



# Environmental Bulletin

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February 18, 2000

*from the Savannah River Site*

## Public Comment Period planned for proposed remediation for K Area Burning/Rubble Pit and Rubble Pile Operable Unit

The Department of Energy (DOE) will release a Statement of Basis/Proposed Plan describing the proposed remedial approach for the K-Area Burning/Rubble Pit (KBRP) and Rubble Pile (KRP) operable unit (OU) at the Savannah River Site (SRS) on February 19, 2000. The South Carolina Department of Health and Environmental Control (SCDHEC) will also release a draft Resource Conservation and Recovery Act (RCRA) permit modification for the proposed remedial action for this unit. The public comment period will last from February 19, 2000, to April 3, 2000.

DOE, the Environmental Protection Agency (EPA), and SCDHEC have reviewed the risks associated with the KBRP and KRP OU at SRS and are recommending the following actions:

(1) For the source unit and its soils – placement of a native soil cover in conjunction with institutional controls. This action will act as a barrier to prevent soil exposure to future human receptors and will also reduce the infiltration of rain-water and thereby limit the potential migration of contaminants from the KBRP soils to the groundwater.

(2) For groundwater – Monitored Natural Attenuation; this involves the installation of nine compliance wells to monitor the progress of the ongoing monitored natural attenuation process.

The KBRP, constructed in 1951, was a shallow, unlined excavation measuring approximately 9 m (30 ft) wide, 73 m (240 ft) long, and approximately 2.4 m (8 ft) deep, and was used as a waste burning and burial pit. The KRP is located adjacent to the KBRP and was used for the disposal of rubble from the initial construction of the K-Area Reactor. The KBRP is located in an area that has been recommended for industrial use by the SRS Citizens Advisory Board (CAB). The *Savannah River Site Future Use Report Stakeholder Recommendations for SRS Land and Facilities* (DOE 1996) includes the recommendation that “residential uses of SRS land should be prohibited”, and the *Federal Facility Agreement Implementation Plan* (WSRC 1996) designated the KBRP as an industrial zone. The planned future use of the KBRP and KRP by DOE is continued industrial usage.

Comments on the Proposed Plan are requested by April 3, 2000. Upon completion of the public comment period, a Responsiveness Summary will be prepared that addresses public comments. The Responsiveness Summary will be made available with the Record of Decision (ROD), and will be sent to each person who submits comments.

### Information Repositories

Copies of the Statement of Basis/Proposed Plan are available in the Administrative Record, which also contains the Remedial Investigation/Feasibility Study (RI/FS) report for these units. The information repositories are listed below:

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

Hard copies of the Statement of Basis/Proposed Plan are available at the following:

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

The Statement of Basis/Proposed Plan 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>).

Copies of the draft RCRA permit modification/s are available for review at SCDHEC during regular business hours, 8:30 a.m. to 5 p.m., Monday through Friday, except legal holidays, at the following locations:

SCDHEC, Bureau of Land and Waste Management  
8901 Farrow Road, Columbia, South Carolina 29203  
Phone: (803) 896-4000

or

SCDHEC, Lower Savannah District  
Environmental Quality Control Office, 218 Beaufort St., N.E.  
Aiken, SC 29802, Phone: (803) 641-7670

If there is interest in discussing this recommended remedial approach, a public hearing may be requested. Comments on the draft RCRA Permit modification and requests for public hearings of the Draft RCRA Permit modification should be sent to:

SCDHEC

Attn: John Litton, P.E., Director  
Division of Hazardous and Infectious Waste Mgt.  
Bureau of Land and Waste Management  
2600 Bull Street, Columbia, SC 29201, (803) 896-4000

# SRS CAB adopts eight recommendations in January

Following are recommendations adopted by the SRS Citizens Advisory Board (CAB) at the January 25 full board meeting. The SRS CAB is an independent organization officially chartered by DOE to provide recommendations and stakeholder insight on site activities to DOE, EPA, and SCDHEC. The CAB is composed of 25 South Carolina and Georgia individuals who reflect the cultural diversity of the population affected by SRS.

## Recommendation 108

### Yucca Mountain Draft Environmental Impact Statement

This recommendation requests that DOE open Yucca Mountain in Nevada on schedule as outlined in the draft EIS and to initiate steps that would lead to congressional reconsideration of the 70,000 metric tons of heavy metal limit for a federal geologic repository. The CAB recommended that DOE more correctly assess the true risks of a no-action analysis and re-evaluate the proposed management and containment of "sealed source" and other general wastes. The CAB also requested a comparative cost benefit analysis of commercial spent fuel, DOE spent fuel and DOE high level waste to establish the order of shipment of materials to the repository.

## Recommendation 109

### DOE and SC Agreement on Removal of High Level Vitrified Waste from SRS

The CAB recommended that DOE work with the South Carolina Governor's office to establish a schedule for removing vitrified high level waste from the state. The CAB suggests this be accomplished through the implementation of the Statement of Principles signed by the Secretary of Energy and Governor Hodges in Sept. 1999.

## Recommendation 110

### Proposed EPA Rule Change

In response to a request for comments from EPA on a proposed rule change that impacts the management of low level mixed wastes, the CAB supported the recommended proposed rule be adopted with one revision. The CAB recommended that EPA revise the proposed rule to exempt low-level mixed waste from RCRA for those DOE low-level waste disposal facilities that have approved Disposal Authorization Statements. This change would significantly reduce the costs of disposal of mixed low level wastes.

## Recommendation 111

### Waste Isolation Pilot Plant RCRA Permit/Transuranic Waste

The SRS CAB resubmits previous recommendations regarding the WIPP RCRA Permit and supports DOE in its lawsuit regarding the permit and its attempt to reduce administrative burdens without jeopardizing health and safety. The CAB feels strongly that the New Mexico Environmental Department should not have regulatory authority over how SRS prepares its waste for shipment to WIPP, which is already regulated by SCDHEC. The Board also provided more specific comments regarding criteria, radiation containment areas and visual examination requirements.

## Recommendation 112

### Selection of High Level Waste Salt Processing Alternative

The CAB asks DOE to commit to a salt waste processing alternative technology selection schedule by September 2001 and ensure it meets regulatory commitments. The CAB also requested a schedule for implementation and an assessment of incremental risks and benefits associated with an early technology decision based on one acceptable technology versus a late technology decision potentially based on multiple acceptable technologies.

## Recommendation 113

### Stakeholder Review of Integrator Operable Unit (IOU) Plans, Studies and Reports

The CAB requested that DOE, EPA and SCDHEC revise the current schedule for IOU plans to provide the public with an opportunity to review reports during the same review period as the regulators and that this change be documented.

## Recommendation 114

### Proposed Interim Action Plan for A Area Burning Rubble Pit

This recommendation requests that the three agencies implement the preferred alternative for final soil remedial action (soil cover with institutional controls) and interim groundwater remedial action (active air sparging system).

## Recommendation 115

### Draft SRS Strategic Plan

The CAB recommended that DOE incorporate public comments regarding how the Strategic Plan tiers from other SRS documents, infrastructure improvements, stewardship, management of SRS forestland, and decontamination and decommissioning objectives.

## Revised FONSI issued for the SRS Sanitary Wastewater Treatment System

DOE prepared an environmental assessment (EA) for the centralization and upgrading of the sanitary wastewater treatment system at SRS. DOE needed to implement that proposed action to meet federal and state regulations regarding the onsite discharge of sanitary wastewater. Based on the analyses in that EA (DOE/EA-0878), DOE issued a Finding of No Significant Impact (FONSI) on Sept. 30, 1993.

Until now, SRS has prohibited the disposal of wastewaters bearing trace radionuclides in the onsite sanitary sewer. To conform to the standard commercial practice of allowing the disposal of low levels of radioactivity into sanitary sewerage, as regulated by the Nuclear Regulatory Commission and SCDHEC, DOE has considered allowing SRS to discharge trace quantities of radionuclides into site sanitary sewerage. The proposal was described in the Dec. 7, 1999, issue of the *SRS Environmental Bulletin* (Vol. 10, No. 17); public comments were accepted from that date until Jan. 10, 2000.

Based on existing SRS procedures and additional analyses on the human health impacts that could result from the proposed discharge of trace amounts of radionuclides to the sanitary wastewater treatment system at SRS, DOE concluded that proposed change in wastewater treatment practice is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, the preparation of an environmental impact statement is not required, and DOE issued the revised FONSI on February 3, 2000. *DOE received no comments on the proposal during the public comment period.*

If you would like a copy of the revised FONSI, or the original EA and FONSI, please contact:

Andrew R. Grainger, NEPA Compliance Officer  
U. S. DOE, Savannah River Operations Office  
Building 742-A, Room 185, Aiken, SC 29808  
e-mail: nepa@srs.gov Fax/telephone: 1-800-881-7292

## Current NEPA actions affecting SRS

### • Construction and Operation of the Low Enriched Uranium

**Loading Station and Modification to the Existing Highly Enriched Uranium Blending Facilities at the Savannah River Site (DOE/EA-1322)**, The EA will analyze the potential environmental consequences associated with construction and operation of a low enriched uranium (LEU) loading station and with modifications to existing facilities at SRS. The proposed action would support delivery of LEU (converted from off-specification highly enriched uranium) to the Tennessee Valley Authority. The EA is currently on hold pending other decisions.

### • Offsite Transportation of Certain Low-Level and Mixed Radioactive Waste from SRS for Treatment and Disposal at Commercial Facilities (DOE/EA-1308)

The EA will analyze the potential environmental consequences associated with shipping low-level and mixed low-level waste to treatment facilities in Texas and/or Envirocare of Utah for disposal. This EA is on hold pending other DOE waste management decisions.

• **Revised FONSI for the EA for Centralization and Upgrading of the Sanitary Wastewater System at SRS (DOE-EA-0878)**, In 1993 DOE-SR prepared an EA and issued a FONSI for the centralization and upgrading of the sanitary wastewater treatment system at SRS. In a recent effort to reduce costs, DOE considered a modification to allow SRS to discharge small quantities of radionuclides into site sanitary sewage. Modifications using NRC and SCDHEC guidelines were used. No changes in existing permits are needed. The Revised FONSI was issued this month. See article on page 2.

• **Evaluate an Alternate Approach for the Defense Waste Processing Facility (DWPF) Glass Waste Canister Storage Facility at SRS (DOE-EA-1327)**, The EA will analyze the 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 draft EA is expected first quarter, 2000.

• **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 first quarter, 2000.

• **SRS Spent Nuclear Fuel Management (DOE/EIS-0279)**, This EIS evaluates management strategies using existing, modified and new facilities or processes for spent nuclear fuel assigned to SRS. The final EIS is expected in first quarter, 2000.

• **DOE Waste Management (DOE/EIS-0200)**, This EIS recommends the types of wastes DOE sites would ship to other DOE sites for storage, treatment, and disposal. Transuranic, hazardous, and high level RODS have been issued. Low level and low-level mixed waste RODS are expected in February 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. This SEIS is on hold pending other decisions.

### DOE applies Plug-In ROD

## In Situ Stabilization approach to be used for K Reactor Seepage Basin

An Explanation of Significant Differences (ESD) is being issued by DOE, the lead agency for SRS, with concurrence by the EPA-Region IV and SCDHEC to document the decision that the K-Area Reactor Seepage Basin (KRSB) meets the criteria specified in the Plug-in ROD, and that the remedy selected in the Plug-in ROD is appropriate for the KRSB Operable Unit. The determination of how this unit meets the criteria is in the Technical Evaluation Report available in the Administrative Record File. The public comment period is scheduled for February 18, 2000 to March 18, 2000.

The KRSB is located in the south-central portion of the SRS in the K-Reactor Area. The OU is approximately 400 ft east of the K-Reactor. The KRSB was used from 1957 to 1969 to receive low-level radioactive wastewater from K-Area disassembly basin. The water was sent to the basin through an underground pipeline. The basin is approximately 135 ft by 70 ft with an average depth of 7 ft.

The Plug-in ROD selected In Situ Stabilization with a Low Permeability Soil Cover System as the remedy for basins that received radioactive water and met other specified criteria.

In situ stabilization uses grout to mix with the contaminated soils to form a solid mass. Although the ROD did not identify a specific waste unit for the remedial action, it did identify KRSB as a candidate for the plug-in remedy.

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 in which the remedy will be implemented. EPA, SCDHEC and DOE have determined that using an ESD to present the waste unit selected for implementation is key in communicating remedial decisions for the Plug-in ROD.

The 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. The National Oil and Hazardous Substances Pollution Contingency Plan requires the lead agency to provide an explanation of the differences and to make the information available to the public in the Administrative Record and information repository. This ESD is available for public review during normal business hours at the information repositories on page 1.

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Savannah River Site  
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## The SRS

### Environmental Bulletin

For more information on this or other environmental and compliance activities at SRS, please contact:

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[http://www.SRS.GOV/general/srenviro/  
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