



# MARYLAND SCRAP TIRE ANNUAL REPORT – Fiscal Year 2011 –

Prepared by:  
Land Management Administration

Prepared for:  
Senate Education, Health and Environmental Affairs Committee  
House Environmental Matters Committee

November 2011



MARYLAND DEPARTMENT OF THE ENVIRONMENT  
1800 Washington Boulevard | Baltimore, MD 21230 | [www.mde.state.md.us](http://www.mde.state.md.us)  
410-537-3314 | 800-633-6101 x3314 | TTY Users: 800-735-2258  
Martin O'Malley, Governor | Anthony G. Brown, Lt. Governor | Robert M. Summers, Ph.D., Secretary





# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
INTRODUCTION .....	1
ACCOMPLISHMENTS AND RESULTS .....	1
FINANCIAL STATEMENT SUMMARY .....	1
LEGISLATIVE UPDATE .....	2
<b>OVERVIEW .....</b>	<b>3</b>
<b>SCRAP TIRE STOCKPILE CLEANUPS.....</b>	<b>3</b>
OBJECTIVE.....	3
ACCOMPLISHMENTS .....	4
FY 2012 ONGOING STOCKPILE CLEANUPS .....	5
COST RECOVERY ACTIONS .....	9
<b>SCRAP TIRE PROJECTS .....</b>	<b>10</b>
PROJECTS INITIATED DURING FY 2011 .....	11
PROJECTS CONTINUING FROM PREVIOUS YEARS.....	11
SCRAP TIRE PROJECTS PLANNED FOR FY 2012 .....	12
<b>LICENSING .....</b>	<b>12</b>
LICENSING ACCOMPLISHMENTS IN FY 2011 .....	13
<b>SCRAP TIRE MARKETS AND MARKET DEVELOPMENT .....</b>	<b>14</b>
MARKET ANALYSIS .....	14
MARYLAND’S SCRAP TIRE FLOW AND DESTINATIONS .....	15
<b>COMPLIANCE AND ENFORCEMENT ACTIVITIES.....</b>	<b>17</b>
STRATEGIES FOR COMPLIANCE AND ENFORCEMENT ACTIONS IN FY 2011 .....	17
ACCOMPLISHMENTS IN FY 2011 .....	17

## TABLE OF FIGURES & TABLES

FIGURE 1 – MARYLAND SCRAP TIRE PROCESSING CAPACITY .....	14
FIGURE 2 – MARYLAND GENERATED SCRAP TIRE MANAGEMENT.....	14
FIGURE 3 – SCRAP TIRE FLOW IN FY 2011 .....	16
FIGURE 4 – INSPECTIONS AND SPOT CHECKS .....	18
FIGURE 5 – NUMBER OF ENFORCEMENT ACTIONS .....	18
TABLE I – MARYLAND USED TIRE CLEANUP AND RECYCLING FUND FY 2011 REVENUES AND EXPENDITURES .....	2
TABLE II – SCRAP TIRE CLEANUP SITES COMPLETED IN FY 2011 .....	4
TABLE III – SCRAP TIRE STOCKPILE CLEANUPS ONGOING IN FY 2012.....	5
TABLE IV – MARYLAND INITIATED COST RECOVERY ACTIONS THROUGH FY 2011 .....	9
TABLE V – SCRAP TIRE LICENSES IN FY 2011 .....	13
TABLE VI – MARYLAND LICENSED SCRAP TIRE PROCESSING FACILITIES .....	16
TABLE VII – SCRAP TIRE COMPLIANCE AND ENFORCEMENT IN FY 2011 .....	18

---

The Waste Diversion and Utilization Program of the Maryland Department of the Environment produced this report. Contents may be used without permission, provided credit is given.



# Executive Summary

---

## Introduction

This is the Fiscal Year (FY) 2011 Scrap Tire Annual Report as required by Environment Article, Section 9-275(b), which is 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 ("the Department" or "MDE") and the Maryland Environmental Service ("MES") from July 2010 through June 2011, and describes activities for the coming year.

---

## Accomplishments and Results

- Maryland generated an estimated 5.8 million scrap tires in FY 2011 that were managed in the following manner: Recycled or used as fuel in Maryland (69 percent) and exported to other states for disposal, recycling, or used as fuel (31 percent).
  - Maryland's licensed scrap tire facilities processed 7.2 million scrap tires in FY 2011, including 4.0 million Maryland-generated scrap tires and 3.2 million scrap tires imported from out-of-State.
  - Approximately 85 percent of the tires processed in Maryland were recycled and 15 percent were used as supplemental fuel in cement plants and waste-to-energy facilities.
  - Since the inception of the Scrap Tire Program in 1992, over 9.6 million scrap tires have been recovered from 859 stockpile cleanup sites.
  - During FY 2011, a total of 35 illegal scrap tire stockpile sites were cleaned up and approximately 509,060 tires were removed.
  - Approximately 94 percent of all stockpile site cleanups accomplished in FY 2011 were achieved by administrative enforcement, without using the Used Tire Cleanup and Recycling Fund ("the Fund").
  - A total of 344 new scrap tire licenses were issued.
  - A total of 71 scrap tire licenses were renewed.
  - At the end of FY 2011, there were a total of 3,261 valid Maryland scrap tire licenses.
  - MDE inspectors performed 801 scrap tire site inspections/investigations.
- 

## Financial Statement Summary

- The 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 an eighty cent (\$0.80) per tire recycling fee on the first sale of any new tire in the State.
- Revenues to the Fund were significantly higher (51%) in FY 2011 than in FY 2010. However, that amount is somewhat skewed because the Maryland Comptroller's office forwarded 5 quarters of revenue to the Department, rather than the usual 4 quarters. When the total revenue amount for FY 2011 is divided by 5 and the estimated amount for the extra quarter's revenue is removed from the total, the estimated revenue for the 4 quarters of FY 2011 is \$3,991,015.19. This amount is still higher (20%) than the FY 2010 revenue, but not

as high as it initially appears to be. It is possible that the Comptroller's office will correct this anomaly by forwarding only 3 quarters of revenue during FY 2012, but the Department has not received any information regarding this issue from the Comptroller's office. The increase in revenue during FY 2011 may be a sign that the economy is improving; however, there is not yet enough data to draw conclusions about whether this trend will continue.

- Table I summarizes the Scrap Tire Program expenditures for FY 2011.

**Table I – Maryland Used Tire Cleanup and Recycling Fund  
FY 2011 Revenues and Expenditures**

<b>Fund Balance (7/1/2010)</b>	<b>\$3,804,725.23</b>
Add Open Prior Year Encumbrances	\$1,620,262.79
<b>Adjusted Beginning Balance</b>	<b><u>\$5,424,988.02</u></b>
<b>FY 2011 Revenues</b>	
Gross Used Tire Fees Revenues	\$4,988,768.99
Adjustment for Comptroller's Fees	\$0.00
Reduced Collateral Escrow (ESSROC Cement)	\$0.00
Cost Recovery/Penalties (Cash and Accruals)	\$853.24
DBM Revenue Reduction	<u>(\$830,000.00)</u>
<b>Total Revenue for FY 2011</b>	<b><u>\$4,159,622.23</u></b>
<b>FY 2011 Expenditures</b>	
Scrap Tire Program Expenses	<u>(\$1,332,089.94)</u>
Other MDE Administrative Expenses	<u>(\$354,098.65)</u>
Department Indirect Costs	<u>(\$352,776.80)</u>
MES Projects and Administration	<u>(\$234,202.50)</u>
Prior FY Encumbrance Payments	<u>(\$987,908.99)</u>
<b>Total FY 2011 Expenditures</b>	<b><u>(\$3,261,076.88)</u></b>
<b>Total Encumbrances</b>	<b><u>(\$1,724,024.66)</u></b>
<b>Total Fund Balance (6/30/2011)</b>	<b><u>\$4,599,508.71</u></b>

### Legislative Update

- Chapter 487 of the 2009 Budget Reconciliation and Financing Act reduced the Fund by \$3 million.
- In accordance with House Bill 101, enacted during the FY 2009 legislative session, the Department used \$270,693.49 of the revenues received by the Fund in FY 2010 for administrative expenses of the Department.

- Section 9-275(a) of the Environment Article, Annotated Code of Maryland also allows the Department to use up to 50 percent of the revenues received by the Fund in FY 2010, and each fiscal year thereafter, for administrative expenses of the Department.
  - Chapter 484 of the 2010 Budget Reconciliation and Financing Act reduced the Fund by \$1,100,000.
  - Chapter 484 of the 2010 Budget Reconciliation and Financing Act reduced the Fund by \$80,000 in FY 2011 through furloughs and temporary salary reductions.
  - Chapter 397 of the 2011 Budget Reconciliation and Financing Act reduced the Fund by \$750,000.
  - In accordance Chapter 487 of the 2009 Budget Reconciliation and Financing Act, the Department used \$354,098.65 of the revenues received by the Fund in FY 2011 for administrative expenses of the Department.
- 

## Overview

---

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 Department's progress in implementing the law and ensuring the proper management of scrap tires in Maryland. This report includes additional information about the program and future activities.

The Scrap Tire Recycling Act 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 Fund to support the Scrap Tire Program.

- ❖ The Department uses the Fund for administration of the program, licensing activities, stockpile cleanups, enforcement/compliance, remedial actions, and for the development and distribution of public information concerning scrap tire issues.
  - ❖ Under the Department's authorization, the Maryland Environmental Service (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.
- 

## Scrap Tire Stockpile Cleanups

---

### Objective

The Departmental Scrap Tire Cleanup Objective for FY 2011, to initiate the planning and cleanup process for 100 percent of illegal scrap tire stockpile sites identified during the year, was accomplished. During FY 2011, the Scrap Tire Program continued cleanup and recovery of the

remaining 2.18 million scrap tires identified in stockpiles at the end of FY 2010, along with those scrap tires from 22 stockpiles newly identified during the year.

In order to achieve this goal, the following strategies were undertaken:

- The initial employment of administrative enforcement procedures to persuade property owners to remove stockpiles using their own resources.
- Use of the Fund to clean up stockpile sites only when administrative enforcement efforts were unsuccessful.
- Targeting efforts toward eliminating all scrap tire stockpile sites.
- The Department will seek cost recovery from responsible parties for expenses incurred at sites that are not eligible for exemption.

## Accomplishments

Since the inception of the Scrap Tire Program in 1992, almost 9.7 million scrap tires have been recovered from completed and ongoing stockpile cleanup sites.

During FY 2011, the Scrap Tire Program successfully completed cleanup of 35 illegal scrap tire stockpiles, consisting of approximately 509,060 scrap tires. These sites were located in 16 of the State's 24 jurisdictions and ranged in size from 23 to 290,000 tires (see Table II for a list of stockpile cleanups completed during FY 2011). The Scrap Tire Program also initiated the planning and cleanup process for the 22 illegal scrap tire stockpile sites newly identified during FY 2011.

Most of the scrap tire stockpile cleanups occurred without using the Fund. Ninety-four percent (94%) of all stockpile abatements completed in FY 2011 – 33 of 35 completed stockpile cleanups – used the administrative approach. The two remaining sites qualified for the inheritance exemption for cost recovery and were conducted using the Fund.

**Table II – Scrap Tire Cleanup Sites Completed in FY 2011**

Site Name	County	Initial Number of Tires
Garner/Brandywine – Ravine 5	Prince George's	290,000
Morgan/Mechanicsville	St. Mary's	121,335
Roll Rite/Laurel	Howard	25,000
Mona Equipment Inc/Port Tobacco	Charles	15,000
St. Mary's/Sandy Acres Lane	St. Mary's	12,245
Wise/Clarksville	Howard	10,218
Vandyke/Rising Sun	Cecil	10,000
Don's Sales/Swanton	Garrett	8,500
Compton Inc/Port Tobacco	Charles	4,000
DNR/Linthicum	Anne Arundel	4,000
Gregory/Rhodesdale	Dorchester	1,381
11655 Crossroads Circle/Middle River	Baltimore County	1,000
DNR/Wilson/Oldtown	Allegany	1,000
Beach Drive Properties/Huntingtown (Neald Estates)	Calvert	800
Kramer/Nanticoke	Wicomico	500
Cummings/Upper Marlboro	Prince George's	400



Site Name	County	Initial Number of Tires
Mechanics Valley/North East #2	Cecil	400
MFS & ABS Mattress, LLC etal/Upper Marlboro	Prince George's	400
Morgan/Frederick	Frederick	400
Gallagher/Sharptown	Wicomico	360
Davis/Silver Spring	Montgomery	300
Troutman/Cumberland	Allegany	300
York Building Products/Perryville #2	Cecil	300
Dasc, LLC/Upper Marlboro #2	Prince George's	250
DNR/Gunpowder Falls State Park	Baltimore County	230
Bittorf/Salisbury	Wicomico	125
ICC/Rockville	Montgomery	100
Lenhoff/Chestertown	Kent	100
MNCPPC/Rockville	Montgomery	100
Exelon Generation Company, LLC/Conowingo	Cecil	80
Hodorowicz/North East	Cecil	70
SHA/Route 29 North	Montgomery	60
Green/Street (Street Auto Center)	Harford	43
St. Charles Active Adult Comm., LLC/Waldorf	Charles	40
MFI Investment, LLC/Joppa	Harford	23
<b>TOTAL TIRES REMOVED</b>		<b>509,060</b>

## FY 2012 Ongoing Stockpile Cleanups

During FY 2012, the Department plans to complete or initiate the cleanup of the majority of known scrap tire stockpiles throughout Maryland. Most of the stockpiles will be cleaned up using administrative efforts and enforcement actions because funding is limited for State-funded cleanups. New stockpile sites are continually being identified for cleanup in Maryland. A total of 64 stockpile sites have been targeted for either continuation of cleanup efforts or completion during FY 2012. (See Table III for details.) Following are the cleanups continuing during FY 2012.

**Table III – Scrap Tire Stockpile Cleanups Ongoing in FY 2012**

Site Name <sup>▲</sup>	County	Legislative District	Initial Number of Tires
<b>Garner/Brandywine – Ravines 1-4</b>	<b>Prince George's</b>	<b>27A</b>	<b>1,500,000</b>
Boehm/Crownsville	Anne Arundel	33	301,125
Polvi/Brandywine	Prince George's	27A	103,423
<b>Tucker/West River</b>	<b>Anne Arundel</b>	<b>30</b>	<b>36,400</b>
Mt. Airy Auto & Truck Parts, LLC/Mt. Airy	Frederick	4A	15,000
Gough/Lusby	Calvert	49C	10,000
Howard 2/Reisterstown	Baltimore County	04	10,000

<sup>▲</sup> Sites listed in **bold** represent planned State funded cleanups.

Site Name ^	County	Legislative District	Initial Number of Tires
Zepp/Pasadena	Anne Arundel	31	10,000
<b>Tyler Towing/Clarksville</b>	<b>Howard</b>	<b>13</b>	<b>10,000</b>
Insley/Cambridge #2	Dorchester	37B	6,655
SOMCO Towing & Salvage/Westover	Somerset	38A	6,000
G & TL Smith Contracting LLC/Chesapeake Beach	Calvert	27B	5,000
Grant County Mulch/Laurel	Prince George's	21	5,000
Mizzell/Aquasco	Prince George's	27A	4,000
Johns-Gibbs/Marydel	Caroline	36	3,050
Gilbert/Joppa	Harford	34A	3,000
Harpers/Elkton	Cecil	36	3,000
Tilghman/Easton	Talbot	37B	3,000
Prince George's County/Capitol Heights	Prince George's	24	2,500
Ed's Towing/Rising Sun	Cecil	34B	2,000
Lieske/Perryman	Harford	34A	2,000
Pechin/Sudlersville	Queen Anne's	36	1,500
Sprig, LLC/Glen Burnie	Anne Arundel	31	1,334
MacFarland/Ridgely #2	Caroline	37B	1,100
DNR/Mardela Springs	Wicomico	37B	1,000
McIntyre/Huntingtown	Calvert	27B	1,000
Metro Golf Cart Rentals S&S, LLC/Brandywine	Prince George's	27A	1,000
Reid/Darlington	Harford	35A	700
Lofland/Sudlersville #2	Queen Anne's	36	700
Dico, Inc/Fairmount Heights	Prince George's	24	600
Szymanski/Rock Hall #2	Kent	36	600
Bare/Manchester (Bachman Valley Road)	Carroll	5A	600
Peterson/Baltimore	Baltimore City	31	600
Decatur/Cumberland	Allegany	1C	500
Carter/Nanjemoy	Charles	28	500
Munson/Waldorf	Charles	28	500
Prince George's County/Fairmount Heights	Prince George's	24	500
Robinson/Bryans Road	Charles	28	500
Turner Transit/Capitol Heights	Prince George's	24	500
Whitman/La Plata	Charles	28	500
Delano/Federalburg	Caroline	37B	500
DNR/Cedarville State Park #2	Prince George's	27A	350
FRON-DJW, LLP/Perryville (Touchstone Perryville, LLC)	Cecil	34B	300
Beachwood North H.O.A/Sparrows Pt.	Baltimore	06	250

Site Name ^	County	Legislative District	Initial Number of Tires
Dasc, LLC/Upper Marlboro	Prince George's	25	250
Rodenhauer/Bowie	Prince George's	23B	250
Triplin/Baltimore	Baltimore	46	250
Anne Arundel County/Hanover	Anne Arundel	32	200
Aud/Great Mills	St. Mary's	29B	200
Lounsbury/Port Deposit	Cecil	34B	200
Sarver/Cumberland	Allegany	1B	200
Jones/California	St. Mary's	29B	200
Batson/Federalburg	Caroline	37B	150
Pearce/Warwick (JC & T Investments, LLC)	Cecil	36	136
USA National Park Service/Tuscarora	Frederick	3B	115
Abouzeid/Elkton	Cecil	36	100
Anne Arundel County/Pasadena	Anne Arundel	2	100
Cooper/Chestertown	Kent	36	100
Gelof/Chestertown	Kent	36	100
Jorgensen/Buckeystown	Frederick	3B	100
Fair Hill Natural Resources/Elk Mills #2	Cecil	35B	75
McAleer/Dickerson	Montgomery	15	60
Bauer/Middle River	Baltimore	29A	40
Wolfepack LLC/Severn	Anne Arundel	32	30
<b>TOTAL TIRES REMAINING TO BE REMOVED</b>			<b>2,059,643</b>

### State Funded Cleanups

The following are descriptions of each of the current State-funded scrap tire cleanups underway.

#### *Garner/Brandywine Cleanup – Ravine #5*



*Before Cleanup*



*During Cleanup*



*After Cleanup*

Garner/Brandywine Scrap Tire Stockpile Cleanup – Located in Prince George’s County, this is one of the few remaining very large scrap tire dumps in Maryland. This stockpile consists of approximately 1,500,000 to 2,000,000 tires in seven ravines on the property. With the passage of legislation exempting inherited scrap tire sites from cost recovery requirements, the owners, who inherited the site but were not involved in the tire dumping, granted the Department access for a State cleanup in FY 2005, and the Board of Public Works approved funding the cleanup through the Fund.

Status: Cleanup activities on the first ravine (Ravine #5) began in FY 2010. Cleanup and stabilization activities were completed in June, 2011. The remainder of the site was bid and the contract was executed in May 2011. Cleanup activities in Ravine #4 began in June 2011 and are expected to be completed during FY 2012. Cleanup of the entire site is expected to be completed during FY 2014. The total cost for cleanup of the entire site is estimated at \$10,509,118.00. MES has secured a loan from the Department’s Water Quality Financing Administration to help finance this cleanup.

*Morgan/Mechanicsville Cleanup*



*Before Cleanup*



*During Cleanup*



*After Cleanup*

Morgan/Mechanicsville Scrap Tire Stockpile Cleanup – The project was funded through the Fund, and the property owner qualified for the inheritance exemption from cost recovery requirements. The property is located in St. Mary’s County.

Status: Cleanup activities began in November 2007. All scrap tires, estimated at 121,335 tires, have been removed from the site for proper disposal, recycling, and/or use as fuel. Site restoration activities were performed, including stabilization of the slopes, reforestation of the site, and monitoring of tree and vegetation growth for several years. The permits were closed out in FY2011 and the cleanup is now complete.

Tucker/West River Scrap Tire Stockpile Cleanup – The project is being funded through the Fund, and the property owner qualifies for the inheritance exemption. The stockpile is estimated at 36,400 scrap tires, and the property is located in Anne Arundel County.

Status: MES delineated the limits of the scrap tire stockpile and obtained necessary permits. These cleanup development activities have cost the Department approximately \$53,810.00 to date. MES will solicit bids for the cleanup activities in July 2011. The contractor is expected to begin work on-site in September 2011, and cleanup and restoration activities are expected to be completed in December 2011. MES will monitor tree and vegetation growth after site restoration until the permits are closed.

Boehm/Crownsville Scrap Tire Stockpile Cleanup – This is an old commercial landfill in Anne Arundel County that has approximately 301,125 scrap tires in ravines and partially buried in the ground.

Status: Due to loss of legal access to the site, and permitting difficulties, cleanup planning activities were placed on hold prior to FY 2009. Several representatives from the Department and MES met with the new property owners at the site and were allowed to walk the property to observe the current condition of the scrap tires and the site conditions. The Department informed the property owners of the need to clean up the scrap tires, but no cleanup actions have been taken. The Department is working with the Office of the Attorney General and considering its options for moving forward with this cleanup.

### Cost Recovery Actions

- The Department continues to use the services of the Attorney General’s Office to handle scrap tire cost recovery actions (see Table IV for details).
- To date, 136 cleanups have been performed using the Fund.
- In total, 32 property owners have been pursued in cost recovery actions for cases in which the State initiated scrap tire cleanups with Fund monies.
- Cost recovery actions have not been performed against:
  - 92 sites because they were on publicly owned property;
  - 6 sites because they qualified for the inheritance exemption;
  - 3 sites because the property owner passed away and the estate was closed before a cost recovery action could be completed; and
  - 3 sites because the cost to pursue the case was higher than the cost recovery amount that could be sought.
- To date, the Department has sought a total of \$3,438,877.55 from property owners and has collected a total of \$323,349.24 in cost recovery actions. Many of these cases are still in litigation. Some cases were settled out-of-court for less than the amount originally sought due to the Defendant’s inability to pay.
- The Garner/Brandywine (State-funded cleanup efforts continued in FY 2011), Morgan/Mechanicsville (completed in FY 2011), and Tucker/West River (expected to be completed in FY 2012) sites all qualify for the inheritance exemption. Therefore, cost recovery will not be sought after cleanup efforts conclude on these sites.

**Table IV – Initiated Cost Recovery Actions Through FY 2011**

Site Name	County	Cleanup Year	No. of Tires	Amount Sought
Hughesville/Underwood	Charles	1996	720,000	\$1,015,299.72
Western Commercial/Smithburg	Washington	1996	505,500	\$770,174.47
Oak Hill Realty/Easton	Talbot	1997	158,325	\$375,294.16
Lofland/Sudlersville	Queen Anne’s	1996	120,000	\$226,083.74
Mack 1, 2, & 3/Reisterstown**	Baltimore	2000	44,087	\$184,451.09
Snyder/Calvert	Cecil	1996	129,526	\$151,266.00
Shorter/Waldorf**	Charles	1998	129,626	\$137,902.00

Site Name	County	Cleanup Year	No. of Tires	Amount Sought
Tull/Federalburg	Caroline	1997	61,688	\$104,586.00
Johnson/Sunderland	Calvert	2003	10,735	\$91,123.00
Howard/Crisfield	Somerset	2002	21,505	\$86,395.00
Insley/Cambridge	Dorchester	2002	20,747	\$60,908.91
Hustle Tire/Ingleside	Queen Anne's	1998	26,852	\$48,437.69
Brown/Williamsport*	Washington	1998	18,672	\$27,482.37
Dotson/Preston	Caroline	2000	24,000	\$26,403.70
Sproates/Golts	Kent	1998	6,825	\$26,118.75
Warfield/Bethlehem	Caroline	1997	14,338	\$24,596.24
Myers/Baltimore	Baltimore	2002	7,179	\$22,349.00
Williams/Vienna	Dorchester	2002	3,642	\$14,611.00
Elwood's Auto/Smithburg	Washington	2000	266,664	\$11,388.02
Husted/Crisfield	Somerset	2003	1,650	\$7,598.00
Clark/Choptank	Caroline	2004	2,007	\$5,495.00
Betts/Crisfield	Somerset	2002	922	\$3,877.00
Heath Salvage/Millington	Kent/Queen Anne's	2001	3,478	\$3,200.00
Thomas/Rhodesdale	Dorchester	2003	350	\$2,450.00
Joy & Morgan Developers/Temple Hills	Prince George's	2002	238	\$1,855.00
Truxon/Hillsboro	Caroline	2003	758	\$1,799.00
Goodyear/Elkton	Cecil	2003	1,013	\$1,200.00
McMannis/Cumberland	Allegany	1997	887	\$998.00
Carter/Queenstown	Queen Anne's	1998	1,117	\$982.00
Spencer/Golts	Kent	1997	230	\$950.00
Wilkinson/Oldtown	Allegany	2002	248	\$800.00
Holley/Collins Road	Somerset	1997	217	\$788.00
Lane/Princess Anne	Somerset	2003	300	\$750.00
King/Annapolis Junction**	Anne Arundel	1999	0	\$533.19
Turner/White Hall	Harford	2003	500	\$500.00
Miller/Churchton	Anne Arundel	2004	16,000	\$231.50
<b>Total Amount Sought (Through FY 2011)</b>				<b>\$3,438,877.55</b>

\* Cost to pursue recovery of funds will exceed amount sought.

\*\* Owner died before costs were recovered.

## 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 2011**

Due to lack of funding, MDE did not initiate any new scrap tire projects during FY 2011.

---

## **Projects Continuing from Previous Years**

### **Rubber-Modified Asphalt Project (Caroline County)**

- In FY 2007, MES worked with Talbot County to identify potential sites for rubber-modified asphalt installations. However, Talbot County did not provide MES with identified sites and paving schedules.
- In FY 2009, the Department and MES began working with Midshore Regional Landfill, a cooperative effort between Kent, Caroline, Queen Anne's, and Talbot County governments. The project involved installation of rubber-modified asphalt in lieu of traditional paving materials as part of construction of the Midshore II Regional Landfill in Caroline County. The project targeted County, municipal, and/or landfill roads in several high/diverse use areas.
- In FY 2009, a portion of River Road in front of the Midshore II Regional Landfill near the Town of Ridgely in Caroline County was selected as the paving location.
- The rubber modified asphalt was installed in October 2010, in conjunction with construction of the Midshore II Regional Landfill, which opened on October 11, 2010.
- The rubberized asphalt is expected to show several advantages over traditional materials including increased flexibility and durability, and decreased slumping, reflective cracking, and noise.
- This project will demonstrate and encourage the use of rubberized asphalt products by public agencies and private contractors in Maryland.
- Representatives from State and county government agencies and private contractors were invited to observe the manufacture of the rubberized asphalt mix and installation of the material on River Road.
- Informational signs have been placed at the project site educating the public about the project and scrap tire recycling.
- The rubberized asphalt road section will be visually monitored for pavement condition every 6 months for 3 years (through October 2014).
- The first post-construction inspection was completed on March 1, 2011, and the pavement was observed to be in excellent condition.

### **Landfill Environmental Monitoring Project**

- This project was discontinued in FY 2011 due to the fact that the Department had enough data to make scientifically defensible conclusions regarding the suitability of scrap tire materials in several of the landfill projects, and no further non-intrusive data collection or sampling was able to be performed at the remaining landfills. It was determined that the risk of damaging the landfill's protective systems (cover, drainage, liner) and causing environmental harm was not warranted by the minimal amount of data that

could be collected by performing an invasive investigation (excavating through the cover and waste, and observing the liner and drainage systems).

---

## Scrap Tire Projects Planned for FY 2012

Due to reduction of available revenues in the Fund, the Scrap Tire Program will not conduct any new scrap tire projects during FY 2012. Instead, available funds will be used to pursue cleanup of illegal scrap tire stockpiles that would otherwise remain a threat to public health and the environment.

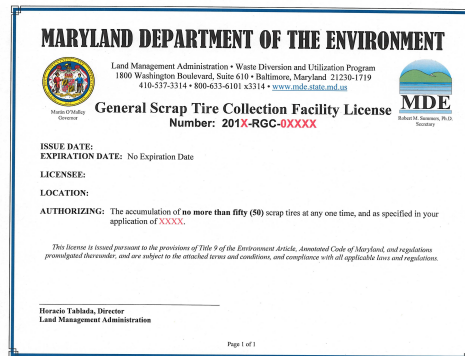
---

## Licensing

---

Under Maryland law (Section 9-228 of the Environment Article), the Department is required to regulate scrap tire facilities and scrap tire haulers.

- Facilities that collect or process scrap tires are required to obtain an appropriate license for their respective operations.
- 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,
  - *via* a licensed or approved transportation system,
  - *to* a licensed or approved scrap tire facility for the transfer, collection, or processing of the scrap tires.



The Department issues the following types 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 whole or chipped scrap tires 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 in FY 2011

- A total of 344 new and 71 renewal scrap tire licenses were issued. (see Table V).
- A majority of the license applications received (64%) were processed within the standard license application processing time of 60 days. Due to the loss of the scrap tire permit writer to retirement and reorganization within MDE, the scrap tire licensing duties were assigned to existing personnel until a new staff member could be hired and trained. The existing personnel had to learn how to process the applications and issue the licenses in addition to their regular duties. This caused an increase in the application processing time and a backlog in the issuance of licenses during the first half of FY 2011. Once the new staff member was hired and trained, the backlog was eliminated and the permit turnaround times improved dramatically in the second half of FY 2011. The FY 2011 quarterly breakdown of the percentage of license applications processed within the standard license application processing time of 60 days is as follows:
  - 1<sup>st</sup> Quarter = 15%
  - 2<sup>nd</sup> Quarter = 24%
  - 3<sup>rd</sup> Quarter = 91%
  - 4<sup>th</sup> Quarter = 92%

**Table V – Scrap Tire Licenses in FY 2011**

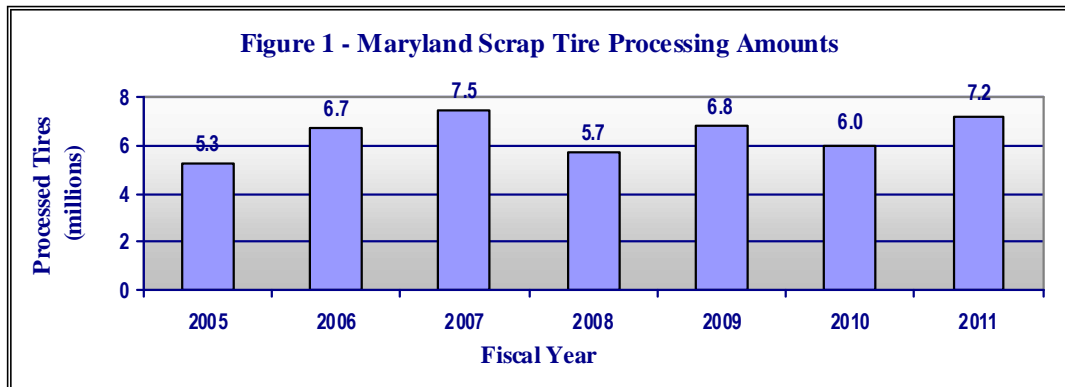
Type	New	Renewed	Total Issued (FY 2011)	Total Valid Licenses
General Collection	77	N/A	77	1,592
Secondary Collection	120	38	158	840
Primary Collection	0	1	1	2
Recyclers	0	3	3	3
TDF Facility	0	0	0	1
Solid Waste	0	1	1	2
Haulers	147	28	175	821
<b>TOTAL</b>	<b>344</b>	<b>71</b>	<b>415</b>	<b>3,261</b>

# Scrap Tire Markets and Market Development

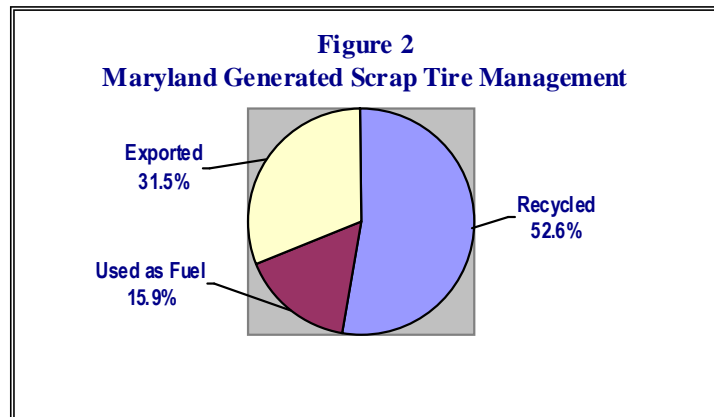
## Market Analysis

During FY 2011, the State's scrap tire processing facilities managed approximately 7.2 million tires generated from Maryland and out-of-state facilities.

- This represents a 20.4% increase from the previous year. (See Figure 1). The approximately 7.2 million tires processed include approximately 55% (3,981,374) Maryland generated and 45% (3,226,745) imported tires.



- Of the 7.2 million scrap tires processed, approximately 85% (6,127,655) were recycled, a 6% increase from the percentage reported in FY 2010. The remaining 15% (1,080,464) were used as fuel.
- Approximately 52.6% (3,056,494) of the 5.8 million Maryland-generated scrap tires were recycled in Maryland facilities and 15.9% (924,880) were used as fuel in Maryland facilities during FY 2011. The remaining 31.5% of the tires (approximately 1.8 million) were exported. (See Figure 2).



- Emanuel Tire Company (Maryland's largest scrap tire recycling facility) in Baltimore City processed about 5.9 million tires in FY 2011, a 34% increase from the number processed in FY 2010 (4.4 million).

- The Auston Tire Recycling facility in Harford County processed 226,531 tires in FY 2011, a noticeable increase of 19% from the 189,812 tires processed in FY 2010.
- During FY 2011, Holcim US, Inc. (formerly the St. Lawrence Cement Company) in Washington County processed approximately 281,137 tires, a significant 41% decrease from the reported quantity (479,714 tires) in FY 2010.
- The Harford Waste-to-Energy Facility processed 797,743 tires during FY 2011, a 10% increase from the number of tires processed during FY 2010 (723,738).

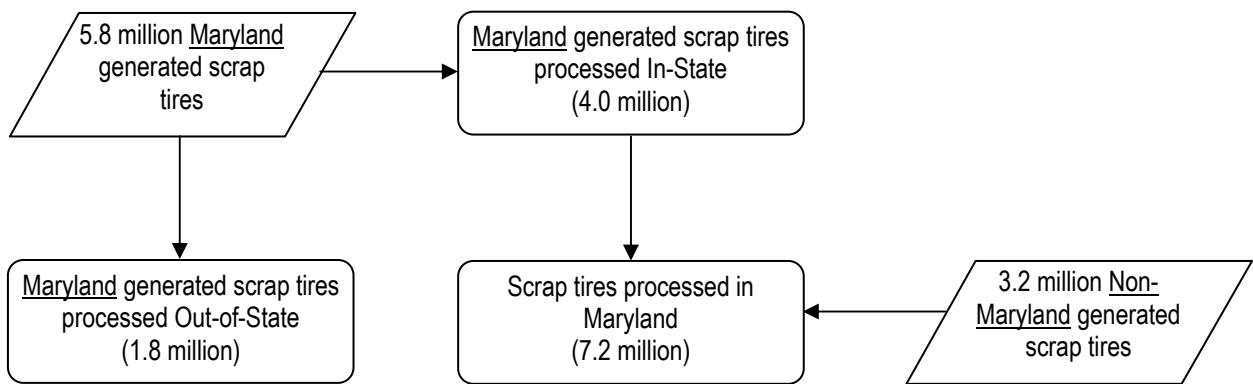
---

## **Maryland's Scrap Tire Flow and Destinations**

- 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, collected, or processed at the facility.
  - Identification of scrap tire haulers transporting the scrap tires, quantities in number or weight, and delivery facility information.
- There is no data available on actual amounts of scrap tires generated, so an estimate based on population is used. Based on the assumption that scrap tires are generated at a rate of one tire per person per year, the most recent census numbers were used to estimate that 5.8 million scrap tires were generated in Maryland during FY 2011. The actual number of scrap tires generated could vary (up or down) from the estimate due to factors such as economic conditions, special government programs, product recalls, etc.
- The overall processing of scrap tires (Maryland and out-of-state) increased 20.4% from reported capacity for FY 2010. Although several Maryland processing facilities decreased their processing capacity, a number of others increased their processing capacity in FY 2011. Most notably, Emanuel Tire Company increased their processing capacity by approximately 1.5 million tires. It is possible that the estimated number of scrap tires generated in Maryland is slightly higher than actual numbers due to economic factors (primarily fewer miles driven). The overall amount of scrap tires processed in Maryland increased by 20.4%, and the ratio of scrap tires that were recycled versus used as fuel in Maryland increased 6% during FY 2011. Overall, the scrap tire generation, processing, and handling of Maryland scrap tires follow the traditional trends, but the ratios have changed slightly: approximately 3.1 million scrap tires were recycled (a 19.4% increase), 1.8 million scrap tires were exported (a 21.7% decrease), and the remaining approximately 924,880 scrap tires were used as fuel (a 0.4% decrease).
- Continued emphasis needs to be given to market development of scrap tire products and processed raw materials. During FY 2009, the Department

worked with the Maryland Environmental Service and the private sector to develop a “best practices” manual to encourage engineers and designers to incorporate the use of tire-derived products into civil engineering projects. The manual advises the design engineer of possible uses for engineering materials derived from scrap tires, including the use of tire chips in drainage layers. The guidance will increase the utilization of these materials, and using alternatives will help conserve natural resources, such as gravel and crushed stone. The manual is available free of charge online at the Maryland Department of the Environment’s website at: [http://www.mde.state.md.us/programs/Land/RecyclingandOperationsprogram/ScrapTire/Documents/www.mde.state.md.us/assets/document/Guidance\\_Manual\\_For\\_Scrap\\_Tires.pdf](http://www.mde.state.md.us/programs/Land/RecyclingandOperationsprogram/ScrapTire/Documents/www.mde.state.md.us/assets/document/Guidance_Manual_For_Scrap_Tires.pdf) and on Maryland Environmental Service’s website at: <http://www.menv.com/content/recycling/Guidance%20Manual%20for%20Scrap%20Tires.pdf>.

**Figure 3 – Scrap Tire Flow in FY 2011**



**Table VI – Maryland Licensed Scrap Tire Processing Facilities**

Facility Name/Type	Location	Operation	Telephone	Tires Processed in FY 2011
Emanuel Tire Company/ Recycler	1300 Moreland Ave Baltimore MD 21216	The company has been processing scrap tires for the last four decades. The operation converts scrap tires into 1 to 2 inch size tire chips.	(410) 947-0660	5,870,785
K & K Tire, Inc./ Recycler	816 Oregon Avenue Linthicum MD 21090	Processes scrap tires into products.	(410) 636-2002	30,339
Auston Tire Recycling/ Recycler	1202 Pauls Lane Joppa MD 21085	Processes scrap tires into products.	(410) 335-1016	226,531

<b>Facility Name/Type</b>	<b>Location</b>	<b>Operation</b>	<b>Telephone</b>	<b>Tires Processed in FY 2011</b>
Holcim US, Inc. (formerly 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 generate up to 35 percent of the process heat needed to convert the raw material into cement.	(301) 739-1150	281,137
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	797,743
Wheelabrator Baltimore LP (BRESKO)	1801 Annapolis Road Baltimore MD 21230	The facility has been approved to burn scrap tires with municipal solid waste.	(410) 234-0808	1,318
Fort Detrick	393 Beasley Road Frederick MD 21702	The facility burns scrap tires with solid waste and medical waste.	(301) 619-2323	266
<b>TOTAL</b>				<b>7,208,119</b>

---

## **Compliance and Enforcement Activities**

---

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

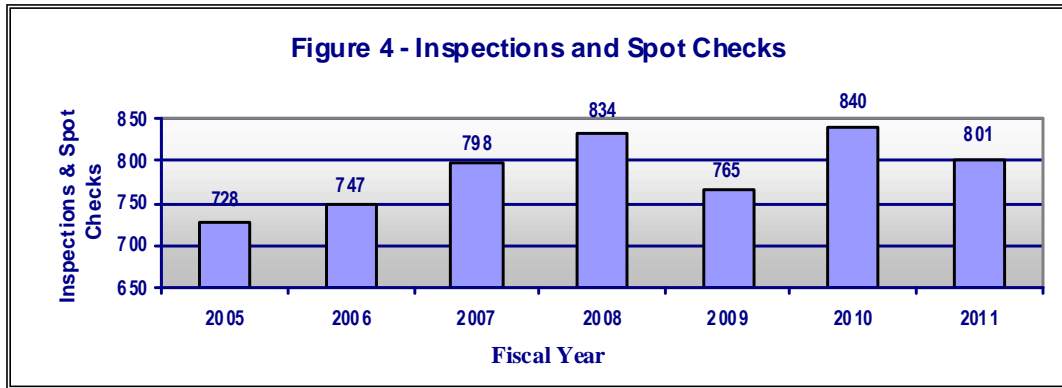
### **Strategies for Compliance and Enforcement Actions in FY 2011**

- Continue to maintain the quality of compliance and enforcement activities and routinely perform site inspections and investigations.
- Maintain inspection, compliance assistance, and enforcement actions of scrap tire licensees to discourage illegal scrap tire stockpiles.
- Continue coordinating with the State Fire Marshal's Office to ensure that plans for tire recycling and storage facilities meet applicable fire prevention standards and have adequate provisions for fighting fires should they occur.
- Continue identification and cleanup of illegal scrap tire stockpiles.

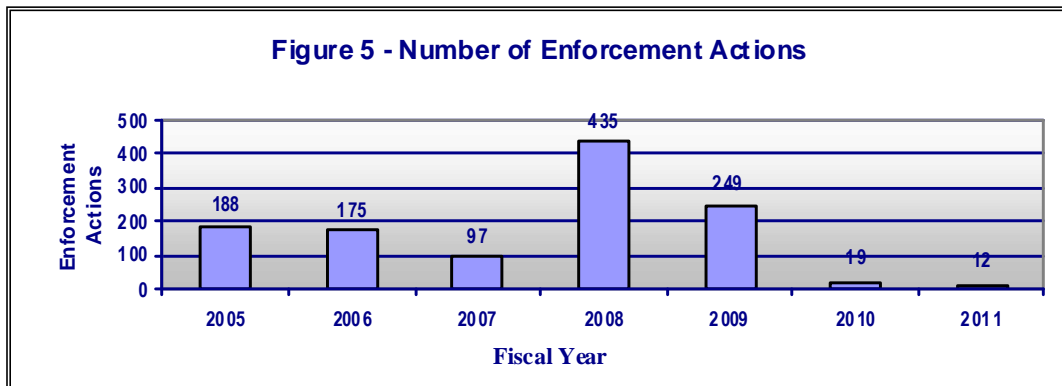
---

### **Accomplishments in FY 2011**

- A total of 801 scrap tire investigations and inspections were conducted.



- There was a decrease (4.6%) in the number of scrap tire inspections conducted in FY 2011 to 801 from 840 in FY 2010. The inspection coverage rate of 17% in FY 2011 is the same as the coverage rate reported in FY 2010.
- The percentage of inspected facilities in significant compliance was 99% during FY 2011, a slight increase over the compliance rate of 98% reported in FY 2010.
- A total of 52 significant violations were resolved, a 23.9% decrease from the number (218) resolved in FY 2010.
- The number of compliance assistance actions rendered increased from 5 in FY 2010 to 30 in FY 2011.
- The Scrap Tire Program worked in conjunction with the Office of the Attorney General (“OAG”) to issue letters to facilities that failed to submit semi-annual reports, resulting in the submittal of over 100 delinquent reports and collection of \$2,750.00 in fines.
- The Scrap Tire Program issued 12 enforcement actions during FY 2011 consisting of 12 Notices of Violation. Two referrals were made to the Office of the Attorney General for possible criminal action.



- Table VII displays the FY 2011 enforcement data as reported in the annual *MDE Enforcement Report*.

**Table VII – Scrap Tire Compliance and Enforcement in FY 2011**

<b>Permitted Sites/Facilities</b>	
Number of Permits/Licenses issued	404
Number of Permits/Licenses in effect at Fiscal Year End	3,224
<b>Other Regulated Sites/Facilities</b>	

Stockpiles to be cleaned up	64
<b>Inspections</b>	
Number of Sites inspected (“inspected” defined as “at the site”)	550
Number of Sites audited but not inspected (“not inspected” defined as “places where MDE reviewed submittals but did not go to the site”)	1,575
Number of Sites evaluated for compliance (sum of the two measures above)	2,125
Number of Inspections and Spot Checks (captures the number of compliance activities at sites)	801
Number of Audits (captures the number of reviews of file/submittals for compliance)	2,980
Number of Inspections, Audits, Spot Checks (sum of the two measures above, same as current count)	3,781
<b>Compliance Profile</b>	
Number of Inspected Sites/Facilities with Significant Violations	7
Percent of Inspected Sites/Facilities with Significant Violations	1%
Inspection Coverage Rate*	17%
<b>Significant Violations</b>	
Number of Significant Violations involving Environmental or Health Impact	0
Number of Significant Violations based on Technical/Preventative Deficiencies	11
Number of Significant Violations carried over awaiting disposition from Previous Fiscal Year	193
Total	204
<b>Disposition of Significant Violations</b>	
Resolved	52
Ongoing	152
<b>Enforcement Actions</b>	
Number of Compliance Assistance rendered	30
Number of Administrative Corrective Orders issued	0
Number of Civil Corrective Orders/Injunctions issued	0
Number of Criminal Corrective Orders issued	0
Number of Stop Work orders	0
Number of SEP’s entered into	0
Number of Administrative Penalties and Other Enforcement Actions	12
Number of Civil Penalties and Other Enforcement Actions	0
Number of Referrals to Attorney General for possible Criminal Action	2
<b>Penalties</b>	
Number of Administrative Penalties issued	0
Number of Civil Penalties issued	0
Number of Criminal Penalties issued	0
Value of SEP’s entered into	0
Amount of Penalties obtained	\$2,750.00
<b>Citizen Suits</b>	
Number of Notifications received of 3 <sup>rd</sup> Party Lawsuits being filed against regulated entities	0

\* Coverage rate above is computed as the total number of sites inspected and dividing that by the total number of permits/licenses in effect plus the number of stockpiles to be cleaned up.