

Savannah River Site Citizens Advisory Board

Recommendation 217 Additional TRU Waste Shipments from Mound

Background

The Savannah River Site (SRS) Citizens Advisory Board (CAB) has been aware of the possibility of consolidating transuranic (TRU) waste from sites around the DOE complex with small inventories for some time (Ref. 1). In 1997, the SRS CAB was receptive to the idea of consolidating and treating TRU waste at SRS provided that DOE has a definite schedule for treatment and shipment of SRS Waste to WIPP and funding was available for an assay, sorting, segregating, and repackaging facility (Ref. 2).

In September 2000, the SRS CAB was supportive of the first shipment of TRU waste from the DOE Mound site (located near Cincinnati, Ohio). The SRS CAB support was based on the considerable taxpayer savings, the relative low risk, and the use of funding external to SRS for the activity. Plus, the SRS CAB saw this transfer as a way to accelerate SRS TRU waste shipments to WIPP. This could be accomplished because approximately twice as much SRS TRU waste would be shipped to WIPP than was received from Mound (Ref. 3).

Based upon DOE incorporating the SRS CAB's suggestions, considerable progress in shipping waste to WIPP from SRS was achieved. The last receipt of Mound TRU waste occurred in September 2003. Unexpectedly for SRS, due to recent Mound decontamination and decommissioning activities, Mound has requested permission to send an additional 60 to 70 cubic meters of TRU waste already in WIPP approved shipping containers to SRS (Ref. 4).

Comment

Mound and SRS have agreed that, as an incentive to accommodate this additional Mound waste, SRS will send 4 shipments (of equal volumetric quantities to incoming Mound shipments) out to WIPP for every 1 shipment of Mound waste sent to SRS. In addition, Mound is paying for the characterization and storage costs for this waste. The SRS CAB believes that the acceptance of the Mound waste by SRS has been beneficial to both parties. It has allowed Mound to close early and has helped SRS accelerate its TRU waste program.

While the SRS CAB has been supportive of the Mound agreement, the SRS CAB would like to see similar equity considerations in place prior to receipt of any such waste at SRS from any DOE site. The SRS CAB believes other equity considerations may be possible.

The SRS CAB is very committed to seeing SRS meet its milestone to remove all legacy TRU waste from SRS by 2009/2010. In order to meet the site milestone of 2009/2010, NRC certification is required on the TRUPACT-III shipping container to handle the non-drummed TRU wastes, a transportation packaging method (such as Arrowpak) is needed to handle high-activity drums, and a pathway must be established for all of the TRU waste. Additionally, before the high activity (principally Pu-238) drummed waste and non-drummed waste can be shipped to WIPP, new technologies and methods are needed for performing large container assay and X-ray and limited intrusive repackaging for large containers and high-activity drums. The WIPP certification equipment for non-drummed waste is expected to arrive at SRS in late FY05 and is expected to be operational in FY07.

If DOE places the necessary emphasis and resources on the certification process, the SRS CAB believes that non-drummed and high-activity drummed waste certification can be

expedited. One way to create this necessary emphasis is to tie the receipt of any new sources of TRU waste at SRS to the certification process. DOE needs to provide the SRS CAB with early identification of any such shipments of new TRU waste from within the DOE complex and allow the SRS CAB to evaluate the need for additional equity considerations before it is received at SRS.

Recommendation

The SRS CAB continues to support the very successful agreement with Mound; however, it recommends the following concerning any additional TRU waste shipments to SRS, including any new shipments from Mound:

1. DOE assure that SRS send four shipments of transuranic waste (of equal volumetric quantities to incoming Mound shipments) from SRS to WIPP for every one shipment of Mound waste received at SRS.

2. DOE notify the SRS CAB as soon as possible if it is considering sending any additional TRU waste from other DOE sites to SRS including any new shipments from Mound and allow enough lead-time for the SRS CAB to evaluate the need for additional equity considerations.

3. DOE could expect such considerations before any additional TRU waste shipments from other DOE sites are received at SRS to include the following:

• WIPP certification equipment is fully operational

• Assurances that SRS TRU wastes shipments to WIPP do not get delayed by other DOE sites

• Acceleration of available shipping containers for non-drummed (Trupact III) and highactivity drums (Arrowpak) TRU waste

• Provide a disposition path for all SRS TRU waste, particularly that waste with no defined final disposition.

References

1. Record of Decision from the Waste Management Programmatic Environmental Impact Statement, January 20, 1998.

2. Citizens Advisory Board Recommendation No. 47 (adopted November 18, 1997), "Environmental Management Integration and some SRS Specific Recommendation".

3. Citizens Advisory Board Recommendation No. 130 (adopted September 26, 2000), "Mound TRU Waste Shipments to SRS".

4. Mound TRU Waste Update, presentation to the CAB WM Committee by Bert Crapse, DOE-SR, May 3, 2005.

Agency Responses

Department of Energy-SR