SRS Citizen's Advisory Board

Recommendation No. 148

January 15, 2002

Low Activity TRU Facility

Background

Activities in the TRU waste area involve extensive preparation for the certification of containers to meet the WIPP waste acceptance criteria. These criteria may necessitate removal of items that are noncompliant. A state-of-the-art technology known as HANDSS-55 is currently under development to provide sort, segregate, and repackage low activity drums of TRU waste that don't meet the waste acceptance requirements for shipment to WIPP. HANDSS-55 stands for **HAN**dling and **D**rum **S**egregation **S**ystem for **55**-gallon drums.

The hardware will be incorporated into a modular cell containment system to allow this work to be done in a remote environment. The HANDSS-55 cell and associated hardware is being developed as a joint effort by the Idaho National Engineering and Environmental Laboratory (INEEL) and the Savannah River Technology Center (SREL). The HANDSS-55 technology comprises four modules: (1) the Waste Sorting Module, (2) the TRU Waste Repackaging Module, (3) the Process Waste Reduction Module, and (4) the System Integration and Control Module. The development, engineering, and assembly of the HANDSS-55 technology are being funded mainly from DOE technology development funding, not SRS operating budget. However, SRS must provide a facility to house the HANDSS-55 technology. SRS is currently implementing a project to modify part of the 643-43E Building to accommodate the technology. This doubled contained facility with separate ventilation will be called the Low Activity TRU Facility (LATF).

Comment

The HANDSS-55 technology is scheduled for delivery to SRS in mid to late 2003 with full operations expected in late 2004 or early 2005. It will provide SRS with a method to process waste for disposal in the near term that would otherwise stay at SRS until 2015. In addition, this technology provides additional experience in remote handling and robotics for SRS and provides a good foundation for future development. The SRS CAB endorses from a safety standpoint the capability to sort, segregate, and remove prohibited TRU waste items remotely and can see the potential benefits such a facility will have at SRS. The SRS CAB understands that current operations will proceed while HANDSS-55 is being developed and put into service.

Recommendation

The SRS Citizens Advisory Board recommends that SRS proceed with the planned modifications for the Low Activity TRU Facility (LATF) and

1. Provide a status update on the regulatory permits associated with the LATF facility and the progress of the HANDSS-55 technology installation until it is operational.
2. Identify any potential cost savings, technology enhancements, or management modifications, which could potentially speedup the disposition of SRS TRU waste.

References

1. SRS Transuranic (TRU) Waste Program Review, presentation to the WM Committee by Dale Ormond, December 11, 2001.

Agency Responses

Department of Energy-SR