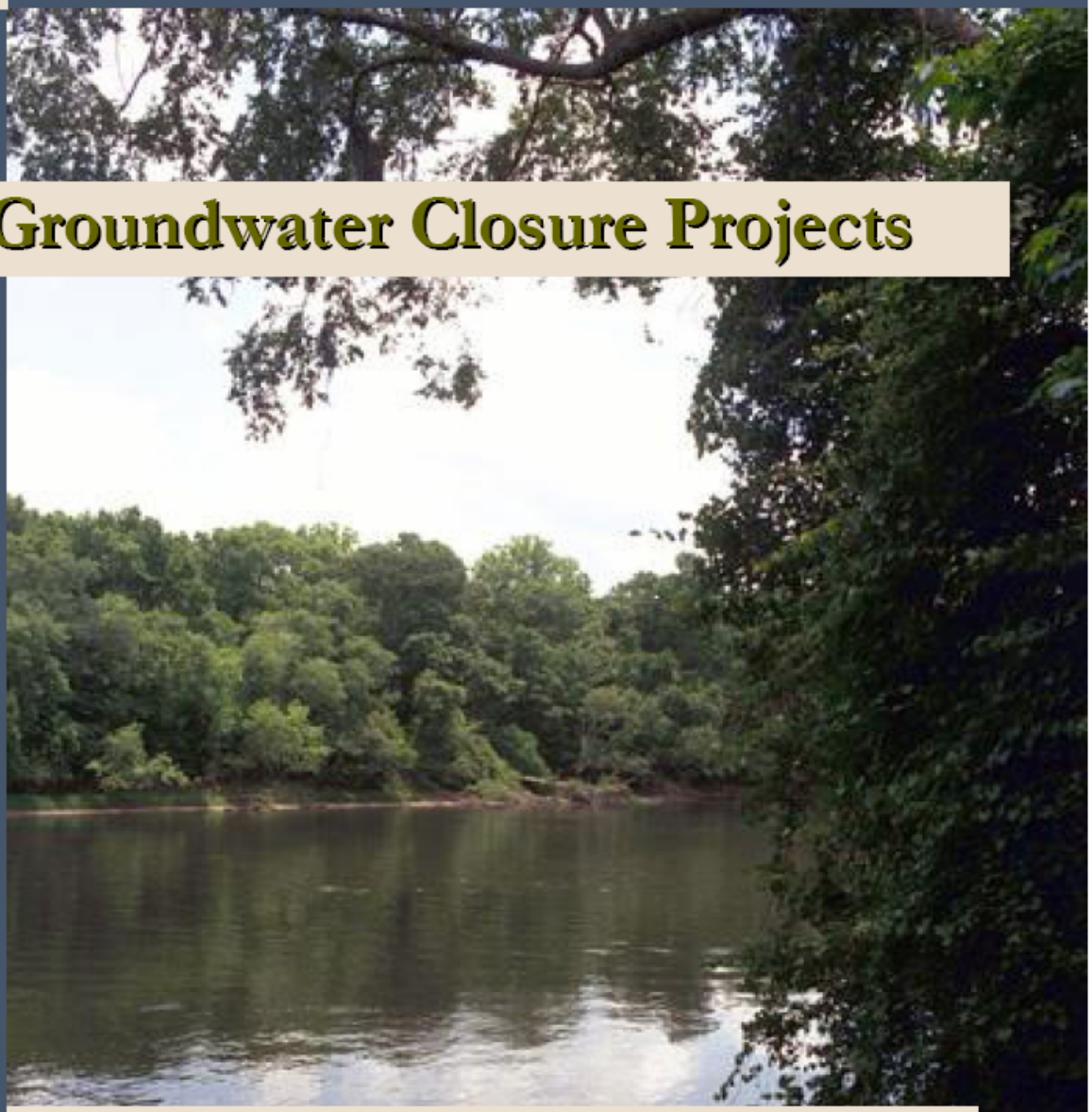
S&G

SOIL AND GROUNDWATER CLOSURE PROJECTS



Soil & Groundwater Closure Projects

Accomplishments 2005

Introduction

Safety

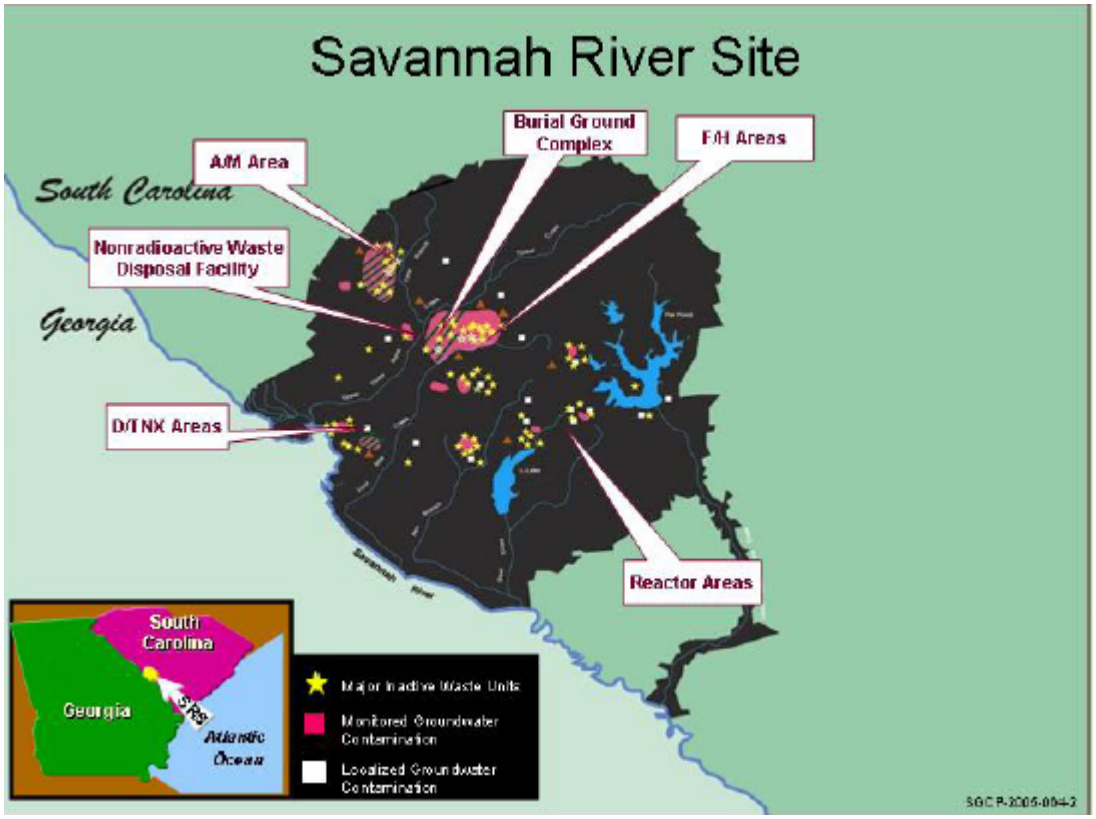
While achieving major remediation, Soil and Groundwater Closure Projects maintained its excellent safety record, reaching a milestone of eight years and over seven million safe hours since the last days away or lost time injury. This trend continues into 2006.

Soil and Groundwater Closure Projects (SGCP)

SGCP is responsible for the remediation of 515 SRS waste units to reduce risk and protect human health and the environment. The remediation is regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). This is accomplished through the SRS Federal Facility Agreement (FFA), a tri-party agreement between the US Environmental Protection Agency, the South Carolina Department of Health and Environmental Control, and the US Department of Energy that:

- Directs the comprehensive remediation of the Site
- Ensures that SRS satisfies RCRA and CERCLA requirements
- Includes cleanup schedules for SRS waste units

In 2005, SGCP completed seven waste units on or ahead of schedule. SGCP has completed 318 of the Project's 515 waste units; another 50 units are in the remediation phase. By 2025, all inactive SRS waste sites posing a risk to human health or the environment will be remediated and controlled, and contaminated groundwater will be remediated, in remediation, or closely monitored.



Key Projects 2005

T Area Completion

T Area is located near the SRS boundary and includes five waste units and three contaminated slabs. It will be the first area to be closed, scheduled for Fall 2006. The planned remediation is to remove and dispose of 2,000 yards of highly contaminated soil offsite, and install a low permeability cap. The design has been completed and the contract for a 10-acre geosynthetic cover system has been awarded.

Backfilling the Old TNX Seepage Basin

General Separations Area Consolidated Unit

The H-Area Inactive Process Sewer Line closure activities, including placement of the geosynthetic clay liner and grouting of manholes and pipe sections were performed in 2005. Remedial Action activities at Warner's Pond removed 20,000 cubic yards of contaminated soil from Warner's Pond, and placed the soil at selected locations within the Old Radioactive Waste Burial Ground (ORWBG). Enhancements to the H-Area stormwater drainage system at the Warner's Pond area continue. Excavation of contaminated soil from the H-Area Retention Basin (HRB) and soil pile was also initiated in 2005**.** Around 7,000 cubic yards of contaminated soil were removed from HRB and placed within the ORWBG. Field preparation for the placement of the geosynthetic cover system at the ORWBG began and construction of the cover system has been initiated on 16 acres.

The GSACU

F&H Area Groundwater Projects

SGCP completed installation of the permanent base injection system at the F-Area barrier wall system gate locations. The system consists of an above-ground control system, underground distribution lines, and injection wells to convey the base solution into the water table aquifer. The base solution raises the pH of the groundwater to background pH, resulting in reduced leaching of metals to the groundwater. The base injection system is used with the barrier wall system to reduce the spread of groundwater contamination to Fourmile Branch.

Base injection remedial system

M Area Dynamic Underground Stripping

M Area Dynamic Underground Stripping (DUS) Construction was completed on March 15, 2005. Operation of DUS began on August 8, 2005. By the end of 2005, the DUS system had removed approximately 93,000 lbs of solvents. DUS is expected to accelerate cleanup in M-Area at SGCP's second highest risk site (the A&M Area Groundwater Plume). DUS extracts material 15 times faster than soil vapor extraction and 75 times faster than the pump and treat system.

Aerial view

P Area Reactor Seepage Basin

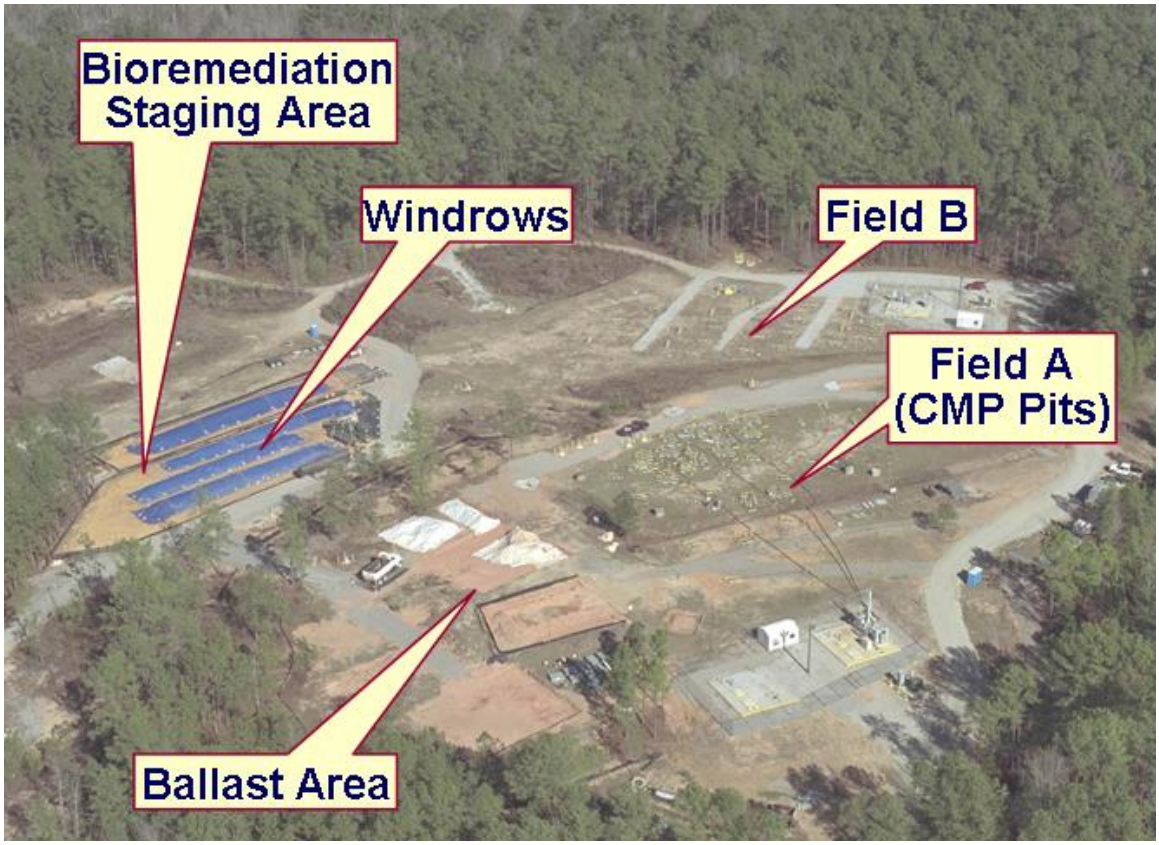
The Post-Construction Report (PCR) was submitted in November 2005, documenting the completion of field implementation of the remedial action for the closure of the P-Area Reactor Seepage Basin (PRSB) operable unit. The remedial action included solidification via grouting of Basins #1 and Basin #3, and removal of the grouted process sewer line and placement in Basin #1. Upon completion of the grouting activities a low permeability geosynthetic closure cover was placed over the PRSB to reduce water infiltration. Long term institutional controls were also implemented.

Remediation of basin

Chemicals, Metals, and Pesticides (CMP) Pits

Initiation of re-vegetation of the CMP Pits “Ballast” area in May 2005 marked the completion of the interim action for this CMP Pits subunit. The interim action consisted of enhanced bioremediation of the “ballast” area soil contaminated with pesticides and PCB’s. Verification sampling confirmed that the remedial goals had been achieved and the treated soils were placed back in the Ballast Area.

In 2005, the Three Parties signed the final ROD selecting electrical resistance heating (ERH) with soil vapor extraction (SVE) as the final action for the subsurface soils (vadose zone). The final ROD also selected Monitored Natural Attenuation (MNA) for the groundwater.



CMP Pits bioremediation

L Area Hot Shop

The remediation of the L-Area Hot Shop ended in June 2005 with the turnover of the site to Operations & Maintenance. This facility was used for decontamination and maintenance of equipment from the reactors areas through 1983. The buildings that were part of this unit were removed in 1993, leaving the slab, associated drain lines and contaminated soils. This remedial action involved the removal of the concrete slab, drain lines and soils, and the placement of these items into Basin 3 of the P-Area Reactor Seepage Basin. The excavated area was backfilled and covered with sod.

L-Area Hot Shop closure