

ALABAMA HAZARDOUS SUBSTANCE CLEANUP FUND - FY 96

EXECUTIVE SUMMARY

The Alabama Department of Environmental Management (ADEM) is submitting the following report for the fiscal year 1996 (FY 96). During FY 96, 58 hazardous substance sites were evaluated or cleaned up. At 30 sites, evaluations or cleanups were ongoing from previous years. Twenty-eight new sites were discovered during this fiscal year alone. Approximately \$354,000 in funds provided by the Alabama Hazardous Substance Cleanup Fund (AHSCF) were utilized in the evaluations and/or cleanups of these sites. This represents an increase of approximately \$30,000 over the previous year.

Funds were used for disposal fees, contractual cleanup services, analytical costs, salary, and fringe benefits. Projects varied dramatically in scope, ranging from removal of a single drum to providing oversight for responsible party cleanups involving the expenditure of over \$1 million.

Additionally, ADEM personnel coordinated with the Emergency Response and Removal Branch of the U. S. Environmental Protection Agency (EPA) during FY 96 on several projects initiated by ADEM. At this time, an estimated \$1.7 million has been spent on one site alone by the EPA after a limited expenditure of AHSCF funds. Cleanup at that site is still underway by the EPA. An estimate of the total cost of the site cleanup has been calculated to be at least \$2.9 million.

During FY 96, ADEM entered into cooperative efforts with local authorities, companies, or individuals to provide for the cleanup of several larger sites which posed a threat to human health or the environment. These sites were of a size usually too large and cost prohibitive to be addressed by ADEM. By the innovative use of settlement agreements, oversight of cleanups by ADEM personnel, and other joint efforts, the cleanup of these sites, which would not have been possible without the combined resources of several parties, was accomplished. Where Federal cleanup of these sites was not available, a timely solution to the threat posed by the sites was provided through the efforts of the ADEM personnel and local authorities or property owners. In some cases, this was an intermediate measure until further Federal cleanup measures could be taken. In others, it provided for the total cleanup of the site problems. However, in all cases, it provided for the removal of the imminent and substantial threat to human health and the environment.

The remaining fund balance as of September 30, 1996, was \$469,052.34.



PROGRAM OVERVIEW

The AHSCF has numerous functions including the following:

- To provide timely responses at inactive or abandoned hazardous substance sites which have the potential for negative impact on human health and the environment such that the threat from the site is mitigated in a timely fashion.
- To respond to emergency situations, such as drum removal, spills, or contaminated sites that have been determined to be imminent hazards to either human health or the environment.
- To discover and conduct preliminary investigations of potential hazardous substance, pollutant, or contaminant releases from abandoned hazardous waste sites, solid waste sites, or agricultural chemical sites, and to identify Potentially Responsible Parties (PRPs).
- To oversee PRPs or their contractors in conducting surveys, investigations, and studies to ensure proper actions are planned and implemented to clean and remediate sites, or to conduct such activities at sites where there are no PRPs available.
- To oversee PRP development and implementation of plans for the cleanup of sites or conduct those actions at "orphan sites", within the fiscal abilities of ADEM.
- To manage state contractors under the AHSCF at state sponsored cleanups. These activities include development of standards and guidelines, safety plans, training, as well as the supervision of the actual cleanup operations.
- To conduct public information and community relations activities with guidance from the ADEM public affairs office.



SITE DESCRIPTIONS AND STATUS OF WORK

AHSCF GENERAL MANAGEMENT

Reference # 9000

The AHSCF General Management accounting category provides for numerous functions not directly accountable to specific sites. These include but are not limited to, the personnel and travel costs associated with conducting complaint investigations, as well as administrative support for the purchase and repair of equipment utilized on all sites. Field sampling and safety supplies are also provided from this budget area. General administrative functions which address research and clerical support are also included.

TERRA INTERNATIONAL

Montgomery County

Reference # 9009

Terra International (Terra, Inc.) is a distribution center for pesticides and herbicides located on Air Base Boulevard in Montgomery, Alabama. Evaluations by Terra International and ADEM personnel defined the existence and extent of soil contamination at the site. The contamination appeared to have been caused by small spills which occurred over many years of operation.

Removal of arsenic and pesticide contaminated soils occurred during 1993. Soil cleanup levels were established at concentrations consistent with comparable Superfund sites in Alabama. While limited groundwater contamination occurred at the site, recent monitoring was conducted to determine seasonal variations for the constituents of concern and their concentrations. Earlier removal of the source of contamination (soil) has significantly improved groundwater quality. The AHSCF provided funds for the oversight of the sampling and removal activities at the facility and the continued evaluation of quarterly groundwater monitoring. It has been determined that no further remedial action or groundwater monitoring is necessary at this site, as groundwater quality goals have been obtained.

BROWN FOUNDATION

Tuscaloosa County

Reference # 9034

The James Graham Brown Foundation site (Brownville Site) located in Brownville, Tuscaloosa County, is adjacent to the business location of Brown Wood Preserving Co., Inc., which operates a wood preserving plant. The wood preserving plant formerly was owned and operated by W. P. Brown & Sons Lumber Co., Inc. The Foundation inherited the W. P. Brown & Sons stock and in June 1980 sold the assets and the real property of the wood preserving plant to Brown Wood Preserving Co., Inc. The Foundation is not affiliated with Brown Wood Preserving.

The wood preserving plant adjacent to the Site has been used for pressure treating of wood products



from 1923 to the present. The plant has treated utility poles, barn poles, fence posts and lumber and has used creosote as a wood preservative. Wastewater from the wood preserving treatment operations drained onto the adjacent Site. Soils within the Site are contaminated with creosote wood preservative wastes, the primary contaminants of which are polycyclic aromatic hydrocarbons (PAHs).

Under an Administrative Order by Consent (AOC) with the EPA, an emergency removal was conducted in 1992. This action included the removal of heavily contaminated soils from the site, followed by the on-site treatment of lesser contaminated soils using biodegradation. A creosote recovery system has been constructed on the Site. On August 24, 1992, the Foundation entered into a Settlement Agreement with ADEM to continue work pursuant to the above referenced EPA AOC.

The water treatment plant was placed back into operation in April 1994. The normal bioremediation “season” usually runs from April to November. For FY 96, approximately 195,750 gallons of water were collected and treated before discharge via the NPDES permit. Approximately 3,650 gallons of creosote were recovered and disposed of through Systec Environmental Corporation in Demopolis, AL.

The Foundation continues to bioremediate creosote contaminated soil in two areas of the site. A recovery system collects a groundwater/creosote mixture for separation, water treatment and discharge via an NPDES outfall. Soil bioremediation is accomplished by frequent plowing and tilling with the addition of indigenous microbes and fertilizer.

Approximately 5 of the total 35 acres within the site are being bioremediated. The Foundation charter calls for the disbursement or sale of all landholdings by a prescribed date and the Foundation is investigating avenues for the release of those portions of the site that can be considered uncontaminated. ADEM is developing a plan and course of action whereby that can be accomplished. Funds charged against the Site include personnel time for document review and site inspections.



Brown Foundation, Brownville, Tuscaloosa County, Alabama



ARCHER LANDFILL

Shelby County

Reference # 9039

Archer Landfill is located on County Road 55 in a rural area of Shelby County, four miles south of Westover. Catalytic, Inc., contracted with Mr. Wayne Archer in 1977 to dispose of 545 tons of material from the Coal Liquefaction Pilot Plant in Wilsonville. Materials disposed at the site include mineral ash, filter cake containing asbestos, numerous 55-gallon drums of liquids, and other solid materials. Raytheon, Catalytic's parent company, is currently awaiting final approval of a cleanup plan recently submitted to ADEM. The removal of the waste should be completed in FY 97, but the maintenance of the site and monitoring of the groundwater may continue for an indeterminate amount of time.

SCHUFFERT DRUMS

Chilton County

Reference # 9046

The Schuffert Drum Site is located on County Road 24 in the rural town of Verbena in Chilton County. The site consisted of 28 steel 55-gallon drums abandoned on a private citizen's property in sound condition. The AHSCF provided for the pick-up and disposal of all the drums on site along with waste derived from the storage of the drums. No further action is anticipated at either the State or Federal Superfund level for this site.

FUELS & CHEMICALS, INC. (FCI)

Tuscaloosa County

Reference # 9048

The FCI site is located 15 miles east of Tuscaloosa and approximately 1 mile east of Coaling. In September 1992, the facility was abandoned by the owner/operator with over 1 million gallons of waste derived fuel stored in 16 horizontal tanks, 10 vertical tanks, 5 refractory tanks, and over twelve hundred 55-gallon drums. Analysis of the contents of the tanks and drums revealed elevated levels of the following compounds: 1,1,1-trichloroethane, tetrachloroethene, benzene, toluene, xylenes, polycyclic aromatic hydrocarbons, and others. Evaluation of the cleanup of the site for the past three years has cost a total of approximately \$20,530.

The PRP group, along with EPA and ADEM, have completed all cleanup and removal work on site. The AHSCF has provided for quarterly groundwater sampling which is still ongoing at the site. If the results maintain current levels, ADEM plans to reduce monitoring to a bi-yearly sampling session.



CARSON ROAD BATTERY

Jefferson County

Reference # 9049

This site is an approximate 50 acre tract of land owned by ALAGASCO in Pinson. It and the adjacent land were used in secondary lead smelting operations during the 1950s and 1960s. Crushed battery casings were deposited on this site. Representatives from ALAGASCO met with ADEM representatives and developed a sampling plan to determine the extent of the lead contamination. During 1994, ADEM personnel observed the sampling of the site, conducted sampling of monitoring wells and obtained split samples to test for lead contamination. ALAGASCO has refined its cleanup plan for the site due to additional sampling and discussion with ADEM personnel and has submitted it to ADEM for review and approval.

WEST END LANDFILL

Calhoun County

Reference # 9054

The West End Landfill is located on Highway 202 approximately one mile west of Anniston, Calhoun County, Alabama, and is part of the Monsanto facility. The site consists of a landfill of approximately six acres. This landfill contains PCBs and other materials which Monsanto manufactured from the 1920s until 1960. The landfill itself is undergoing RCRA closure by capping with a synthetic membrane liner. A Preliminary Assessment was conducted under the Federal Superfund program. The AHSCF was involved in assessment activities which encompassed areas of contamination surrounding the West End Landfill. Areas surrounding the site have been sampled by ADEM personnel in conjunction with the Department of Public Health. Several areas surrounding Monsanto's Anniston facility have shown levels of PCB contamination. The Department of Public Health also collected blood samples from nearby residents and found elevated blood levels of PCBs present.

LATHAM DRUMS

Madison County

Reference # 9069

The Latham Drum site was located at a private residence in Huntsville, Alabama. One 55-gallon drum was abandoned at this residence on Firestone Drive by the adjacent property owner. The contents of the drum consisted of a tar material used by the neighbor in his construction business. The material hardened in the drum preventing the possibility of a spill to the environment. A Madison County public works crew provided transportation and disposal of the drum at the Cullman Environmental Center.



CAPITOL CITY PLUME/RSA TOWERS SITE

Montgomery County

Reference # 9074

The RSA Towers site is located in a four block area of downtown Montgomery that is bound on the west by McDonough Street, on the south by Monroe Street, on the east by Decatur Street, and on the north by Jefferson Street. Soils containing 7,500 parts per million perchloroethylene (PCE) were reported by the Retirement Systems of Alabama (RSA) officials in a 20 foot deep excavation constructed for the RSA Chiller Plant. The contaminated soil at the RSA Chiller Plant site was removed. Further investigation by ADEM indicates a source of the contamination may have come from off-site and that PCE has also contaminated groundwater. ADEM is currently working to find the source of the contamination and to define the extent of the contaminated groundwater plume.

During FY 94, FY 95 and FY 96, the AHSCF provided funding for the installation of several ground water monitoring wells and for passive soil gas studies to define the boundaries of the groundwater plumes. The site scored high enough for further study at the Site Inspection stage of the Federal Superfund process, but it is not currently known if EPA will pursue any further action in FY 97.

GOODYEAR SCOTTSBORO

Jackson County

Reference # 9076

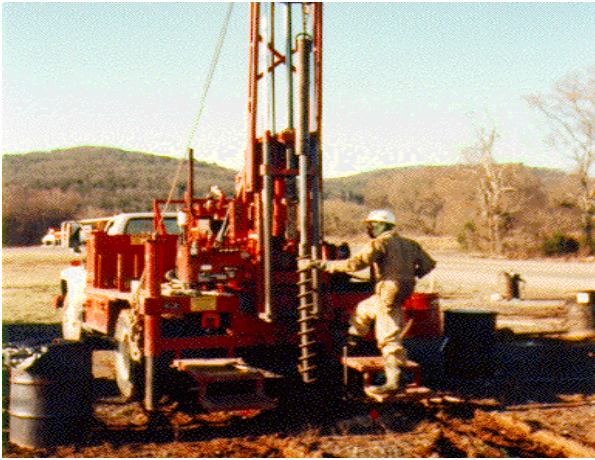
The Goodyear Scottsboro site is located at the AKZO Industrial Fibers Inc., (AKZO) plant site approximately seven miles southeast of Scottsboro, near the intersection of Highway 72 and the Highway 79 by-pass. AKZO manufactures polyester fibers for the tire industry and polyester resins for the food packaging industry. Goodyear Tire & Rubber, in fulfillment of ownership transfer agreements of the industrial fiber plant to AKZO, has remediated two former disposal sites at the plant; i.e., the limestone pit and the burn pit (waste fiber landfill).

The limestone pit was reported to be an excavated pit which received chemicals from the plant laboratory from 1972 to 1980. Investigations reveal that chemicals have migrated from the pit into surrounding soils. Approximately 3,000 cubic yards of contaminated soil have been removed from the pit. The limestone pit has been backfilled with clean soil, compacted, graded, and seeded.

The waste fiber landfill primarily included inert polyester fibers and construction debris. Approximately 12,650 cubic yards of waste fibers and soils have been excavated from the burn pit area and disposed in an approved Subtitle D landfill. During excavation of this area, 11 55-gallon drums were detected and located. The drums were identified as containing a PCB oily liquid and were disposed of properly. This area has been backfilled with clean soil, compacted, graded and seeded.



A No Further Action recommendation has been granted for the soils of these two sites. Groundwater conditions are being considered for additional investigation. Goodyear Tire & Rubber is reimbursing ADEM for oversight costs at this site. This reference number is being used to track those expenses for accounting purposes.



Monitoring well installation and excavation at Goodyear, Scottsboro, Jackson County, Alabama

DERIDDER CHEMICAL CO.

Mobile County

Reference # 9078

The DeRidder Chemical Company is a defunct pine rosin manufacturing facility located on Main Street in the town of Whistler, Alabama. This industrial site was operated by various concerns since the Civil War. Some of the different operations on this site included a cannon ball factory, a railroad car reconditioning plant, and several rosin production facilities. The local municipality received a grant to establish a Casey Jones Railroad Museum on this site. ADEM personnel provided oversight and advice for cleanup plans to remediate the site sufficiently to enable the town to establish the museum here. Assessment of cleanup plans is still ongoing.

MOFFETT ROAD DRUMS

Mobile County

Reference # 9080

The Moffett Road Drums consisted of two incidents of drums abandoned along Moffett Road in Mobile, Alabama. The first incident involved one 55-gallon drum abandoned behind the Moffett Road Winn Dixie. The drum contained used waste oil and was sampled and tested to ensure the suitability for disposal through a waste oil recycler. Analysis indicated no presence of PCBs, chlorine, or other hazardous contaminants and the drum was collected by a licensed and appropriate recycler. The



second incident consisted of an abandoned drum located in a thicket behind the Moffett Road Veterinarian Clinic. ADEM personnel investigated the complaint and found one 55-gallon drum of used waste oil in good condition. A local recycler was contacted and, after field testing for presence of PCBs and chlorine, the drum was vacuumed to reclaim the oil. The AHSCF provided funds for the initial investigation and ultimate disposal of the drum. There appears to be no health risk at the site and no further action at this site is necessary or anticipated.

JOHNSON'S LANDFILL

Morgan County

Reference # 9095

Johnson's Landfill is located in Trinity, Morgan County. This landfill consists of various wastes from manufacturing facilities located in the Decatur area. The landfill, which covers an area of approximately 20 acres, contains municipal wastes and industrial wastes. A significant amount of leachate is visible at the landfill. Monitoring wells, leachate, and soil samples have shown contamination with chlorinated materials. Drums which were visible at the surface have been removed from the landfill and placed in plastic lined holding areas on-site. A small scale magnetometer survey conducted under the AHSCF, by ADEM personnel, led to the conclusion that many more drums exist under the surface. Also, several more partially buried drums are visible but have not been removed. Temporary monitoring wells have been constructed under the AHSCF and contamination of ground-water has been detected in some of these wells. A Petrex Tube study was also undertaken at the site with AHSCF funds. This study detected contamination with volatile organic compounds in the soil. Further characterization of the site is ongoing.

CATALYTIC INC./SRC PILOT PLANT SITE

Shelby County

Reference # 9107

The Catalytic Inc./SRC Pilot Plant is located in north-central Alabama in the eastern portion of Shelby County. The site is approximately one mile northeast of the small rural town of Wilsonville on a nine acre section of property located near the convergence of Yellow Leaf Creek and the Coosa River.

The Catalytic Inc. site, also known as the Advanced Coal Liquefaction Research and Development (ACLR&D) facility, was constructed in 1974 for the purpose of developing clean burning fuels from coal with high sulfur and ash content. During the coal liquefaction process, large quantities of hazardous waste (spent solvents, coal tar derivatives, and solid waste materials), were produced and stored on the site and the adjacent Southern Company "Hill" Drum site. Southern Company Services (SCS) assumed responsibility for the site. SCS dismantled the ACLR&D facility and began assessing the possibilities that the site could have soil and groundwater contamination problems. SCS has completed a qualifying removal at the "Hill" site and is currently in the Remedial Investigation/ Feasibility Study stages of preparing the ACLR&D site for soil and groundwater remediation. Work is continuing at this site.



FLORENCE WAGON WORKS

Lauderdale County

Reference # 9111

The Florence Wagon Works is located on the north bank of the Tennessee River within the Tennessee Valley Authority Wilson Dam Reservation. Historically, the Wagon Works, owned by A. D. Bellamy, covered several city blocks and produced several types of horse drawn wagons from 1889 to 1940. Mr. Bellamy strategically located his factory on the north bank of the Tennessee River adjacent to the boat canal and a section of the Louisville and Nashville Railroad. The entire factory employed 175 people and produced 15,000 wagons annually. Many of the structural remains of the facility still exist at the site, and the site is currently part of the National Register of Historic Places.

In July of 1994, the City of Florence began to make plans to build a historic riverside trail along a CSX Railroad right of way located along the northern border of the Florence Wagon Factory site. During an environmental investigation conducted on the proposed trail property, high levels of lead were detected in one of the soil borings collected near the east end of the Florence Wagon Works tram track. Further investigation by TVA suggests that the source of the lead is old paint waste left behind by the former wagon factory.

ADEM is currently working with all persons involved with the Florence Wagon Factory site in a joint effort to assess the extent of lead contamination at the site and to determine what clean-up efforts will be necessary to make the site environmentally safe without destroying the historic significance of the site.

FULLCO LUMBER COMPANY

Marion County

Reference # 9112

The Fullco Lumber Company is a defunct wood treatment facility located on the western edge of Haleyville, Alabama. Initial investigation by ADEM revealed wood preserving chemicals leaching into an adjacent small stream, contaminated soil, and contaminated groundwater. The former site of the processing facility was deemed a hazard to human health and the environment and the Emergency Response and Removal Branch (ERRB) of the U.S. Environmental Protection Agency (EPA) was sent to further investigate the site. After limited expenditure of AHSCF funds to fence the former processing area, the EPA initiated an excavation and cleanup of the site -- which is still ongoing. Cost for the State to erect a fence at this site was approximately \$11,000. Currently the EPA has spent approximately \$1.7 million in their cleanup efforts. Total cost for this cleanup has been projected to be in excess of \$2.9 million.





Fulco Lumber Company tanks prior to removal by EPA ERRB



Initial excavation and removal efforts at Fulco Lumber Company, Haleyville, Marion County

ESCATAWPA RIVER AIRPORT

Mobile County

Reference # 9116

One 55-gallon drum and one 35-gallon drum was found abandoned near the Escatawpa River in Wilmer, Alabama located in Mobile County. Local individuals were using the drums for target practice and some material had spilled to the ground. ADEM personnel investigated and obtained samples from each drum, which indicated that both drums contained used waste oil. Damage to the drums resulted in spillage of the contents and contamination of a small area around where the drums were found. A qualified cleanup contractor was contracted and assisted ADEM personnel in treating the contaminated soil on-site by using bioremediation techniques. Several bags of absorbent and microbes were added to the spill and very finely tilled into the soil. After additional applications and tilling, sample analysis results show a marked decrease in levels of hydrocarbons to acceptable levels. Remediation of this site is considered a success and no further action is required.

HALL CHEMICAL

Marshall County

Reference # 9118

The Hall Chemical Company, Inc., is located on Highway 69 East in Arab, Alabama, in an industrialized suburban area. The facility began operations in 1966, consists of 79.3 acres, and currently is a major supplier of metal-based specialty products utilized in various other industries. Contaminants



of concern are arsenic, cadmium, chromium, cobalt, copper, lead, nickel, zinc, tetrachloroethene, and trichloroethylene. Areas of concern are contaminated groundwater, heavy metal contaminated pond sludge, and heavy metal contaminated soils.

In March 1995, Hall Chemical Company entered into a settlement agreement with ADEM to sample contaminated areas and monitor groundwater for additional information needed to determine if cleanup was necessary. The site underwent continued evaluation under the Federal Superfund program due to the heavy metal concern. The AHSCF provided funding for staff to evaluate the initial threat to human health and the environment, to provide oversight of the sampling, to collect and analyze soil and groundwater samples taken from the areas of concern, and oversee placement of a cap over the contaminated soil area. Additional monitoring of the groundwater and determination of future cleanup alternatives and activities are continuing.



Hall Chemical, Arab, Marshall County, Alabama

**SOUTHLAND AGRICULTURAL CHEMICAL/AIR PRO
Montgomery County
Reference # 9119**



Excavation and installation of the liner at Southland Chemicals/Airpro



The Southland Agricultural Chemicals/Air Pro site is a former pesticide distributorship located on Chandler Street near downtown Montgomery, Alabama. Soil and groundwater sampling performed at the site indicated contamination from endrin and toxaphene (pesticides) and heavy metals. A cooperative agreement between ADEM and the property owner to clean the site up was implemented. AHSCF funds were expended for oversight of cleanup activities and to confirm the results of soil and water analysis. The site underwent soil removal activities and had an impermeable membrane liner installed over all areas of former contamination. Groundwater monitoring activities are still currently ongoing at the site, and a plan is being devised for the mitigation of pesticide contaminated groundwater.

CAREN INC. TANKS

Baldwin County

Reference # 9123

Caren Inc., a former sludge treatment facility, is located in the City of Gulf Shores, Alabama. When the site was abandoned, eight large tanks were left on the property by the former owner. A large amount of a sludge conditioner, Alum, used in the former operations was left in three of the tanks. After the initial investigation, a qualified disposal firm was contracted to disassemble the tanks and the sludge conditioner was properly disposed of at an authorized landfill. Of the five other tanks, one was empty and one contained a sand filter for seawater treatment. The three remaining tanks contained diesel fuel and, after cleanup, were donated to a local scuba diving school and are awaiting removal. No further action was deemed necessary for this site.



Caren Inc., tanks, Gulf Shores, Baldwin County, Alabama



BENCO
Lowndes County
Reference # 9124

Benco Industries is an inactive sign manufacturer located in Fort Deposit, Alabama. The initial investigation revealed approximately 60 partially filled 55- and 5-gallon drums of what was found to be paint waste and waste water which were abandoned on site by the former owner. These drums were analyzed and properly disposed of by an appropriate disposal contractor. Debris from the cleanup of the site was identified and properly landfilled. The cleanup has been concluded and new tenants have occupied the facility. A CERCLA Preliminary Assessment of the site recommended the site be placed in a category of no further remedial action planned with regard to Superfund based on the successful cleanup of the site.

SULLIGENT HIGHWAY 17 DRUMS
Lamar County
Reference # 9129

The Sulligent drums were discovered by the ADEM of Transportation workers along Highway 17 just south of Sulligent, Alabama. Of the two 55-gallon drums found at this site, one was filled with waste oil. After analysis, the oil was pumped out by a qualified disposal firm and disposed of in the proper manner. The second drum was sampled and found to contain a non-hazardous wax (probably used for waxing floors). The drum was approved for land disposal and was transported to a solid waste landfill for proper disposal. No further action was necessary for this site.

AVERITT EXPRESS
Lee County
Reference # 9131

Averitt Express, Inc., is a shipping facility composed of approximately 30 acres which is located at 701 West Point Parkway, Opelika, Alabama. A well defined drainage pathway on site allowed Total Petroleum Hydrocarbon (TPH) contamination in the soil to extend into a wooded area from the parking lot of the facility.

The site cleanup was initiated by Averitt in April 1995, and the cleanup was completed by July 1995. In total, 10.89 tons of TPH contaminated soil was removed from the drainage ditch and pavement areas, and the waste was properly disposed of at an appropriate disposal facility. The AHSCF provided funding for staff to evaluate the initial threat to the human health and the environment, to provide oversight during the cleanup process, and to collect/analyze limited samples of the contaminated soils in the areas of concern.



BLACKWATER RIVER DRUM

Baldwin County

Reference # 9132

The Blackwater River drum was located near Seminole, Alabama, in Baldwin County. The site consists of one 55-gallon steel drum that was found floating in the Blackwater River. The AHSCF provided funds for the removal, sampling, transportation, and proper disposal of the drum. No further action is anticipated at the State or Federal Superfund level for this site.

BIRMINGHAM SOUTHERN PRECISION DRUMS

Jefferson County

Reference # 9134

The Birmingham Southern Precision Drum site is the location of 12 abandoned 55-gallon drums of oil. The owner of the property had debris cleared from the site to facilitate cleanup of the spilled oil. The drums were cleaned of any residual oil by a contractor after testing verified the oil contained less than 50 parts per million of PCBs. The empty drums were then hauled away for proper disposal. Oil contaminated soil was treated on site by use of bioremediation techniques. A bioremedial product was added to the spill area and finely tilled into the soil along with additional nutrients. After several applications and several months, composite samples were taken and analysis indicated marked decreases in contamination. The site was successfully bioremediated. AHSCF funds provided for the bioremediation project with the expense to be reimbursed by the property owner.

NASA MARSHALL SPACE FLIGHT CENTER

Madison County

Reference # 9135

The National Aeronautics and Space Administration's (NASA) Marshall Space Flight Center (MSFC) is located in north-central Alabama on approximately 1,840 acres of property near the center of Redstone Arsenal (RSA). Most of the property adjacent to the MSFC is under primary control of the U. S. Army.

This facility is the NASA principal propulsion development center. Its scientists, engineers, and support personnel play a major role in the National Space Transportation System by managing the space shuttle's main engines, solid rocket boosters, and external tanks.

The MSFC is a large quantity generator of hazardous wastes for temporary storage. It also maintains interim status post-closure care for three former surface impoundments associated with the treatment of metal plating wastes.



After several investigations of the facility, the total number of sites found to be addressed by the MSFC is 82. In addressing these 82 sites, MSFC conducted confirmatory sampling between August 1993 and April 1994. The results of the samplings recommended that soil for 37 sites be considered for No Further Remedial Action. These sites have been given a status of No Further Investigation at this time. In May 1994, MSFC was placed on the NPL making it eligible for cleanup under the Federal Superfund program. As part of the Superfund process, MSFC is conducting a multi-phase investigation called a Remedial Investigation/Feasibility Study (RI/FS). There are 45 sites such as fuel loading areas, engine test stands, and paint shops where hazardous materials have been used, disposed of, or stored which have been targeted for study during the RI/FS. Because of similarities in investigation activities, cleanup approaches, or geography, these sites have been grouped together into nine operable units. The field work for the RI/FS has already begun.

ADEM has assisted in providing oversight and advice through all phases of the work in progress. There is a Memorandum of Agreement between MSFC and ADEM for reimbursement of costs for state services.

SHANKLIN PROPERTY

Crenshaw County

Reference # 9137

The Shanklin Property is located in Crenshaw County on County Road 4 near Honoroville, Alabama. The owner's son transported 48 drums from Cleveland, Ohio for use as farm storage. These 48 drums were partially filled with waste oil. The drums were consolidated and field samples were taken to test for PCBs and chlorinated products. This analysis indicated that no PCBs or chlorinated materials were present in the drums. After consolidation, five filled 55-gallon drums of waste oil required proper disposal. The property owner was provided with the test results and a list of qualified transporters. The waste materials have been properly disposed of by a qualified fuel blending operation. AHSCF provided funds for the initial investigation and the oversight of the proper disposal of the waste oil.

MONTGOMERY PLATING WORKS

Montgomery County

Reference # 9140

Montgomery Plating Works is located in a commercial and residential area at 1419 Highland Avenue, in Montgomery, Alabama. The facility, 56 feet by 32 feet, consists of one building which appeared to house the office and indoor plating operations and an outside work area plus driveway. Plating operations were started in the 1930s. The facility was closed by the last owner in 1992, and the property was abandoned after the owner filed for bankruptcy in 1994.



Numerous materials utilized during operations at this site were left behind in the abandoned building, posing a threat to nearby residents. Used waste streams consisted of vats containing plating solutions, numerous other miscellaneous bags and containers, as well as waste spilled on the floors and walls. Contaminants identified at the site included hydrofluoric acid, sodium dichromate dihydrate, zinc cyanide, lacquer thinner, nickel chloride hexahydrate, cadmium, chromium, cobalt, copper, cyanide, gold, lead, nickel, silver, zinc, and contaminated soils.

Phase I cleanup activities were initiated on August 14, 1995, and consisted of identification and over-packing of the known waste chemicals. These activities were undertaken to reduce the threat to nearby residents which the site posed. The containers were temporarily staged at a suitable secure location.

Phase II cleanup activities included disposal of staged materials and cleanup of the building interior and vats. The AHSCF provided funding for a qualified contractor to perform Phase I and Phase II activities. The AHSCF also provided funding for staff to evaluate the initial threat to human health and the environment, to provide for oversight during the ongoing cleanup process, and to collect/analyze samples of the contaminated soil in the areas of concern. Any further cleanup of the site will be conducted at the State level.



**Inspecting Waste, Montgomery Plating
Montgomery, Alabama**

**WESTEND COMMUNITY LANDFILL
Calhoun County
Reference # 9142**

The Westend Community Landfill is the same site as West End Landfill (see Reference # 9054). It is a landfill owned and operated by Monsanto of Anniston, Alabama from the 1920s until 1960. This second reference number tracked expenses associated with the Department of Public Health's study which collected additional PCB samples of nearby residences. This study was conducted by ADEM staff and was developed by ADPH to provide detailed soil results for comparison with resident's blood



levels of PCBs.

RED EAGLE TRAP & SKEET CLUB

Talladega County

Reference # 9143

The Red Eagle Skeet & Trap Club site is approximately a 20 acre parcel of land located in Childersburg, Talladega County, Alabama. Since 1981, the Red Eagle Skeet and Trap Club has fired approximately 1 million pounds of lead shot onto property owned by the city of Childersburg. The city requested that ADEM and the Alabama Department of Public Health evaluate the site to determine what impact the lead shot could have on the environment and the local community surrounding the gun club.

It has been determined that the soils in the shot fall out zone has become contaminated with lead at concentrations that could pose a threat to human health and the environment if the lead shot and the lead contaminated soil are not remediated. ADEM is currently working with the gun club and the city of Childersburg in an attempt to negotiate a voluntary cleanup agreement for approval in FY 97.

CRACKER ASPHALT

Hale County

Reference # 9144

The Cracker Asphalt Facility is approximately a 25-acre parcel of land located adjacent to Moundville State Park in Hale County, Alabama. The Cracker Asphalt Company operated an asphalt refining and storage company at the site in the late 1960's. During a bankruptcy sale that took place in 1968, Conrad Wesselhoeft purchased the old Cracker Asphalt Facility site and started a metal fabricating business that produces metal tank heads and large boat anchors. Leakage and spillage from asphalt and diesel fuel storage tanks are believed to be the sources of known ground water and possible surface water contamination. Since all the tanks at the site are currently empty and Mr. Wesselhoeft's metal fabrication business does not use any materials containing the type contaminants found in samples of ground water and leachate from the site, the initial sources of contamination, if from Cracker Asphalt, are thought to be no longer be present.

During FY 96, AHSCF funds were used to sample soil, groundwater, surface water and leachate at the old Cracker Asphalt site in order to determine if this site or the adjacent resin plant is the source of known groundwater contamination. Currently, ADEM can not conclude that the Cracker Asphalt site is the source but it is likely that the site is responsible for at least some of the contamination. The resin plant is possibly the major source of the contamination to groundwater.





Abandoned Drums and Dip Vats at Cracker Asphalt, Hale County, Alabama

MAGNOLIA SPRINGS DRUMS

Baldwin County

Reference # 9145

Assisting the Baldwin County District Attorney's office, ADEM personnel sampled and provided for the disposal of two 55-gallon drums of hazardous materials which were staged at the Magnolia Springs Landfill. These drums were opened and sampled by a qualified contractor. The drums were characteristic hazardous wastes due to flash points and contained carbon disulfide. The contractors provided for the proper disposal of the materials. AHSCF funds provided for the sampling and disposal of the drums.

ROBERSTDALE DUMP

Baldwin County

Reference # 9146

The Robertsdale Dump is located on Highway 43 in Robertsdale, Alabama. Waste at the site consisted of several hundred 5-gallon containers of oil and hydraulic fluid which had never been used. These containers were stored in a barn which was being torn down. These materials were removed and properly disposed of and the barn itself was demolished and the debris disposed of in the proper manner.



COALING DRUMS

Tuscaloosa County

Reference # 9148

The Coaling Drum site was located in Coaling, Alabama, along State Highway 11 in a very rural area. ADEM received a complaint of one 55-gallon drum abandoned along the highway. When the site was located by investigators, it was discovered that the drum had been removed prior to ADEM personnel arriving on site. No further action was required.

BUCK CREEK MILLS

Shelby County

Reference # 9148

The Buck Creek Mills site is an abandoned warehouse located in Alabaster, Alabama, on State Highway 119. Five 55-gallon drums of used waste oil and hand soap were found on the property. Presently, the City of Alabaster is working in conjunction with ADEM personnel to provide for the proper disposal of these drums. AHSCF funds were used to perform the initial investigation and will be used in the oversight of the proper disposal of these drums.

KING DRUM

Jefferson County

Reference # 9149

The King Drum site was located at a private residence on 47th Avenue in Birmingham, Alabama. This one 55-gallon drum appeared to consist of used paint waste. The drum was removed from the site and staged at an alternate secure location due to the presence of young children living at the residence. Samples were taken from the drum and are presently being analyzed to identify all constituents of the drum.

SQUARE D - MONTEVALLO

Shelby County

Reference # 9150

During the reorganization of the company, Square D decided to sell its inactive facility at Montevallo, Alabama. Prior to the sales transaction, the company initiated an environmental assessment of the site. Along one drainage pathway, heavy metal contamination was discovered. Square D notified ADEM of the problem and AHSCF funds were expended to provide ADEM oversight in delineating the extent of contamination, review the cleanup proposal, and to provide oversight of the cleanup activities performed at the site. Approximately 80 - 100 cubic yards of soil contaminated by copper and lead



were excavated and disposed of from this site. Confirmatory samples help conclude the cleanup was a success and no further action was deemed necessary. Square D reimbursed the AHSCF for assessment activities associated with the site.



Excavation work at Square D - Montevallo

STANDARD FORGE & AXLE PLATING WORKS
Montgomery County
Reference # 9151

Standard Forge and Axle Plating Works consists of 1.43 acres and is located in a rural/lightly industrialized area of Montgomery, Alabama. The site is west of the Birmingham Highway and Maxwell AFB. Operations of the plating works started in the mid 1940s and ceased in the mid 1980s. The facility was sold in 1985. Nickel and bronze plating activities caused deterioration of concrete in the building's interior and wastes were deposited outside on the ground.

Soil analyses of the samples collected at various times during 1996, indicated one area of concern in the rear of the facility. Ongoing events consist of delineation of the extent of contamination and the eventual removal of an estimated 15 to 25 cubic yards of lead contaminated soil.

The AHSCF provided funding for staff to evaluate the initial threat to human health and the environment, collection and analysis of soil samples in the area of concern, and to provide oversight during the proposed cleanup. Any future cleanup of the site will be conducted at the State level.



STAR PLATING
Colbert County
Reference # 9152



Drummed materials abandoned at Star Plating in Tuscumbia, Alabama

Star Plating is located in Tuscumbia, Alabama. It is the site of an abandoned electroplating facility which operated from the early 1970s until 1993. The site was abandoned with over 100 55-gallon drums of corrosive and hazardous chemicals, including cyanide, in containers of uncertain structural integrity. Soil contamination has also been detected outside the building. The AHSCF provided funds for the contractual stabilization and sampling of the materials inside the building to prevent the further migration of materials to the surrounding environment. The US. EPA has conducted a Removal Site Assessment at the site to determine the extent of contamination and possible criteria for removal of contaminated materials.

WORLEY DRUM SITE
Calhoun County
Reference # 9153



Drum Sampling at Worley Drum site in Anniston, Alabama



The Worley Drum Site consisted of a total of 35 steel and plastic 55-gallon drums in Anniston, Alabama. Twenty-one of the drums were empty and had been used to burn debris such as household trash, and leaves. The remaining 14 drums contained a highly corrosive substance. The AHSCF provided funds for the transportation of the drums to a more secure and stable site until they could be disposed of properly. No further action is anticipated at the State or Federal Superfund level for this site.

ALABAMA SHIPYARDS

Mobile County

Reference # 9154



Excavation at the Alabama Shipyards

The Alabama Shipyards site consisted of a large area of soil contaminated with various petroleum hydrocarbon by-products. Soil contamination resulted from decades of washing train cars, fueling of ships, and other practices at the Shipyard. The AHSCF provided funds for periodic site visits to ensure that the total petroleum hydrocarbon (TPH) impacted soil was consolidated for use as a compacted structural fill in the construction of parking lots on the Shipyard property. The AHSCF also provided funds for the periodic sampling of the soil on site.

KOWLIGA DRUMS

Elmore County

Reference # 9155

This site was located on an unnamed, unimproved dirt road in Elmore County. Five 55-gallon drums, found at the site by the local fire chief, consisted of three drums of waste oil and two drums of wax. The drums of waste oil were recycled by an approved and appropriate waste oil recycler. The two



drums of wax were landfilled at the Selma landfill after proper processing and approval. No spills or other contamination impacted the soil at this site and no further remediation was required.

BIRMINGHAM-SOUTHERN COLLEGE

Jefferson County

Reference # 9156

The Birmingham-Southern College site was located at a former National Guard Armory on the west side of the BSC campus. This facility was either bought or was donated to the college. In several of the outlying buildings of the facility, numerous 55-gallon drums and 5-gallon containers of materials had accumulated. These materials included drums of polyurethane rubber compounds, paint thinners, DDT aerosol bombs, paint wastes, and other materials. AHSCF funds were expended to initially investigate the site and evaluate the threat the site might pose to nearby students and residents in the area. The site was then referred to appropriate ADEM personnel to assist the college in properly disposing of the materials and correct any regulatory violations associated with prolonged storage of the materials.

FAIRVIEW ROAD DRUMS

Etowah County

Reference # 9157

The Fairview Road Drums site is located in Gadsden, Alabama in a heavily populated area. Three 55-gallon drums were discovered at an abandoned residence approximately one block from the local elementary school and shopping center. ADEM personnel declared an emergency situation upon arrival at the site and a qualified contractor was contracted to respond to sample and provide for removal and proper disposal of the drums. The drums contained highly flammable materials and posed a significant concern as a fire hazard. After disposal of the drums, no further action was deemed necessary at this site.

TELEDYNE CONTINENTAL MOTORS

Mobile County

Reference # 9159

The Teledyne Continental Motors Inc., site is an industrial facility located at 2000 Ninth Street within the Brookley Industrial Complex in Mobile, Alabama. A settlement agreement between Teledyne and ADEM has been developed to initiate a voluntary cleanup of the site. The agreement provides for the evaluation, removal, treatment, disposal, and/or on-site management of contaminated materials by Teledyne, and the reimbursement of oversight costs incurred by ADEM in conjunction with the neutral sump release at this site.



BREWTON, HIGHWAY 41, CONECUH RIVER DRUM

Escambia County

Reference # 9160

This site was located east of Brewton and East Brewton on US Highway 41 at the bridge crossing the Conecuh River. Local residents reported one 55-gallon drum abandoned next to the bridge crossing. The drum was removed from the site and staged at the Conecuh County Maintenance Shop. Samples were collected and analyzed at the ADEM Laboratory. The substance could not be positively identified; therefore, a sample was supplied to the manufacturer listed on the drum for confirmation of the final identification.

JASPER WALKER COUNTY ACID

Walker County

Reference # 9161

Approximately three gallons of acid was discovered on county property by Walker County employees. The acid, stable in a sound container, was transported to ADEM's Laboratory for sampling. The acid was ultimately neutralized and disposed according to applicable regulations in the proper manner.

HEFLIN WEIGH STATION DRUMS

Cleburne County

Reference # 9162

The Heflin Weigh Station drums were located off Interstate 20 in Heflin, Alabama. Approximately 10 55-gallon drums containing hardened concrete mix and 2 drums of waste oil were discovered and reported to ADEM. The concrete mix was transported and properly disposed of at a local landfill. The used waste oil was disposed of by a qualified used oil recycler. Bioremediation of soil at the site is planned due to limited spillage of the waste oil. Further State action is planned for this site.

SOUTHERN CONCEPTS FURNITURE/BEAR CREEK

Marion County

Reference # 9163

This site is a defunct furniture manufacturer located in Bear Creek, Alabama. The former operator of the facility abandoned approximately 25 drums of old varnish. The containers consist of a mixture of 55-gallon drums and 5-gallon drums, most of which are nearly full. This site is scheduled for sampling and cleanup actions in the near future.



MR. TRANSMISSION, 431 SOUTH/HUNTSVILLE

Madison County

Reference # 9164

The Mr. Transmission site is the site of several abandoned drums behind the Mr. Transmission shop located at 8918 South Memorial Parkway/Highway 431 South in Huntsville, Alabama. The site is adjacent to a shopping mall and cultivated fields. Located at the site were 8 metal and 12 plastic containers of approximately 3- to 5-gallons of a waste oil mixture containing Acid/Base/Neutral compounds.

The containers were sampled, overpacked in four 60-gallon overpack drums, and shipped to an approved recycler for disposal. AHSCF funding provided for staff to evaluate the initial threat to the human health and the environment, to provide for the oversight of cleanup operations, and to collect and analyze contaminated soils from the area of concern.

TALLADEGA CYLINDER

Talladega County

Reference # 9165

The Talladega Cylinder site consisted of one cylindrical container found by a highway maintenance crew near the city of Talladega, Alabama. The cylinder was labeled as methyl chloride. The AHSCF provided funds for the removal and the technical assistance in the detonation of the cylinder at the City of Talladega's Bomb Range. No other disposal option was available due to the condition of the cylinder. No further action is anticipated for the site at the State or Federal Superfund levels.

BESSEMER ADAMSITE

Jefferson County

Reference # 9166

The Bessemer Adamsite site consisted of three 35-gallon drums of illegally stored hazardous materials which were located at a private citizen's residence. The materials stored could be used in manufacturing chemical weapons used in crowd control and included a teargas precursor. The AHSCF provided funds for the removal and transportation of these materials to a more secure area until they could be safely disposed of by the US armed forces. The chemicals were disposed of through the joint efforts of the U. S. Army and U. S. EPA. No further action is anticipated for this site at the State or Federal Superfund level.

CAHABA WOOD PRESERVING CO.

Perry County

Reference # 9167



The Cahaba Wood Preserving Company was a defunct and abandoned creosote pole facility located near Sprott, Alabama. The site consisted of 2 dip vats approximately 4 feet deep and 40 feet long with metal liners, an above ground storage tank, and contaminated soil. The vats were still full of creosote. The estate of the former owner provided for the cleanup of the site, which included removal of the liquid creosote by tanker truck, removal and disposal of the metal vat liners, removal and disposal of the above ground storage tank, and removal of approximately 100 cubic yards of contaminated soil. Remedial activities performed at the site included demolition of the vats on site, placement of an 18 inch compacted clay cap and 6 inch topsoil cover over the crushed vats, and seeding the cover with grass. AHSCF funds were expended to review the cleanup plans and provide general oversight of the cleanup of the site.



Excavation and destruction of dip vats at Cahaba Wood Preserving

COLONIAL BREAD STORE - SELMA

Dallas County

Reference # 9168

This site is located in Selma, Alabama on US Highway 80. A small quantity of diesel fuel was spilled at the site when an unidentified truck stopped at the store in order to close a valve on its tank. ADEM was notified and several bags of bioremedial absorbent was applied to the spill of diesel fuel to absorb the free product and treat the spill area. No further action is planned for this site.

LIBERTY HILL ROAD DRUM

Madison County

Reference # 9170

The Liberty Hill Road Drum site is located in Huntsville, Alabama in a rural residential area. The site



consists of two intact 55-gallon drums containing small amounts of liquid, which were sampled for characterization and disposal. One drum was declared empty. The second drum contained a minimal amount of product residue which was absorbed and properly disposed of in accordance with EPA and ADEM regulations. The AHSCF provided funding for staff members to evaluate the initial threat to the human health and the environment and to provide for the oversight of the cleanup of the drums.

CENTRAL FOUNDRY COMPANY

Tuscaloosa County

Reference # 9996

Central Foundry, located in Holt, is a site being remediated by the U.S. Department of Commerce, Small Business Administration. The site became property of the U.S. Government through bankruptcy proceedings after operating as a foundry for more than 70 years. Remediation is underway to clear the way for sale of the property to public and private concerns. ADEM is providing oversight at this site, and no state funds are being utilized for remediation.

Contamination at the site consisted of lead and other heavy metals, waste oils, PCBs, and asbestos-containing materials. Work was begun at the site in late 1993 to identify contaminated areas. Excavation and treatment of soils and removal of waste oils and PCBs was initiated in March 1994. Approximately 879,000 pounds of scrap metal were removed from the site for recycling, and 8,643.6 tons of solid waste and soils were disposed in both Class C (hazardous), or Class D (non-hazardous) landfills. Waste oils, PCBs and other liquid waste found at the site have been disposed in accordance with EPA and ADEM regulations.

All contaminated areas at the site were remediated during FY 95 except the baghouse area. This area was remediated during FY 96, and a final cleanup report was received. This site is considered to be in the No Further Remedial Action Planned status by ADEM. The US Government sold the site for the expansion of Tuscaloosa Steel Corporation, which is performing additional demolition of abandoned structures to make the site suitable for redevelopment.



FEDERAL SUPERFUND IN ALABAMA - FY 96

During FY 96, a total of 48 sites were evaluated in Alabama under the Federal Superfund program. Of these 48 sites, 31 were evaluated at the preliminary assessment level, 14 at the site investigation level, and 3 at the expanded site inspection level. This evaluation process was funded through Superfund to identify sites which were eligible for cleanup utilizing Federal money as National Priorities List Sites. While only 12 sites are currently on the National Priorities List in Alabama, this evaluation process provided resources to gather information which complemented the State Program. The assessment process provided data useful in identifying sites which in some cases might be a priority under the AHSCF for cleanup.



**AHSCF FY 96 ANNUAL REPORT
COST BREAKDOWN (SITE SPECIFIC)**

#	NAME	LOCATION	COST
9000	Administrative Site Number	N/A	80,280.33
9009	Terra International	Montgomery, AL	115.93
9034	Brown Foundation	Tuscaloosa, AL	3,110.50
9039	Archer Landfill	Westover, AL	521.36
9046	Schuffert Drums	Verbena, AL	628.96
9048	Fuels & Chemicals	Tuscaloosa, AL	11,162.28
9049	Carson Road Battery	Pinson, AL	233.97
9069	Latham Drums	Huntsville , AL	1,356.59
9074	Capitol City Plume/RSA Tower	Montgomery, AL	5,776.92
9076	Goodyear-Scottsboro	Scottsboro, AL	7,878.54
9078	DeRidder Chemical Co.	Whistler, AL	401.38
9080	Moffett Road Drums	Mobile, AL	1,222.35
9095	Johnsons Landfill	Trinity, AL	781.98
9107	Catalytic	Wilsonville, AL	1,934.15
9111	Florence Wagon Works	Florence, AL	1,023.27
9112	Fullco Lumber Co.	Haleyville, AL	50.00
9116	Escatawpa River Airport	Wilmer, AL	936.99
9118	Hall Chemical	Arab, AL	4,483.01
9119	Southland Agricultural Chem./Air Pro	Montgomery, AL	10,504.52
9123	Caren Inc. Tanks	Gulf Shores, AL	193.82
9124	Benco	Fort Deposit, AL	2,995.42
9129	Sulligent - Highway 17 Drums	Sulligent, AL	927.56
9131	Averitt Express	Opelika, AL	18.58
9132	Blackwater River Drums	Seminole, AL	3,185.50
9134	Birmingham Southern Precision Drum	Birmingham, AL	1,982.82
9135	NASA Marshall Space Flight Center	Huntsville, AL	13,142.09
9137	Shanklin Property	Honoraville, AL	624.27
9140	Montgomery Plating Works	Montgomery, AL	26,173.09
9142	Westend Community Landfill	Anniston, AL	11,674.91
9143	Red Eagle Trap & Skeet Club	Childersburg, AL	2,314.68
9144	Cracker Asphalt	Moundville, AL	3,043.02
9145	Magnolia Springs Drum	Magnolia Springs, AL	3,224.61
9146	Robertsdale Dump	Robertsdale, AL	104.30
9147	Coaling Drums	Coaling, AL	633.40
9148	Buck Creek Mills	Alabaster, AL	2,031.60
9149	King Drum	Birmingham, AL	790.99
9150	Square D - Montevallo	Montevallo, AL	1,641.55



**AHSCF FY 96 ANNUAL REPORT
COST BREAKDOWN (SITE SPECIFIC)**

#	NAME	LOCATION	COST
9151	Standard Forge & Axle	Montgomery, AL	1,212.83
9152	Star Plating	Tuscumbia, AL	31,317.49
9153	Worley Drum Site	Anniston, AL	5,560.51
9154	Alabama Shipyards	Mobile, AL	1,496.65
9155	Kowliga Drums	Elmore, AL	1,686.03
9156	Birmingham-Southern College	Birmingham, AL	403.32
9157	Fairview Road Drums	Gadsden, AL	1,468.19
9159	Teledyne Continental Motors	Mobile, AL	2,818.68
9160	Brewton Hwy 41, Conecuh River Drum	Brewton, AL	420.07
9161	Jasper, Walker County Acid	Jasper, AL	232.91
9162	Heflin Weigh Station Drums	Heflin, AL	1,205.12
9163	Southern Concepts Furniture/Bear Crk	Bear Creek, AL	232.91
9164	Mr. Transmission/Hwy 431 South	Huntsville, AL	1,666.94
9165	Talladega Cylinder	Talladega, AL	493.51
9166	Bessemer Adamsite	Bessemer, AL	532.52
9167	Cahaba Wood Preserving Co.	Sprott, AL	519.55
9168	Colonial Bread Store	Selma, AL	45.54
9170	Liberty Hill Road Drum	Huntsville, AL	985.91
9996	Central Foundry	Holt, AL	1,267.19
Subtotal for site specific costs			261,330.02
Laboratory Analysis Costs			<u>92,503.75</u>
Total Expenditures for FY 1995			353,833.77



Glossary of Abbreviations

ADEM - Alabama Department of Environmental Management
ADPH - Alabama Department of Public Health
AHSCF - Alabama Hazardous Substance Cleanup Fund
AOC - Administrative Order of Consent
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
EPA - Environmental Protection Agency
ERRB - Emergency Response and Removal Branch (of the EPA)
FY - Fiscal Year
MSFC - Marshall Space Flight Center
NASA - National Aeronautics and Space Administration
NPDES - National Pollution Discharge Elimination System
PAH - Polycyclic Aromatic Hydrocarbon
PCBs - Polychlorinated Biphenyls
PCE - perchloroethylene
PRP - Potentially Responsible Party
RCRA - Resource Conservation and Recovery Act
RI/FS - Remedial Investigation/Feasibility Study
RSA - Retirement System of Alabama
TPH - Total Petroleum Hydrocarbon
TVA - Tennessee Valley Authority

