

Savannah River Site

2026 ALARA Document (U)

Approved by:

M&O Senior Executive – Site ALARA Committee Chairperson

LWO Senior Executive

Prepared by:

Site ALARA Coordinator

Executive Summary

Beginning in fiscal year 2025, Department of Energy (DOE) transitioned landlord responsibilities of Savannah River Site (SRS) from the Office of Environmental Management (EM) to the National Nuclear Security Administration (NNSA).

To support current and future NNSA missions, the decision was made for Savannah River Nuclear Solutions (SRNS) and Savannah River Mission Completion (SRMC) employees to have an Administrative Control Level (ACL) of 2 rem (2000 mrem) for Calendar Year (CY) 2026. This is equal to the DOE ACL of 2 rem, but still significantly lower than the federal occupational dose limit of 5 rem (5000 mrem). Battelle Savannah River Alliance (BSRA) and Centerra-SRS will continue with a 500 mrem ACL for their employees in CY 2026. DOE and NNSA personnel will continue with a 150 mrem ACL in CY 2026.

The exposure goals, also known as ALARA goals, at SRS for CY 2026 were established by the appropriate radiological facilities and their support groups based on the anticipated work for the year. These goals were presented to the Site ALARA Committee (SAC) and the Environmental Safety and Quality Board (ESQB) for approval by appointed voting members.

The annual base routine operations cumulative exposure goal for CY 2026 has been established at 88.520 rem, with an additional exposure goal of 122.284 rem allocated for special work operations. This brings the total exposure goal for CY 2026 to 210.804 rem. This figure represents an approximate 4.3% increase compared to the final exposure goal for CY 2025, which was 202.153 rem. The increase is largely attributed to the anticipated expansion in work scope for Savannah River Mission Completion (SRMC).

The goal for intakes of radioactive material resulting in an exposure greater than 500 mrem Committed Effective Dose (CED) from a single event continues to be zero.

Radiological Performance Goals

Cumulative Radiation Exposure is based on total effective dose exposures (including tritium) resulting from Base Routine Operations and Special Work Operations.

- *Base Routine Operations* are normal activities related to facility operation and maintenance.
- *Special Work Operations* are not part of routine operations and typically are of limited, non-repetitive duration. Special Work Operations goals are reviewed quarterly by the facilities and goals may be adjusted as approved by the company's executive committee.

Administrative Control Levels are established to maintain personnel radiation exposure below federal limits while supporting organizational goals.

Personnel Contamination Events are established for skin and personnel effects contamination that are reportable in accordance with the criteria contained in DOE O 232.2A, “Occurrence Reporting and Processing of Operations Information.” These reporting criteria are available in the site’s SIRIM/ORPS information system.

Confirmed Intakes Resulting in Committed Effective Dose (CED) are established for a single intake of radioactive material that exceeds the anticipated exposure of 500 mrem or greater. This criterion is based on DOE O 232.2A, “Occurrence Reporting and Processing of Operations Information.” The reporting criterion is available in the site’s SIRIM/ORPS information system.

Business Unit	Base Routine (rem)	Special Work (rem)	Total Cumulative Exposure Goal (rem)
H-Area Material Disposition H-Canyon/ H-Outside Facilities/ H B-Line	4.500	0	4.500
Nuclear Materials Storage Project K-Area L-Area	13 0.920	17 0.640	30 1.560
Solid Waste Management (SWM)	3.200	0	3.200
Infrastructure (INF)/ Soil and Ground Water (SGP)	3.200	0	3.200
F-Area Operations	1	0	1
Tritium Projects	2	1.472	3.472
<u>SRNS Total</u>	27.820	19.112	46.932
Waste Treatment Defense Waste Processing Facility (DWPF)	16	11.200	27.200
Tank Farms H-Tank Farm/ 299-H/ F-Tank Farm	22.800	32.320	55.120
Salt Waste Processing Facility (SWPF)	2	57.420	59.420
End Stream Delivery (ESD) Effluent Treatment Facility (ETF)/ Saltstone	2	0.900	2.900
<u>SRMC Total</u>	42.800	101.840	144.640
<u>BSRA Total</u>	16.400	1.332	17.732
<u>Centerra-SRS Total</u>	1.500	0	1.500
<u>Site Total</u>	88.520	122.284	210.804