

The Savannah River Site Environmental Bulletin

April 10, 2018

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Removal Site Evaluation Report/Engineering Evaluation/Cost Analysis (RSER/EE/CA) for P-Area Groundwater Operable Unit Available for Public Comment

The U. S. Department of Energy (DOE) is proposing to perform a non-time critical removal action for the P-Area Groundwater Operable Unit (PAGW OU). 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, 40 Code of Federal Regulations 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 contaminants present at this operable unit. This document will be available for public review and copying at the locations listed below. The 30-day public comment period is scheduled for April 10, 2018 to May 10, 2018.

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

P-Area is located within the central portion of the Savannah River Site (SRS) ~4.0-km (2.5 mi) east-southeast of the geographical center of SRS and about 6.4 km (4 mi) west of the nearest site boundary. The PAGW OU encompasses the groundwater beneath P-Area, northwest to Steel Creek, northeast toward PAR Pond and SRS Road F, and southeast to Meyers Branch. PAGW was impacted by P Reactor complex operations between 1954 and 1991. PAGW OU includes volatile organic compound (VOC) groundwater plumes containing primarily Trichloroethylene (TCE) with minor quantities of tetrachloroethylene and a tritium groundwater plume. Tritium will be addressed in a separate, future decision and is not addressed as part of this removal action.

DOE, EPA, and SCDHEC have reviewed the risks associated with this unit and have determined that an early removal action is warranted to reduce the mass of TCE in the groundwater that is discharging to Steel Creek that exceeds regulatory limits. Three cleanup alternatives were evaluated based on effectiveness, ease of implementation, and cost. The preferred removal action for the PAGW is the installation of a subsurface Permeable Reactive Barrier (PRB) in the neck area of the TCE groundwater plumes. Permeable Reactive Barrier technology involves the installation of zero-valent iron in groundwater to passively treat the TCE plumes. The PRB will be installed in a narrow, well defined geological feature consisting of high permeable sediments through which the TCE contaminated groundwater is traveling. The PRB is designed to destroy the TCE flowing through it and thus ultimately reduce the TCE levels in Steel Creek to below regulatory levels. This alternative is expected to be consistent with the final remedial action.

Upon completion of the public comment period, an Action Memorandum with a Responsiveness Summary that addresses public comments will be prepared.

For additional information, contact: Janet Griffin, Savannah River Nuclear Solutions, LLC, Savannah River Site, 730-1B, Aiken, SC 29808

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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 Government Information Section at Augusta 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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For additional information about the five-year remedy review process at SRS, please contact:

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