



SRS Citizen's Advisory Board

Recommendation No. 78

January 26, 1999

High Level Waste Tank Closure Environmental Impact Statement

Background:

The Savannah River Site (SRS) has 51 High Level Waste (HLW) Tanks located in F and H-Areas near the middle of SRS. Two of the 51 tanks have been closed. The remaining tanks contain about 34 million gallons of highly radioactive fission products in the two fractions of supernate (soluble salts containing Cs-137) and sludge (insoluble metal oxides). With the soluble salts planned to follow, the sludge wastes are being vitrified in the Defense Waste Processing Facility (DWPF) and poured into stainless steel canisters to be stored at SRS until shipment to a geologic repository (over 500 canisters have been filled). Once the HLW tanks are emptied and retired, they will be closed in accordance with the Federal Facility Agreement (FFA) and a South Carolina Department of Health and Environmental Control Industrial Waste Water Permit.

HLW tanks 17, 18, 19, and 20 in F-Area were selected to be the first to be closed. They are grouped into a Four-Pack with a control room and evaporator common to the four. The SRS Citizens Advisory Board Recommendation 15 provided early support for the tank closures, and later Recommendation 43 provided support to close the entire Four-Pack (see References 1 and 2). Closure of the Four-Pack will be a major accomplishment for SRS.

Tanks 20 and 17 were closed in 1997. They were the first HLW tanks to undergo regulatory closure in the United States, and possibly in the world. They were emptied and washed, their residual waste heels fixed with reducing grout, then they were filled with self-leveling low-strength grout topped with high-strength low-viscosity grout. There has been no impact evident on worker safety, public health, or the environment. The CAB is extremely pleased with the closure of these two tanks, and with the interagency coordination that produced these closures.

However, on October 30, 1998, DOE-SR recommended to the DOE Acting Assistant Secretary for Environmental Management the preparation of an Environmental Impact Statement (EIS) prior to closing any of the 49 additional HLW tanks. The EIS schedule included a Notice of Intent published in the Federal Register in December 1998, public scoping meetings in January 1999, and an expected Record of Decision (ROD) in December 1999. The EIS will cost between \$0.5 to \$1.0 million dollars. DOE-SR justified the EIS as a need to be consistent with the EIS preparation being done for future tank closures at other DOE sites, to open a new dialogue with the public, and to address regulatory concerns independent of the SRS tanks raised at two DOE national tank closure workshops. DOE-SR concluded that an EIS at this time would not impact its FFA schedule to close additional HLW tanks; e.g., although HLW is already being removed from Tank 19, its closure is not scheduled to be completed until 2003.

While the CAB is pleased with the three agencies on the closure of tanks 20 and 17, after deliberations with the regulators, technical experts, and citizens, including the environmental activists at the Natural Resources Defense Council (NRDC) in Washington, DC, the SRS CAB questions the need for the HLW tank closure EIS when an Environmental Assessment has been completed and when no new health, safety, or environmental issues have been identified. But if DOE-SR feels that it must address these issues, other avenues are available under CERCLA, which can address these concerns at significantly less cost.

Recommendation:

The SRS Citizens Advisory Board recommends that DOE:

1. Cancel the HLW Tank Closure EIS unless by March 1999, DOE identifies to the Board the worker safety, public health, and environmental protection issues, which remain to be addressed.

However, in the event that the HLW Tank Closure EIS preparation continues even if no significant worker safety, public health, and environmental protection issues are identified, the SRS CAB recommends that DOE:

- 2a. Devote the minimum amount of funds and time to complete the HLW Tank Closure EIS.
- 2b. Provide a briefing at the March 1999, CAB meeting on the contractor selected to prepare the EIS along with the estimated costs and schedule to complete the HLW Tank Closure EIS.
- 2c. Ensure that the EIS is finished and the ROD is published by the end of December 1999.
- 2d. Ensure that the EIS data and conclusions feed into the CERCLA process to save time and costs.

References

- 1. Recommendation 15, Tank Farm Closure Criteria, adopted 1/23/96
- 2. Recommendation 43, HLW Tanks and 1F/1H Evaporator, adopted 7/22/97

Agency Responses

[Department of Energy-SR](#)