Recommendation No. 55

March 24, 1998

Composite Analyses

Background

The Composite Analysis (CA) for low-level waste (LLW) disposal facilities analyzes the synergistic impact on the public from all the significant radioactive waste sources located in the General Separations Area.(1) The CA provides a framework to assess the impact of existing contamination from past disposal practices and effects on future members of the public. In accord with the Defense Nuclear Facilities Safety Board (DNFSB) recommendation to perform CAs on the synergistic effects of source terms and with DOE regulations that dictate performance assessments (PA) to determine the long-term effects from individual source terms, the CA demonstrates that continued LLW disposal at SRS is protective of the environment and members of the public.

The CA process is now undergoing an independent technical review by a national Federal Review Panel. The review will be completed before the Department of Energy Headquarters (DOE-HQ) gives its own approval of the CA process. But if these reviews are successful, CAs could establish priorities for future cleanup activities at SRS and guide future land-use decisions.

Recommendation:

The SRS Citizens Advisory Board recommends that:

1. After the results of the independent technical review of the CA are released, but by no later than June 15, 1998, the three agencies, DOE, South Carolina Department of Health and Environmental Control (SCDHEC) and the Environmental Protection Agency (EPA) arrive at a decision on using CAs and PAs at SRS as part of the process to determine the feasibility of disposing CERCLA waste in a DOE-regulated facility while assuring public protection. This decision by the three agencies should spell out whether CAs and PAs are sufficient to demonstrate that the disposal of LLW is protective of the environment and human health.

- 2. Present the results of the decision to the CAB at our July 1998 meeting.
- 3. Include the CA as a basis for the preparation of SRS Future Use Plans since the CA provides an assessment of the synergistic impacts (total dose) that future members of the public can expect from sources of radioactive material remaining in the General Separations Area.
- 4. Prepare a Composite Analysis for each of the major industrial areas at SRS where radioactive materials have been used or stored. Coordinate these analyses with the groundwater and surface water analyses and models currently being produced for the major watersheds at SRS.

(1) Composite Analysis, E-Area Vaults and Saltstone Disposal Facilities, Rev. 0, September 1997, WSRC-RP-97-311.

Agency Responses

Department of Energy-SR