



Environmental Bulletin

Volume 11, Number 14
October 18, 2000

from the Savannah River Site

Document available for review

Seepage Basin meets plug-in ROD remedy

An Explanation of Significant Difference (ESD) is being issued by the Department of Energy (DOE), with concurrence by the United States Environmental Protection Agency-Region IV (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC) to document the decision that the C-Area Reactor Seepage Basin (CRSB) meets the criteria specified in the Plug-in Record of Decision (ROD). The detailed determination of how this unit meets the criteria is in the Technical Evaluation Report available in the Administrative Record File as noted in the locations identified below.

The CRSB is located in the central portion of the Savannah River Site (SRS), approximately 800 feet west of C-Reactor. The CRSB, consisting of three connected basins and the associated pipeline, received low-level radioactive wastewater from 1959 to 1986.

The CRSB meets the criteria specified in the Plug-In ROD for using the plug-in remedy. To use the plug-in remedy, a waste site must be radioactively contaminated, located near a nuclear facility, contain principal threat source material (PTSM), and the PTSM is not in contact with groundwater or surface water.

The remedy includes the following components:

- Stabilizing the PTSM soils to the depth of 6 feet in the first basin and to 4 feet in the second basin using a cement-based grout mixture. This treatment will convert the waste into a form less likely to result in human exposure to radionuclides.
- Placing a low permeability soil cover over all three basins. This will reduce infiltration through the stabilized soil and prevent exposure of humans or animals to radionuclides in the stabilized soil.
- Grouting the pipeline. This will prevent exposure to burrowing animals.

- Using land use controls to prevent human contact with the stabilized PTSM soils.

This remedy will be the final remedy for this Operable Unit (OU), since the groundwater associated with this OU is being addressed in conjunction with the C-Area Reactor groundwater OU.

SRS is required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) to publish an ESD whenever there is a significant change to a component of the remedy identified in the ROD. This ESD is unique in that it does not detail a change from a remedy selected in the ROD, but rather documents the waste unit for which the remedy will be implemented. EPA, SCDHEC and DOE have determined that using an ESD format to present the waste unit selected for implementation is key in communicating remedial decisions for the Plug-in ROD.

This ESD is available for public review during normal business hours at the following information repositories:

- DOE Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina-Aiken campus in Aiken, SC;
- Thomas Cooper Library Government Documents Department, University of South Carolina in Columbia, SC;
- Reese Library, Augusta State University in Augusta, GA;
- Asa H. Gordon Library, Savannah State University in Savannah, GA.

This information is also available on the Internet at the SRS Home Page under "Happening Now" (<http://www.srs.gov/general/srs-home.htm>) and on the SRS Environmental Restoration Home Page under "Public Involvement" (<http://www.srs.gov/general/srenviro/erd/pub/pubinv.html>).

Any comments or questions may be directed to Jim Moore, Westinghouse Savannah River Company, Building 742-A, Aiken, SC 29808; 1-800-249-8155; jim02moore@srs.gov

ROD issued for L/P Bingham Pump Outage Pits

DOE, EPA, and SCDHEC have selected remedial approaches for SRS's L and P Area Bingham Pump Outage Pits operable unit. A 30-day public comment period for the Proposed Plan and the associated draft Resource Conservation and Recovery Act (RCRA) permit modification was held from June 10, 1999 to July 9, 1999.

The remedial decision is documented in the ROD document. This document includes a responsiveness summary that addresses public comments. DOE has worked with SCDHEC and EPA to ensure the remedial approach is consistent with all applicable environmental requirements. The three agencies determined that remedial action is necessary for this unit. The preferred remedial action is Land Use Controls (access and deed restrictions/notifications) for soils and No action for groundwater.

The remedial action is intended to be permanent and effective in both the long and near terms. Copies of the ROD are available in the administrative record. The administrative record is available in the information repositories listed:

- DOE Public Reading Room at the Gregg-Graniteville Library at the University of South Carolina-Aiken campus in Aiken, SC; and
- Thomas Cooper Library Government Documents Department at the University of South Carolina in Columbia, SC.

Hard copies of the Record of Decision are available at the following:

- Reese Library at Augusta State University in Augusta, GA; and
- Asa H. Gordon Library at Savannah State University in Savannah, GA.

The ROD is also available on the Internet in the SRS Home Page (<http://www.srs.gov>), under "Happening Now," (<http://www.srs.gov/general/srs-home.htm>) and on the SRS Environmental Restoration Home Page, under "Public Involvement," (<http://www.srs.gov/general/srenviro/erd/pub/pubinv.html>). For additional information, contact Jim Moore, at the address listed on the back of the Bulletin.

SRS CAB adopts three recommendations in September

Recommendation 128

Request for Data/Information on Alternative Technologies to Incineration

The SRS Citizens Advisory Board (CAB) recommended that the Blue Ribbon Panel of independent scientific experts established to explore technological alternatives to incineration utilize the *Integrated Process Analysis of Treatment Systems for Mixed Low Level Waste* report to avoid duplication of efforts. It also request that DOE-HQ expand the mission of the Blue Ribbon panel from exploring technological alternatives to incineration to identifying the best available technology for treatment of transuranic, mixed transuranic, low-level, mixed low-level and other incinerable waste.

Recommendation 129

Mound TRU Waste Shipments to SRS

The CAB recommended that DOE accept transuranic waste shipments from Mound and that DOE receive approval to ship more TRU waste volume from SRS to the Waste Isolation Pilot Plant (WIPP) than it receives from Mound. The Board also requested that DOE provide non-SRS funding to not only transfer the Mound

waste to SRS but to fund all activities necessary to accelerate SRS TRU waste shipments to WIPP.

Recommendation 130

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

The SRS CAB provided public comments on an Environmental Assessment for Offsite Transportation of Low Level Radioactive and Mixed Waste. They requested 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 and more information regarding "exclusive use vehicles."

In other business, the SRS CAB also agreed to an alternative meeting schedule in 2001 and will meet quarterly as a full Board, four months in combined committee meetings and with individual committee meetings held in the evenings of off months as needed.

Site Selection Guidance Manual available for public review

The Savannah River Technology Center recently published a site selection guidance manual that provides an overview of how new facilities are sited at SRS. Historically, the site selection process at SRS was based primarily on facility-specific engineering and op-

erational requirements. A more comprehensive site selection process is now required to ensure that potential environmental and regulatory issues do not impede project implementation. For a copy of this guidance manual, please contact Jim Moore.

Current NEPA actions affecting SRS

• **Construction and Operation of the Highly Enriched Uranium Blend-Down Facilities at the Savannah River Site (DOE/EA-1322)**, The EA will analyze the potential environmental consequences associated with construction and operation of the Highly Enriched Uranium (HEU) blenddown facilities. The proposed action would support delivery of low enriched uranium converted from off-specification HEU to the Tennessee Valley Authority. A Finding of No Significant Impact (FONSI) is expected in October.

• **Offsite Transportation of Certain Low-Level and Mixed Radioactive Waste from SRS for Treatment and Disposal at Commercial and Government Facilities (DOE/EA-1308)**, The EA will analyze the potential environmental consequences associated with transporting low-level and mixed low-level waste to offsite commercial and government facilities for treatment and/or final disposal. These facilities are variously located in the Idaho, Nevada, Tennessee, Texas, Utah, and Washington. The draft EA was issued to the public on September 13. The public comment period closes on October 17, 2000.

• **Evaluate an Alternative Approach for the Defense Waste Processing Facility (DWPF) Glass Waste Canister Storage Facility at SRS (DOE/EA-1327)**, The EA analyzed potential environmental consequences associated with building and operating an onsite above-ground concrete pad for casks containing DWPF canisters. The storage casks would be made using SRS's inventory of depleted uranium trioxide powder. The EA was completed in March, however, the contracting strategy is now being re-evaluated. When the proposed action is reformulated, the EA will be revised accordingly. The schedule is uncertain.

• **Removal, Transportation, and Storage of Strontium 90 Radiosotopic Thermoelectric Generators (DOE/EA-1351)** This EA is being developed jointly by DOE and the U.S. Air Force. It will address removal and transportation of 10 strontium 90 radioisotopic thermoelectric generators (RTGs) from Burnt Mountain Seismic Array Observatory in Alaska to either a designated site within the DOE complex or to an interim storage location at an Air Force facility, and selection of a long-term storage location for the 10 RTGs and up to 50 other RTGs located throughout the U.S. A draft EA is expected in March, 2001

• **SRS High Level Waste Tank Closure (DOE/EIS-0303)**, The proposed action is to close the SRS HLW Tanks in accordance with applicable laws, regulations, DOE Orders and SCDHEC permit requirements. The draft EIS is expected in the fourth quarter 2000.

• **SRS Salt Disposition Alternative SEIS (DOE/EIS-0082-S2)**, The proposed action is to construct and operate a process to replace In-Tank Precipitation as part of the SRS High Level Waste Management System. The draft EIS is expected in November 2000, with the final in June 2001.

Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Waste at Yucca Mountain (DOE/EIS-0250) The EIS will assess the potential environmental impacts from construction, operation, and closure of a Nuclear Regulatory Commission-licensed geologic repository for disposal of spent nuclear fuel and high level wastes. The final EIS is expected in late 2001.

Draft EA prepared to transport waste from SRS

DOE has prepared a draft environmental assessment (EA) (DOE/EA-1308) to analyze the potential environmental impacts of the proposed offsite transportation of certain low-level radioactive waste (LLW) and mixed (i.e., hazardous and radioactive) low-level radioactive waste (MLLW) from SRS. DOE needs a viable near-term treatment and disposal option for five LLW and MLLW forms that are generated at SRS. DOE needs to take action in a cost-effective and timely manner because onsite treatment and disposal capabilities for these waste forms do not exist at SRS at this time and/or it is more beneficial to DOE to dispose of the waste at another location. These waste forms would also comprise an estimated volume of approximately 4,804,282 cubic feet.

The continued storage of this volume of waste would likely exceed regulatory limits. Continued storage would not be consistent with the agreements between DOE and the State of South Carolina concerning MLLW management under the SRS Site Treatment Plan that was developed pursuant to the Federal Facility Compliance Act of 1992. Violating these agreements could result in fines and penalties for DOE as well as suspension of the site's Resource Conservation and Recovery Act Permit. Comments regarding and requests for copies of the draft EA should be sent to Andrew R. Grainger, NEPA Compliance Officer, DOE-SR, Building 742-A, Room 185, Aiken, SC 29808 e-mail: nepa@srs.gov; telephone: 1-800-881-7292

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