

# MARYLAND'S SCRAP TIRE PROGRAM

## Annual Report for Fiscal Year 2001

Report to the  
Senate Education, Health, and  
Environmental Affairs Committee  
*and the*  
House Environmental Matters Committee



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*Department*

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## EXECUTIVE SUMMARY

This document is the Fiscal Year (FY) 2001 Scrap Tire Annual Report as required by Environment Article, Section 9-275(b) and prepared for the standing committees of the Maryland General Assembly. The report addresses Maryland's Scrap Tire Program activities as undertaken by the Maryland Department of the Environment (Department) and the Maryland Environmental Service (MES) from July 2000 through June 2001 and describes future activities for the coming year.

### **FY 2001 Objectives And Accomplishments**

In keeping with the stockpile cleanup and tire recycling objectives as directed by the Act, the Scrap Tire Program's FY 2001 priorities were :

- ❖ In accordance with guidance from the year 2000 Maryland legislative session (Senate Bill 136), accelerate the expenditure of funds in the State Used Tire Cleanup & Recycling Fund (Fund) to clean up remaining illegal scrap tire stockpiles; implement scrap tire projects to reduce, recover, and recycle scrap tires; and to expand the scrap tire recycling system on a regional basis to provide additional processing and recycling capacity to manage more effectively the ongoing generation of tires.

#### *Accomplishments –*

- Pursuing these objectives, the Fund balance was reduced by \$5.1 million (45.1%) from \$11.3 million to \$6.2 million.
  - A total of 6.7 million scrap tires were processed by Maryland licensed scrap tire facilities. Approximately 68% of these tires were recycled while the remaining 32% were used as supplemental fuel in cement plants and waste-to-energy facilities.
- ❖ In conjunction with MES, convene a Scrap Tire Advisory Group to study the existing Scrap Tire Recycling System and receive recommendations on ways in which it might be improved.

*Accomplishments –* The Department and MES convened a Scrap Tire Advisory Group to assess the current status of the Scrap Tire Recycling System and to provide advice on possible methods for improvement. The Advisory Group conducted a series of meetings to learn about current conditions related to scrap tire recycling in Maryland, to assess issues that need to be addressed, and to consider options for addressing the issues identified.

- ❖ Coordinate with the Maryland Department of Health and Mental Hygiene (DHMH) and the Maryland Department of Agriculture (MDA) on scrap tire stockpiles that have a high mosquito infestation concern, and expedite their timely cleanup.

*Accomplishments* – The Department coordinated with DHMH and MDA and established a procedure for addressing scrap tire stockpiles infested with mosquitoes carrying the West Nile Virus.

- ❖ Pursue the cleanup and recovery of the majority of those previously identified illegally stockpiled tires, and those newly identified stockpile sites to be discovered in FY 2001, through administrative and State-initiated measures.

*Accomplishments* –

- Since the inception of the Scrap Tire Program in 1992, well over 7.2 million scrap tires have been recovered from completed and ongoing stockpile cleanup sites.
- 55 illegal scrap tire stockpile sites were cleaned up in FY 2001.
- Approximately 91% of all stockpile site cleanups accomplished in FY 2001 were achieved through administrative means.

- ❖ Pursue cost recovery actions for scrap tire cleanups that utilized the Fund.

*Accomplishments* – The Attorney General’s Office continued to seek cost recovery from State sponsored cleanups and collected \$45,251 in cost recovery actions.

- ❖ Continue to review and take action on all scrap tire license applications and renewals within designated approval times.

*Accomplishments* –

- A total of 233 new scrap tire licenses were issued by the Department, primarily for scrap tire collection facilities and scrap tire haulers.
- A total of 118 scrap tire licenses were renewed by the Department, all for scrap tire collection facilities and scrap tire haulers.
- At the end of FY2001, there were a total of 3,070 valid Maryland scrap tire licenses.
- A total of 844 scrap tire site inspections/investigations were performed.

- ❖ Continue work on the Westover Landfill (Somerset County), Westernport Landfill (Allegany County) and Fairhill Equestrian Center (Cecil County) projects approved and initiated in FY2000.

*Accomplishments* –

- Design work continued on both landfill scrap tire projects and construction is expected to commence in FY 2002.
- Construction of the Fairhill Equestrian Arenas scrap tire project was completed.

- ❖ Implement additional scrap tire projects planned for FY2001.

*Accomplishments –*

- One new scrap tire playground was constructed in a Maryland State Park (Milburn Landing Area of Pocomoke State Park in Worcester County). This brings the total number of State Park playgrounds developed using the scrap tire fund to nine.
- The Department and MES worked with the Maryland Department of Education to construct and/or renovate 10 playground facilities at various Maryland public schools using recycled tires and recycled tire materials to improve these public facilities and educate students and the public on the usefulness of recycling technologies.
- A Governor's Scrap Tire Youth Employment Program was conducted that resulted in the recovery of approximately 8,500 scrap tires.
- Design work was completed for a scrap tire walking path to be constructed in the Stephen Decatur Park in Berlin, Worcester County, Maryland.
- More than 122,000 scrap tires were collected from Maryland's citizens during the FY2001 Scrap Tire Amnesty Day event.
- Design work was initiated on a project that includes using scrap tire chips as an alternative drainage medium in the closure cap at Beulah Landfill in Dorchester County.
- Design work was substantially completed on a project utilizing scrap tire chips as a drainage layer in the construction of a new cell at Reich's Ford Landfill in Frederick County.

- ❖ Continue public education efforts which promote proper handling, storage, and recycling of scrap tires.

*Accomplishments –*

- The Department partnered with WBAL-TV and MES to create a public service announcement campaign entitled "Ready-Set-Recycle." Three 30-second spots were shown in conjunction with the morning, noon, and evening news and aired from January 1 to mid-March 2001.
- Movie screen ads were developed from the WBAL-TV ad campaign and played in Loews theatres from May through August 2001. Hoyt's movie theatres began playing the movie ads in May 2001 and continued through November 2001. This ad campaign will also be aired during Winter-Spring 2002.
- A new Scrap Tire Program web-page was developed and incorporated into the Department of the Environment web-site.

## **Financial Statement Summary**

The Fund, as authorized by the Environment Article, Section 9-275, provides the funding for administration of the Scrap Tire Program. In FY 2001:

- The Fund generated fee revenues of: \$ 2,083,088
- Expenditures by the Department and MES totaled: \$ (7,105,703)
- The Fund balance at the end of FY 2001 was: \$ 6,243,695

(See Table VI for detail)

## **FY 2002 Objectives**

The Scrap Tire Program's Objectives for the coming year include:

- ❖ In accordance with guidance from the year 2000 Maryland legislative session (Senate Bill 136), continue to accelerate the expenditure of funds in the State Used Tire Cleanup & Recycling Fund to clean up illegal scrap tire stockpiles; implement scrap tire projects; and to investigate expansion of the scrap tire recycling system on a regional basis to provide additional processing and recycling capacity to manage more effectively the ongoing generation of tires.
- ❖ In conjunction with MES, work to address the issues identified by the Scrap Tire Advisory Group, which was convened during FY2001 to study the existing Scrap Tire Recycling System.
- ❖ Ensure implementation of procedures established in coordination with the Maryland Department of Health and Mental Hygiene (DHMH) and the Maryland Department of Agriculture (MDA) for the expeditious and timely cleanup of scrap tire stockpiles that have a high mosquito infestation concern.
- ❖ Continue to pursue the cleanup and recovery of a majority of the remaining scrap tires from Maryland stockpiles through administrative and state-initiated measures.
- ❖ Pursue cost recovery actions for scrap tire cleanups that utilized the Fund.
- ❖ Review and take action on all scrap tire license applications and renewals within the standard approval times.
- ❖ Plan and conduct the following new scrap tire projects:
  - Construction of a new state park scrap tire playground at Smallwood State Park in Charles County;
  - Construction or renovation of scrap tire playgrounds at several public schools at various locations throughout Maryland under the State school construction project;
  - Initiation of landfill cap projects using recycled scrap tires at closed landfills in Maryland;
  - Installation of permanent rubber mats made with recycled scrap tires in horse stalls in four barns at the Maryland State Fairgrounds;
  - Conduct a scrap tire amnesty program similar to those previously conducted.

- ❖ Continue public education efforts which promote proper handling, storage, and recycling of scrap tires.

The Department's Scrap Tire Program has achieved most of its goals in cleaning up illegal scrap tire stockpiles and managing newly generated scrap tires in Maryland. The FY 2001 accomplishments and FY 2002 objectives outlined in this summary are described in further detail within the body of this report.

## INTRODUCTION

- Approximately **5.6 million** scrap tires are generated in Maryland every year.
- Scrap tires, because of their size and shape and associated environmental hazards caused by improper management practices, present both difficult and costly disposal and recycling challenges for the entities responsible for overseeing their management.
- In 1991, the Maryland General Assembly adopted the Scrap Tire Recycling Act, which established a mechanism for the cleanup of scrap tire stockpiles and for the collection, transportation and recycling or processing of all scrap tires that are generated annually in Maryland.
- The Act established the Scrap Tire Cleanup and Recycling Fund (Fund) as the funding support for the Scrap Tire Program.
  - The Department uses the Fund for administration of the program, licensing activities, enforcement/compliance, stockpile cleanups, remedial actions, and for the development and distribution of public information concerning scrap tire issues.
  - Under the Department's authorization, MES may use portions of the Fund to implement and oversee programs established as part of a Scrap Tire Recycling System and other projects that reduce, recover and/or recycle scrap tires.
- During the 2000 Legislative Session the fee was reduced from \$1.00 to \$0.40 per tire on the sale of each new tire in the State. In addition, §9-276 of the Environment Article, Annotated Code of Maryland, was amended to exempt inherited property from the requirement that the property owner reimburse the Maryland Department of the Environment for the cost of removal of illegally stored or disposed scrap tires up to \$10,000.
- Since the inception of the Act, the Scrap Tire Program's responsibilities have included licensing, compliance, and enforcement activities for scrap tire collection, recycling/processing facilities, and haulers.
  - Additionally, the Department issues approvals for substitute fuel/tire-derived fuel (TDF) and solid waste acceptance facilities.
- Although the Scrap Tire Program has continued to evolve, the goals of the Scrap Tire Program have remained consistent:
  - To develop and establish on-going systems to accommodate scrap tires which are both environmentally and economically sound;
  - To provide the public with the information necessary to properly manage scrap tires in ways that protect and enhance Maryland's environment; and

- To continue to cleanup existing illegal scrap tire stockpiles, using the Fund to expedite this goal.
- This report has been prepared for the Senate Education, Health, and Environmental Affairs Committee and the House Environmental Matters Committee as required by the Scrap Tire Law to advise the Standing Committees of the progress the Department is making in implementing the law and ensuring the proper management of scrap tires in Maryland. This report is structured to include additional information about the program and future activities.

## **II. SCRAP TIRE STOCKPILE CLEANUPS**

- ❖ The Scrap Tire Program's overall cleanup goal for FY 2001 was to continue to move toward the clean up and recovery of the majority of the 1.2 million scrap tires identified in stockpiles at the end of FY 2000, along with those tires which may be newly identified from new or old stockpiles during FY2001.
- ❖ In order to achieve this goal, the following strategies were undertaken:
  - The initial employment of administrative procedures to persuade property owners to remove stockpiles using their own resources;
  - Use of the Fund to cleanup stockpile sites only when administrative efforts were unsuccessful; and
  - Targeting efforts toward eliminating the larger scrap tire stockpile sites (over 5,000 tires).

### **Cleanup Accomplishments in FY 2001**

- Since the inception of the Scrap Tire Program in 1992, over 7.2 million scrap tires have been recovered from completed and ongoing stockpile cleanup sites.
- During FY 2001 the Department initiated administrative cleanup procedures for the 38 new stockpile sites identified during the year, and continued administrative and State sponsored cleanup efforts for 114 remaining sites identified in previous years.
- During FY 2001 the Scrap Tire Program successfully completed clean up of 55 illegal scrap tire stockpiles, consisting of 106,423 scrap tires. These sites were located in 20 of the State's 24 jurisdictions and ranged in size up to 56,000 tires. (See Table I)
- Much of this scrap tire stockpile cleanup success occurred without using taxpayer's money. 91% of all stockpile abatements completed in FY 2001 (50 out of 55 completed stockpile cleanups) used the administrative approach. The remaining 5 sites for which cleanup was completed in FY 2001 (9 % of the stockpile abatements) were conducted using the Fund for cleanup activities. Cost recovery is being pursued for these sites.
- After exhausting attempts at achieving administrative cleanup for three scrap tire stockpiles in FY2001, access to these sites (containing approximately 431,500 scrap

tires) was obtained from the responsible party or through the courts, and were referred to MES to initiate contractual arrangements for State sponsored cleanup of the sites.

- A total of six scrap tire stockpiles are currently undergoing planning for State sponsored cleanup by MES, including the above noted three sites referred in FY 2001 and three sites referred in FY 2000. (See sites shown in bold on Table II)
- Much of the Scrap Tire Program’s success in terms of stockpile cleanups for FY 2001 can be attributed to continuing the employment of administrative procedures. The administrative process involves the issuance of site inspection notices, site complaints and formal notice letters by which the Department encourages cleanup of scrap tires by the owner.

**Table I  
Stockpile Cleanups Completed in FY 2001**

Site Name	County	Number of Tires
Ewing Motors/Cordova	Talbot	56,000
Finch/Mechanicsville	Saint Mary’s	10,000
Machado 2/Annapolis Junction	Anne Arundel	6,287
Ray’s Auto Parts/Detour	Carroll	5,767
Various smaller sites	---	<u>28,369</u>
	<b>Total</b>	<b>106,423</b>

### **Stockpile Cleanup Actions Planned for FY 2002**

- ❖ The Department has established a goal to complete or initiate the cleanup of the majority of the 2.3 million tires (identified by end of FY2001) still remaining in known scrap tire stockpiles throughout Maryland.
  - Numerous new stockpile sites are continually being identified for cleanup in Maryland.
  - Although most of these sites tend to be considerably smaller than those identified in the past, nevertheless a number of sites containing one hundred thousand or more scrap tires continue to be occasionally discovered.
- ❖ To accomplish this goal, 13 large stockpile sites (over 5,000 tires) have been targeted for either continuation of cleanup efforts or completion in FY2002. (See Table II)

- In instances in which administrative efforts are not successful in encouraging owner cleanups, the Department will file (or has filed) complaints with the court system for State access to these properties.
- After access to these stockpiles is granted by the court, State-sponsored cleanup of these stockpiles will likely be completed or initiated during FY 2002. (see Table II)
- The Department will seek cost recovery for expenses incurred from those determined to be responsible parties.
- Based upon the Department's experience, additional old stockpiles will be newly identified during FY 2002 and added to this list on an evolving basis.
- 

**Table II**  
**Large Stockpile Cleanups Ongoing in FY 2002**

Site Name	County	Initial Number of Tires
<b>Boehm/Crownsville</b>	<b>Anne Arundel</b>	<b>400,000</b>
<b>Jordan/Oakville</b>	<b>Saint Mary's</b>	<b>412,000</b>
Hodge/Northeast	Cecil	100,000
Schultz/Denton	Caroline	78,500
Insley/Cambridge	Dorchester	24,785
A Plus Auto Recyclers Inc.	Baltimore	20,000
<b>Howard/Crisfield</b>	<b>Somerset</b>	<b>18,000</b>
Eastern Auto Parts/Preston	Caroline	15,000
<b>Johnson/Sunderland</b>	<b>Calvert</b>	<b>10,735</b>
Route 301 LTD/Brandywine	Prince George's	10,000
Eastern Corporation/Federalburg	Dorchester	10,000
<b>Palmer State Park #1</b>	<b>Harford</b>	<b>9,000</b>
<b>Palmer State Park #2</b>	<b>Harford</b>	<b>8,100</b>
<i>Total Tires from Targeted Sites</i>		<i>1,116,120</i>

\* Sites in **bold** referred to MES for a State sponsored cleanup. Cost recovery will be sought.

- At the end of FY 2001 there are 97 remaining stockpiles that have been identified in Maryland, including the 13 sites listed in Table III.
  - The remaining 84 sites are relatively small stockpiles (under 5,000 tires).

- Cleanups for all of these sites will continue to be vigorously pursued in accordance with standard operating procedures for the Department’s administrative cleanup actions. (See Table IV)

**Table III  
Total Stockpile Cleanup**

<b>Number of Tires In Identified Stockpiles (End of FY 2001)</b>	<b>2,302,500</b>
<b>Number of Tires from Stockpile Sites Projected for Completion in FY 2002</b>	
Larger Stockpile Sites (Table III)	<b>1,116,120</b>
Smaller Stockpile Sites	<b>20,000</b>
<b>Number of Tires in Stockpile Sites Projected for Final Cleanup in Future Years Beyond FY 2002</b>	<b>1,166,380</b>

**Cost Recovery Actions Completed In FY 2001 and Plans For FY 2002**

- The Department continues using the services of the Attorney General’s Office to handle scrap tire cost recovery actions.
- In FY 2001, the Department successfully collected \$45,251.28 in cost recovery actions.
- The Department’s Attorney General’s Office will continue to pursue cost recovery actions for all appropriate projects.

**III. SCRAP TIRE PROJECTS**

- ❖ MES has the primary role in the planning and implementation of scrap tire projects to promote the development of new technologies for recycling scrap tires while reducing, recovering and recycling scrap tires from stockpiles in Maryland.

## **Projects Initiated During FY 2001**

- **Beulah Landfill Closure Cap (Dorchester County)**
  - This project involves the use of tire chips in combination with stone aggregates as an alternative to sand aggregates and/or a geotextile drainage net in the closure cap of the landfill.
  - The project will provide the opportunity to collect long-term field performance data regarding the use of the scrap tire chips as an alternative to the sand aggregate traditionally used in the drainage layer of the closure cap of municipal solid waste landfills.
- **Reich's Ford Landfill (Frederick County)**
  - This application involves the use of tire chips as a protective cover layer in the construction of a cell bottom liner system of a municipal solid waste landfill.
  - Preliminary design work was initiated in FY 2001.
- **Milburn Landing State Park Scrap Tire Playground (Worcester County)**
  - This project involved the planning, design, and (volunteer) construction of a children's playground, which demonstrates the beneficial uses of scrap tires as building materials.
  - The project was undertaken in conjunction with DNR and is the ninth State Park scrap tire playground developed throughout Maryland.
- **Berlin Walking Path (Worcester County)**
  - This ongoing project consists of a recycled scrap tire walking path within Stephen Decatur Park in Berlin utilizing crumb rubber derived from scrap tires.
  - MES and the Town of Berlin have completed site and project design work for the project in FY 2001.
  - Project objectives for FY2002 include procurement of materials and installation services for the walking path, construction of the recycled scrap tire walking path, and an opening dedication ceremony.
  - The project will use a significant quantity of scrap tires, and will provide a recycled scrap tire walking path in the Town of Berlin along with an informational sign along the path educating visitors and residents about scrap tire recycling.
- **Public School Playground Construction (Statewide)**
  - The Department, MES and the State Department of Education again partnered to create scrap tire playground projects at various Maryland public schools.
  - The Department and MES are working with the Department of Education to construct

and/or renovate several playground facilities using recycled tires and recycled tire materials to improve these public facilities and educate students and the public on the usefulness of recycling technologies.

- **Scrap Tire Amnesty Day (Statewide)**

- The Scrap Tire Amnesty Day project was executed as five regional one-day events held during Saturdays throughout April and May, 2001.
- County residents were encouraged to participate in the project by delivering scrap tires using non-commercial vehicles to a primary event location chosen by each participating County.
- Residents were permitted to deliver up to 10 scrap tires per vehicle on Amnesty Day free of charge.
- Fifteen counties throughout Maryland and Baltimore City participated, resulting in the recovery of approximately 122,000 scrap tires.
- The ultimate objective of this project was to prevent illegal scrap tire accumulations and dumping activities in the future.

- **Governor's Scrap Tire Youth Employment Program (Statewide)**

- As part of the Governor Parris N. Glendening's Scrap Tire Youth Employment Program, the Department planned a tire project that provided summer employment activities for up to one hundred (100) youths.
- This project included local government involvement and involved scrap tire recovery activities and vocational training for the youths.
- A total of 4 small stockpile sites were abated as part of this project, removing approximately 8,500 scrap tires from illegal stockpiles in Maryland.

- **Public Education Campaign (Statewide)**

- The Department partnered with WBAL-TV and MES to create a public service announcement campaign entitled "Ready-Set-Recycle."
- The focus of the campaign was on the benefits of recycling with a special emphasis on scrap tires.
  - Because of concern about the spread of West Nile virus, the Department also teamed with the Maryland Department of Agriculture ("MDA") to create a message about taking tires to a licensed facility so that they do not become breeding sites for mosquitoes.
- Three 30-second spots were shown in conjunction with the morning, noon, and evening news and aired from January to March 2001.
- Copies of the recycling ads are available to Maryland counties to air on cable channels.
- Movie screen ads were also developed from the WBAL-TV ad campaign and played in Loews theatres from May through August 2001.
  - Hoyt's movie theatres began playing the movie ads in May 2001 and continued through November 2001.
- This ad campaign will also be aired during Winter-Spring 2002.

## **Projects Continuing from Previous Years**

- **Westernport Landfill (Allegany County)**

- This project incorporates the use of scrap tire chips in lieu of stone aggregate as a drainage medium in the toe slope berm of the closure cap.
- Design work on the engineering plans continued throughout FY2001, and construction is expected during FY 2002.

- **Westover Landfill (Somerset County)**

- This project incorporates the use of scrap tire chips in lieu of stone aggregate as a drainage medium in the toe slope berm of the closure cap.
- Design work on the engineering plan continued and contracts were awarded for the scrap tire portions of the project.
- Construction of the closure cap is expected to commence during FY2002.

- **Hobbs Road Landfill (Caroline County)**

- Planning for this project was previously initiated to incorporate the use of scrap tire chips in lieu of stone aggregate as a drainage medium in the toe slope berm of the closure cap.
- Since initiation of project planning, Caroline County has indicated that they are unable financially to continue with this closure project at this time.

- **Fairhill Equestrian Center (Cecil County)**

- This project was initiated to provide footing materials required for an equestrian competition arena, two new dressage arenas, and repairs to the cross-country coarse turf grass at the Fair Hill Equestrian Park in Cecil County.
- Design plans were revised at the request of DNR and Fair Hill International, and construction at the equestrian center continued throughout FY 2001.
- All work being performed utilizes rubber derived from scrap tires.

- **Continuing Project Monitoring**

- Several scrap tire projects which were completed in previous years have ongoing monitoring programs to assess the suitability of these scrap tire applications and their success in meeting project goals.
- Monitoring continues for the following projects.

- |   |                  |
|---|------------------|
| ▪ <b>Highway Soundwall Barrier (I-95)</b> | Baltimore County |
| ▪ <b>Round Glade Landfill</b>             | Garrett County   |
| ▪ <b>Garrett County Landfill</b>          | Garrett County   |
| ▪ <b>Nicholson Road Landfill</b>          | Kent County      |
| ▪ <b>Newland Park Landfill</b>            | Wicomico County  |

- At the completion of the individual project monitoring periods final reports will be prepared which summarizes the data collected and conclusions reached.

### **Scrap Tire Projects Planned for FY 2002**

- **Smallwood State Park Scrap Tire Playground - (*Charles County*)**
- **MD State Fairground Horse Stalls Project - (*Baltimore County*)**
- **Closure Cap Projects at Landfills - (*Statewide*)**
- **Governor's Scrap Tire Youth Employment Program - (*Statewide*)**
- **Public School Scrap Tire Playgrounds Project - (*Statewide*)**
- **Scrap Tire Amnesty Program - (*Statewide*)**

## IV. LICENSING

- ❖ In Maryland, approximately 5.6 million scrap tires are generated annually.
- ❖ Since 1994, the disposal of scrap tires in Maryland landfills has been banned.
  - Subsequently, all scrap tires have been collected and processed in Maryland through licensed or approved facilities in the State.
- ❖ By Maryland law (Section 9-228 of the Environment Article), the Department is required to regulate scrap tire facilities and scrap tire haulers.
  - Facilities which collect or process scrap tires are required to obtain an appropriate license for their respective operation.
  - Scrap tire haulers are also required to obtain licenses for their activities.
  - This comprehensive licensing program allows for the efficient management of scrap tires from the point of generation through a licensed or approved transportation system to a licensed or approved scrap tire facility for the transfer, collection, or processing of scrap tires.
- ❖ The Department issues the following type of scrap tire licenses:
  - **Scrap Tire Recycler License:**  
For activities that convert scrap tires into a marketable product.
  - **Scrap Tire Collection Facility License:**  
For operations that collect or accumulate scrap tires temporarily on a site and transfer scrap tires to licensed or approved scrap tire facilities. There are three categories of collection facility licenses:
    - **General License:** Sites with up to 50 scrap tires at any given time.
    - **Secondary License:** Sites with up to 1,500 scrap tires at any given time.
    - **Primary License:** Sites with more than 1,500 scrap tires at any given time.
  - **Scrap Tire Hauler License:**  
For a person who, as a part of a commercial business, transports scrap tires in the State.
  - **Substitute Fuel/Tire Derived Fuel (TDF) Facility Approval:**  
For operations that use scrap tires (whole or chips) to replace existing fuel sources.
  - **Solid Waste Acceptance Facility Approval:**  
For a permitted refuse disposal or acceptance facility that accepts scrap tires for collection or processing.

## Licensing Accomplishments

- A total of 351 scrap tire licenses (233 new licenses and 118 renewals) were issued. (see Table IV).
- All (100%) of the license applications received were processed within the standard license application processing time of 60 days, exceeding the Department's goal of 90%. Approximately 40% of the license applications were processed within 30 days.

**Table IV**  
**Scrap Tire Licenses – FY 2001**

<u>Type</u>	Issued	Renewed	<u>Total Valid Licenses</u>
General Collection	82	N/A	1,675
Secondary Collection	77	49	705
Primary Collection	0	0	2
Recyclers	0	0	2
TDF Facility	0	0	3
Solid Waste	1	0	2
<u>Haulers</u>	<u>73</u>	<u>69</u>	<u>681</u>
<b>Total</b>	<b>233</b>	<b>118</b>	<b>3,070</b>

## Licensing Goals for FY 2002

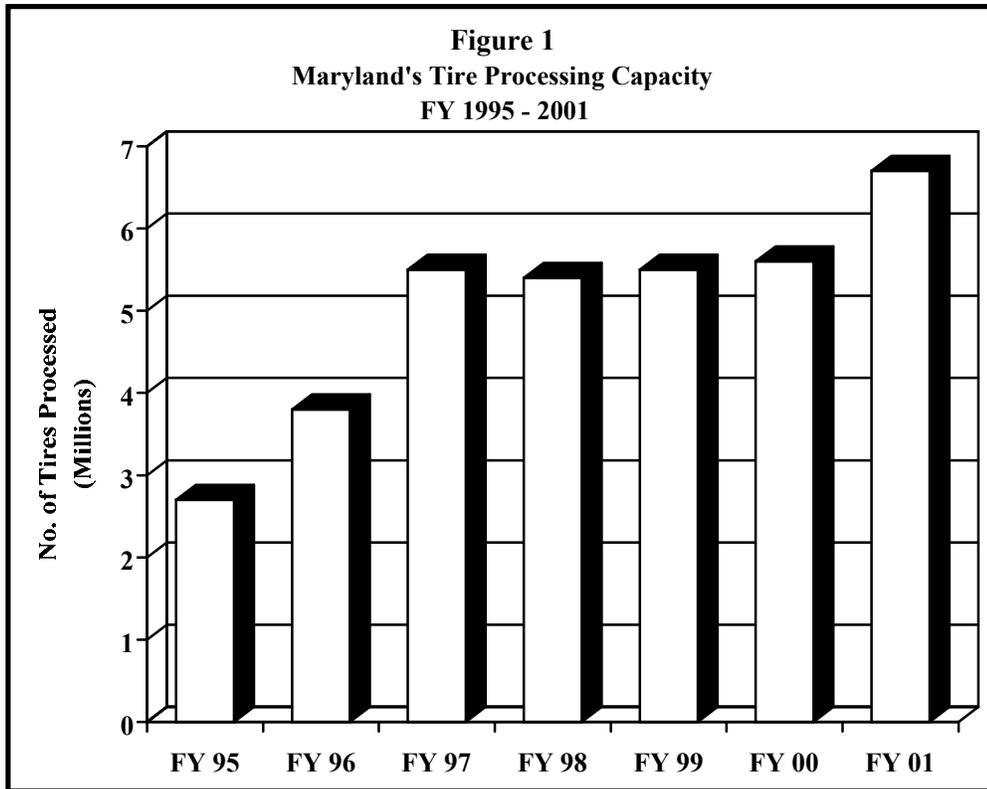
- To continue to review new and renewal license applications within the Standard License Issuance Time as established for FY 2002.
- To continue to maintain a high quality of service to Maryland's scrap tire business community by providing technical assistance with and the timely processing of license applications.

## **V. SCRAP TIRE MARKETS AND MARKET DEVELOPMENT**

- ❖ The law requires the Maryland Environmental Service (MES) to establish a Scrap Tire Recycling System (System) throughout the State.
- ❖ In FY 1992, MES initiated planning for a System which included scrap tire collection, hauling, and recycling/tire-derived fuel facilities.
  - During this process three companies were approved for eligibility within such a System. These included:
    - Emanuel Tire Company in Baltimore City
    - ESSROC Cement Corporation in Frederick County
    - Lehigh Portland Cement Company in Carroll County (See Table V).
- ❖ During the 2000 Legislative Session, a number of questions or concerns were raised by the legislators regarding the viability of the System and ways in which it might be improved.
  - In order to address these concerns, the Department, in coordination with MES, convened a Scrap Tire Recycling System Advisory Group in FY 2001 to study the issue and provide recommendations on ways in which it might be improved.

### **Market Analysis**

- ❖ During FY 2001, the State's scrap tire processing capacity handled approximately 6.74 million tires.
  - This figure represented a 19.6% increase from the previous year.
- ❖ Figure 1 provides a comparison of scrap tire processing capacity within the State of Maryland from FY 1995 to FY 2001.
- ❖ Table V provides a summary of Maryland licensed scrap tire processing facilities.



- ❖ An analysis of reported FY 2001 scrap tire processing data shows the following:
  - Approximately 2.1 million scrap tires (32% of the total processed in Maryland) were used as tire derived fuel in Maryland facilities.
  - Approximately 4.6 million scrap tires (68% of the total processed in Maryland) were recycled. (from in-state and out-of-state sources)
  - Approximately 3.9 million (69%) of all scrap tires processed in Maryland were generated in Maryland, and another 2.8 million (31%) were brought to Maryland processing facilities from out-of-state scrap tire generators.

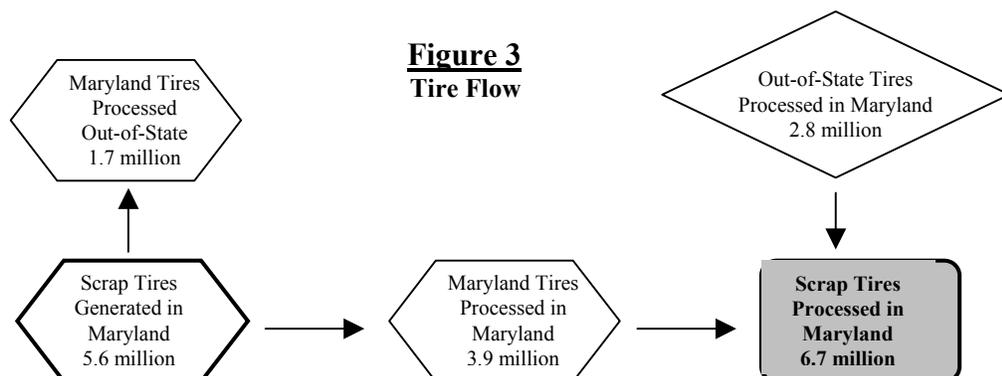
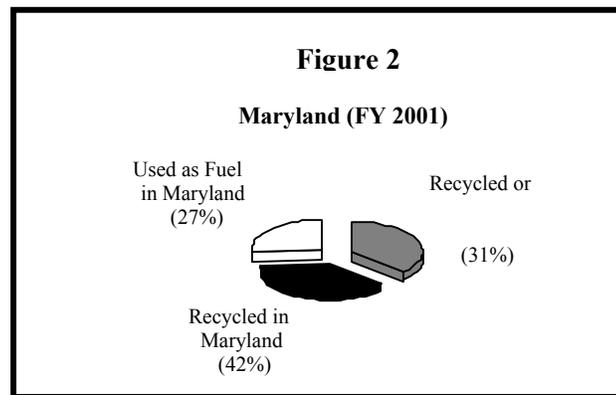
**Table V**  
**Maryland Licensed Scrap Tire Processing Facilities**

<b>Facility Name/Type</b>	<b>Location Address</b>	<b>Operation</b>	<b>Telephone</b>	<b>Tires Processed FY-2001</b>
Anderson Tire Co. Inc./ Recycler	West Gordy Road Salisbury MD 21801	The license has been issued for the processing of scrap tires and converting them into 1 to 2 inch size chips. No tires have been processed since the issuance of the license.	(410) 749-5570	22,410
Emanuel Tire Company/ Recycler	1300 Moreland Avenue Baltimore MD 21216	The company has been processing scrap tires for last three decades. The operation converts scrap tires into 1 to 2 inch size tire chips.	(410) 947-0660	4,550,900
ESSROC Cement Corporation/ TDF	4120 Buckeystown Lime Kiln MD 21702	The operation utilizes whole passenger scrap tires as a supplemental fuel in its two cement kilns to replace 20 to 30 percent of the process heat needed to convert the raw material into cement.	(301) 874-8271	582,370
St. Lawrence Cement Co./ TDF	1260 Security Road Hagerstown MD 21741	The operation utilizes tire chips as a supplemental fuel in its cement kiln to replace up to 35 percent of the process heat needed to convert the raw material into cement.	(301) 739-1150	None
Lehigh Portland Cement/ TDF	117 South Main Street Union Bridge MD 21702	This facility's operation is similar to ESSROC's operation.	(410) 775-1000	1,198,800
Baltimore RESCO, Waste-to- Energy Facility /Incinerator	1801 Annapolis Road Baltimore MD 21230	The facility processes 2,250 tons per day of municipal solid waste and was approved to burn tires in FY 1997. Steam generated at the facility to generate electricity for sale to BG&E.	(410) 234-8271	1,120
Harford Waste-to Energy Facility/ Incinerator	1 Magnolia Road Joppa MD 21085	The facility processes up to 360 tons per day of municipal solid waste with a tire content of up to 72 tons per day. Steam is generated at the facility to generate electricity for Aberdeen Proving Ground Army facility.	(410) 679-6200	383,150
<b>Total</b>				6,738,750

Source: Scrap Tire Semi-Annual Reports

## Maryland's Scrap Tire Flow and Destinations

- ❖ Since the inception of the scrap tire program, there are now almost 2,400 locations in the State where a citizen or a business may bring scrap tires and know that they will be properly handled.
  - Scrap tire haulers pick up tires from these locations and deliver them to either licensed or approved facilities in Maryland or out-of-state.
- ❖ All licensed scrap tire facilities and haulers are required to submit semi-annual reports to the Department. Reports must include:
  - The origin and number of scrap tires received at the facility
  - Identification of scrap tire haulers transporting the scrap tires, and other scrap tire pick up and delivery facility information.
- ❖ Approximately 5.6 million scrap tires were generated in Maryland in FY 2001.
  - Figure 2 shows how these Maryland generated tires were managed.
  - Figure 3 shows schematically the flow and processing of tires into and out of the State of Maryland.



## **Projected Markets for FY 2002**

- ❖ Based on the scrap tire market profile for the past three years and the anticipated cessation in tire derived fuel processing at one of the operating cement kilns due to construction of a new kiln, the Department estimates that the processing capacity for tire derived fuel will decrease in FY 2002 compared to FY2001.
  - Presently, Emanuel Tire Company is the only scrap tire recycling facility in Maryland which is recycling tires in significant quantities.
  - Four Maryland facilities used scrap tires as tire derived fuel (TDF) for supplemental energy in FY 2001.
    - These facilities included two cement kilns and two waste-to-energy facilities (see Table V).
      - The Baltimore RESCO Company (a waste-to-energy facility) only used 1,121 tires in FY2001 and is not anticipated to process a significant quantity in FY 2002.
      - St. Lawrence Cement Company in Washington County is licensed for TDF but did not process any scrap tires in FY 2001 and is not anticipated to process a significant quantity in FY 2002.
      - During FY 2001, Lehigh Portland Cement Company used approximately 1.2 million scrap tires as tire derived fuel (TDF) for the manufacture of cement products.
        - Lehigh plans to upgrade the facility and build a new kiln during FY 2002.
        - Construction and initiation of the plant will require the company to stop processing TDF for a minimum of one year, beginning in October, 2001.
        - The new kiln has been designed to be able to process TDF, but the actual processing capacity won't be known until the new kiln is operational and has been properly calibrated (scheduled to be complete during FY2003).

## **Other Market Development Activities – Scrap Tire Advisory Group**

- ❖ During FY 2001, the Department and MES convened the Scrap Tire Advisory Group to assess the current status of the Scrap Tire Recycling System and to provide advice on possible methods for improvement
  - The Advisory Group conducted a series of meetings to learn about current conditions related to scrap tire recycling in Maryland, to assess issues that need to be addressed, and to consider options for addressing the issues identified.
  - The Advisory Group identified five major issues, with possible solutions, that the Department and MES should consider for the scrap tire program.

1) *Issue:* System capacity

*Possible solutions:*

- Market development
- Interstate cooperation

*FY 2001 activities:*

- The Department finalized plans to sponsor the “First Mid-Atlantic Regional Scrap Tire Conference” in November 2001, which included:
  - A conference of regional state regulators to encourage interstate cooperation.
  - A full day technical training session for design of Civil Engineering applications of scrap tire products.
  - A two day conference of presentations by experts in the field to encourage market development.

2) *Issue:* Regional distribution of processing facilities

*Possible solutions:*

- Consideration of economic incentives for development of regional collection facilities.

3) *Issue:* Illegal dumping and littering of tires.

*Possible solutions:*

- Consideration of a scrap tire tracking “manifest” system
- Consideration of a scrap tire positive value system
- Increased public education activities

*FY 2001 activities:*

- The Department’s licensing and semi-annual reporting database was upgraded to an Access database to allow for more efficient tracking of scrap tires.

- The Department initiated a public service announcement campaign, consisting of both television and movie theatre ads.

4) *Issue: Difficult to dispose of tires (truck tires, rimmed, dirty)*

*Possible solutions:*

- Consideration of economic incentives for these types of tires.
- Increased interstate cooperation
- Ensure proper handling of tires to minimize dirt and mud.

*FY 2001 activities:*

- The Department wrote letters to county landfills to ensure that proper practices for tire handling were followed.

5) *Issue: Economic Issues - current market conditions*

*Possible solutions:*

- Continue funding of projects to ensure demand for scrap tire Products
- Consider providing loans or grants to the private sector

- In FY 2002 the Department will continue to assess and implement procedures to respond to the Scrap Tire Advisory Group issues.

## **VI. COMPLIANCE AND ENFORCEMENT ACTIVITIES**

- ❖ The goal of the Department's compliance and enforcement program is to ensure that all of Maryland's licensed scrap tire facilities and scrap tire haulers are in full compliance with the scrap tire law, regulations and license conditions.

## **Goals for Compliance and Enforcement Actions in FY 2001**

- Continue to maintain the quality of compliance and enforcement activities and to perform at least 800 inspections and investigations.
- Provide professional high quality service to Maryland scrap tire business community.

## **Accomplishments in FY 2001**

- The Solid Waste Program's inspectors conducted a total of 844 scrap tire investigations and inspections, exceeding the program's goals for inspection
- Scrap tire sites inspected included both licensed and unlicensed scrap tire facilities, as well as sites that have been designated for cleanup by the Department.

<p style="text-align: center;"><b>USED TIRE CLEANUP AND RECYCLING FUND FISCAL REPORT</b></p>
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- ❖ Environment Article, Section 9-275, Annotated Code of Maryland, provides the Department with the responsibility for administering the Fund.

- ❖ The Fund is generated through the collection of a tire recycling fee on the first sale of any new tire in the State.
- ❖ During the 2000 Legislative Session, the Maryland General Assembly amended §9-276 of the Environment Article, Annotated Code of Maryland (via Senate Bill 136) revising the fee from \$1.00 to \$0.40 per tire on the sale of each new tire in the State.
  - The legislature also directed the Department to accelerate the expenditure of funds in the Fund for cleaning up the remaining illegal scrap tire stockpiles.
  - In addition, the Maryland General Assembly amended §9-276 of the Environment Article to exempt inherited property from the requirement that the property owner reimburse the Department for the cost of removal of illegally stored or disposed scrap tires up to \$10,000.
- ❖ Table VI summarizes the scrap tire program expenditures for FY 2001.

**Table VI**

**Maryland Used Tire Clean Up and Recycling Fund  
FY 2001 Revenues and Expenditures**

Fund Balance (7/1/2000):	\$11,345,897.44
 <u>FY 2001 Revenues</u>	
Gross Used Tire Fees Revenues:	\$ 2,083,088.34
Adjustment for Comptroller's Fees:	(\$ 125,219.54)
Adjustment of the Department's Prior Costs:	\$ 380.03
Cost Recovery Revenues:	\$ 45,251.28
 Adjusted Net Used Tire Revenues for FY 2001:	 \$2,003,500.11
 <u>FY 2001 Expenditures</u>	
MDE Program Expenditures:	(\$948,621.05)
Stockpile Clean Ups:	(\$2,026,007.00)
MDE Indirect Costs:	(\$ 844,574.91)
MES Projects and Administration:	(\$3,286,500.00)
 Total FY 2001 Expenditures:	 (\$7,105,702.96)
 Fund Balance (6/30/2001):	 \$6,243,694.59



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