

NUCLEAR MATERIALS COMMITTEE

Established to study issues that involve nuclear materials (generally uranium and plutonium) impacting present or future SRS activities. Issues include SNF (foreign & domestic), nuclear materials management and nuclear materials integration. Committee addresses the consolidation, storage and disposition issues related to legacy materials (once part of nuclear weapons production cycle) that are no longer needed for their original purpose but are not considered waste.



SRS/CAB 2011 Annual Work Plan Topics Under Consideration

- Plutonium storage & consolidation
- K-Area update
- Plutonium disposition program
- Enriched uranium disposition program
- Used nuclear fuel storage & disposition program
- H-Canyon complex (including HB-Line)
- Other nuclear materials activities (including NNSA update, Small Modular Reactor)



Committee members

- Dr. Rose Hayes, Chair
- John Snedeker, Co-Chair
- Ed Burke
- Stan Howard
- Rev. Alex Williams
- Travis Johnson

Final Disposition for SNF, Surplus Plutonium & VHLW

- Recommendation #263 (joint w/WM)
- Adopted: 5/19/09
- Status: Open

Suggestion: Close with WM concurrence.

Only partial response received.

Should develop new recommendation after BRC final report.



Enriched Uranium Disposition

- Recommendation #266
- Adopted: 9/29/09
- Status: Open

Suggestion: Close.

Similar to Recommendation 280, adopted 9/27/11.

Concern for Effective Utilization of H-Canyon

- Recommendation #276
 - Adopted: 3/29/11
 - Status: Open
- Suggestion: Remain Open

Similar to #280.

Recommendation covers staffing & operating H-Canyon to maintain capability to process potential nuclear materials in need of stabilization &/or disposition and discontinuing foreign receipts @ SRS until processing path is resolved.



Recommendation 276 cont'd

- DOE Response included:

DOE is continuously evaluating the H-Canyon mission & appropriately staff it to meet the requirements of that mission.

Anticipated 2012 H-Canyon & HB Line budget = \$165m, including \$15m carryover from prior yrs.

Due to nonproliferation concerns involved w/these materials the priorities of the nation require that SRS continue to receive these materials.



Concern for Receipt & Planning for Disposition of Research Reactor SNF (RRSNF)

- Recommendation #280
- Adopted 9/27/11
- Status: Pending

- DOE Response: Evaluating options for effective utilization of H-Canyon in regards to the overall mission requirements of the Dept. as a whole. No decision on H-Canyon operational status has been made at this time.

- RRSNF is safely stored in L-Basin & L-Basin “has been shown to be an available storage facility for 50+ yrs.”

Recommendation 280 cont'd

- “Based on the need to promote nonproliferation throughout the World, it is in the best interests of the United States Citizens that SRS continue to receive the RRSNF”.
- “The President is evaluating the disposition of Spent Nuclear Fuel in the United States via the established Blue Ribbon Committee (BRC)”.
- Development of a Systems Plan would be ineffective use of tax dollars at this time.

David C. Moody, Mgr.



Disposition Costs for SRS RRSNF

- Recommendation #281
- Adopted: 9/27/11
- Status: Pending

DOE Response: “Since it is not known what the final repository will be and the specification for that facility it would be difficult to prepare the disposition costs case suggested in your recommendation.”



Recommendation 281 cont'd

“...Due to the uncertainties in H-Canyon future missions, the allocation of costs for processing SNF cannot be determined at this time. However, we can provide the costs associated with SNF storage in L-Basin. This cost is currently \$40 million per year and would be required every year that SNF was stored in L-Basin”.

Hybrid cases are evaluated on a case-by-case basis, including the technical, environmental, safety, and health factors.

David C. Moody, Mgr.



Impact of BRC Recommendations on Savannah River Site (SRS)

- Recommendation #282
- Adopted: 9/27/11
- Status: Pending

“As soon as possible after the [BRC] report has been issued and evaluated by the Department for impacts, a briefing to the CAB will be made”.

David C. Moody, Mgr.