



Environmental Bulletin

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from the Savannah River Site

Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (rser/ee/ca) is Available for the P-Area Ash Basin (Including Outfall P-007) (188-P) and the R-Area Ash Basin (188-R) Subunits

The U. S. Department of Energy (DOE) is proposing to perform a non-time critical removal for the P Area and R Area Ash Basins, subunits of the P Area Operable Unit (PAOU) the R Area Operable Unit (RAOU). Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) the Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) describes how the proposed removal action meets the criteria established in the National Oil and Hazardous Substances Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) 300.415. The purpose of this RSER/EE/CA is to identify the objectives of the removal action, and to develop alternatives that address the potential threats from release of contaminants to the environment from this subunit. This document will be available for public review and copying at the locations listed below. The public comment period is scheduled for January 27, 2010 to February 26, 2010.

The RSER/EE/CA was completed to meet the terms of CERCLA, a law governing the investigation and cleanup of waste units. The DOE has worked with the United States Environmental Protection Agency-Region 4 (USEPA) and the South Carolina Department of Health and Environmental Control (SCDHEC) to ensure the remedial approach is consistent with all applicable environmental requirements.

The PAOU is located about 2.5 miles east-southeast of the geographical center of the Savannah River Site (SRS) and about 4 miles west of the nearest site boundary. The RAOU is located about 2.5 miles northeast of the geographical center of the SRS and about 4.5 miles northwest of the nearest site boundary.

In both P-Area and R-Area, SRS utilized a coal-fired powerhouse to generate steam and electricity, with coal ash produced as a result of boiler operations. The ash generated from the P-Area Powerhouse and the R-Area Powerhouse was disposed within each respective ash basin. Due to the lack of operations and maintenance activities, both ash basins have been naturally re-vegetated and support a thriving, diverse ecology of grasses, shrubs, and trees. This vegetation will be removed as part of a maintenance action prior to the removal action that addresses the ash.

The scope of the removal action addresses the following subunits within PAOU and RAOU:

P-Area Ash Basin (PAB) (including Outfall P-007)
R-Area Ash Basin (RAB)

Coal related radioactive and hazardous contamination is present within the ash at elevations that exceed the cumulative carcinogenic risk. The purpose of the removal action is to prevent possible exposure to the ash within the subunits to the industrial worker and to prevent migration of contamination associated with ash along the surface water pathways.

Based on comparative analysis of the alternatives against effectiveness, implementation, and cost, the preferred alternatives have been selected based on the area of contamination. These alternatives meet the Removal Action Objectives, will not preclude any additional remediation of the PAOU or the RAOU, and are expected to be consistent with the final remedial actions proposed for the PAOU and the RAOU.

For the PAB (including Outfall P007), Alternative P-3, Cesium-137 Removal and Soil Cover, has been identified as the preferred action. Removing the cesium-137 (+D) contaminated-soil and ash at Outfall P-007 that exceed concentrations greater than 10 pCi/g provides overall protection to human health. The excavated contaminated soil exceeding the 10 pCi/g cesium-137 (+D) concentration will be disposed of at the SRS E-Area Low Level Waste Facility. The placement of a 2 foot thick soil cover over the remaining cesium-137 (+D) contamination at the Outfall P-007 and over the PAB protects the future industrial worker and prevents spread of contamination by rain or wind.

For the RAB, Alternative R-3, Soil Cover, has been identified as the preferred action for the RAB. The placement of a 2 foot thick soil cover over the ash will protect the future industrial worker from exposure to contaminated ash and prevents spread of contamination by rain or wind. Upon completion of the public comment period, an Action Memorandum with a Responsiveness Summary that addresses public comments will be prepared.

Copies of the RSER/EE/CA are available in the administrative record. The administrative record is available in the information repositories listed below:

- 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 RSER/EE/CA 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.

An electronic copy of the RSER/EE/CA is posted at the following address:
<http://www.srs.gov/general/programs/soil/pub/pubinv.html>

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