

The Savannah River Site Environmental Bulletin

November 5, 2019

Volume 31, Number 9

Notice of Public Availability **Sixth Five-Year Remedy Review Report for Savannah River Site** **Operable Units with Native Soil Covers and/or Land Use Controls**

The Sixth Five-Year Remedy Review Report is being conducted in five phases for operable units (OUs) with similar remedies. The OUs are grouped by the following remedy types: (1) native soil covers and/or land use controls (LUCs), (2) groundwater, (3) engineered cover systems, (4) geosynthetic or stabilization/solidification cover systems, and (5) operating equipment. The public is notified when each phase of the remedy review is conducted and when the phase is complete. The review for the first phase of OUs with native soil covers and/or LUCs remedy is complete and is being made available to the public.

The Comprehensive Environmental Response, Compensation, and Liability Act requires that remedial actions that result in hazardous substances, pollutants, or contaminants remaining at an OU at levels unsuitable for unrestricted land use be subject to a five-year remedy review. The *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls* evaluated the remedial actions that have been selected at the SRS OUs through issued Records of Decision (RODs), Interim RODs, ROD Amendments, or Explanations of Significant Differences to determine whether the selected remedies remain protective of human health and the environment. The *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls* is complete and is being issued by the U.S. Department of Energy, the lead agency for the Savannah River Site (SRS), with concurrence by the U.S. Environmental Protection Agency – Region 4, and South Carolina Department of Health and Environmental Control.

The five-year remedy review addressed three major questions:

- Are the remedies functioning as intended by the decision document?
- Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?
- Has any other information emerged that could call into question the protectiveness of the remedy?

The report reviews the remedy decisions for SRS OUs that selected native soil covers and/or LUCs as the final remedy to address soil contamination.

The SRS Environmental Bulletin

Native soil covers are often implemented at SRS to protect against human and/or ecosystem exposure to waste or contaminated material left in place. Native soil covers are appropriate when water infiltration and leaching of contaminants to groundwater is not a concern. A typical soil cover is 12 inches to 24 inches thick and is usually vegetated to minimize erosion. Native soil covers are usually low in cost and construction materials are readily available from SRS local sources. Native soil covers may be combined with other remedial actions but require LUCs as a component of the remedy. For the SRS OUs discussed in this report, native soil covers were already in place prior to selection of the remedial action, and only LUCs were required as the final remedial action.

LUCs are maintained for all OUs where hazardous substances, pollutants, or contaminants remain on-site or have been left in place above levels that are acceptable for unlimited use and unrestricted exposure. LUCs may be implemented as a stand-alone remedy or combined with other remedial actions. LUCs involve institutional controls (i.e., administrative controls) and engineering controls and can include monitoring, maintenance, reporting, access restrictions, signage, fencing, and land use restrictions.

The Sixth Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs includes a review of the following OUs and their respective remedies:

- C-Area Operable Unit
- C-, K-, and L-Reactor Complexes
- Early Construction and Operational Disposal Site L-1, N-2, P-2, and R-1A, -1B, -1C
- F-Area Burning/Rubble Pits (231-F, 231-1F, and 231-2F)
- Gunsite 012
- Heavy Equipment Wash Basin (NBN)
- K-Area Bingham Pump Outage Pit (643-1G)
- L-Area and P-Area Bingham Pump Outage Pits (643-2G, 643-3G, and 643-4G)
- PAR Pond (685-G) (Including the Pre-Cooler Ponds and Canals) and Lower Three Runs Integrator Operable Unit Tail Portion (Middle and Lower Subunits)
- R-Area Bingham Pump Outage Pits (643-8G, 643-9G and 643-10G) and R-Area Unknown Pits #1, #2, and #3
- Silverton Road Waste Unit (731-3A)

The exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of remedy selection are still valid for all of the remedial actions evaluated. No new information has come to light that calls into question the protectiveness of any of the selected remedies. The remedies were determined to be protective of human health and the environment. However, the in-situ decommissioning with LUCs remedy for the C-, K-, and L-Reactor Complexes was determined to be protective in the short term by implementing LUCs to prevent exposure. In order to be protective in the long-term, the remainder of the remedy to implement in-situ decommissioning for the C-, K-, and L-Reactor Complexes must be completed.

The SRS Environmental Bulletin

There were no issues or recommendations based on the *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls*.

To aid in the review of the report, a *Savannah River Site Fact Sheet for Sixth Five-Year Remedy Review Report for SRS Operable Units with Native Soil Covers and/or Land Use Controls* was also developed.

Copies of the *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls* and Fact Sheet 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 (USC)-Aiken campus in Aiken, SC; and
- Thomas Cooper Library Government Information and Maps Department at USC in Columbia, SC

Hard copies of the *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls* and the Fact Sheet are available at the following locations:

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

An electronic copy of the *Sixth Five-Year Remedy Review Report for Savannah River Site Operable Units with Native Soil Covers and/or Land Use Controls* can be found at the following website:

- <http://www.srs.gov/general/programs/soil/rod/rod.html>

An electronic copy of the Fact Sheet can be found at the following website:

- <http://www.srs.gov/general/programs/soil/pub/pubinv.html>

The SRS Environmental Bulletin

For additional information contact:

Janet Griffin
Savannah River Nuclear Solutions
Aiken, S.C. 29808
(803) 952-8467
email: janet.griffin@srs.gov

Mailing List Information

Add to mail list Correct my address Remove from mail list

Name _____

Mailing Address _____

E-mail Address _____

Mail to: SRS Environmental Bulletin
Savannah River Site, Building 730-1B
Aiken, SC 29808

Save a stamp! E-mail your changes to janet.griffin@srs.gov



The SRS Environmental Bulletin

Savannah River Site
Building 730-1B
Aiken, S.C. 29808