SRS Maps

• Site
• Sampling Locations
• Doses
• Groundwater

Savannah River Site Environmental Report for 2010
Figure 1 The Savannah River Site
SRS is located in South Carolina, about 12 miles south of Aiken, South Carolina, and about 15 miles southeast of Augusta, Georgia. The Savannah River flows along a portion of the site’s southwestern border.
Figure 2  Radiological Surface Water Sampling Locations
Surveillance and effluent sampling points are near SRS facilities, on site streams, and on the Savannah River.
Figure 3   NPDES Sampling Locations
Twenty-eight industrial wastewater outfalls were regulated at SRS in 2010 under NPDES Permits SC0000175 and SC0047431. Of the 28 outfalls, one (002) appears in Permit SC0047431 but has never existed—and thus is not included on the map.
Figure 4 NPDES Stormwater Outfall Locations

Forty-one industrial stormwater outfalls were regulated at SRS during 2010 under Permit SCR000000, the NPDES General Permit for Stormwater Discharges Associated with Industrial Activity (except construction activity). In September, stormwater outfalls N-01, N-02, N-2A, and N-03 were removed, and a new N-02 outfall was added.
Figure 5. Radiological Air Surveillance Sampling Locations

The SRS air surveillance program consists of 111 stations located on site or along the site perimeter, as well as three stations approximately 25 miles from the site perimeter (located near the Savannah River; near the New Savannah Bluff Lock and Dam, also known as the Augusta Lock and Dam; and at the Aiken airport) and one about 100 miles from the site perimeter (near Savannah, Georgia).
Figure 6  SRS Thermoluminescent Dosimeter (TLD) Sampling Locations

Ambient gamma radiation exposure is measured at SRS at the following locations: Plant Vogtle vicinity, population centers, air surveillance stations, and site perimeter stations.
SRS collects fish (for both radiological and nonradiological analyses) from the Savannah River above, adjacent to, and below the site, as well as at Stokes Bluff Landing and near Savannah, Georgia.
Figure 8 Radiological Soil Sampling Locations
SRS collected soil samples in 2010 from five onsite locations, 12 site perimeter locations, and four offsite locations.
Figure 9  Radiological Sediment Sampling Locations
Sediment samples were collected in 2010 at eight Savannah River locations—upriver of, adjacent to, and
downriver of the site—and 19 onsite locations.
Figure 10  Radiological Vegetation Sampling Locations
Vegetation samples were collected for radiological analysis in 2010 from 13 locations on site or along the site perimeter, and from four offsite locations.
Figure 11  Swamp Contamination
Radioactivity released from SRS operations contaminated the Savannah River Swamp between Steel Creek and Little Hell Landing—an area outside the SRS boundary—during the 1960s. Approximately 25 Ci of cesium-137 and 1 Ci of cobalt-60 were released from the P-Area storage basin to Steel Creek—L-Lake did not exist at the time of the release—and migrated downstream to a part of the swamp.
Figure 12 Savannah River Swamp Sampling Trails
Ten sampling trails were established in the Savannah River Swamp in 1974 so that surveys could be conducted on the movement of contamination from SRS operations.
Figure 13  Nonradiological Surface Water Sampling Locations
Surface water samples are collected from five Savannah River and 11 SRS stream locations and are analyzed for various chemical and physical properties.
Most of the drinking water at SRS is supplied by three "large" systems, which require regulatory oversight and thus are sampled on a regular basis. The site also has 14 "small" domestic water facilities, which serve populations of fewer than 25 persons, but only seven of the smaller systems (as shown on the map) require regulatory oversight and must be sampled. The three larger systems have transmission pipes, elevated storage tanks, water treatment plants, and a backup water treatment plant.
Figure 15  Nonradiological Sediment Sampling Locations
Sediment samples are collected at eight onsite stream locations and three Savannah River locations. The samples are analyzed for various inorganic contaminants (metals) and pesticides/herbicides.
Figure 16  Sector-Specific Adult Maximally Exposed Individual Air Pathway Doses (in mrem) for 2010
Maximally exposed individual (MEI) site boundary doses from airborne releases are shown for each of the 16 major compass point directions surrounding SRS. In 2010, the due north sector had the highest MEI dose (0.05 mrem).
Figure 17  Wind Rose for SRS, 2002–2006
This wind rose graphically depicts the percent of occurrence frequencies of six wind speed categories by 16 cardinal wind direction sectors at SRS. The wind speed categories are defined on the plot; direction is defined as the sector from which the wind blows. The data used to generate the wind rose consist of hourly averages of wind speed and direction at the H-Area meteorological tower for the 5-year period 2002–2006; measurements were taken 200 feet above the ground.
Figure 18  Facilities Monitored by the SRS Monitoring Well Network; Shaded Areas Indicate Extent of Groundwater Contamination.
Figure 19  Water Table Contours at SRS
Figure 20  Potentiometric Surface of the Gordon Aquifer at SRS
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Figure 23  Wells Along Site Boundary Between A-Area/M-Area and Jackson, South Carolina (Nearest Population Center)
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Figure 29 Recovery Well Zone of Capture and Trichloroethylene Contour Map of the Composite Lost Lake Aquifer Zone at the M-Area and Wet Labs HHMPs, Renoud Hall 2010
Figure 32  Tritium Concentrations and Potentiometric Surface in the Upper Aquifer Zone of the Upper Three Runs Aquifer at the GSA, Third Quarter 2010
Figure 33  Tritium Concentrations and Potentiometric Surface in the Lower Aquifer Zone of the Upper Three Runs Aquifer at the GSA, Third Quarter 2010