<u>ALABAMA HAZARDOUS SUBSTANCE CLEANUP FUND</u> <u>ANNUAL REPORT FY 01</u>

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ALABAMA HAZARDOUS SUBSTANCE CLEANUP FUND - FY 01

EXECUTIVE SUMMARY

The Alabama Department of Environmental Management (ADEM) is submitting the following report for the fiscal year 2001 (FY01). During FY01, 25 hazardous substance sites were evaluated or cleaned up under authority of the Alabama Hazardous Substance Cleanup Fund (AHSCF) Act, § 22-30A, Code of Alabama, 1975, as amended. A total of \$172,866.43 in funds provided by the AHSCF was utilized in the evaluation and/or cleanup of these 25 sites. This represents a decrease of approximately \$159,813.69 over the previous fiscal year. Funds were used for disposal fees, contractual cleanup services, analytical costs, and personnel costs. The number of sites addressed also decreased from 32 to 25 sites.

The scope of the cleanup and/or evaluation of many of these sites was very complex. The sites addressed under this Act may be as small as a single drum abandoned or spilled along a state highway, or as large as a significant excavation, disposal and cleanup at a facility.

Since its inception, the AHSCF has addressed almost 300 sites. Of these 300 sites, approximately 250 have been remediated to an extent that no further actions were warranted. The remaining sites either have cleanups pending or are being monitored. Cleanup work conducted under the AHSCF authority has totaled almost \$2.5 million dollars from state funds, with tens of millions of dollars spent by responsible parties on cleanups which were either directed or overseen by this program. The majority of revenue for the AHSCF is generated from a tax on hazardous waste disposal at Emelle, Alabama. Revenues from this funding source, however, have decreased dramatically from a high of approximately a quarter million dollars annually to a recent low in fiscal year 2001 of approximately \$98,150. With this ever shrinking budget, the efforts of the AHSCF continues to be focused on providing services in the most cost effective manner. By eliminating multiple site pickups at small sites, the limited number of dollars is spent as effectively as possible.

ADEM has rigorously attempted to obtain the best value for funds expended. To this end, ADEM continues to combine or consolidate small sites with existing sites or larger new sites with compatible waste streams. Approximately 5 sites were appropriate for handling in this manner for FY01. This combining of sites allowed for simplified and more cost effective disposal of materials – resulting in savings to the AHSCF of thousands of dollars in transportation and disposal costs.

Several actions initiated under the AHSCF were larger than typical cleanups overseen via the AHSCF. These cleanups included the cleanup of contaminated sites in residential areas, cleanup and disposal of large numbers of abandoned drums. Specifically, the largest amount spent on one site, including laboratory costs, was approximately \$29,900. This cost occurred during the evaluation of a groundwater plume of 680 acres. Approximately \$17,000 of the costs for the Coliseum Boulevard Plume site located in Montgomery were expended in investigating and evaluating the vertical and horizontal extent of the plume. The remaining \$12,900 was expended for analytical costs for laboratory analysis of soil and groundwater samples. A potentially responsible party has spent additional funds in evaluating this plume.

During FY01, 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. 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. In some cases Federal cleanup of these sites was provided since State funds are limited, as a timely solution to the threat posed by the sites. The efforts of the ADEM personnel were focused to define the severity of the threat where federal assistance was needed. In some cases, expending State funds was an intermediate measure until further Federal cleanup measures could be taken. In others, expending AHSCF funds provided for the total cleanup of the site problems. However, in all cases, the goal was to provide for the removal of the imminent and substantial threat to human health and the environment.

Revenue placed into the fund for the fiscal year totaled \$258,406.58. These revenues came from the General Fund (\$36,042.00), fees from wastes disposed of at the Emelle Hazardous Waste Landfill (\$98,145.21), and reimbursement from potentially responsible and responsible parties under cooperative agreements with ADEM (\$124,219.37). Expenditures on the sites evaluated and cleaned up this year totaled \$172,866.43. The remaining fund balance as of September 30, 2001, was \$534,320.04 (an increase of \$85,540.15 from the end of FY00). See graphs at Attachment 1.

PROGRAM OVERVIEW

The AHSCF has numerous functions including the following:

 \cdot 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.

 \cdot 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.

 \cdot 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).

 \cdot 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.

 $\cdot\,$ 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.

 \cdot 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.

 $\cdot\,$ To conduct public information and community relation activities with guidance from the ADEM public affairs office.

SITE DESCRIPTIONS AND STATUS OF WORK

This section of the annual report provides a site description and status report of each site in numerical order. The maps in Attachment 3 provide a visual representation of site locations with respect to potentially impacted surface water resources, wells, businesses and homes.

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 of sites which have not been allocated their own specific site number, administrative support for the purchase and repair of equipment utilized on all sites, and field sampling and safety supplies. General administrative functions, which address research and clerical support, are included in this budget area, as are activities associated with the first reporting of potential sites. In addition, approximately 5 small sites with waste streams compatible with larger were managed under this fund code. These 5 sites were located in the following counties: Baldwin county near Bay Minette, Jefferson county in Birmingham, and Russell county near Phenix City.

CATALYTIC Shelby County Reference # 9107

The Southern Company Drums/Catalytic Site is located on a four-acre site near Hwy 25 North in Wilsonville, Alabama. The facility is adjacent to both the Gaston Electric Generating Plant and the Southern Company Services Power Systems Development Facility.

The facility was operated from 1974 to 1992 to perform research pilot testing for the production of a clean burning coal-derived liquefied fuel. Operations at the facility resulted in subsurface soil and groundwater contamination. The main contaminants found to be present at the site included volatile organic compounds and polynuclear aromatic hydrocarbons.

Site remedial activities for subsurface soils began in September 1997 and were completed in April 1998. The soil remediation was accomplished using a Low Temperature Thermal Desorption Rotary Kiln. The site posed a potential risk to groundwater resources in the area that are used for municipal drinking water supplies. As a result, a groundwater-monitoring plan detailing monitoring well placement, sampling methods, and sampling schedule was submitted to ADEM in the fall of 1998 and approved by ADEM on December 4, 1998. The objective of the groundwater-monitoring plan is to gather sufficient data to determine whether or not natural attenuation of the groundwater contamination is a viable remedial option. The necessary data will continue to be acquired over the next two years by performing periodic (quarterly and semi-annual) groundwater sampling and testing. ADEM review of long-term groundwater data is an ongoing process and has continued through 2001.

SOUTHLAND AGRICULTURAL CHEMICALS/AIR PRO Montgomery County Reference # 9119

Southland Agricultural Chemicals/Airpro is located at 1075 Chandler Street, Montgomery,

Alabama. The site is the former location of a pesticide distributorship. Pesticides were detected in soil and groundwater during an environmental site assessment. Regions Bank, mortgage holder of the property, entered into a "Settlement Agreement" with ADEM in order for ADEM to provide regulatory oversight of assessment, remedial, and monitoring activities. Soil removal and capping activities were performed at the site in 1996. Regions Bank began quarterly monitoring of selected groundwater monitoring wells on site in 1996. In May 1999, ADEM requested samples be collected from all of the wells associated with the site on an annual basis during the months of April to May of each year. This request was made following the review of quarterly monitoring reports that indicated elevated levels of pesticides corresponding to the seasonal high water table for the site. Site management has consisted of site visits during sampling, split sampling, review of quarterly monitoring reports, and an annual inspection of the capped area. Regions Bank did not submit any data to the ADEM concerning the April-May 2001 groundwater sampling event. Further groundwater sampling and analysis may be necessary at this site.

IRVINGTON TIRE FIRE Mobile County Reference #9198

Irvington Tire Fire site is located near Mobile, Alabama on Highway 90 at longitude 88°12'52" and latitude 30°31'09". This site was a former tire shredding business. The operator shredded used tires for recycling in various businesses. Due to a number of factors, the operator went out of business and abandoned the site – leaving a large quantity of used tires on site. These tires caught fire in 1997. ADEM and EPA responded to the site and the emergency response and remediation of the site included the placement of a clay cap over the site. The owner of the site expressed some concerns to ADEM about possible future contamination being released to the environment. ADEM personnel responded to the site, took soil and water samples, inspected the integrity of the cap on the site and responded to the land owner. These include: (1) maintaining the integrity of the clay cap to ensure no further release of contaminants; (2) the addition of a six (6) inch compacted topsoil layer over the clay with suitable vegetative covering and/or suitable paving materials such as asphalt; and, (3) the site should only be utilized for industrial or commercial uses, and not for residential use. The latest assessment of the site showed no contaminants being released into the environment and migrating off-site.

INDUSTRIAL DISTRIBUTION SERVICES WAREHOUSE Jefferson County Reference # 9213

Industrial Distribution Services Warehouse (IDS) is located at 3500 1st Avenue South Birmingham, Jefferson County Alabama. The site is the former location of a cotton mill that was being used as a warehouse for storing paper products and other miscellaneous items that included various chemicals. A fire at the subject property on October 2, 1997 resulted in approximately 4,300 gallons of Dursban (chlorpyrifos) being released to Cottonmill Creek, Village Creek, and Bayview Lake. The release caused by the fire extinguishing activities was the second largest fish kill recorded in the state at that time. The release was detected in soil, groundwater, surface water, and surface water sediments. Soil concentrations of chlorpyrifos were determined to be below levels of concern. Concentrations detected in surface water and surface water sediments subsequently declined below levels of concern as predicted by degradation models. Following the release, groundwater monitoring wells were installed and groundwater concentrations of chlorpyrifos were found to be above levels of concern, and routine groundwater sampling was initiated. All of the groundwater monitoring wells associated with the site were sampled for chlorpyrifos on June 29-30, 1999. The results of the sampling event indicated twelve (12) of the thirteen (13) wells did not have detectable levels of chlorpyrifos in the groundwater. Historically, the 13th well, monitoring well #71 had the highest concentrations of chlorpyrifos relative to the other wells associated with the site. During FY2000 and FY2001, the facility operator and ADEM conducted split sampling of the well with elevated levels of chlorpyrifos for analysis. The concentrations of chlorpyrifos have declined well below the action level determined for the site. The ADEM issued a letter of "No Further Action" associated with the site on June 21, 2001.

PRICHARD BROWNFIELDS (ADECA)

Mobile County Reference #9250

The Prichard Brownfields site sponsored by ADECA consists of fourteen (14) individual residential and business establishments that have either gone out of business or been abandoned. The City of Prichard is presently working with ADEM to provide assistance in the environmental assessment of each individual property to determine if there is in fact a risk to the environment or to human health posed by the sites. At one site, numerous field screening samples were taken to ascertain the presence of lead contamination. After analyzing the data to



GeoProbe sampling performed at Prichard Brownfield site

determine the horizontal extent of the lead contamination, GeoProbe sampling was performed to help the City define the vertical extent of the contamination and to identify any groundwater problems which might have arisen from lead leaching into the groundwater. GeoProbe analysis of groundwater samples indicated that no leaching of lead into the groundwater is taking place at this site. Cost analysis for possible cleanup of the site was performed utilizing computer software supplied by the US EPA and the cost analysis was given to the City of Prichard. Since this facility is located adjacent to a residential neighborhood, direct contact exposure for any trespassers is a concern.

PRICHARD BROWNFIELDS (PRICHARD) Mobile County Reference #9251

The Prichard Brownfields site consists of three (3) individual residential and business establishments that have either gone out of business or been abandoned. The City of Prichard is presently working with ADEM to provide assistance in the environmental assessment of each individual property to determine if there is in fact a risk to the environment or to human health posed by the sites. These assessments are being conducted as part of EPAs Brownfield Program.

UNIONTOWN BROWNFIELD Perry County Reference # 9255

The City of Uniontown received a Brownfield Pilot Grant to conduct environmental site assessments on former industrial/manufacturing facilities located in the city. Uniontown is located in Perry County. The City designated three (3) sites in Uniontown as Brownfield sites and contacted the ADEM to perform the assessments. The sites were Dewitt Apparel, King Pharr Canning Company, and the cotton mill/Eagle Shoe and Slipper Company. Dewitt Apparel was a former clothing manufacturer located on Cahaba Road. King Pharr Canning Company was a former vegetable cannery located on Village Avenue. The cotton mill/Eagle Shoe and Slipper Company was a former vegetable cannery located on Village Avenue. The cotton mill/Eagle Shoe and Slipper Company was a former sewing thread mill and later a shoe manufacturer located on Church Street. Assessment activities began in Uniontown in May of 1999 and the last report was finalized and delivered to the City of Uniontown in October of 2001. The assessments concluded no serious environmental risks from hazardous substances are occurring at the sites. However, carbon black stored at one of the sites is a solid waste problem. Additional work may be performed in association with the assessed sites or additional sites in the future.

HORTON FURNITURE Pike County Reference # 9259

ADEM was contacted by the Fire Department of Troy, Alabama, concerning a situation involving smoking/fuming 5-gallon containers in an seldom used and dilapidated warehouse near downtown Troy, Alabama. ADEM personnel responded to the site and found three 5gallon steel containers in poor condition. The metal buckets contained a red crystalline material which was reacting to rainwater leaking through the warehouse roof. Samples of the material were taken and laboratory analysis was performed to ascertain the nature of the materials. Conversations with the owner of the warehouse and laboratory analysis indicated that the material was an industrial strength sewer and pipe cleaner similar to Red Devil Lye. Because of the condition of the containers and the fact of the materials were reacting to rainwater, ADEM had a contractor respond to the site and overpack the materials in an 85gallon plastic overpack. The materials were then staged at the regional Alabama Department of Transportation office located in Troy, Alabama. Transportation and disposal of the materials by an approved and qualified disposal facility was arranged and the materials were disposed at a hazardous waste disposal facility. The emergency response action eliminated the release of corrosive fumes and prevented nearby businesses and their employees from being exposed to the fumes. No further action is necessary at this site.

HUEYTOWN/PATEL DRUMS Jefferson County Reference # 9260

Over 300 containers of laboratory chemicals, ranging from 55-gallon drums to small vials, were discovered at 3290 Allison-Bonnett Drive, in Hueytown, Alabama. Due to the death of the operator of this laboratory supply business, the materials were abandoned. ADEM personnel responded to the site after being notified by the owner of the building. In addition, local Emergency Management and City officials requested the assistance of ADEM in responding to the situation. All the containers were in good shape. A large number of the containers were sealed and had never been opened. Approximately one third of the materials were reutilized by the science departments of Auburn University and Birmingham-Southern College at no cost to the AHSCF. Seven 55-gallon drums of materials were shipped back to the original manufacturer in Canada. A small amount of materials was reutilized by high school chemistry departments in the Montgomery, Alabama area. The rest of the materials, which consisted of containers which had previously been opened, materials which were not laboratory grade, or materials for which no use or reutilization could be identified, were appropriately disposed. The non-hazardous materials were disposed at a subtitle D landfill in Jefferson County. The hazardous materials were packed, transported to, and disposed at an appropriate hazardous waste disposal facility. AHSCF funds provided for the transportation of the materials from the site to a temporary storage area, classification of materials which could not be reutilized, and appropriate transportation and disposal of the remaining materials by qualified contractors. If all 300 containers had been disposed as hazardous wastes, transportation and disposal would have cost the AHSCF \$30,000 to \$40,000. By reutilizing approximately half of the materials, separately disposing of the non-hazardous materials, and convincing the manufacturers of some materials to accept the return of the materials, total cost of the disposal was slightly more than \$20,000 -- a net saving to the AHSCF of \$10,000 to \$20,000. The last of the materials were disposed in the appropriate waste facility in June 2001. Prompt response actions and attention to the site conditions prevented the ultimate release of this wide range of diverse chemicals. No further action is deemed necessary at this site.

BUCK CREEK MILLS BROWNFIELD Shelby County Reference # 9262

Buck Creek Mills is a former cotton mill which also operated a bleaching and dyeing operation from 1902 until 1979. Located at the corner of 11th Ave SW and Buck Creek Road, this 20 acre site is owned by the City of Alabaster. Buck Creek flows adjacent to the site, bending at a right angle to border roughly the southern and western boundaries of the site. This site is a Brownfield assessment site with reimbursement for the assessment provided by Region IV of the US EPA.

The preliminary assessment was completed February 29, 2000. The main mill consists of a large, two-story, brick building (approximately 750 ft. x 200 ft.). Processes housed in this building

included storage of baled cotton, picking, carding, drawing, spinning, weaving, dying, and bleaching. Most of the interior of this building is painted with lead-based paint. Another, smaller brick building is situated beside it that housed the machine shop, engine, and boiler rooms. Several smaller buildings also exist. One has a sign that reads "Chlorine Shack". This building has one compressed gas cylinder in it with no distinguishable marking.

A waste water treatment facility is located outside the fenced area. Two tank systems, a sludge drying bed, and four surface impoundments are associated with the waste water treatment building. Of the four surface impoundments, only the "Aerated Lagoon" continues to hold water. The surface impoundment nearest the treatment building and tank system contains blue sludge. Tests of the sludge showed no hazardous constituents.

At the time of completion of the assessment three businesses operated in the northern end of the main mill and in two of the smaller buildings on-site. Approximately six persons were on-site at any given time. The site had electrical power and potable water was supplied by the City of Alabaster.

Numerous containers are located throughout the main mill and there are nine transformers on-site. Amosite asbestos is present on the three boilers and as pipe-wrap from the boilers to the dye house area. The asbestos is sloughing off the boiler and some of the pipes and is in a friable state.

Fluorescent light bulbs are abundant throughout the mill. Some are in-place in the ceilings and others are stacked in various containers in the plant. A few were observed to have been thrown into the now dry "Quiescent Lagoon." No further action appears to be needed at this site regarding the AHSCF program.

JASPER AVE A DRUMS Walker County Reference # 9263

This site is located at 2809 A Street East in Jasper, Alabama, Walker County. The site is located at an abandoned house on Whitehouse Road. Local fire department officials contacted ADEM to investigate what appeared to be an abandoned drug lab. ADEM personnel responded and notified the Jasper Police Department. The AHSCF provided funds for sampling and analysis of the abandoned chemical containers located on site and for the contractor to assist in overpacking and transporting the materials. Many of these containers had highly acidic contents. The containers were overpacked and transported to a temporary staging area until proper disposal and transportation to a disposal facility can be coordinated. During this past fiscal year, additional sampling was performed on the materials to facilitate proper disposal. Some of the materials were determined to be non-hazardous, and were disposed at the local waste water treatment plant. Other materials were appropriately classified and disposed at an appropriate hazardous waste disposal facility. The remaining drum of hazardous waste was disposed utilizing a licensed hazardous waste transporter for shipment to an appropriate disposal facility. The emergency response and ultimate proper disposal of these materials eliminated the risk of a release of hazardous chemicals which would have posed a threat to nearby residences. In addition, soil and groundwater contamination was avoided. No further action is anticipated or needed at this site.

TALLASSEE BROWNFIELDS Elmore County Reference #9264

The Tallassee Mill Brownfields site is located in the city of Tallassee in Elmore County, Alabama at 1844 Old Mill Road. The facility is situated on the West Bank of the Tallapoosa River adjacent to Thurlow Dam and the associated Alabama Power Company generation station.

The original mill dates to 1844 and has significant historical value as it was used as an armory for the Confederacy during the Civil War. The armory produced carbine rifles for the war effort. The mill produced textiles until its closure sometime in the early 1970's. The site has seven distinct buildings still standing that are constructed of locally quarried blue granite.

Investigations showed that the paint on the walls contain lead. The paint on the walls remains intact. The Talisi Historical Preservation Society presently holds the mortgage and is intending to restore/renovate this facility as a historical site. The Federal Brownfields site assessment has been completed and has been submitted to the US EPA.

During the Brownfield investigation at the Tallassee Mills, two out of service transformers and two 55-gallon drums of used oil were discovered. The large transformer (1,300 pounds empty) had not been opened and still contained approximately 50 gallons of transformer oil. The



ADEM personnel transferring PCB oils and loading transformer and drums for disposal

small transformer had been opened, the oil drained out, and the coils removed and scattered on the ground. It had subsequently filled with rainwater. ADEM personnel responded to the site and acquired samples from the drums and the transformers. Laboratory analysis of the oil in the two 55-gallon drums indicated the oil was highly contaminated with Polychlorinated biphenyls (PCBs). Analysis of the oil in the large transformer indicated significantly lower levels of PCBs as did the rainwater which had collected in the small transformer. Because of the inaccessible location and questionable integrity of the drums, the materials were hand pumped and transferred to new 55-gallon steel drums for packaging for transportation and disposal. A qualified and appropriate hazardous waste transporter was contracted and the transformers, drums of PCB oils, the empty drums, and the contaminated rainwater were transported to an appropriate disposal facility. No further actions are deemed necessary with regards to the PCBs. In addition, the Brownfield assessment has also been completed. The completed assessment was presented to the Talisi Historical Preservation Society at a formal presentation in Governor Siegelman's office.

HENDERSON, BLACK, AND GREENE (HB&G) Pike County Reference # 9266

The Henderson, Black, and Greene (HB&G) facility is located in Troy, Alabama. The facility manufactures structural and decorative building materials. Historical operations at the facility included wood treating materials/products with pentachlorophenol (PCP). Process spillage resulted in an area of limited soil contamination. The property owner performed a voluntary cleanup in order to address the area of concern, and ADEM provided oversight and review for this soil remediation project via a voluntary cleanup Settlement Agreement. Project management consisted of reviewing assessment reports, review and comments on work plans, and site visits. The property owner has reimbursed the fund for the oversight costs associated with the project. ADEM issued a letter of "No Further Action" for the remedial project on February 23, 2001.

GRAHAM DRUM SITE Mobile County Reference #9267

The Graham Drum Site is located in West Mobile County in a mostly residential area. Mr. T. J. Graham notified ADEM of an incident where an unknown party dumped several drums on his property. The property is located at 2534 Schillinger Rd., West Mobile, Alabama. ADEM personal responded to the site to evaluate the situation. A total of six drums were abandoned in what was formerly a clay pit operated by Mr. Graham. ADEM personnel sampled the drums and laboratory analysis was performed. Analysis indicated that the materials in the drums consisted of waste solvents and water. No labels or any other information about the drums or who abandoned them were found at the site. The drums were staged at the site until proper disposal could be arranged. A licensed and appropriate hazardous waste transporter was contracted and the waste was properly disposed on April 24, 2001. No further actions are necessary at this site.

COOPER INDUSTRIES AND AEROVOX Madison County Reference # 9269

The Aero M site is located at 2615 Memorial Parkway SW in Huntsville, Alabama, on the southeast corner of Memorial Parkway and Bob Wallace Drive. The geographical location of the facility is at 086° 35' 18.17" longitude, and 034° 42' 50.93" latitude. The Aero M facility is a large brick structure that occupies eleven (11) acres of land, and is located in an area that is zoned for business and light industry. The Aero M facility was originally built by P.R. Mallory in approximately 1954. P.R. Mallory operated the facility until 1979 when Emhart Industries purchased it, and continued operating it until the mid-1987. During this 33 year time span, the plant utilized trichloroethane (TCE) for cleaning and degreasing in the manufacturing process. The plant typically received a shipment of TCE every 2-3 weeks in 1987, with the last shipment being received on May 18, 1987. On March 5, 1993, the company's name was changed to Aerovox Aero M, Inc.

The Aerovox Aero M, Inc. facility now produces aluminum foil for use in the fabrication of electrolytic capacitors. The process involves chemically etching the aluminum to increase its surface area and build up a layer of oxide. The chemical etching process produces a large amount of heat. As an effort to control this large amount of heat, the facility uses an on-site production well as the source for its non-contact cooling water. The well is able to pump approximately 500 gallons of water per minute through the system. After use, the water is discharged per the facility's NPDES discharge permit. During a review for the sale of the property, trichloroethylene (TCE) contamination was discovered in the groundwater. Aerovox Aero M notified ADEM in March, 1993, of the contamination, and stated that the source could possibly be a old drum storage pad used to store product TCE. The parent company for Aerovox Aero M is now in the process of determining the source and extent of contamination on and around the site. ADEM is providing oversight and technical support of this project. During this fiscal year, ADEM personnel split analytical samples with Aerovox/AeroM personnel during the ongoing groundwater investigation. Groundwater samples were taken to try to determine what the extent of groundwater contamination and to help delineating the plume area. This is an ongoing project.

RIVER OAK ROAD DRUM Mobile County Reference # 9270

On November 25, 2000, fourteen drums (14) dumped at the end of River Oak Road in Mobile, AL were reported to ADEM. ADEM investigators responded to the site to ascertain the condition of the drums and to obtain samples for analysis. Some of the drums were found to be in questionable condition and actions was needed to prevent spills to the environment. Drum contents were consolidated and oils were immediately removed from the site. After consolidation of materials, the remaining drums on site consisted of five (5) empty drums and two (2) drums with materials remaining. Laboratory analysis of the samples was received and arrangements were made to obtain adequate disposal of the remaining materials. A licensed and appropriate hazardous waste transporter was contracted and the waste was properly disposed on April 24, 2001.

BIRMINGHAM BROWNFIELDS CLEANUP Jefferson County Reference #9271

The City of Birmingham received a grant from the Environmental Protection Agency to begin a Brownfields Cleanup Revolving Loan Fund. This loan program would provide funds for environmental cleanup in the City of Birmingham. The City would be the administrator of the loans and ADEM would act as the site manager for the program to provide oversight and review of site specific work. The ADEM assisted the City of Birmingham in developing a Memorandum of Agreement (MOA) between the City and ADEM to provide oversight and define roles and expectations. The City decided not to implement the loan program at this time and to allow the program to expire. With regards to AHSCF activity, no additional work will be performed in association with this project.

DANNELLY FIELD AIR NATIONAL GUARD Montgomery County Reference # 9272

This site is located at the Alabama Air National Guard facility at Dannelly Field on the south side of US Highway 80 in Montgomery, Alabama. The Air National Guard acquired a hanger and adjacent property from the Army National Guard. The hanger was demolished in preparation for building a new complex. During the excavation of the surrounding property for foundation work, the construction workers unearthed an unidentified and abandoned oil/water separator tank and crushed it before they knew what was there. The Air National Guard notified ADEM of the situation, and personnel responded to the site to investigate. ADEM personnel reviewed cleanup plans, provided oversight, and took analytical samples to assist the Air National Guard in their cleanup efforts at the site. Contractors for the Air National Guard over-excavated the area of the former oil/water separator and stockpiled the contaminated soil on site. After evaluating alternatives, the Air National Guard opted to utilize an on site bioremediation land farm to facilitate cleanup of the contaminated soil. ADEM personnel provided oversight on the construction of the land farm, analysis required, assisted in identifying clean up goals, and other facets of the project. The contaminated soil was successfully remediated. No further action is required at this site at this time.

COLISEUM BOULEVARD PLUME Montgomery County Reference # 9273

The Coliseum Boulevard Plume is located in North Montgomery and covers approximately 682 acres. This 682 acre site has a solvent, trichloroethylene, as a contaminant in the groundwater below the site. This contaminated groundwater is located at a depth of 25 to 45 feet below ground surface. The surface water emanating from a culvert traversing under Coliseum Boulevard is also impacted by contaminated groundwater. The culvert leads to a ditch located across from the Winn Dixie Shopping Center. The water in this ditch flows under the Northern Boulevard, eventually leading to the Alabama River.

The 682 acre site includes the neighborhoods of Chisholm, Eastern Meadows, and Vista View. The Chisholm Community Center, the Chisholm Elementary School and the Montgomery Zoo are located on the northern portion of the site. The Alabama Department of Transportation Materials and Tests offices and laboratory and the Department of Finance Printing and Publications facility are located in the south central part of the site.

The Chisholm Community, developed in the 1940s and 1950s, has a population of approximately 2,112 residents. The Eastern Meadows subdivision was built in the 1980s and has a population of approximately 330 residents. The Vista View subdivision was built in the 1980s and is still being developed. It has approximately 555 residents. The Vista View and Eastern Meadows subdivisions are on property that was part of Kilby Prison. The land was used to grow crops from 1921 until the 1960's. It was bought by Alfa Mutual Fire Insurance Company in 1972 and was developed for homes.

The Alabama Department of Transportation Materials and Tests Bureau offices and laboratory are located in the south central part of the site. The laboratory was built in 1961. The offices

were built in the 1970s. The laboratory has used trichloroethylene in its asphalt testing laboratories. Currently, approximately 5 gallons of trichloroethylene is used each month and recycled at the site.



Rotary Drill Rig Installing Monitoring Wells for the Coliseum Blvd Plume Site

The Department of Finance Printing and Publications facility is located in the south central part of the site. This facility also uses very small quantities of trichloroethylene in its printing operations. This building was constructed in 1987. Other users of trichloroethylene may be identified in the future as the site investigation continues.

Drinking water for the City of Montgomery is not affected by the TCE contaminant plume at this site. The wells that currently supply the city are not located in this area. The City of Montgomery obtains 34 percent of its municipal water supply from 45 groundwater wells. The closest well to the site serving the City of Montgomery is approximately 1 mile away from the site. The Tallapoosa River provides the other 66 percent of municipal drinking water.

During the summer of 1999 field screenings conducted during a geotechnical investigation at a commercial lot located at the northeastern portion of Coliseum Boulevard detected the possible presence of volatile organic compounds (VOCs). Based on the field screening results a



Sampling of the Montgomery Zoo Lake and Three-Mile Branch

Limited Phase II Environmental Site Assessment was performed at the site. Soil and groundwater samples were collected during the investigation, and trichloroethylene was detected in the groundwater .



ADEM Personnel Performing GeoProbe Sampling

During fiscal year 2001, ADEM collected samples from numerous monitoring wells and soil boring locations. Surface water testing was also conducted from various ditches in the area affected. The major emphasis of this testing was to document the extent of trichloroethylene and its breakdown products as contamination in the Chisholm Boulevard area. This testing was conducted in a series of sampling events that progressed through the year to delineate the extent of groundwater contamination.

From January 2001 until February 2001, TTL personnel, contracted by the ALDOT, conducted an investigation using a Membrane Interface Probe (MIP). The MIP was used as a screening device to select soil and groundwater sample locations. Soil and groundwater samples were collected from 25 borings (PH-34 to PH-58) at the site. Trichloroethylene was detected in the soil in 21 of the 25 borings at concentrations ranging from 3.2 to 162 ppb. Trichloroethylene was detected in groundwater in 23 of the 25 borings at concentrations ranging from 3.1 to 2,020 ppb.

In January and February 2001, ALDOT constructed a fence around portions of the West Kilby and Main Kilby Ditch. The fence was constructed to prevent public access to the ditches in areas were elevated trichloroethylene has been detected in surface water. ALDOT has conducted a Interim Corrective Measure (ICM) study during the past year for the West and Main Kilby Ditches. The purpose of the study is to develop, screen, and evaluate ICM alternatives that are protective of human health (i.e., eliminate or reduce the potential exposure to TCE in the West and the Main Kilby Ditches), and ultimate select the preferred alternative. The Alabama Department of Environmental Management (ADEM) is currently reviewing the Interim Corrective Measure Report for the Coliseum Ditch Area.

The chemical of concern for the site is trichloroethylene and associated breakdown products. These contaminants are present in both groundwater and surface water. Soil analytical results collected to date have not shown a clearly defined source area. ADEM has and will continue to provide regulatory oversight to ensure that human health and the environment are protected from any contamination that may be present at the Coliseum Boulevard Plume Site.

B & B CHEMICAL Mobile County Reference # 9274

The B & B Manufacturing Site is located in Mobile County near downtown Mobile, Alabama at 401 South Carolina Street. This site is an abandoned facility that provided chemicals for curing cement and manufactured a type of glue for industrial uses. A complaint was made to ADEM that the owner left numerous drums, plastic totes, and other materials on site when he abandoned the site. ADEM investigators responded to the site and found approximately 200 drums, over 100 four-foot square totes, 300 bags of starch and other materials, additional drums of concentrated acid, open vats, stained soil, numerous storage tanks and other hazardous wastes. Representative samples were taken from the drums on site. Laboratory results indicated the presence of flammable solvents in the drums. Because of the deteriorating condition of the drums and the large size of the cleanup necessary, the US EPA Emergency Response and Removal Branch (ERRB) was contacted and responded to the site. ADEM has coordinated with the ERRB in the cleanup of the site, providing assistance when needed. No further action under the AHSCF should be required at this site.

CONWAY ROAD DRUM SITE Morgan County Reference #9275

ADEM Decatur Field Office personnel received a complaint that one fifty-five gallon drum had been abandoned off Conway Road in Morgan County. They responded to the site and staged the drum at County District Road Shop, 2626 Central Parkway Southwest, Decatur, AL. ADEM Site Assessment personnel responded to the site and obtained samples from the drum. Analysis of the samples indicated that the material was a non-hazardous glue type resin. Disposal of the material was accomplished at the Morgan County Subtitle D landfill on February 1, 2001. No further action is required for this site.

WIGFIELD ROAD DRUMS

Mobile County Reference # 9276

ADEM personnel received a complaint that 3 drums had been abandoned off of Wigfield Road in Mobile, Alabama. The drums were immediately staged at the Mobile County Public Works Camp II located at 7075 McDonald Road, Irvington, Alabama. Investigators responded to the site and sampled the drums. Laboratory analysis was performed at the ADEM Central Laboratory in Montgomery, Alabama. Analysis indicated that the materials in the drums were a mixture of flammable substances (ie. benzene, toluene, etc...). A qualified disposal company was contacted and the materials were disposed of at an appropriate disposal facility on April 24, 2001. No further action is deemed necessary or required at this site.

BIRMINGHAM 1ST AVENUE SOUTH DRUMS Jefferson County Reference #9277

The ADEM Birmingham Field Office received a complaint concerning 2 drums abandoned off 1st Avenue South in Birmingham, AL. ADEM personnel responded to investigate the complaint and found two 55-gallon drums abandoned in front of the IDS Warehouse at 3500 1st Avenue South. Samples of the materials were taken and one drum was found to contain water, the other was found to contain toluene. The drums were properly staged while waiting on the analytical results. The materials were disposed at an appropriate disposal facility on April 24, 2001. No further action was deeded necessary.

SOUTH UNION STREET DRUM Montgomery County Reference # 9279

ADEM personnel received a complaint that a drum was abandoned in the parking lot of Saint John the Baptist Catholic Church located at 547 South Union Street, Montgomery, Alabama. The drum was abandoned in the parking lot adjacent to the Saint John's Headstart Center (day care). Investigators responded to the site and found a company name on the drum. Contact was made with the manufacturer of the materials and after some discussion, the company agreed to have the drum of material returned to them. The company contracted with a transporter and arranged for the transportation of the drum from Montgomery to their facility. ADEM personnel transferred the drum from the South Union Street location to a pickup point located on Highway 31 near Maxwell Air Force Base, and the material was shipped back to the manufacturer for proper disposal. No further action is deemed necessary for this site.

JAFFE JEFFERSON COUNTY Jefferson County Reference # 9281

On August 8, 2001, ADEM personnel responded to the Jaffe Wholesale Iron and Metal Company site in Birmingham, Alabama. The owners of the property initiated a voluntary cleanup of the site with ADEM oversight. Work involved the removal of contaminated soils, grading of the site, backfilling, and placement of a clean clay cap, and additional grading of the site to facilitate drainage. This is an ongoing project. The owners of this site have remediated the site under the newly adopted Alabama Land Recycling and Economic Redevelopment Act (ALRERA). Further oversight will be performed relating to this project as it progresses toward completion.

FEDERAL SUPERFUND IN ALABAMA - FY01

During FY01, a total of 38 sites were evaluated in Alabama under the Federal Superfund program. Of these 38 sites, 24 were evaluated at the preliminary assessment level, 13 at the site investigation level, and 1 at the expanded site investigation level. If approved, this site will be placed on the National Priority List. This evaluation process is funded through the Federal Superfund program to identify sites eligible for cleanup utilizing Federal funds as National Priorities List sites. While only 14 sites are currently on the National Priorities List in Alabama, this evaluation process provided resources to gather information which complement the State Program. The assessment process provided data useful in identifying sites which may be a priority under the AHSCF for cleanup.

AHSCF FY 2001 ANNUAL REPORT COST BREAKDOWN (SITE SPECIFIC)

#	NAME	LOCATION	COST.	
0000		T 7 '	50 200 16	
9000	Administrative Site Number	various	50,388.16	
0107	106.10			
910/		Wilsonville, AL	126.18	
9119	Southland Agricultural Chem./Air Pro	Montgomery, AL	1/0.12	
9198	Irvington Tire Fire	Irvington, AL	648.98	
9213	IDS Warehouse	Birmingham, AL	163.99	
9250	ADECA Brownfield	Prichard, AL	11,478.61	
0051	(14 Sites)		720.02	
9251	Prichard Brownfield	Prichard, AL	/30.92	
0255	(3 Sites)		9 (90 25	
9255	(3 Sites)	Uniontown, AL	8,680.33	
9259	Horton Furniture	Trov. AL	584.65	
9260	Huevtown Drums	Huevtown. AL	1.157.83	
9262	Buck Creek Mills Brownfield	Alabaster, AL	29.36	
9263	Jasper Avenue E Drums	Jasper, AL	6,960.85	
9264	Tallassee Brownfields	Tallassee, AL	2,390.30	
9266	HB & G	Troy, AL	556.40	
9267	Graham Drums	Mobile, AL	991.57	
9269	Cooper Industries and Aerovox	Huntsville, AL	2,752.10	
9270	River Oak Road Drum	Mobile, AL	1,515.55	
9271	Birmingham Brownfields Cleanup	Birmingham, AL	255.59	
9272	Dannelly Field Air National Guard	Montgomery, AL	263.08	
9273	Coliseum Blvd Plume	Montgomery, AL	16,992.27	
9274	B & B Chemical Co.	Mobile, AL	1,168.99	
9275	Conway Road Drum Site	Decatur, AL	988.77	
9276	Wigfield Road Drums	Mobile, AL	2,163.35	
9277	Birmingham 1 st Avenue South Drums	Birmingham, AL	634.17	
9279	South Union Street	Montgomery, AL	107.60	
9281	Jaffe Jefferson County	Birmingham, AL	866.79	
T- 1			110 744 50	
I otal	112,/00.53			
Laboratory Costs as of 30 September 2001				

Total Expenditures for FY01

\$ 172,866.43

Balance as of 1 October 2000	\$ 448,779.89
Expenditures for FY01	- 172,866.43
Revenues for FY01	+ 258,406.58
Remaining AHSCF Fund Balance as of 1 October 2000	\$ 534,320.04

Graphs of Expenditures/Revenues for AHSCF

Background

The following three graphs show the overall picture of the health and status of the Alabama Hazardous Cleanup Fund (AHSCF) in a monetary sense. The first graph "Revenue Sources for AHSCF" graphically represents the following points:

- Funding into the AHSCF from the General Fund has remained at a static level of \$36,042 over the past 5 fiscal years.
- Revenues from the one-dollar per ton tax on the Chemical Waste Management Inc., Hazardous Waste Landfill at Emelle, AL, has progressively declined as fewer materials are disposed at the landfill. Over the past five fiscal years, these revenues have declined from a high of \$276,615 in FY97 to a low of \$98,145 in FY01.
- Reimbursements from Owner/Operators at cleanups which are overseen by ADEM has been on a general increase, and in the last few years has taken over as the major source of funding for the AHSCF. The amount reimbursed each year is dependent on the availability of a responsible party who can reimburse the fund, the type of sites handled each year, and a wide variety of other factors.

The second chart "Expenditures for AHSCF Sites" graphically shows the amount of funds expended by fiscal year and the number of sites addressed per year. The number of sites shows a general decline over the past 5 years. This is due mainly to consolidation of sites by wastestreams, combining small sites into larger sites, and generally finding more efficient ways to handle sites instead of assigning each and every drum discovered along the roadside its own site number. For improved management and a more cost effective approach, drums abandoned in a common area are collected and staged at a single location. This allows for more efficient testing, reduces the number of site pickups required, and ultimately reduces transportation costs. These newer management practices have helped to reduce disposal costs. While the overall number of reported sites has declined, the number of incidents requiring response has remained fairly constant. As mentioned in the Executive Summary, this past year approximately 5 responses which, in the past, would have required separate site numbers and separate tracking were combined and consolidated with other existing sites or larger new sites to more efficiently handle, transport, and dispose of the materials.

The third chart "Expenditures/Funding/Fund Balance" graphically shows a comparison between expenditures and funding received each fiscal year. What is readily apparent is that in three of the past six fiscal years, expenditures have exceeded funding received by the AHSCF. Each year, ADEM personnel have striven to perform duties under the AHSCF in more cost effective and efficient manners. This has allowed ADEM to oversee cleanups and handle projects which would otherwise not be addressed due to unavailability of AHSCF funding or because the were too small to meet the threshold for Federal agencies to address. As shown in the chart, the ending fund balance has remained fairly constant over the last few years; however, this is primarily due to ADEM's success in obtaining reimbursement from several large sites from previous years. This trend is not expected to continue, since most of the sites handled in the recent years have been smaller sites with unidentifiable or less viable responsible parties. If this trend continues, there will come a time where the AHSCF will not have the funds to take on the projects we now oversee or to perform the cleanups which have been so successful during the past years. There is the real possibility of exhausting the fund within the next few years if the present trend continues.

Alabama State Map with Site Locations

Site Specific Maps for Each Site

Abbreviations and Acronyms

- ADEM Alabama Department of Environmental Management
- AHSCF Alabama Hazardous Substance Cleanup Fund
- ALDOT Alabama Department of Transportation
- ALRERA Alabama Land Recycling and Economic Redevelopment Act
- CERCLA Comprehensive Environmental Restoration Compensation and Liability Act
- ERRB Emergency Response and Removal Branch of the US EPA
- ICM Interim Corrective Measure
- MEK Methyl Ethyl Keytone
- MOA Memorandum of Agreement
- PA Preliminary Assessment
- PCB Polychlorinated Biphenyls
- PRP Potentially Responsible Party
- RFI RCRA Facility Inspection
- SI Site Investigation
- SWMU Solid Waste Management Units
- TCE Trichloroethylene
- VOC Volatile Organic Compounds