NPL Site Narrative for Savannah River Site (USDOE)

SAVANNAH RIVER SITE (USDOE)
Aiken, South Carolina

Conditions at proposal (July 14, 1989): The Savannah River Site (SRS), formerly known as the Savannah River Plant, has produced nuclear materials for national defense on a 192,000-acre site near Aiken in Aiken, Allendale, and Barnwell Counties, South Carolina, since 1951. First operated by the Atomic Energy Commission, it is now operated by the U.S. Department of Energy (USDOE). The area around SRS is heavily wooded and ranges from dry hilltops to swampland.

SRS operations generate a variety of radioactive, nonradioactive, and mixed (radioactive and nonradioactive) hazardous wastes. Past and present disposal practices include seepage basins for liquids, pits and piles for solids, and landfills for low-level radioactive wastes.

According to a 1987 USDOE report, shallow ground water on various parts of the site has been contaminated with volatile organic compounds (degreasing solvents), heavy metals (lead, chromium, mercury, and cadmium), radionuclides (tritium, uranium, fission products, and plutonium), and other miscellaneous chemicals (e.g., nitrates).

Contamination has been found in the A-Area Burning/Rubble Pit, where degreasers and solvents were deposited during 1951-73. In 1985, trichloroethylene (TCE) was detected in nearby monitoring wells. Soil in the A-Area Miscellaneous Chemical Basin, which reportedly received drums of waste solvents, also contains TCE. The 3,200 residents of Jackson, South Carolina, receive drinking water from wells within 3 miles of hazardous substances on SRS.

A small quantity of depleted uranium was released in January 1984 into Upper Three Runs Creek, according to USDOE. The creek and all other surface water from SRS flow into the Savannah River, which is a major navigable river and forms the southern border between South Carolina and Georgia. Along the banks of the river is a 10,000-acre wetland known as the Savannah River Swamp. A March 1987 USDOE report indicates the swamp is contaminated with chromium, mercury, radium, thorium, and uranium, which overflowed from an old seepage basin.

USDOE is investigating SRS under its Comprehensive Environmental Assessment and Response Program. Under the program, USDOE is developing plans for studying several contaminated areas. Also, USDOE will close some areas on SRS and conduct postclosure monitoring under a permit issued under Subtitle C of the Resource Conservation and Recovery Act. RCRA facility investigations are also being conducted under the corrective action requirements of the RCRA permit.

Status (November 21, 1989): USDOE investigations continue.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be

found on the Internet at ATSDR - ToxFAQs (http://www.atsdr.cdc.gov/toxfaqs/index.asp) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.