



**Savannah River Site  
Citizens Advisory Board**

**Recommendation 201  
Repackaging of TRU Waste Black Boxes**

**Background**

The historical mission of the transuranic (TRU) waste project has been to receive and safely store TRU waste generated at the Savannah River Site (SRS) and throughout the DOE complex. The focus has shifted to preparation and transportation of waste to the WIPP disposal facility located in Carlsbad, New Mexico. This is accomplished by: (1) characterizing and certifying TRU waste to meet the WIPP waste acceptance criteria (WAC); (2) removing wastes that do not meet the WIPP WAC and that can be disposed in a more cost effective manner; and (3) repackaging the waste to meet transportation and storage requirements.

SRS TRU waste will be transported overland in TRU Package Transporters, Model II (TRUPACT-II) or enhanced Type B shipping containers (TRUPACT-III) and be disposed of at WIPP. Presently, SRS has shipped approximately 3,800 cubic meters or 1/3 of the total inventory of legacy TRU waste to WIPP. The current accelerated baseline calls for all legacy TRU waste to be removed by 2008 (all low activity drummed TRU waste by 2006 and all non-drummed or large container TRU waste by 2008).

One recent key accomplishment was the successful repackaging pilot project to repackage the two large steel boxes in F-Canyon truck well (Ref.1). A similar repackaging project has also taken place in E-Area. These large steel black boxes (18 ft x 12 ft x 7 ft OD) include glove boxes, process vessel, ventilation systems, etc., stored in inner plywood boxes. The total original legacy inventory for these large black boxes was 107 (40 – Pu239 & 67 - Pu238). Seventeen of the large containers were dispositioned to LLW (6 – PU239 & 11- Pu238). Two have been repackaged in E-Area and two are included in the F-Canyon repackaging pilot project.

**Comment**

The SRS Citizens Advisory Board (CAB) commends DOE for using an existing facility with experienced personnel to prove that repackaging of high activity TRU waste black boxes can be accomplished in a safe and cost effective manner. However, due to the F-Canyon closure project, the facility is only available to support disposition of two boxes. With fifteen of the Pu238 boxes and one Pu239 box requiring a Category 2 (Cat 2) facility to repackage the black box contents, a similar facility to F-Canyon is needed. The SRS CAB is also pleased to see the repackaging efforts for low activity black boxes taking place in E-Area. By such efforts the SRS CAB's request for DOE to work aggressively to have all legacy TRU waste at SRS removed by 2008 can be realized (Ref. 2).

The SRS CAB is concerned about what facilities will be available to repackage the contents of the large black boxes (Ref. 3 & Ref. 4). Based upon the August 6, 2004 DNFSB weekly report, insufficient funding and lack of mission direction from DOE will soon limit the operational efficiency of H-Canyon (Ref. 5). Therefore, H-Canyon may be a likely facility to continue the black boxes repackaging effort. However, the SRS CAB does not want any interruption of H-Canyon missions and would propose developing an integrated schedule so that both repackaging of TRU wastes and H-Canyon activities can continue without significantly impacting the overall schedules of either program. The SRS CAB desires early identification of a dedicated facility for repackaging black box contents and any mission plans so affected to be suitably addressed to eliminate potential operational interferences.

**Recommendation**

The SRS CAB makes the following recommendations to continue the acceleration of TRU

waste disposition at SRS:

1. DOE evaluate the use of H-Canyon or another appropriate existing facility to repackage the high activity TRU waste black boxes.
2. DOE continue to use E-Area as much as possible for low activity TRU waste black boxes.
3. DOE provide a planning update and a proposed timeline by February 28, 2005 to assure the Board that the entire inventory of legacy TRU wastes, including those in black boxes, shall be removed by 2008.

## **References**

1. TRU Black Box Repackaging Pilot Project in F-Canyon, presentation to the WM Committee by Michael Logan, November 1, 2004.
2. Citizens Advisory Board Recommendation No. 198 (adopted October 13, 2004), "SRS TRU Waste Program Challenges".
3. Citizens Advisory Board Recommendation No. 164 (adopted June 12, 2003), "Waste Isolation Pilot Plant Non-Compliant Item WAC".
4. Citizens Advisory Board Recommendation No. 187 (adopted May 5, 2004), "SRS TRU Waste Program Acceleration".
5. Defense Nuclear Facilities Safety Board SRS Report for Week Ending August 6, 2004.

## **Agency Responses**

[Department of Energy-SR](#)