

Recommendation No. 82

March 23, 1999

Waste Management Programmatic Environmental Impact Statement Record Of Decision For High Level Waste

Background:

The Waste Management Programmatic Environmental Impact Statement (WM PEIS) was published in May 1997 (Ref. 1) to give direction to the management and disposal of all of the Department of Energy (DOE) radioactive and mixed waste. Records of Decision (ROD) are being developed and published on individual waste streams (low-level mixed, low-level, transuranic, high-level, and hazardous wastes). Already the CAB has provided input to the WM PEIS ROD on low-level and mixed low-level waste (Ref. 8). A Record of Decision was drafted last Fall for the high-level waste (HLW) stream. However, even though the draft was requested from DOE-Headquarters, it has not been provided. The purpose of this motion is to provide input to DOE on the final HLW ROD even though the CAB has not had an opportunity to review the draft.

The Savannah River Site (SRS) Citizens Advisory Board (CAB) has concerns about the HLW at SRS. Motions stressing the importance of meeting regulatory commitments to finish vitrifying all HLW and to shipping it to a geologic repository were passed shortly after the CAB formation (Refs. 2 and 3). As general input to the WM PEIS (Ref. 4) and to the Environmental Integration Plan (EMI; Refs. 5. 6, and 7), the CAB stressed the value of the cost effective use of DOE facilities for HLW management. And in Recommendation 51 (Ref. 6), the CAB recommended that vitrified HLW at the West Valley Demonstration Project (WVDP) be brought to SRS for interim storage prior to shipment to the repository. The WVDP canisters are a small percentage of SRS's HLW canisters, but receiving them at SRS would have benefited SRS and DOE by establishing transportation procedures for HLW and by constructing a shipping and receiving facility at SRS which could have been used to ship the HLW canisters to the repository once it opened. This action would have saved DOE significant funds by allowing West Valley to close before the repository opened.

However, the preferred alternative in the WM PEIS was for each of the four HLW sites to immobilize and store its own HLW waste (SRS, Hanford, WVDP, and the Idaho National Environmental and Engineering Laboratory, or INEEL). The three alternatives rejected were: (1) HLW canisters would be stored at Hanford, SRS and WVDP until shipment to the geologic repository; (2) Canisters from WVDP would be transported to SRS or Hanford and stored at both sites plus INEEL until shipment to the repository; and (3) Canisters would be transported from WVDP, INEEL, and SRS to Hanford until shipment to the repository.

Recommendation:

In order to save scarce funds and to speed up the cleanup at SRS, the Savannah River Site Citizens Advisory Board recommends that DOE maximize the use of treatment and storage facilities across the DOE complex for the management of HLW. We also recommend the opening of the HLW geologic repository as soon as safely and technically feasible. And we recommend specifically that:

- 1. DOE provide a current review of all DOE sites to determine whether the use of HLW treatment and storage facilities and assets is optimum across the DOE complex (excluding the shipment of untreated HLW).
- DOE provide sufficient funding to maintain SRS canister production at last year's rate of 250 per year. While we recognize that operational stand-downs to vitrify HLW will occur at the Defense Waste Processing Facility which in turn will adversely impact its annual production rate of filling canisters, it is unacceptable to us to produce less in any given year than the annual average regulatory commitment of 200 canisters each year.
- 3. DOE analyze the cost benefit of optimum use of the DOE complex before constructing any new HLW facilities.

4. Consistent with SRS CAB Recommendation 72 (Ref. 8), if DOE can assure the Board that all funds saved by closing WVDP early will be transferred to SRS to build HLW shipping facilities, then the Board recommends that DOE transport the vitrified HLW stored in canisters at WVDP to SRS prior to shipment to the geologic repository.

References

- 1. Final Waste Management Programmatic Environmental Impact Statement, U.S. Department of Energy Office of Environmental Management Report DOE/EIS-0200-F, May 1997.
- Recommendation to meet Commitment to Vitrify High-Level Waste by 2028/ISPR of DWPF Operations, Savannah River Site Citizens Advisory Board Recommendation 12, November 28, 1995.
- 3. Ultimate Disposition of HLW, Savannah River Site Citizens Advisory Board Recommendation 14, November 28, 1995.
- 4. Waste Management Programmatic Environmental Impact Statement, Savannah River Site Citizens Advisory Board Recommendation 16, January 23, 1996.
- 5. Environmental Management Integration DOE Headquarters, Savannah River Site Citizens Advisory Board Recommendation 48, November 18, 1997.
- 6. Environmental Management Integration HLW, Savannah River Site Citizens Advisory Board Recommendation 51, November 18, 1997.
- Political, Regulatory, and State Equity Issues and Treatment, Storage and Disposal of Defense-Related Nuclear Wastes and Materials, Savannah River Site Citizens Advisory Board Recommendation 63, July 28, 1998.
- 8. Waste Management Programmatic EIS-Low Level and Mixed Low Level Waste, Savannah River Site Citizens Advisory Board Recommendation 72, November 17, 1998.

Agency Responses

Department of Energy-SR