



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

February 16, 2018

The Honorable Mike V. Miller, Jr., President
Senate of Maryland
State House, H-107
Annapolis MD 21401-1991

The Honorable Michael E. Busch, Speaker
House of Delegates
State House, H-101
Annapolis MD 21401-1991

The Honorable Joan Carter Conway, Chair
Senate Education, Health and
Environmental Affairs Committee
Miller Senate Office Building
2 West Wing
11 Bladen Street
Annapolis MD 21401-1991

The Honorable Kumar P. Barve, Chair
Environment and Transportation Committee
House of Delegates
House Office Building, Room 251
6 Bladen Street
Annapolis MD 21401-1991

Dear President Miller, Speaker Busch, Chairs Conway and Barve:

As required in Section 9-275(b) of the Environment Article, Annotated Code of Maryland, I am enclosing a copy of the 2015 report on the Maryland Scrap Tire Program.

If the Department can provide you with any additional information, please contact me or Ms. Hilary Miller, Director of the Land and Materials Administration, at 410-537-3304 or via email at hilary.miller@maryland.gov.

Sincerely,

Ben Grumbles
Secretary

Enclosures

cc: Sarah Albert, Department of Legislative Services, Mandated Report Specialist
Hilary Miller, Director, Land and Materials Administration



MARYLAND
Department of the Environment

**MARYLAND SCRAP TIRE
ANNUAL REPORT
– Fiscal Year 2015 –**

Prepared by:

Land and Materials Administration

Prepared for:

Senate Education, Health and Environmental Affairs Committee

House Environment and Transportation Committee

October 2016



MARYLAND DEPARTMENT OF THE ENVIRONMENT
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Executive Summary

Introduction

This is the Fiscal Year (“FY”) 2015 Scrap Tire Annual Report as required by Environment Article, Section 9-275(b), Annotated Code of Maryland, which is prepared for the Senate Education, Health, and Environmental Affairs Committee and the House Environment and Transportation Committee of the Maryland General Assembly to advise the Standing Committees of the Maryland Department of the Environment’s (“the Department” of “MDE”) progress in implementing the law and ensuring the proper management of scrap tires in Maryland. The report addresses Maryland’s Scrap Tire Program activities as undertaken by the Department and the Maryland Environmental Service (“MES”) from July 2014 through June 2015, and describes planned activities for the coming year.

Accomplishments and Results

- Maryland generated an estimated 5.9 million scrap tires in FY 2015 that were managed in the following manner: recycled or used as fuel in Maryland (64 percent) and exported to other states for disposal, recycling, or use as fuel (36 percent) (see Figure 2).
 - Maryland’s licensed scrap tire facilities processed 6.9 million scrap tires in FY 2015, including 3.8 million Maryland-generated scrap tires and 3.1 million scrap tires imported from out-of-State (see Figure 1).
 - Approximately 79 percent of the scrap 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 10.6 million scrap tires have been recovered from 988 stockpile cleanup sites.
 - During FY 2015, a total of 11 illegal scrap tire stockpile sites were cleaned up and approximately 6,035 scrap tires were removed (see Table II).
 - 100 percent of all stockpile site cleanups accomplished in FY 2015 were achieved by administrative enforcement, without using the Used Tire Cleanup and Recycling Fund (“the Fund”).
 - A total of 420 new scrap tire licenses were issued (see Table V).
 - A total of 45 scrap tire licenses were renewed (see Table V).
 - At the end of FY 2015, there were a total of 3,090 valid Maryland scrap tire licenses (see Table V).
-

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.
- ★ Gross tire fee revenues to the Fund (\$3,725,909.85) were slightly higher (2 percent) in FY 2015 than in FY 2014 (see Table I).

**Table I – Maryland Used Tire Cleanup and Recycling Fund
FY 2015 Revenues and Expenditures**

Fund Balance (7/1/2014)	\$ <u>4,934,999.06</u>
Add Open Prior Year Encumbrances	\$ 1,866,537.48
Adjusted Beginning Balance	\$ <u>6,801,536.54</u>
FY 2015 Revenues	
Gross Used Tire Fees Revenues after Comptroller Adjustment	\$ 3,725,909.85
Cost Recovery	\$ 0.00
Total Revenue for FY 2015	\$ <u>3,725,909.85</u>
FY 2015 Expenditures	
Scrap Tire Program Expenses	(\$ 509,682.03)
Land and Materials Administration Expenses	(\$ 1,675,122.54)
Department Expenses	(\$ 0.00)
Department Indirect Costs	(\$ 477,529.80)
Stockpile Cleanups	(\$ 110,419.26)
MES Projects and Administration [†]	\$ 300,000.00
Prior FY Encumbrance Payments	(\$ 1,152,632.45)
Total FY 2015 Expenditures	(\$ <u>3,625,386.08</u>)
Total Open Encumbrances	(\$ <u>556,081.79</u>)
Total Fund Balance (6/30/2015)	\$ <u>6,345,978.52</u>

* Note: Revenue collected from scrap tire penalties is deposited into the Maryland Clean Water Fund, not the Used Tire Cleanup and Recycling Fund. Scrap tire penalties for FY 2015 were \$19,104.00.

† Note: This is shown as a positive because it was the return of project funds advanced to MES but not fully expended.

Overview

The Scrap Tire Recycling Act (“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, 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.

Legislative Summary

- ✓ Section 9-275(a) of the Environment Article, Annotated Code of Maryland, 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.
- ✓ The Department used \$1,675,122.54 of the revenues received by the Fund in FY 2015 for administrative expenses of the Land and Materials Administration.

Scrap Tire Stockpile Cleanups

Objective

The Department's Scrap Tire Cleanup Objective for FY 2015 to initiate the planning and cleanup process for 100 percent of illegal scrap tire stockpile sites identified during the year, was accomplished. During FY 2015, the Scrap Tire Program continued oversight of cleanup and recovery of the remaining 375,748 scrap tires identified in stockpiles at the end of FY 2014, along with those scrap tires from 11 stockpiles newly identified during FY 2015. In order to achieve this objective, the following strategies are available:

- * 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.
- * Seeking cost recovery from responsible parties for Department expenses incurred at sites that are not eligible for exemption from paying cost recovery.

Accomplishments

Since the inception of the Scrap Tire Program in 1992, over 10.6 million scrap tires have been recovered from completed and ongoing stockpile cleanup sites.

During FY 2015, the Scrap Tire Program successfully completed cleanup of 11 illegal scrap tire stockpiles, consisting of approximately 6,035 scrap tires (see Table II). These sites were located in 8 of the State's 24 jurisdictions and ranged in size from 50 to 3,039 scrap tires. The Scrap Tire Program also initiated the planning and cleanup process for the 11 illegal scrap tire stockpile sites newly identified during FY 2015.

All of the scrap tire stockpile cleanups in FY 2015 occurred without using the Fund. One-hundred percent (100 percent) of all stockpile abatements completed in FY 2015 used the administrative approach.

Table II – Scrap Tire Cleanup Sites Completed in FY 2015

Site Name	County	Initial Number of Scrap Tires
Prince George’s County/Capitol Heights	PG	3,039
Danny’s Service/Havre de Grace	HA	1,000
MERRITT MR, LLC/Elkridge	HO	586
Lydell Road/Hyattsville	PG	300
Toledo/Silver Spring	MO	300
Curry/Hyattsville	PG	200
Reynolds/Elkton	CE	200
Stanton/East New Market	DO	200
Lawhorn/Golts (Wells Fargo)	KE	100
Willey/Fishing Creek	DO	60
Lawson/Welcome	CH	50
TOTAL SCRAP TIRES REMOVED		6,035

FY 2016 Ongoing Stockpile Cleanups

New stockpile sites are continually being identified for cleanup in Maryland. A total of 53 stockpile sites are targeted for either continuation of cleanup efforts or completion during FY 2016. This represents 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. Table III details the scrap tire cleanups continuing during FY 2016.

Table III – Scrap Tire Stockpile Cleanups Pending or Ongoing in FY 2016

Site Name ^	County	Legislative District	Initial Number of Scrap Tires
Boehm/Crownsville	Anne Arundel	33	214,400
Tyler Towing/Clarksville	Howard	13	61,376
Mt. Airy Auto & Truck Parts, LLC/Mt. Airy	Frederick	4A	15,000
Howard 2/Reisterstown	Baltimore	4	10,000
Patel/Elkton	Cecil	3	7,200
Insley/Cambridge #2	Dorchester	37B	6,655
Gough/Lusby	Calvert	29C	6,000
G & TL Smith Contracting LLC/Chesapeake	Calvert	27B	5,000
Ewings Used Cars & Parts, Inc./Middle River	Baltimore	7	4,500
Alston/Capitol Heights	Prince George's	24	4,000

Site Name ^	County	Legislative District	Initial Number of Scrap Tires
Johns-Gibbs/Marydel	Caroline	36	3,050
Harpers/Elkton	Cecil	36	3,000
Tilghman/Easton	Talbot	37B	3,000
Leopar/Joppa	Harford	34A	3,000
Spargo Enterprises, Inc./Capitol Heights	Prince George's	24	3,000
Lieske/Perryman	Harford	34A	2,000
Tower Terra, LLC/Brandywine	Prince George's	27A	2,000
Mike's Works, LLC/Lusby	Calvert	29C	1,500
DNR/Mardela Springs	Wicomico	37B	1,000
Allen/Harwood	Anne Arundel	33B	1,000
McIntyre/Huntingtown	Calvert	27B	1,000
Zepp/Pasadena	Anne Arundel	31	1,000
Tucker Enterprises, LLC/Clarksville	Howard	13	800
Bare/Manchester	Carroll	5A	600
Szymanski/Rock Hall #2	Kent	36	600
R & J Investments/Baltimore	Baltimore City	45	513
Carter/Nanjemoy	Charles	28	500
Decatur/Cumberland	Allegany	1C	500
Munson/Waldorf	Charles	28	500
Beachwood North H.O.A./Sparrows Point	Baltimore	6	500
Frederick/Crownsville	Anne Arundel	33A	500
Glover/White Hall	Baltimore	5B	500
Turner Transit/Capitol Heights	Prince George's	24	500
Legore Bridge Road/Monocacy River	Frederick	4A	375
Richardson/Joppa	Harford	34A	300
Baltimore City/Baltimore	Baltimore City	46	250
Rodenhauser/Bowie	Prince George's	23B	250
Square 743 Investors LP ETL/District Heights	Prince George's	25	250
Mizzell/Aquasco	Prince George's	8	200
Sarver/Hill/Cumberland	Allegany	1B	200
Words of Life Fellowship Church/Hyattsville	Prince George's	24	200
Deshong/Big Pool	Washington	6	150
2801-2803 52nd Avenue, LLC/Hyattsville	Prince George's	47	100
Anne Arundel County/Pasadena	Anne Arundel	2	100
Darley/Rising Sun	Cecil	34B	100

Site Name [▲]	County	Legislative District	Initial Number of Scrap Tires
Mazcko/Millington	Kent	36	100
Taylor/Princess Anne	Somerset	38A	70
McAleer/Dickerson	Montgomery	15	60
Bundy/Westminster	Carroll	5	50
Federal National Mortgage Association/Westminster	Carroll	5	50
Hatten/Newark	Worcester	38B	50
Weaver/Indian Head	Charles	28	40
Gayle/Princess Anne	Somerset	38A	20
TOTAL SCRAP TIRES REMAINING TO BE REMOVED			367,609

▲ Sites listed in **bold** represent potential State funded cleanups.

State-Funded Cleanups

The following are descriptions of each of the active State-funded scrap tire cleanup sites during FY 2015.

Garner/Brandywine Scrap Tire Stockpile Cleanup – Located in Prince George’s County, this was one of the few remaining very large scrap tire dumps in Maryland. This stockpile consisted of approximately 1,135,160 scrap tires in seven ravines on the property. In FY 2005, the Board of Public Works approved funding for the cleanup. Due to the inheritance exemption in the law, there is no cost recovery for this cleanup.

Status: Cleanup activities on the first ravine (Ravine #5) began in FY 2010 and were completed in June 2011. Cleanup of the remainder of the site (Ravines #1-4) began in June 2011 and was completed in June 2012, a year and a half ahead of schedule. Monitoring of tree growth will continue for five years, until 2017, to ensure that the site stabilization and restoration efforts are successful. The total cost for cleanup of the entire site, including permitting activities and project management, 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.

Garner/Brandywine Cleanup



Aerial Photo of Entire Site During Cleanup



Ravine 2 - Before Cleanup

Garner/Brandywine Cleanup



Ravine 3 - Before Cleanup



Ravine 2 - During Cleanup



Ravine 3 - During Restoration



Ravine 1 - After Cleanup

Boehm/Crownsville Scrap Tire Stockpile Cleanup – This was the site of an old commercial landfill in Anne Arundel County that currently has approximately 214,400 scrap tires in ravines, both loose and partially buried in the ground.

Status: In November 2012, the Department commenced litigation against the owners to compel them to clean up the scrap tires or grant access to the State for the cleanup of the scrap tires, and to pay for all expenses incurred by the State related to the cleanup. The case was settled in February 2014, and the Department and property owners entered into a consent order that stipulates that the Department will clean up the scrap tires on site using the Fund and the property owners will place a portion of the property into an environmental trust. The design and permitting phase of the cleanup is complete. Scrap tire removal and site restoration activities are expected to take place during FY 2016.

Boehm/Crownsville Cleanup



Tyler Towing/Clarksville Scrap Tire Stockpile Cleanup – This property was used as a junkyard for decades in Howard County. There are estimated to be 61,376 scrap tires in stockpiles throughout the property. Some scrap tires are mixed with scrap metal, soil, and other solid wastes in a berm that roughly follows the property perimeter.

Status: All administrative and enforcement efforts by the Department have been exhausted, and the property owners have failed to remove and properly dispose of the scrap tires on the site. The Department is working with the Office of the Attorney General to pursue other cleanup and/or enforcement actions.

Cost Recovery Actions

- ♦ The Department continues to use the services of the Office of the Attorney General to handle scrap tire cost recovery actions (see Table IV for details).
- ♦ Since the inception of the program, a total of 147 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 used the Fund to initiate scrap tire cleanups.
- ♦ Cost recovery actions have not been performed against:
 - 95 sites because they were on publicly owned property;
 - 11 sites because they qualified for the inheritance exemption;
 - 5 sites because the property owner passed away and the estate was closed before a cost recovery action could be completed;
 - 3 sites because the cost to pursue the case was higher than the cost recovery amount that could be sought; and
 - 1 site because the Department entered into a Consent Order with the property owners exempting the owners from cost recovery in exchange for placing a portion of the property into an environmental trust.
- ♦ To date, the Department has sought a total of \$3,088,508.90 from property owners (see Table IV) and has collected a total of \$323,349.24 in cost recovery actions. Many of these cases are still in litigation or have been sent to the Central Collections Unit (“CCU”). 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 site (significantly completed in FY 2012, except for monitoring of restoration efforts) qualifies for the inheritance exemption. In accordance with a consent order, Boehm/Crownsville (currently in design and permitting phase) will be cleaned up using the Fund and the property owners will not be required to reimburse the Department. Therefore, cost recovery will not be sought for these sites.
- ♦ No cost recovery funds were collected in FY 2015.

Table IV – Initiated Cost Recovery Actions Through FY 2015

Site Name	County	Cleanup Year	No. of Scrap 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
Snyder/Calvert	Cecil	1996	129,526	\$151,266.00
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
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
Turner/White Hall	Harford	2003	500	\$500.00
Miller/Churchton	Anne Arundel	2004	16,000	\$231.50
Total Scrap Tires Removed			2,127,441	
Total Amount Sought (Through FY 2015)				\$3,088,508.90

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 2015

- ❖ A total of 420 new and 45 renewal scrap tire licenses were issued (see Table V).

Table V – Scrap Tire Licenses in FY 2015

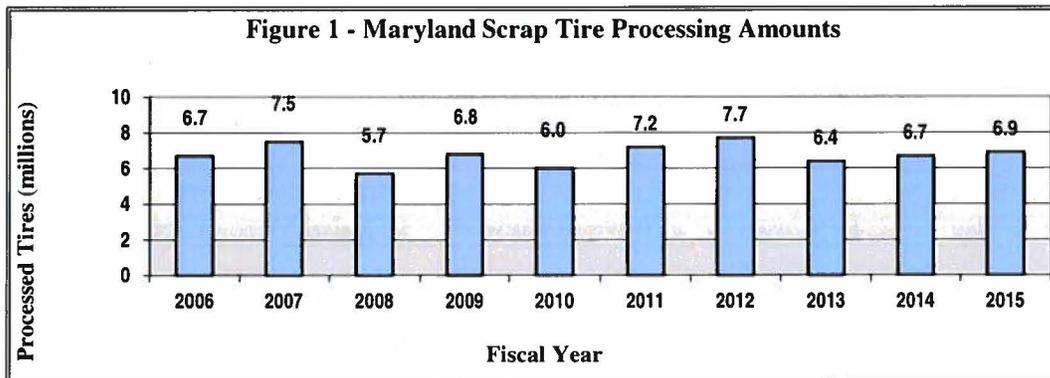
Type	New	Renewed	Total Issued (FY 2015)	Total Valid Licenses
General Collection	43	N/A	43	1,409
Secondary Collection	246	30	276	982
Primary Collection	0	0	0	2
Recyclers	0	0	0	4
TDF Facility	0	0	0	1
Solid Waste	0	0	0	3
Haulers	131	15	146	689
TOTAL	420	45	465	3,090

Scrap Tire Markets and Market Development

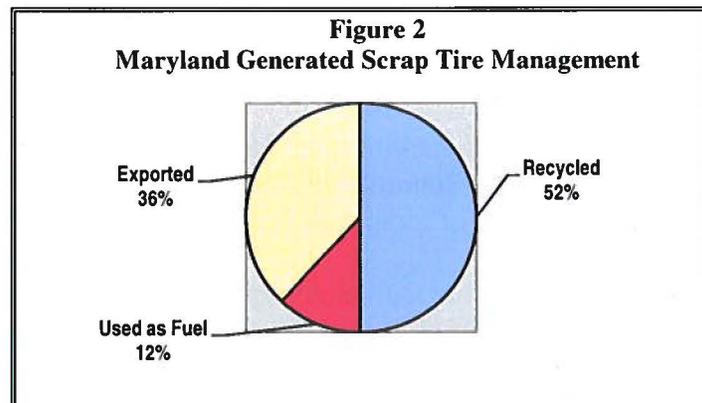
Market Analysis

- ❖ All licensed or approved 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 facility information for where the scrap tires were deposited.

- ❖ There is no data currently 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 5.9 million scrap tires were generated in Maryland during FY 2015. 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.
- ❖ During FY 2015, the State's scrap tire processing facilities managed approximately 6,913,697 scrap tires generated from Maryland and out-of-State facilities (see Table VI).
 - ✦ This represents a slight (2.5 percent) increase from the previous year (see Figure 1). The 6,913,697 scrap tires processed include approximately 55 percent (3,793,248) Maryland generated and 45 percent (3,120,449) imported scrap tires.
 - ✦ Of the 6,913,697 scrap tires processed, approximately 79 percent (5,494,428) were recycled, a 3 percent decrease from the percentage reported in FY 2014. The remaining 21 percent (1,419,269) were used as fuel.



- ✦ Approximately 52 percent (3,077,045) of the estimated 5.9 million Maryland-generated scrap tires were recycled in Maryland facilities and 12 percent (716,203) were used as fuel in Maryland facilities during FY 2015. The remaining 36 percent of the scrap tires (2,106,752) were exported (see Figure 2 and Figure 3).
- ✦ Emanuel Tire Company (Maryland's largest scrap tire recycling facility) in Baltimore City processed 4,942,819 scrap tires in FY 2015, a slight (0.65 percent) increase from the number processed in FY 2014 (4,911,114).



- ✘ The Harford Waste-to-Energy Facility processed 522,324 scrap tires during FY 2015, a 10 percent decrease from the number of scrap tires processed during FY 2014 (578,938). The Harford Waste-to-Energy Facility will be ceasing operations permanently in March 2016.
- ✘ During FY 2015, Holcim US, Inc. in Washington County processed approximately 894,683 scrap tires, a 39 percent increase from the reported quantity (645,204 scrap tires) in FY 2014. Holcim will be making improvements to their facility and operation, and, as a result, plans to stop using scrap tire derived fuel in FY2016. Holcim intends to use scrap tire derived fuel after the improvements are completed. This could affect the scrap tire market flow in Maryland in FY2016.
- ✘ K & K Tire, Inc. in Anne Arundel County processed 331,596 scrap tires in FY 2015, a 56 percent increase from the 212,300 scrap tires processed in FY 2014. K & K Tire, Inc. experienced a scrap tire fire at their facility during the winter of 2015. They were able to save their processing equipment and were open for business again within days of the fire.
- ✘ The Auston Tire Recycling facility in Harford County processed 220,013 scrap tires in FY 2015, a decrease of 45 percent from the 398,108 scrap tires processed in FY 2014.
- ✘ Wheelabrator Baltimore LP in Baltimore City processed 2,215 scrap tires in FY 2015, a 38 percent increase from the 1,610 scrap tires processed in FY 2014.
- ✘ Fort Detrick in Frederick County processed 47 scrap tires in FY 2015, a 48 percent decrease from the 90 scrap tires processed in FY 2014.

Maryland's Scrap Tire Flow and Destinations

- ▶ The overall amount of scrap tire processing (6,913,697 scrap tires) increased 2.5 percent from the reported processing for FY 2014 (6,747,364 scrap tires). Three of the Maryland processing facilities decreased their processing of scrap tires (Harford Waste-to-Energy by 10 percent, Auston by 45 percent, and Fort Detrick by 48 percent), resulting in a combined total decrease of 234,752 scrap tires in FY 2015. Four of the Maryland processing facilities increased their processing of scrap tires (Emanuel by 0.65 percent, Holcim by 39 percent, Wheelabrator by 38 percent, and K & K by 23 percent) in FY 2015 by a combined total of 401,085 scrap tires. The percentage of scrap tires that were recycled versus used as fuel in Maryland decreased 3 percent during FY 2015.
- ▶ Overall, the scrap tire generation, processing, and handling of the estimated 5.9 million Maryland scrap tires follow the traditional trends, although the percent of Maryland scrap tires exported to other states appears to have decreased slightly from 38 percent in FY 2014 to 36 percent in FY 2015: 3,077,045 scrap tires were recycled, approximately 2,106,752 scrap tires were exported, and the remaining 716,203 scrap tires were used as fuel. The estimated number of Maryland generated scrap tires exported to other states is based on the assumption that 5.9 million scrap tires were generated in Maryland. That figure is estimated by assuming that one scrap tire is generated for every resident in Maryland each year, based on the most current census data.

- ▶ Continued emphasis needs to be given to market development of scrap tire products and processed raw materials. The Department worked with MES and the private sector to develop a “best practices” manual to encourage engineers and designers to incorporate the use of scrap 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 Department’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.

Figure 3 – Scrap Tire Flow in FY 2015

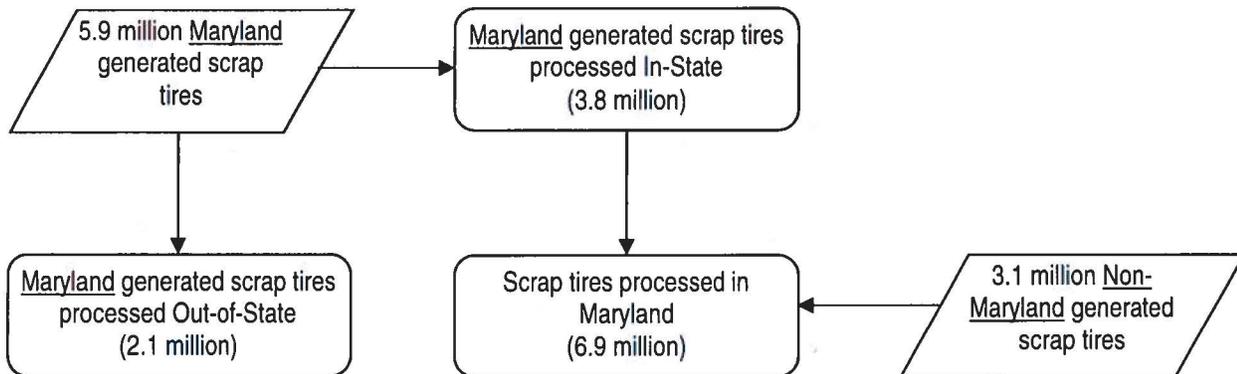


Table VI – Maryland Licensed Scrap Tire Processing Facilities

Facility Name/Type	Location	Operation	Telephone	Tires Processed in FY 2015
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	4,942,819
Holcim US, Inc./ 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	894,683
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 scrap tire content of up to 72 tons per day. Steam is generated at the facility to create electricity for Aberdeen Proving Ground Army facility.	(410) 679-6200	522,324
Auston Tire Recycling/ Recycler	1202 Pauls Lane Joppa MD 21085	Processes scrap tires into products, such as rubber mulch material for landscaping or playgrounds.	(410) 335-1016	220,013
K & K Tire, Inc./ Recycler	816 Oregon Avenue Linthicum MD 21090	Processes scrap tires into products, such as rubber mulch material for landscaping or playgrounds.	(410) 636-2002	331,596
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	2,215
Fort Detrick	393 Beasley Road Frederick MD 21702	The facility burns scrap tires with solid waste and medical waste.	(301) 619-2323	47
A2Z Scrap Tire Recycling Facility	250 S. Kresson Street, Baltimore, MD 21224	The facility has been approved to process scrap tires into products, such as rubber mulch material for landscaping or playgrounds.	(410) 679-8877	0
TOTAL				6,913,697