

# Solid Waste Biennial Report

October 1, 2010 - September 30, 2012

## 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 Alabama Department of Environmental Management (ADEM) and numerous stakeholders to pass needed revisions to the State Solid Waste statute. The four main purposes to the SWRMMA are as follows:

- Establish a Statewide waste reduction/recycling program, goal and measurement methodology;
- Provide stable funding for ADEM'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 2008, the ADEM Solid Waste staff has grown from six full-time equivalents to more than twenty-five. 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 96% in FY12, as determined by the number of formal enforcement actions relative to the number of compliance inspections conducted.

Since the passage of the Act, the Department 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, a Statewide Solid Waste Reduction and Recycling goal, and the Recycling Facility and Composting programs.

The regulation of recycling efforts in the State is a new area of emphasis for the ADEM, but is one that the Department has fully embraced. Through the ARF grants, local governments have been awarded more than \$7 million dollars by ADEM since its inception in 2009. By returning these funds to local communities, ADEM has played a role in the creation or expansion of nearly twenty local recycling programs which have been 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 since passage of the SWRMMA and is excited by the challenges and opportunities that lie ahead for its Solid Waste Program. The Department looks forward to the continued support for these efforts by Governor Bentley, the Legislature, and the citizens of Alabama.



## Background

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 October 1, 2011 through September 30, 2012.

### Solid Waste Program Regulatory Development

The Solid Waste Program regulations (Division 13 of the ADEM Administrative Code) were revised twice from October 2010 to September 2012 to reflect changes in the law. These revisions were made to incorporate new statutory requirements into the existing program regulations (recycling and composting) and redefine existing definitions (removing coal ash exemption).

Additionally, the State Legislature directed the Department to evaluate and make recommendations regarding solid waste management in the State of Alabama. As a result of this directive, the Department partnered with Auburn University to conduct an independent assessment of Alabama's current solid waste regulations. To date, Auburn University has completed the planned public meetings and a draft of the final report is expected to be submitted to the Department in early 2013.

## 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 <sup>st</sup> Quarter FY11	1,027,352	615,260	290,934	19,317	460,720	8,536
2 <sup>nd</sup> Quarter FY11	936,514	84,304	283,497	2,353	323,096	8,656
3 <sup>rd</sup> Quarter FY11	1,105,740	99,127	428,082	27,219	340,015	9,675
4 <sup>th</sup> Quarter FY11	1,108,267	123,780	388,423	28,425	516,989	10,083
1 <sup>st</sup> Quarter FY12	987,150	95,789	250,341	3,031	293,384	8,901
2 <sup>nd</sup> Quarter FY12	1,213,766	89,483	241,597	38,367	797,481	9,162
3 <sup>rd</sup> Quarter FY12	1,077,681	38,570	324,553	15,604	896,516	9,085
4 <sup>th</sup> Quarter FY12	1,191,364	91,516	772,666	23,479	753,563	8,851

\*All volumes reported in tons.



## 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.

### *Recycling/Solid Waste Funds Collected:*

FUNDING PERIOD	TOTAL
1 <sup>st</sup> Quarter FY11	\$1,289,317.40
2 <sup>nd</sup> Quarter FY11	\$1,020,899.10
3 <sup>rd</sup> Quarter FY11	\$741,874.98
4 <sup>th</sup> Quarter FY11	\$977,415.36
1 <sup>st</sup> Quarter FY12	\$941,088.78
2 <sup>nd</sup> Quarter FY12	\$806,647.24
3 <sup>rd</sup> Quarter FY12	\$720,148.48
4 <sup>th</sup> Quarter FY12	\$838,985.74

### *Funds Allocated:*

FUNDING PERIOD	RECYCLING	DUMP REMEDIATION	TOTAL
Fiscal Year 2011	\$1,161,552.62	\$2,065,929.99	\$1,161,552.62
Fiscal Year 2012	\$1,711,682.00	\$1,103,417.82	\$3,293,283.87

Prior to the program funding provided by the SWRMMA, the Department's Solid Waste Program had a 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*

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 UAD 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 UAD sites, along with legal support from two staff attorneys. During this reporting period, the number of solid waste landfill compliance inspections were 580 in fiscal year 2011 and nearly 600 in fiscal year 2012. As a result of this increased compliance presence at permitted landfills, the Department has continued to see high compliance rates for these facilities, approximately 96% compliance rate from FY2011 through FY2012.



Landfill Operator Certification Program

In November 2009, the Department held its first landfill operator certification training class. Since that time, eight additional training courses have been provided throughout the State. As a result of the training, 460 applications for certified landfill operators have been received by the Department, 442 applications have been approved, 6 applications have been denied and 12 applications are pending. It is the intent of the Department to continue providing and overseeing landfill operator certification training as necessary.

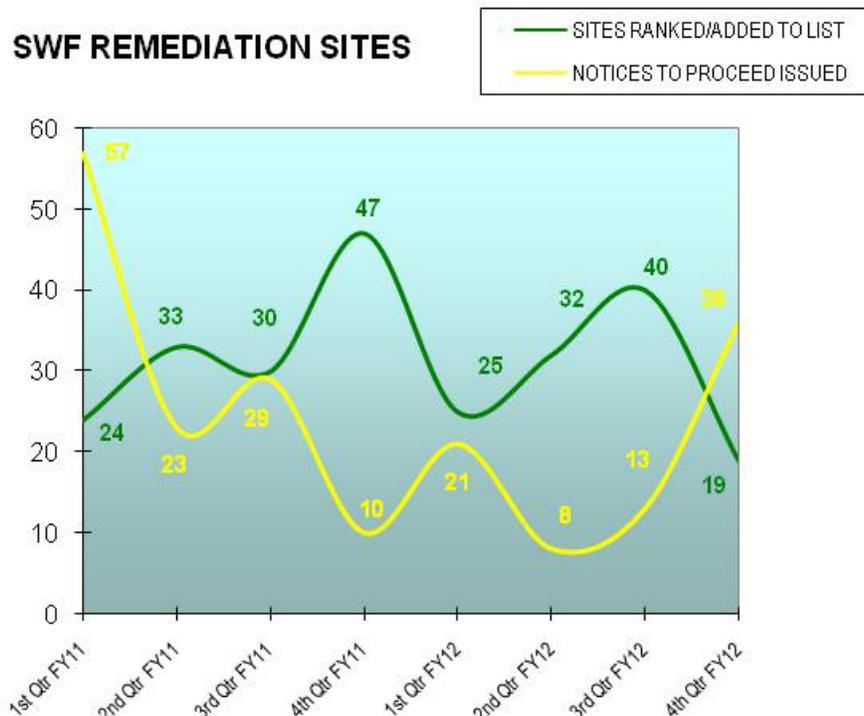
Unauthorized Solid Waste Dump Site Investigations

As with the review of solid waste landfill permit applications, the previously limited personnel resources hampered the Department’s ability to investigate UAD 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 UAD sites identified across Alabama is through 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), the UAD site is eligible for remediation using monies from the Solid Waste Fund, which was established by the SWRMMA.

**SWF REMEDIATION SITES**



Once a site has been deemed 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 made a priority.

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 126 remediation projects that have been completed or are in-progress, 23 were remediated using interagency cooperative agreements with local governments. The remaining remediation projects were awarded in accordance with State bid law to private contractors.

During FY 2011 and FY 2012, the Department has issued 197 Notices to Proceed for remediation activities obligating \$3,169,347.81 of Solid Waste Funds. From the 121 completed solid waste remediation projects during this same time period, contractors and local governments have removed and properly disposed of approximately 15,600 tons of solid waste materials. Examples of successful remediation projects are discussed below:

This project was located on County Roads 12 and 26 near Bankston, Fayette County, Alabama. The project was awarded for a cost of \$38,577.00. The project began in May 2011 and was completed in June 2011. The contractor removed and disposed of 326 tons of solid waste material from the site.



Fayette Co. Roads. 12 & 26 Site (Fayette County) Pre-Removal



Fayette Co. Roads. 12 & 26 Site (Fayette County) Post-Removal

This project was located on Winston County Road 3508 near Natural Bridge, Winston County, Alabama. The project was conducted by the Winston County Commission, as an interagency cooperative agreement, at a cost of \$32,591.87. The project began in May 2012 and was completed in June 2012. The contractor removed and disposed of approximately 125 tons of solid waste material from the site.



Winston Co. Road 3508 Site (Winston County) Pre-Removal



Winston Co. Road 3508 Site (Winston County) Post-Removal

The Department completed several remediation projects in Tuscaloosa County, including one in Northport and one in Tuscaloosa. The remediation project located in Northport was conducted at a cost of \$23,424.50 and was completed in less than two months. The contractor removed and disposed of approximately 140 tons of solid waste material and 375 scrap tires. The remediation project, which was located in a mobile home park in Tuscaloosa, was completed at a cost of \$38,000, and the contractor removed and disposed of approximately 260 tons of solid waste material.



Reed Road Site (Tuscaloosa County) Pre-Removal



Reed Road Site (Tuscaloosa County) Post-Removal



Thomas Road Site (Tuscaloosa County) Pre-Removal



Thomas Road Site (Tuscaloosa County) Post-Removal

### Recycling and Waste Minimization

Funding through the Act has 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 FY 2011 and 2012 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.

### Recycling Grants

The ARF Grants Program received 34 applications in FY2011 requesting grant funding of almost \$5 million. Twenty grants were awarded, totaling over \$2 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), 20% of the funds are designated for smaller projects (Category 2 – less than 40,000 households), the remaining 20% can be awarded to applicants in either category, 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 FY2012, 25 applications were submitted requesting funding over \$4.1 million. Fifteen grants were awarded totaling over \$2 million.



**2011 ARF Grants Awarded**

<b>Recipient</b>	<b>Grant Amount</b>
Jefferson County Department of Health	\$220,348.00
Calhoun County Commission	\$249,111.00
Birmingham-Jefferson Convention Center	\$50,588.20
City of Huntsville	\$30,810.00
Baldwin County Commission	\$62,850.00
City of Tuscaloosa	\$212,000.00
City of Dothan	\$142,000.00
East Alabama Recycling Partnership	\$232,826.00
Autauga County Commission	\$34,500.00
Daphne East Elementary	\$2,475.00
City of Selma	\$86,991.00
Shoals Solid Waste Authority	\$96,900.00
Athens/Limestone Recycling Center	\$96,269.00
City of Sylacauga	\$126,768.21
City of Eufaula	\$42,773.18
City of Ozark	\$2,329.00
Elmore County Commission	\$116,723.00
Clay County Commission	\$14,471.25
City of Guntersville	\$65,224.67
City of Florence	\$113,998.00

## 2011 Alabama Recycling Fund Grant Recipients



- 1 - City of Selma
- 2 - City of Ozark
- 3 - City of Sylacauga
- 4 - City of Huntsville
- 5 - City of Florence
- 6 - City of Tuscaloosa
- 7 - City of Dothan
- 8 - City of Eufaula
- 9 - Autauga County Commission
- 10 - Daphne East Elementary
- 11 - Jefferson County Department of Health
- 12 - Shoals Solid Waste Authority
- 13 - Athens/Limestone Recycling Center
- 14 - Birmingham-Jefferson Convention Center
- 15 - East Alabama Recycling Partnership
- 16 - Calhoun County Commission
- 17 - Elmore County Commission
- 18 - Clay County Commission
- 19 - City of Guntersville
- 20 - Baldwin County Commission

### 2012 ARF Grants Awarded

Recipient	Grant Amount
City of Florence	\$218,297.00
City of Daphne	\$72,941.86
Jefferson County Department of Health	\$246,800.00
City of Tuscaloosa	\$179,600.00
City of Dothan	\$248,000.00
City of Huntsville	\$10,189.00
East Alabama Recycling Partnership	\$110,963.00
Mobile County Commission	\$141,500.00
City of Livingston	\$187,332.00
City of Columbiana	\$7,246.00
City of Guntersville	\$34,223.00
Elmore County Commission	\$83,083.00
City of Troy	\$292,000.00
Bibb County Commission	\$112,328.50
Albertville/Boaz Recycling Authority	\$64,503.00



## 2012 Alabama Recycling Fund Grant Recipients



- |                          |  |
|--------------------------|--|
| 1 – City of Troy         | 8 – City of Columbiana                     |
| 2 – City of Daphne       | 9 – City of Livingston                     |
| 3 – City of Guntersville | 10 – Mobile County Commission              |
| 4 – City of Huntsville   | 11 – Jefferson County Department of Health |
| 5 – City of Florence     | 12 – Elmore County Commission              |
| 6 – City of Tuscaloosa   | 13 – Bibb County Commission                |
| 7 – City of Dothan       | 14 – Albertville/Boaz Recycling Authority  |
|                          | 15 – East Alabama Recycling Partnership    |



Dothan Recycling Partnership



Montgomery Electronics Recycling Event



East Alabama Recycling Partnership



East Alabama Recycling Partnership

### Recycling Facility Regulations

Regulations requiring a one-time registration and certain compliance activities for recycling facilities was adopted in June 2010, and can be found in ADEM Administrative Code 335-13-3. 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. Alabama ReTRAC Connect has been completed, and registered facilities and others required to report will begin utilizing this system in early 2013. A summary of these activities will be included in the 2013 biennial report.

## 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 to date have provided 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. 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 and efforts will continue to be made in the education and outreach of regulated entities.

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.”

Beginning in early 2013, the Department expects to 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.