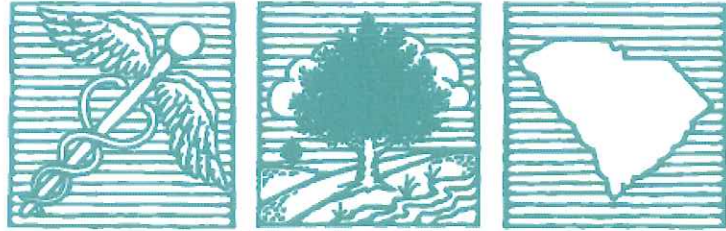


**D H E C**



**PROMOTE PROTECT PROSPER**

**South Carolina Department of Health  
and Environmental Control**

**C. Earl Hunter, Commissioner**

**Hazardous Waste Contingency Fund Annual Report**

**Fiscal Year 2009: July 1, 2008 through June 30, 2009**



**Bureau of Land and Waste Management  
Division of Site Assessment, Remediation and Revitalization**

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

The Hazardous Waste Contingency Fund Annual Report is submitted by the SC Department of Health and Environmental Control in compliance with S.C. Code Section 44-56-180. Additionally, Act 119 of 2005 mandates that agencies provide all reports to the General Assembly in an electronic format.

[www.scdhec.gov](http://www.scdhec.gov)

# Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

## Table of Contents

<b>I.</b>	<b>The State Superfund Program: Introduction</b>	<b>1</b>
<b>II.</b>	<b>Hazardous Waste Contingency Fund and State Superfund Program</b>	<b>2</b>
A.	Brief History of Hazardous Waste Contingency Fund and the State Superfund Program	2
B.	Hazardous Waste Contingency Fund Uses	2
1.	State Lead Response Actions (Appendices A, B, and C)	2
2.	Emergency Response (Appendix D)	4
3.	Administrative Costs/Salaries	4
4.	Criminal Investigations	4
5.	National Priorities List Sites (Appendix E)	4
C.	Hazardous Waste Contingency Fund – Uncontrolled Sites Fund Status and Financial Sheets	5
1.	Fund Status	5
2.	Financial Sheets	6

## Appendices

**Appendix A: Summaries of State - Lead Sites**

**Appendix B: State Superfund Process**

**Appendix C: The State Superfund Program – Public Participation**

**Appendix D: Emergency Response Actions for Fiscal Year**

**Appendix E: Sites on the National Priorities List (NPL)**

**Appendix F: List of Standard Acronyms**

**Appendix G: Glossary of Terms**



55-gallon drums of dye waste were abandoned at the Gun O Field Road Site. Samples were taken to determine the proper disposal method for the drums and the drums' contents.



While installing an irrigation system at a home, a junction box and PVC piping were discovered. The piping came from the direction of a closed facility. The box's black sludge contained high concentrations of PCE and TCE. Air vapor samples were also taken from the crawlspace of the home and all concentrations were within acceptable range for vapor samples.



On June 25, 2008, a Responsible Party under a Voluntary Cleanup Contract began the removal of the former Nytronics Component Group, Inc.'s historic, four-story, main manufacturing building, the water tank, as well as other outlying buildings. The photo on the right was taken on November 21, 2008. The site's main contaminants of concern are PCBs and VOCs (primarily TCE). Future response activities include: the soil, the onsite sewer system, the western drainage ditch, the onsite and offsite groundwater, and Swift Creek and the associated wetlands.

# Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

## I. THE STATE SUPERFUND PROGRAM: 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). The HWMA mandates the South Carolina Department of Health & Environmental Control (DHEC or the Department) to 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). The State Superfund Program 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 highlights some of the many accomplishments of DHEC's State Superfund Program during Fiscal Year 2009 (FY09). The State Superfund Program's purpose is to protect public health and the environment by requiring investigation and cleanup of abandoned and uncontrolled hazardous waste sites and by taking short-term actions to mitigate immediate threats to human health and the environment. DHEC focuses its attention and financial resources on the sites that pose the greatest risk to human health.

During FY09, staff directed response actions at over 200 uncontrolled or abandoned sites, including removal actions and emergency response actions to address immediate threats, long-term remedial actions, Brownfields, and criminal investigations. While some of these sites are being addressed by responsible parties (RPs) or non-responsible parties (NRPs), many response actions, as well as DHEC's oversight activities, are funded totally or partially by the HWCF.

In FY09, DHEC expended in excess of \$1.6 million from the HWCF. The HWCF continued to fund or support numerous activities, including the continuing remedial investigation and feasibility study at the Philip Services Site in Rock Hill; sampling of private wells, provision of bottled water, and design of a new water main to provide a permanent source of drinking water to a small area near the Town of Lexington; implementation of the first phase of a groundwater treatment system at the Stoller Site in Charleston County; and a criminal investigation in Florence County that led to a time-critical removal action that cost in excess of a quarter million dollars.

In addition to performing investigation and cleanup activities, the Department continued to pursue recovery of its past response costs. The Department also entered into contracts with private parties to pay for or perform response actions with Departmental oversight.

While we recognize these successes, we remain mindful of our need to quickly and efficiently address the many threats to public health and the environment that are posed by remaining uncontrolled waste sites in South Carolina. Currently, there are approximately 1115 sites that have been identified as being known or potentially contaminated. DHEC consistently attempts to direct private parties to assess and/or cleanup contamination where appropriate. Nonetheless, each site represents a potential liability to the HWCF if the RP(s) is unknown, unwilling, or unable to conduct the necessary activities. In light of that and prior fund expenditures to date, the known number of contaminated sites represents a potential liability to the HWCF in excess of \$60 million. Staff typically works on more than 100 sites per year, but work is not always continuous and most sites require several years of attention before they are ready for reuse as residential or commercial properties.

The intent of this report is to provide the reader with an idea of the magnitude of work that has already been performed on uncontrolled sites as well as an understanding of the challenges that lie ahead in addressing the hundreds of other sites in our inventory.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

### **II. HAZARDOUS WASTE CONTINGENCY FUND AND STATE SUPERFUND PROGRAM**

#### **A. Brief History of Hazardous Waste Contingency Fund and the State Superfund Program**

South Carolina's Hazardous Waste Contingency Fund was created in 1980 when the General Assembly amended the South Carolina Hazardous Waste Management Act (HWMA) to impose a fee of \$1.50 per ton on the disposal of hazardous waste at the former GSX Services landfill facility (later operated by Laidlaw and Safety-Kleen) at Pinewood. Through the years, various amendments to the HWMA modified the fee structure to include non-hazardous wastes and to increase the per ton rates on waste disposal.

Historically, the HWCF has been segregated into distinct and separate funds: the Permitted Sites Fund which ensures the availability of funds for response actions at permitted waste landfills, and the Uncontrolled Sites Fund which is used to defray the costs of governmental response actions at uncontrolled hazardous waste sites and from accidents in the transportation of hazardous materials.

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or federal Superfund law) to identify and manage the nation's worst abandoned and uncontrolled hazardous waste sites. In the early 1980s, the South Carolina General Assembly amended the HWMA and authorized DHEC to implement and enforce CERCLA. The HWMA was also amended to specifically incorporate the liability provisions of Section 107 of CERCLA, which created a liability scheme that encourages RPs to perform cleanups and provided a mechanism for recovering costs from recalcitrant parties.

The Uncontrolled Sites Fund (of the HWCF) is used to address abandoned and uncontrolled waste sites that do not qualify for federal assistance. The primary uses of the HWCF are to oversee the cleanup of contaminated sites, to cleanup those sites where other funds are not available, and to conduct emergency response activities. The HWCF is also used to conduct criminal investigations, to support the Voluntary Cleanup Program, to provide the State's cost share (10% up to 50% match) for federal dollars spent on remedial actions at Federal Superfund Sites, and to conduct the Waste Minimization and Reduction Program. The following paragraphs provide a brief discussion of the major uses of the HWCF. More detail is provided in Appendices A through E.

#### **B. Hazardous Waste Contingency Fund Uses**

##### **1. State Lead Response Actions (Appendices A, B, and C)**

The primary purpose of the HWCF is to provide funds for contractual services to perform state-funded investigation and cleanup activities at sites where other funds are not available. The State Superfund Program evaluates and sets priorities for sites in order to address the worst cases first. In FY06 and FY07, DHEC staff developed a new process for "tiering" sites (i.e., assigning a priority based on available information) to help ensure that the worst sites are addressed first. Unless the Department deems an imminent threat exists or a criminal investigation is necessary, state-funded response actions are generally taken only after the Department initiates the appropriate administrative procedures to secure alternative funding. Considerable time and effort are expended to ensure that all available funds from the RPs and other sources are utilized before drawing on funds from the HWCF. In most cases, the Department attempts to negotiate settlements with RPs and NRPs prior to using the HWCF.

There has been considerable progress in the State Superfund Program'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,

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

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.

During FY09, the Program completed a state-funded time-critical removal action at the Horton Sales Development Corporation—Piedmont Site to address the imminent threats posed by several thousand chemical totes at a closed Greenville cleaning and recycling facility. Some of these totes were leaking and many of them contained hazardous substances and were stacked haphazardly about the property. Since this project began, DHEC has spent over \$4 million on this site, including in excess of \$2.6 million during FY09. Appendix A includes summaries briefly describing some of the many state-lead and voluntary cleanup sites at which the Department managed or oversaw response activities during FY09. Additional information on the processes for addressing contaminated sites is included in Appendix B.

DHEC has addressed many other abandoned and uncontrolled waste sites using the HWCF. The following are examples of sites addressed and the amount of fund money that has been spent at these sites:

Hollis Road Site. A groundwater plume polluted at least 42 business and private drinking water wells with trichloroethene in Lexington County. The Department conducted extensive sampling and approximately 300 businesses and residences were provided access to public water using HWCF monies. Cost to date: approximately \$2.9 million.

Philip Services Corporation Site. A permitted hazardous waste disposal facility for solvent reclamation and incineration, which filed for bankruptcy protection in 2003. DHEC responded and kept a groundwater treatment system operating, removed the incinerator and its building, completed the Remedial Investigation, and initiated a Feasibility Study. Costs to date: approximately \$3.3 million. DHEC has recovered \$2.3 million from the bankrupt debtor and is negotiating with other RPs to implement a long-term remedial action.

Stoller Chemical Company Site. A former fertilizer manufacturing company located in Charleston County had extensive sediment, soil and groundwater contamination. The pollution impacted Caw-Caw Swamp, which is currently being cleaned up. The project cost to date exceeds \$17 million. The HWCF has allowed DHEC to implement response actions in a timely manner while concurrently pursuing responsible parties. DHEC has recovered almost 95 percent of all costs to date. DHEC has already treated and disposed of thousands of tons of waste materials and cleaned up contaminated sediments in Caw Caw Swamp, and began implementation of long-term groundwater remediation in FY09.

Over the last few years, DHEC has mobilized and responded after emergency orders were issued to close operating facilities such as Tin Products in Lexington County, Cardinal Chemical in Richland County, and Starmet in Barnwell County. The U.S. Environmental Protection Agency (EPA) has also assisted with cleaning up these facilities; however, their actions have generally been limited to short-term surficial cleanup. Long-term cleanup of the contaminated groundwater will likely be funded by the HWCF. The S.C. Hazardous Waste Management Act requires that DHEC pursue RPs to recover costs associated with the investigation and cleanup. DHEC often finds that the RPs are bankrupt and costs cannot be recovered.

Various styles of settlements with responsible and non-responsible parties require settling parties to perform investigations to determine the source, nature, and extent of contamination at a site, and/or cleanup contaminated sites, to fund these response activities themselves, or alternatively, to reimburse the Department's response costs when the Department performs cleanups of sites. Appendix A includes information on each site relating to the type of settlement, RP and NRP contracts, cost recovery and settlement agreements, and/or judicial consent orders where a party may be performing and/or funding response activities. In many cases, multiple funding sources are used to investigate and/or cleanup sites. With many of these settlements, the Department provides bargaining tools, such as covenants not to sue for the work performed by the RP or NRP to the Department's satisfaction, and/or state contribution protection

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

from other RPs which may seek reimbursement of all or a portion of costs of responding to environmental conditions at a site.

Even though a RP or NRP enters into an agreement or voluntary cleanup contract with the Department to pay for or perform response activities, DHEC staff must review and approve all environmental reports, sampling data, and other activities associated with the cleanup of contaminated sites to assure that public health and the environment are protected. Under these contracts and agreements, parties are required to reimburse DHEC's costs for oversight activities. Further, DHEC performs public participation/community involvement activities pursuant to CERCLA and the National Contingency Plan (NCP) to ensure that affected communities have input into the cleanup. Appendix C details these activities.

### **2. Emergency Response (Appendix D)**

DHEC's Emergency Response Program responds to accidental spills and other problems associated with the transportation of hazardous materials as well as other incidents where hazardous materials are spilled, illegally dumped, or otherwise abandoned on public property. The Emergency Response Program administers the Emergency Response Contract, which is used to secure, sample, and properly dispose of wastes. These activities are funded by the HWCF.

During FY09, DHEC expended approximately \$59,633.30 responding to 17 incidents. The Emergency Response Program recovered \$13,054 from the National Pollution Funds Center during FY09, and over \$30,686.65 is pending approval for reimbursement. The amount of reimbursement varies from year to year depending on the number and type of incidents that occur. All reimbursements are returned to the HWCF.

Appendix D lists emergency response actions during FY09 and includes a brief description of each response.

### **3. Administrative Costs/Salaries**

DHEC uses some of the HWCF monies for administration. The HWCF typically funds approximately 12 FTEs (full-time equivalent positions) that perform site prioritization activities, project management, technical reviews and field oversight, cost recovery activities, public participation activities, and other administrative activities in support of the Program. During FY09, the HWCF provided approximately \$822,230.65 for salaries and fringe benefits, agency administrative assessments, and other non-site-specific costs. These costs are included in DHEC's cost recovery efforts against potentially responsible parties.

### **4. Criminal Investigations**

The State Superfund Program also assists DHEC's Office of Criminal Investigations in providing technical assistance and contractual services for gathering evidence for environmental crime cases. During FY09, the HWCF supported criminal investigation activities at three sites. After the initial criminal investigation activities were completed, DHEC performed additional cleanup activities using its civil authorities and the HWCF. On these three sites, DHEC spent approximately \$404,227.60 in supporting environmental crime investigations and resulting civil cleanup actions.

These matters are considered enforcement confidential until the criminal investigations are completed.

### **5. National Priorities List Sites (Appendix E)**

The NPL is a list of sites that the United States Environmental Protection Agency (EPA) has identified for investigation and potential long-term remediation under the authority of the Federal Superfund Program. There are currently 40 NPL sites in South Carolina, four sites that have been deleted from the NPL, 12 sites



## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

that are being addressed as “NPL-equivalent” sites, and six Federal-lead removal sites that are being addressed under the Support Agency Cooperative Agreement. DHEC staff provides technical and administrative assistance to EPA on these sites. Cleanup activities on most of these sites are being funded by private parties and most of DHEC’s day to day costs are funded through a cooperative agreement with EPA; however, DHEC is “potentially” liable for a state cost share of 10% to 50% for long-term remedial action costs at sites being funded by EPA. There are currently no NPL sites that require that the state fund 100% of operations and maintenance costs. However, in November 2009, DHEC will be expected to assume responsibility for 100% of the operation and maintenance costs at the Elmore Waste Disposal Site in Greer (these costs are expected to be approximately \$150,000 a year). DHEC may also incur costs for activities such as natural resource damage assessments and other activities that are outside the scope of the cooperative agreement. In FY09, DHEC expended approximately \$51,726.49 from the HWCF for activities at NPL and other Federal-lead sites. Additional information on South Carolina’s NPL sites is included in Appendix E.

### **C. Hazardous Waste Contingency Fund – Uncontrolled Sites Fund Status and Financial Sheets**

#### **1. Fund Status**

Just as CERCLA provides federal funding to address certain uncontrolled hazardous waste sites, the HWMA provides state funding to investigate and cleanup uncontrolled sites that do not qualify for federal assistance. From its beginning in 1980, the Uncontrolled Sites Fund portion of the HWCF grew to a balance of approximately \$11 million at the close of FY90.

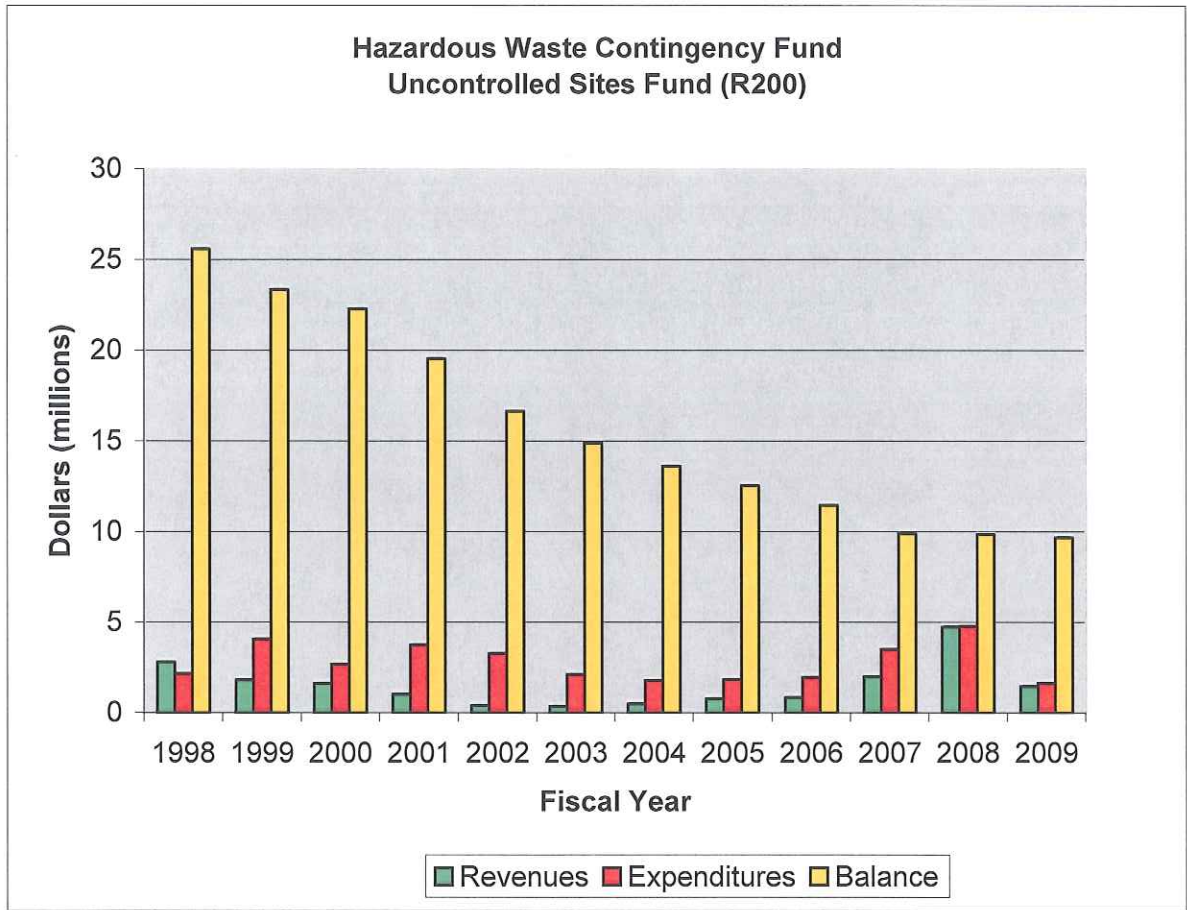
Through the 1990s, revenues for the Uncontrolled Sites Fund averaged approximately \$2-3 million annually and the Fund balance grew and briefly exceeded \$25 million in 1998 (see Figure 1). However, in 2000, Safety-Kleen filed for bankruptcy protection and shortly thereafter stopped receiving waste at the Pinewood landfill. At that time, the Uncontrolled Sites Fund had a balance of approximately \$22 million. With the exception of monies from cost recovery efforts and the billing of private parties for DHEC’s oversight of work performed under consent agreements and voluntary cleanup contracts, there were no new revenues for the HWCF. From FY98 through FY07, expenditures greatly exceeded revenues and the HWCF balance steadily declined. The closing balance for FY08 was approximately \$9,858,995.69. During FY09, revenues and expenditures were almost identical and the HWCF closed FY09 with a balance of \$9,683,613.66, most of which is committed to future assessment and remediation activities.

Beginning in 2000, establishing a continued funding source for the HWCF was a budget priority for the Department. Budget Proviso 9.45, which was passed in 2006, allowed the HWCF to retain the interest on the fund balance. In FY08, Budget Proviso 9.54 authorized DHEC to assess an annual fee on hazardous waste generators and to levy a per ton fee on hazardous waste generated with the proceeds to be deposited into the HWCF. Specifically, large quantity generators, as determined by R.61-79.262 (South Carolina Hazardous Waste Regulations) producing greater than 100 tons of hazardous waste per year are assessed an annual base fee of \$1,000 per facility and a \$1.50 per ton fee for all hazardous waste the company generates. Large quantity generators producing 100 tons or less of hazardous waste are assessed an annual fee of \$1,000. Small quantity generators are assessed an annual fee of \$500. Fees collected under this provision shall not exceed an annual cap of \$15,000 per generator. Companies subject to fees required by S.C. Code Ann. Section 44-56-170(F)(1)(1976) are exempt from fees established by this provision. It is anticipated that these two provisos will authorize the annual collection of approximately \$1.5 to 2.0 million.

# Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

## 2. Financial Sheets

The chart below and table on page 8 show the Uncontrolled Sites Fund balances, revenues, and expenditures for FY09. Revenues were in excess \$1,459,294.27, expenditures were \$1,634,676.30, and the closing balance was \$9,683,613.66.



## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### Hazardous Waste Contingency Fund Balance for FY09

The FY09 year-end financial snapshot is listed below.

<b>UNCONTROLLED SITES FUND</b>	
Opening Balance (07/01/08)	9,858,995.69
Revenues	1,459,294.27
Total Expenditures FY09 (chart below)	(1,634,676.30)
Closing Balance (06/30/09)	9,683,613.66
Obligated as State Match for National Priorities List Sites.	(194,000)
Obligated in Purchase Orders for Response Activities, etc. (chart on page 9)	(6,617,052.11)
Obligated for Supplies, Equipment, Travel, Etc	(47,472.00)
Obligated for Administrative Expenses for FY10 (Salaries, Fringe Benefits, and Agency Assessment)	(844,609.00)
Un-obligated Balance for Uncontrolled Sites Fund (06/30/09)	1,980,480.55

<b>BREAKDOWN OF TOTAL FY09 EXPENDITURES</b>	
Uncontrolled Sites	752,812.35
Emergency Response	59,633.30
Salaries, Fringe Benefits, Agency Administrative Assessment	822,230.65
Total Expenditures	1,634,676.30

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### Obligations in Purchase Orders for Response Actions, Legal Activities, Etc. as of June 30, 2009

This table shows current site-specific obligations (approximately \$6.6 million) that are already assigned to a state contractor or which are planned to be committed in the near future. These sites represent a very small portion of DHEC's site inventory. Based on recent and historical averages, it is estimated that the existing inventory of sites may present a \$60 million liability to the HWCF.

OBLIGATION	DESCRIPTION	AMOUNT
Coastal Lumber – Marion Sawmill	Sampling	1,005.00
Gun-O-Field Road	Drum Removal	4,057.18
Hebron Drive/Consolidated Freightways	Alternate Water	70,699.08
Hollis Road	Groundwater Treatment	2,600,000.00
Horton Sales Development	Complete Chemical Tote Removal	4,412.47
I-85	Response to Transformer Release	9,899.38
Kalama	Sampling	286.87
Philip Services Corp. (PSC)	Remedial Investigation and Feasibility Study	175,471.33
South Lake Drive/Old Orangeburg Road	Groundwater Treatment	2,600,000.00
Springs Industries – Indian Land Service Center	Investigation	33,412.25
Springsteen Mill	Removal Action	5,449.75
Stoller	Remedy Evaluation	217,743.57
Suffolk Chemical Company	Operation and Maintenance - Groundwater Pump and Treat	53,567.06
US Finishing/Cone Mills	Sampling	100.00
Original Contractor Commitments	Various Sites/Activities	693,887.42
Miscellaneous		23,476.46
Various Parties	Outside Legal Services in Support of Cost Recovery and Other Related Activities	123,584.29
Total Obligation through June 30, 2009 ***		6,617,052.11

\*\*\* This figure does not include any additional planned future assessment or cleanup activities that have not yet been assigned to a contractor. Sites that have a Record of Decision and previously had funds committed include the Columbia Organic Chemicals Site and Adams (Pete) Hasell Site.

# Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

## Appendix A

### Summaries of State - Lead Sites

The following summaries describe some of the State-lead sites at which Department personnel oversaw response activities during Fiscal Year 2009 (FY09). The funding for these activities came from Responsible Parties (RP), Non-Responsible Parties (NRPs), or the Hazardous Waste Contingency Fund. The primary source of the funding for each site is designated in each site summary as Lead Designation. A list of standard acronyms is attached as Appendix F.

#### A-CHEM CORPORATION

**Location:** 5205 S MAIN ST (U.S HWY 29), COWPENS

**Description:** Facility formerly manufactured dyes and resins for the textile industry and had a permitted wastewater treatment system that discharged to the public sewer.

**Lead Designation:** RP Funded Consent Agreement 93-46-HW 08/30/1993

**Funds Expended in FY'09:** \$ 1,902.00      Total Site Expenditures: \$75,272.00

**Actions Taken in FY'09:** The interim remedial action, which includes pumping water from the contaminated bedrock aquifer, treating the water by air stripping, and discharging the treated water to the Spartanburg Sanitary Sewer, continued to operate. Monthly monitoring reports indicate the recovery and treatment of VOCs is continuing. Since system startup in April 2000, approximately 53 million gallons of groundwater have been treated and the total VOCs mass removed estimated at 199 kg.

#### ARKWRIGHT DUMP

**Location:** HILLTOP LN, SPARTANBURG

**Description:** Former landfill approximately 30 acres in size operated during the 1950s and 1960s by the City of Spartanburg. The site contains areas of exposed municipal waste and medical waste as well as discolored soil and collected water.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 348.00      Total Site Expenditures: \$1,856.00

**Actions Taken in FY'09:** DHEC participated in a meeting and site visit with the City of Spartanburg and EPA on October 14, 2008. The participants discussed how to move forward with the closure of the landfill.

#### ARVIN MERITOR FACILITY

**Location:** 144 TRANQUIL CHURCH RD, MULLINS

**Description:** VOCs and metals in soils. Transfer project from BOW.

**Lead Designation:** RP Funded, VCC 05-5626-RP

**Funds Expended in FY'09:** \$ 3,027.00      Total Site Expenditures: \$11,430.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** On July 24, 2008, the RP submitted the Remedial Investigation Report-Second Phase. On October 14, 2008, the Department provided comments and requested additional investigation activities be performed. On October 23, 2008, the Department and the RP discussed a focused feasibility study to evaluate potential remedies for site cleanup. On February 19, 2009, the RP requested approval of the installation of two new groundwater monitoring wells and to sample the production well onsite, which was approved on March 4, 2009. The Supplemental Investigation Activities Report indicated that VOCs impact in groundwater did not extend offsite to the south or northwest of the property. Also, the absence of VOCs in the samples from the production well indicated that the deeper groundwater underlying the site had not been adversely impacted; therefore, it was not acting as a conduit for vertical migration of contamination. The Department expects the submission of a Focused Feasibility Study in FY10.

### **ASHEPOO PHOSPHATE/FERTILIZER WORKS**

**Location:** BRASWELL ST, CHARLESTON

**Description:** A phosphate fertilizer granulation plant operated at this location. Lead and arsenic are present in the soil and groundwater. Groundwater has low pH.

**Lead Designation:** Federal  
NRP VCC (relating to a portion of the site)

**Funds Expended in FY'09:** \$ 920.00 Total Site Expenditures: \$6,155.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and Conoco/Phillips regarding natural resource damages.

### **ASHLEY PHOSPHATE MINE**

**Location:** OFF OF DORCHESTER RD/APPIAN WAY, N. CHARLESTON

**Description:** Tract along Ashley River used for phosphate mining and phosphate fertilizer production. Waste streams associated with former super phosphate fertilizer production.

**Lead Designation:** VCC 05-5445-NRP

**Funds Expended in FY'09:** \$ 233.00 Total Site Expenditures: \$4,946.00

**Actions Taken in FY'09:** The Department reviewed the first semiannual groundwater report and there were no significant change in groundwater quality or the concentration of metals. The annual maintenance of the restrictive covenant was performed and all the restrictions on the property remained.

### **ATLANTIC PHOSPHATE WORKS/SCE&G HAGOOD ST**

**Location:** 2200 HAGOOD RD, CHARLESTON

**Description:** Former phosphate fertilizer plant. Documented low pH groundwater and heavy metal contamination.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 1,535.00 Total Site Expenditures: \$8,360.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages.

### **AUTOMATIC SWITCH COMPANY**

**Location:** 1561 COLUMBIA HWY N, AIKEN

**Description:** Electronics manufacturer with groundwater contaminated with chlorinated solvents.

**Lead Designation:** RP Funded, VCC 02-5455-RP

**Funds Expended in FY'09:** \$ 16,089.00 Total Site Expenditures: \$62,856.00

**Actions Taken in FY'09:** At its May 19, 2009 public meeting, the Department presented the results of the Remedial Investigation, explained the remedial alternatives evaluated in the Focused Feasibility Study, and presented the Department's preferred alternative (the Proposed Plan) for soil and groundwater remediation. Based upon oral comments at the meeting, public response to the Department's preferred alternative was favorable. The public comment period ended in June, and the selected cleanup remedy will consist of a soil vapor extraction system to address contaminated soil and a groundwater extraction system to pump and treat contaminated groundwater. A Record of Decision will be completed in FY10.

### **AVX - AMERICAN GEAR & PINION CO**

**Location:** HWY 501, CONWAY

**Description:** An electronic components manufacturing facility has two unlined lagoons with metal plating waste and is located adjacent to the Intracoastal Waterway. Contamination is attributed to the former operator, American Gear & Pinion Company.

**Lead Designation:** RP Funded, VCC 97-36-SW  
RP Funded Consent Agreement 86-51-SW (9/29/1986) and Administrative Order 97-36-SW 10/23/1997

**Funds Expended in FY'09:** \$ 3,901.00 Total Site Expenditures: \$42,503.00

**Actions Taken in FY'09:** DHEC conducted a site visit in August 2008 and continued discussions with AVX about conducting additional groundwater sampling off the property. On October 1, 2008, AVX submitted a groundwater investigation work plan, which was approved on October 7, 2008. However, the site work was not conducted because AVX was unable to obtain access from the owner of the property immediately downgradient of the plume. The pump and treat system and phyto-remediation systems continue to treat the contaminated groundwater. Concentrations of volatile organic compounds continued to decrease in the monitoring wells.

### **AVX CORPORATION MYRTLE BEACH**

**Location:** 17TH AVE S, MYRTLE BEACH

**Description:** AVX acquired the property from the former Myrtle Beach Air Force Base and currently manufactures electronic components. From 1980 until 1996, groundwater contamination was monitored and treated by AVX without the Department's knowledge or approval.

**Lead Designation:** RP Funded Consent Order 96-43-HW, DWP 12/19/1996

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Funds Expended in FY'09:** \$ 33,045.00    Total Site Expenditures: \$115,510.00

**Actions Taken in FY'09:** Implementation of the Feasibility Study (FS) Work Plan began in FY09. A pilot study to test the effectiveness of enhanced reductive dechlorination (ERD) began with the installation of an injection well and a number of observation wells on property located next to the AVX facility. After the first phase of the pilot test, the scope of the study was expanded and the first Addendum to the FS work plan was proposed by the RP and approved by DHEC. Prior to the second injection, a second Addendum to the FS work plan was proposed increasing the scope of the project again and adding additional observation and injection wells. The Department requested additional details on the second Addendum and received a Pre-Test Engineering Design Calculations and Design Modeling Plan. After reviewing this plan, the Department approved the second Addendum. Progress on the ERD pilot study has been provided to the Department in Monthly Progress Reports and within a Tracer Test Summary Report reviewed in March 2009.

Other reports reviewed in FY09 included: An Additional Off-Site Groundwater and Surface Water Investigation Report, a Waste Pad Investigation Work Plan, a 2008 Groundwater Monitoring and On-Site Monitoring Well Installation Report, a Drum Storage Pad Investigation Report, a Drum Storage Pad Removal Report, and a Supplemental Off-Site Soil Gas Investigation Report. A number of Monitoring Well Approvals were also granted to the RP for the installation of wells proposed and approved in the work plans and addendums.

Moreover, the Department has remained committed to keeping the public informed by providing site investigation updates, conducting another Availability Session in March 2009, attending community meetings, and responding to requests for specific information on the site.

### BAHAN MACHINE & FOUNDRY CO INC

**Location:** 200 W WAREHOUSE CT, TAYLORS

**Description:** Former textile machinery manufacturing facility with possible PCB contamination.

**Lead Designation:** RP Funded, VCC 00-5403-RP

**Funds Expended in FY'09:** \$ 2,499.00    Total Site Expenditures: \$14,459.00

**Actions Taken in FY'09:** On July 29, 2008, the Department received the Temporary Well Installation and Monitoring Well Sampling report, which included the results of the installation of three temporary wells advanced to 20-feet below ground surface which aided in determining the horizontal extent of petroleum contaminated soil and groundwater. The results of the soil and groundwater samples indicated that there was no further petroleum contamination in any other area of the site; therefore, the Department approved the recommendation of installing a free product recovery system on the existing monitoring wells that contain petroleum. A Work Plan for Free Phase Product Recovery was approved for implementation on October 8, 2008. The May 2009 progress report documented that an active skimmer system was initially installed in the 4-inch diameter monitoring well (MW-13) near the center of the plume and passive recovery SoakEase™ socks were placed in the remaining five 2-inch diameter monitoring wells (MW-3, MW-4, MW-10, MW-11 and MW-12) located near the perimeter of the plume. During the initial two weeks of operation, approximately 10 gallons of free product were recovered. The second progress report documented 32 gallons of free product was recovered, showing a significant decline of free product in wells MW-3 and MW-4, a small decrease in MW-12 and an increase of product in wells MW-10 and MW-11. The system is scheduled to operate continuously.



## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### BARNWELL TOWN DUMP

**Location:** ON CO RD 607 5 MI E OF INT CO RD 70, BARNWELL

**Description:** The Town of Barnwell operated the dump from 1955 to 1972. Lanolin sludge containing perchloroethene from wool mill dry-cleaning operation and trichloroethene found in open dump. Approximately 100 drums found. Site adjacent to Salkehatchie River.

**Lead Designation:** RP Funded, VCC 00-13-HW  
RP Funded Consent Agreement 00-13-HW 06/09/2000

**Funds Expended in FY'09:** \$ 603.00 Total Site Expenditures: \$42,232.00

**Actions Taken in FY'09:** The Department reviewed monthly progress reports and continued to work on the completion of the Record of Decision.

### BEST GOLF CARTS/DUMP/WOOD PRESERVATION

**Location:** HWY 701 IN HOMEWOOD 2 MILES N OF CONWAY

**Description:** Former wood treating operation with copper, chromium and arsenic contamination.

**Lead Designation:** RP Funded, VCC 01-5103-RP  
RP Funded Consent Agreement 95-17-HW 08/02/1995

**Funds Expended in FY'09:** \$ 411.00 Total Site Expenditures: \$28,335.00

**Actions Taken in FY'09:** On December 9, 2008, the Department issued a Certificate of Completion of VCC 01-5103-RP.

### BLACKBERRY VALLEY LANDFILL

**Location:** GROCE RD 1.5 MI. FROM INT S-199 & S-132, GREENVILLE

**Description:** A Greenville County permitted landfill that accepted domestic and industrial waste.

**Lead Designation:** RP Funded, VCC 02-21-HW  
RP Funded Administrative Consent Order 92-08-HW and Consent Agreement 02-21-HW (10/04/2002)  
11 RP Cost Recovery Settlement Agreements

**Funds Expended in FY'09:** \$ 2,629.00 Total Site Expenditures: \$182,837.00

**Actions Taken in FY'09:** DHEC approved the 2008 Annual Groundwater Corrective Action Monitoring Report on February 3, 2009. DHEC approved the disposal of condensate from the methane recovery system on March 26, 2009. The Department received a methane monitoring report for the landfill on April 9, 2009, and commented on the results on June 3, 2009.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### BRASWELL SITE

**Location:** 6268 BUSH RIVER RD, NEWBERRY

**Description:** Mobile home destroyed by fire and explosion related to the manufacturing of methamphetamine. Surrounded by pastureland and a large pond. Fire/explosion took place November 17, 2008. DHEC State Remediation Section and its contractor responded to investigate the possibility of environmental contamination.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 9,504.00 Total Site Expenditures: \$9,504.00

**Actions Taken in FY'09:** This site was an active illegal methamphetamine lab and meth lab waste disposal site. Waste products from the meth "cooking" were poured into the mobile home's open toilet flange which discharged into a septic tank. The operator was in the process of "cooking" when a pressurized container exploded, killing the operator.

After gaining access rights from the property owner, DHEC performed site recon and sampling activities. Samples were taken from the septic tank, tile field, and the drinking water well on site. Analytical results showed elevated levels of various solvents, petroleum hydrocarbons, and acids. The Department performed groundwater sampling via GeoProbe on February 12, 2009. Samples were taken down gradient from the septic tank tile field and analytical results showed "non-detect" for all test parameters. The property owner is working with DHEC's Regional Office for waste disposal options (trailer and other solid wastes around the site) and the Waste Assessment Section to pump out and dispose of septic tank waste contaminated with various meth lab wastes.

The Department forwarded demand for payment of \$5658.03 letters to four of the RPs. The RPs have not reimbursed the Department's costs of response. A request for restitution of the Department's response costs was also forwarded to the Newberry County Sheriff's Office and the State prosecutor.

### BREWER GOLD MINE DAM FAILURE

**Location:** 1/2 MI.NOF INTERSECTION OF SR 265&CR110, JEFFERSON

**Description:** Dam failure at the mine released acid mine drainage to nearby creek. EPA performed emergency response.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 1,097.00 Total Site Expenditures: \$1,605.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The Department assisted EPA and reviewed various reports during FY09.

### BROCKMAN CHRYSLER-PLYMOUTH SUZUKI

**Location:** 2750 LAURENS RD, GREENVILLE

**Description:** An auto dealership with groundwater contaminated with organics from an onsite paint/body shop.

**Lead Designation:** RP Funded Consent Agreement 94-08-HW 03/29/1994

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Funds Expended in FY'09:** \$ 853.00    Total Site Expenditures: \$16,925.00

**Actions Taken in FY'09:** The Department provided comments on Groundwater Monitoring Reports submitted in June 2008 and May 2009. Future sampling has now been reduced to one monitoring well.

### **CALHOUN PARK AREA SITE**

**Location:** CALHOUN @ CONCORD ST S, CHARLESTON

**Description:** A former manufactured gas plant and Ansonborough Homes, a public housing unit.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 474.00    Total Site Expenditures: \$37,224.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and SCANA regarding natural resource damages.

### **CARDINAL CHEMICAL CO**

**Location:** 0.1 MI E OF INT OF SHOP RD & S BELTLINE, COLUMBIA

**Description:** Operating facility became unable to discharge to Publicly-Owned Treatment Works and exhausted onsite capacity for storage of processed waste and storm water.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 177.00    Total Site Expenditures: \$210,060.00

**Actions Taken in FY'09:** The Department periodically visited the site to verify security was maintained, and to confirm stormwater was not accumulating to the point of discharging onto the adjacent property.

As required by the Non-Responsible Party VCC (which relates to a 6-acre tract of the total site), a Site Assessment Report was submitted to the Department in August 2008 that summarized the findings from the May 2008 soil and groundwater sampling event. These results indicate groundwater is impacted by volatile organic compounds (TCE and 1,1-DCE) at levels exceeding the Maximum Contaminant Level and localized areas of soil exceed both residential and industrial screening levels.

### **CAROLINA GRAVURE**

**Location:** 1 MI ON COMMERCIAL DR FRM INT OF SC 6, LEXINGTON

**Description:** A rotogravure printing facility from 1969 to 1990. The rotogravure process included the use of solvents and metal-based inks. From 1997 to 2001, the site was leased to Michelin for use as a tire warehouse.

**Lead Designation:** RP Funded, VCC 05-4707-RP

**Funds Expended in FY'09:** \$ 1,491.00    Total Site Expenditures: \$3,124.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** On July 14, 2008, the Department met with the RP to discuss the scope of work included in the Environmental Assessment Work Plan (Revision 2) Report. On August 12, 2008, the Department approved the RP's request to take soil core samples at 10-foot intervals to the groundwater interface at 120 feet at each of the groundwater sampling locations. The final revision of the work plan was approved. An environmental assessment was conducted to investigate potential source areas and the follow-up report was submitted on March 31, 2009. The majority of the groundwater and soil samples did not show significant contamination; however, one area showed elevated concentrations of metals in soil and groundwater. The Department requested the installation of permanent monitoring wells and the collection of additional soil samples. This work will be conducted in the first part of FY10.

### **CAROLINA STEEL DRUM CORP**

**Location:** PORTER RD @ I-77, ROCK HILL

**Description:** Site was used for drum recycling.

**Lead Designation:** State  
RP Funded Administrative Consent Agreement 90-48-SW; Amended (09/29/1990)  
06/25/1990

**Funds Expended in FY'09:** \$ 152.00 Total Site Expenditures: \$579,035.00

**Actions Taken in FY'09:** The Non-Responsible Party VCC was executed on January 13, 2009. The assessment required by the contract included the sampling of soils, sediments, surface water, and groundwater from the existing monitoring wells. All samples were collected during the second week in April, and the Department anticipates receipt of this data in early July 2009. The current property owners are evaluating the future use options of the site.

### **CASTLEBRIDGE PROPERTIES**

**Location:** 200 & 280 NATIONAL AVE, SPARTANBURG

**Description:** Pre-buy assessment found PCE, TCE in groundwater. Site consists of two buildings previously used for warehousing and manufacturing. Metal plating operation in one building. Both buildings contained industrial drycleaning processes.

**Lead Designation:** RP Funded, VCC 07-5712-RP

**Funds Expended in FY'09:** \$ 3,945.00 Total Site Expenditures: \$6,033.00

**Actions Taken in FY'09:** On August 12, 2008, DHEC approved the Remedial Investigation Phase I Work Plan (Revision 1). DHEC approved the revised Sampling and Analysis Plan on September 12, 2008. DHEC received the Remedial Investigation Phase I Report on March 10, 2009; the Department provided comments and anticipates responses from the RP in FY10.

### **CHEMURGY PRODUCTS PLANT**

**Location:** 101 CONGAREE RD (a/k/a WOODS LAKE RD), GREENVILLE

**Description:** Groundwater contamination resulting from disposal of waste containing coal tar residue. Soil contamination has been removed, and the groundwater plume appears to have migrated across Piper Lane. One interim remedial pumping well in place.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Lead Designation:** RP Funded Administrative Consent Agreement 89-32-SW 09/29/1989

**Funds Expended in FY'09:** \$ 1,315.00 Total Site Expenditures: \$27,533.00

**Actions Taken in FY'09:** The Department approved a work plan for Additional On-Site Assessment and Aerobic Degradation of Naphthalene and 2-Methylnaphthalene.

### **CLINTON MILLS-PLANTS 1 AND 2**

**Location:** 600 ACADEMY ST, CLINTON

**Description:** Textile plant used 1,1,1-trichloroethane for a cleaning solvent and approximately 1531 gallons of waste 1,1,1-trichloroethane were used around railroad tracks and fence for weed control.

**Lead Designation:** RP Funded, VCC 02-5327-RP  
RP Funded, VCC 05-5327-RP

**Funds Expended in FY'09:** \$ 961.00 Total Site Expenditures: \$6,310.00

**Actions Taken in FY'09:** On July 25, 2008, the Department advised the RP it was in compliance with the November 9, 2006 work plan. To better characterize the site, the Department requested five groundwater monitoring wells be re-sampled. The September 25, 2008 Groundwater Sampling Report results revealed that the free product detected in groundwater monitoring well (W-2) had increased from 0.08 ft to 0.75 ft and groundwater in well W-5 had been impacted by contaminants. On September 24, 2008, the Department requested that a work plan be submitted that will adequately address the vertical and horizontal extent of contamination. A work plan for further assessment is expected to be submitted in FY10.

### **COASTAL LUMBER CO - CARMICHAEL TRACT**

**Location:** 800 HULL RD, MARION

**Description:** Disposal site for Coastal Lumber Marion Sawmill. Demolition and CCA-treated wood were disposed. Arsenic and chromium was detected in soil and groundwater.

**Lead Designation:** RP Funded, VCC 04-5539-RP

**Funds Expended in FY'09:** \$ 1,756.00 Total Site Expenditures: \$2,388.00

**Actions Taken in FY'09:** On September 25, 2008, the Department received a Remedial Investigation Report with new analytical data as a result of the additional required investigation mandated by the Department. After reviewing the report, the Department notified the RP that additional groundwater investigation was necessary due to the impact of arsenic and lead in the onsite wells. The results of the June 4, 2009 sampling event confirmed that lead and arsenic were exceeding the Maximum Contaminant Levels. A proposed work plan for the installation of groundwater monitoring wells will be required for submittal to the Department for review in FY10.

### **COASTAL LUMBER CO - MARION SAWMILL SITE**

**Location:** SC HWY 41 ALT & EAST ST, MARION

**Description:** Former pine sawmill with CCA wood treatment operation. Possible arsenic and chromium in soil and groundwater.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Lead Designation:** RP Funded, VCC 04-5538-RP

**Funds Expended in FY'09:** \$ 1,096.00      Total Site Expenditures: \$2,481.00

**Actions Taken in FY'09:** On September 25, 2008, the Department received a Remedial Investigation Report with new analytical data as a result of the additional required investigation mandated by the Department. After reviewing the report, the Department notified the RP that additional groundwater investigation was necessary due to the impact of arsenic and lead in the onsite wells. The results of the June 4, 2009 sampling event confirmed that lead and arsenic were exceeding the Maximum Contaminant Levels. A proposed work plan for the installation of groundwater monitoring wells and a thorough soil investigation will be required for submittal to the Department for review in FY10.

### **COLONIAL HEIGHTS PACKAGING**

**Location:** EXIT 68 INTERCHANGE OF I-85, SPARTANBURG

**Description:** Chlorinated solvents. Transfer from BOW.

**Lead Designation:** RP Funded, VCC 07-5647-RP

**Funds Expended in FY'09:** \$ 879.00      Total Site Expenditures: \$1,803.00

**Actions Taken in FY'09:** A Groundwater Sampling Report was approved in February 2009. The Department denied the responsible parties' request for a no further action designation as DHEC did not consider the terms of the VCC completed. The Department approved a new schedule for groundwater monitoring and additional groundwater data was collected in late FY09. A May 2009 Groundwater Monitoring Results Report was submitted to the Department in June 2009. Based on the new data, the Department agreed to reduce the number of monitoring wells to be sampled.

### **COLUMBIA NITROGEN**

**Location:** W END OF MILFORD ST RT 26, CHARLESTON

**Description:** The site operated from 1905 to 1966 as a phosphate fertilizer granulation plant.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 165.00      Total Site Expenditures: \$624.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and Ashley II regarding natural resource damages.

### **COLUMBIA ORGANIC CHEMICALS INC**

**Location:** 1 BLK FRM INT OF TRUE ST & DRAKE AVE, COLUMBIA

**Description:** A closed specialty chemical manufacturer whose processes led to soil and groundwater contamination. Delineation of groundwater contamination is ongoing, while the remedy for addressing soil contamination, a protective cap, is currently being designed.

**Lead Designation:** State  
RP Funded Consent Agreement 91-10-SW, Incomplete 02/27/1991

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Funds Expended in FY'09:** \$ 8,655.00      Total Site Expenditures: \$3,674,872.00

**Actions Taken in FY'09:** In July 2008, the Department provided area residents with the results of soil samples collected from their property and analyzed for the presence of dioxins. The data indicated dioxins were not present in offsite areas in excess of the EPA's residential removal action level of 1 part per billion.

### COLUMBIA SUPPLY COMPANY

**Location:** 823 GERVAIS ST, COLUMBIA

**Description:** Site of former manufactured gas plant with buried coal tar.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 1,324.00      Total Site Expenditures: \$12,348.00

**Actions Taken in FY'09:** The Department reviewed the groundwater monitoring report and recommended that additional ISCO treatment be conducted. Additional ISCO injections were conducted in February 2009, and a monitoring report was submitted on March 18, 2009. The contaminant concentrations onsite remained significantly above the remedial goals; however, all of the offsite monitoring wells have met their goals. Columbia Supply proposed new cleanup goals, but the Department did not agree with these proposals. A remediation meeting was held on May 12, 2009, to discuss how to get the project to completion. It was determined that remediation would be completed under an existing Bureau of Water Consent Order.

### CONE MILLS CORP/UNION BLEACHERY PLANT

**Location:** 3335 OLD BUNCOMBE RD, GREENVILLE

**Description:** Former textile dyeing and finishing plant with hexavalent chromium, PCBs, and other metals in groundwater, sediment, surface water, and soil.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 37,136.00      Total Site Expenditures: \$644,399.00

**Actions Taken in FY'09:** Late in FY08, the Court appointed a receiver to market the property and manage various administrative activities at the site. During FY09, DHEC evaluated several potential purchase agreements, but none were approved. Also, on June 3, 2009, DHEC issued a Notice to Proceed with additional assessment activities. DHEC approved the Work Plan for environmental sampling on June 15, 2009. DHEC visited the Site on June 17, 2009, to observe the sampling activities.

### CONGAREE DOWNS AREA POND

**Location:** RAMBLIN RD AT ELNORA DR, WEST COLUMBIA

**Description:** Suspected herbicide discharge killing aquatic plants.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 5,268.00      Total Site Expenditures: \$5,268.00

**Actions Taken in FY'09:** DHEC performed sampling and installed a filter on a private residential well.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### HEBRON DRIVE (f/k/a CONSOLIDATED FREIGHTWAYS)

**Location:** HEBRON DR/SUNSET BLVD, WEST COLUMBIA

**Description:** Groundwater contamination. PCE in groundwater above the MCL. Source of the PCE is probably from offsite.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 7,258.00 Total Site Expenditures: \$7,258.00

**Actions Taken in FY'09:** Two private wells with concentrations above drinking water standards were discovered in the area near the Consolidated Freightways facility. An alternate drinking water supply was provided to the residents while the situation was assessed. DHEC proposed to install a waterline down Hebron Drive to tie all of the residents on to The City of West Columbia water. An Action Memorandum was signed on April 9, 2009.

DHEC went door to door to provide notice to the public. An availability session was held on June 2, 2009, to respond to questions and concerns. Three additional residential wells were also identified during the meeting, which were later sampled and no contaminants were found. Design and construction of water mains will be completed in FY10.

### CREATEX MANUFACTURING CORP

**Location:** INT OF SC 9 & IRON ORE RD, SPARTANBURG

**Description:** Two unpermitted disposal areas at the Milliken plant contained drums, industrial waste and construction debris. VOCs were found in soil and groundwater. Based on Remedial Investigation results, removal was the chosen remedy.

**Lead Designation:** RP Funded, VCC 96-22-HW  
RP Funded Consent Agreement 96-22-HW, Amended 05/07/97 05/28/1996

**Funds Expended in FY'09:** \$ 1,314.00 Total Site Expenditures: \$24,434.00

**Actions Taken in FY'09:** The Department met with the neighboring property owner to discuss the groundwater migration onto his property as it was determined that the downgradient well that had low levels of TCE was actually on his property and not on Milliken's. The Department sent a request to Milliken to further characterize the extent of contamination. In October 2008, a Work Plan was submitted for additional groundwater characterization, which specified that groundwater samples should be collected at multiple depths to truly characterize the extent of contamination and which was approved.

### CSX MCCORMICK TRAIN WRECK

**Location:** HWY 28 & STATE RD 62, MCCORMICK

**Description:** Area of a train derailment; toluene, xylene, and benzene contamination present.

**Lead Designation:** RP Funded, VCC 96-36-HW  
RP Funded Consent Agreement 96-36-HW 10/01/1996

**Funds Expended in FY'09:** \$ 803.00 Total Site Expenditures: \$32,607.00



## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** The Department reviewed the Annual Groundwater Monitoring Report that summarized the phytocover maintenance and the annual groundwater quality monitoring activities that occurred during December 2008. Phytosystem maintenance has resulted in a well-established ground cover and mature trees that can survive under normal precipitation rates of the Piedmont region without irrigation. Groundwater quality data indicates the distribution of hydrocarbon constituents in shallow groundwater continues to be limited to the central portion of the area west of Highway 28. Based on the data collected since nitrate injection system shutdown, installation of the phytosystem, and site restoration activities, it is apparent that groundwater quality conditions remain stable and natural biodegradation processes are reducing hydrocarbon concentrations and controlling hydrocarbon migration in site groundwater.

### **DALE OWEN SITE**

**Location:** 250 WENTZKY RD, ANDERSON

**Description:** Dow Badische Plant (now owned by BASF Corporation) disposed of plant waste at this residential property without a permit. High concentrations of trichloroethene are in the groundwater and soil. BASF entered into an RP-VCC in 1998, but the VCC was terminated and BASF entered into a Consent Agreement in 2001.

**Lead Designation:** RP Funded, VCC 98-5220-RP  
RP Funded 01-21-HW 06/26/2001

**Funds Expended in FY'09:** \$ 529.00      Total Site Expenditures: \$211,452.00

**Actions Taken in FY'09:** After review of the groundwater monitoring data, it was determined by DHEC that an additional round of Hydrogen Release Compound (HRC) injections were required. The first round of injections showed significant reduction in volatile organic compounds in the shallow groundwater. However, the concentrations in the deeper groundwater zone remained about the same as before injection. The second round of injections will target the deeper groundwater zone. Groundwater monitoring will continue to monitor the progress of the remedy.

### **DARLINGTON COUNTY PRISON FARM**

**Location:** 200 CAMP RD, DARLINGTON

**Description:** Former wood treatment operation where wood was dipped into a creosote pit. A prison is currently located on the site.

**Lead Designation:** RP Funded Amendment 95-43-SW (07/10/1995), Administrative Consent  
Agreement 92-43-SW 08/05/1992

**Funds Expended in FY'09:** \$ 1,253.00      Total Site Expenditures: \$31,794.00

**Actions Taken in FY'09:** DHEC provided comments on both of the Groundwater Monitoring Data reports on July 30, 2008 and March 5, 2009.

### **DETROIT BROACH COMPANY**

**Location:** BUNCOMBE RD, GREER

**Description:** Company manufactures cutting tools. Groundwater beneath the site contains chlorinated solvents at levels exceeding Maximum Contaminant Levels.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Lead Designation:** RP Funded Amended (11/14/96); Consent Agreement 94-55-HW 12/19/1994

**Funds Expended in FY'09:** \$ 718.00 Total Site Expenditures: \$13,292.00

**Actions Taken in FY'09:** The Department reviewed a 2008 Annual Groundwater Monitoring Report and the 2009 Annual Groundwater Monitoring Report is anticipated FY10.

### **DONWAL**

**Location:** 125 INDUSTRIAL PARK RD, SUMMERVILLE

**Description:** Site of former foam insulation manufacturing facility. Groundwater contaminated by chlorinated solvents.

**Lead Designation:** RP Funded Consent Agreement 95-28-HW 10/26/1995

**Funds Expended in FY'09:** \$ 3,873.00 Total Site Expenditures: \$43,387.00

**Actions Taken in FY'09:** The Department approved the Feasibility Study Work Plan in April 2009 and field assessment activities to collect data necessary to complete the Feasibility Study which began in June. During this month, trenching confirmed the presence of a leachfield behind the building; five piezometers were installed; and passive soil gas screening was conducted along the storm water ditches. Results from these activities will be submitted to the Department in a monthly progress report. As required by the work plan, these progress reports will continue to be submitted to the Department on a monthly basis while the field investigation is occurring.

### **DOWBRANDS INC**

**Location:** 300 S MAIN ST, MAULDIN

**Description:** Former manufacturing facility, now used for warehousing. Soil contamination: PCE, TCE, Chloroform. Groundwater contaminated with PCE, DCCE, and TCE. Possible off-site sources as well as potential on-site sources.

**Lead Designation:** RP Funded, VCC 09-5797-RP

**Funds Expended in FY'09:** \$ 3,757.00 Total Site Expenditures: \$3,757.00

**Actions Taken in FY'09:** An RP entered into a Responsible Party Voluntary Clean-up Contract with the Department in February 2009. Soon afterwards the Department met with the RP to discuss DHEC's expectations regarding the required Remedial Investigation Work Plan. The first Remedial Investigation (RI) Work Plan was submitted to the Department in March 2009. The Department provided comments to the RP. A revised RI work plan was submitted in May 2009 and approved. Implementation of the three-phased work plan began in the latter part of FY09 and a report is anticipated in FY10.

### **DUKE POWER - SPARTANBURG MGP SITE**

**Location:** 684 N PINE ST, SPARTANBURG

**Description:** Possible tar, hydrogen sulfide, waste sludge, phenol, oil contamination. Former manufactured gas plant (MGP); currently a natural gas facility.

**Lead Designation:** RP Funded, VCC 01-5406-RP

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Funds Expended in FY'09:** \$ 1,647.00    Total Site Expenditures: \$35,560.00

**Actions Taken in FY'09:** The annual groundwater monitoring report indicated groundwater concentrations appeared to be decreasing over time. A Feasibility Study will be completed to evaluate remedial alternatives for groundwater remediation.

### EFP PRODUCTS

**Location:** 6247 CAMPBELL RD, YORK

**Description:** Site of metal plating facility where bedrock groundwater is impacted by chromium.

**Lead Designation:** RP Funded, VCC Letter of Agreement  
RP Funded Consent Agreement 95-32-HW 11/30/1995

**Funds Expended in FY'09:** \$ 8,629.00    Total Site Expenditures: \$84,655.00

**Actions Taken in FY'09:** The results of a Treatability Study conducted on subsurface vadose zone soils in the former plating area indicated zero valent iron was successful in reducing the hexavalent chromium to its less toxic and insoluble trivalent state. This information, plus previously identified soil remedies, was re-evaluated in a February 2009 Feasibility Study Addendum. The Department will select a soil remedy and propose its selection to the affected community in a Proposed Plan.

### EVODE-TANNER INDUSTRIES

**Location:** FURMAN HALL COURT, PO BOX 1967, GREENVILLE

**Description:** Former latex paint manufacturing facility at which spent solvents were disposed of in a trench.

**Lead Designation:** RP Funded Consent Agreement 94-49-HW 11/21/1994

**Funds Expended in FY'09:** \$ 652.00    Total Site Expenditures: \$40,010.00

**Actions Taken in FY'09:** In accordance with the Consent Agreement, quarterly reports detailing monitoring events were submitted to the Department. The expanded interim correction action system continued to operate and to date has recovered and treated more than 42 million gallons of impacted groundwater. Data indicates this pump and treat system continues to be effective in removing volatile organic compounds from the recovered groundwater. The Department also met with the Responsible Party to discuss the requirements for the upcoming Remedial Investigation/Feasibility Study submittal.

### FIBER INDUSTRIES INC

**Location:** INT I-85 & WOODRUFF RD, GREENVILLE

**Description:** Site of former textile manufacturing company that utilized on-site landfill. Landfill contained textile manufacturing waste, asbestos, construction materials, oily wastes, solvents, acid, and a waste impoundment.

**Lead Designation:** RP Funded, VCC 00-4782-RP  
RP Funded Administrative Consent Order 90-09-SW 01/23/1990

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Funds Expended in FY'09:** \$ 972.00      Total Site Expenditures: \$49,649.00

**Actions Taken in FY'09:** Remedial Action is completed for groundwater and currently known areas of soil contamination. Long-term monitoring continues at selected locations, and portions of the site are undergoing Brownfields redevelopment. A major well abandonment effort occurred in support of the redevelopment.

### FIBER INDUSTRIES/PALMETTO PLANT

**Location:** MCIVER RD 1 MI FROM INT HWY 52, DARLINGTON

**Description:** Chrome sludge treatment facility (storage lagoon and drying beds). Storage facility for organic, inorganic and solvent wastes. Bureau of Water Consent Agreement 93-046-W.

**Lead Designation:** RP Funded, 93-046-W

**Funds Expended in FY'09:** \$ 866.00      Total Site Expenditures: \$1,254.00

**Actions Taken in FY'09:** Groundwater contamination is present and is currently being remediated with a tiered pump and treat system. The most recent owner has filed bankruptcy. The property has an interested buyer and remediation is on-going.

### FLORENCE MGP SITE

**Location:** 553 N IRBY ST, FLORENCE

**Description:** Site of former manufactured gas plant at which soils are contaminated with tar and fuel; groundwater is contaminated with VOCs and SVOCs.

**Lead Designation:** RP Funded, VCC 00-5396-RP

**Funds Expended in FY'09:** \$ 1,148.00      Total Site Expenditures: \$30,657.00

**Actions Taken in FY'09:** DHEC reviewed the groundwater monitoring plan in November 2008. Additional groundwater monitoring wells will be installed in different zones across the site to measure groundwater quality. Groundwater monitoring will continue on a quarterly basis to evaluate the effectiveness of the removal action.

### FORMER COOPER HAND TOOLS SITE

**Location:** 815 STATE RD, CHERAW

**Description:** Company designed and manufactured small hand tools, electroplating, tinning, and wastewater treatment. VOCs in soil and groundwater, chlorinated solvents.

**Lead Designation:** RP Funded, VCC 04-5582-RP

**Funds Expended in FY'09:** \$ 881.00      Total Site Expenditures: \$7,537.00

**Actions Taken in FY'09:** On June 30, 2008, the Department approved the additional Supplemental Investigation work plan. Eight new monitoring wells will be installed and vertical profiling conducted to characterize the extent of contamination.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

### **FRANKLIN SITE**

**Location:** 6305 MACEDONIA CHURCH RD, PROSPERITY

**Description:** Buried C&D debris including tires, lead-based painted debris as well as asbestos.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 3,473.00 Total Site Expenditures: \$10,209.00

**Actions Taken in FY'09:** Samples were collected from an open dump of which construction materials were located in late FY08. Portions of the costs associated with the FY09 sampling were paid in FY09.

### **GEORGIA CHEMICAL WORKS**

**Location:** HWY 17 @ EDISTO RIVER, PON PON

**Description:** Former superphosphate fertilizer producer. Elevated arsenic and lead in soil.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 188.00 Total Site Expenditures: \$6,441.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages.

### **GRACE WR & CO AG CHEM GROUP**

**Location:** INT OF HARMAN & ELGIN ST, CHARLESTON

**Description:** Superphosphate fertilizer manufacturing facility that also blended various pesticides for agricultural use. Soil, groundwater, surface water, and sediment contaminated with pesticides, metals, and VOCs.

**Lead Designation:** RP Funded, VCC 89-34-SW  
RP Funded Administrative Consent Agreement 89-34-SW, S 11/13/1989

**Funds Expended in FY'09:** \$ 896.00 Total Site Expenditures: \$93,397.00

**Actions Taken in FY'09:** The Department entered into a contract with The City of Charleston for property redevelopment. The Scope of Work is being negotiated. Sampling of groundwater and surface water occurs once every nine months and an annual report is submitted. In general groundwater and surface water quality have improved since the completion of the remedial action. Groundwater and surface water monitoring will continue for the next year.

### **GUN O FIELD ROAD**

**Location:** 2280 GUN O FIELD RD, WALLACE

**Description:** Several drums of what appears to be textile dye dumped in the woods.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 11,997.00 Total Site Expenditures: \$11,997.00

**Actions Taken in FY'09:** In November 2008, the Department was notified of abandoned wastes located in a wooded area off of Gun O Field Road in Marlboro County near the North Carolina border. On December 1, 2008, the Department sent a Scope of Work to A&D Environmental Services to obtain a cost estimate, which included the costs related to sample collection, laboratory analysis for up to six samples, transportation/disposal costs, a site figure, data submittal and any other anticipated costs to cleanup the site. A brief Project Information Package (PIP) was submitted on December 12, 2008, describing the field activities necessary to address the Scope of Work. On January 15, 2009, the Department sent a Notice To Proceed to begin the activities associated with the drum characterization. A total of nine drums were sampled in order to aid in determining the source and characterization of the suspected dye waste, on January 27, 2009. The lab results confirmed that the waste was non-hazardous; and therefore, can be disposed in that manner. On March 4, 2009, drums were placed in overpacks and set in a roll-off box for transport and disposal to a proper disposal facility.

### HINSON ROBERT PROPERTY / FMX

**Location:** RTE #4 W OF COUNTY RD 257, BENNETTSVILLE

**Description:** Pesticide residuals from an off-site warehouse fire were buried in an on-site pit.

**Lead Designation:** RP Funded Consent Agreement 93-15-SW 03/02/1993

**Funds Expended in FY'09:** \$ 113.00 Total Site Expenditures: \$14,081.00

**Actions Taken in FY'09:** Groundwater samples were collected from existing monitoring wells and all contaminant concentrations were below drinking water standards.

### HITACHI ELECTRONIC DEVICES

**Location:** 575 MAULDIN RD, GREENVILLE

**Description:** Site of former television picture tube manufacturing facility. Soil and groundwater contaminated with trichloroethene due to spills and leaks.

**Lead Designation:** RP Funded, VCC 97-5303-RP

**Funds Expended in FY'09:** \$ 4,255.00 Total Site Expenditures: \$36,379.00

**Actions Taken in FY'09:** As required by the VCC, a Remedial Investigation Report was submitted to the Department in April 2009 describing the numerous phases of investigation and interim remediation activities that have been conducted to investigate the nature and extent of trichloroethene (TCE) in groundwater. As the Department reviewed this report, quarterly monitoring of groundwater, surface water, and sediments continued. In most wells within the source area, groundwater TCE concentrations remain significantly lower than pretreatment levels; however, two breakdown products of TCE were detected in off-site downgradient monitoring wells. TCE and its associated breakdown products were also detected in surface water and sediment samples from the Reedy River.

The pump and treat system along the southern property boundary continued to operate and remove VOCs from the groundwater. Since being placed in full operation in January 2007, the system has treated approximately 1.4 million gallons of groundwater. The estimated cumulative mass of VOCs removed by the system is 478 pounds. When considering the former soil vapor extraction system and in-situ thermal

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

desorption processes, the estimated total amount of VOCs removed through this FY is 6.69 tons. The pump and treat system and quarterly monitoring will continue until a final remedy is selected.

### **HOLLIS ROAD CONTAMINATION**

**Location:** 206 HOLLIS RD, LEXINGTON

**Description:** Plume(s) of VOCs causing groundwater contamination east of the I-20/Highway 6 interchange and south of the Town of Lexington. At least 42 business and private drinking water wells have trichloroethene contamination.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 483.00 Total Site Expenditures: \$2,965,524.00

**Actions Taken in FY'09:** Groundwater samples results were reviewed. Remedial alternatives are being considered in conjunction with the South Lake Drive/Old Orangeburg Road Site investigation.

### **HORTON SALES DEVELOPMENT CORP**

**Location:** 1870 PIEDMONT HWY, PIEDMONT

**Description:** Site is being used as a chemical tote facility. Site appears unstable and contaminated (surficial staining) from potentially hazardous material.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 37,409.00 Total Site Expenditures: \$4,212,607.00

**Actions Taken in FY'09:** A Final Removal Action Report was submitted to the Department in July 2008. This report documented all activities that occurred between December 2006 and January 2008. During this time period, a total of 9,462 intermediate bulk containers were processed (rinsed and cleaned) and transported to the Union County Landfill for disposal. Many of these containers contained varying quantities of liquids and/or solids. During this removal activity, over one million gallons of liquid and 725 tons of solids and sludge were transported offsite for disposal as nonhazardous waste. In addition to the nonhazardous waste stream, approximately 85,000 gallons of liquid were transported to hazardous waste treatment plants in Maryland and Michigan. The Department continued to conduct its PRP investigation and build a case for cost recovery activities.

### **I-85 DISTRIBUTION CENTER**

**Location:** NW INTERSTATE OF I85 AND SIGBEE RD, SPARTANBURG

**Description:** Former textile manufacturing facility. Soil, groundwater, and surface water contaminated with perchloroethene (PCE).

**Lead Designation:** RP Funded, VCC Letter of Agreement  
RP Funded Court Order Consent Decrees 7:03-0805-26 (1/12/05 and 3/9/05)

**Funds Expended in FY'09:** \$ 45,295.00 Total Site Expenditures: \$2,389,270.00

**Actions Taken in FY'09:** DHEC continued to operate the stream sparging system. Monthly discharge monitoring reports were submitted per the permit requirements. Over 184 million gallons of water have

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

been treated to date. Concentrations of contaminants in the stream have showed a steady decline over the time of operation of the system.

### **INDUSTRIAL DRIVE SITE**

**Location:** 341 INDUSTRIAL DR, LEXINGTON

**Description:** Originally part of the South Lake Drive Site, but determined to be separate contamination. VOCs detected in soils and groundwater.

**Lead Designation:** RP Funded, VCC 00-34-HW

**Funds Expended in FY'09:** \$ 8,450.00 Total Site Expenditures: \$71,060.00

**Actions Taken in FY'09:** The Revised Feasibility Study Report submitted in FY08 was found to contain a number of deficiencies. The Department met with the RP to discuss the concerns with the document. The RP submitted responses to the Department's comments and proposed the collection of additional groundwater data, which the Department approved. An Additional Assessment Activities Work Plan was submitted, however, the Department had some concerns regarding the location of an additional monitoring well proposed to define the end of the groundwater plume. A site visit was conducted and the parties resolved the well location. The work plan was then approved and a Monitoring Well Permit was issued. The work plan was implemented at the end of FY09 and a report of the activities is anticipated in FY10.

### **INDUSTRIAL METAL PROCESSING/HAMPTON AVE**

**Location:** 1326 HAMPTON AVE EXT, GREENVILLE

**Description:** Scrap metal yard with PCBs, arsenic, and lead in soils. Copper present in surface water at property boundary.

**Lead Designation:** RP Funded, VCC 99-5358-RP

**Funds Expended in FY'09:** \$ 1,797.00 Total Site Expenditures: \$8,816.00

**Actions Taken in FY'09:** After the review of the Site Assessment and Remediation Activities Report submitted by the RP, the Department requested the submittal of an additional work plan that will assess the horizontal and vertical extent of soil and groundwater contamination. There were still levels of contaminants that exceeded EPA's soil residential and industrial regional screening levels in certain areas. The Department approved a Work Plan for Additional Assessment Activities. The Department expects a report detailing the results of the investigation in FY10.

### **INTEL POWER SERVICES**

**Location:** 303-A GREER DR, SIMPSONVILLE

**Description:** Soil, groundwater and surface water contamination

**Lead Designation:** RP Funded, VCC 06-5675-RP

**Funds Expended in FY'09:** \$ 2,587.00 Total Site Expenditures: \$2,602.00

**Actions Taken in FY'09:** After a site visit with the RPs and follow-up discussions, DHEC approved the revised Soil and Groundwater Assessment Work Plan in January 2009. DHEC issued a Temporary Monitoring Well permit on January 27, 2009. On June 5, 2009, DHEC approved the Soil and Groundwater Assessment Report.



## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### IVAX INDUSTRIES INC

**Location:** 1880 LANGSTON ST, ROCK HILL

**Description:** Abandoned chemical site with shallow groundwater contaminated by chlorinated VOCs.

**Lead Designation:** RP Funded, VCC 02-5416-RP

**Funds Expended in FY'09:** \$ 3,581.00 Total Site Expenditures: \$27,614.00

**Actions Taken in FY'09:** After review of the July 11, 2008, Supplemental Remedial Investigation Report, DHEC requested the installation of additional monitoring wells to completely define the groundwater plume. DHEC held a conference with the RP on September 17, 2008. DHEC approved a monitoring well permit on November 21, 2008. DHEC approved the Interim Measures Work Plan on February 5, 2009. On June 5, 2009, the RP and the Department met to discuss upcoming groundwater monitoring well installation fieldwork.

### J&H SMITH MANUFACTURING CO

**Location:** 114 W PEARL ST, LAMAR

**Description:** Site consists of metal cutting, and painting operation. Groundwater is contaminated with VOCs.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 319.00 Total Site Expenditures: \$576.00

**Actions Taken in FY'09:** The Department contacted the current owner of the property and requested an access agreement. Access was obtained and additional groundwater data will be collected in FY10.

### KALAMA SPECIALITY

**Location:** HWY 21, BURTON

**Description:** Specialty chemical manufacturer discharged wastewater to on-site lagoon.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 21,711.00 Total Site Expenditures: \$39,844.00

**Actions Taken in FY'09:** After an offsite business's well had detections of contaminants, DHEC conducted a groundwater investigation on the Kalama Site property and additional offsite property to determine if detections were coming from groundwater contamination at the site. The focus of the study was on the limestone aquifer and six wells were sampled onsite as well as three wells offsite that were screened in the limestone aquifer. This study was conducted in a time critical fashion because of the use of well water at a nearby horse farm and trailer park.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### KELLETT PROPERTY

**Location:** 230 E STANDING SPRINGS RD, SIMPSONVILLE

**Description:** Unpermitted area where approximately 4000 drums of industrial wastes were buried. During a removal action, the drums were unearthed and the contents disposed off-site. Remedial Investigation is ongoing with delineation of groundwater contamination.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 96.00 Total Site Expenditures: \$4,755,999.00

**Actions Taken in FY'09:** The Department contacted the Responsible Party to discuss submittal of the Remedial Investigation/Feasibility Study Report.

### KINGS LABORATORY INC

**Location:** 1/4 MI E OF I-77 N OF BLYTHEWOOD RD, BLYTHEWOOD

**Description:** Former specialty chemical company with groundwater contamination.

**Lead Designation:** RP Funded Administrative Consent Order 90-18-SW, W 03/26/1990

**Funds Expended in FY'09:** \$ 4,947.00 Total Site Expenditures: \$41,338.00

**Actions Taken in FY'09:** The Department provided comments to the RP's Groundwater Monitoring Report. A Work Plan for Groundwater Remediation and responses to the Department's previous comments were approved and well approval permits provided. The work plan will be implemented in FY10.

### KOPPERS CO INC

**Location:** KOPPER'S RD, FLORENCE

**Description:** Abandoned creosote and PCP lagoons.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 346.00 Total Site Expenditures: \$485.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several meetings with the Natural Resource Trustees and the negotiation of potential settlement claims regarding natural resource damages.

### KOPPERS CO/TREATING PLANT

**Location:** #3 BRASWELL ST, CHARLESTON

**Description:** Large wood treatment plant that used creosote, pentachlorophenol, and chromated copper arsenate (CCA).

**Lead Designation:** RP Funded 99-15-HW 04/01/1999

**Funds Expended in FY'09:** \$ 1,388.00 Total Site Expenditures: \$157,765.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and Beazer East regarding natural resource damages.

### **LEXINGTON COMPOST LANDFILL TOWN OF**

**Location:** 374 RAILROAD AVE, LEXINGTON

**Description:** Old town dump approximately 10 acres used of the 22.72 acres tract. Household garbage, maybe industrial waste, but town claims not much industry around when dump was used. Closed about 30 years ago.

**Lead Designation:** RP Funded, VCC 07-5450-RP

**Funds Expended in FY'09:** \$ 747.00 Total Site Expenditures: \$1,607.00

**Actions Taken in FY'09:** Soil and groundwater samples were collected. Groundwater contamination was consistent with migration from the Hollis Road Groundwater Contamination Site.

### **MACALLOY CORPORATION**

**Location:** 1800 PITTSBURGH AVE, CHARLESTON

**Description:** Ferro-chrome alloy producer using submerged electric arc furnaces. Chromium contamination from air pollution (precip. dust and tower sludge)

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 3,709.00 Total Site Expenditures: \$39,537.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees regarding natural resource damages.

### **MCELVEEN PROPERTY**

**Location:** 6 - 14 BARTLETTE ST, SUMTER

**Description:** Former gas station/automotive garage. Transfer from UST.

**Lead Designation:** RP Funded, VCC 06-5661-RP

**Funds Expended in FY'09:** \$ 455.00 Total Site Expenditures: \$1,777.00

**Actions Taken in FY'09:** The Department approved the Revised Remedial Investigation Study Work Plan on February 19, 2009, for implementation of initial field screening investigation activities. A report documenting the results of the investigation is expected in FY10.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### MOORE BUSINESS FORMS SITE

**Location:** 1415 EMERALD RD, GREENWOOD

**Description:** Transferred project from Bureau of Water. Former printing facility with solvent contamination in groundwater. Transferred out of the Superfund Program thereafter.

**Lead Designation:** RP Funded, VCC 09-5678-OC (01/28/09; amended 03/09/09)

**Funds Expended in FY'09:** \$ 1,299.00 Total Site Expenditures: \$1,648.00

**Actions Taken in FY'09:** An Oversight Contract (09-5678-OC) was executed January 28, 2009, and an amendment to the Contract was issued March 9, 2009.

### NYTRONICS COMPONENTS GROUPS INC

**Location:** 700 ORANGE ST, DARLINGTON

**Description:** A former electronics manufacturing facility with soil, sediment, groundwater, and surface water contamination from polychlorinated biphenyls, volatile organic compounds, metals, and pesticides.

**Lead Designation:** RP Funded, VCC 99-5124-RP

**Funds Expended in FY'09:** \$ 1,432.00 Total Site Expenditures: \$75,984.00

**Actions Taken in FY'09:** On July 10, 2008, the demolition of the main buildings began and the mitigation of the surface water drainage ditch thereafter. The RP will begin to remediate soil contamination, design a groundwater remediation system and further evaluate the Swift Creek wetlands area.

### OLD ORCHARDS MEADOWS

**Location:** HOOD RD, GREER

**Description:** Former solvent recovery facility that was purchased by Hoechst, Inc. and used as parking lot. Site contains high levels of vadose zone VOCs as well as VOC-contaminated groundwater that migrated off-site.

**Lead Designation:** RP Funded, VCC 98-55-HW  
RP Funded Consent Agreement 98-55-HW 10/01/1998

**Funds Expended in FY'09:** \$ 1,736.00 Total Site Expenditures: \$73,381.00

**Actions Taken in FY'09:** The August 28, 2008 Semi-Annual Progress Report documented the performance of the automated injection system during the first six months of 2008. The sampling results indicated that the system is continuing to successfully treat both the saprolite and the bedrock aquifers with some areas showing a significant decline in PCE and TCE. In other areas, the level of contaminants has increased from previous sampling events. On November 4, 2008, the RP requested a modification to the Underground Injection Control permit #344M, in order to conduct supplemental injections in the vicinity of MW-7R and MW-8; and the Department approved the modification to the permit on November 7, 2008. The proposed injections are tentatively scheduled to start on November 10, 2008. The Department notified the RP of its concerns with the increase of concentrations in these areas; and DHEC expects a proposed plan that will assess the effectiveness of the remedy in FY10.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

### **PACIFIC GUANO**

**Location:** 1505 KING ST EXT, CHARLESTON

**Description:** Former fertilizer company. Soil and groundwater contaminated with lead.

**Lead Designation:** RP Funded, VCC 00-5296-RP

**Funds Expended in FY'09:** \$ 1,282.00 Total Site Expenditures: \$33,887.00

**Actions Taken in FY'09:** DHEC issued a certificate of completion on December 16, 2008, for the RP. Additional groundwater monitoring and cap maintenance will be required but the requirements of the remedy have been completed. DHEC reviewed the annual report and groundwater sampling results. Groundwater concentrations have remained consistent over the last few years.

DHEC conducted several site inspections to determine if the property owner could make minor alterations to the cap without impacting the effectiveness of the remedy. It was determined that the installation of a power pole and removal of a median would not affect the remedy, given the location and the replacement of the asphalt cap once the disturbance was complete.

### **PALMETTO ANTIQUE FLOORING AND SALVAGE**

**Location:** 1125 JOE LOUIS DR, COLUMBIA

**Description:** The facility planes antique heart pine lumber reclaimed from pre-1970's construction. Bulk quantities of wood shavings and sawdust have accumulated outside the process building. Samples indicated lead (at leachable levels) is present in the sawdust.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 1,797.00 Total Site Expenditures: \$45,991.00

**Actions Taken in FY'09:** The Department requested the facility owner and the operator to reimburse its response costs associated with the removal activity. At the end of June 2009, one RP has verbally agreed to the terms of a settlement. DHEC expects the final settlement in FY10.

### **PHILIP SERVICES CORPORATION**

**Location:** 2324 VERNSDALE RD, ROCK HILL

**Description:** Formerly a RCRA TSD under interim status for solvent reclamation and incineration.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 309,710.00 Total Site Expenditures: \$3,304,963.00

**Actions Taken in FY'09:** The Remedial Investigation (RI) was completed and the RI Report submitted to DHEC on September 1, 2008. The investigation identified multiple source areas that must be addressed. The Administrative Record was updated in January 2009. DHEC discussed remedial options to be included in the Feasibility Study with representatives of the PRP Group.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### PORT OF BALDWIN MINES

**Location:** LADYS ISLAND DR BRIDGE, PORT ROYAL

**Description:** Superphosphate production facility and mining operation that used sulfuric acid to produce fertilizers. Slag wastes still onsite containing high amounts of lead, arsenic and cobalt.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 769.00 Total Site Expenditures: \$15,594.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages.

### RAILROAD AVENUE SITE

**Location:** RAILROAD AVE, HARTSVILLE

**Description:** Railroad spur and switching yard with possible petroleum constituents from railroad operations.

**Lead Designation:** RP Funded, VCC 02-5496-RP

**Funds Expended in FY'09:** \$ 5,541.00 Total Site Expenditures: \$13,113.00

**Actions Taken in FY'09:** On July 24, 2008, DHEC provided comments on the Groundwater Investigation Results and requested further investigation. DHEC commented on both the Soil Cap Reports and Construction Reports. DHEC received the results of the additional monitoring well sampling on March 18, 2009. On April 13, 2009, DHEC met with the RPs to discuss the remedial work. On April 13, 2009, DHEC received the final Declaration of Covenants and Restrictions that was filed with Darlington County. DHEC issued the Certificate of Completion for one of the RPs for VCC 02-5496-NRP on April 17, 2009. DHEC received a temporary monitoring well application for work on May 19, 2009. DHEC issued a well permit for the installation of two temporary groundwater monitoring wells on May 20, 2009. Portions of the site are being redeveloped for commercial interests.

### RENTAL UNIFORM SERVICE SITE

**Location:** 415 KEITH DR, GREENVILLE

**Description:** Former industrial laundry facility with soil and groundwater contamination with acetone, PCE, toluene, 1,2,4-trimethylbenzene, naphthalene, xylene, and benzene.

**Lead Designation:** RP Funded, VCC 04-5487-RP

**Funds Expended in FY'09:** \$ 1,777.00 Total Site Expenditures: \$3,456.00

**Actions Taken in FY'09:** The Department approved the installation of 11 temporary monitoring wells to determine if contamination has migrated off the property. After review of the February 6, 2009 Remedial Investigation Report, the Department determined that additional investigation is needed in some areas, due to the presence of very high levels of volatile organic compounds present in the samples taken near the property boundary. On April 23, 2009, the Department approved the RP to perform additional investigation in the areas that contained high levels of VOCs in groundwater. A report documenting the results of the additional remedial investigation is expected in FY10.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### RMAX

**Location:** 1649 BATESVILLE RD, GREENVILLE

**Description:** Facility manufactures foam insulation panels. Groundwater contaminated with trichloroethene.

**Lead Designation:** RP Funded, VCC 00-5361-RP

**Funds Expended in FY'09:** \$ 202.00 Total Site Expenditures: \$16,140.00

**Actions Taken in FY'09:** At the Department's request, the RP performed a sampling event and the report is due in FY10.

### ROBERT BOSCH TOOL CORPORATION SITE

**Location:** 800 WOODSIDE AVE, FOUNTAIN INN

**Description:** Former manufacturer of small tools. Possible metals and VOCs.

**Lead Designation:** RP Funded, VCC 05-5613-RP

**Funds Expended in FY'09:** \$ 1,221.00 Total Site Expenditures: \$3,418.00

**Actions Taken in FY'09:** On July 23, 2007, DHEC provided comments on the May 17, 2007 Remedial Investigation/Feasibility Study (RI/FS) work plan. On September 27, 2007, the Department received revision two. The Department received a second RI/FS Work Plan on October 7, 2008. The Work plan is deficient as the RP has not submitted the required Quality Assurance Project Plan (QAPP). On March 11, 2008, DHEC commented on revision 2 of the RI/FS work plan. After working with the RP, the Department expects all required documents that make up the third revised RI/FS Work Plan to be submitted for review in FY10.

### SANGAMO/LAKE HARTWELL OPERABLE UNIT 2

**Location:** TWELVE MILE CREEK & LAKE HARTWELL, PICKENS

**Description:** Historic release of PCBs from Sangamo Plant into Twelve Mile Creek have contaminated sediment and fish tissue.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 8,257.00 Total Site Expenditures: \$32,257.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and Schlumberger regarding natural resource damages.

### SANGAMO/TWELVE-MILE/HARTWELL

**Location:** SANGAMO RD(S-190) 0.5 MI FROM US 178, PICKENS

**Description:** On-site capacitor burial, soil and stream sediment PCB contamination. Operable Unit 1

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 4,079.00 Total Site Expenditures: \$27,727.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and Schlumberger regarding natural resource damages.

### SC DEPARTMENT OF MENTAL HEALTH - BULL ST CAMPUS

**Location:** 2100 BULL ST, COLUMBIA

**Description:** Former mental health care and treatment facility. Buildings range from 20 to 150 years old. USTs and ASTs, hydraulic lifts, pesticide storage areas, paint shops, etc.

**Lead Designation:** RP Funded, VCC 08-5789-RP

**Funds Expended in FY'09:** \$ 7,042.00 Total Site Expenditures: \$7,042.00

**Actions Taken in FY'09:** DHEC met with the RP on September 24, 2008 to discuss the proposed assessment activities. VCC 08-5789-RP was signed November 10, 2008. DHEC received the Remedial Investigation Work Plan on February 18, 2009. On April 23, 2009, DHEC made a site visit. On May 22, 2009, DHEC submitted comments on the Remedial Investigation Work Plan and expects the RP's response in early FY10.

### SCA-CHARLESTON DISPOSAL

**Location:** N SIDE OF CO-76 1/2 MILE E OF US-78, LADSON

**Description:** Former privately operated landfill that accepted all types of wastes, some possibly hazardous.

**Lead Designation:** RP Funded Consent Agreement 95-07-HW 04/10/1995

**Funds Expended in FY'09:** \$ 50.00 Total Site Expenditures: \$6,864.00

**Actions Taken in FY'09:** The 2009 Triennial Groundwater Monitoring Report was submitted at the end of FY09 and will be reviewed in FY10.

### SCE&G FLEET MAINTENANCE SITE

**Location:** 1409 HUGER ST, COLUMBIA

**Description:** Current city bus terminal. Former MGP from 1906 to 1954. Coal tar and PAH contamination in soil and groundwater.

**Lead Designation:** RP Funded, VCC 02-5295-RP

**Funds Expended in FY'09:** \$ 1,458.00 Total Site Expenditures: \$21,063.00

**Actions Taken in FY'09:** In August 2008, the RP submitted a Remedial Investigation Report. DHEC requested that additional characterization be conducted in the former bus terminal maintenance areas that represented significant data gaps in the report. The RP excavated a series of test pits to characterize the



## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

areas in question. A total of 12 test pits were excavated to the water table. Various debris and manufactured gas plant waste material was revealed from nearly all of the excavations. A summary of the supplemental delineation activities was submitted to DHEC on April 21, 2009.

The RP and DHEC agreed that the best response action would be to conduct a removal action. A draft interim removal action work plan was submitted on June 6, 2009. The Department will draft an Action Memorandum and hold an availability session in the first quarter of FY10 to update the public on the proposed removal action. The removal action should begin by the end of 2009.

### **SCE&G SAVAGE ROAD CREW QUARTERS SITE**

**Location:** 900 SAVAGE RD, CHARLESTON

**Description:** A high-voltage substation with two buried electrical capacitors. Soil and groundwater are impacted by PCB contamination.

**Lead Designation:** RP Funded, VCC 98-5331-RP

**Funds Expended in FY'09:** \$ 2,032.00 Total Site Expenditures: \$15,925.00

**Actions Taken in FY'09:** DHEC reviewed the quarterly groundwater sampling results and concentrations continue to exceed remedial goals in two wells onsite. Additional sampling will continue in FY10.

### **SCE&G SUMTER MGP SITE**

**Location:** 238 HAUSER ST, SUMTER

**Description:** Former manufactured gas plant with soil and groundwater impacted.

**Lead Designation:** RP Funded, VCC 98-5343-RP

**Funds Expended in FY'09:** \$ 696.00 Total Site Expenditures: \$41,672.00

**Actions Taken in FY'09:** DHEC reviewed the quarterly monitoring reports. Concentrations in general did not change on the onsite property and indicate that NAPL may be present in the deeper groundwater zone. DHEC is requiring the RP to conduct a feasibility study to evaluate remedial alternatives for groundwater cleanup.

### **SIMPSONVILLE (OLD) DUMP**

**Location:** 3 MILES FROM INT.S-55 OFF S-453, SIMPSONVILLE

**Description:** Former county-operated sanitary landfill. Groundwater contaminated with VOCs.

**Lead Designation:** RP Funded Consent Agreement 95-34-SW 09/25/1995

**Funds Expended in FY'09:** \$ 2,093.00 Total Site Expenditures: \$203,686.00

**Actions Taken in FY'09:** The 2009 Semi-Annual Groundwater, Surface Water & Methane Monitoring Report was reviewed and the Department requested several monitoring wells be replaced due to the lack of water available for sampling during the most recent groundwater sampling events. The RP's responses are anticipated in FY10.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

### **SOUTH LAKE DRIVE/OLD ORANGEBURG ROAD SIT**

**Location:** S LAKE DR & OLD ORANGEBURG RD S, LEXINGTON

**Description:** One to one-and-one-half mile area of commercial and private property where groundwater is contaminated with VOCs.

**Lead Designation:** RP Funded, VCC Letter of Agreement

**Funds Expended in FY'09:** \$ 69,881.00 Total Site Expenditures: \$2,139,878.00

**Actions Taken in FY'09:** Three monitoring wells were installed on the Carolina Steel and Wire facility to replace the ones that were abandoned to build the storage building on site. Groundwater sampling indicates that the injection of permanganate into the groundwater has reduced the VOC concentration by an order of magnitude. The source area was capped by the new storage building after the injections were completed. The capping of the source area and injections should provide for continued improvement in groundwater quality in this area.

DHEC continued to evaluate remedial alternatives for additional groundwater cleanup. A technical memorandum was submitted on March 18, 2009, that evaluated potential remedial alternatives. Additional assessment was required to understand the depth and width of contamination in the proposed treatment area. In May 2009, DHEC collected groundwater samples downgradient of the source area to characterize the extent of contamination.

A revised Remedial Technology Evaluation and Pilot Study Design report was submitted on June 24, 2009. This report revised the previous remedial alternative evaluation and proposed a pilot test for a permeable reactive barrier.

### **SPARTAN INDUSTRIES INC**

**Location:** HWY 176, PACOLET

**Description:** Chrome plating facility with groundwater contamination.

**Lead Designation:** RP Funded, VCC 93-41-HW

**Funds Expended in FY'09:** \$ 553.00 Total Site Expenditures: \$4,314.00

**Actions Taken in FY'09:** On September 9, 2008, the Department requested the RP submit an assessment plan to further assess the horizontal and vertical extent of chromium contamination in the soil and groundwater. The work plan was approved for implementation on November 17, 2008. The Department expects the fieldwork to begin in FY10.

### **SPRINGS INDUSTRIES - INDIAN LAND SERVICE CENTER**

**Location:** 3223 KENDELL TRACE, FORT MILL

**Description:** Former Springs Industries site, now a residential subdivision. A small tank was discovered on a resident's property that had a PVC line running to it from the direction of the former plant.

**Lead Designation:** RP Funded, VCC 08-5790-RP

**Funds Expended in FY'09:** \$ 63,857.00 Total Site Expenditures: \$63,857.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** During the installation of an irrigation system in a Bridgemill Subdivision home, a junction box and piping was revealed. In September 2008, the box was sampled and pumped out. The box and piping contained black sludge that contained high concentrations of Tetrachlorethylene (PCE) and Trichloroethylene (TCE). DHEC collected vapor samples from the crawlspace of the house to determine if there were any vapor intrusion issues. All concentrations detected were within the acceptable range for vapor samples.

An RP entered into a VCC with DHEC in October 2008. The work plan called for assessment and remediation of the property. DHEC went door to door to deliver information to the residents and held an informal meeting with the public to discuss the work to be conducted prior to the start of field activities. Four phases of assessment and removal were conducted. Phase 1 included soil and groundwater sampling. Phase 2 included removal of the box, piping and contaminated soil surrounding the box, and piping from the backyard of the residence. During Phase 2, it was determined that the piping ran under the house and that additional measures were needed before attempting to remove the piping. Helical piers were placed around the corner of the house to brace the foundation and assure that excavation would be safely performed. Phase 3 involved the excavation of piping from underneath the foundation of the house and along the side of the house. Phase 4 included the removal of the neighboring driveway and the removal of piping to the utility lines. Phase 5 included confirmation sampling and an electro-magnetic survey to assure that all contaminated materials had been removed.

### **SPRINGS INDUSTRIES - SPRINGSTEEN PLANT**

**Location:** BETWEEN SPRING & WALNUT ST, CHESTER

**Description:** Former textile mill. Current owner is performing demolition and salvage operations at the site. Illegal disposal of asbestos, estimated 500 to 800 bags. Also, National Targeted Brownfield Assessment site on behalf of City of Chester.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 1,124.00 Total Site Expenditures: \$27,042.00

**Actions Taken in FY'09:** The Department's contractor provided legal support as a witness in the criminal prosecution case.

### **STARMET CMI**

**Location:** 365 METAL DR HWY 80, BARNWELL

**Description:** Approximately 8,000 metric tons of uranium waste on site and approximately 20,000 drums.

**Lead Designation:** State (previously Federal-lead)  
RP funded Cost Recovery Settlement CR-5471-01  
RP funded Cost Recovery Settlement CR-5471-02

**Funds Expended in FY'09:** \$ 275,032.00 Total Site Expenditures: \$1,626,997.00

**Actions Taken in FY'09:** The Department completed an evaluation of remedial alternatives to address the residual uranium contamination onsite and identified a preferred remedy. This preferred remedy will be described in a Proposed Plan and made available to the community and other interested parties for public comment. The Department continued to maintain radiological monitoring and security of the property.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### STEVENS JP & CO CHEM PLANT NO 1

**Location:** OLD PELZER RD, PIEDMONT

**Description:** Site of former chemical manufacturing plant.

**Lead Designation:** RP Funded, VCC 05-15-HW  
RP Funded Administrative Consent Order 91-13-SW 03/14/1991

**Funds Expended in FY'09:** \$ 2,438.00 Total Site Expenditures: \$117,646.00

**Actions Taken in FY'09:** The RP completed a soil vapor extraction and liquid oxidation pilot test for the tank farm area. DHEC requested that a Feasibility Study be developed to address the remaining source areas. The RP continued to operate the groundwater extraction and stream sparging remediation systems. Quarterly groundwater monitoring reports indicated in general groundwater concentrations stayed about the same across the site except where the extraction system was operating. Concentrations in the extraction area generally decreased over the last year. Operation of the groundwater recovery system continued. A removal occurred in the newly discovered oil containment area and the Department discussed future response including a Feasibility Study. An annual monitoring report was submitted and reviewed.

### STOLLER CHEMICAL CO - CHARLESTON

**Location:** U.S HWY 17 7477 SAVANNAH HWY, CHARLESTON

**Description:** Former fertilizer manufacturing company. Sediment, soil, and groundwater impacted. Operable Unit One consists of plant building and groundwater; Operable Unit Two consists of Caw Caw Swamp.

**Lead Designation:** State  
RP Funded CONSENT AGREEMENT 97-29-HW; SA 2:97-726-12 (RSG)  
RELEASE 95-CP-40-1434 (RELIANCE INS) 03/01/1997

**Funds Expended in FY'09:** \$ 120,730.00 Total Site Expenditures: \$4,888,805.00

**Actions Taken in FY'09:** DHEC signed a ROD Amendment to discontinue the existing pump and treat system and install a permeable reactive barrier to treat contaminated groundwater. The ROD Amendment was signed on July 9, 2008. The new remedy consists of construction of three Sulfate Reducing Bioreactors. The first of the walls was installed on the Site property, directly downgradient of the petromat beginning in December 2008. The wall consists of a mixture of wood chips, hay, sawdust, cow manure, lime, and CKD blended to make a sulfate reducing environment.

DHEC met with a neighboring property owner to gain access to its property to install the other two trenches. This property owner expressed concerns that additional characterization was needed prior to the installation of the wall on their property. DHEC reviewed and approved the Site Characterization plan for additional assessment. The assessment will include a series of groundwater monitoring points to fill data gaps on this property. The results from this investigation will help determine if the remedy will need to be modified or if it can be installed as designed.

### STONO PHOSPHATE WORKS

**Location:** 2079 AUSTIN AVE, CHARLESTON

**Description:** Former phosphate fertilizer plant now occupied by Dolphin Cove Marina. Lead and arsenic present in the soil and groundwater. Low pHs present in the groundwater.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 1,160.00      Total Site Expenditures: \$7,078.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages.

### SUFFOLK CHEMICAL CO

**Location:** .5 MILES N OF US-76 ON CO RD 82, CHAPIN

**Description:** Abandoned industrial chemical repackaging plant with groundwater contaminated with VOCs.

**Lead Designation:** State

**Funds Expended in FY'09:** \$ 25,332.00      Total Site Expenditures: \$1,032,887.00

**Actions Taken in FY'09:** An assessment of groundwater quality during the seventh year of operation of the groundwater extraction system was completed in January 2009. Based on the data collected during this annual sampling event, the remedial system continues to remain effective in recovering and controlling the migration of VOCs in groundwater off-site to the west. The groundwater effluent continues to pass toxicity tests and meets the requirements for acceptance by the Town of Chapin wastewater treatment plant. It is estimated that approximately 14 million gallons of groundwater have been recovered by the two extraction wells and 10.351 pounds of VOCs have been removed since April 2002. Continued groundwater monitoring will allow evaluation of any changes to the contaminant concentrations and distribution.

### SUN CHEMICAL CORPORATION

**Location:** ONE SEQUA DR, CHESTER

**Description:** A manufacturing facility that makes specialty chemical products. Soil contaminated with Polychlorinated Biphenyls (PCBs) and VOCs; groundwater contaminated with VOCs.

**Lead Designation:** RP Funded, VCC 99-39-HW  
RP Funded Consent Agreement 99-39-HW 08/30/1999

**Funds Expended in FY'09:** \$ 6,964.00      Total Site Expenditures: \$68,831.00

**Actions Taken in FY'09:** On January 6, 2009, DHEC approved the Operation and Maintenance Plan for the In Situ Chemical Oxidation (ISCO). DHEC commented on the Project Control Plans on February 13, 2009; after reviewing the RP's responses, DHEC approved the Project Control Plans on April 23, 2009.

### SWIFT AGRI-CHEM CORP

**Location:** 2750 SPEISSEGGER DR, CHARLESTON

**Description:** A phosphate fertilizer granulation plant operated at this location. Lead and arsenic in the soils and groundwater. Low pHs in the groundwater.

**Lead Designation:** Federal

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Funds Expended in FY'09:** \$ 2,109.00      Total Site Expenditures: \$13,686.00

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages.

### **THOMAS & BETTS - INMAN FACILITY**

**Location:** 10390 U.S HWY 176 (ASHEVILLE HWY), INMAN

**Description:** PCE, toluene and heavy metals in two on-site sanitary septic systems, on-site oil/water separator and on-site infiltration gallery.

**Lead Designation:** RP Funded, VCC 04-5483-RP

**Funds Expended in FY'09:** \$ 3,848.00      Total Site Expenditures: \$22,999.00

**Actions Taken in FY'09:** The Department reviewed RP's response to comments on the draft Feasibility Study. A Final Remedial Investigation /Feasibility Study Work Plan was submitted on August 21, 2008, which was approved. The work planned focused on tracing the bedrock fractures and determining if there were any preferential pathways for discharge into the creek. Surface water samples were collected and were consistent with the low levels of VOCs previously detected. Additional monitoring wells were installed in February 2009 to characterize the vertical and horizontal extent of the contamination. Sampling results showed high levels of volatile organic compounds in the groundwater downgradient of the site. In May 2009, based on the results of the Supplemental Investigation Report, DHEC recommended that a feasibility study be conducted to evaluate potential remedial alternatives to cleanup the groundwater.

### **VELCOREX/GREENWOOD MILLS EDISTO PLANT**

**Location:** 2500 ROWESVILLE RD, ORANGEBURG

**Description:** Textile dyeing and finishing plant operated by Greenwood Mills (1970-1988) and Velcorex Inc. (1988-2006). Spill of fuel oil being remediated under BOW. Phase II pre-buy found trace levels of PCE in groundwater.

**Lead Designation:** RP Funded, VCC 07-5693-RP-2

**Funds Expended in FY'09:** \$ 3,743.00      Total Site Expenditures: \$5,124.00

**Actions Taken in FY'09:** On July, 18, 2008, the Department provided comments to the RP's Remedial Investigation Work Plan. After several revisions and discussions with the NRP and the RP, the RI Work plan was approved on April 24, 2009. On June 23, 2009, DHEC issued a monitoring well approval for the installation of up to five permanent groundwater monitoring wells. Field work will be conducted in FY10.

### **VIRGINIA CAROLINA CHEMICAL CORPORATION (VCC) BLACKSBURG (FORMER)**

**Location:** OLD SHELBY RD, BLACKSBURG

**Description:** Former Phosphate fertilizer plant.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 2,492.00      Total Site Expenditures: \$2,492.00

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Actions Taken in FY'09:** This site is being addressed under the Federal Superfund Program. The HWCF supported the Department's participation in several conferences with the Natural Resource Trustees and ExxonMobil Corp. regarding natural resource damages. The HWCF supported the Department's activities until the site could be listed as a Federal Superfund Removal Action.

### **WANDO PHOSPHATE MILL**

**Location:** BAKER HOSPITAL BLVD, NORTH CHARLESTON

**Description:** Former superphosphate fertilizer plant from 1884 to 1924.

**Lead Designation:** Federal

**Funds Expended in FY'09:** \$ 1,286.00 Total Site Expenditures: \$1,286.00

**Actions Taken in FY'09:** The Department requested EPA to assess this site as a possible federal-lead site. The HWCF supported the Department's activities until the site could be listed as a Federal Superfund Removal Action.

### **WEEKS LIQUID FERTILIZER INC**

**Location:** AIR BASE RD COUNTY RD #769, CONGAREE

**Description:** Bankrupt facility used for blending fertilizer, herbicides, and pesticides.

**Lead Designation:** RP Funded, VCC 93-29-SW  
RP Funded Administrative Consent Agreement 93-29-SW 07/06/1993

**Funds Expended in FY'09:** \$ 586.00 Total Site Expenditures: \$21,885.00

**Actions Taken in FY'09:** The Department reviewed the Annual Report that summarized recent groundwater quality monitoring. Although reported nitrate concentrations were stable or decreasing, these concentrations continued to exceed the cleanup goals; however, the existing monitoring well network defines the downgradient edge of the nitrate plume, and nitrate is not migrating offsite in shallow groundwater. Data also indicates the deeper groundwater has not been impacted by former fertilizer blending operations. Based on the findings of this report, groundwater monitoring will continue to be conducted on a semi-annual basis (June and December) for nitrates only. Sampling and analysis for chlorinated pesticides is recommended prior to the next 5-year review in December 2011.

## **State Superfund Process**

### **THE STATE SUPERFUND PROGRAM**

#### **A Brief Description of the State Superfund Process**

DHEC's Bureau of Land and Waste Management's Division of Site Assessment, Remediation and Revitalization is responsible for managing state-lead and EPA-lead Superfund Programs. The site assessment and remediation process, which mirrors EPA Superfund's process, may include a short-term removal action or a complex and lengthy remedial investigation and cleanup. The State Superfund process begins with site discovery or notification of possible releases of hazardous substances. If a site requires immediate attention, DHEC's Emergency Response Program 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. If a site's condition does not qualify for placement on the Federal Superfund Program's National Priorities List (NPL), then cleanup is addressed by the State Superfund Program.

A Remedial Investigation/Feasibility Study (RI/FS) is conducted by DHEC. A Remedial Investigation (RI) is an in-depth investigation to determine the nature and extent of contamination at a 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.

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. If the Department determines that no further response action is required to protect human health and the environment, the technical response matter is in effect closed.

The Department encourages potentially responsible parties (PRPs) to pay for State Superfund cleanups. One or several PRPs may participate. These are called state 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 HWCF. Sites that are remediated using the HWCF are called state-lead sites. Where PRPs are unwilling to perform cleanup activities, DHEC pursues PRPs for cost recovery through administrative and legal actions. Regardless of whether the cleanup is financed by the HWCF, or PRPs, CERCLA requires the same cleanup process.



**The State Superfund Program – Public Participation**

**A Brief Description of Public Participation**

CERCLA incorporated public involvement into the Superfund process. Congress intended to ensure that the people whose lives were affected by abandoned and uncontrolled hazardous waste sites have a voice in how their communities were addressed and cleaned up. DHEC adopted these values and is committed to early and meaningful community involvement during State Superfund cleanup. The State Superfund Program educates, informs, and involves the citizens, elected officials, and the local government officials of a Superfund community on the issues that pertain to that particular site.

The State Superfund Program has historically strived to inform the public of environmental impacts of contamination in their communities and to involve the communities with decision-making opportunities. Depending on local needs of the community and pursuant to HWMA, CERCLA, and the NCP, the State Superfund Program:

- provides fact sheets written for the public;
- holds public meetings, availability sessions and one-on-one meetings with community members at different phases of response;
- provides the public with 30-day periods in which to comment on proposed cleanup activities of which such notice is mailed to area residents and published in a local newspaper of general circulation within the affected community, and
- provides 30-day periods to comment on various documents such as cost recovery settlement agreements and judicially-approved settlements with responsible parties, of which notice is mailed to all known PRPs and published not only in the local newspaper but also in the South Carolina State Register;
- establishes a local repository in which the State Superfund Program provides copies of the administrative record (AR), which contains documents the Department relied on in making any technical decisions at a site. The AR is updated at different phases of cleanup;
- establishes a community relations plan for state-lead sites as deemed appropriate; and,
- participates in press conferences and a variety of other activities designed specifically for the community.

The State Superfund Program requires these public participation costs to be reimbursed by the responsible or non-responsible parties which have entered into the agreement or contract with the Department. Contact persons from the State Superfund Program are always available to answer citizens and media inquiries about Superfund sites.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### Appendix D

## Emergency Response Actions for Fiscal Year

The Emergency Response Section is responsible for overseeing the emergency response contract. The contract is a strong asset to the Superfund program. Before this contract came into existence, local, county and state governments were forced to rely on the federal government and concerned corporate citizens of the state to handle small incidents when things were illegally dumped or abandoned on public property. The contract is used to secure, sample and dispose of abandoned waste.

Moran Environmental Recovery, Inc. with a branch office in North Charleston was awarded the contract for the eastern region of the state. A&D Environmental was awarded the contract for the middle region of the State. The upper region of the state was awarded to AEO Inc. All contractors work on a 24-hour on-call basis and are required to respond within three hours to their respective regions within the state.

DHEC's Emergency Response Section expended approximately \$65,500.16 responding to seventeen incidents during fiscal year 2009. Approximately \$13,054 of the FY 09 funds have been reimbursed and an additional \$30,686.65 is pending approval for reimbursement from the National Pollution Funds Center. The amount of reimbursement money varies from year to year depending on the number and types of incidents that occur. The seventeen emergency response actions for this fiscal year are outlined on the following pages.

*\*Denotes reimbursement sought from National Pollution Funds Center.*

*# Denotes reimbursement has been received from National Pollution Funds Center.*

Job Number	Contractor	Date	County	Cost	Complete
09-01	AEO	08/04/2008	Lancaster	\$2,141.50	Yes
09-02	A&D	09/11/2008	Columbia	\$3,832.46	#Yes
09-03	Moran	11/26/2008	Charleston	\$2,558.50	*Yes
09-04	A&D	12/03/2008	Aiken	\$1,052.25	Yes
09-05	Moran	12/04/2008	Beaufort	\$942.75	Yes
09-06	AEO	01/08/2009	Anderson	\$6,304.29	*Yes
09-07	Moran	01/12/2009	Charleston	\$1,042.00	Yes
09-08	AEO	01/26/2009	Spartanburg	\$8,684.60	Yes
09-09	A&D	02/09/2009	Florence	\$6,046.50	#Yes
09-10	Moran	02/24/2009	Charleston	\$813.36	*Yes
09-11	AEO	02/26/2009	Spartanburg	\$3,176.40	#Yes
09-12	Moran	04/06/2009	Myrtle Beach	\$1,406.63	*Yes
09-13	A&D	04/17/2009	Florence	\$7,955.62	*Yes
09-14	Moran	04/24/2009	Myrtle Beach	\$6,805.80	Yes
09-15	AEO	05/21/2009	Anderson	\$4,361.28	*Yes
09-16	A&D	06/03/2009	Columbia	\$3,617.00	*Yes
09-17	Moran	06/13/2009	Charleston	\$3,669.97	*Yes

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

### EMERGENCY RESPONSE SITE DESCRIPTIONS:

**09-01-200805185 (Region 3)** Lancaster County. Illegal dumping of suspected engine oil on a roadway for approximately 800 to 1,000-feet on State Highway 55. SCDOT spread sand out on the affected area to soak up the oil. Soil excavation was necessary to remove contamination before it was washed into a creek.  
**Advanced Environmental Options.....\$2,141.50.00**

**\*09-02-200806252 (Region 3)** Newberry County. Approximately 40 gallons of diesel fuel threatening to enter a nearby storm drain was discovered spilled in the median of I-26 at mile marker 73. This storm drain led directly to Cannons Creek, a tributary to Parr Reservoir. The spilled material was removed and properly disposed.

**A&D Environmental.....\$3,832.46**

**\*09-03-200807949 (Region 7)** Charleston County. Two abandoned leaking drums on Pringle Street in Charleston were discovered and placed into a 90-gallon over-pack drum and properly disposed. Analytical data on the contents of the drums indicated petroleum products.

**Moran Environmental Recovery .....\$2,558.50**

**09-04-200808099 (Region 5)** Aiken County. A 55-gallon drum that contained approximately 20 gallons of an unknown liquid was abandoned on Doodle Hill Road in Orangeburg. The drum's contents were sampled and removed, and properly disposed.

**A&D Environmental.....\$1,052.25**

**09-05-200808120 (Region 8)** Beaufort County. The illegal dumping of three 5-gallon pails of muriatic acid at the Beaufort Fire Department in Bluffton was discovered. The pails contents were sampled, the pails were placed into a 55-gallon poly drum and properly disposed.

**Moran Environmental Recovery.....\$942.75**

**\*09-06-200900201 (Region 1)** Anderson County. The illegal dumping of waste oil products off Hickory Road was discovered. Soil excavation was necessary to remove contamination before washing into a nearby creek. All contaminated soil was placed into a lined 30-yard roll-off box and properly disposed.

**Advanced Environmental Options.....\$6,304.29**

**09-07-200900291 (Region 7)** Charleston County. The local Fire Department found six 50-gallon drums, several 5-gallon cans, and open plastic containers that had been abandoned on the side of the road within 100 yards from a creek. Some of the containers were leaking. In order to stop the liquids from reaching the creek, pads and spill booms were used across the affected area to contain the product. The contaminated soil and containers were removed for proper disposal.

**Moran Environmental Recovery.....\$1,042.00**

**09-08-200803180 (Region 2)** Spartanburg County. On May 27, 2008, the illegal dumping of suspected chrome metal plating waste down 13 miles of roadway from Hwy 292 inside the City of Lyman and up Little Mountain Road to Little Mountain Circle and through several neighborhoods. EPA and DHEC responded to the incident. DHEC conducted additional sampling and soil removal on January 26, 2009.

**Advanced Environmental Options.....\$8,684.60**

**\*09-09-200900670 (Region 4)** Florence County. Approximately 75 to 100 gallons of diesel fuel, which drained into a nearby storm drain, was spilled on the shoulder of I-95 at mile marker 163. This storm drain led directly to creeks that are tributaries to the Great Pee Dee River. DHEC removed the spilled fuel.

**A&D Environmental.....\$6,046.50**

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**\*09-10-200901189 (Region 7)** Charleston County. A 55-gallon drum leaking suspected oil was found abandoned on the side of I-526, approximately 500 yards away from the Ashley River. In order to stop oil from reaching the river, pads and booms were placed across the affected area. The contaminated soil was then removed.

**Moran Environmental Recovery.....\$813.36**

**\*09-11-200901273 (Region 2)** Spartanburg County. A 35-gallon poly drum containing suspected oil was found abandoned on the side of a dirt road approximately .25 miles from Crocker Branch, which leads to Thicketty Creek. DHEC removed and properly disposed of the drum.

**Advanced Environmental Options.....\$3,176.40**

**\*09-12-200902043 (Region 6)** Horry County. The North Myrtle Beach Fire Department discovered an abandoned 55-gallon drum. DHEC placed the drum into a 95-gallon over-pack drum, removed the drum, and sampled the contents. The lab results determined the drum contained Butanone, (otherwise known as methylethylketon) and the contents were properly disposed.

**Moran Environmental Recovery.....\$1,406.63**

**\*09-13-200902486 (Region 4)** Florence County. Four leaking drums were found abandoned by the roadway near Lake City. DHEC placed drums into over-packs for confirmation testing of the contents, which laboratory results indicated contained petroleum products. The contaminated soil and drums were removed and properly disposed.

**A&D Environmental.....\$7,955.62**

**09-14-200902616 (Region 6)** Horry County. The illegal dumping of asbestos material along the side of the road was discovered. The local Fire Department sprayed the piles of material with water until the DHEC's contractor arrived. DHEC properly disposed of the asbestos waste.

**Moran Environmental Recovery.....\$6,805.80**

**\*09-15-200903087 (Region 1)** Anderson County. An anonymous report of an oil spill at a boat landing off of River Road and Melanie Drive in Piedmont was received. Approximately 50 gallons of suspected oil was discovered dumped in the woods near the river. DHEC placed pads and maintained booms to contain the product until it could be pumped up and then removed and properly disposed of the contaminated soil.

**Advanced Environmental Options.....\$4,361.28**

**\*09-16-200903410 (Region 3)** Richland County. Two 55-gallon drums of suspected oil was dumped on Old State Road in Cayce. The potential impact via a drainage ditch to the Congaree River was a concern. In order to stop the oil from reaching the river, DHEC removed the contaminated soil for proper disposal.

**A&D Environmental.....\$3,617.00**

**\*09-17-200903716 (Region 7)** Charleston County. There was a release of oil due to a truck accident located on Old Jacksonboro Road in Ravenel. No responsible party could be determined to address this release. DHEC mitigated the immediate threat to the environment and properly disposed of the contaminated soil.

**Moran Environmental Recovery.....\$3,669.97**

**Subtotal: \$65,500.16**

**Sites on the National Priorities List (NPL)**

Sites shown in this list are being addressed under the authority of the Federal Superfund Program. SARR staff provides technical and administrative assistance to USEPA on those sites. Most of those sites are on the NPL, or have been recommended for listing. Sites on the NPL are eligible to receive Federal Superfund money for remedial activities. Revenues from the uncontrolled sites portion of the State's Hazardous Waste Contingency Fund are used to provide the state's cost share for Fund-lead NPL sites and to support the Department's activities associated with National Resource Damages Assessments (NRDA). As the current Federal law is written, the state's cost share for remedial action at Fund-lead sites is a minimum of ten percent (10%) but may be as high as fifty percent (50%) for sites owned or operated by the state or any of its political subdivisions. The state is also responsible for the same cost share percentage for the first year of any long term monitoring. Thereafter, the state becomes responsible for one hundred percent (100%) of the costs for Operation and Maintenance (O&M). Furthermore, if any remedial action requires more than ten years (e.g., groundwater recovery and treatment operations), the state is required to fund one hundred percent (100%) of the cost after the first ten years. The table below is a complete NPL list for South Carolina.

Key to the Acronyms on the NPL list:

- o NPL means the site is listed on the National Priorities List
- o NPL-D means the site has been "delisted" or removed from the National Priorities List
- o NPL-P means the site is proposed for the National Priorities List
- o NPL-R means the site is on the National Priorities List, but is being addressed under RCRA.
- o NPLS means the site is a satellite site of a National Priorities List site
- o NPL-E (equivalent) or SACM (Superfund Accelerated Cleanup Model) means the site is being addressed as if on the NPL, even though it has not been formally listed for the NPL.

Site Name EPA ID # City Name	County	NPL – Status	Description
ADMIRAL HOME APPLIANCES SCD047563614 WILLISTON	Barnwell	NPL-E	
ARKWRIGHT DUMP SC0002333227 SPARTANBURG	Spartanburg	NPL-E	The site is a former landfill approximately 30 acres in size operated during the 1950s and 1960s by the City of Spartanburg. The site contains areas of exposed municipal waste and medical waste as well as discolored soil and ponded water.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

Site Name EPA ID # City Name	County	NPL – Status	Description
ASHEPOO PHOSPHATE/FERTILIZER WORKS SC0001645373 CHARLESTON	Charleston	NPL-E	Charleston Container Co. is a portion of this site and is being worked on in the VCP.  A phosphate fertilizer granulation plant operated at this location. Lead and arsenic are present in the soil and groundwater. Groundwater has low pH.
ATLANTIC PHOSPHATE WORKS/SCE&G HAGOOD ST SCD000822171 CHARLESTON, SC	Charleston	NPL-E	Former phosphate fertilizer plant. Documented low pH groundwater and heavy metal contamination.
BEAUNIT CORP-CIRCULAR KNIT & DYEING PL SCD000447268 FOUNTAIN INN	Greenville	NPL	On-site wastewater lagoon.
BRASWELL SHIPYARDS INC/FED-SERV SCD061528956 CHARLESTON	Charleston	NPLS	Six large aboveground storage tanks containing creosote and bermed areas around the tanks. Contaminated soil has already been removed by the PRPs . Part of Koppers Charleston.
BRAY PARK DUMP SCD980844500 CAYCE	Lexington	NPLS	Old uncontrolled town dump. Heavy metal contamination present in groundwater. Part of Lexington County 321 Landfill site.
BREWER GOLD MINE DAM FAILURE SCD987577913 JEFFERSON	Chesterfield	NPL	Dam failure at the mine released acid mine drainage to nearby creek. EPA did emergency response.
CALHOUN PARK AREA SITE SCD987581337 CHARLESTON	Charleston	NPL-E	A former manufactured gas plant and Ansonborough Homes, a public housing unit.
CAROLAWN SCD980558316 FORT LAWN	Chester	NPL	Waste stored for planned on-site incineration in large above ground bulk tanks and drums. The site is split into two operable units. OU-2 is a no further action.
COLUMBIA NITROGEN SC0001040393 CHARLESTON	Charleston	NPL-E	The site operated from 1905 to 1966 as a phosphate fertilizer granulation plant.
DODGENS PROPERTY SCD980847230 PICKENS	Pickens	NPLS	Former dump site, with PCB contamination. PART OF SANGAMO SITE.
ELMORE (FRANK) SITE SCD980839542 GREER	Spartanburg	NPL	Drum disposal site and abandoned underground storage tank. Site has been subdivided and is now owned by 2 different property owners.
GEIGER (C & M OIL) SITE SCD980711279 RANTOWLES	Charleston	NPL	Waste oil incinerator with eight on-site storage lagoons.
GOLDEN STRIP SEPTIC TANK SCD980799456 SIMPSONVILLE	Greenville	NPL-D	Lagoons containing industrial waste water pumped from area industries. Site has been delisted.  File indicates a YMCA Recreation Park was proposed for this site.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

Site Name EPA ID # City Name	County	NPL – Status	Description
GROCE LABORATORIES INC (AQUA-TECH) SCD058754789 GREER	Spartanburg	NPL	Closed RCRA treatment, storage, and disposal facility. Approximately 7,000 drums, 97 above-ground tanks, 1,200 gas cylinders.
HELENA CHEMICAL CO - FAIRFAX SCD058753971 FAIRFAX	Allendale	NPL	On-site landfilling of pesticides.
HENRY'S KNOB AKA HENRY KNOB SCN000407376 CLOVER	York	NPL-E	Former open kyanite mine with low pH in surface water and contaminated soils and groundwater. Elevated metals in soil and groundwater.
INDEPENDENT NAIL CO SCD004773644 BEAUFORT	Beaufort	NPL-D	Wastewater discharged to on-site (no discharge) lagoon. Removal conducted on the lagoon. EPA delisted site. Currently under long term groundwater monitoring.
INTERNATIONAL MINERALS AND CHEMICALS SCD003350493 SPARTANBURG	Spartanburg	NPL-E	Facility produced phosphate fertilizer until closed out under RCRA in 1987.
KALAMA SPECIALITY SCD094995503 BURTON	Beaufort	NPL	Specialty chemical manufacturer discharged wastewater to on-site lagoon.
KOPPERS CO INC SCD003353026 FLORENCE	Florence	NPL-R	Abandoned creosote & PCP lagoons.
KOPPERS CO/TREATING PLANT SCD980310239 CHARLESTON	Charleston	NPL	Large wood treatment plant that used creosote, pentachlorophenol, and chromated copper arsenate (CCA).
LEONARD CHEMICAL CO INC SCD991279324 CATAWBA	York	NPL	Solvent reclaimer, landfilled distillation still bottoms on-site & drum storage.
LEXINGTON COUNTY LANDFILL SCD980558043 CAYCE	Lexington	NPL	County operated landfill that accepted industrial and domestic wastes. Also includes Old Cayce Dump Site and the Bray Park Dump.
LYMAN DYEING & FINISHING LANDFILL SCD987584653 LYMAN	Spartanburg	NPL-E	Old dump used from 1924 to mid 1960's for industrial waste containing PAHs and metals. EPA entered into negotiations to conduct a RI/FS. The site contains numerous empty and crushed drums.
MACALLOY CORPORATION SCD003360476 CHARLESTON, SC	Charleston	NPL	Ferro-chrome alloy producer using submerged electric arc furnaces. Chromium contamination from air pollution (precip. dust & tower sludge)
MEDLEY FARMS SCD980558142 GAFFNEY	Cherokee	NPL	Drum disposal and lagoons filled with hazardous substances.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

Site Name EPA ID # City Name	County	NPL – Status	Description
OLD CAYCE DUMP SITE SCD980844328 CAYCE	Lexington	NPLS	Old uncontrolled town dump with heavy metal contamination in groundwater. Part of Lexington County Landfill Site.
PALMETTO RECYCLING INC SCD037398120 COLUMBIA	Richland	NPL-D	Battery recycling operation, acid (H <sub>2</sub> SO <sub>4</sub> ) stored in a below ground sump, the lead plates were shipped out of state for recycling.
PALMETTO WOOD PRESERVING INC SCD003362217 CAYCE	Lexington	NPL	Spillage of Copper Chromium Arsenic (CCA) solution used for lumber treatment.
PARA-CHEM SOUTHERN INC SCD002601656 SIMPSONVILLE	Greenville	NPL	Synthetic organic chemical manufacturer who buried solvents on-site behind the plant.
ROCHESTER PROPERTY SCD980840698 TRAVELERS REST	Greenville	NPL	Burial of industrial waste brought here from off site.
ROCK HILL CHEM- RUTLEDGE (BILL) PROPERTY SCD980844005 ROCK HILL	York	NPL	Aboveground storage tanks containing hazardous waste (methylene chloride) also soil contamination from spillage. Site was formerly a reclaimer in early 1960's.
SANGAMO / BRAZEALE PROPERTY SCD980847297 PICKENS	Pickens	NPLS	PCB contamination from burial of transformers & capacitors. Part of the Sangamo Site. Also see 57011.
SANGAMO / CROSS ROADS CHURCH SCD980847354 PICKENS	Pickens	NPLS	Roadside dump w/PCB contamination from capacitor dumping. Part of Sangamo site.
SANGAMO / ERNEST NIX PROPERTY SCD980847172 PICKENS	Pickens	NPLS	Large gully where PCB wastes were disposed of, 1964-65. Part of the Sangamo Site.
SANGAMO / HAGOOD RESERVOIR SCD981470206 PICKENS	Pickens	NPLS	PCB stream sediment contamination. Part of Sangamo Operable Unit Two.
SANGAMO / MAW BRIDGE ROAD SCD981470255 PICKENS	Pickens	NPLS	PCB stream sediment contamination. Part of Sangamo Operable Unit Two.
SANGAMO / WELBORN PROPERTY SCD980847115 PICKENS	Pickens	NPLS	PCB waste materials allegedly dumped into a gully. Part of Sangamo OU-1.
SANGAMO TROTTER- DODGENS SCD981474836 SUNSET	Pickens	NPLS	This site is part of the Sangamo PCB investigations.



## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

Site Name EPA ID # City Name	County	NPL – Status	Description
SANGAMO/LAKE HARTWELL OPERABLE UNIT 2 SCS123456847 PICKENS	Pickens	NPL	Historic release of PCBs from Sangamo Plant into Twelve Mile Creek have contaminated sediment & fish tissue.
SANGAMO/TWELVE- MILE/HARTWELL SCD003354412 PICKENS	Pickens	NPL	On-site capacitor burial, soil and stream sediment PCB contamination. Operable Unit 1 (OU-1)
SCR&D BLUFF ROAD SITE SCD000622787 COLUMBIA	Richland	NPL	Drum storage facility where wastes were originally planned to be recycled.
SCR&D DIXIANA SCD980711394 CAYCE	Lexington	NPL	Drum storage site. Wastes originally planned for recycling.
SHURON TEXTRON INC SCD003357589 BARNWELL	Barnwell	NPL	Plant operated from 1958 to 1992. Sludge lagoons and two drying basins containing VOCs and metals. Two debris areas containing drums and plant waste are present. The RI/FS was completed for the site. ROD was written for the site.
STONO PHOSPHATE WORKS SC0002316404 CHARLESTON	Charleston	NPL-E	Former phosphate fertilizer plant now occupied by Dolphin Cove Marina. Lead and arsenic present in the soil and groundwater. Low pHs present in the groundwater.
SWIFT AGRI-CHEM CORP SCD058181991 CHARLESTON	Charleston	NPL-E	A phosphate fertilizer granulation plant operated at this location. Lead and arsenic present in the soils and groundwater. Low pHs in the groundwater.
TIN PRODUCTS - RED BANK CREEK SCSFN0407133 LEXINGTON	Lexington	NPL-E	Chemical production plant that released an unknown volume of chemicals (organotin) to its wastewater discharge line. The release disabled the city's wastewater treatment plant at Two Notch Rd & resulted in fish kills along Red Bank Creek & Crystal Lake
TOWNSEND SAW CHAIN CO SCD980558050 PONTIAC	Richland	NPL	Chromium plating waste discharged onto the ground surface.
TROTTER HILL RD SCD981750334 PICKENS	Pickens	NPLS	Part of Sangamo Site.
US DOE SRS / SAVANNAH RIVER PLANT SC1890008989 AIKEN	Aiken	NPL	Federal site currently being handled on federal level. (01/28/88)
USMC MARINE CORPS RECRUIT DEPOT SC6170022762 PARRIS ISLAND	Beaufort	NPL	Federal site currently being handled on federal level. (01/28/88)
WAMCHEM INC SCD037405362 BURTON	Beaufort	NPL	Specialty chemical manufacturer discharged wastewater to spray irrigation fields

List of Standard Acronyms

ACA	Administrative Consent Agreement
ACO	Administrative Consent Order
AST	Aboveground Storage Tank
AR	Administrative Record
BRA	Baseline Risk Assessment
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
CA	Consent Agreement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CO	Consent Order
COE	U.S. Army Corps of Engineers
DHEC	South Carolina Department of Health and Environmental Control
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOJ	U.S. Department of Justice
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
ESI	Expanded Site Investigation
FFA	Federal Facilities Agreement
FOIA	Freedom of Information Act
FS	Feasibility Study
FY	Fiscal Year
HRS	Hazard Ranking System
MCL	Maximum Contaminant Level
NCP	National Contingency Plan
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRDs	Natural Resource Damages
NRP	Non-Responsible Party
NOSW	Notification of Site Work
O&M	Operation and Maintenance
OSHA	Occupational Safety and Health Administration
OU1	Operable Unit 1
OU2	Operable Unit 2
PA	Preliminary Assessment

PAHs	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl
PCE	Perchloroethylene, Tetrachloroethylene
PER	Preliminary Engineering Report
PIP	Project Information Package
POTW	Publicly Owned Treatment Works
PRP	Potentially Responsible Party
RA	Remedial Action
RCRA	Resource Conservation and Recovery Act of 1976
RD	Remedial Design
RD/RA	Remedial Design/Remedial Action
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Responsible Party
RPM	Remedial Project Manager
RQ	Reportable Quantity
SARA	Superfund Amendments and Reauthorization Act of 1986
SI	Site Investigation
SOW	Scope of Work
SVOCs	Semi-Volatile Organic Compounds
TBSA	Targeted Brownfields Site Assessment
TCA	Trichloroethane
TCE	Trichloroethene
TCLP	Toxicity Characteristic Leaching Procedure
TSDF	Treatment, Storage and Disposal Facility
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VCC	Voluntary Cleanup Contract
VCP	Voluntary Cleanup Program
VOCs	Volative Organic Compound

## Glossary of Terms

- Abatement** - Reducing the degree or intensity of, or eliminating, pollution.
- Acute exposure** – A single exposure to a toxic substance, which may result in severe biological harm or death.
- Administrative Consent Agreement** - A legally binding and enforceable agreement between the South Carolina Department of Health and Environmental Control and potentially responsible parties to perform or pay for site studies or cleanups.
- Administrative Record** - All documents which USEPA or the Department considered or relied upon in selecting the response action at a Superfund site, culminating in the record of decision for remedial action or an action memorandum for removal actions.
- Aeration** - A process that promotes breakdown of contaminants in soil or water by exposing them to air.
- Air Stripping** - A process whereby VOCs are removed from contaminated water by forcing a stream of air through it in a pressurized vessel. The contaminants evaporate into the air stream. The air may be further treated before it is released into the atmosphere.
- Aquifer** - An underground layer of rock, sand or gravel capable of storing water within cracks and pore spaces (i.e. between grains). The water contained in the aquifer is called groundwater.
- Backfill** – An excavated area that is refilled with earth; or the material itself that is used to refill an excavated area.
- Background Level** - The naturally occurring level of an element or compound in the environment.
- Brownfields** – Properties where expansion, reuse, or redevelopment is complicated by real or perceived environmental contamination.
- Cap** - A layer of material, such as clay or a synthetic material, used to prevent direct contact with waste materials or to prevent rainwater from penetrating through a contaminated area and spreading contaminated materials. The surface cap is generally mounded or sloped so water will drain off of the cap.
- Carcinogen** - Any substance that can cause or aggravate cancer.
- Closure** - The process by which a landfill stops accepting wastes and is shut down under guidelines that ensure that public health and the environment are protected.
- Coal Gasification** Conversion of coal to a gaseous product by one of several available technologies.
- Consent Agreement** - A legally binding and enforceable agreement between DHEC and potentially responsible parties to perform or pay for site studies or cleanups.
- Consent Decree** - A legal document, approved and issued by a judge, formalizing an agreement between USEPA or the Department and the parties potentially responsible for site contamination. The decree usually describes cleanup actions that the potentially responsible parties are required to perform.
- Contaminant** - Any physical, chemical, biological, or radiological substance or matter that has an adverse effect on air, water, or soil.
- Contamination** - Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use. Also applies to surfaces of objects, buildings, and various household and agricultural use products.
- Cost Recovery** - A legal process by which potentially responsible parties who contributed to contamination at a Superfund site can be required to reimburse the Hazardous Waste Contingency Fund for money spent during any cleanup actions by the state.
- Downgradient** - The direction that groundwater flows; similar to "downstream" for surface water.
- Dredging** - Removal of mud from the bottom of water bodies.
- Effluent** - Wastewater, treated or untreated, that flows out of a treatment plant, sewer or industrial outfall.
- Emergency Planning and Community Right-To-Know Act (EPCRA)** - Also known as Superfund Amendments and Reauthorization Act (SARA) title III, provides an infrastructure at the state and local levels to plan for chemical emergencies. Facilities that store, use, or release certain chemicals, may be subject to various reporting requirements under EPCRA. Reported information is then made publicly available so that interested parties may become informed about potentially dangerous chemicals in their community.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

- Environment** - The sum of all external conditions affecting the life, development and survival of an organism.
- Environmental Justice (EJ)** – This is the fair treatment and meaningful involvement of all people – regardless of race, color, national origin, or income – in the development, implementation, and enforcement of environmental laws, regulations, and policies.
- Facility Evaluation** - An inspection of a facility to confirm the release or imminent threat of release of hazardous substances, to develop information to evaluate the threat to public health and/or the environment, and to determine the relative priority of a facility.
- Facility Identification** - The identification of facilities using the existing reporting requirements for release of hazardous substances, complaints from the public and reports from other agencies or parties.
- Feasibility Study (FS)** - A detailed evaluation of alternatives for cleaning up a site. A feasibility study follows the remedial investigation phase.
- Geographic Information System (GIS)** – This system electronically manages geographically referenced data. Through GIS, such data can be displayed, assembled, stored, and manipulated, and is frequently displayed in a map format. Examples of the use of GIS include county boundaries, land use, and pollution-monitoring locations.
- Hazard Ranking System** – This is the principle screening tool used by USEPA to place waste sites on the National Priorities List (NPL). It is a numerically based screening system that uses information from initial, limited investigations – the preliminary assessment and the site inspection – to assess the relative potential of sites posing a threat to human health or the environment.
- Heavy Metals** - Metallic elements with an atomic weight greater than sodium.
- Hydrocarbons** - Chemical compounds that consist entirely of carbon and hydrogen.
- Identification and Notification of Potentially Responsible Parties (PRPs)** - Upon site identification, the Department will initiate actions to identify and notify the PRPs associated with a facility where a release or imminent threat of a release has been confirmed.
- Initial Investigation** - An initial investigation will determine if a release or imminent threat of release of hazardous substances may have occurred that warrants further action, such as a field visit and examination of existing records.
- Inorganic Compound** - Generally encompasses elements and substances that do not contain carbon.
- Interim Action** - An action which may be required at any time before the selection of final remedial action to prevent, minimize, or mitigate harm to public health and/or the environment.
- Lagoon** - A shallow pond where sunlight, bacterial action, and oxygen work to purify wastewater.
- Landfill** - A disposal facility where waste is placed in or on land.
- Leachate (n)** - The liquid that trickles through or drains from waste, carrying soluble components from the waste. Leach, Leaching (v.t.) - The process by which soluble chemical components are dissolved and carried through soil by water or some other percolating liquid.
- Letter of Agreement** - A letter, in contractual form, that commits the signing party to demonstrate that any groundwater contamination on his property has an off-site source. In exchange for this demonstration, the Department agrees not to hold the property owner liable for the groundwater contamination.
- Maximum Contaminant Level (MCL)** - The maximum permissible level of a contaminant in water delivered to any user of a public system. MCLs are enforceable standards.
- Migration** - The movement of oil, gas, contaminants, water or other liquids through porous and permeable rock.
- Monitor Well** – 1) A well used to obtain water quality samples or measure groundwater levels. 2) A well drilled at a hazardous waste management facility or Superfund site to collect ground-water samples for the purpose of physical, chemical, or biological analysis to determine the amounts, types, and distribution of contaminants in the groundwater beneath the site.
- National Contingency Plan (NCP)** – Also known as the National Oil and Hazardous Substances Pollution Contingency Plan, is the federal regulation required by Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act that provides the organizational structure and procedures for preparing and responding to releases of hazardous substances into the environment.
- National Priorities List (NPL)** - USEPA's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under Superfund.

## Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009

**Non-Responsible Party (NRP)** - Parties, including future property owners, who did not contribute to the contamination at a site and are not liable for costs related to response actions.

**Occupational Safety and Health Administration (OSHA)** – A Federal agency whose goals are to save lives, prevent injuries, and protect the health of America’s workers. Staff establishes protective standards, enforces those standards, and reaches out to employers and employees through technical assistance and consultation programs.

**Operation and Maintenance (O&M)** – These activities protect the integrity of a Superfund site’s cleanup plan. O&M measures are initiated by the Division after cleanup objectives have been reached, and the site is determined to be operational and functional.

**Organic Compound** - Generally encompasses substances that contain carbon.

**Operable Unit (OU)** - A portion of a Superfund site that is addressed separately from the rest to allow for easier management or a more timely response.

**Plume** - A body of contaminated groundwater flowing from a specific source.

**Potentially Responsible Parties (PRPs)** – Parties are individuals, companies, owners, or any other party who may have contributed to the contamination at a Superfund site and are liable for payment of costs related to response actions.

**Preliminary Assessment (PA)** - The process of collecting and reviewing available information about a known or suspected hazardous waste site or release.

**Record of Decision (ROD)** - A public document that explains which cleanup alternative(s) will be implemented at a contaminated site. It includes the official documentation of the cleanup technology that will be implemented.

**Recovery Well** - A well used to reclaim or capture contaminated groundwater.

**Remedial Action (RA)** - The implementation of the remedy outlined in the Record of Decision for a contaminated site.

**Remedial Design (RD)** - The phase of remediation that follows the selection of a remedy and includes development of engineering drawings and specifications for a site cleanup.

**Remedial Investigation (RI)** - Process of collecting data necessary to adequately characterize the site for the purpose of developing and evaluating remedial alternatives.

**Remedial Investigation and Feasibility Study (RI/FS)** - Its purpose is to assess site conditions and evaluate alternatives to the extent necessary to select a remedy.

**Remediation** – The process of providing a remedy to cleanup a site.

**Resource Conservation and Recovery Act (RCRA)** – protects human health and the environment from the potential hazards of waste disposal, conserves energy and natural resources, reduces the amount of waste generated, and ensures that wastes are managed in an environmentally sound manner.

**Runoff** - The discharge of water over land into surface waters. It can carry pollutants from the air and land into receiving waters.

**Safe Drinking Water Act** – This Act protects the quality of drinking water in South Carolina and the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources.

**Scope of Work** - A general description of the work intended at a site. It includes the media to be sampled and the constituents analyzed for, but not necessarily location and sample number.

**Sediment** - The layer of soil, sand, and minerals at the bottom of surface waters (such as streams, lakes and rivers) that absorb contaminants.

**Site Inspection/Investigation (SI)** - The collection of information from a Superfund site to determine the extent and severity of hazards posed by the site. It follows and is more extensive than a preliminary assessment.

**Sludge** - Semi-solid residues from industrial or water treatment processes that may be contaminated with hazardous materials.

**Sparging** – Injection of air below the water table to strip dissolved volatile organic compounds and/or oxygenate ground water to facilitate aerobic biodegradation of organic compounds.

**Sump** - A pit or tank that catches liquid runoff for drainage or disposal.

**Surface Water** - All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc.)

**Toxicity Characteristic Leaching Procedure (TCLP)** - A laboratory test to determine whether a material must be handled as a hazardous waste.

## **Hazardous Waste Contingency Fund, Annual Report for Fiscal Year 2009**

**Treatment, Storage and Disposal Facility (TSDF)** - A facility where a hazardous substance is treated, stored, or disposed. TSD facilities are regulated by USEPA and the Department under RCRA.

**Trichloroethylene (TCE)** - A stable, colorless liquid with a low boiling point that has many industrial applications, including use as a solvent and metal degreasing agent.

**Underground Storage Tank (UST)** - A tank and any underground piping connected to the tank that is located at least partially (10%) underground and designed to hold gasoline or other petroleum products or chemicals.

**Up gradient** - An area or direction that is topographically and/or hydraulically higher than contaminated areas and, therefore, are not prone to contamination by the movement of polluted groundwater.

**Volatile Organic Compounds (VOCs)** - VOCs are made as secondary petrochemicals. They include light alcohols, acetone, trichloroethylene, perchloroethylene, dichloroethylene, benzene, vinyl chloride, toluene and methylene chloride. These potentially toxic chemicals are used as solvents, degreasers, paint thinners and fuels.

**Voluntary Cleanup Program** - The State program designed to provide incentives for parties to voluntarily conduct response actions at sites by providing liability protection and/or covenants not to sue.

**Wetlands** - An area that is regularly saturated by surface or groundwater and, under normal circumstances, is capable of supporting vegetation typically adapted for life in saturated soil conditions.