

Savannah River Site Citizens Advisory Board

Recommendation 169

Draft WVDP Waste Management Environmental Impact Statement

Background

In accordance with directives in the West Valley Demonstration Project (WVDP) Act, DOE is responsible for facilities used in connection with the WVDP High Level Waste (HLW) vitrification effort and for the disposal of the Low Level Waste (LLW), mixed LLW, HLW, and TRU waste produced by the WVDP HLW solidification program. To fulfill its responsibilities under this Act, DOE needs to identify a disposal path for wastes that are currently stored onsite and that will occur over the next 10 years and to determine a management strategy for the existing waste storage tanks. The April draft EIS focuses on DOE's responsibilities to dispose of wastes and continue to safely mange the waste storage tanks.

The Draft WVDP Waste Management EIS analyzes three alternatives for the continued onsite waste management and shipment of wastes to offsite disposal (Ref. 1). Under the No Action Alternative, Continuation of Ongoing Waste Management Activities, waste management would include continued storage of existing Class B and Class C LLW, TRU waste and HLW. Limited amounts of Class A LLW would be shipped to offsite disposal and the remainder would be stored onsite.

Under Alternative A (Preferred Alternative), Offsite Shipment of HLW, LLW, Mixed LLW, and TRU Wastes to Disposal and Ongoing Management of the Waste Storage Tanks, DOE would ship Class A, B, and C LLW and mixed LLW to one of two DOE potential disposal sites (Washington or Nevada) or to a commercial disposal site (such as Envirocare); ship TRU waste to WIPP in New Mexico; and ship HLW to the proposed Yucca Mountain HLW Repository.

Under Alternative B, Offsite Shipment of LLW, Mixed LLW to Disposal, Shipment of HLW and TRU Waste to Interim Storage, and Interim Stabilization of the Waste Storage Tanks, LLW and mixed LLW would be shipped offsite for disposal at the same locations as Alternative A. TRU wastes would be shipped for interim storage at one of five DOE sites: Hanford in Washington; Idaho National Engineering and Environmental Laboratory (INEEL); Oak Ridge National Laboratory (ORNL); Savannah River Site (SRS); or WIPP. TRU wastes would subsequently be shipped to WIPP or remain at WIPP for disposal. HLW would be shipped to SRS or Hanford for interim storage, with subsequent shipment to Yucca Mountain for disposal.

Comment

The SRS Citizens Advisory Board (CAB) supports the Preferred Alternative but can accept Alternative B, specifically SRS receiving waste shipments from WVDP provided that certain stipulations apply. The SRS CAB is on record recommending that the vitrified HLW from WVDP come to SRS for storage prior to shipment to Yucca Mountain, contingent upon the opening of Yucca Mountain and other commitments (Ref. 2 & 3). The CAB was not unanimous concerning this decision and some of the dissenting opinions were based on equity considerations (Ref. 4). Since then, the SRS CAB has supported the DOE regional waste disposal concept as proposed in the Waste Management Programmatic Environmental Impact Statement (Ref. 5). Under this concept, SRS has the potential to receive LLW from seven DOE facilities. The CAB supported the efforts of DOE to optimize waste disposal across the DOE complex and held the view that the regional concept should be viewed with a national perspective instead of a parochial one. However, the SRS CAB was very clear that its support for a regional disposal concept was contingent upon other states participating in the concept. The SRS CAB fully expects equable treatment (Ref. 6). If wastes are going to be received at SRS from other DOE facilities, then concessions and acceleration of SRS waste disposal are expected.

Recommendation

The SRS Citizens Advisory Board (CAB) recommends to the three agencies that TRU waste and HLW coming to SRS be accepted from WVDP if the following conditions are met:

- 1. TRU Waste storage shall be available at SRS to accept WVDP TRU waste or funding (above site mission operating budget) shall be available to design and construct such storage facilities.
- 2. SRS high activity TRU waste (Pu-238) is placed on a priority disposal schedule and all appropriate shipping containers are made available to comply with the Performance Management Plan shipping schedule. In addition, for every volume of WVDP transuranic waste received by SRS, a shipment of high activity SRS transuranic waste equal to twice the receiving volume shall be shipped to WIPP.
- 3. A HLW shipping and receiving facility shall be constructed and operational at SRS in order to be able to ship SRS vitrified HLW canisters to the HLW repository prior to receiving WVDP HLW.
- 4. A second glass waste canister storage building should be constructed and operational at SRS prior to receiving WVDP HLW.
- 5. Both the WVDP and SRS HLW shipments are included along with the first shipments of defense nuclear waste to Yucca Mountain.
- 6. Funding shall be made available to cover any additional handling costs.
- 7. Any transuranic waste shipped to SRS for temporary storage must be designated as defense waste packaged in a form that meets the WIPP WAC so that it may be shipped directly for disposal without any further processing by SRS. Certified and licensed shipping containers must be available for its future shipment for disposal.

References

- 1. Draft West Valley Demonstration Project Waste Management Environmental Impact Statement, DOE/EIS-0337D, April 2003.
- 2. Citizens Advisory Board Recommendation No. 51 (adopted November 18, 1997), "Environmental Management Integration High Level Waste."
- Citizens Advisory Board Recommendation No. 82 (adopted March 23, 1999), "Waste Management programmatic Environmental Impact Statement Record of Decision for High Level Waste."
- 4. Citizens Advisory Board Recommendation No. 63 (adopted July 28, 1998), "Political, Regulatory, and State Equity Issues and Treatment, Storage, and Disposal of Defense-Related Nuclear Wastes and Material."
- Citizens Advisory Board Recommendation No. 72 (adopted November 17, 1998), " Waste Management programmatic Environmental Impact Statement
- 6. Citizens Advisory Board Recommendation No. 118 (adopted March 28, 2000), "Waste Management Equity Issues."

Agency Responses

Environmental Protection Agency (PDF) Department of Energy-SR (PDF)