

Recommendation No. 71 November 17, 1998

Closure of the Old Radioactive Waste Burial Ground

Background:

The Old Radioactive Waste Burial Ground (ORWBG) is a 76 acre inactive landfill disposal area for solid low-level radioactive waste and hazardous wastes in E-Area near the center of SRS. The nearby Mixed Waste Management Facility (MWMF), comprising 58 acres, was compacted and capped previously and the rest of the Low Level Radioactive Waste Disposal Facility (LLRWDF) (about 60 acres) is in the final process of compacting and capping. Contaminated groundwater from the ORWBG flows towards and is outcropping into a ditch which feeds Four Mile Creek. Contaminated groundwater from the LLRWDF flows toward Upper Three Runs Creek but has not outcropped into the creek yet.

The ORWBG was used from 1952 until 1974 and contains waste from SRS, other DOE sites and from Department of Defense operations. Most Low-Level Waste (LLW) was placed in earthen trenches 20 feet wide, 20 feet deep and up to 700 feet long. Generally four feet of dirt was placed on top of the waste. The ORWBG contains about 7,125,000 cubic feet of waste. Approximately 90 percent is job control waste (paper, coveralls, protective clothing, cardboard boxes, etc.). Irradiated metal scrap makes up about 7 percent and the remaining 3 percent is a wide variety of natural and man made radioactive materials, contaminated equipment and absorbed solvents and oils.

An Interim Action was taken under CERCLA for the ORWBG. A low permeability soil cover was installed to further reduce worker risk, reduce contaminant migration to groundwater, reduce potential soil erosion and spread of contaminants, and to stabilize the surface of the ORWBG. This cover is from two to eight feet deep and is sloped to promote stormwater runoff. It was completed for a cost of about \$8 million in February 1998.

The Citizens Advisory Board (CAB) commended the Department of Energy Savannah River Site, the Environmental Protection Agency (EPA), and the South Carolina Department of Health and Environmental Control (SCDHEC) for their consensus Interim Action in CAB Recommendation Number 19, and recommended if feasible, that DOE should select a final remedy that utilizes the soil cover in the Interim Action preferred alternative.

The ORWBG is currently following the CERCLA process for final remediation. A Corrective Measures Study/Feasibility Study (CMS/FS) is scheduled for submittal to the U. S. EPA and to the SCDH EC in March 1999 and for approval in August 1999. A Proposed Plan (PP) is scheduled for submittal in summer 1999 and approval in December 1999, a public comment period from January - February, 2000, a final ROD in June 2000, and starting remedial action in September 2001. The contaminated groundwater is being handled under the Resource Conservation and Recovery Act.

Recommendation:

The SRS Citizens Advisory Board is forming a public Focus Group to evaluate and recommend means of speeding up the schedule and to evaluate and recommend remediation alternatives for closure of the 76 acre Old Radioactive Waste Burial Ground. It is recognized that the ORWBG can not be discussed in isolation without considering the impacts on the groundwater and future impacts on the groundwater of closure alternatives. Therefore, the public Focus Group will also consider the groundwater contaminated plumes. The public Focus Group will be formed by December 1998, report progress to the CAB in May 1999, prepare a report for the CAB by September 1999, and assist the CAB ER&WM subcommittee to draft motions for the CAB consideration as appropriate. It will periodically meet to review the progress toward remediation and report to the CAB as appropriate until remediation actually begins.

- 1. The SRS Citizens Advisory Board recommends that SRS, EPA and DHEC provide dedicated representatives and technical support to the public Focus Group to ensure its effectiveness.
- 2. The SRS Citizens Advisory Board recommends that the public Focus Group and the three agencies work together in reviewing alternatives and selecting the preferred remedies for closing the ORWBG.

Agency Responses

Department of Energy-SR

Department of Health and Environmental Control

United States Environmental Protection Agency