

# MARYLAND SCRAP TIRE ANNUAL REPORT - Fiscal Year 2010 -

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House Environmental Matters Committee

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# **Executive Summary**

#### Introduction

This is the Fiscal Year (FY) 2010 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 2009 through June 2010, and describes activities for the coming year.

#### **Accomplishments and Results**

- Maryland generated an estimated 5.7 million scrap tires in FY 2010 that were managed in the following manner: Recycled or used as fuel in Maryland (59 percent) and exported to other states for disposal, recycling, or used as fuel (41 percent).
- Maryland's licensed scrap tire facilities processed 6.0 million scrap tires in FY 2010, including 3.4 million Maryland-generated scrap tires and 2.6 million scrap tires imported from out-of-State.
- Approximately 79 percent of the tires processed in Maryland were recycled and 21 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 9.4 million scrap tires have been recovered from 820 stockpile cleanup sites.
- During FY 2010, a total of 40 illegal scrap tire stockpile sites were cleaned up and approximately 230,399 tires were removed.
- Approximately 92 percent of all stockpile site cleanups accomplished in FY 2010 were achieved by using administrative enforcement (without using the Used Tire Cleanup and Recycling Fund).
- A total of 368 new scrap tire licenses were issued.
- A total of 120 scrap tire licenses were renewed.
- At the end of FY 2010, there were a total of 3,203 valid Maryland scrap tire licenses.
- MDE inspectors performed 840 scrap tire site inspections/investigations.

## **Financial Statement Summary**

- ★ The Environment Article, Section 9-275, <u>Annotated Code of Maryland</u>, provides the Department with the responsibility for administering the Fund.
- ★ The Fund is generated through the collection of an eighty cent (\$0.80) tire recycling fee on the first sale of any new tire in the State.
- ★ Due to the economic downturn, revenues to the Fund were less in FY 2010 than in most previous years and may continue to decline in the next fiscal year. This is caused by the reduction in sales of new vehicles (although the "Cash for Clunkers" program helped to counteract this) and new tires, a reduction in the number of miles driven causing tires to last longer than in the past and be replaced less often, and in increase on the number of miles

- driven on tires before replacing them. Used tire sales (not subject to the tire fee) increased during FY 2009 and FY 2010.
- ★ Table I summarizes the Scrap Tire Program expenditures for FY 2010.

Table I – Maryland Used Tire Cleanup and Recycling Fund FY 2010 Revenues and Expenditures

Fund Balance (7/1/2009)	\$4,335,225.49
Add Open Prior Year Encumbrances	\$3,378,407.64
Adjusted Beginning Balance	<u>\$7,713,633.13</u>
FY 2010 Revenues	
Net Used Tire Fees Revenues to MDE	\$3,312,083.21
Reduced Collateral Escrow (ESSROC	
Cement)	(\$16,000.00)
Cost Recovery (Cash and Accruals)	\$0.00
Revenue Reduction	(\$1,100,000.00)
Total Revenue for FY 2010	<u>\$2,196,083.21</u>
FY 2010 Expenditures	
<b>Ⅱ</b>	(\$1,000,955,05)
Scrap Tire Program Expenses	(\$1,900,855.05)
Other MDE Administrative Expenses	(\$270,693.49)
MES Projects and Administration	(\$421,399.02)
Prior FY Encumbrance Payments	(\$1,360,444.82)
Department Indirect Costs	(\$531,335.94)
Total FY 2010 Expenditures	<u>(\$4,484,728.32)</u>
Total Encumbrances	<u>(\$1,620,262.79)</u>
Total Fund Balance (6/30/2010)	<u>\$3,804,725.23</u>

## **Legislative Update**

- ✓ During the 2009 legislative session, House Bill 101 reduced the Fund by \$3,000,000.
- ✓ House Bill 101 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.
- ✓ During the 2010 legislative session, House Bill 141 reduced the Fund by \$1,100,000.
- ✓ In accordance with House Bill 101, enacted during the 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.

#### **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 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.

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 2010 was to initiate the planning and cleanup process within 30 days of discovery for 100 percent of illegal scrap tire stockpile sites identified during the year. During FY 2010, the Scrap Tire Program continued clean up and recovery of the remaining 2.2 million scrap tires identified in stockpiles at the end of FY 2009, along with those scrap tires from 26 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.
- Let Use of the Fund to clean up stockpile sites only when administrative enforcement efforts were unsuccessful.
- **x** Targeting efforts toward eliminating all scrap tire stockpile sites.
- In instances in which administrative enforcement efforts are not successful in encouraging owner cleanups, the Department has filed complaints with the court system for State access to these properties.
- \* The Department will seek cost recovery for expenses incurred for those sites determined to be non-eligible for exemption from those determined to be responsible parties.

#### **Accomplishments**

Since the inception of the Scrap Tire Program in 1992, over 9.4 million scrap tires have been recovered from completed and ongoing stockpile cleanup sites.

During FY 2010, the Scrap Tire Program successfully completed cleanup of 40 illegal scrap tire stockpiles, consisting of approximately 230,399 scrap tires. These sites were located in 18 of the State's 24 jurisdictions and ranged in size from 38 to 180,700 tires (see Table II for a list of stockpile cleanups completed during FY 2010).

Most of the scrap tire stockpile cleanups occurred without using the Fund. Ninety-two percent of all stockpile abatements completed in FY 2010 – 37 of 40 completed stockpile cleanups – used the administrative approach. The remaining sites for which cleanup was completed in FY 2010, two of which are located on public lands, were conducted using the Fund for cleanup activities. A small portion of one additional site was cleaned up using the Fund, before the property owners took over the cleanup activities themselves.

**Table II – Scrap Tire Cleanup Sites Completed in FY 2010** 

		Initial Number
C'A N	<b>C</b> 4	Initial Number
Site Name	County	of Tires
Suraci Family LTD/Davidsonville	Anne Arundel	180,700
Schwartz/Eagle Harbor	Prince George's	17,000
Midshore Recyclers, Inc/Hurlock	Dorchester	11,750
DNR/Green Ridge State Forest	Allegany	3,317
Laudenklos/Union Bridge	Carroll	2,448
300 Route 40, LLC/Joppa	Harford	2,241
Cotler/Rockville	Montgomery	1,546
Hanover Properties, LLC/Hanover	Anne Arundel	1,415
Southern MD Concrete Products, Inc/District Heights	Prince George's	1,331
DNR/Savage River State Forest	Garrett	833
Christian Homes & Building Management Inc/Ijamsville	Frederick	700
Ting, LLC/Delmar	Wicomico	650
Harris/Nanticoke	Wicomico	600
Edwards/Sparrows Point	Baltimore County	600
Roop/Rising Sun	Cecil	500
Ervin/Millington	Queen Anne's	500
Johnston/Baltimore	Baltimore City	500
Davy/Cumberland	Allegany	500
McGrady/Aberdeen	Harford	400
Short/Mardela Springs	Wicomico	337
3801 North Point Blvd, LLC/Baltimore	Baltimore County	329
Barrow/Rising Sun	Cecil	300
Thomas/Baltimore	Baltimore County	250
Sorteberg/Glen Arm	Baltimore County	250
Bandy/Poolesville	Montgomery	157
Webster Investment Group Inc/Capitol Heights	Prince George's	150
Hinder/Bel Air	Harford	140
Squires/Elkton	Cecil	137
Rogers/Greensboro #2	Caroline	100
1035 Old Philadelphia Road, LLC/Aberdeen	Harford	100

		<b>Initial Number</b>
Site Name	County	of Tires
Anne Arundel County/Brooklyn Park	Anne Arundel	80
DJH Limited Liability Company/Joppa	Harford	80
KSI Largo, LLC/Largo	Prince George's	75
Bowie/Nanjemoy	Charles	75
Chesapeake/Port Republic	Calvert	71
Tesco, LLP/Grantsville	Garrett	62
Murray/Worton	Kent	55
River Ventures, LLC/Riverdale	Prince George's	42
Sweatt/Capitol Heights	Prince George's	40
Dr. Bowen Road	Prince George's	38
TOTAL TIRES REMOVED		230,399

## **FY 2011 Ongoing Stockpile Cleanups**

During FY 2011, the Department plans to complete or initiate the cleanup of the majority of known scrap tire stockpiles throughout Maryland using administrative enforcement actions. Unfortunately, funding is limited for State funded cleanups. Numerous new stockpile sites are continually being identified for cleanup in Maryland. A total of 73 stockpile sites have been targeted for either continuation of cleanup efforts or completion during FY 2011. (See Table III for details.) Following are the cleanups continuing during FY 2011.

**Table III – Scrap Tire Stockpile Cleanups Ongoing in FY 2011** 

Site Name 🕹	County	Legislative District	Initial Number of Tires
Garner / Brandywine	Prince George's	27A	1,400,000
Boehm / Crownsville	Anne Arundel	33	301,125
Morgan / Mechanicsville	Saint Mary's	29B	121,335
Polvi / Brandywine	Prince George's	27A	100,000
Tyler Towing / Clarksville	Howard	13	50,000
Tucker / West River	Anne Arundel	30	36,400
Roll Rite/Laurel	Howard	13	25,000
Waterview Hotel / Nanticoke	Wicomico	37A	19,500
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
Vandyke/Rising Sun	Cecil	34B	10,000
Wise / Clarksville	Howard	13	9,343
Mona Equipment Inc. / Port Tobacco	Charles	28	7,000
Insley / Cambridge #2	Dorchester	37B	6,655

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

Site Name 🕹	County	Legislative District	Initial Number of Tires
SOMCO Towing & Salvage / Westover	Somerset	38A	6,000
G & TL. Smith Contracting LLC / Chesapeake Beach	Calvert	27B	5,000
Don's Sales / Swanton	Garrett	1A	4,600
Compton Inc. / Port Tobacco	Charles	28	4,000
DNR / Linthicum	Anne Arundel	D32	4,000
Mizzell / Aquasco	Prince George's	27A	4,000
Gilbert / Joppa	Harford	34A	3,000
Harpers / Elkton	Cecil	36	3,000
St. Mary's / Sandy Acres Lane	St. Mary's	29A	2,500
Prince George's County/Capitol Heights	Prince George's	24	2,500
Bruso / Aquasco	Prince George's	27A	2,100
Pechin / Sudlersville	Queen Anne's	36	1,500
Gregory/Rhodesdale	Dorchester	37B	1,260
MacFarland / Ridgely #2	Caroline	37B	1,100
DNR/Mardela Springs	Wicomico	37B	1,000
Lieske/Perryman	Harford	34A	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
Bare/Manchester	Carroll	5A	600
Peterson / Baltimore	Baltimore City	31	600
Szymanski / Rock Hall #2	Kent	36	600
Carter / Nanjemoy	Charles	28	500
Decatur / Cumberland	Allegany	1C	500
Delano / Federalsburg	Caroline	37B	500
Kramer / Nanticoke	Wicomico	37A	500
Munson / Waldorf	Charles	28	500
Prince George's County/Fairmount Heights	Prince George's	24	500
Turner Transit / Capitol Heights	Prince George's	24	500
Lofland / Sudlersville #2	Queen Anne's	36	400
Mechanics Valley / North East #2	Cecil	36	400
DNR / Cedarville State Park #2	Prince George's	27A	350
FRON-DJW, LP/Perryville	Cecil	34B	300
Troutman/Cumberland	Allegany	1C	300
USA National Park Service/Tuscarora	Frederick	3B	300
Beachwood North H.O.A / Sparrows Pt.	Baltimore	06	250
Rodenhauser / Bowie	Prince George's	23B	250

Site Name ▲	County	Legislative District	Initial Number of Tires
Sprig, LLC/Glen Burnie	Anne Arundel	31	250
Triplin / Baltimore	Baltimore	46	250
Zepp / Pasadena	Anne Arundel	31	250
Gallagher/Sharptown	Wicomico	37A	200
Lounsbury / Port Deposit	Cecil	34B	200
Anne Arundel County/Hanover	Anne Arundel	32	200
Sarver / Cumberland	Allegany	1B	200
DNR / Gunpowder Falls State Park	Baltimore	5B	175
Batson/Federalsburg	Caroline	37B	150
Bittorf/Salisbury	Wicomico	38B	125
Abouzeid/Elkton	Cecil	36	100
Anne Arundel County/Pasadena	Anne Arundel	2	100
Cooper/Chestertown	Kent	36	100
Gelof/Chestertown	Kent	36	100
ICC/Rockville	Montgomery	19	100
MNCPPC/Rockville	Montgomery	19	100
DNR/Elk Mills #2	Cecil	36	60
McAleer / Dickerson	Montgomery	15	60
SHA/Route 29 North	Montgomery	14	60
Green/Street	Harford	35A	43
Bauer / Middle River	Baltimore	29A	40
Wolfepack LLC / Severn	Anne Arundel	32	30
TOTAL TIRES REMAINING TO BE F	REMOVED		2,181,361

#### **State Funded Cleanups**

#### Garner/Brandywine Cleanup - Section 2 of Ravine #5











After cleanup

Garner/Brandywine Scrap Tire Stockpile Cleanup – 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 granted the Department access for a State cleanup in FY 2005, and the Board of Public Works approved partial funding to initiate the cleanup. The project is being funded through the Fund, and the property owner qualifies for the inheritance exemption. The property is located in Prince George's County.

Status: The Maryland Environmental Service (MES) completed planning studies and permitting activities to perform scrap tire removal and cleanup processes. MES and MDE have been to the site numerous times with contractors, surveyors, and other Federal, State, and County government representatives. MES and MDE have also met with Prince George's County officials on several occasions regarding the permitting process. The permits Prince George's County requires for this process include grading, sediment control, and forest stand delineation approvals. A State/federal wetlands permit is required as well. MES hired consultants to survey and help delineate the property boundaries, topographic elevations, scrap tire limits, wetlands, forestry, etc. The bid process took place at the end of FY 2009, resulting in very competitive bid prices for cleanup of the scrap tires. The planning, permitting, and bid activities cost the Department approximately \$420,000. Cleanup activities on the first ravine began in FY 2010. Cleanup and stabilization activities were completed for two-thirds of the first ravine. Bids will be solicited for cleanup of the final third of the first ravine and a portion of the second ravine during Fall 2010. The remainder of the site will be bid during FY 2011. Cleanup of the 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 applied for a loan from MDE's Water Quality Financing Administration to help finance this cleanup.

#### Morgan/Mechanicsville Cleanup







During cleanup



After cleanup

<u>Morgan/Mechanicsville Scrap Tire Stockpile Cleanup</u> – The project is being funded through the Fund, and the property owner qualifies for the inheritance exemption. 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 and reforestation of the site. This cleanup will not be considered fully complete until the permits have been closed out (expected during FY 2011). The permits require that the Department and MES monitor growth of the vegetation on the slope and the replacement trees for a period of two years after site restoration.

<u>Suraci Family LTD/Davidsonville Scrap Tire Stockpile Cleanup</u> – Funding for this project was encumbered through the Fund, and the property owner will be required to reimburse the Fund for all expenditures related to the cleanup. The stockpile consists of approximately 56,800 scrap tires and the property is located in Anne Arundel County.

Status: When the Department was unable to get the property owners to remove the scrap tires from the property through administrative efforts, court-ordered access was obtained for the purpose of conducting a State-funded cleanup. MES began working to delineate the limits of the scrap tire stockpile, obtain necessary permits, and determine an estimate of cleanup costs. After incurring expenditures of approximately \$69,171 related to these efforts, in addition to court costs and attorney fees, the Suraci Family LTD (property owners) agreed to complete the cleanup on their own. Cleanup of the site began during FY 2009 and was completed during FY 2010. A total of 180,700 scrap tires were removed from the property for proper disposal. The Department will seek cost recovery for all State funds expended on this site.

<u>Waterview Hotel/Nanticoke Scrap Tire Stockpile Cleanup</u> – This site, which contained a stockpile of approximately 19,500 scrap tires, is located along the shoreline at the mouth of the Nanticoke River in Wicomico County. The scrap tires were located below the mean high tide level. The Fund was used to pay for this cleanup, as the tires were located in the waters of the State.

<u>Status:</u> All necessary permits were obtained and the bid process took place during early Fall 2009. Scrap tire removal and most site restoration activities were

completed during FY 2009. The remaining site restoration work, final inspection, contractor payments, and closeout took place during early FY 2010.

<u>Tucker/West River Scrap Tire Stockpile Cleanup</u> – The project is being funded through the Fund, and the property owner qualifies for the inheritance exemption. The stockpile is estimated at 10,000 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 to date. Due to insufficient funding, cleanup activities were placed on hold during FY 2010. The Department is considering its options for moving forward with this cleanup, if sufficient funding can be obtained to complete the cleanup.

<u>Boehm/Crownsville Scrap Tire Stockpile Cleanup</u> – 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.

<u>Status:</u> Due to insufficient funding, loss of legal access to the site, and permitting difficulties, cleanup planning activities were placed on hold prior to FY 2009. The Department is 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.
- Cost recovery actions have been pursued against 32 scrap tire property owners in which cleanup was initiated by the State utilizing 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 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 inability of the defendant to pay.
- The Garner/Brandywine (State-funded cleanup efforts continued in FY 2010), Morgan/Mechanicsville (significantly completed in FY 2009), and Tucker/West River (on hold due to insufficient funding) sites all qualify for the inheritance exemption. The Waterview Hotel/Nanticoke site (significantly completed during FY 2009) is located on publicly-owned land. Therefore, cost recovery will not be sought after cleanup efforts conclude on these sites.

**Table IV – Initiated Cost Recovery Actions Through FY 2010** 

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
Tull/Federalsburg	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
Total Amount Sought (Through FY 20	10)	•		\$3,438,877.55

<sup>\*</sup> 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 2010**

Due to lack of funding, MDE did not initiate any new scrap tire projects during FY 2010.

## **Projects Continuing from Previous Years**

#### Rubber-Modified Asphalt Project (Talbot 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, MDE and MES began working with the Midshore Regional Landfill (which involves the intergovernmental cooperation between Caroline, Kent, Queen Anne's, and Talbot Counties) to install rubber-modified asphalt product in lieu of traditional paving materials on County, municipal, and/or landfill roads in several targeted high/diverse use areas in conjunction with the construction of the Midshore II Regional Landfill in Caroline County.
- 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.

#### **Landfill Environmental Monitoring Project**

• This project will allow the Department and MES to perform long-term monitoring at various landfill demonstration projects that have been constructed using scrap tire materials, including additional monitoring of existing projects.

• The Department plans to conduct additional evaluation and monitoring of the Reichs Ford, Newland Park, Garrett County Cell 2, Westernport, and Westover Landfill Demonstration Projects.

 Additional monitoring may include items such as the collection of leachate and gas samples from landfill cells, the collection of stormwater monitoring samples, and the exhumation and testing of tire chips installed within the landfill(s). For existing projects with on-site monitoring data acquisition equipment, testing of the equipment may be required to determine the

functionality of the equipment.

 This project will continue the collection of environmental and field performance data from landfill demonstration projects. This data is intended to provide supplemental information to enhance scientifically defensible conclusions regarding the suitability of scrap tire materials for use in various landfill applications.

 The funding for this project was encumbered at the end of FY 2009.
 Sampling work was performed at Garrett County Cell 2 during FY 2010.



## **Scrap Tire Projects Planned for FY 2011**

There are insufficient funds to conduct any new scrap tire projects during FY 2011.

# 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 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 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 2010**

- ❖ A total of 368 new and 120 renewal scrap tire licenses were issued. (see Table V).
- ❖ Most of the license applications received (87%) were processed within the standard license application processing time of 60 days.

Туре	New	Renewed	Total Issued (FY 2009)	Total Valid Licenses
General Collection	74	N/A	74	1,592
Secondary Collection	178	61	239	806
Primary Collection	0	1	1	1
Recyclers	0	0	0	2
TDF Facility	1	0	1	1
Solid Waste	0	0	0	2
Haulers	115	58	173	799
TOTAL	368	120	488	3,203

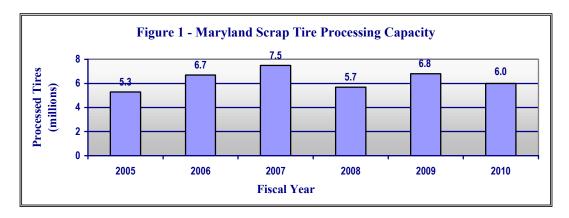
**Table V – Scrap Tire Licenses in FY 2010** 

# **Scrap Tire Markets and Market Development**

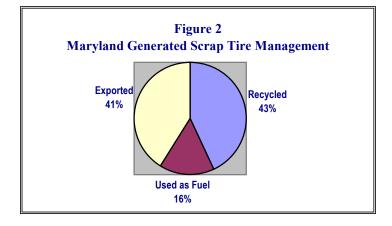
## **Market Analysis**

During FY 2010, the State's scrap tire processing capacity managed approximately 6.0 million tires generated from Maryland and out-of-state facilities.

This represents a significant 11.6% decrease from the previous year. (See Figure 1.). The nearly 6.0 million tires processed include approximately 57% (3,382,504) Maryland generated and 43% (2,603,697) imported tires.



- ➤ Of the 6.0 million scrap tires processed, approximately 79% (4,710,783) were recycled, the same percentage reported in FY 2009. The remaining 21% (1,275,418) were used as fuel.
- Approximately 43% (2,453,849) of the 5.7 million Maryland-generated scrap tires were recycled and the remaining 16% (928,655) were used as fuel in Maryland facilities during FY 2010. Approximately 41% of the tires (2,317,496) were exported. (See Figure 2).

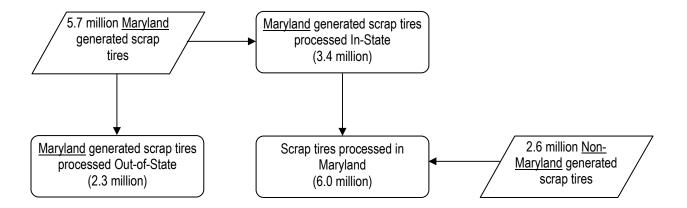


- Emanuel Tire Company (Maryland's largest scrap tire recycling facility) in Baltimore City processed about 4.4 million tires in FY 2010, a 12% decrease from the number processed in FY 2009 (5 million).
- ➤ The Auston Tire Recycling facility in Harford County processed 189,812 tires in FY 2010, a noticeable decrease of 29% from the 268,900 tires processed in FY 2009.
- ➤ During FY 2010, Holcim US, Inc. (formerly the St. Lawrence Cement Company), in Washington County, processed approximately 479,714 tires, a significant decrease from the reported quantity (800,000 tires) in FY 2009.
- The Harford Waste-to-Energy Facility processed 723,738 tires during FY 2010, a 13% increase from the number of tires processed during FY 2009 (639,400).

#### 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.
  - o 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 5.7 million scrap tires were generated in Maryland during FY 2010. 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) decreased 11.6% from reported capacity for FY 2009. This change is due to several factors, including the economic downturn, the fact that the State's scrap tire recycling capacities decreased due to cessation of tire processing at Holcim US, Inc. for part of the year, and the fact that approximately 700,000 fewer tires were imported to Maryland from neighboring states. 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 decreased by 11.6%, but the ratio of scrap tires that were recycled versus used as fuel in Maryland remained the same during FY 2010. Overall, the scrap tire generation, processing, and handling of Maryland scrap tires follow the traditional trends: approximately 2.5 million were recycled, 2.3 million were exported, and the remaining approximately 928,655 were used as fuel.
- 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 on a project 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 is able to advise the design engineer of possible uses for engineering materials derived from scrap tires, including the use of tire chips The guidance will increase the utilization of these in drainage layers. 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 www.mde.state.md.us/Programs/LandPrograms/Solid Waste/ScrapTire/index Maryland Environmental .asp Service's website at: http://www.menv.com/tiredemoprojects.shtml.

Figure 3 – Scrap Tire Flow in FY 2010



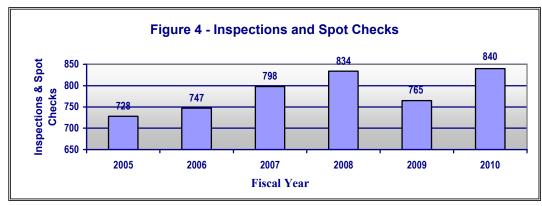
**Table VI – Maryland Licensed Scrap Tire Processing Facilities** 

Facility Name/Type	Location	Operation	Telephone	Tires Processed in FY 2010
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	4,394,768
K & K Tire, Inc./ Recycler	816 Oregon Avenue Linthicum MD 21090	Processes scrap tires into products.	(410) 636-2002	126,203
Auston Tire Recycling/ Recycler	1202 Pauls Lane Joppa MD 21085	Processes scrap tires into products.	(410) 335-1016	189,812
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	479,714
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	723,738
Wheelabrator Baltimore LP (BRESCO)	1801 Annapolis Road Baltimore MD 21230	The facility has been approved to burn scrap tires with municipal solid waste.	(410) 234-0808	71,873
Fort Detrick	393 Beasly Road Frederick MD 21702	The facility burns scrap tires with solid waste and medical waste.	(301) 619-2323	93
TOTAL				5,986,201

# **Compliance and Enforcement Activities**

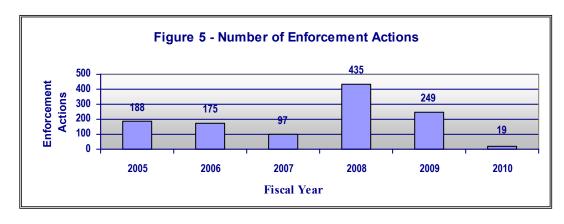
The goal of the Department's compliance and enforcement activities is to ensure that all of Maryland's licensed scrap tire facilities, scrap tire haulers, and scrap tire stockpiles are in full compliance with the scrap tire law, regulations and license conditions.

## Strategies for Compliance and Enforcement Actions in FY 2010



- 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.
- **x** Continue identification and cleanup of illegal scrap tire stockpiles.

# Accomplishments in FY 2010



- A total of 840 scrap tire investigations and inspections.
- There was an increase (9.8%) in the number of scrap tire inspections conducted in FY 2010 to 840 from 765 in FY 2009. The inspection coverage rate of 17% in FY 2010 is a slight increase from the coverage rate (15%) reported in FY 2009.

- The percentage of inspected facilities in significant compliance was 98% during FY 2010, the same as in FY 2009, and a total of 218 significant violations were resolved, an 8.5% increase over the number resolved in FY 2009. The number of compliance assistance actions rendered increased from 1 in FY 2009 to 5 in FY 2010.
- The Program issues late notices to license holders who fail to submit required semi-annual reports and initiated a process of issuing administrative orders to those who did not respond to outstanding notices. The Program issued 19 enforcement actions during FY 2010 including one Notice of Violation and 18 Site Complaints. One referral was made to the Office of the Attorney General for possible criminal action.
- In FY 2010, 218 significant violations were resolved, as compared to 201 in FY 2009.
- Table VII displays the FY 2010 enforcement data as reported in the annual MDE Enforcement Report.

## Table VII – Scrap Tire Compliance and Enforcement in FY 2010

Permitted Sites/Facilities	
Number of Permits/Licenses issued	488
Number of Permits/Licenses in effect at Fiscal Year End	3,203
Other Regulated Sites/Facilities	2,202
Stockpiles to be cleaned up	73
Inspections	
Number of Sites inspected ("inspected" defined as "at the site")	548
Number of Sites audited but not inspected ("not inspected" defined as "places where MDE	
reviewed submittals but did not go to the site")	2,102
Number of Sites evaluated for compliance (sum of the two measures above)	2,650
Number of Inspections and Spot Checks (captures the number of compliance activities at	
sites)	840
Number of Audits (captures the number of reviews of file/submittals for compliance)	6,033
Number of Inspections, Audits, Spot Checks (sum of the two measures above, same as	
current count)	6,873
Compliance Profile	
Number of Inspected Sites/Facilities with Significant Violations	12
Percent of Inspected Sites/Facilities with Significant Violations	2%
Inspection Coverage Rate*	17%
Significant Violations	
Number of Significant Violations involving Environmental or Health Impact	0
Number of Significant Violations based on Technical/Preventative Deficiencies	13
Number of Significant Violations carried over awaiting disposition from Previous Fiscal	
Year	398
Total	411
Disposition of Significant Violations	
Resolved	218
Ongoing	193
Enforcement Actions	
Number of Compliance Assistance rendered	5
Number of Administrative Corrective Orders issued	0
Number of Civil Corrective Orders/Injunctions issued	0
Number of Criminal Corrective Orders issued	0
Number of SEP's entered into	0
Number of Other Enforcement Actions	19
Number of Referrals to Attorney General for possible Criminal Action	1
Penalties	
Number of Administrative Penalties issued	0

Number of Civil Penalties issued	0
Number of Criminal Penalties issued	0
Amount of Penalties obtained	\$1,000.00
Citizen Suits	
Number of Notifications received of 3 <sup>rd</sup> Party Lawsuits being filed against regulated entities	0

<sup>\*</sup> 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.