Waste Generation and Pollution Prevention Progress

Fact Sheet

Savannah River Site

Savannah River Site - 1994

Location: Aiken,
South Carolina
Site Size: 198,334 Acres
Operations Office: Savannah River
Lead Program Office: Defense Programs
DOE Employees: 592
Prime Contractor Employees: 14,727

DOE/EM--97001361

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Facility Mission

The mission of the Savannah River Site is evolving as emphasis shifts from nuclear material production to environmental management. The Savannah River Site remains a major defense installation, and continues to process and purify tritium, and perform plutonium separation.

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MASTER

Routine Waste Generation and Projected Reduction by Waste Type

* 1999 reflects the application of DOE goals to the 1993 baseline.

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1994 Pollution Prevention and Recycling Accomplishments

- The Savannah River Site implemented innovative practices that resulted in the disposal avoidance of 3,220 cubic meters of low-level waste, exceeding the 1994 goal by over 70 percent.
- Waste minimization initiatives and the use of nonhazardous chemicals enabled the Savannah River Site to avoid 40,370 kilograms of hazardous waste and 7,060 kilograms of low-level mixed waste.
- Approximately \$13.3 million in life cycle waste costs were avoided due to a 31 percent reduction (9,700 cubic meters) in solid waste generation and disposal volumes.
- Traditional field constructed containments were replaced by prefabricated radiological containment systems, eliminating more than 400 cubic meters of low-level radioactive waste.
- Mercury Spring pumps and Sargent-Welch duo-seal vacuum pumps were replaced in the Tritium Facility, eliminating the generation of tritium-contaminated mercury and oil waste streams.
- A radiological control program to reduce the size of the Contamination Areas and Radiological Buffer Areas eliminated 620 cubic meters of low-level waste, contributing to the Savannah River Site's achievement of a 42 percent reduction in low-level waste.
- The fuel/target assembly area of a shutdown reactor building was designated as a sorting and staging area for decontamination of low-level contaminated material and equipment for reuse, saving approximately \$20 million.
- Catalytic oxidation systems were installed on vadose system air strippers, reducing volatile organic solvents released to the air by more than 60,000 pounds.

Materials Recycled by the Savannah River Site in 1994

Recycled Material	Savannah River Site (in Metric Tons)	DOE Complex (in Metric Tons)
Automotive	94	1,420
Metals	1,854	21,797
Paper	910	14,486
Other Materials*	15	18,574
GRAND TOTAL	2,873	56,277

* Other materials may include toner cartridges, food/garden waste, plastic, styrofoam, glass, concrete, wood, fluorescent light tubes, coolant, filters, solvents, photographic materials, ground circuit boards, chemicals, small animal exposure tubes, paint, adhesives, brick, non-process wastewater, furniture/office equipment, fly ash, and high explosives.

The Waste Generation and Pollution Prevention Progress Fact Sheet is published by the Office of Pollution Prevention, Office of Environmental Management, EM-77. Additional information on the Pollution Prevention Program at the Savannah River Site may be obtained by contacting:

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