 2) What monitoring activities have been deferred due to funding shortages?
 - 3) What monitoring activities are considered to be the highest priorities?
 - 4) Has the program identified new structural vulnerabilities in the L-Basin structure? If so, please explain.
 - 5) How has the program been updated to reflect the newest seismic information from the SRS seismic hazards analysis?

9:35 a.m.

Questions, discussion

9:55 a.m.

Break

10:10 a.m.

SNF Processing at H-Canyon

[Allen Gunter](#), DOE, Savannah River Operations Office

- i. Explain the overall processing plans for SNF and related materials at the H-Canyon facility. Provide an updated H-Canyon processing “roadmap,” if available.
- ii. What facility upgrades or modifications are needed to complete all anticipated SNF processing campaigns?

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- iii. If the “swap” of SNF between SRS and Idaho does not occur, is it possible to process the non-aluminum SNF at SRS? What modifications would be required at H-Canyon?
- iv. What are the projections for longer-term operations at H-Canyon (2015-2025)?
- v. Will the expected Tank Farm operations support the planned processing campaigns at H-Canyon (e.g., will the HLW tank farms accept the necessary volumes of HLW)?

10:40 a.m. Questions, discussion

11:00 a.m. SNF Management Alternatives

[Maxcine Maxted](#), DOE, Savannah River Operations Office

- i. Is DOE considering alternatives for dry storage of SNF held in L-Basin? If so, what are the alternatives, the status of design, and the schedule for implementation, and how is the design being coordinated with other SNF dry-storage systems across the DOE complex?
- ii. Would a SNF dry storage pad be located at the L-Area complex, or elsewhere on site?
- iii. What interaction has DOE-SR had with Hanford to understand the experience gained and lessons learned at the Hanford K-Basins regarding the drying and packaging of SNF?
- iv. How is the need to avoid repackaging the SNF for transportation and disposal, potentially after extended on-site storage, being taken into account?

11:30 a.m. Questions, discussion

11:50 p.m. Public Comments

12:15 p.m. Lunch Break

1:15 p.m. Vitrification of High-Level Waste—Defense Waste Processing Facility (DWPF) Operating History and Plan

[Jonathan Bricker](#), Savannah River Remediation

- i. Provide an update of DWPF HLW glass production rates and process issues.

Note: The questions included with each topic were provided to DOE in September 2014 by the NWTRB.

- ii. What is the status of modification to the melter and the DWPF process (e.g., melter bubblers and dry feed of frit) to improve production rates?

1:40 p.m. Questions, discussion

2:00 p.m. Start-up of the Salt Waste Processing Facility

[Peter Hill](#), Savannah River Remediation

[David Peeler](#), Savannah River National Laboratory

- i. Are modifications to the DWPF glass formulation needed to accommodate the salt waste stream from SWPF? (i.e., changes to the glass formulation from one optimized for sludge and low quantities of salt waste to one optimized for sludge and larger quantities of salt waste) If so, please explain.
- ii. Can the DWPF glass formula be adjusted to avoid adding simulated sludge to the salt-rich waste stream from SWPF when tank sludge removal is complete – and thereby minimize the overall number of HLW canisters produced?

2:25 p.m. Questions, discussion

2:45 p.m. Break

3:00 p.m. Lessons Learned – DWPF/Waste Treatment Plant (WTP) Melter Design and Influence of Glass Formulation

[Dan Iverson](#), Savannah River Remediation

Integration: Transfer of Lessons Learned to the Hanford WTP

[Vijay Jain](#), Savannah River Remediation

[Sharon Marra](#), Savannah River National Laboratory

- i. What integration activities are occurring to facilitate the transfer of lessons learned from DWPF to Hanford's WTP?
- ii. Please explain the primary technical differences between the DWPF melter design and the two WTP melter designs?
- iii. How have developments and changes in the DWPF glass formulation influenced the design of the WTP melters?

3:50 p.m. Questions, discussion

Note: The questions included with each topic were provided to DOE in September 2014 by the NWTRB.

4:10 p.m.

Storage of Vitrified HLW

[Brenda Green](#), Savannah River Remediation

[Jean Ridley](#), DOE, Savannah River Operations Office

- i. What is the current projection for the total number of HLW canisters to be produced?
- ii. How much storage capacity remains in Glass Waste Storage Building #2, and how does that capacity affect production rates at DWPF?
- iii. What are DOE's current plans for a third storage facility for HLW canisters?
- iv. Is DOE-SR working with DOE-HQ to ensure the SRS HLW canisters are considered and integrated with DOE's plans for packaging, shipping, and disposal of SNF and HLW? If so, are there any recent developments to report?

4:30 p.m.

Questions, discussion

4:50 p.m.

Public Comments

5:20 p.m.

Adjourn Public Meeting

5:30 p.m.–6:30 p.m.

Poster Session

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