

# Alabama's Scrap Tire Program



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of Environmental  
Management

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## BIENNIAL REPORT 2004-2006

Report for the  
Alabama Legislature  
and the  
Alabama Scrap Tire Commission

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# *Executive Summary*

*This document is the first Scrap Tire Biennial Report as required by the Scrap Tire Environmental Quality Act, Ala. Code § 22-40A-21(k) (2006 Rplc. Vol.), as prepared by the Alabama Department of Environmental Management (ADEM) on behalf of the Alabama Scrap Tire Commission (STC) and presented to the Alabama Legislature. The report addresses Alabama's Scrap Tire Program activities as undertaken by ADEM and the STC.*

## ***Accomplishments and Results August 2004 through March 2007***

- Alabama generates an estimated 5 million scrap tires annually. Up to an additional 4 million scrap tires are shipped to Alabama annually from other states.
- An estimated 7,092,000 scrap tires from all sources are beneficially reused annually. Approximately 96.5% are utilized as fuel or substitute raw material and 3.5% are reused through engineered and other uses.
- Since inception, over 675,000 scrap tires have been removed from 48 stockpile or illegal disposal sites, not including those removed from the Four Star Recycling Site detailed below.
- The Scrap Tire Fund remediation project of the former Four Star Recycling site in Attalla, Etowah County, has resulted in 20,933 tons of scrap tire material being removed from the site (equivalent to 2,093,267 passenger tires) with expenditures of \$1,857,776. The project, slated for completion in August 2009, is currently estimated to be 25% complete. Over 50% of material removed from this site has been beneficially reused.
- 2,026 Scrap Tire Receiver Registrations have been issued since the regulatory program began issuing Registrations in late 2004.
- 144 Scrap Tire Permits have been issued for the transporting, sorting and processing of scrap tires.
- Over 1,500 inspections of regulated, registered and permitted facilities have been completed.
- Over 350 inspections and assessments of scrap tire sites have been completed.
- Over 200 enforcement actions have been initiated in cases of regulatory non-compliance.



# Executive Summary

## *Financial Statement Summary* *August 2004 through March 2007*

The Alabama Scrap Tire Fund (STF), as authorized by the Alabama Scrap Tire Environmental Quality Act, provides the funding for administration of the Alabama Scrap Tire Program and the aspects enumerated in the Act including: regulation and enforcement, site remediation and market development.

**Table I**  
**Alabama Scrap Tire Fund**

The Fund has generated fee revenues of	\$13,780,435
Interest Income	\$704,177
Transfers	\$76,691
Revenue Total	\$14,561,302
Scrap Tire Program expenditures by ADEM	\$2,123,163
Site Remediation expenditures	\$1,857,776
STC and other expenses	\$829
Fund Balance	\$10,579,535
Anticipated/encumbered expenditures for Site Remediation	\$8,599,949
Estimated ADEM expenditures for next fiscal year	\$840,000

The STF is projected to decline in future years with the recent establishment of a small-site cleanup program for innocent landowners; expected low, cost recoveries from site remediation projects; and increased market development activities.

## *Legislative Update*

The Alabama Scrap Tire Environmental Quality Act was amended during the 2005 and 2006 Sessions of the Alabama Legislature. Accordingly, the Scrap Tire Program regulations contained in ADEM Administrative Code 335-4 have also been revised. These amendments refined the program to clarify certain regulatory provisions, allow the granting of variances to enhance beneficial reuse, as well as remediate smaller accumulation and disposal sites concurrently with larger STF sites.



# *Introduction*

The Alabama Scrap Tire Environmental Quality Act established a mechanism for the cleanup of scrap tire stockpiles and for the collection, transporting, processing and recycling or disposal of all scrap tires that are generated or imported into Alabama. The Act established the Scrap Tire Fund (STF) as support for the Alabama Scrap Tire Program. The STF is utilized as specified in the Act and as follows:

- ❖ To pay the costs of remediation, abatement, removal, or other remedial action within the range of 45 percent to 75 percent of monies deposited to the Scrap Tire Fund during the previous budget year;
- ❖ To pay the costs of the Department associated with the development and enforcement of regulations, up to 20 percent of monies deposited to the Scrap Tire Fund during the previous budget year including personnel, training, materials, and equipment relating to administration of this chapter and for the training of enforcement personnel within the department, county, and other governmental organizations;
- ❖ To administer a program, within the range of zero percent to 20 percent of monies deposited to the Scrap Tire Fund during the previous budget year, managed by ADECA, directed at promoting and developing markets as an alternative to disposal;
- ❖ To fund the programs delegated by the Department to counties for enforcement of regulations, not to exceed 10 percent of monies deposited to the Scrap Tire Fund during the previous budget year;
- ❖ To pay the tire retailer, not to exceed five percent of fees collected, for collection and accounting costs associated with collection of the fee and the monthly distribution to the Department of Revenue;
- ❖ To pay the costs of administration of the Department of Revenue, not to exceed two percent of monies, associated with establishment of the Scrap Tire Fund, receipt of funds, disbursements, and auditing revenues in the Scrap Tire Fund.

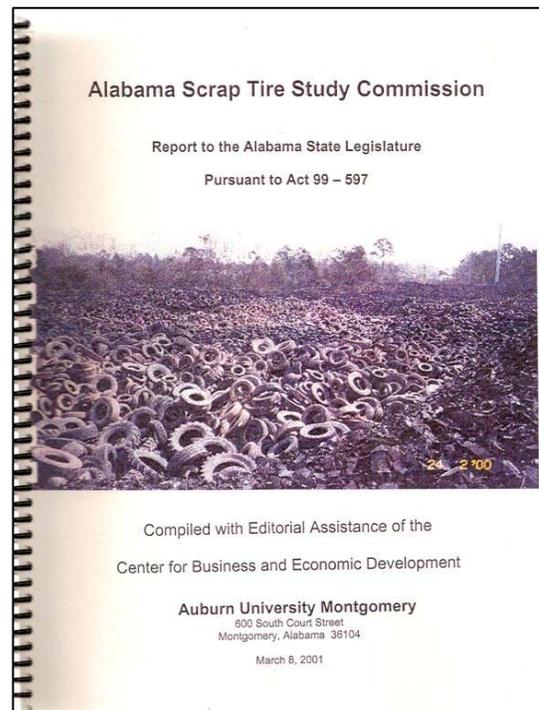


# History

Pursuant to Act 99-597, the Alabama Scrap Tire Study Commission (STSC) submitted a report (March 8, 2001) to the Alabama Legislature that detailed the generation, accumulation, challenges and opportunities to more effectively manage scrap tires in Alabama. The report was the culmination of work performed by a broad stakeholder group and included more than two years of meetings and research involving representatives of industry, government and the public. Furthermore, the STSC was charged by Joint Resolution SJR-152 to clarify sections of scrap tire legislation that had been identified. The STSC subsequently drafted legislation to address those issues.

Results of work performed by the STSC revealed informational areas of concern and some that were surprising at the time of the report. Among these, approximately 5 million scrap tires were estimated to be generated annually in the state, an estimated 14 to 20 million tires were stockpiled or illegally disposed, and an additional 4 to 5 million tires were being shipped to Alabama from out-of-state sources annually. And, Alabama was the only state in the Southeast that had not enacted an adequately-funded, comprehensive cleanup and management program nor extensive regulatory structure to address the problem. While the former system in place did contain licensing and enforcement provisions for scrap tire receivers and transporters, enforcement responsibility occurred at the county level. Funding was inadequate to perform routine compliance and enforcement activities at a level necessary to combat the problem, especially when confronted with the removal of accumulated stockpiles.

To address these and other issues acknowledged in the report, the STSC made a number of recommendations including options for addressing existing stockpiles. Four options were brought forth: 1) manage in place without cleanup, 2) cleanup with existing resources, 3) task the Department of Corrections with the cleanup, or 4) establish a new funding mechanism. Under Option 1), management of accumulations without cleanup would not eliminate the risks to public health and welfare; therefore, this was not deemed a viable option. Under Option 2), existing resources would not provide the estimated \$10-20 million to address the problem. Options 3) and 4) remained, but the STSC concluded that a cleanup fund supported by scrap tire fees was an essential component of the task to eliminate existing and prevent the formation of future accumulations. As a result, the STSC recommended that a \$1.00 per tire fee collected at the point of sale be instituted to remediate existing stockpiles and the remainder of collected funds be directed toward enforcement and incentive programs to address future problems. The STSC included these recommendations in the drafting of the Scrap Tire Environmental Quality Bill. After discussions with scrap tire



programs in other states and existing state agencies in Alabama, the STSC recommended that the Alabama Department of Environmental Management would be the most appropriate agency in which to house a comprehensive program.

The draft bill addressed stockpile remediation, regulation and enforcement, and market development. In addition, the bill would abolish the Scrap Tire Study Commission and establish the Alabama Scrap Tire Commission (STC) to oversee the implementation of the Act, authorizing the new Commission to spend and allocate funds in the Scrap Tire Fund for the purposes authorized in the Act.

The legislation was introduced during the 2003 Session of the Alabama Legislature by Senator Larry Means in the Senate and Representative Craig Ford in the House. The bill was signed into law by Governor Riley in June 2003. The Alabama Scrap Tire Environmental Quality Act provided a funding mechanism for scrap tire management through the use of a \$1.00 per tire point of sale collection system on the sale of each new, used or retreaded tire sold in Alabama. The Act also prescribed how collected funds were to be allocated to support activities of fund disbursement, regulation, marketing, site remediation, and county delegation. Additionally, it directed ADEM to establish a ranking system for accumulation sites and adopt regulations for the management, transportation, site remediation, and disposal or reuse of scrap tires.

**Alabama Scrap Tire Commission**

Comprised of the following or their  
representatives according to the Alabama Scrap  
Tire Environmental Quality Act

Governor

Lieutenant Governor

Speaker of Alabama House of Representatives

ADEM Director

State Health Officer

ADECA Director

Association of County Commissions

Alabama Tire Dealers Association

Rubber Manufacturers Association

Business Council of Alabama

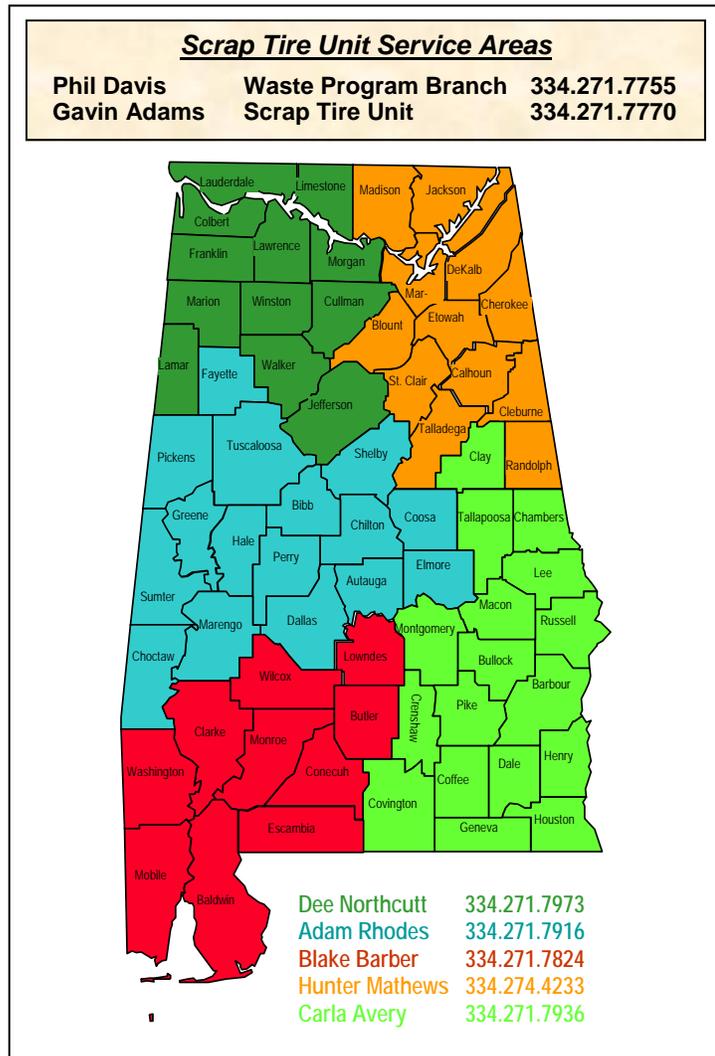
The STC met initially in September 2003 to establish operating procedures and formed a Regulation Review Team to initiate detailed review of regulations drafted pursuant to the Act. The Alabama Scrap Tire Environmental Quality Act required ADEM to have its program begin October 1, 2004. In February 2004, the STC, through ADEM, submitted proposed regulations to the Joint Committee on Administrative Regulation, following all procedures established under the Administrative Procedures Act and the Environmental Management Act. On June 29, 2004, the Environmental Management Commission adopted the new Division 335-4 regulations for the Scrap Tire Program into the ADEM Administrative Code. These regulations became effective August 4, 2004.

With continued input from the STC, ADEM began the process of staffing and developing the program. In conjunction with the Alabama Tire Dealers Association, other trade and industry associations, and the media, the Department initiated strategies to notify those entities subject to

regulation. The regulatory program provides for the registration of scrap tire receivers, including separate classes for tire retailers, and salvage and fleet operations. The permitting program provides for permitting of scrap tire transporters, processors and end-users, including provisions for the storage and transportation of scrap tires. Manifesting shipments utilizing an approved form is a requirement to provide ADEM with useable information in determining proper reuse or disposal of scrap tires within the state. Procedures were also established by regulation for the remediation of scrap tire sites, including an approved contractor and site ranking system.

The ADEM Scrap Tire Unit is comprised of one Unit Chief, seven permit writer/inspectors and one administrative support assistant. Of these, two technical staff are primarily charged with investigation of complaints regarding non-compliant activities or instances of illegal disposal, as well as identification of unregistered and unpermitted facilities. All staff are assigned service areas geographically by population and are responsible for registration and permitting, inspection, data management of registered and permitted facilities, and compliance and enforcement. Staff are also assigned specialty areas such as database development, software and equipment maintenance and review of financial assurance data for compliance purposes.

ADEM has incorporated innovative methods for its registration, permitting and site remediation activities. To provide real-time access to facility and site data, staff use Tablet PCs to perform facility inspections and complaint investigations. Electronic filing eliminates the requirement for maintenance of paper records and speeds data retrieval. Global Positioning System (GPS) points are recorded for each facility and site, facilitating the use of Geographic Information System (GIS) tools and navigation. An Oracle database is utilized for tracking activities of registered and permitted entities. Information gathered through this and other sources (e.g., data from the Alabama Department of Revenue, including collections and delinquencies) can be cross-referenced to aid in compliance determinations or to prioritize inspections.



# Registration and Permitting

In accordance with the provisions of the Alabama Scrap Tire Environmental Quality Act, ADEM is required to regulate facilities involved in the generation, transportation, processing, management and end-use or disposal of scrap tires.

- ❖ Facilities that generate more than ten scrap tires per year are required to register as scrap tire receivers. Those that sell new, used or retread tires are Class One Receivers, who must also register with the Department of Revenue for collection of the \$1.00 per tire scrap tire environmental fee. All others, including government, fleet management, and dismantling operations that generate more than ten scrap tires per year must register as Class Two Receivers.
- ❖ Those who transport more than eight scrap tires per shipment are required to obtain a Scrap Tire Transporter Permit.
- ❖ Processors who sort, size, reduce or alter scrap tires by any physical or chemical means, or who incorporate scrap tires into an end-product must obtain a Scrap Tire Processor Permit.
- ❖ Facilities that have other permits necessary to utilize scrap tires as a fuel source, substitute raw material, or for engineered use must receive exemptions or obtain permits for those activities.



The image shows a registration form from the Alabama Department of Environmental Management (ADEM). The form is titled "Alabama Department of Environmental Management Scrap Tire Facility Registration". It contains the following information:

BUSINESS NAME:	Treadway Tire
FACILITY NAME:	Treadway Tire
FACILITY LOCATION:	1008 Main Street Tuscaloosa, Alabama 35401
REGISTRATION NUMBER:	STP00000620
REGISTRATION TYPE:	Class One Receiver: Tire Dealer
MAXIMUM AMOUNT OF TIRE MATERIALS ALLOWED TO BE ACCUMULATED:	1000

Below the table, there is a small disclaimer: "In accordance with and subject to the provisions of the Alabama Scrap Tire Environmental Quality Act, Code of Alabama 1975, §§22-2-12 to 22-2-16, the Alabama Environmental Management Act, amended Code of Alabama 1975, §§22-2-17 to 22-2-19, and rules and regulations adopted hereunder, and subject further to the conditions and terms of this facility registration, the Registrar is hereby authorized to operate the scrap tire facility at the described facility location."

At the bottom, the ISSUANCE DATE is listed as March 27, 2007, and there is a signature of the Registrar.

Registered scrap tire receivers are required to comply with regulatory provisions to include the following:

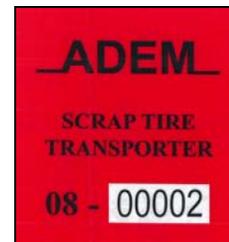
- ◇ Storage within approved limits;
- ◇ Implementation of vector control for outside storage;
- ◇ Maintenance of a scrap tire operating record;
- ◇ Use of approved manifest for shipment.

Permitted scrap tire transporters are required to comply with regulatory provisions to include the following:

- ◇ Maintenance of a scrap tire operating record;
- ◇ Use of approved manifest and transporter decals for shipment;
- ◇ Acceptance of scrap tires from registered/permitted facilities only;
- ◇ Maintenance of required financial assurance.

Requirements for scrap tire processors and those holding registrations as exempt processors, engineered use and other approved applications may include:

- ◇ Maintenance of any required financial assurance;
- ◇ Acceptance of scrap tires from registered/permitted facilities only;
- ◇ Compliance with storage requirements;
- ◇ Requirements for vector control, storage and fire prevention.



## Registration and Licensing Accomplishments

Registration and permitting of scrap tire facilities began in the fall of 2004. While most facilities have contacted the Department concerning their need for registration and permitting, additional facilities continue to be identified. ADEM Scrap Tire Unit staff utilize several means to determine those facilities required to be registered and/or permitted. Included is a review of the Department of Revenue's scrap tire fee collection data, Yellow Pages and internet searches, field investigations, and receipt of facility complaints from citizens.

Since inception, over 2,000 registrations have been issued to scrap tire receiver facilities. There have been 144 permits issued to scrap tire transporters and processors. Tables II and III provide a more detailed overview of these activities.

**Table II**  
**Alabama Scrap Tire Registrations and Permits**

Type	Total Issued 2004	Total Issued 2005	Total Issued 2006	Total Issued 2007	Type Total
Class One Receiver	524	809	276	62	1,671
Class Two Receiver	162	120	53	20	355
Transporter	27	46	24	7	104
Class One Processor	0	1	0	0	1
Class Two Processor	0	1	1	0	2
Class Three Processor	0	1	1	0	2
Class Four Processor	14	15	5	1	35
Exempt Fuel User	1	6	0	0	7



**Table III - Registration and Permit Issuance by County**

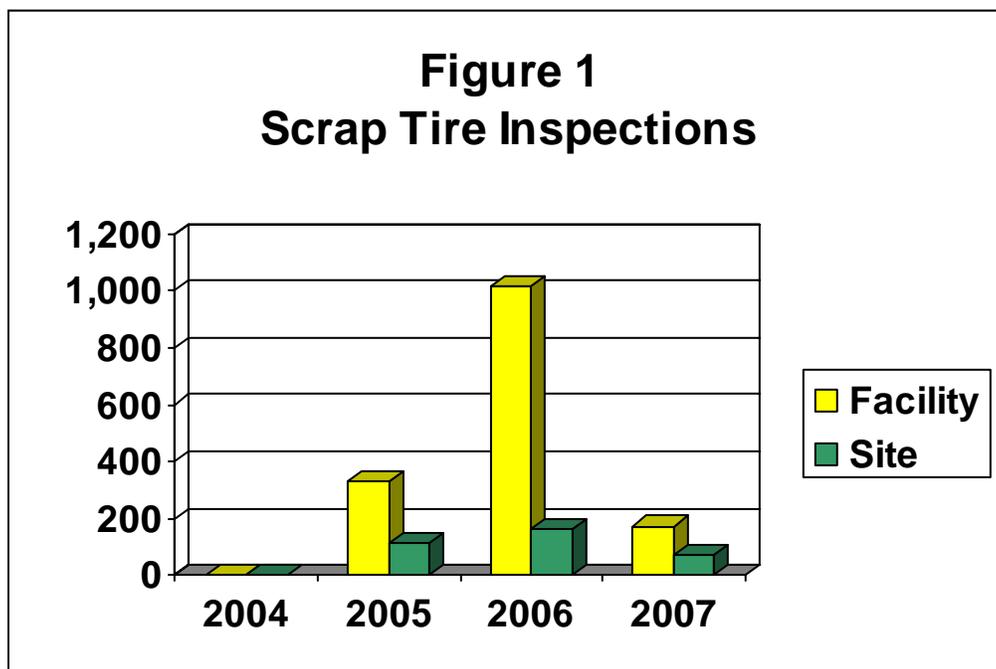
	Receivers	Transporters	Processors	Total County Facilities
Autauga	21	0	0	21
Baldwin	60	0	0	60
Barbour	19	2	2	23
Bibb	9	0	0	9
Blount	15	6	2	23
Bullock	4	0	0	4
Butler	16	1	1	18
Calhoun	69	5	2	76
Chambers	19	0	0	19
Cherokee	9	0	0	9
Chilton	34	0	0	34
Choctaw	11	0	0	11
Clarke	17	0	0	17
Clay	9	2	0	11
Cleburne	6	0	0	6
Coffee	42	0	0	42
Colbert	31	2	2	35
Conecuh	5	0	0	5
Coosa	1	0	0	1
Covington	30	5	3	38
Crenshaw	0	0	0	0
Cullman	43	9	5	57
Dale	27	0	0	27
Dallas	21	1	0	22
DeKalb	29	1	0	30
Elmore	29	2	1	32
Escambia	26	0	0	26
Etowah	32	0	0	32
Fayette	9	0	0	9
Franklin	12	1	0	13
Geneva	17	0	0	17
Greene	4	0	0	4
Hale	4	0	0	4
Henry	5	0	0	5
Houston	67	1	0	68
Jackson	18	0	0	18
Jefferson	262	13	5	280
Lamar	5	0	0	5
Lauderdale	27	2	0	29
Lawrence	13	0	0	13
Lee	52	0	0	52
Limestone	27	1	1	29
Lowndes	3	0	0	3
Macon	9	0	0	9
Madison	88	4	1	93
Marengo	11	0	0	11
Marion	12	0	0	12
Marshall	47	1	0	48
Mobile	129	8	6	143
Monroe	13	3	0	16
Montgomery	112	4	2	118
Morgan	39	0	0	39
Perry	7	0	0	7
Pickens	9	0	0	9
Pike	26	4	1	31
Randolph	16	0	0	16
Russell	24	1	0	25
St. Clair	49	1	0	50
Shelby	65	5	1	71
Sumter	9	0	0	9
Talladega	44	0	1	45
Tallapoosa	27	0	0	27
Tuscaloosa	75	0	0	75
Walker	35	1	1	37
Washington	3	0	0	3
Wilcox	10	0	0	10
Winston	8	3	0	11
Out-of-State	0	17	1	18
<b>Totals</b>	<b>2,026</b>	<b>106</b>	<b>38</b>	<b>2,170</b>

# Compliance and Enforcement

## Facility Inspection and Site Investigation

Ensuring the regulatory compliance of scrap tire facilities and proper management of scrap tires in Alabama is a primary component of the ADEM Scrap Tire Program. Efforts to inspect scrap tire facilities and perform site investigations of accumulation and disposal sites is commensurate with the goals of the site remediation program, specifically the elimination of existing scrap tire accumulations and the prevention of new site formation.

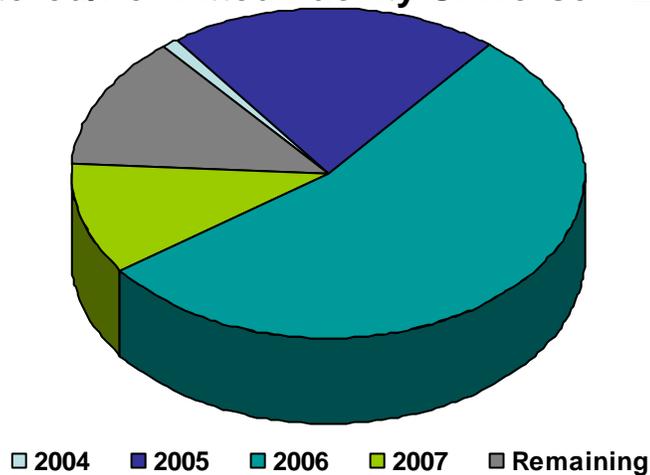
Scrap tire program staff perform inspections of registered and permitted facilities to ensure compliance with regulatory provisions. Staff are assigned geographic service areas and, following registration and/or permitting activities of facilities within those areas, schedule inspections to determine compliance. Even with the existing high facility to inspector ratio, over 85% of Alabama scrap tire facilities have been inspected on at least one occasion. Follow-up inspections are performed at those facilities where compliance issues have been noted. Staff perform inspections utilizing Tablet PCs and standardized inspection forms for efficiency and accuracy. In addition to visual observations of the facility, operating records and manifests are reviewed on-site to ensure proper scrap tire management and compliance with regulations. Compliance issues during the inspection are identified and detailed in an inspection report provided to the facility representative after each inspection. These inspection reports are also reviewed by the supervisor to assess any applicable enforcement action. In instances where enforcement action is warranted and issued, staff perform follow-up inspections to ensure the facility returns to compliance as stated in the action. Over 1,500 facility inspections have been performed to date.



With the large number of facilities within the regulatory universe and high volumes of complaints concerning scrap tire facilities (or sites) received by the program, two staff are assigned primarily to the investigation of complaints, and instances of scrap tire accumulations or illegal disposal. Field inspections include observations of site conditions, noting numbers and condition of scrap tire materials present, photographic documentation, GPS location and determination of property ownership.

To date, program staff have responded to over 350 complaints. Investigation into these sites usually necessitates enforcement action for cleanup either by the responsible party or property owner. As a result of these efforts, over 100 enforcement actions have been taken requiring site remediation.

**Figure 2**  
**Inspection Coverage Rate**  
**Program Start through March 2007**  
**Registered/Permitted Facility Universe = 2,170**



**Table IV—Scrap Tire Facility Inspections and Site Investigations by County**

	2004		2005		2006		2007		Facility Total	Complaint Total
	Facility	Complaint	Facility	Complaint	Facility	Complaint	Facility	Complaint		
Autauga			13	3	3	4			16	7
Baldwin			9	12	39	7	11	5	59	24
Barbour					7		3		10	0
Bibb					4				4	0
Blount				4	6				6	4
Bullock					3		1		4	0
Butler					6	16		6	6	22
Calhoun	1		8	11	27	1	5	1	40	14
Chambers				2	20	1			20	3
Cherokee			5		3	2			8	2
Chilton			17	1	41	15	10	2	68	18
Choctaw					10			3	10	3
Clarke			2	2	14	7			16	9
Clay			1		8				9	0
Cleburne			3		3	1			6	1
Coffee			17	1	24	3	1	2	42	6
Colbert			6			1			6	1
Conecuh				2	2	2			2	4
Coosa					1				1	0
Covington			3	3	26	2			29	5
Crenshaw					1	2			1	2
Cullman				1	22	2			22	3
Dale			19	1	3	4	4	2	26	7
Dallas			5		24	1	1		30	1
Delkalb			1	6	16	2	2		19	8
Elmore	2		24	3	4	3	2	4	30	12
Escambia			2	1	24	2		1	26	4
Etowah			2	3	28	5	15	6	45	14
Fayette					8				8	0
Franklin					5				5	0
Geneva					12				12	0
Greene					4			1	4	1
Hale			2	1	2			1	4	2
Henry			4						4	0
Houston			43	1	11	10	17	1	71	12
Jackson				1	8				8	1
Jefferson				6	26	7	5	1	31	14
Lamar					2	1			2	1
Lauderdale			7	1	12				19	1
Lawrence				1	3				3	1
Lee			7	2	44	5	1	1	52	8
Limestone			1	2	9				10	2
Lowndes					2	1	2		4	1
Macon				7	7	1		8	7	16
Madison			10	1	39		4		53	1
Marengo					5	3		1	5	4
Marion					6				6	0
Marshall	1		3	1	20	2	2		25	4
Mobile			21	20	87	18	25	5	133	43
Monroe			4		9	3			13	3
Montgomery				3	53	3	7		60	6
Morgan			2	1	11	1			13	2
Perry			1		4			6	5	6
Pickens					9				9	0
Pike				1	17		8	1	25	2
Randolph				1	14				14	1
Russell				1	2		7		9	1
St. Clair			11	3	29	11	4	6	44	20
Shelby			38		14	3	32	2	84	5
Sumter					10		1	1	11	1
Talladega			9	4	37	2			46	6
Tallapoosa			3		25	2			28	2
Tuscaloosa					90	2	3	2	93	4
Walker			20	1	5	1	2	2	25	4
Washington				1	3	6			3	7
Wilcox			7					1	7	1
Winston					3				3	0
	<b>4</b>	<b>330</b>	<b>116</b>	<b>1,016</b>	<b>165</b>	<b>173</b>	<b>72</b>	<b>1,519</b>	<b>357</b>	
						<b>Grand total</b>		<b>1,876</b>		

# Scrap Tire Site Remediation

One of the major goals of the program is the elimination of existing stockpile accumulations and illegal disposal sites in Alabama. To this end, the Scrap Tire Program has made great progress in identifying, assessing, and initiating cleanup among the largest known scrap tire sites in the state utilizing the Scrap Tire Fund (STF), as well as effecting removal actions through enforcement, as appropriate.

In order to facilitate the clean up of large sites, procedures were included in Admin. Code 335-4 to address the priority ranking and approved contracting processes. Sites with the potential for cleanup to be covered by the STF were first researched to determine if a readily available responsible party or landowner could be responsible to fund the removal. Sites not meeting these requirements were eligible for listing and priority ranking. However, for sites in which the STF is used for remediation activities, all methods of cost recovery will be investigated to recover remediation expenses to the maximum extent possible. Departmental staff performed investigations of each large site, gathering data on ranking factors to include: quantities of tire materials present, presence or threat of disease carrying vectors (such as mosquito species), proximity to schools or other sensitive resident populations, location of utility and transportation resources, threat of hazards (such as fire) and proximity to sensitive environments.

Sites determined to be potentially eligible for cleanup utilizing the STF were prioritized using these factors by a Site Ranking Committee comprised of Departmental staff and members of the Scrap Tire Commission. The highest ranking sites, determined during the ranking process are found in Table V. Due to the scope of large site projects, only the highest ranking site was to be addressed first. The ranking process identified the highest ranking site as the former Four Star Wholesale and Tire Brokerage site located in Attalla, Alabama.

**Table V**  
**Large Scrap Tire Site Priority Listing**

<u>County</u>	<u>Site Name</u>	<u>Estimated Quantity</u>
Etowah	Four Star Wholesale and Tire Brokerage	8,000,000 Scrap Tires
Mobile	Prichard Site	750,000 Scrap Tires
Geneva	Geneva County Site	3,000,000 Scrap Tires

Following the ranking of eligible sites, the Department began the process of establishing an Alabama Approved Scrap Tire Remediation Contractors list as required by regulation. Applications from interested contractors were sought through the issuance of a public notice. Applicant requirements included possession of a current Alabama General Contractor's License, possession of (or be able to obtain) regulatory-specified insurance and financial assurance, and possess the resources and experience necessary to successfully complete removal activities.

Upon establishment of the approved contractor list, a formal site-specific Request for Proposals (RFP) was developed and issued to approved contractors. Mandatory attendance of an on-site preview, walkthrough, and information session was held for prospective contractors. Bidding for the project was requested on a whole project, per-ton cost basis, including all aspects of site cleanup. The State of Alabama competitive bid process was followed including a public opening of bids received in response to the RFP. The lowest responsible bidder who could handle all aspects of the project was determined to be C.W. Owens Enterprises of Southside, Alabama who began work on the project in August 2006. The bid price for removal is \$88.75 per ton of material removed and covers all activities denoted in the contract. A press conference was held at the Attalla City Hall announcing the commencement of site activities. Monthly removal quantities and expenses under the contract through March 2007 are listed in Table VI, totaling 20,933 tons of scrap tire material removed from the site (equivalent to 2,093,267 passenger tires) with expenditures of \$1,857,776.

**Table VI**  
**Attalla, Alabama Scrap Tire Site**  
**Site Removal Totals and Expenditures**

<u>Year/Month</u>	<u>Quantity (Tons)</u>	<u>Expenditure</u>
2006 August	2,686	\$238,410
2006 September	4,058	\$360,185
2006 October	3,496	\$310,225
2006 November	3,221	\$285,868
2006 December	2,735	\$242,693
2007 January	3,223	\$286,053
2007 February	1,514	\$134,342
Totals	20,933	\$1,857,776

The contract calls for all solid waste to be removed from the site and for any required site stabilization to be completed. Additionally, due to quantities of tire materials involved and the potential for beneficial reuse of much of the material on-site, a 50% or greater reuse requirement was included as a binding condition of the contract. To this end, the contractor is utilizing MTR, Inc. of Mississippi to process and contract with fuel or substitute raw material users to meet the reuse requirement. Scrap Tire Program staff perform weekly on-site contract oversight to monitor the progress of the project, adherence to contract requirements, verification of manifested shipment quantities and invoices, and documentation of site activities.



Removal activities to date have occurred in the outdoor storage areas, and over 95% of materials have been removed from on-site warehouses at the former Four Star Wholesale and Tire Brokerage site.

Building #2 Pre-Removal



Building #2 Post-Removal



Area #6 Pre-Removal



Area #6 Post-Removal



It is anticipated that a very similar process will be used to remediate the remaining large sites on the priority listing. Whenever feasible (given the site conditions, condition of materials on-site and economic considerations determined by site location), the reuse requirement will be included as a condition of future contracts.

Geneva County Scrap Tire Site



Prichard Scrap Tire Site



With the recent April 2007 revisions to the scrap tire program regulations, processes will be developed for the remediation of small sites defined as containing 25,000 or less scrap tire equivalents. The goal is to provide for the cleanup of small sites concurrently with the larger site remediation projects. It is anticipated that differences between the large site and small site projects could provide measures resulting in accelerated cleanup at small sites.

An additional component of the remediation program is the cleanup of sites by identified responsible parties and/or landowners through the use of enforcement mechanisms. ADEM staff discover potential sites through field and complaint investigations. In instances of scrap tire accumulations, ADEM staff work with local officials to determine property ownership of sites under investigation, and issue cleanup notices to landowners. Landowners are given opportunities to provide information regarding potential responsible parties. Those required to undertake removal actions on such sites must provide the program with a cleanup plan; photo-documentation of sites before, during and after cleanup; and provide receipts to document reuse or disposal. Once notified that the project has been finished, ADEM staff revisit the site to determine if required actions have been completed.

The success of the scrap tire program is evident. Over 675,000 scrap tires have been removed and properly managed from 48 sites in Alabama. It is important to note that these sites were completed without the use of the STF other than the expenditure of Departmental funds for site assessment and oversight. Table VII lists sites that have been completed through March 2007.



Cullman County Site Pre-Removal



Cullman County Site Post-Removal



Pickens County Site Pre-Removal



Pickens County Site Post-Removal



Butler County Site Pre-Removal



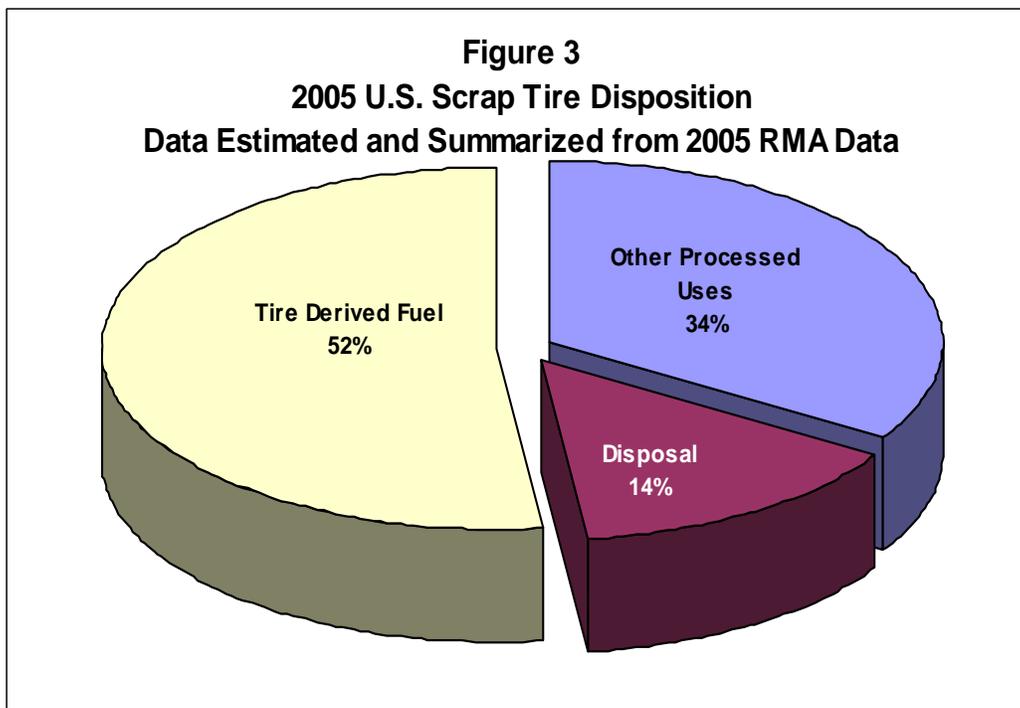
Butler County Site Post-Removal

**Table VII—Site Remediation / Enforcement Action Removals**

COUNTY	SITE NAME	TIRE QUANTITIES
Autauga	International Paper Land Site	100
	Jones Site	250
	Burns Site	150
Baldwin	Katz Miller Southeast	6,000
Butler	Edgar Site	10
	Camelia Communications Site	100
	Plum Creek Timberlands Site	50
	Sustainable Forests Site	50
	Thagard Site	200
Calhoun	Strickland Site	20
Chilton	Brackin Site	99
	Gene Martin Auto Sales	300
Coffee	Baker Site	1,150
Colbert	Morgan Site	988
Conecuh	Nicholson Site	400
Cullman	County Road 9 at Hooks Road Site	600,000
Dallas	Selma Funeral Home Site	21
Elmore	Bryant Site	384
Escambia	Brantley's Used Tires	14,200
Etowah	Martin Foundry	175
	Caps Site	2,158
Houston	Tallent's Used Parts	4,115
	Eagle Towing and Recovery	192
Lamar	Lucas Site	400
Limestone	Abercrombie Commercial Tire	2,000
Lowndes	Philen Site	150
Macon	White Church Cemetary Site	250
	County Road 9 at Hooks Road Site	100
	Shorter School Site	100
Madison	Shultz Site	974
Marshall	Berry Site	410
Mobile	ABC Auto Salvage	15,000
	Jensen and Stone Road Site	3,800
	Guesnard Site	100
	P&D Auto Parts	7,000
	Curet Site	1,050
Monroe	Nall Site	30
Montgomery	South Boulevard Site	150
	Holiday Site	40
	Pettitway Salvage Yard	500
Morgan	Hill Site	1,593
Pickens	Swedenburg	7,379
St. Clair	Harvell & Sons Trucking	500
Shelby	Wholesale Tire	100
Walker	Empire Coke Site	3,000
	J's Auto Parts	300
Washington	Woodrow, Reynolds and Son Timber	6
	Total Tires Removed through March 2007	675,844

# Scrap Tire Markets and Development

In the latest report on scrap tire markets in the United States, prepared by the Rubber Manufacturers Association (RMA), Alabama was recognized as one of the top two states in improvements made regarding scrap tire issues. Specifically, the state was highlighted for the initiation of stockpile and illegal site remediation projects and its performance relating to expanding scrap tire markets. The estimated United States beneficial reuse of scrap tires and scrap tire materials is illustrated in Figure 3. Tire Derived Fuel (TDF) and disposal in permitted landfills comprise the majority of end destinations for scrap tire materials generated in Alabama. Current scrap tire markets in Alabama are predominately serving steel and cement manufacturing industries through the supply of whole or processed tires as TDF or raw material substitution.

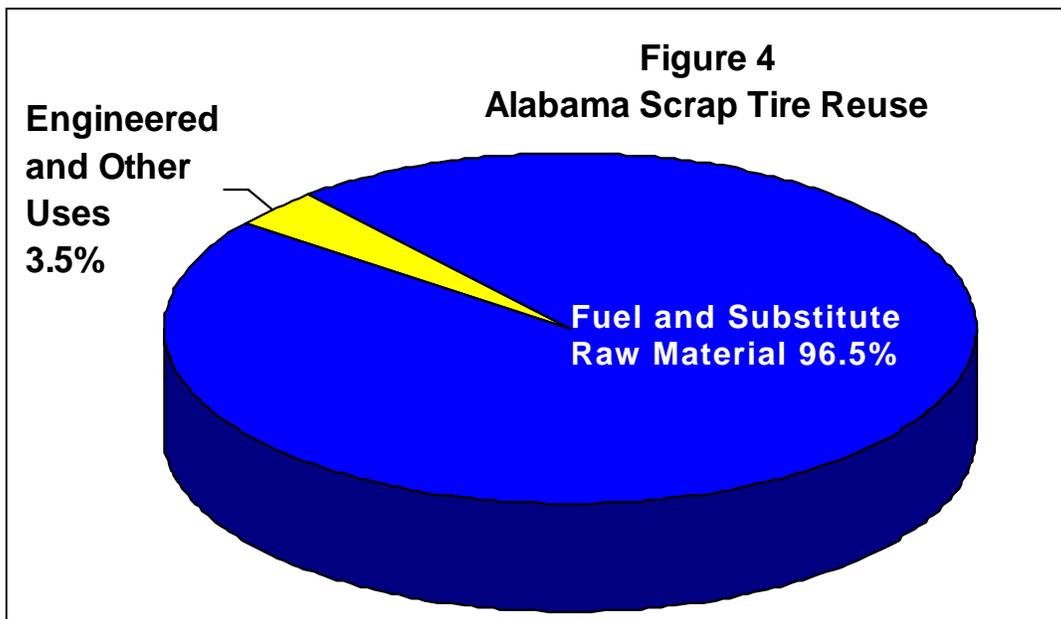


Beneficial reuse of scrap tires and scrap tire materials in Alabama is primarily the result of utilization of material by several large end-users. As stated by RMA, the initiation of stockpile cleanups and the 2004 implementation of a comprehensive regulatory structure to address scrap tire disposition has enabled increases in reuse to occur. Economic pressures resulting from rising prices of traditional fuel sources have also played a large part in the increase, as coal, electricity and natural gas have seen large price jumps in recent years. The reuse of scrap tires and tire materials in Alabama is expected to outpace the generation rate of approximately 5 million per annum. But, the importation of an additional 4 million scrap tires per annum in many instances will result in disposal of scrap tires as a viable option in Alabama.

**Table VIII  
Current Permitted 30-Day Storage and Utilization of Scrap Tires**

<b>Alabama Exempt Scrap Tire Fuel and Substitute Raw Material Facilities</b>	<b>30-Day Permitted Storage (Tons)</b>	<b>30-Day Usage (Tons)</b>
Lafarge Building Materials, Inc.	4,320	348
International Paper Corporation	3,168	811
Holcim (US), Inc.- Theodore Plant	3,879	2,480
Lehigh Cement Company	8,500	291
Smurfit-Stone Container, Inc.	1,200	173
National Cement	4,464	0
CEMEX, Inc.	2,520	478
IPSCO Steel (Alabama), Inc.	651	1,281
Walter Marine, Inc.	10	1
Robbins, LLC	50	47
World Environmental Solutions	25	0
<b>Total</b>	<b>28,787</b>	<b>5,910</b>

Table VIII provides current data on the permitted storage limits of the largest fuel use and raw material substitution facilities in Alabama, as well as the most recent annual reuse data per facility. All facilities in Alabama permitted to utilize scrap tires in TDF or raw material substitution applications reported an average current use of 5,910 tons of scrap tires and scrap tire materials per month which represents a monthly usage of approximately 591,000 scrap tires. This results in approximately 7,092,000 scrap tires being beneficially reused annually in Alabama, and exceeds the estimated annual state generation rate of approximately 5,000,000. One facility is not currently utilizing tire materials, although permitted and expected to do so again in the near future, and one facility was only recently permitted and has not yet begun operations.



Although the beneficial reuse of scrap tires in Alabama is somewhat larger than in many other states, both in quantity and as a percentage of generation, the importation of scrap tires from other states still provides ample opportunities for market expansion. The Alabama Scrap Tire Environmental Quality Act provides funding through the STF for the Alabama Department of Economic and Community Affairs (ADECA) to promote and develop markets as an alternative to landfilling scrap tires or processed tire material. Following initiation of the remediation project at the Attalla scrap tire site, the STC directed ADECA to proceed with research and development of an Alabama scrap tire marketing plan. A committee established by the STC, and chaired by an ADECA representative, has initiated these activities and will report their findings and recommendations to the STC. Examples of markets being pursued by other states include the use of scrap tires for playground and sports field applications; flooring and construction materials; rubber modified asphalt; and other civil engineering applications.

#### IPSCO Steel - Mobile, Alabama



IPSCO is an Alabama Exempt Substitute Raw Material User utilizing scrap tires in steel production.

#### Holcim (US) - Theodore, Alabama



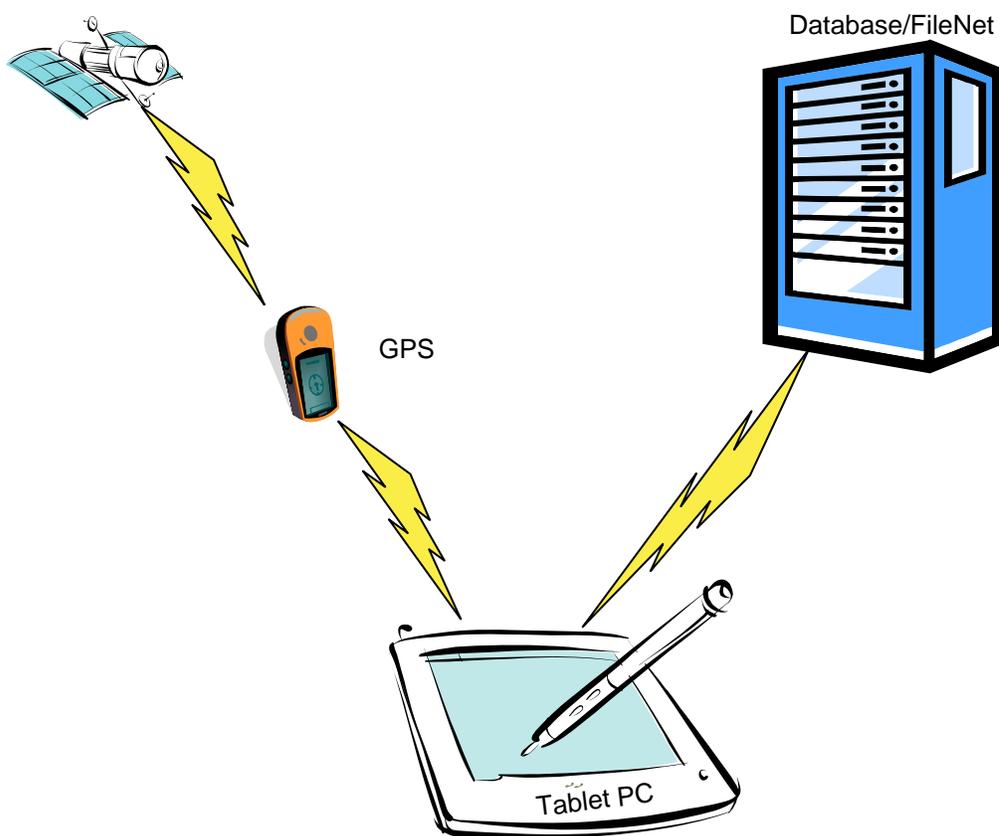
Holcim (US) is an Alabama Exempt Fuel User utilizing scrap tires in cement production.

# *Innovation and Efficiency*

The Scrap Tire Program has implemented several measures aimed at increasing the efficiency of the program. The program was among the first in the Department to utilize Tablet PCs to perform facility inspections and site investigations, providing real-time access to facility information. Tablet PCs reduce the time required to prepare and distribute inspection reports to facilities as required by regulation. Standardized inspection forms exist in an electronic format which, as well as being easier to upload to file tracking and database systems, provide for increased staff efficiency. Portable printing units are currently being investigated for the possibility of providing copies of inspection reports to facilities in the field, reducing staff time and postage costs.

Locations of all facilities registered or permitted under the program and all investigated scrap tire sites are recorded utilizing Global Positioning System (GPS) units integrated with the Tablet PC. The recording of locations allows for easier determination of property ownership when required by potential enforcement actions. GPS units also provide navigational assistance in returning to scrap tire sites located in rural areas.

Documents produced electronically or in hard copy are retained using an electronic filing system known as FileNet. This system allows for more secure storage, ready retrieval and use by staff, and eliminates the need for printing or storage of paper documents.



# Other Scrap Tire Program Activities

In addition to traditional regulatory and site remediation activities, the Scrap Tire Program has been actively involved in or led several activities aimed at strengthening the program. These activities include training both staff and those within the regulated community. In conjunction with the Alabama Tire Dealers Association (ATDA), question and answer training sessions were held in several Alabama locations to provide compliance information to those subject to the new regulations. These sessions empowered their members and other interested parties with timely information to determine how their operations would be affected. Also, the program has issued numerous press releases and made presentations at trade association meetings, tire dealer conferences and other events aimed at increasing knowledge of the program and its requirements.



Alabama Power  
Conference Center  
600 North 18th Street  
Birmingham, AL

**Scrap Tire  
Fire Prevention/  
Fire Fighting and  
Remediation Seminar**



March 7 - 8, 2005  
Sponsored by:  
Alabama Scrap Tire Commission  
Alabama Department of Environmental  
Management  
Rubber Manufacturers Association  
U.S. EPA Region 4  
Alabama Tire Dealers Association  
Alabama Power

In March 2005, responding to a training need not only within Alabama but in other states, the Scrap Tire Program sponsored a Scrap Tire Fire Prevention, Fire Fighting and Remediation Seminar in Birmingham. The training course was co-sponsored by the STC, the RMA, EPA Region 4, ATDA and Alabama Power. The training afforded owners and operators of scrap tire facilities useful information in scrap tire fire prevention. Topical presentations were provided by experts in scrap tire management as well as those experienced in the response and proper management of scrap tire fires. Attendees included those from several states including scrap tire program staff, owners and operators of scrap tire facilities and local emergency response personnel.

In May 2006, the Alabama program hosted the U.S. EPA Region 4 Scrap Tire Forum in Mobile. The Forum provided attendees with up-to-date information regarding the status of scrap tire programs in the Southeast and current and future issues facing scrap tire management. Topics included legal considerations, cost recovery options, estimation techniques, and site restoration. Also included were discussions of local and regional end-use markets and lessons learned by state programs in scrap tire program development and implementation.



# *Future Program Activities*

The program has achieved success in the development and implementation of standard operating procedures, regulatory mechanisms and tools for the management of scrap tire generation, transportation, processing and disposal. Additionally, procedures and requirements for the remediation of large scrap tire sites are well established. The program will continue to expand and evolve as necessary to further its mission of properly managing scrap tires in Alabama. Continued emphasis will be placed on the elimination of threats posed by scrap tire accumulations and illegal disposal sites. However, the program will look toward the future in increasing beneficial reuse opportunities of scrap tires as a useful resource instead of a waste to be managed. To this end, the following strategies and activities will be developed and enhanced to strengthen the program and its effectiveness.

- Continue development and implementation of a Small Site Remediation Program concurrently with the Large Site Remediation Program to accelerate the cleanup of smaller stockpile or illegal disposal sites;
- Educate Department staff, the regulated community and others on existing regulatory requirements as well as emerging technologies in the field of scrap tire management;
- Continue to identify unregistered and unpermitted facilities, and assess and prioritize sites for cleanup;
- Enhance outreach to and coordination among trade associations, government agencies and public groups to maximize program exposure, encourage increased reuse opportunities and reduce instances of non-compliance;
- Continue contracting and oversight of scrap tire remediation projects;
- Review data acquired through facility reporting and field activity to prioritize activities such as inspections and site investigations;
- Finalize an Alabama Market Development Plan for scrap tires to increase utilization of scrap tires in beneficial reuse and recycling applications.



Automated feed system for introduction of scrap tires into the kiln at the Lafarge Building Materials, Inc. cement plant, Calera, Alabama.

This publication was produced by the Alabama Department of Environmental Management on behalf of the Alabama Scrap Tire Commission.

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