

Solid Waste Biennial Report

April 15, 2008 - September 30, 2010

Executive Summary

The Solid Wastes and Recyclable Materials Management Act (SWRMMA) was signed into law by Governor Riley on April 15, 2008. This legislation marked the culmination of nearly two decades of effort on behalf of the Department of Environmental Management and numerous stakeholders to pass needed revisions to the State Solid Waste statute. There are four main purposes to the SWRMMA:

- Establish a Statewide waste reduction/recycling program, goal and measurement methodology;
- Provide stable funding for the Alabama Department of Environmental Management's solid waste and recycling programs;
- Establish a grants program for local recycling efforts; and
- Provide fiscal resources to remediate unauthorized dumps/illegal disposal sites.

The Act established a statewide solid waste disposal fee of \$1/ton or \$0.25/cubic yard for all solid waste disposed in Alabama landfills. The revenues generated by this fee have enabled the Department to add needed staff necessary to carry out the programmatic requirements of the law. Since mid-2008, the ADEM Solid Waste staff has grown from six full-time equivalents to more than 25, including an increased number of compliance inspectors in the field. This increased compliance presence by the Department has, at least in part, been responsible for an increase in the overall compliance rate at permitted landfills from 57% for FY08 to nearly 95% in FY10, as determined by the number of formal enforcement actions relative to the number of compliance inspections conducted.

Since the passage of the Act, ADEM has worked diligently to implement its requirements. Several revisions and additions to the Department's Solid Waste program regulations have been made, while others are currently under development for future promulgation. Chief among these revisions were the establishment of the Alabama Recycling Fund (ARF) Grants Program, the Solid Waste Fund (SWF) Site Remediation program, the Landfill Operator Certification program, and a Statewide Solid Waste Reduction and Recycling goal.

The regulation of recycling efforts in the State is a new area of emphasis for ADEM, but is one that the Department has fully embraced. Through the ARF grants, local governments have been awarded more than \$2.8 million by ADEM in the first two years of the program. By returning these funds back to local communities, ADEM has played a role in the creation or expansion of nearly 20 local recycling programs, which will be instrumental in diverting significant quantities of solid waste from landfills, providing economic benefits to the local governments as well as to their private enterprise partners and preserving our State's natural resources.

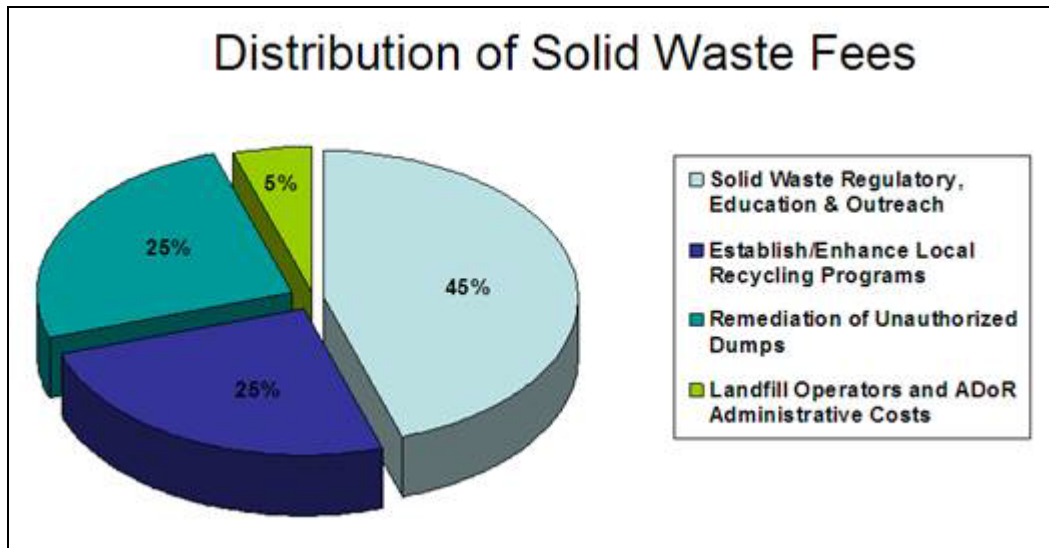
This report contains information on the ADEM Solid Waste Program activities and accomplishments since the passage of the SWRMMA. The Department is proud of the accomplishments achieved in the first two years following the passage of the SWRMMA and is excited by the challenges and opportunities that lie ahead for its Solid Waste Program. We look forward to continued support for these efforts by Governor Bentley, the Legislature and the citizens of Alabama.

Background

The Solid Wastes and Recyclable Materials Management Act (SWRMMA) was signed into law by Governor Riley on April 15, 2008. There are four main purposes to this Act:

- 1) Establish a Statewide waste reduction/recycling program, goal and measurement methodology;
- 2) Provide stable funding for the Alabama Department of Environmental Management's solid waste and recycling programs;
- 3) Establish a grants program for local recycling efforts; and
- 4) Provide fiscal resources to remediate unauthorized dumps/illegal disposal sites.

The breakdown of funding designations, as established by this law, is shown below:



In accordance with the requirements of the SWRMMA, this biennial report contains information on the ADEM Solid Program's activities and accomplishments for the period of April 15, 2008 through September 30, 2010.

Solid Waste Program Regulatory Development

The Solid Waste Program regulations (Division 13 of the ADEM Administrative Code) were revised six times from September 2008 to August 2010 to reflect the changes in the law. These revisions were made to incorporate new statutory requirements into the existing program regulations. Additional revisions are currently under development, and should be promulgated during 2011.



Amount of Solid Waste Disposed at Alabama Solid Waste Disposal Facilities

REPORTING PERIOD	MSW/ IN-STATE	MSW/OUT OF STATE	CD/IN-STATE	CD/OUT OF STATE	INDUSTRIAL/ IN-STATE	INDUSTRIAL OUT OF STATE
1 st Quarter FY09	1,048,228	109,866	398,857	18,663	293,861	9,671
2 nd Quarter FY09	927,179	77,098	375,774	16,934	2,613,165	0
3 rd Quarter FY09	1,078,704	76,185	357,370	15,301	305,440	0
4 th Quarter FY09	918,921	673,456	351,468	15,723	261,660	0
1 st Quarter FY10	891,678	613,407	210,075	11,185	204,470	9,264
2 nd Quarter FY10	1,016,010	95,183	183,086	15,144	244,822	0
3 rd Quarter FY10	613,302	25,670	282,486	18,190	166,507	0
4 th Quarter FY10	1,033,326	932,270	336,860	24,787	385,639	9,734

*All volumes reported in tons.

Amount of Disposal Fees Collected & Allocated

Funding is generated from \$1.00 per ton or \$0.25 per cubic yard on all solid waste disposed in the State of Alabama. The fees are collected by the Alabama Department of Revenue. The volumes reported quarterly to the Alabama Department of Revenue for fees are periodically verified against the volume reports submitted to the Alabama Department of Environmental Management.

Funds Collected:

FUNDING PERIOD	TOTAL
1 st Quarter FY09 ⁽¹⁾	\$0.0
2 nd Quarter FY09 ⁽²⁾	\$1,560,552.00
3 rd Quarter FY09	\$1,264,528.00
4 th Quarter FY09	\$2,926,372.00
1 st Quarter FY10	\$2,200,576.00
2 nd Quarter FY10	\$2,012,484.00
3 rd Quarter FY10	\$2,118,280.00
4 th Quarter FY10	\$2,484,296.00

(1) Fees were assessed in First Quarter Fiscal Year 2009

(2) Fees were collected in Second Quarter Fiscal Year 2009

Funds Allocated:

FUNDING PERIOD	RECYCLING	DUMP REMEDIATION	TOTAL
Fiscal Year 2009	\$1,161,552.62	\$0.00	\$1,161,552.62
Fiscal Year 2010	\$1,711,682.00	\$1,581,601.87	\$3,293,283.87

Prior to the program funding provided by the Solid Wastes and Recyclable Materials Management Act, the Department's Solid Waste Program had budget of just over \$700,000 and a staff of two permit writers and two landfill compliance inspectors/unauthorized solid waste dump (UAD) site investigators. In addition to a supervisor and clerical support, the Program was supported by less than half of a hydrogeologist's time and an ADEM attorney. These personnel limitations resulted in a backlog of solid waste landfill permit reviews, a limited number of compliance inspections at permitted landfills, and a backlog of unresolved unauthorized dump complaints. Additionally, no personnel or other resources were available to address waste minimization and recycling in the state or to track the progress towards achieving the 25% solid waste reduction goal established in 1991 by the State Solid Waste Management Plan (SWMP).

Program Accomplishments

Solid Waste Landfill Permitting

Prior to fiscal year 2009, the Department employed two engineers and a fraction of a hydrogeologist to review solid waste landfill permit applications. At that time, the Department had a significant backlog of applications for landfill permits. Since the passage of the Act, the Solid Waste Program has increased its staffing to five permit engineers and two full-time geologists, has eliminated the backlog of permit applications pending review, and has reduced its review and processing time for permit applications by nearly half.

Solid Waste Landfill Compliance

Prior to fiscal year 2009, the two staff solid waste compliance inspectors inspected each landfill once per year. These two staff members were also tasked with the responsibility of investigating unauthorized solid waste dump sites. The additional funding provided by the Act enabled the Department to employ four dedicated personnel for solid waste landfill compliance inspections and six dedicated personnel for the investigation of unauthorized solid waste dump sites, along with legal support from two staff attorneys. Solid waste landfill compliance inspections increased from approximately 180 per year to nearly 325 in fiscal year 2009 and to over 500 in fiscal year 2010. As a result of this increased compliance presence at permitted landfills, the Department has seen a significant increase in the compliance rate for these facilities, going from a 57% compliance rate in FY2008 to a 94% compliance rate in FY2010.

Landfill Operator Certification Program

In November 2009, the Department held its first landfill operator certification training class. Since that time, four additional training courses have been provided throughout the State. As a result of the training, 330 applications for certified landfill operators have been received by the Department, 305 applications have been approved, 9 applications have been denied and 16 applications are pending. It is the intent of the Department to continue providing and overseeing landfill operator certification training as necessary.

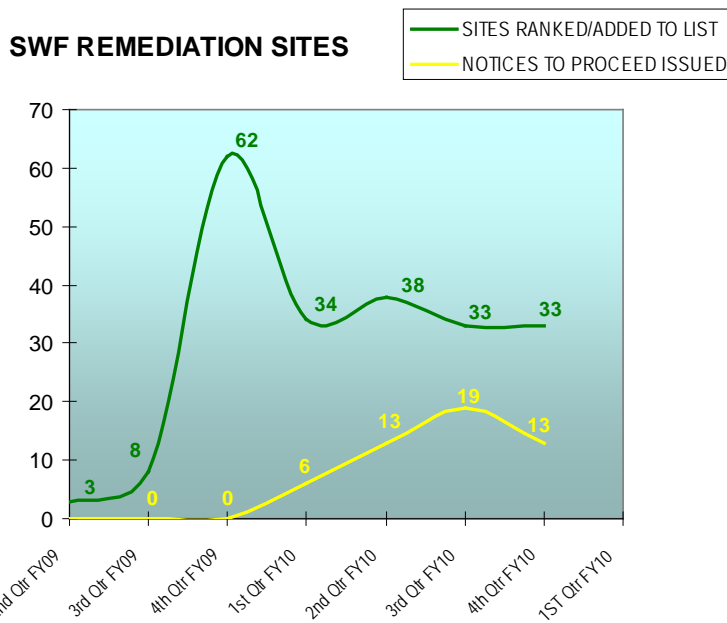
Unauthorized Solid Waste Dump Site Investigations

As with the review of solid waste landfill permit applications, the previously limited personnel resources hampered the Department's ability to investigate unauthorized solid waste dump sites in a timely manner which resulted in a backlog of unresolved complaints. With the additional funding created by the SWRMMA, the Department now employs six field inspectors who investigate UAD sites. This additional staffing has eliminated the backlog of unresolved complaints, resulted in a significant number of enforcement actions taken against responsible parties, which have required these sites be properly remediated and closed.



Unauthorized Solid Waste Dump Site Remediation

The primary tool for remediating unauthorized solid waste dumps sites identified across Alabama is through these enforcement actions. However, when it is determined that the property owner meets the qualifications to be considered an “innocent landowner,” as defined in ADEM Admin. Code r. 335-13-11-.02(1), then the UAD site is eligible for remediation using monies from the Solid Waste Fund, which was established by the Solid Wastes and Recyclable Materials Management Act.



Once a site has been determined to be eligible for remediation funded by the Solid Waste Fund, the site is ranked according to information obtained during the initial site investigation using criteria outlined in ADEM Admin. Code r. 335-13-11-.04. This ranking process ensures that sites with the greatest potential impacts to human health and environmental safety are addressed first.

When sites rank sufficiently high on the remediation list, the Department initiates remediation activities by obtaining site access from the property owner. Once the site access agreement is executed, the Department will either utilize a local government entity

through an interagency cooperative agreement or will solicit competitive bids for the project. Of the 102 remediation projects that have been completed or are in-progress, 17 were remediated using interagency cooperative agreements with local governments such as the City of Montgomery, the Geneva County Commission, the Bullock County Commission, and the Lamar County Engineering Department. The remaining remediation projects were awarded in accordance with State bid law to private contractors.

Since program inception in 2009 and continuing through FY10, the Department has issued 51 Notices to Proceed for remediation activities obligating \$1,581,601.87 of Solid Waste Funds. From the 46 completed solid waste remediation projects, contractors and local governments have removed and properly disposed of approximately 6,750 tons of solid waste materials.

The Department’s first solid waste remediation project was located on Sweet Bethel Road in Coden, Mobile County, Alabama. The project was competitively bid and awarded at a cost of \$48,275.00. The project began in October 2009 and was completed in November 2009. The contractor removed and disposed of 660 cubic yards of solid waste material from the site.



Sweet Bethel Road Site (Mobile County) Pre-Removal



Sweet Bethel Road Site (Mobile County) Post-Removal

Another solid waste remediation project was located on Forest Avenue in Jackson, Clarke County, Alabama. The project was awarded for a cost of \$25,000.00. The project began in December 2009 and was completed in February 2010. The contractor removed and disposed of 30 tons of solid waste material from the site.



Forest Avenue Site (Clarke County) Pre-Removal



Forest Avenue Site (Clarke County) Post-Removal

One of the Department's largest remediation efforts was located on Clark Bottom Road in Berry, Fayette County, Alabama. The winning project bid was \$198,588.00. The project began in December 2009 and was completed in February 2010. The contractor removed and disposed of nearly 200 tons of solid waste material from the site.

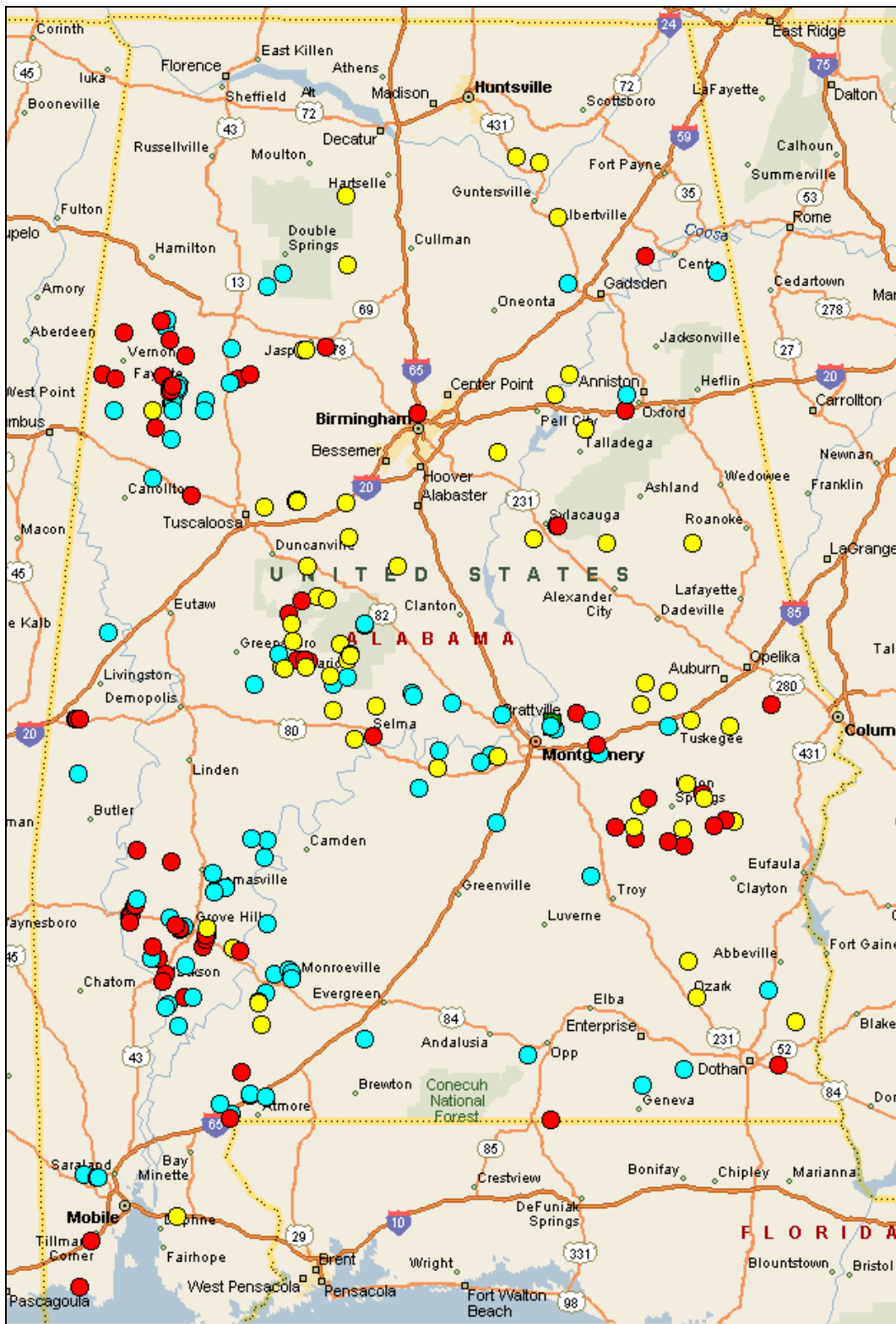


Clark Bottom Road Site (Fayette County) Pre-Removal



Clark Bottom Road Site (Fayette County) Post-Removal

UNAUTHORIZED SOLID WASTE DUMP SITE REMEDIATION LOCATIONS



- Completed solid waste dump site remediation projects
- Solid waste dump site remediation projects in-progress
- Solid waste dump site remediation projects listed and ranked

Recycling and Waste Minimization

Prior to the passage of the SWRMMA, resources were not available to develop programs or provide support to statewide recycling and waste minimization activities. Funding through the Act provided for additional personnel in the Materials Management Section of the Solid Waste Branch and for development of programs and activities to provide for regulation and reporting of recycling within the state. Such programs include recycling grants and recycling facility regulations, as well as additional actions to track the current state of recycling in the state and to establish and further progress towards a statewide recycling goal.

The ADEM Recycling Program staff members are assigned geographic service areas and are responsible for overseeing the registration, inspection, data management and compliance of registered facilities, as well as recycling grant management within those service areas. Leveraging of resources and assistance with program development is provided through partnerships with other recycling organizations such as the Alabama Recycling Coalition (ARC) and the Southeast Recycling Development Council (SERDC). Examples of these partnership activities include a series of workshops held throughout the state in 2009 and 2010 and the SERDC bin grant program which provided over 1,000 bins to assist local recycling programs with collection of recyclable materials within Alabama communities.

In October 2009, the Department modified its Solid Waste Program regulations to establish a statewide waste reduction and recycling goal, as required by the SWRMMA. Utilizing the limited amount of statewide recycling data available at the time, the Department set this goal at 25%, just as it had been in the 1991 State SWMP. The regulations require that the goal be evaluated triennially and revised as warranted in order to promote increased recycling and beneficial use within the State.

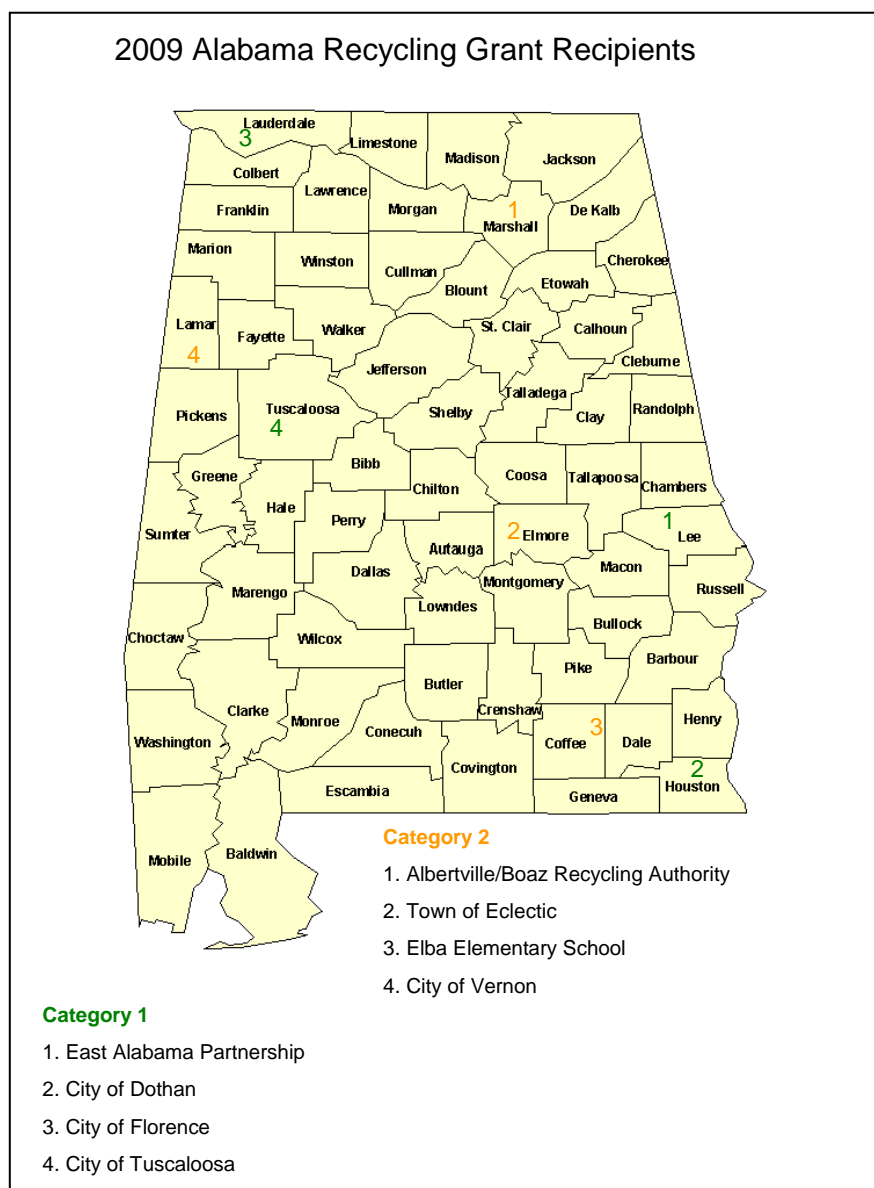
Recycling Grants

The Alabama Recycling Fund (ARF) Grants Program received 37 applications in 2009 requesting grant funding of almost \$7 million. Eight grants were awarded, totaling over \$1.1 million. Priority was given to joint projects of regional nature. Under the ARF, 60% of the funds are designated for larger projects (Category 1 – greater than 40,000 households), and no single award may be greater than 20% of total funds available. The lead applicant must be a local government or local government non-profit. In 2010, 23 applications were submitted requesting funding over \$7 million. Sixteen grants were awarded totaling over \$1.7 million.



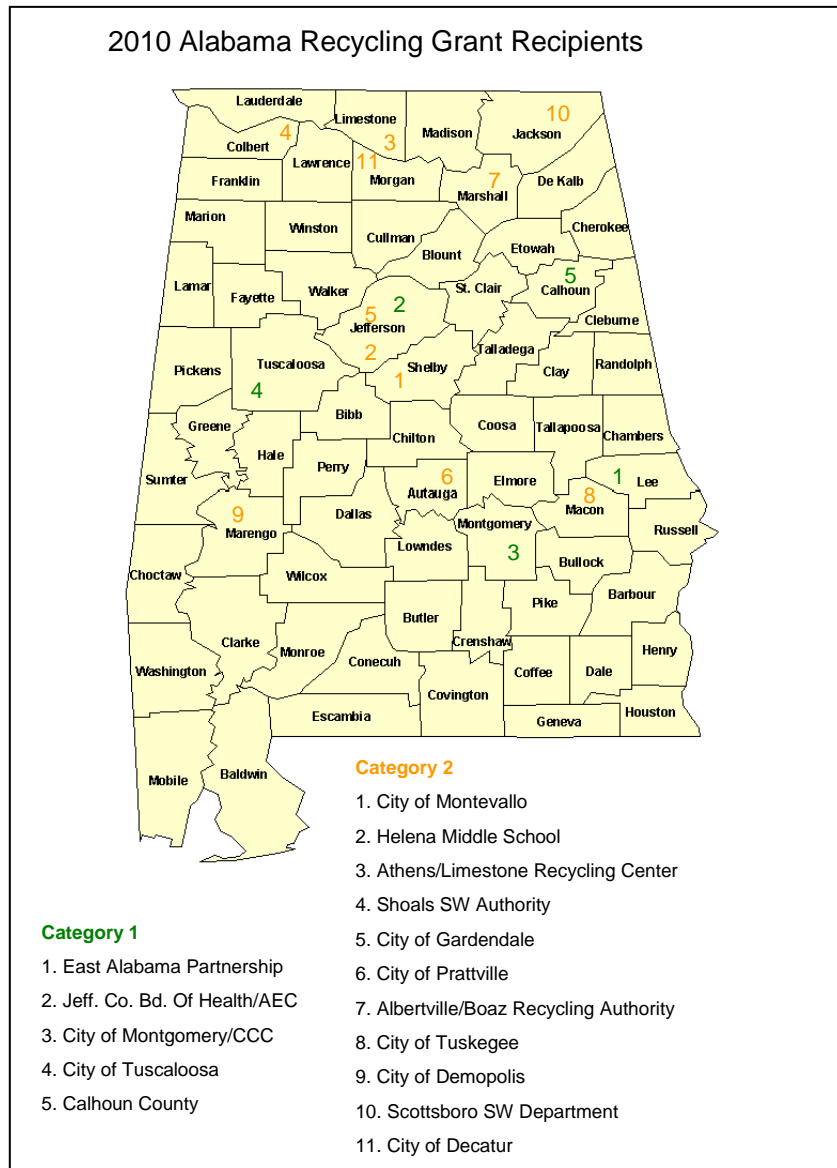
2009 ARF Grants Awarded

Recipient	Grant Amount
Albertville/Boaz	\$259,740.00
Dothan	\$223,500.00
Eclectic	\$31,400.00
Elba Elementary School	\$1,061.62
Florence/Lauderdale County	\$196,562.00
East Alabama Recycling Partnership	\$120,139.00
Tuscaloosa/Northport/Tuscaloosa County	\$279,150.00
Vernon	\$50,000.00



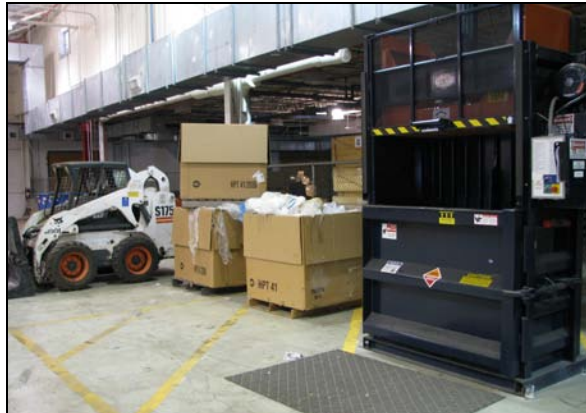
2010 ARF Grants Awarded

Recipient	Grant Amount
Albertville/Boaz	\$144,308.00
Athens/Limestone County	\$58,996.00
Calhoun County/Talladega County	\$252,350.00
Decatur	\$42,235.88
Demopolis	\$18,500.00
Gardendale	\$30,100.00
Montevallo	\$154,093.00
Montgomery/Montgomery Clean City Commission	\$193,868.12
Prattville	\$13,500.00
Tuscaloosa/Northport/Tuscaloosa County	\$133,400.00
Tuskegee	\$13,740.00
East Alabama Recycling Partnership	\$169,701.00
Helena Middle School	\$1,400.00
Jefferson County	\$276,368.00
Scottsboro	\$143,202.00
Shoals Solid Waste Authority	\$65,920.00





Dothan Recycling Partnership



Tuscaloosa Northport Recycling



East Alabama Recycling Partnership



City of Montevallo Recycling

Recycling Facility Regulations

Regulations requiring a one-time registration and certain compliance activities for recycling facilities were adopted in June 2010, and may be found in ADEM Administrative Code 335-13-3. The Department began development of these regulations in late 2009. A stakeholder group was formed, which consisted of representatives of manufacturing, end users, environmental advocacy groups, the ARC, and local governments. The rules require each facility who is the initial receiver of recyclable material to register with the Department and to comply with facility standards involving receipt and storage of recyclable materials, as well as certain operational requirements. The registration form includes a facility description, general site information, and operational plans. Also required are facility signage, labeling and storage recommendations, record keeping and reporting requirements. Each registered facility is required to submit a Semi-annual Report to assist the Department in tracking progress towards the statewide waste minimization and recycling goal. A summary of these activities will be included in the 2013 biennial report.

Future Program Goals

The Department will continue to work with local communities, elected officials, the regulated community and other stakeholders to refine and improve the management of solid waste in Alabama. The accomplishments of the past two years lay a solid foundation for future program enhancements. Chief of among these future goals is increased compliance assistance at permitted landfills and a greater emphasis on the development of recyclable materials markets.

With a greater inspection presence by ADEM staff and a better trained network of operators, permitted landfills should continue to see an increased rate of compliance. By increasing its compliance assistance efforts, ADEM may be able to correct many nagging non-compliance issues at certain facilities. Small, government-owned landfills still face a number of non-compliance issues as a result of their limited resources available for technical assistance. While ADEM is a regulatory agency, its staff possesses a wealth of operational and technical knowledge concerning proper solid waste management. In the future, the ADEM Solid Waste program will strive to continue providing compliance assistance as an integral part of its implementation, especially targeting landfills owned and operated by local governments.

In expanding recycling efforts within the State, ADEM will continue to work with the recycling industry through its involvement in groups such as ARC and SERDC. Additionally, in order to encourage the development of markets for certain commodities, priority may be given in future grant cycles for projects that focus on certain material streams. Further, as authorized by the SWRMMA, the Department may consider the development of regulations requiring bans on landfill disposal of certain wastes in order to promote recycling. Solid wastes that may be subject to such a ban could include whole scrap tires; beverage containers; and appliances, also referred to as “white goods.”

Over the next two years, the Department will begin the process of registering and inspecting recycling facilities. Primary within this undertaking will be the receipt and management of data on the quantities of recyclable materials processed by these facilities. Historically, the Department has been provided with very limited data regarding the amount of recycling that occurs in Alabama. Under this new program, significant progress should be made toward obtaining recycling data within the State.