



### **Recommendation No. 131**

September 26, 2000

#### **Environmental Assessment for the Transportation of SRS MLLW and Certain LLW for Treatment and Disposal at Commercial and Government Facilities**

##### **Background**

DOE proposes to transport five forms of Low Level Waste (LLW) and Mixed Low Level Waste (MLLW) to offsite commercial and government facilities for treatment and/or final disposal. These waste forms include vitrified blended uranium sludge and four forms of waste (miscellaneous soil/debris in bulk, miscellaneous soil/debris in drums, miscellaneous liquids in drums, and miscellaneous liquids in tanker trucks) with activity levels equal to or less than 99 nCi/gram. DOE needs to take this action because treatment and disposal capabilities for these wastes do not exist at SRS and/or it is more cost effective or beneficial to DOE to dispose of these wastes at another location. This Environmental Assessment (EA) was prepared to analyze the potential environmental and health impacts of the proposed offsite transportation.

The EA analysis used actual data for the vitrified blended uranium sludge but worst case scenarios were used to calculate environmental effects of transporting the other four waste streams. Eleven potential offsite locations were identified and grouped into six geographic destinations that were evaluated. Routing conditions were developed using DOE computer codes and included population densities, distance traveled, and the fraction of highway and rail travel in urban, suburban, and rural population zones.

Exposure, as a result of an accident, was evaluated and the dose was based on immersion in a cloud of contaminated material and the direct inhalation of the contaminated material. The EA did not analyze dose from ingestion because any contaminated foodstuffs (crops, cattle, and milk) as a result of serious accidents were assumed to be taken out of the marketplace as a result of emergency cleanup actions.

The EA concluded that there would be no adverse environmental impacts of transporting these materials to other locations for disposal and no disproportionate environmental justice impacts. It found no latent cancer fatality to worker and the public during normal operations or as the result of a traffic accident. DOE expects the transportation to result in about nine non-fatal accidents but no fatal accidents based on Department of Transportation statistics. Injuries would be the result of vehicle collisions and not release of radioactive materials.

##### **Comments**

The EA analyses the offsite shipment of SRS LLW and MLLW with difficult disposition paths and supports the Record of Decision (ROD) of the Waste Management Programmatic EIS for offsite treatment/disposal of LLW and MLLW. The SRS Citizens Advisory Board (CAB) likes the use of the conservative scenarios utilized in the EA and supports the conclusion that it is safe to transport these waste shipments to offsite commercial and government facilities.

##### **Recommendation**

1. The SRS CAB recommends that DOE incorporate the following comments into the Draft EA:
  - a. In Section 2.1 (Proposed Action pp. 9-10), the SRS CAB would like additional clarification on the level of controls and oversight that will be implemented at the commercial facilities receiving waste shipments, specifically whether DOE plans on conducting annual audits of these facilities.
  - b. In Section 3.2.2 (Assumptions p. 12), the first sentence of the second paragraph needs a verb correction and the SRS CAB would like to see an explanation of "exclusive use vehicles".
  - c. The SRS CAB would like to know why agricultural risks are not discussed. (Section 3.2.2 - Assumptions pp. 13-14).

## **References**

1. Draft Environmental Assessment for the Offsite Transportation of Certain Low-Level and Mixed Radioactive Waste from Savannah River Site for Treatment and Disposal at Commercial and Government Facilities, DOE/EA-1308, September 2000.
2. Environmental Assessment (EA) for the Offsite Transportation of Low-Level Radioactive and Mixed Waste, presentation to the CAB WM Committee by Don Zecha, September 11, 2000.

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## **Agency Responses**

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