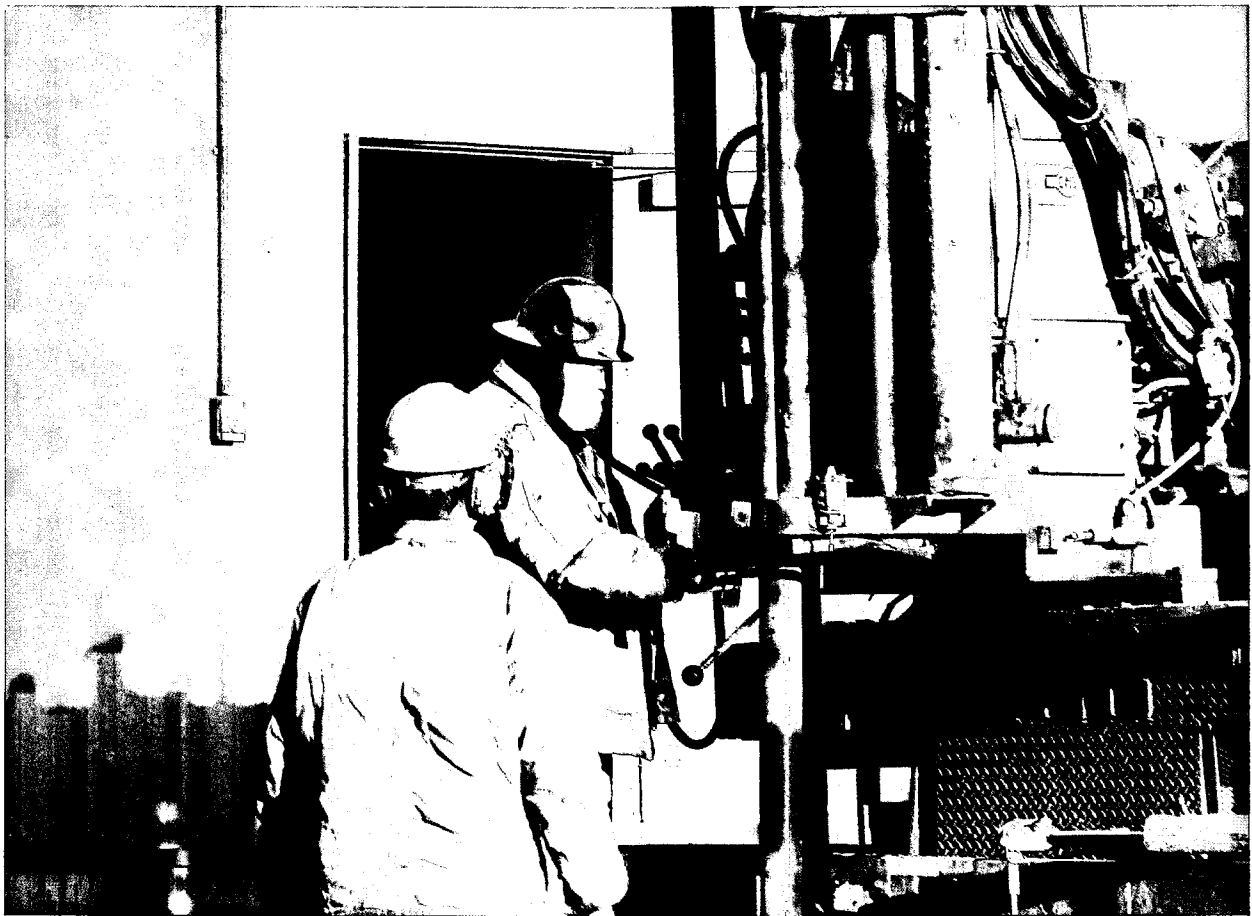


SOUTH CAROLINA
HAZARDOUS WASTE CONTINGENCY FUND

ANNUAL REPORT

Fiscal Year 2006: July 1, 2005 through June 30, 2006



South Carolina Department of Health
and Environmental Control

**SITE ASSESSMENT &
REMEDIATION DIVISION
OF THE
BUREAU OF LAND & WASTE
MANAGEMENT**

**SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL**



**BUREAU OF LAND AND WASTE MANAGEMENT
DIVISION OF SITE ASSESSMENT AND REMEDIATION**

**ANNUAL REPORT
FISCAL YEAR ENDING JUNE 30, 2006**

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Introduction

This Annual Report is submitted to the South Carolina General Assembly as required by S.C. Code Ann. Section 44-56-180(b) of the South Carolina Hazardous Waste Management Act ("HWMA"). Section 44-56-180(b) mandates that the South Carolina Department of Health & Environmental Control ("DHEC" or the "Department") annually report on the activities and response actions that have been carried out under the auspices of the Hazardous Waste Contingency Fund ("HWCF" or "State Superfund"). DHEC's State Remediation Section further publishes this report to provide outreach and education to a wide variety of audiences, including other elected officials, financial and real estate communities, businesses, consultants, local governments, redevelopment authorities, and the general public.

This report focuses on sites across South Carolina that have known or perceived environmental contamination. During FY06, the staff conducted and oversaw various types of response actions at over 200 sites, including state-lead sites, emergency response sites, federal Superfund sites, and Brownfields sites. While some of these sites are being addressed by potentially responsible parties ("PRPs") or non-responsible parties ("NRPs"), many response actions and the Department's oversight activities are funded totally or partially by the HWCF. Field activities supported by the HWCF include the following: a remedial investigation at the Philip Services Corporation Site (a former hazardous waste incineration facility) in Rock Hill; a pilot study for groundwater treatment at the Stoller Chemical Company facility in Jericho; an investigation and removal at a former methamphetamine site in Charleston County; and emergency response activities that resulted from a hydrogen chloride smoke plume caused by a huge fire at the former JP Stevens Mill #3 in Great Falls. The HWCF also supported several criminal investigations that resulted in convictions for illegal waste disposal as well as reimbursement of the Department's environmental response costs.

In addition to investigation and cleanup activities, the Department was successful in many cost recovery efforts in FY06. Judicial settlements were reached with several PRPs for past response costs and future cleanup activities at the Cone Mills-Union Bleachery Site in Greenville. In the absence of these settlements, this site would have become a major financial commitment for the HWCF. Without the need for litigation, the Department also recovered all past response costs at the Blackberry Valley Landfill Site. Future cleanup activities at this site are being funded by Greenville County under a consent agreement. The Department also entered into numerous other consent agreements and contracts with private parties to perform response actions with Departmental oversight.

Despite these successes, we are concerned about our future ability to quickly and effectively address the many threats to human health and the environment that are posed by hundreds of uncontrolled waste sites in South Carolina. The State Superfund Program relies heavily on the HWCF for contractual services as well as for salaries of staff who perform and oversee state-lead and private party cleanup actions. During FY06, HWCF expenditures totaled approximately \$1.97 million, while revenues (primarily from cost recovery settlements and reimbursements of

oversight costs) totaled approximately \$847,000. Since the summer of 2000 when the HWCF lost its permanent funding source, the HWCF balance has dropped from over \$22 million to approximately \$11 million in June 30, 2006. (See Figure on page 11.) The Department continues to seek a permanent funding source for the HWCF so that uncontrolled sites can be addressed in a timely and efficient manner.

The Superfund Program: What Roles Are Taken By Our Federal and State Governments to Address Hazardous Waste Sites?

The primary purpose of the Superfund Program is to investigate and clean up abandoned and uncontrolled hazardous waste sites. In South Carolina, the Superfund Program is implemented pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the South Carolina Hazardous Waste Management Act (SCHWMA). CERCLA was created to identify and manage the nation's worst abandoned and uncontrolled hazardous waste sites. Through the SCHWMA, the Department is authorized to implement and enforce CERCLA and assess and remediate contaminated sites.

I. The Federal Superfund Law, Process, and Procedure

A. Federal Superfund Law

In 1980, the United States Congress passed CERCLA, in response to environmental problems such as the State of New York's Love Canal Site located near Niagara Falls. CERCLA provided federal funds for responding to releases and threatened releases of hazardous substances and created a liability scheme that encouraged Potentially Responsible Parties (PRPs) to address sites and provided a mechanism for recovering costs from recalcitrant parties.

In 1986, after demands on the Federal Superfund Program became more apparent, Congress reauthorized CERCLA and increased funding and authority for the United States Environmental Protection Agency (EPA). It also increased the State's role in implementing that law. This reauthorization was called the Superfund Amendments and Reauthorization Act (SARA). The Federal Superfund Program was reauthorized again by Congress in 1991, allowing the program to continue under the same funding and regulatory framework. Congress has not formally reauthorized CERCLA since 1991, but several amendments have been added and the Superfund Program remains in the federal budget and operates under the guidelines of the 1991 reauthorization.

B. Federal Superfund Process

The Federal Superfund process begins with site discovery or notification of possible releases of hazardous substances. If a site requires immediate attention, EPA's Emergency Response and Removal Branch may perform actions to address immediate threats to the public health or the environment. If a site does not pose an imminent threat, it is screened to determine whether it warrants further evaluation for remedial (or long-term) measures. EPA then evaluates a site to determine if the release(s) of hazardous substances qualifies for placement on the Federal Superfund Program's National Priorities List (NPL). Sites that do not qualify for the NPL are referred to the State Superfund Program.

If a site is placed on the NPL, a Remedial Investigation/Feasibility Study (RI/FS) is conducted. A Remedial Investigation (RI) is an in-depth investigation to determine the nature and extent of contamination at the site. The Feasibility Study (FS) provides a comparison of various cleanup options that would make the site safe for the public and the environment. From the information in the FS, a Proposed Plan is developed offering a preferred remedial option. The public is given a 30-day comment period on the Proposed Plan during which a public meeting is held to encourage community input and participation concerning the suggested options for cleanup. After the comment period, a Record of Decision (ROD) is written to formally document the cleanup technology that will be implemented at the site.

After the ROD, the project enters the Remedial Design/Remedial Action (RD/RA) phase, which is a site's actual remedy designed and carried out. Ongoing monitoring of site conditions occurs to ensure that the remedy is protective of public health and the environment. EPA may delete a site from the NPL when it determines that no further response is required to protect human health and the environment.

Under CERCLA, EPA encourages PRPs to pay for Superfund cleanups. One or several PRPs may participate. These are called enforcement-lead sites. At other sites, however, there may be no known PRPs, or the PRP may not be able to afford the necessary cleanup actions. When a PRP-financed cleanup is not possible, the site is addressed using the Federal Superfund Trust Fund, which was generated by taxes on petroleum and chemical companies. Sites that are remediated using the Trust Fund are called Federal Fund-lead sites. Where PRPs are unwilling to perform cleanup activities, EPA pursues PRPs for cost recovery through administrative and legal actions. Regardless of whether the cleanup is financed by the Superfund Trust Fund or PRPs, CERCLA requires the same cleanup process and the Department works closely with EPA on the Federal-lead sites.

II. The State Superfund Law and Procedure

A. State Superfund Law

The Department's Division of Site Assessment and Remediation (SAR) administers the State Superfund Program under authority of the South Carolina Hazardous Waste Management Act, S.C. Code Ann. § 44-56-200, which in 1981 adopted CERCLA Section 107 (liability provisions) by reference and gave the Department the authority to implement and enforce CERCLA. Subsequent state legislation provided that fees be charged for disposal of hazardous waste into permitted landfills in South Carolina and created the Hazardous Waste Contingency Fund, which is also known as the "State Superfund." This fund is used to address uncontrolled sites when no other sources are available or private parties are not willing to address a site. As of this writing, Safety-Kleen (formerly known as Laidlaw and GSX) landfill in Pinewood was permitted for hazardous waste disposal in South Carolina. Later legislation imposed a fee on non-hazardous waste disposed at Safety-Kleen.

In 2000, Safety-Kleen closed the facility in Pinewood and filed for bankruptcy. Since then, the only revenue going into the Hazardous Waste Contingency Fund is through State Superfund cost recovery efforts and the oversight billing of private parties performing work under consent agreements and voluntary cleanup contracts. When the Pinewood facility closed, the Uncontrolled Site portion of the HWCF had a balance of over approximately \$22M. On June 30, 2006, the balance was approximately \$11M. (See Figure 1 on page 11.) In order for the Department to continue taking a proactive role toward cleaning up contaminated sites across South Carolina, we need a continuing source of funding for the Hazardous Waste Contingency Fund to continue performing timely and effective cleanup efforts.

B. DHEC's State Superfund Procedure

The Bureau of Land and Waste Management's Division of State Assessment and Remediation is responsible for managing the assessment and remediation of South Carolina's abandoned or uncontrolled hazardous waste sites or the State Superfund sites. The site assessment and remediation process, which mirrors EPA's process, may include a short-term removal action or a complex and lengthy remedial investigation and cleanup.

The Department's goal is to evaluate and set priorities for sites in order to address the worst cases first. Unless the Department deems an imminent threat exists or a criminal investigation is necessary, state-funded response actions are taken only after the Department initiates the appropriate administrative procedures to secure alternate funding. Considerable time and effort is expended to ensure that all available funds from the responsible parties and other sources are utilized before drawing on funds from the Hazardous Waste Contingency Fund. These actions enable the Department to administer the Contingency Fund in a cost-effective manner and to maintain compliance with the South Carolina Hazardous Waste Management Act.

There has been considerable progress in the Department's efforts to address uncontrolled hazardous waste sites in spite of the complex process involved in resolving problems that have taken decades to develop. For example, many sites have been abandoned by bankrupt firms or are the product of "midnight" dumping and thus, the contamination remains unknown and undiscovered for years. This situation provides the multiple challenges of identifying the materials involved, the persons responsible, defining the true extent of the problem and its associated risk, and notifying the community of findings and keeping them informed and involved in the cleanup efforts. Even though information on the chemicals used at a facility is often available, information on wastes may not be, and identifying the source and nature of the contamination is often very difficult. Considerable resources must be invested to properly sample and analyze materials, which are likely to be volatile, reactive, explosive, corrosive, and/or toxic.

The Department is often forced to complete time consuming and expensive jobs due to the unwillingness or inability of private parties to effectively manage remedial actions. Searches for responsible parties to pay for corrective actions at a site can be exhaustive and slow. However, except when an imminent threat exists, prior to using state funds to pay for response actions, the Department is mandated by law to identify and attempt to exhaust any applicable liability insurance, other financial assurance mechanisms provided by the responsible parties, or utilize

funds available. As a result, legal issues frequently add to the complexity of cleanups. The Department attempts to negotiate settlements for voluntary cleanups to avoid expenditures from the "State Superfund." These voluntary agreements can avoid time consuming and expensive litigation often associated with convincing non-cooperative parties to respond.

III. The Division of Site Assessment and Remediation

SAR is responsible for performing and overseeing the assessment and clean-up of State Superfund sites, implementing the Brownfields/Voluntary Cleanup Program and Drycleaning Restoration Program; assisting EPA with its Federal Superfund Sites in South Carolina; and overseeing the Federal Facilities Agreement at the Savannah River Site. The Hazardous Waste Contingency Fund is used in whole or in part by the following sections of SAR: State Site Assessment, State Remediation, Brownfields/Voluntary Cleanup Program, and Emergency Response. Other sections or areas of SAR perform duties that receive funding other than from State Superfund are: the Federal Site Assessment, Federal Facilities Agreement, and the Dry Cleaning Program. Each section of SAR and their responsibilities are described below, with the exception of the Dry Cleaning Program of which submits a separate annual report.

A. The State Remediation Section

The State Remediation Section is responsible for addressing sites that do not qualify for action under the Federal Superfund Program. The State Remediation Section first tries to persuade private parties to perform the necessary work through a consent agreement, cost recovery settlement agreement, or through the Voluntary Cleanup Program (VCP). If a responsible party enters into a formal agreement and completes the work to the Department's standards, the party will receive a covenant not to sue from the Department. If the PRP is unwilling or unable to conduct response activities, the Department may perform the work using a State Superfund Contractor and monies from the State's Hazardous Waste Contingency Fund.

Project Managers are assigned to sites and are responsible for determining the necessary scope of work as well as overseeing the work and costs associated with the site. Department staff are typically on-site during the assessment and remediation activities. There are 14 full-time staff who perform project management/technical reviews for State and Federal Superfund sites and Drycleaner sites. There are five additional staff who are responsible for tasks that support the program including negotiating contracts for site cleanup, recovering costs from responsible parties, reviewing baseline human health risk assessments for contaminated sites, reviewing invoices submitted from contractors for state-lead sites, assisting project managers with administrative work, overseeing projects, handling the public participation component, and assisting the Department's legal staff on CERCLA investigations and cost recovery issues.

B. Brownfields/Voluntary Cleanup Program

The Voluntary Cleanup Program began in 1988 and was expanded and enhanced to include a brownfields component in 1995. In May 2000, the Brownfields/Voluntary Cleanup Program

Law, Article 7 of the South Carolina Hazardous Waste Management Act, was signed. This law allows responsible parties to enter into contracts to perform assessment and remediation of sites and receive the Department's covenant not to sue for the work performed to the Department's satisfaction. Further, the Brownfields/VCP Law allowed parties not responsible for the contamination to enter into a contract with the Department; acquire a property; perform an environmental scope of work designed to assess the contamination; take reasonable steps to stop continuing releases and make the property safe for its intended future use; and receive contribution protection; and state CERCLA liability protection for existing contamination. In June of 2005, the Brownfields/VCP was amended to add another protection for non-responsible parties. This protection is third-party liability protection that can only be acquired through a voluntary cleanup contract. From July 1, 2005 through June 30, 2006, the Department entered into nine responsible party voluntary cleanup contracts and 35 non-responsible party voluntary cleanup contracts.

Non-responsible parties entering into a voluntary cleanup contract are eligible for financial incentives. These incentives include the following: tax credits for environmental work; \$1000 more for each job created that is eligible for a job tax credit; property tax exemption for up to five years upon completion of the voluntary cleanup contract with county concurrence; and fee in lieu of taxes with a \$1 million investment in the property.

C. The Federal and State Site Assessment Section

The Site Assessment Section is responsible for evaluating potential hazardous waste sites for EPA to determine if they should be included on the NPL. The Site Assessment Section uses the pre-Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) screening as its first step for reviewing sites. The pre-CERCLIS screening includes a file review, site reconnaissance, limited environmental sampling, and completion of a checklist and/or a brief summary report. The sites are discussed at regular meetings of the Self-Directed Work Team (SDWT) (see below). The outcome of a pre-CERCLIS screening is usually either adding the site to CERCLIS for further investigation or referring it to the State Superfund Program or another appropriate area within the Department. Sites requiring further assessment are scheduled for a Preliminary Assessment/Site Inspection (PA/SI). The PA/SI includes the collection of environmental samples, a Hazard Ranking Score (HRS), and a report summarizing the findings. The HRS is an EPA model used to evaluate sites that may score high enough to be included on the NPL. If additional information is still warranted to determine if a site qualifies for the NPL, an Expanded Site Inspection (ESI) may be conducted. The ESI is similar to the PA/SI but may include the collection of a larger number of samples or more detailed, site-specific information. The final stage of the process is the HRS package, which is the official documentation used to place a site on the NPL. At any stage of the assessment process, it may be determined that a site will not score high enough to be on the NPL. Such sites are given a Federal No Further Remedial Action Planned (NFRAP) designation by the Self-Directed Work Team and are referred to the State Superfund Program or another appropriate area within the Department. In FY06, Site Assessment staff performed 1 Expanded Site Investigation, 2 pre-CERCLIS screenings with checklist and narrative, and 17 pre-CERCLIS screenings with Expanded Investigations and Reports.

Self-Directed Work Team

A Self-Directed Work Team (SDWT), consisting of Department and EPA staff was formed in 1994. This partnership was designed to build and maintain a working relationship between the state regulatory agency and federal regulatory agency. The SDWT works together to review and discuss sites in South Carolina which are being considered for the Superfund Program. In FY06, the continued focus of the team's activities was a Site Discovery Initiative (SDI). The SDI focuses on historical industries that may have lingering environmental concerns that were thought to be under-evaluated or in need of assessment. Examples of focus industries during FY06 are out-of-operation textile dyeing and finishing operations and former phosphate fertilizer manufacturers. The SDI is an ongoing process that enables the SDWT to prioritize sites that warrant additional investigation.

D. The Federal Facilities Agreement (FFA) Section

The Savannah River Site (SRS) is addressed under the Federal Facilities Agreement (FFA), which is a three-party agreement between EPA, the United States Department of Energy (DOE), and the Department. The FFA was finalized on August 16, 1993. This agreement outlines the corrective/remedial action process from site investigation through site remediation and specifies the procedures for the parties to follow in setting priorities for this process. The Department's FFA Section oversees the implementation of the FFA and ensures integration of both the Resource Conservation Recovery Act (RCRA) and CERCLA requirements applying to environmental activities at SRS. In addition, the FFA establishes the requirements for the prevention and mitigation of releases (or potential releases) from the SRS High Level Radioactive Waste Tank Systems.

The Department began in 2004 evaluating the environmental condition of facilities at SRS that DOE plans to decommission and demolish (D&D). The DOE provides information about each D&D facility in two separate documents: the Facility Decommissioning Evaluation (FDE), which is submitted to the Department prior to the commencement of decommissioning activities; and the Decommissioning Project Final Report (DPFR), which provides information about the environmental conditions at a facility after decommissioning is complete. The D&D efforts were coordinated with Soil and Groundwater Closure Projects (SGCP) under the FFA in a comprehensive effort to close entire areas of the SRS.

Key project documents were reviewed during FY06 (October 1, 2005 through September 30, 2006). The primary documents reviewed consisted of 18 Site Evaluation (SE) Reports, four RCRA Facility Investigation/Remedial Investigation (RFI/RI) Workplans, three RFI/RI Reports, three Baseline Risk Assessments (BRA), three Corrective Measures Study/Feasibility Studies (CMS/FS), one Corrective Implementation Plan/Remedial Action Implementation Plan, three Statement of Basis/Proposed Plans (SB/PP), three Proposed Plans (PP), nine Record of Decisions (RODs), eight RCRA Permit Modifications, 14 Facility Decommissioning Evaluations (FDE),