Fact Sheets

SRS

Central Shops Burning/Rubble Pits (631-1G & 631-3G/3GA)

Background

The Central Shops Burning/Rubble Pits, 631-1G and 631-3G/3GA, are located approximately 1,000 feet north of the Central Shops Area in the central part of the Savannah River Site (SRS). The pits were separate disposal areas grouped together as one waste site because of their close proximity and functional similarity. These pits received hazardous and non-hazardous waste materials beginning in the early 1950s through the mid-1980s.

Waste disposal activities in Pit 631-1G are estimated to have begun in 1951. This pit has dimensions of 260-feet long by 30-feet wide with debris ranging 2 to 9-feet below land surface averaging 4 feet in thickness. The debris was covered with a clay fill varying in thickness from 2 to 4-feet and overlain with a 1-foot thick topsoil.

Combustible wastes were also deposited in Pit 631-1G. These wastes were thought to be oils, rags, paper, cardboard, plastics, degreasers, wood, rubber, and drummed organic solvents. In 1973, periodic burning of these wastes ceased and a layer of soil placed over the ashes. The pit then received inert rubble such as paper, cans, lumber, and galvanized steel barrels until its closure in 1985.

Pit 631-3G began receiving wastes after 1975. The pit has dimensions of 400-feet long by 50-feet wide with debris ranging 8 to 27 feet below land surface. The debris was covered with a clay soil varying in thickness from 7 to 10 feet and creating a mounded profile.

The pit was used for the disposal of dry inert rubble thought to be asbestos, paint cans, fluorescent light fixtures, paper, cans, lumber, barrels, metal pipes and shavings, and electrical switchgear. Dumping ceased in 1983, and burning operations are not known to have occurred at this pit.

During Phase II characterization activities, it was revealed that Pit 631-3G is divided into two separate pits, designated as 631-3G and a southern Pit 631-3GA. A trench was installed across Pit 631-3GA revealing unburned materials such as concrete slabs, transite, and metal objects.

Boreholes were drilled in Pit 631-3GA indicating the depth of the debris to be at least 15 feet below land surface with the top of the debris ranging from 3.5 to 8 feet below land surface. The debris is overlain with a clay fill.

Environmental Concerns

The results of the soil characterizations revealed there are no principal threat source materials and no ecological constituents of concern (COC). One human health COC {benzo(a)pyrene} was observed in the Pit 631-1G subsurface soil and five human health COCs {benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene} observed in the Pit 631-3G subsurface soil. These COCs are determined to be low risk for the industrial worker and industrial land use classification. Results of the groundwater characterizations revealed no contamination exists in the groundwater.

Environmental Actions and Plans

In 1996, SRS performed an accelerated site characterization to determine unit-specific constituents. Characterization activities included soil, groundwater, and surface water sampling and analysis, as well as trenching and well installation. In 1997, SRS submitted a RCRA Facility Investigation and Remedial Investigation (RFI/RI) Work Plan to the U.S. Environmental Protection Agency (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC); both regulatory agencies approved the Work Plan.

A RFI/RI and Baseline Risk Assessment was approved by the EPA and SCDHEC in June 2001. A strategy was developed to delete the Corrective Measures Study/Feasibility Study (CMS/FS) and develop the Statement of Basis/Proposed Plan (SB/PP). This strategy was based on the findings in the RFI/RI and Baseline Risk Assessment investigation and decisions made by the Department of Energy (DOE), USEPA, and SCDHEC at the June 7, 2001, Scoping Meeting.

SRS submitted the SB/PP to the USEPA and SCDHEC in August 2001; both regulatory agencies approved the SB/PP in January 2002. The final Record of Decision (ROD) was issued in June 2003. The remedial action consists of institutional controls (in conjunction with improved stormwater management). This remedial action is designed to maintain industrial land use through institutional controls and offers the most cost-effective method of managing this low risk waste site.