



**Savannah River Site
Citizens Advisory Board**

Recommendation 176 Plutonium Storage in 235-F Facility

Background

Plans for stabilizing and packaging plutonium metal and oxide at SRS have been dramatically delayed by DOE's decision not to proceed with the Actinide Packaging and Storage Facility (APSF) construction. DOE suspended the APSF project in January 1999. At that time, DOE undertook a systematic review of SRS plutonium stabilization and storage options. This review is documented in "Evaluation of Savannah River Plutonium Storage and Stabilization Options" (Ref. 1).

The evaluation considered several options for managing DOE's surplus plutonium, pending disposition. The evaluation recommended that DOE store SRS stabilized materials in DOE-STD-3013 ("3013 Standard") containers inside shipping containers in existing vaults in Building 235-F, and KAMS as necessary, to await disposition. WNew work is under way in FB Line, in the form of a new Packaging and Stabilization project to and materials are being stabilized materials in DOE-STD-3013 containers. This project will installed high-temperature furnaces and additional packaging equipment to stabilize DOE legacy materials thereby meeting the DOE long-term safe storage criterion. These activities are expected to continue until about 2006.

DOE-SR intends to modify the 235-F facility for increased capacity for storing plutonium packaged in accordance with DOE-STD-3013, *Stabilization, Packaging, and Storage of Plutonium-Bearing Materials*; addition of a plutonium stabilization and repackaging capability; and limited sampling activities. Congress tasked the Defense Nuclear Facilities Safety Board (Board) to conduct a study of the adequacy of the Building 235-F at the Savannah River Site (SRS) for the storage of defense plutonium and defense plutonium materials in connection with the Department of Energy (DOE) fissile materials disposition program.

The Board had specific concerns that are being addressed by SRS in a revised Documented Safety Analysis (DSA) for continued operations (Ref. 2). As part of the DSA, aAdditional storage and surveillance capability will be evaluated.required. The 3013 Container Surveillance Project will allow the continued surveillance capability upon FB-Line deactivation.

Comments

The plutonium stabilization and repackaging capability for 235-F will not be available until 2007, one year after FB-Line deactivation. Remembering the Consolidated Incinerator Facility (CIF) issue (Recommendations #126, #133, #136, and #141), the SRS Citizens Advisory Board (CAB) has concerns about closing an existing facility before another one is available to fulfill its operation, in this case the repackaging capabilities. In addition, the SRS CAB has serious reservations about funding availability to ensure the surveillance capability of the 3013 Container Surveillance Project.

Recommendation

The SRS CAB recommends that DOE:

1. Verify the funding availability for the 3013 Container Surveillance Project in Building 235-F and provide documentation to demonstrate its availability on or before January 26, 2004.

2. Ensure the capability for interim disposition and repackaging is available until the capability is established in Building 235-F.
3. Maintain an interim surveillance capability in compliance with the 3013 standard.

References

1. "Evaluation of Savannah River Plutonium Storage and Stabilization Options." July 2000.
2. Safe, Secure Plutonium Storage in 235-F, presentation to the NM Committee by Eric Fitzgerald, October 27, 2003.

Agency Responses

[Department of Energy-SR](#)