

The Savannah River Site Environmental Bulletin

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

The Seventh Five-Year Remedy Review Report is being conducted in five phases for Savannah River Site (SRS) 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 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, commonly known as CERCLA, 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 Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs 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 Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs is complete and is being issued by the U.S. Department of Energy-Savannah River Operations Office, the lead agency for the SRS, with concurrence by the U.S. Environmental Protection Agency – Region 4, and South Carolina Department of Environmental Services.

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.

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 and 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.

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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 Seventh 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 OU
- 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 OU (no building number [NBN]) (comprised of Gunsite 012 Rubble Pile [NBN], Rubble Pile Across from Gunsite 012 [NBN], and ECODS G-3 [adjacent to Gunsite 012] [NBN])
- 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)
- Lower Three Runs Integrator OU (comprised of PAR Pond [685-G] [Including the Pre-Cooler Ponds and Canals] and Old R-Area Discharge Canal [also known as Joyce Branch] [NBN])
- 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)
- Wetland Area at Dunbarton Bay in Support of Steel Creek Integrator Operable Unit

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. All remedies were determined to be protective of human health and the environment. However, the in-situ decommissioning (ISD) with LUCs remedy for the C-, K-, and L-Reactor Complexes will be protective of human health and the environment upon completion. The ISD portion of the remedy will be implemented upon closure of the C-, K-, and L-Reactor Complexes. In the interim, exposure pathways that could result in unacceptable risks are adequately addressed by the LUCs that are in place.

There were no issues or recommendations based on the Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs.

To aid in the review of the report, a Savannah River Site Fact Sheet for Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs was also developed.

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Copies of the Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs and associated 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 Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs 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 Seventh Five-Year Remedy Review Report for SRS OUs with Native Soil Covers and/or LUCs 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>

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