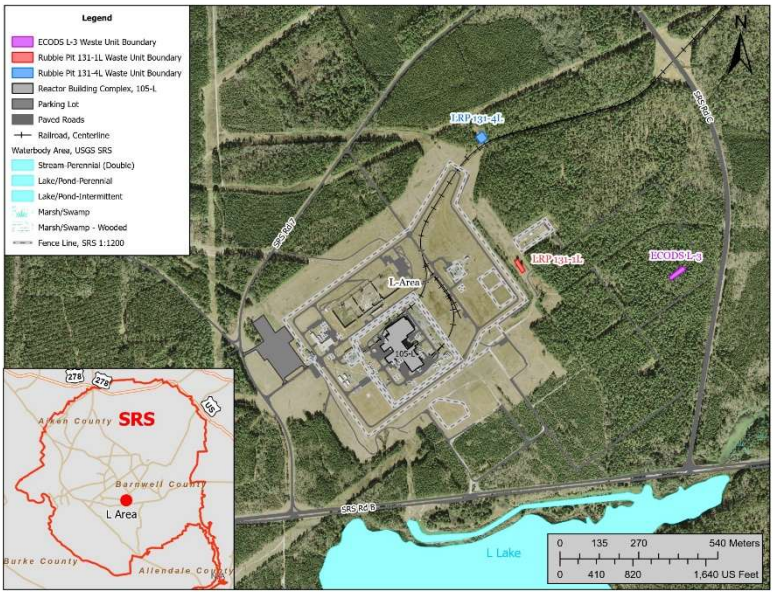
Savannah River NUCLEAR SOLUTIONS℠

United States Department of Energy Statement of Basis/Proposed Plan Fact Sheet for the ECODS L-3, L-Area Rubble Pit (131-1L), L-Area Rubble Pit (131-4L) OU, SEMS Number: 91

SRNS-RP-2025-00790

Savannah River Site, South Carolina **October~~June~~ 2025**

INTRODUCTION



This fact sheet summarizes the Statement of Basis/Proposed Plan (SB/PP) for the Early Construction and Operational Disposal Site (ECODS) L-3 (no building number [NBN]), L-Area Rubble Pit (131-1L) (LRP 131-1L), and L-Area Rubble Pit (131-4L) (LRP 131-4L) Operable Unit (OU) located at the Savannah River Site (SRS). The United States Department of Energy (USDOE) owns and operates the SRS. Hazardous substances that are regulated under the federal law requirements of the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) are managed at the SRS as part of a comprehensive cleanup program.

A remedial action is needed at the ECODS L-3, and LRP 131-1L, and LRP 131-4L OU because asbestos containing material (ACM) is likely present in the soil at the ECODS L-3 and LRP 131-4L subunits, polychlorinated biphenyls (PCBs) are present in the surface soil at the ECODS L-3 subunit, and benzo(a)pyrene is present in the surface soil at the LRP 131-4L subunit that may pose a threat to human health and the environment. A remedial action is not needed at the LRP 131-1L subunit because there are no contaminants present at the subunit that may pose a threat to human health or the environment. The SB/PP for the ECODS L-3, LRP 131-1L and LRP 131-4L OU outlines the range of remedial alternatives evaluated and presents the proposed remedy. The document describes how the public can comment on the proposed action through written comments and by participating in public meetings.

ECODS L-3, LRP 131-1L and LRP 131-4L OU BACKGROUND

ECODS L-3 Subunit

The ECODS L-3 subunit is one of twenty-five ECODS at SRS which were identified during a review of early 1950s aerial photographs. These sites were used during the construction and early

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operation of SRS for disposal of construction debris and other non-radioactive waste materials, such as rubble and concrete.

The ECODS L-3 subunit is located in the southern portion of the SRS, east of L Area. The subunit is approximately 6.0 miles (mi) north of the nearest SRS boundary and is within the Steel Creek Watershed. The ECODS L-3 subunit is located approximately 1,700 feet (ft) east of the eastern corner of the L Area perimeter fence.

The ECODS L-3 subunit was used to dispose of trash and construction debris, such as rubble and concrete, and is estimated to have been in use from November 1953 to June 1954. Based on a site evaluation (SE) of the subunit completed in 2002, it was estimated that waste disposed of in the ECODS L-3 subunit was buried in two trenches, approximately (~)50 ft wide by 90 ft long, located end-to-end. Sections of the trenches may have been used as a burn pit for disposal of combustible waste.

The 2002 SE characterization data was of sufficient quality and quantity to conduct a baseline risk assessment (BRA) and contaminant migration (CM) evaluation to support remedial decision-making. The evaluation determined that there was no threat to human health (industrial worker) ecological receptors, no threat of migration of contaminants to groundwater, and no presence of principal threat source material (PTSM) were identified for this subunit. PCBs (specifically, Aroclor 1254 and Aroclor 1260) are present in the surface soil that pose a human health risk (i.e., hypothetical resident receptor) greater than 1.0E-06[1] and a hazard quotient (HQ)[2]. PCBs are also present in the surface soil that exceed the Toxic Substances and Control Act (TSCA) applicable or relevant and appropriate requirement (ARAR) threshold of 1 mg/kg for high occupancy (i.e., unrestricted land use).

An asbestos survey was not completed for the ECODS L-3 subunit during the 2002 SE. Based on the disposal history of similar SRS ECODS and the dates of operation of the ECODS L-3 subunit, ACM may be present in soils that may pose a risk to human receptors if disturbed.

L-Area Rubble Pit (131-1L)

The LRP 131-1L subunit is a former waste disposal area reportedly used for various construction debris and operated from 1973 to 1982. The LRP 131-1L subunit is located to the east of L Area, approximately 150 ft outside of the L Area perimeter fence. The subunit is a rectangular area

[1] A risk greater than or equal to 1.0E-06 indicates a probability of 1 chance in 1,000,000 of an individual developing cancer.
[2] A hazard quotient (HQ) greater than or equal to 1 indicates that an individual could experience adverse health effects from exposure to the contaminant.

approximately 40 ft by 150 ft. SRS records indicate that metal, lumber, poles, concrete, brick, tile, asphalt, tires, rubber, scrap metal, fence posts, hard plastics, wallboard, asbestos, glass, batteries, paint cans, drums and transite were typically disposed of at SRS construction debris sites such as the LRP 131-1L subunit. There is no record of hazardous or radioactive material disposed of at the subunit.

A preliminary screening was performed at the LRP 131-1L subunit in 1991 which included a soil-gas survey to determine if hazardous waste may be present in the subsurface soils and to identify potential areas of contamination within the subunit. A total of ten soil-gas samples were collected and analyzed for volatile organic compounds (VOCs) and chlorinated VOCs. The survey results determined that VOCs from methane through hexane are likely to be present in the subunit soils. The LRP 131-1L soils were fully characterized in 2022 to support a BRA and CM evaluation and to support remedial decision-making. It was determined that the term "pit" may be a misnomer as construction debris was encountered at only one (1) soil boring in the 0.3 to 1.2 m (1 to 4 ft) interval and appeared to be a railroad tie or other creosote wooden material. No potential asbestos containing material was observed in any soil borings. ~~no waste material was placed below ground surface.~~ The conclusion of the BRA and CM evaluation confirmed that there are no contaminants present at the LRP 131-1L subunit that pose a threat to human health or the environment at the LRP 131-1L.

L-Area Rubble Pit (131-4L)

The LRP 131-4L subunit is located north of the L Area perimeter fence and east of Road 7. Records indicate the LRP 131-4L subunit received inert rubble from the L-Area Powerhouse Stack and Silo demolition. The rubble consisted primarily of concrete and asphalt material with some metal. The unlined pit was reported to have operated from 1973 to 1983 before it was filled and seeded in 1983. Operating procedures indicate it was to receive inert, non-hazardous materials, and there are no records indicating any disposal of hazardous or radioactive materials.

The LRP 131-4L subunit boundaries encompass an area ~100 ft by 100 ft. During site walkdowns to support a 1994 SE effort, the subunit size was questioned due to land disturbance on the northwestern side of the subunit, outside of the waste unit orange ball markers. Additionally, during site walkdowns in 2021, surface disturbance and debris (e.g., rebar, concrete, asphalt) were observed on the northeastern side of the LRP 131-4L subunit outside of the orange ball markers. Therefore, the area of LRP 131-4L subunit that was investigated was expanded to ~120 ft by 120 ft to include the disturbed land and observed debris.

The LRP 131-4L subunit was characterized from 1992 to 1994 under the SE program, and another characterization effort was conducted in 2022 to conduct a BRA and CM evaluation to support

remedial decision-making. No threat to human health (industrial worker) or ecological receptors, no threat of migration of contaminants to groundwater, or the presence of PTSM were identified for this subunit. Benzo(a)pyrene is present in the surface soil that poses a risk greater than 1.0E-06[3] for human health (hypothetical resident receptor).

Presumed ACM was identified during the 2022 characterization efforts and is consistent with expected building materials and the time period that the LRP 131-4L subunit was in operation. Therefore, ACM is present in unit soils that may pose a risk to human receptors if exposed.

CLEANUP GOALS

Contaminants are not present at the LRP 131-1L subunit that pose a threat to human health or the environment, and the preferred remedial action for this subunit is No Action. The future land use for the LRP 131-1L subunit will be unrestricted. Contaminants are present at the ECODS L-3 and LRP 131-4L subunits at levels that are not suitable for unrestricted use. Cleanup goals for the ECODS L-3 and LRP 131-4L subunits include the following:

ECODS L-3

- Prevent exposure of human receptors to presumed ACM that is likely present in soils.
- Prevent exposure of a future resident to Aroclor 1254 and Aroclor 1260 in surface soils at levels exceeding 1.0E-06 risk and HQ of 1.
- Prevent exposure of human receptors to Aroclor 1254 and Aroclor 1260 in surface soils at levels exceeding TSCA ARAR threshold of 1 mg/kg.

L-Area Rubble Pit (131-4L)

- Prevent exposure of human receptors to presumed ACM that is likely present in soils.
- Prevent exposure of a future resident to benzo(a)pyrene in surface soils at levels exceeding 1.0E-06 risk.

[3] A risk greater than or equal to 1.0E-06 indicates a probability of 1 chance in 1,000,000 of an individual developing cancer.

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PROPOSED REMEDY

Land Use Controls (LUCs) is the preferred alternative for the ECODS L-3 and LRP 131-4L subunits. LUCs include engineering controls (signs indicating access restrictions and the presence of ACM) and administrative measures (deed restrictions, excavation permit restrictions, and worker protection programs) to effectively reduce exposure of contaminated media to human receptors. This alternative does not support unrestricted land use and would require five-year remedy reviews.

No Action is the preferred alternative for LRP 131-1L subunit because there are no contaminants present that pose a threat to human health or the environment. The future land use for this subunit will be unrestricted.

The United States Environmental Protection Agency and the South Carolina Department of Environmental Services concur with the proposed remedies for the ECODS L-3, LRP 131-1L, and the LRP 131-4L OU.

FOR MORE INFORMATION

The Administrative Record File, which contains the information pertaining to the selection of the response action, is available at the following locations:

US Department of Energy
Public Reading Room
Gregg-Graniteville Library
University of South Carolina – Aiken
471 University Parkway
Aiken, South Carolina 29801
(803) 641-3465

Thomas Cooper Library
Government Information and Maps Department
University of South Carolina
1322 Greene Street
Columbia, South Carolina 29208
(803) 777-4841

The Administrative Record File is available electronically at the following address:
http://www.srs.gov/general/programs/soil/arf/arfirf.html

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Hard copies of the Statement of Basis/Proposed Plan for the ECODS L-3, LRP 131-1L, and LRP 131-4L OU are available at the following locations:

Reese Library
Government Information Department
Augusta University
2500 Walton Way
Augusta, Georgia 30904
(706) 737-1744

Asa H. Gordon Library
Savannah State University
2200 Tompkins Road
Savannah, Georgia 31404
(912) 358-4324

HOW TO SUBMIT COMMENTS

SB/PP for ECODS L-3, LRP 131-1L and LRP 131-4L OU begins [date] and ends [date]. To request a public meeting during the public comment period, to obtain more information concerning this document, or to submit written comments, contact one of the following:

Barbara Smoak
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Savannah River Site
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(803) 952-8060
barbara.smoak@srs.gov

The South Carolina Department of Environmental Services
Attn: Mr. Kent Krieg, Director
Division of Waste Management
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201
(803) 898-0255