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**ADEM**

**ADEM**



**Alabama Department of Environmental Management  
Annual Report  
2005-2006**

The Alabama Environmental Management Commission is comprised of seven members. Each commissioner is appointed by the Governor and must meet qualifications for the applicable position as specified in the Environmental Management Act. The Commission's duties include hearing administrative appeals of permits, variances, and administrative orders issued by the Department; adopting environmental regulations, developing environmental policy, and selecting the ADEM Director.



*Left to right: Sam H. Wainwright, P.E., Engineer; Laurel G. Gardner, D.V.M., Biologist/Ecologist; W. Scott Phillips (Chairman), Certified by National Water Well Association; Kathleen J. Felker, M.D. (Vice-Chairman), Physician; Kenneth A. Hairston, Esq., Attorney; Anita L. Archie, Member at Large; John H. Lester, D.V.M., Chemist/Veterinarian.*

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# 2005-2006 Vital Stats

Permits issued.....	7,678
Facilities observed/inspected.....	26,207
Administrative orders.....	101
Administrative penalties.....	\$1.22 million
Emergency responses.....	271
Air monitoring stations maintained.....	64
Water monitoring stations maintained.....	1,501
Well drillers licensed.....	135
Water certifications issued.....	910
Wastewater operator certificates issued.....	517
Lab samples collected.....	7,306

# Public Relations

Public accountability is the fundamental mission of the Public Relations Office at the Alabama Department of Environmental Management. The office responds to inquiries from the public and media representatives and distributes news releases and advisories to announce departmental programs, services, and events. Throughout the 2006 fiscal year, the office worked with ADEM's divisions, sections, and branches to promote programs, meetings, projects and services to make information available to elected officials, state agencies, news media, and the general public.



*Jerome Hand*

Working closely with all of the department's divisions, sections, and branches, the Public Relations Office coordinates responses to news media questions and requests, and contacts radio, television, and newspapers to help promote departmental programs. In the 2006 fiscal year, the office distributed dozens of news releases and media advisories to inform the press about permits, regulations, compliance and enforcement actions. News releases are emailed to more than 300 media outlets and also made available to the public on the department's web site at [adem.alabama.gov](http://adem.alabama.gov).

The office routinely sets up media interviews for the Director and ADEM scientists and engineers to help explain complicated programs and to answer technical questions. The office is responsible for the con-

tent of the Annual Report and also monitors electronic and print news media for articles, editorials and reports involving departmental programs and services.

The office is the contact point for news media inquiries and responds to requests for information about regulations, permits, grants and various ADEM programs. The Public Relations staff also receives requests from citizens, public officials, and environmental groups and helps provide access to public documents for news reporters, editorial boards, elected officials, and the general public. In the 2006 fiscal year, the division responded to numerous inquiries and forwarded messages to other divisions or agencies when necessary to provide prompt and complete responses.

As part of the Environmental Management Commission's strategic plan calling for improved external affairs through better media and public outreach programs, the Public Relations Office was involved with the design of a new logo for the department in the 2006 fiscal year. Staff from the office attended numerous public meetings to gather input from citizens, provide information, and answer questions. The office also worked with the Commission and other state agencies to announce meetings and coordinate media coverage.

The office worked with public relations staff at EPA Region 4 and other states in the 2006 fiscal year to coordinate response to environmental issues that involved Alabama and other southern states. The Public Relations staff attended emergency response training, met with county Emergency Management Agencies and public information personnel to facilitate better communication, cooperation, and understanding of each other's roles and responsibilities, and met with other state agencies to become more familiar with statewide response efforts. The office also coordinated media requests, interviews, and updates to citizens involving the department's numerous environmental and hazardous materials responses and recovery efforts to explain the department's participation and role in safeguarding the environment.

# From the Director



Our challenge at the Alabama Department of Environmental Management is to balance the protection of Alabama's resources and the continued development of our great state.

Alabama's future depends on its valuable natural resources and its people. It is our job at ADEM to safeguard the state's environment so that generations of Alabamians may live and work and prosper in health and safety. Continued economic development is a vital element for our state to move forward and it is essential that this development take place without compromising the state's lakes, rivers, streams, forests, mountains, valleys, wetlands, and green spaces.

We have a plan for the future. We are addressing serious issues in a straightforward manner as we look to build a department that runs as efficiently and effectively as

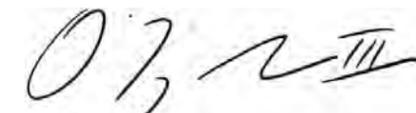
possible to fulfill our mission to manage the environment and ensure the decisions we make are in the best interest of our state. ADEM's job is to preserve and protect what we have today for future generations of Alabamians.

With that in mind and with consecutive years of federal budget cuts, we can no longer perform our job exactly as it has been done over the past 25 years. We have to improvise, adapt, and overcome. And that's exactly what our 600 employees are doing under a strategic plan approved by the Alabama Environmental Management Commission in 2004.

We are taking advantage of new technologies to improve our operation. We are using aerial surveillance, tablet computers, electronic reports, and GPS and GIS applications to better serve the taxpayers of Alabama.

As part of our plan for the future, we've implemented a quality management system. It's aimed at evaluating each one of our processes to make sure we are making the most efficient and effective use of resources. The strategic plan that we are operating under also calls for improved external relations and we are making tremendous strides in this area with a new look for the department, and a new, full-time environmental justice coordinator.

We invite you to take a close look at this Annual Report. It highlights the department's accomplishments in the 2006 fiscal year and summarizes our efforts and achievements as we continue to work toward striking a balance between the demands associated with economic growth and development and safeguarding Alabama's natural resources as we plan for the future.



Onis "Trey" Glenn, III  
ADEM Director

# Overview

## Background

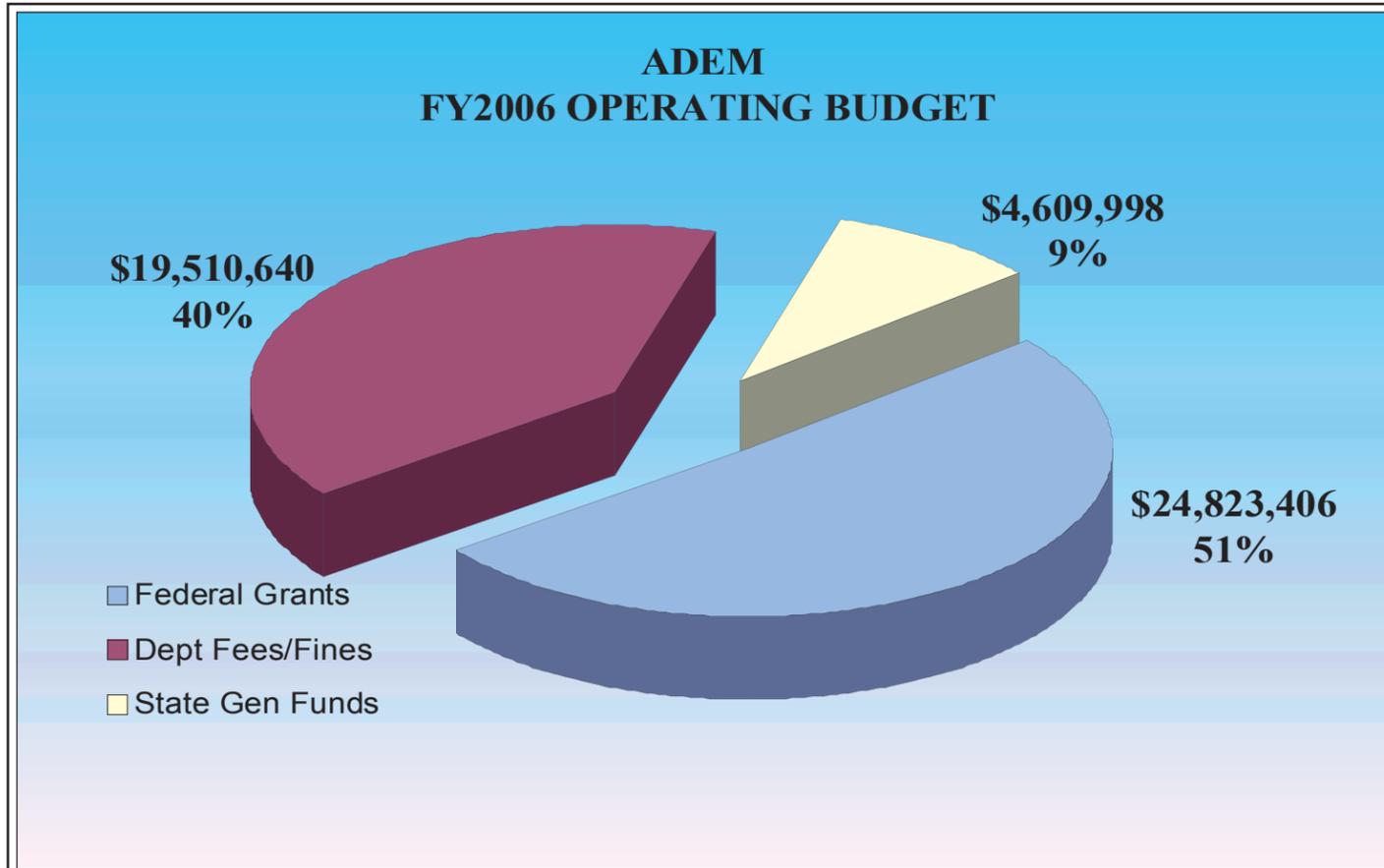
The Alabama Department of Environmental Management's mission is to implement state and federal rules and regulations to safeguard the environment for present and future generations of Alabamians. ADEM is working to become the best state environmental agency in the country in balancing the protection of the state's environment and the health of its citizens with the productive use of its valuable natural resources. Alabama has a wealth and variety of natural resources, however these resources are not unlimited, and their use must be balanced with other needs including economic development.

The State Legislature passed the Alabama Environmental Management Act in 1982 establishing ADEM and the Alabama Environmental Management Commission. The commission has seven members who are appointed by the Governor and confirmed by the State Senate. Each commissioner serves a six-year term, and may be reappointed. The commission has the authority to select ADEM's director and advise the director on environmental matters; to establish, adopt, modify, and suspend any rules, regulations or environmental standards for ADEM; to develop environmental policy for the state; and to hear and determine appeals of administrative actions.

## Budget and Workforce

The department's operating budget for the 2006 fiscal year (Oct. 1, 2005 - Sept. 30, 2006) was \$48.9 million. Slightly more than half of the budget, \$24.8 million, came from federal grants. The department imposes fees for permitting activities and collects penalties for violations. This amount totaled more than \$19.5 million in the 2006 fiscal year. ADEM receives a small percentage from the State General Fund that is used to match federal grants. In the 2006 fiscal year, this allocation totaled \$4.6 million accounting for 9% of the department's overall budget.

ADEM has 600 employees statewide with field offices in



# Human Resources

The Human Resources Office of the Alabama Department of Environmental Management supports the Director's office, division chiefs, and branch supervisors to ensure that all federal and state personnel laws and regulations are followed. The office provides advice and guidance regarding personnel interviewing, hiring, probationary reports, performance appraisals and employee training. The office assists other divisions, sections, and branches within the department with salary adjustments, personal leave, benefits issues, and any disciplinary actions. The Human Resources staff also is responsible for coordinating health and wellness programs as well as maintaining all employee files.

The office maintains and updates the policies and procedures manual for the department. The staff interprets personnel-related laws, rules, and agency policies, and makes recommendations on departmental procedures, policies, and plans. The office recommends changes to employee classifications and reviews manpower issues. Staff routinely attend training seminars and receive updates on relevant issues and reviews documents to remain current on employment law trends. The office also assists employees with opportunities for counseling and information concerning raises and promotions.



Tracy Pieper

In the 2006 fiscal year, representatives from the Human Resources Office visited numerous colleges and universities to recruit personnel for positions within the department. The staff assembled presentations and publications explaining ADEM's operations, programs, services, and mission, and also explained what employment opportunities exist within the department.

The office works closely with graphic arts staff to publish career benefits and career opportunities brochures and to post job openings and job descriptions on the Human Resources page of the department's web site. The site lists employment classifications currently being recruited by the department. It also features a link to download state

applications, electronic copies of brochures, and has a list of frequently asked questions and answers. In addition, the division serves as a liaison to the State Personnel Department for all actions and activities involving human resources.

In the 2006 fiscal year, the Human Resources Office began writing, producing and publishing a wellness newsletter for the department. The monthly newsletter is emailed to employees and posted on the department's intranet site. It gives employees health, fitness and nutrition tips, feature articles, along with information on other matters related to state health programs.

## Policy of Non-discrimination

The Alabama Department of Environmental Management does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in the administration of its programs or activities, in accordance with applicable laws and regulations. The department has designated responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination requirements. ADEM appoints employees based on an equal opportunity, merit basis, without regard to race, color, national origin, sex, religion, age or disability.

# Office of General Counsel

The Office of General Counsel helps the Alabama Department of Environmental Management comply with federal and state laws and regulations. The office provides representation, legal advice, and assistance for the Director, deputy director, divisions, and branches. The office reviews orders and contracts and issues legal opinions. Staff attorneys represent ADEM in civil litigation in state and federal courts, assist in the formulation of administrative orders and represent the department in appeal hearings before the Environmental Management Commission and other administrative agencies.



*Olivia Rowell*

In the 2006 fiscal year, the department issued 101 administrative orders with 80 carrying civil penalties totaling more than \$1.22 million. Regulatory programs administered by the department are diverse. However, the fundamental principle of consistency guides the enforcement process with similar penalties being assessed for similar permit violations within programs and across divisions and branches. When penalties are assessed, six penalty factors referenced in the Environmental Management Act are considered: the seriousness of the violation; standard of care; economic benefit of delayed compliance; efforts to minimize or mitigate the violation's effect; history of previous violations; and the entity's ability to pay.

The Office of General Counsel works with the Director and division chiefs on internal and external legal issues and is responsible for keeping up to date on new laws, rules, and regulations affecting the Alabama Department of Environmental Management and ensuring division and branch supervisors are informed of legal issues that relate to their staff and operations. The office also handles legal questions involving human resource matters and works closely with the State Attorney General's office.

During the 2006 fiscal year, ADEM's Office of General Counsel filed six lawsuits seeking to enforce environmental statutes and regulations. Lawsuits were filed to address violations of storm water regulations, enforce permit requirements,

and collect unpaid civil penalties. In the case of the Town of Lowndesboro v. ADEM, the department received a favorable ruling in settling the issue of the award of attorney fees against the state. The Alabama Supreme Court ruled that sovereign immunity bars the award of attorney fees against the State.

In the 2006 fiscal year, the OGC successfully defended the department before the Environmental Management Commission in the case of H. Robert Garrison v. ADEM. The verdict upheld the department's procedures for granting a variance to the coastal construction line in Baldwin County. The Commission's decision affirming the Department's grant of the variance was later upheld by the Circuit Court.

The office also was instrumental in presenting a case before the Alabama Court of Civil Appeals. In ADEM v. Association of Regional Councils, the court found that no case or controversy existed against the department with regard to the Association of Regional Councils' claim that its members are unable to provide "statements of consistency" for solid waste landfill permit applications. The ruling upheld the department's regulations that mandate local approval by a regional planning council before landfill permit applications are considered by the Alabama Department of Environmental Management.



*Marilyn Elliott,  
Deputy Director*

Birmingham, Decatur, Mobile, and a central office and laboratory facility in Montgomery. One of ADEM's greatest resources is a dedicated and professional staff of scientists and engineers. The department's highly-skilled and technical workforce is critical in monitoring industry, construction, landfills, and other entities in an ever-changing environment.

## Environmental Administration

The Alabama Department of Environmental Management is authorized to administer all major environmental laws including the Clean Air Act, Clean Water and Safe Drinking Water Acts and federal solid and hazardous waste programs. The department's major functions of permitting, enforcement, and compliance are handled through five divisions; Air, Land, Water, Field Operations, and Permits & Services.

ADEM's functions are supported by an Office of General Counsel, Human Resources, Administrative section, and Public Relations Office.

## Strategic Plan: Efficiency and Effectiveness

Following directives from the Environmental Management Commission's 2004 Strategic Plan, ADEM continued and expanded its use of state-of-the-art technology in the 2006 fiscal year. The department began utilizing new computer applications, exploring new innovations and using personal digital assistants. ADEM also began using aerial technology to enhance inspections, information gathering, compliance, and to improve the department's overall performance of operating more efficiently and effectively.

As part of the strategic plan, the department put in place other technology and innovations to streamline operations in the 2006 fiscal year. ADEM increased its use and processing of electronic forms and documents, including the submittal and handling of data and electronic inspections utilizing tablet computers; integrating Geographic Information Systems (GIS) and Global Positioning Systems (GPS) as computer tools to link program information with data and files.

The Alabama Department of Environmental Management is putting the environment first and striving to give Alabamians a better tomorrow. As part of the department's plan for the future, a quality management system is being implemented to evaluate each of ADEM's



*John Hagood,  
Executive Counsel*

processes to ensure every division, branch and section is making the most efficient and effective use of its resources. A new environmental justice coordinator has been appointed to give all Alabamians timely and accurate information about their environment enabling them to make decisions accordingly.

## Strategic Plan: External Relations

External relations were enhanced in the 2006 fiscal year based on guidelines in the strategic plan. The department developed a more proactive, positive program for media and public relations. ADEM developed a new logo and new Internet address - [adem.alabama.gov](http://adem.alabama.gov) - to give the department a new, more professional look. The department also made more documents, notices and reports available on-line for the media,

stakeholders, the regulated community and the general public, while improving the process for downloading and receiving records requests.

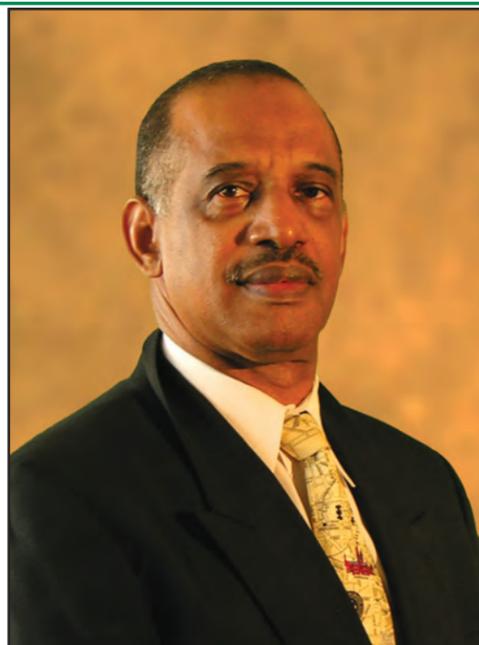
### **Strategic Plan: Funding**

The Alabama Department of Environmental Management's job is to preserve and protect what we have today for future generations of Alabamians. Facing consecutive years of federal budget cuts, the department is addressing serious issues in a straightforward manner and running the department like a business to better manage the environment and ensure the decisions it makes are in the best interest of all Alabamians. ADEM is constantly exploring methods to enhance its funding and to perform its job more efficiently and effectively to safeguard Alabama's precious air, land, and water.

### **Environmental Justice**

In the 2006 fiscal year, the Alabama Department of Environmental Management secured funding for its Environmental Justice program. Environmental Justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

ADEM's Environmental Justice program is designed to help all communities and persons across Alabama enjoy the same degree of



*Elvin Lang,  
Environmental Justice Ombudsman and  
Coordinator*

access to the decision-making process. In the 2006 fiscal year, the department tabbed long-time employee Elvin D. Lang to serve as Environmental Justice Ombudsman and Coordinator. After working with the department for 30 years, Lang began serving in his new position Oct. 1, 2006 (the first day of the 2007 fiscal year).

The focus of the department's Environmental Justice program centers on continuing to develop an appropriate and meaningful process that will work in all of Alabama's 67 counties. A significant portion of the department's efforts in the area of Environmental Justice is ensuring that everyone in the state has equal access to information and opportunity for involvement.

# ADEM

## **At a glance**

**Employees:**  
600

**Web address:**  
[adem.alabama.gov](http://adem.alabama.gov)

**Offices/Labs:**  
Birmingham  
Decatur  
Mobile  
Montgomery

**Main number:**  
(334) 271-7700

### **Operator Certification**

The purpose of water and wastewater treatment operator certification is to protect the public health and welfare and prevent pollution by classifying all water and wastewater treatment plants, water distribution systems, and public wastewater collection systems. Operator certification provides for training and establishes a program for certifying the competency of operators that oversee water and wastewater treatment plants and systems. In the 2006 fiscal year, ADEM implemented a computerized testing program for water and wastewater operators. The new program enables candidates to take operator certification exams at any time Monday through Friday at six locations across the state. More than 230 candidates signed up for computerized tests last year.

### **Computer and Information Systems**

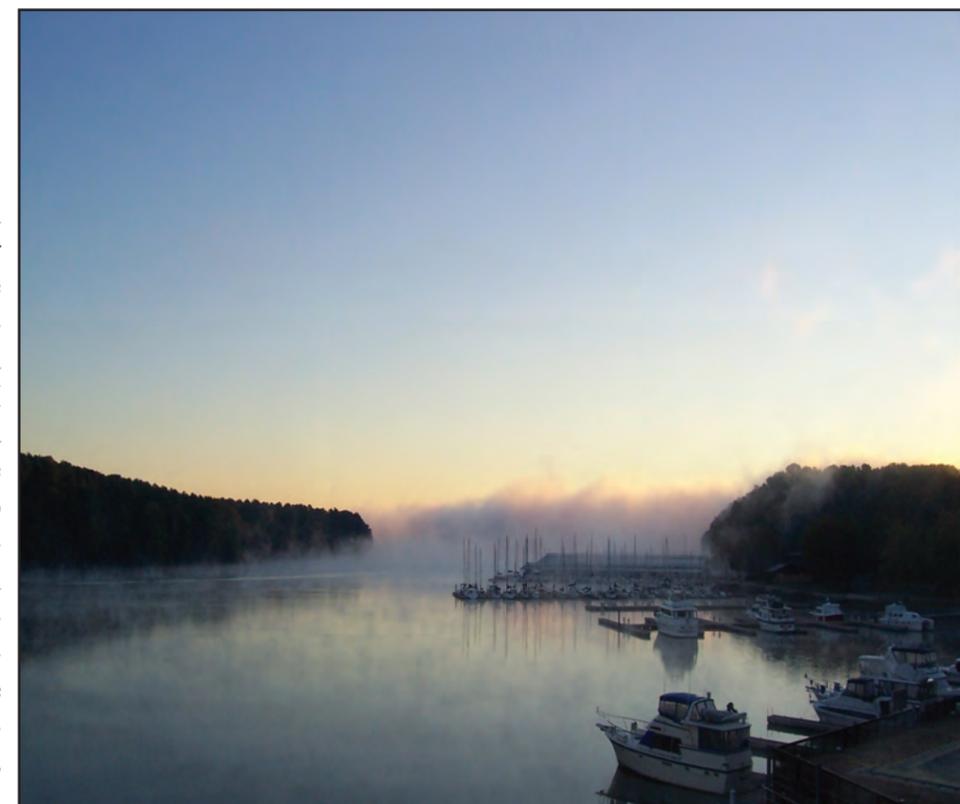
The department's Information Systems Branch provides computer and programming support linking the department's comprehensive environmental programs, projects and services. The branch equips ADEM staff with the latest hardware and software to perform their jobs more efficiently. These services help employees obtain and process information more effectively and play an essential role in making the department more accessible and accountable to the public. In addition to the branch's responsibility for development and maintenance of ADEM's computer network, equipment and programs, it also assists with department-wide installation of software and employee computer training. The integrity of ADEM's computer

data, including upgrades and maintenance of the department web site and intranet functions, is routinely monitored through rigorous, systematic security measures.

In the 2006 fiscal year, the Alabama Department of Environmental Management began providing environmental data to the U.S. Environmental Protection Agency through the "EPA Exchange Network," a partnership among states and EPA, allowing data to be shared efficiently and securely over the Internet. This new information sharing provides real-time access to detailed environmental data while saving programmer time, computer resources, and money. Grants totaling \$1.15 million were used to purchase hardware and software

required to flow data to the Exchange Network through a computer portal or "node." In September 2006, the first data flow from the department's node to EPA began.

The department continues to make impressive strides in its electronic document management program, known as FileNET. To date, there are more than 250,000 documents electronically stored in the system. On the horizon, eDMR or electronic Discharge Monitoring Reports will soon enable NPDES permittees to submit required compliance data to the department and EPA securely over the Internet. The eDMR program will dramatically reduce paperwork and provide more timely access to critical water quality data.



*ADEM's Permits & Services Division manages grants to marinas across the state for the installation of boat sewage pump-out stations and for educating Alabamians on clean boating practices.*

encourage industry, non-regulated businesses, government agencies and the general public to reduce the amount of waste they produce through source reduction practices. The division's Ombudsman Office staffs a toll-free hotline to provide informational assistance to businesses and the general public. In the 2006 fiscal year, the office processed 1,916 calls through the department's 800-number. The office also manages grants to marinas for the installation of boat sewage pump out stations and educating boaters about clean boating practices through the federal Clean Vessel Act.

The 319 Non-point Source Pollution program is also administered through Permits and Services. This non-regulatory program is designed to accomplish water quality improvements through its holistic approach to watershed management and through the utilization of stakeholders and partners that live, work, and recreate in their local watersheds. In the 2006 fiscal year, ADEM's efforts were recognized by the U.S. Environmental Protection Agency. The Yellow Bank Creek Watershed Management Plan was selected by EPA as one of the six best plans in the nation. The Department assisted a local group of stakeholders with the development of the plan, which has now transitioned into the implementation phase enabling ADEM to utilize 319 federal funds to support on-the-ground projects in this watershed of the Tennessee River basin in North Alabama.

In the 2006 fiscal year, ADEM was also recognized by EPA for a success story involving a 28 mile segment of the Flint River (in Lauderdale and Lawrence counties)

that was previously identified on the 303(d) list of impaired waters. Through the implementation of numerous on-the-ground projects, the department documented that water quality improved substantially and the segment now meets all water quality standards. Thus ADEM has proposed that this section of the waterway be removed from the 303(d) list. The non-point program also initiated and hosted numerous training events in the 2006 fiscal year, including the 17th Annual Non-point Source Conference which was attended by more than 200 stakeholders. The program also continued its support of several stakeholder groups including the Alabama Clean Water Partnership and Alabama Water Watch.

ADEM completed a septic tank voucher project in Bibb and Perry counties in the 2006 fiscal year, and held workshops to inform citizens of the negative impacts leaking or faulty septic tanks can have on water quality. Following the workshops, eligible persons received a \$300 voucher that could be redeemed to cover the costs of having their septic tank pumped out. The department hosted six workshops and distributed vouchers to more than 400 Alabamians.

#### State Revolving Fund Loans

The Clean Water State Revolving Fund and the Drinking Water State Revolving Fund are low interest loan programs intended to finance public infrastructure improvements to public water and wastewater treatment systems statewide to assure a more abundant, clean, safe and reliable water supply for Alabamians. The programs are funded in part with the

proceeds of tax-exempt bond issues by the Alabama Water Pollution Control Authority and the Alabama Drinking Water Authority. Both authorities are composed of the Governor, Lt. Governor, Speaker of the House, Finance Director and ADEM Director.

The Permits & Services Division administers the loan programs, performs the required technical and environmental reviews of projects, and disburses funds to recipients. Prior to the 2006 fiscal year, ADEM surpassed the \$1 billion dollar mark in the SRF loan programs. The \$1 billion ranks Alabama second in the southeast in total funding for public drinking water and wastewater infrastructure improvements. In the last 17 years, water and wastewater systems in 58 Alabama counties have successfully closed loans through the two programs.

The Clean Water State Revolving Fund Loan program began in 1989 to assist with construction of wastewater treatment and collection facilities and to achieve statewide compliance with water quality standards. The Drinking Water State Revolving Fund Loan program started in 1998 to provide low-interest financial assistance to communities for water treatment, storage, and distribution improvements to meet more stringent water quality requirements. In the 2006 fiscal year, ADEM closed loans through the two programs totaling more than \$72 million. The division also administers the Brownfield Cleanup Revolving Loan Fund which provides financing to local communities for remediation of brownfields sites.

# Air Division

The Air Division of the Alabama Department of Environmental Management ensures ambient air quality standards, established by the U.S. Environmental Protection Agency, are met to protect human health and the environment. These measures include monitoring air quality, reviewing emission regulations, and implementing a permitting system to ensure that facilities comply with regulations. The division also monitors industrial operations to assure that pollution controls are properly operated and maintained.



Ron Gore

#### Clean Air Act

The Air Division administers the federal Clean Air Act in Alabama. Passed by the U.S. Congress in 1970 and last amended in 1990, the Act established two types of national air quality standards; primary standards which set limits to protect public health, and secondary standards setting limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation and buildings.

#### Particulate Matter

The division monitors fine particulates in Alabama through the Particulate Matter (PM 2.5) multi-year grant. Emissions from large sources such as utilities, refineries, lime cement plants, and pulp and paper mills and small sources such as cars, trucks, and open burning con-

tribute to fine particle concentrations. In the 2006 fiscal year, the division was able to help the state achieve attainment of ozone standards. Alabama no longer has areas designated as non-attainment in relation to the ozone under the National Ambient Air Quality Standard (NAAQS).

#### Title V

The Title V program is for permitting, monitoring, and enforcement of major sources of air pollution. Regulated facilities in Alabama under this program include: utilities, refineries, lime cement plants, pulp and paper mills, surface coating operations, chemical plants, agricultural facilities, and gas compressor stations. This includes some monitoring of mercury. During the 2006 fiscal year, the division was able to

#### Federal Air Program

This program is for implementing and maintaining national ambient air quality standards throughout the state of Alabama, and permitting, monitoring, and enforcement of non-major sources. Some monitoring of air toxic pollutants is performed under this grant. Types of regulated facilities under this program include gasoline tank trucks, stations, and terminals, along with small incinerators and sawmills.

#### Air Permits

Permits are perhaps the most essential factor in the environmental regulatory process and are designed to assure that any source complies with the applicable environmental statutes before becoming operational. Any facility planning to construct or modify a potential air pollution source must contact the division to determine if an air permit will be required and what permitting procedures should be followed.

The permitting decisions made by the Alabama Department of Environmental Management are technical judgments. If the application demonstrates that the project is capable of complying with regulations, a permit is issued. Zoning issues are not within the purview of the division and therefore, are not

considered when permitting air emissions sources. These issues are within the jurisdiction of local zoning authorities.

### Clean Air Interstate Rule

In the 2006 fiscal year, the Air Division adopted New Source Review (NSR) reform regulations, and the Clean Air Interstate Rule (CAIR). Both regulations became effective in July in Alabama. CAIR was issued in 2005 by the U.S. Environmental Protection Agency. The rule is designed to achieve the largest reduction in air pollution in more than a decade. CAIR will ensure that Americans continue to breathe cleaner air by dramatically reducing air pollution that moves across state boundaries. In 2015, CAIR will provide health and environmental benefits valued at more than 25 times the cost of compliance.

The Clean Air Interstate Rule will permanently cap emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) in the eastern United States. CAIR achieves large reductions of SO<sub>2</sub> and NO<sub>x</sub> emissions across 28 eastern states and the District of Columbia. When fully implemented, CAIR will reduce SO<sub>2</sub> emissions in these states by more than 70% and NO<sub>x</sub> emissions by over 60% from 2003 levels. According to EPA, this will result in \$85 to \$100 billion in health benefits and nearly \$2 billion in visibility benefits per year by 2015 and will substantially reduce premature mortality in the eastern U.S. The benefits will continue to grow each year with further implementation.

A closely related action is the EPA Clean Air Mercury Rule (CAMR), which is the first federally-mandated requirement that coal-fired electric utilities reduce mercury

emissions. In the 2006 fiscal year, ADEM's Air Division initiated the development of rules to control mercury emissions from utility plants based on CAMR. Together the Clean Air Mercury Rule and the Clean Air Interstate Rule create a multi-pollutant strategy to reduce emissions throughout the United States.

### Emissions and Modeling

The Alabama Department of Environmental Management is charged with the responsibility of insuring Alabama's air quality meets federal standards. Several methods are used to analyze the quality of Alabama's air. Computer models use air emissions to simulate what the ground-level concentrations of pollutants would be using meteorological data and terrain information. Stack tests are conducted to measure the actual



*ADEM's Air Division monitors air quality, reviews emissions regulations, and implements a permitting system to ensure compliance with all state and federal regulations.*

# Permits & Services Division

The Permits & Services Division of the Alabama Department of Environmental Management handles all permit applications and redevelopment projects by coordinating communications, conferences and other administrative functions. An environmental permit is the mechanism used to regulate emissions to the air and water as well as to assure quality drinking water and the proper management of solid and hazardous wastes. The conditions and limits of these permits are developed by skilled technical staff assigned to specific program areas to ensure the protection of human health and the environment. In addition to permits, the division houses most of the administrative staff at the department including educational resources, compliance assistance, operator certification programs, revolving loan programs, and computer information systems.

### Permits

Applications for permits for new industry typically come to the Permits & Services Division through a local industrial development board or the Alabama Development Office. ADEM's technical staff and company representatives discuss specific requirements for the application. Any necessary modeling of wastes discharged to receiving streams or modeling of air emissions is discussed in detail. Specific processing steps and time periods are provided so that the applicant can include these tasks in the planning of project



*Russell Kelly*

development. The division coordinates communications, public notices, and hearings. Division staff arranges conferences with applicants to expedite the permit process and handles the collection of fees.

Upon application receipt, the division enters information about the facility into the permit tracking database. ADEM technical staff reviews the information provided in the application to determine completeness and compliance with applicable standards. When the permit application is determined to be complete and in compliance with all standards, a draft permit is prepared and a notice of the public comment period is published in a paper of general circulation in the area of the project, and on the department's web site.

Public comment periods are provided to give the public an opportunity

to raise issues. Significant public interest may cause the draft permit to be changed or for the division to schedule a public hearing to receive additional technical input before a final decision is made. Environmental permit decisions are technical in nature and not a mechanism for settling zoning differences. An environmental permit is utilized to control emissions to air, land, and water ensuring the protection of human health and the environment. Specific constituent limits are assigned for each permit which must meet stringent federal and state environmental standards. After a comment period or a public hearing, a thorough evaluation is prepared by the technical staff and made available to those who commented or expressed an interest in the project. A final permit decision is made by the department following this evaluation.

### Education and Outreach

The Alabama Department of Environmental Management has a number of non-regulatory functions administered by the Permits & Services Division including Education and Outreach efforts. These activities include assistance with pollution prevention, recycling, support to small business with compliance, and coordinating voluntary programs to reduce non-point source pollution and improve water quality.

Pollution Prevention is a voluntary non-regulatory program to

Resources Conservation Service technical standards and guidelines. The division is responsible for permitting and compliance activities relative to NPDES permit coverage for treated wastewater and storm water discharges from surface and underground mining operations, regulated construction activity, coal-bed methane gas exploration, development, and production.

### Environmental Monitoring

In the 2006 fiscal year, ADEM successfully completed fish contaminants monitoring in the Alabama, Coosa, Tallapoosa River basin, the state's largest of the five year rotation. Field Operations also sampled and tested fish tissue from all of Alabama's coastal area bays and estuaries in the wake of Hurricane Katrina. The monitoring from the 2006 fiscal year resulted in the greatest number of fish collected for the program since its inception in 1991.

ADEM's Water Quality Monitoring Strategy sets forth a 10-year plan to address EPA's Elements of a State Water Monitoring and

Assessment Program. ADEM's monitoring strategy is implemented on a five-year monitoring cycle and an in-depth review of the strategy is completed at the end of each cycle. This strategy enables ADEM to build on its existing monitoring capabilities and to address all state waters over time. It provides for long-term planning and addresses future initiatives on what improvements are necessary to incorporate requirements outlined by the EPA program. The strategy also satisfies monitoring goals and requirements pursuant to the Alabama Water Pollution Control Act, the Alabama Environmental Management Act, and the federal Clean Water Act. Components of the strategy include monitoring of streams, rivers, reservoirs, and coastal waters.

The Field Operations Division also performs ambient air quality monitoring for ozone and particulate matter at 25 locations in Alabama.

In the 2006 fiscal year, the division began using aerial reconnaissance to help cover more of the state's 52,423 square miles in less

time. It has enhanced the department's compliance efforts. The use of Global Positioning Systems and aerial surveillance has improved ADEM's efforts in the areas discovering un-permitted construction, beach monitoring, finding illegal scrap tire dumps, wetlands surveillance, surface water evaluation, and response to spills and emergencies.

### Coastal Programs

Alabama's Coastal Area Management Program has been in effect since 1979 and ADEM's Coastal Section under the Field Operations Division works to regulate various activities on coastal lands and waters seaward of the continuous 10-foot contour in Baldwin and Mobile counties. Implementation of the program is shared by the state Department of Conservation and Natural Resources and ADEM.

The department is responsible for the program's regulatory functions including permitting, monitoring and enforcement activities. Other division responsibilities and activities in the coastal area include: development and implementation of the Alabama Coastal Non-point Pollution Control program, conducting the Coastal Watershed Survey Program, and conducting studies and projects related to coastal resource management concerns. The division provides assistance to local governments relative to coastal resource management issues through technical assistance, reviews state agency permits, and handles Coastal Zone Management Consistency Review of federally regulated activities, projects, permits and federal assistance to local coastal communities.

levels of emissions that are being released by a facility. Emission inventories use the past year's actual emissions to analyze emission trends.

### Visible Emission Certification

The visible emissions certification program consists of two "smoke schools" conducted in the spring and fall consisting of two sessions per school. These schools are open to ADEM personnel, other regulatory personnel, consultants, and members of the regulated community. The purpose of the program is to certify participants' ability to meet federal requirements for making visible emissions determinations. Each smoke school consists of one day of lecture followed by a

written exam and two days of field training and testing. The lecture certification is valid for three years, the field certification for six months.

### Air Quality Initiatives

The Air Division is involved with other states and agencies in various air quality initiatives. Twenty-two states, including Alabama, are participating in the NOx State Implementation Plan (SIP) to reduce nitrogen oxides from large combustion sources. Although EPA is the lead agency dealing with stratospheric ozone, Alabamians can call the Alabama Department of Environmental Management to get general information or register complaints. These complaints are then referred

to EPA for enforcement action. States in EPA Region 4 are involved in VISTAS (Visibility Improvement State and Tribal Association of the Southeast) to reduce regional haze in parks and recreational areas. Alabama, along with Florida, Mississippi, and Louisiana, also are involved in the Gulf Coast Ozone Study to examine ozone along the Gulf Coast. Through coordinated efforts among the Alabama Department of Environmental Management, other states, and agencies resources can be more efficiently utilized to ensure clean air for future generations.



The Field Operations Division performs sampling and analysis to determine permit compliance.



The Air Division holds two "smoke schools" each year to certify ADEM personnel, consultants, and members of the regulated community on their ability to meet federal requirements for making visible emissions determinations.

# Land Division

The Land Division of the Alabama Department of Environmental Management works to ensure that hazardous wastes, hazardous substances, non-hazardous solid waste, medical waste, and scrap tires are being properly managed in a manner protective of the environment and public health. The division administers major provisions of federal hazardous waste laws in Alabama, which specify environmental standards for hazardous waste generators, transporters and treatment, storage and disposal facilities. ADEM's "cradle-to-the-grave" regulatory approach tracks waste from generation to final disposition and imposes standards at each step to safeguard the environment. The division also administers the Brownfields redevelopment and voluntary cleanup program which assists industries, local governments and developers return inactive or abandoned facilities to productive reuse.

## Hazardous Waste

The Land Division implements state and federal laws on recycling, pollution prevention, and hazardous waste management and assists in the cleanup of sites contaminated with hazardous wastes and substances. The division's Governmental Hazardous Waste and Waste Programs Branches administer major provisions of federal hazardous waste laws, which specify environmental standards for hazardous waste generators, transporters and



Gerald Hardy

treatment, storage, and disposal facilities.

ADEM tracks hazardous waste from generation to final disposition, imposing strict standards at each step. Treatment, storage and disposal facilities must demonstrate financial resources sufficient to cover costs of any environmental conditions that might occur while the site is operational and to ensure safe closure and adequate management for the following 30 years. Hazardous waste transporters are required to secure a permit and carry documents thoroughly identifying the waste being transported.

The division administers the Resource Conservation and Recovery Act (RCRA) in Alabama. This program establishes a system for controlling hazardous waste that

is protective of human health and the environment. RCRA applies to active industrial and governmental facilities. The Chemical Demilitarization program falls under RCRA. The Anniston Chemical Agent Disposal Facility (ANCDF) uses high temperature incineration to destroy stockpiled chemical weapons stored at the Anniston Army Depot. Although funded separately, the facility is regulated through RCRA and ADEM monitors activity on site 24-hours a day, seven days a week. In the 2006 fiscal year, under ADEM oversight the facility destroyed the last military munitions stored at Anniston Army Depot that contained the chemical nerve agent Sarin, commonly referred to as GB. The ANCDF also completed the transition from GB to VX operations, and trial burns demonstrated that the reconfigured facility can safely destroy military munitions containing the nerve agent VX.

Also in the 2006 fiscal year, chemical agent munitions removal began at the former United States military base, Camp Sibert, in parts of Etowah and St. Clair counties. The U.S. Department of Defense is funding the investigation and clean up procedures. As of September 30, 2006 a number of rounds (4) and pieces of debris have been unearthed since digging and clearing work began in area of the camp designated as "Site 8." All recovered rounds are stored at a holding facility until a final assessment is made near the end of the cleanup, at which time they

compiled and made available to the public, industry, and local emergency planning committees for use in emergency situations, to analyze release trends and to aid in reduction of toxic chemical releases.

## Lab Analysis

The division operates three laboratories, the central lab in Montgomery and branch laboratories in Birmingham and Mobile. The central laboratory handles organic, inorganic and radiochemical analyses for the ADEM's Air, Land, and Water programs. A variety of scientific instrumentation is used to perform the analyses and achieve ever-decreasing detection limits. In the 2006 fiscal year, the department's new analytical lab opened with a ribbon cutting ceremony in June. The new state-of-the-art lab is much more efficiently designed and more secure than the pre-World War II multiple buildings that were used previously. The Mobile and Birmingham laboratories have a complete array of inorganic analyses that includes metals, nutrients, solids, cyanide, phenols and bacteriological capability.

## NPDES

The division administers National Pollution Discharge Elimination System permits related to construction, mining, and agriculture activities. Federal and state regulations regarding discharges of storm water require operators and owners to obtain NPDES permit coverage prior to conducting construction, disturbance, or initial operation of small non-coal, non-metallic mining sites, and associated land disturbance activities. These rules require that a

construction Best Management Practices plan be fully implemented and effectively maintained. The plan, designed to minimize pollutant discharges in storm water runoff to the maximum extent practicable during land disturbance activities, must be prepared by a qualified credentialed professional. Best management practices are required to be submitted with the request for registration for proposed discharges to a Tier 1 water body, proposed discharges to an Outstanding National Resource Water-designated body, and for projects involving water body relocation or significant alteration. NPDES registration coverage must be retained until all disturbed areas have been reclaimed and effective storm water quality remediation has been achieved.

The rules require an operator or owner to register construction activi-

ties and associated areas one acre or greater in size. Construction activities less than one acre that are part of or associated with a larger plan of development or sale that might eventually exceed one acre, must also register. Construction activities less than one acre in size that are determined by ADEM to have significant potential to cause or contribute to water quality impairment, may be required to register.

The Field Operations Division monitors Animal Feeding Operations and Concentrated Animal Feeding Operations to ensure that water quality is protected. All CAFOs are required to register with ADEM and all AFO/CAFOs are required to implement and maintain effective best management practices for animal waste production, storage, treatment, transport, and proper disposal that meet or exceed Natural



On June 2, 2006, members of the Environmental Management Commission along with past and present ADEM Directors, Jim Warr and Trey Glenn, participated in a ribbon-cutting ceremony to mark the opening of the department's new laboratory.

# Field Operations Division

ADEM's Field Operations Division supports the department's programs and activities by gathering, analyzing, and distributing data and information. The division provides statewide emergency response to natural disasters, hazardous materials releases, oil spills, gasoline and diesel fuel leaks, accidents, facility incidents, and responds to fish kills.

Field offices are located in Birmingham, Decatur, Mobile, and Montgomery. Each office has staff assigned on a rotating basis for emergency response duties 24-hours a day, seven days a week. The division supports local governments in response to actual or potential releases of oil and hazardous materials resulting from natural, manmade or technological disasters. The ADEM response staff serves as state on-scene coordinator for facility related releases of hazardous materials and oil releases to state waters. The division acts as the technical advisor in identifying and directing the containment, assessment, treatment, and removal of hazardous materials impacting citizens or the environment. ADEM serves as the point of coordination between state and federal response resources of the U.S. Environmental Protection Agency and the U.S. Coast Guard.

In the regulatory arena, the division is responsible for the wastewater permitting, inspection, compliance monitoring, and enforcement activities associated with animal



Steve Jenkins

feeding operations, mining, coal-bed methane, construction, and compliance issues associated with silviculture, and other non-point sources. The division coordinates efforts to prevent adverse impacts on water quality due to non-point sources include working with federal and other state agencies to ensure the use of best management practices, and requiring storm water controls for mining and construction sites. The division is involved in the regulatory activities associated with the Alabama Coastal Area Management Plan and with water quality certifications for dredge and fill permits.

## Emergency Response

The division responds to a variety of emergency situations, including hurricanes, tornadoes, and floods as well as transportation spills and

facility incidents. The division has responders on call at all times from each of its branch offices. These strategic locations minimize response time and multiple on-call personnel allow for response to concurrent events. The division's response to environmental emergencies is coordinated through the Alabama Emergency Management Agency.

In the 2006 fiscal year, Field Operations staff responded to numerous emergency events. ADEM typically deploys teams of engineers and scientists to the Gulf Coast for environmental response and recovery efforts involving hurricanes. The department coordinates with public water and wastewater systems and provides assessment and technical assistance to maintain safe drinking water supplies. The division works closely with the U.S. Coast Guard, EPA, and local organizations to identify and recover hazardous materials. ADEM's emergency response efforts were enhanced in the 2006 fiscal year by utilizing aerial reconnaissance.

Field Operations is also responsible for the SARA Title III program, and reviews, maintains, and serves as a repository for several different documents required to be filed by various industries in Alabama. These documents include hazardous chemical inventory forms, material safety data sheets, toxic release inventory reports, and accidental release notifications. Data from the documents are

will be properly disposed.

ADEM administers the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in Alabama. The program stipulates prohibitions and requirements for closed and abandoned hazardous substance sites. CERCLA provides liability for persons responsible for releases and maintains a trust fund for clean up when no responsible party can be determined.

As part of the CERCLA program, sites are cleaned up under the oversight of ADEM and the U.S. Environmental Protection Agency, either by responsible parties or using trust fund (Superfund) monies. The program addresses abandoned or inactive sites where wastes have been improperly managed and emergencies resulting from spills, leaks, or other accidents. The division assists EPA in implementing Superfund provisions in Alabama by conducting site assessments and overseeing removals at these sites.

The purpose of SACA, the Support Agency Cooperative Agreement is to allow ADEM to support EPA-lead activities in the cleanup of CERCLA sites. This support generally is in the form of document review and comment, meeting attendance, and field inspections of projects to determine compliance with approved plans. A variety of sites and activities are proposed for coverage under the agreement including National Priorities List sites, proposed NPL sites, and other sites which ADEM and EPA agree to include.

ADEM's Land Division administers the Alabama Hazardous Substances Cleanup Fund (AHSCF) used to assess and remediate sites not eligible for Superfund money. The AHSCF was established in 1989 by the Alabama Legislature to provide a mechanism for ADEM to investigate, remediate, and monitor hazardous substance sites. These sites may be an endangerment to human health and the environment, but may not qualify to be addressed under another cleanup program. During the 2006 fiscal year, ADEM utilized AHSCF funds to assist the City of Birmingham's efforts to assess and remove six underground storage tanks near University Hospital.

## Solid Waste

The Land Division regulates the disposal of non-hazardous solid waste in Alabama. Activities include

permitting of landfills for municipal solid waste, construction/demolition, and industrial waste. The division's Waste Programs Branch conducts inspections of permitted landfills to assess compliance with state and federal requirements. Enforcement actions are taken when appropriate. The branch also investigates complaints of unauthorized solid waste dumps and initiates appropriate enforcement action as necessary.

In June 2003, the Alabama Scrap Tire Environmental Quality Act was passed to comprehensively regulate scrap tire accumulations and to provide for cleanup and remediation of illegal scrap tire dumps. The Act placed a \$1 fee on all replacement tires sold to establish a scrap tire fund, and required ADEM to develop a program to regulate the management of scrap tires.



In August of 2006, cleanup activities began at the Attala scrap tire site in Etowah County. In the first two months of the project, more than 6,700 tons of scrap tire materials were removed with more than half being reused as tire-derived fuel.

The division's Scrap Tire Unit inspects scrap tire receivers, transporters, and processors as well as sites where tires have been illegally disposed. The unit investigates complaints of illegal dumping or disposal of scrap tires and takes enforcement action as necessary. Regulated parties consist of retail sellers (of new or used tires), transporters and processors of scrap tires, and landfills used for disposal. The unit uses an efficient and effective paperless process where correspondence and reports are electronically scanned and field inspectors use electronic devices such as PDA's and tablet PC's to record inspection information and prepare reports that are scanned instead of printed.

In the 2006 fiscal year, cleanup activities began at the Attalla (Etowah County) scrap tire site. In the first two months of the clean up, more than 6,700 tons of scrap tires and scrap tire materials were removed from the site, with greater than 50% reused as tire derived fuel. Also in the 2006 fiscal year, the unit performed 1,333 inspections of regulated facilities and investigated 267 illegal scrap tire dump or facility complaints. Since ADEM's scrap tire program began, more than 650,000 scrap tires have been removed by property owners or responsible persons from smaller illegal dumps or improper storage facilities and properly managed through reuse or disposal.

### **Brownfields and Voluntary Cleanup**

The Alabama Department of Environmental Management uses a variety of mechanisms to promote the assessment and redevelopment of

brownfields sites defined as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of hazardous substance, pollutant, or contaminant." Many properties in Alabama have existing infrastructure, yet remain unused due to the real or perceived presence of contamination. Generally, a Brownfield site is put back into productive use by a three step process: assessment, remediation, and redevelopment. In the assessment phase, the testing for contamination is conducted through the collection and analysis of field samples, including groundwater, surface water, sediments, and soil. The data is then used to formulate a remediation plan for site cleanup.

The redevelopment of a site is the ultimate goal of the program. A brownfield site may be utilized as a new industry, but many brownfields sites across the country have been redeveloped as affordable housing units, parks and recreational facilities, or shopping malls. ADEM works closely with regional and local government entities to identify and promote the revitalization and reuse of potential brownfields sites.

Remediation under the program varies according to contamination levels, site conditions, and remediation technologies. In some cases, engineering or institutional controls, such as deed or water use restrictions, may be required before a site can be reutilized. In many cases, the cost of the remediation may be offset by the use of existing infrastructures such as utilities, roads, and railways. In the 2006 fiscal year, ADEM conducted Brownfields workshops in Birmingham, Huntsville, Sheffield,

Tuscaloosa, and Guin (Marion County) to provide information and outreach activities to interested parties.

ADEM's Voluntary Cleanup Program (VCP) began in May 2001 with the signing of the Alabama Land Recycling and Economic Redevelopment Act. The VCP is a fee driven program in which the department provides oversight of voluntarily conducted assessments and cleanups. Once assessed or remediated the sites are provided with certain liability protections. Virtually all entities are eligible to enter the VCP as a means to revitalize economically depressed areas. In the 2006 fiscal year, a steady growth in the program continued with eight applicants completing assessment and cleanups and 22 new enrollment applications being received by the department.

Alabama's Drycleaner Environmental Response program is a voluntary insurance program for active and inactive drycleaner facilities and wholesale distribution facilities. The program is designed to cover some of the costs of assessment and remediation of environmental contamination caused by dry cleaning agents. To participate in the program members are required to pay an annual registration fee into a trust fund. Participation in the program is voluntary but coverage for environmental cleanup is only extended to those who pay into the trust fund. ADEM's responsibilities include establishing performance standards, reviewing initial investigations, prioritizing sites, reviewing assessment and cleanup plans, and issuing concurrence letters.

current and 95% of priority permits issued for the previous year. Alabama was recognized by EPA as the only state in Region 4 that exhibited an overall "significant non-compliance criteria" rate decrease over the past three years for major municipal and industrial facilities.

### **Groundwater**

ADEM's Groundwater programs include the Underground Injection Control (UIC) program, which regulates disposal of treated wastewater into the subsurface, the Underground Storage Tank (UST) program, designed to prevent and clean up pollution caused by leaking underground storage tanks, and the Hydrogeology Section, which responds to other sources of groundwater contamination, and groundwater related complaints from the public.

In the 2006 fiscal year, ADEM permitted 21 new Decentralized Wastewater Treatment Systems under the UIC program representing a 25% increase of this type of permitted facility in one year. This is a very positive trend, because these types of treatment systems decrease the use of septic tanks, which are known to contribute to non-point source pollution due to their high rate of failure.

The UST Compliance Unit is responsible for implementation of equipment and leak detection standards for underground storage tank systems, which are known nationwide to be one of the leading causes of groundwater contamination. The UST Compliance Unit, together with staff from the department's field offices, performs inspections, recom-

mends enforcement actions where needed, and provides the regulated public with as much information as possible to ensure that tank owners and operators understand their responsibilities. More than 3,300 inspections of sites with underground storage tanks were made in the 2006 fiscal year.

The UST Corrective Action Section oversees initial response, assessment, monitoring, risk evaluation and remediation of releases from underground storage tanks. The program includes working with responsible parties and their selected contractors on Trust Fund eligible sites and ineligible sites; reviewing closure site assessments and technical plans and reports regarding assessment, risk evaluation and remediation of UST releases; and reviewing cost proposals for Trust Fund eligible work. ADEM project managers are

assigned specific UST releases and are responsible for overseeing site activities. During the 2006 fiscal year, cleanup was completed at 151 underground storage tank sites where soil or groundwater had been impacted by a release from underground storage tanks.

The Alabama Underground and Aboveground Storage Tank Trust Fund is a fund to reimburse eligible tank owners and operators for costs associated with assessment and remediation of eligible releases. The trust fund serves as the required financial responsibility mechanism for tank owners and operators. In the 2006 fiscal year, \$33.5 million was provided from this fund to carry out emergency responses where needed, and to continue groundwater investigations and cleanups at more than 1,100 Trust Fund sites.



*ADEM's Water Division administers water quality programs that establish and revise standards for surface waters including designated uses and criteria to protect those uses.*

dards for each water body, considering seasonal variations and a margin of safety that accounts for uncertainty.

ADEM's Water Quality Branch determines the amount of each pollutant causing water quality impairment that can be allowed such that the water quality standards for the water body are maintained. The branch develops TMDLs according to a specified schedule. The TMDLs are approved by EPA after an opportunity for public comment. In the 2006 fiscal year, ADEM drafted 12 TMDLs that were submitted for public review and comment and also finalized and submitted the Cahaba River nutrient TMDL to EPA.

The branch administers the water quality standards program that establishes and revises standards for surface waters. The standards consist of the designated uses of surface waters, the water quality criteria to protect those uses and an anti-degradation policy. The program provides the basis for establishing permit limits under NPDES for industrial and municipal wastewater treatment facilities.

As required by the Clean Water Act, Alabama has established and maintains a continuing planning process pertaining to all navigable waters. This process provides the framework to coordinate and unify activities and procedures necessary for maintaining waters of acceptable quality in a manner consistent with the Alabama Water Pollution Control Act and the Clean Water Act. EPA is responsible for periodically reviewing the adequacy of the process.

In the 2006 fiscal year, ADEM conducted a public hearing for the 2006 Triennial Review of Water Quality Standards and completed the response to comments received. The public hearing allowed all interested persons an opportunity to become involved in the water quality standards review process and offer data, views and arguments regarding the existing provisions. The Triennial Review is a formal review of the designated uses of the state's surface waters and the criteria needed to protect those uses. Alabama's water quality standards are designed to protect, maintain and improve lakes, rivers, streams, creeks and estuaries for the propagation of wildlife and aquatic life. The standards provide criteria for agricultural and recreational uses and for prevention and control of pollution.

The effectiveness of the division's surface water quality management programs is evaluated using water quality data and information collected by the surface water monitoring program. The water quality management program incorporates priorities associated with related programs such as watersheds management, the Non-point Source Management Plan, the Coastal Area Management Plan and the Mobile Bay National Estuary Program.

### NPDES

ADEM administers the National Pollutant Discharge Elimination System (NPDES) program for industrial and municipal facilities and the State Indirect Discharge (SID) pretreatment program for industrial indirect discharges. The industrial NPDES and SID programs are implemented by the Industrial

Section. Under the NPDES program industrial facilities are permitted to discharge storm water from industrial activities and treated wastewater to surface waters. The SID program is used to permit facilities to discharge treated wastewater to public or privately-owned wastewater treatment works. Other section responsibilities include on-site inspections of industrial facilities and industrial wastewater treatment systems; review of plans, reports, and applications pertaining to wastewater discharges, system designs, and best management practices (BMPs) for stormwater discharges; and serving as a liaison between private citizens, municipalities, industrial facilities and other governmental agencies in the investigation and resolution of compliance problems and complaints.

The Municipal Section manages the NPDES program for municipal and non-industrial sanitary wastewater sources such as semi-public and private facilities and municipal separate stormwater sewer (MS4) facilities. Section responsibilities include performance of on-site inspections; review of plans, reports, and applications pertaining to sanitary wastewater discharges, sanitary wastewater treatment design, and stormwater program management; and serving as a link between residents, municipalities, industrial facilities and other governmental agencies in the investigation and resolution of compliance problems and complaints.

In the 2006 fiscal year, ADEM's Industrial / Municipal Branch received a Certificate of Achievement from EPA for achieving the goal of 90% of all permits

# Water Division

ADEM's Water Division evaluates and classifies all waters of the state based on existing and expected uses. The division administers the Clean Water Act in Alabama ensuring water quality standards are met. This is accomplished by regulating point-source discharges including municipal, semi-public, and industrial wastewater treatment plants and stormwater runoff from industrial and municipal facilities. The division works diligently to maintain clean and safe drinking water for more than four million Alabamians. The division issues permits requiring industries, municipalities, and private wastewater treatment facilities use, at a minimum, the level of best available technology or secondary treatment, as appropriate, to protect the state's water resources.

### Drinking Water

The Drinking Water Branch works closely with more than 700 water systems to provide safe drinking water. Each month drinking water is tested by individual systems with results submitted to ADEM for review and approval. Specific chemicals are analyzed quarterly and annually to ensure that drinking water meets established standards under the Safe Drinking Water Act.

Alabama's excellent drinking water quality and high compliance rate of public drinking water systems can be attributed to numerous factors including ADEM's mandatory opera-



James McIndoe

tor certification requiring adequately trained operators to treat drinking water. The department requires properly constructed and maintained facilities that can be built only after receiving a permit from ADEM. The drinking water branch reviews more than 150 sets of plans and specifications for water construction projects annually, performs final inspections, and provides annual inspections of all public water systems. Technical assistance is provided to managers and operators regarding new and proposed requirements.

Each year the branch provides a compliance report listing all water system violations. ADEM requires systems to provide an annual consumer confidence report providing information on contaminants detected in drinking water, the status of source water assessments, the

sources of drinking water, and treatment processes. ADEM protects surface waters through a Source Water Assessment, and locally determined source water protection programs mandated by the Safe Drinking Water Act.

In the 2006 fiscal year, three Community Water Systems in Alabama (Trussville, Huntsville, and Fayette) won "Excellence in Operation" awards from the U.S. Environmental Protection Agency. Alabama was the only state in Region 4 with public water systems receiving recognition under this awards program last year.

### Water Quality

The Alabama Department of Environmental Management administers multiple programs related to surface water quality. The programs include water quality standards, list of impaired waters, total maximum daily load development, waste load allocation development, and water quality planning and integrated reporting.

Section 303(d) of the Clean Water Act requires states to list waters for which technology-based limits alone do not ensure attainment of applicable water quality standards. The list includes priority rankings set by the state for the listed waters. Once the impaired waters are identified, section 303(d) requires the state to establish total maximum daily loads (TMDLs) to meet water quality stan-

# Office of the Director

**Environmental Justice**

**Human Resources**

**Office of General Counsel**

**Public Relations**

## Air Division

### Energy Branch

- ◆ Industrial Minerals Section
- ◆ Petroleum Section
  - ◆ Construction Materials Unit

### Planning Branch

- ◆ Control Strategies Section
  - ◆ Program Development Unit
- ◆ Meteorological Section
- ◆ Emissions Measurement Section
  - ◆ Continuous Emissions Monitoring Unit

### Chemical Branch

- ◆ Industrial Chemicals Section
- ◆ Natural Resources
  - ◆ Agriculture/Gas Unit

## Land Division

### Governmental Hazardous Waste Branch

- ◆ Governmental Facilities Engineering
- ◆ Governmental Remediation Engineering
- ◆ Compliance & Enforcement Section
  - ◆ Governmental Compliance Unit

### Waste Programs Branch

- ◆ Engineering Services Section
- ◆ Compliance & Enforcement Section
- ◆ Solid Waste Section
  - ◆ Scrap Tire Unit

### Environmental Services Branch

- ◆ Assessment Section
- ◆ Redevelopment Section
- ◆ Program Support Unit
- ◆ Special Waste Unit

## Water Division

### Industrial/Municipal Facilities Branch

- ◆ Industrial Section
- ◆ Municipal Section

### Water Quality Branch

- ◆ Technical Support Section

### Drinking Water Branch

- ◆ Surface Source Section
- ◆ Ground Source Section Hydrogeology Section

### Groundwater Branch

- ◆ UST Corrective Action Section
- ◆ UST Compliance Unit
- ◆ Hydrogeology Section

## Field Operations Division

### Montgomery Branch

- ◆ Environmental Indicators Section
  - ◆ Aquatic Assessment Unit
- ◆ Air/Facility Section
  - ◆ Air Assessment Unit
  - ◆ Compliance Unit

### Birmingham Branch

- ◆ Facility Section
  - ◆ Water Unit
- ◆ Environmental Assessment Unit

### Decatur Branch

- ◆ Facility Section

### Deputy Chief

- ◆ Environmental Quality Unit

### Mobile Branch

- ◆ Coastal/Facility Section
- ◆ Environmental Assessment Section
  - ◆ Mobile - Water Unit

### Laboratory Branch

- ◆ GC/MS Unit
- ◆ Inorganic Unit
- ◆ GC/HPLC/Extract Unit

### Mining & Nonpoint Section

- ◆ Mining Unit
- ◆ Construction Unit

## Permits & Services Division

### Information Systems Branch

- ◆ Program Development Section
- ◆ Environmental Data Section
- ◆ Systems Services Section
  - ◆ Document Services Unit

### Compliance Assistance Branch

### Fiscal Branch

- ◆ Funds Unit

### General Services Branch

- ◆ SRF & Operator Certification Unit
- ◆ Transportation & Facilities Unit

### Outreach Branch

- ◆ Education Outreach
  - ◆ Nonpoint Source Unit
- ◆ Ombudsman/P2