

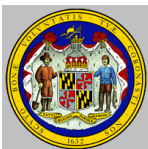


MARYLAND SCRAP TIRE ANNUAL REPORT – Fiscal Year 2016 –

Prepared by:
Land and Materials Administration

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

November 2016



MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard | Baltimore, MD 21230 | www.mde.maryland.gov/recycling
410-537-3314 | 800-633-6101 x3314 | TTY Users: 800-735-2258
Larry Hogan, Governor | Boyd K. Rutherford, Lt. Governor | Ben Grumbles, Secretary



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION	1
ACCOMPLISHMENTS AND RESULTS	1
FINANCIAL STATEMENT SUMMARY	1
OVERVIEW	3
LEGISLATIVE SUMMARY	3
SCRAP TIRE STOCKPILE CLEANUPS.....	3
OBJECTIVE.....	3
ACCOMPLISHMENTS	4
FY 2017 ONGOING STOCKPILE CLEANUPS	5
STATE-FUNDED CLEANUPS	7
COST RECOVERY ACTIONS	11
SCRAP TIRE PROJECTS	13
PROJECTS INITIATED DURING FY 2016	13
PROJECTS CONTINUING FROM PREVIOUS YEARS.....	13
SCRAP TIRE PROJECTS PLANNED FOR FY 2017	13
LICENSING	14
LICENSING ACCOMPLISHMENTS IN FY 2016	14
SCRAP TIRE MARKETS AND MARKET DEVELOPMENT	15
MARKET ANALYSIS	15
MARYLAND’S SCRAP TIRE FLOW AND DESTINATIONS	17
MARKET CHALLENGES	18

TABLE OF FIGURES & TABLES

FIGURE 1 – MARYLAND SCRAP TIRE PROCESSING AMOUNTS	14
FIGURE 2 – MARYLAND GENERATED SCRAP TIRE MANAGEMENT.....	14
FIGURE 3 – SCRAP TIRE FLOW IN FY 2016	16
TABLE I – MARYLAND USED TIRE CLEANUP AND RECYCLING FUND FY 2016 REVENUES AND EXPENDITURES	2
TABLE II – SCRAP TIRE CLEANUP SITES COMPLETED IN FY 2016.....	4
TABLE III – SCRAP TIRE STOCKPILE CLEANUPS PENDING OR ONGOING IN FY 2017	4
TABLE IV –INITIATED COST RECOVERY ACTIONS THROUGH FY 2016	11
TABLE V – SCRAP TIRE LICENSES IN FY 2016.....	14
TABLE VI – MARYLAND LICENSED SCRAP TIRE PROCESSING FACILITIES	18

The Resource Management 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”) 2016 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”) 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 2015 through June 2016, and describes planned activities for the coming year.

Accomplishments and Results

- Maryland generated an estimated 6.0 million scrap tires in FY 2016 that were managed in the following manner: recycled or used as fuel in Maryland (67 percent) and exported to other states for disposal, recycling, or use as fuel (33 percent) (see Figure 2).
 - Maryland’s licensed scrap tire facilities processed 6.66 million scrap tires in FY 2016, including 4.05 million Maryland-generated scrap tires and 2.61 million scrap tires imported from out-of-State (see Figure 1).
 - Approximately 94 percent of the scrap tires processed in Maryland were recycled and 6 percent were used as supplemental fuel in waste-to-energy facilities.
 - Since the inception of the Scrap Tire Program in 1992, over 10.6 million scrap tires have been recovered from 1,030 stockpile cleanup sites.
 - During FY 2016, a total of 37 illegal scrap tire stockpile sites were cleaned up and approximately 29,340 scrap tires were removed (see Table II).
 - 100 percent of all stockpile site cleanups accomplished in FY 2016 were achieved by administrative enforcement, without using the Used Tire Cleanup and Recycling Fund (“the Fund”).
 - A total of 320 new scrap tire licenses were issued (see Table V).
 - A total of 67 scrap tire licenses were renewed (see Table V).
 - At the end of FY 2016, there were a total of 3,143 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.
- ★ There was an increase, to \$3,904,971.28, in the amount of gross tire fee revenues deposited into the Fund in FY 2016, as compared to FY 2015 (\$3,725,909.85) (see Table I).

**Table I – Maryland Used Tire Cleanup and Recycling Fund
FY 2016 Revenues and Expenditures**

Fund Balance (7/1/2015)	<u>\$ 6,345,978.52</u>
Add Open Prior Year Encumbrances	\$ 556,081.79
Adjusted Beginning Balance	<u>\$ 6,902,060.31</u>
FY 2016 Revenues	
Gross Used Tire Fees Revenues after Comptroller Adjustment	\$ 3,904,971.28
Cost Recovery	\$ 0.00
Total Revenue for FY 2016	<u>\$ 3,904,971.28</u>
FY 2016 Expenditures	
Scrap Tire Program Expenses	\$ 717,162.60
Land and Materials Administration Expenses	\$ 1,167,374.27
Department Expenses	\$ 0.00
Department Indirect Costs	\$ 610,052.36
Stockpile Cleanups	\$ 1,896,877.36
MES Projects and Administration	\$ 72,359.37
Total FY 2016 Expenditures	<u>\$ 4,463,825.96</u>
Total Open Encumbrances	<u>\$ 2,077,363.83</u>
Total Fund Balance (6/30/2016)	<u>\$ 4,265,841.80</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 2016 were \$7,500.00.

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 \$1,167,374.27 of the revenues received by the Fund in FY 2016 for administrative expenses of the Land and Materials Administration.
-

Scrap Tire Stockpile Cleanups

Objective

The Department’s Scrap Tire Cleanup Objective for FY 2016 to initiate the planning and cleanup process for 100 percent of illegal scrap tire stockpile sites identified during the year was accomplished. During FY 2016, the Scrap Tire Program continued oversight of cleanup and recovery of 367,609 scrap tires identified in stockpiles at the end of FY 2015. In addition, approximately 220,524 scrap tires from 30 stockpiles were newly identified in FY 2016. 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 2016, the Scrap Tire Program successfully completed cleanup of 37 illegal scrap tire stockpiles, consisting of approximately 29,340 scrap tires (see Table II). These sites were located in 16 of the State’s 24 jurisdictions and ranged in size from 8 to 7,200 scrap tires. The Scrap Tire Program also initiated the planning and cleanup process for the 30 illegal scrap tire stockpile sites newly identified during FY 2016.

All of the scrap tire stockpile cleanups in FY 2016 occurred without using the Fund. One-hundred percent (100 percent) of all stockpile abatements completed in FY 2016 used the administrative approach.

Table II – Scrap Tire Cleanup Sites Completed in FY 2016

Site Name	County	Initial Number of Scrap Tires
Patel / Elkton	Cecil	7,200
Alston / Capitol Heights	Prince George’s	4,000
Williams / Lusby	Calvert	3,000
Leopar / Joppa	Harford	3,000
Cherry Hill Construction / Elkridge	Howard	2,266
Tower Terra, LLC / Brandywine	Prince George’s	2,000
2500 - 2502 Harford Road / Baltimore	Baltimore City	2,000
Allen / Harwood	Anne Arundel	1,000
Pank / Walkersville (Pank Farm) SWP	Frederick	700
Carbaugh / Thurmont	Frederick	620
Barnabas Road Associates LLC	Prince George’s	500
P & J Contracting Company / Baltimore	Baltimore City	400
Richardson / Joppa	Harford	300
Square 743 Investors LP ETL / District Heights	Prince George’s	250
Baltimore City / Baltimore	Baltimore City	250
Moore’s Way / Upper Marlboro	Prince George’s	220
Mizzell / Aquasco	Prince George’s	200
Words of Life Fellowship Church / Hyattsville	Prince George’s	200
Wolfepack LLC / Severn	Anne Arundel	150
Deshong / Big Pool	Washington	150
Hauver / Sabillasville	Frederick	130
Williams / Street	Harford	100
Darley / Rising Sun	Cecil	100
Adkins / Thurmont	Frederick	100
Plourder / Aberdeen	Harford	75
Taylor / Princess Anne	Somerset	70
Miller / Bel Air	Harford	66

Site Name	County	Initial Number of Scrap Tires
Manlove / Earleville	Cecil	50
Hatten / Newark	Worcester	50
Federal National Mortgage Association/Westminster	Carroll	50
Weaver / Indian Head	Charles	40
Seiss / Thurmont	Frederick	30
Deitemyer / Damascus	Montgomery	20
Price / East New Market	Dorchester	19
Hoffman / East New Market	Dorchester	16
Meredith II Property / Federalsburg	Caroline	10
Murphy / Cambridge	Dorchester	8
TOTAL SCRAP TIRES REMOVED		29,340

FY 2017 Ongoing Stockpile Cleanups

New stockpile sites are continually being identified for cleanup in Maryland. A total of 61 stockpile sites are targeted for either continuation of cleanup efforts or completion during FY 2017. 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 2017.

Table III – Scrap Tire Stockpile Cleanups Pending or Ongoing in FY 2017

Site Name ^	County	Legislative District	Initial Number of Scrap Tires
Boehm / Crownsville	Anne Arundel	33	500,000
Nationwide Tire Recyclers, Inc. / Hanover	Anne Arundel	32	200,000
Tyler Towing / Clarksville	Howard	13	46,900
Mt. Airy Auto & Truck Parts, LLC / Mt. Airy	Frederick	4A	15,000
Harford County Auto Parts / Street	Harford	35B	10,000
Insley / Cambridge #2	Dorchester	37B	6,655
G & TL. Smith Contracting LLC / Chesapeake Beach	Calvert	27B	5,000
Ewings Used Cars & Parts, Inc. / Middle River	Baltimore	7	4,500
Johns-Gibbs / Marydel	Caroline	36	3,050
Banks Auto Recyclers / Conowingo	Cecil	35B	3,000
Harpers / Elkton	Cecil	36	3,000
Howard 2 / Reisterstown	Baltimore	04	3,000
Spargo Enterprises, Inc. / Capitol Heights	Prince George's	24	3,000
Tilghman / Easton	Talbot	37B	3,000
Hackett / Rhodesdale	Dorchester	37B	2,500

Site Name ▲	County	Legislative District	Initial Number of Scrap Tires
Irene Glenwood Place Property	Charles	28	2,000
Lieske / Perryman	Harford	34A	2,000
Latham / Lusby (Mike's Works, LLC)	Calvert	29C	1,500
Schultz #2 / Denton	Caroline	37B	1,500
DNR / Mardela Springs	Wicomico	37B	1,000
Frederick / Crownsville	Anne Arundel	33A	1,000
McIntyre / Huntingtown	Calvert	27B	1,000
Zepp / Pasadena	Anne Arundel	31	1,000
Murray / Bishopville	Worcester	38C	949
Tucker Enterprises, LLC / Clarksville	Howard	13	800
Patuxent Research Refuge 2 / Laurel	Anne Arundel	23A	750
Bare / Manchester (Bachman Valley Road)	Carroll	5A	600
Szymanski / Rock Hall #2	Kent	36	600
Beachwood North H.O.A / Sparrows Point	Baltimore	6	500
Carter / Nanjemoy	Charles	28	500
Decatur / Cumberland	Allegany	1C	500
Munson / Waldorf	Charles	28	500
Turner Transit / Capitol Heights	Prince George's	24	500
Urciolo Associates / Point of Rocks	Frederick	3B	500
Nabely / Landover (7410 Jefferson) SWP	Prince George's	22	480
Glover / White Hall	Baltimore	5B	452
Wayne's Auto Service / Denton	Caroline	36	450
Legore Bridge Road / Monocacy River	Frederick	4A	375
CSX Realty Development / Glen Burnie	Anne Arundel	31B	300
Johnson Auto Parts & Recycling	Charles	28	300
Kit Kat Road Partners II, LLC / Elkridge	Howard	13	300
Bond / White Hall	Baltimore	5B	280
Rodenhauser / Bowie	Prince George's	23B	250
Beauchamp / Princess Anne	Somerset	38A	225
Bruner / Galena	Kent	36	200
Oxbow Natural Area / Laurel	Anne Arundel	32	200
Sarver / Hill / Cumberland	Allegany	1B	200
SHA Spirit Master / Edgewater (Church Creek)	Anne Arundel	30A	200
WMATA / Landover	Prince George's	18	200
Womack Brothers, Inc. / Baltimore SWP	Baltimore City	44A	200

Site Name ▲	County	Legislative District	Initial Number of Scrap Tires
Farrow / Hurlock	Dorchester	37B	125
AA County Board of Edu / Brooklyn Park	Anne Arundel	31A	100
Anne Arundel County / Pasadena	Anne Arundel	2	100
Mazcko / Mllington	Kent	36	100
Monocacy River at Devilbiss Bridge Road / Frederick	Frederick	4	100
Ramsey / Marydel	Caroline	36	100
Robinson / Hurlock SWP	Dorchester	37B	65
McAlear / Dickerson	Montgomery	15	60
Roberts / Trappe	Talbot	37B	60
Trust Williamsburg M. E. Church / Trappe	Talbot	37B	30
Sel Properties, Inc. / Joppa SWP	Harford	34A	20
TOTAL SCRAP TIRES REMAINING TO BE REMOVED			831,776

▲ 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 2016.

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.

Boehm/Crownsville Scrap Tire Stockpile Cleanup – This was the site of an old commercial landfill in Anne Arundel County that currently has approximately 500,000 scrap tires in ravines, both loose and partially buried in the ground. The original estimate was approximately 214,400 scrap tires on site, but buried scrap tires and additional surface scrap tires were discovered once on site cleanup activities began.

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 began in FY2016 and are expected to be completed during FY 2017.

Boehm/Crownsville Cleanup



Tyler Towing/Clarksville Scrap Tire Stockpile Cleanup – This property was used as a junkyard for decades in Howard County. There are currently estimated to be 46,900 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 worked with the Office of the Attorney General to obtain court ordered access to the property for the purpose of conducting a State funded cleanup. The design and permitting phase of the cleanup is underway. Scrap tire removal and site restoration activities are expected to take place during FY2017.

Tyler Towing/Clarksville Cleanup





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 (see Table IV) from property owners 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 the cleanup/removal 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 2016.

Table IV – Initiated Cost Recovery Actions Through FY 2016

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/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
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 2016)				\$3,088,508.90

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 2016

No scrap tire projects were initiated in FY 2016.

Projects Continuing from Previous Years

Agricultural Scrap Tire Drop-Off Event Project

- The Department, in conjunction with MES, the Maryland Farm Bureau, Inc. (“MFB”), and the Anne Arundel Economic Development Corporation, initiated an Agricultural Scrap Tire Drop-Off Event in 21 Maryland counties (Allegany*, Anne Arundel*, Baltimore*, Calvert, Caroline, Carroll, Cecil, Dorchester, Frederick*, Garrett, Harford, Kent, Montgomery*, Prince George’s, Queen Anne’s, Somerset, St. Mary’s, Talbot, Washington, Wicomico, and Worcester).
 - The events were held during FY 2015 and FY 2016. Removal and hauling of the agricultural scrap tires is expected to conclude in FY 2017.
 - Eight jurisdictions’ government agencies declined to participate in the FY 2015-2016 events: Allegany*, Anne Arundel*, Baltimore*, Charles, Frederick*, Howard, and Montgomery* Counties, and Baltimore City.
 - *Although Allegany, Anne Arundel, Baltimore, Frederick, and Montgomery Counties’ government agencies declined to participate in the Agricultural Scrap Tire Drop-Off Event, the Anne Arundel Economic Development Corporation, the MFB, and MES provided Agricultural Scrap Tire Drop-Off Events for local farmers in those counties.
 - Over 3,260 tons of agricultural scrap tires (the equivalent of over 326,000 passenger tires) were collected from farmers during the events.
-

Scrap Tire Projects Planned for FY 2017

There are no scrap tire projects planned for FY 2017.

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 or approval 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, and
 - *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 and approvals:

- ✓ **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, based on the capacity of the facility.
- ✓ **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 or supplement 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 2016

- ❖ A total of 320 new and 67 renewal scrap tire licenses were issued (see Table V).

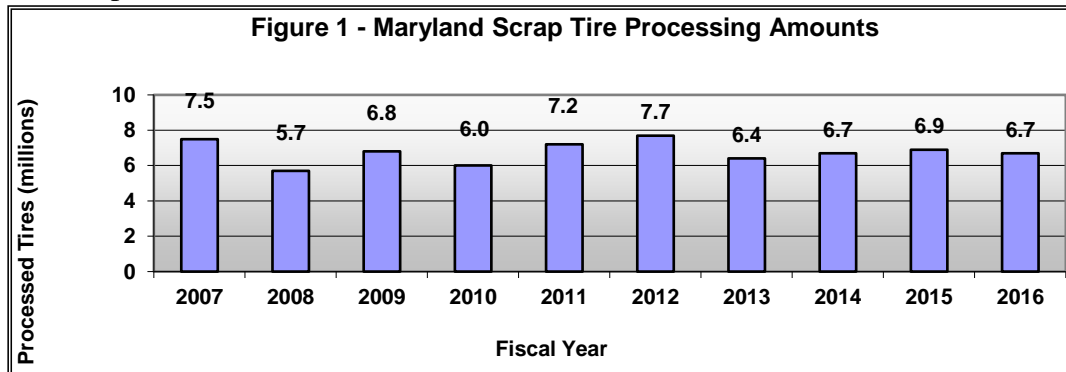
Table V – Scrap Tire Licenses in FY 2016

Type	New	Renewed	Total Issued (FY 2016)	Total Valid Licenses
General Collection	78	N/A	78	1,429
Secondary Collection	141	33	174	1,033
Primary Collection	0	0	0	2
Recyclers	0	0	0	3
TDF Facility	0	0	0	1
Solid Waste	0	0	0	1
Haulers	101	34	135	674
TOTAL	320	67	387	3,143

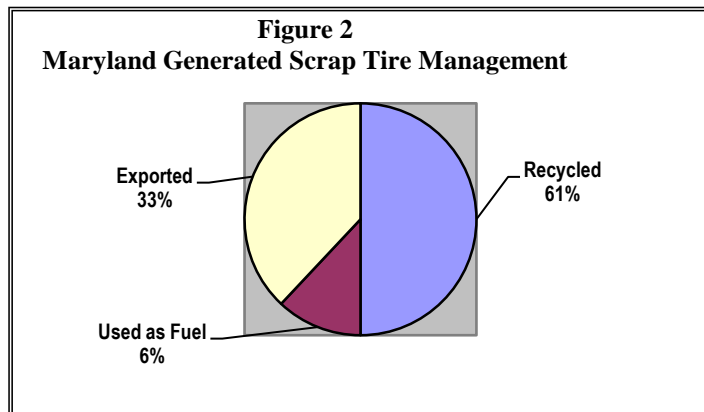
Scrap Tire Markets and Market Development

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 6.0 million scrap tires were generated in Maryland during FY 2016. 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 2016, the State's scrap tire processing facilities managed approximately 6,660,088 scrap tires generated from Maryland and out-of-State facilities (see Table VI).
 - ✱ This represents a slight (3.7 percent) decrease from the previous year (see Figure 1). The 6,660,088 scrap tires processed include approximately 61 percent (4,045,770) Maryland generated and 39 percent (2,614,318) imported scrap tires.



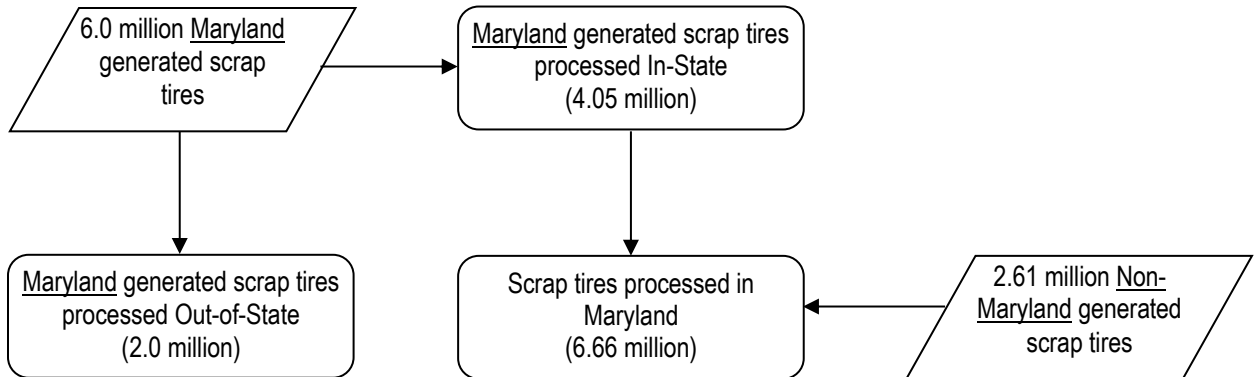
- ✘ Of the 6,660,088 scrap tires processed, approximately 94 percent (6,283,054) were recycled, a 19 percent increase from the percentage reported in FY 2015. The remaining 6 percent (377,034) were used as fuel.
- ✘ Approximately 61 percent (3,668,736) of the estimated 6.0 million Maryland-generated scrap tires were recycled in Maryland facilities and 6 percent (377,034) were used as fuel in Maryland facilities during FY 2016. The remaining 33 percent of the scrap tires (1,954,230) were exported (see Figure 2 and Figure 3).
- ✘ Emanuel Tire Company (Maryland's largest scrap tire recycling facility) in Baltimore City processed 5,617,112 scrap tires in FY 2016, a 13.6 percent



- increase from the number processed in FY 2015 (4,942,819).
- ✘ The Auston Tire Recycling facility in Harford County processed 385,742 scrap tires in FY 2016, an increase of 75.3 percent from the 220,013 scrap tires processed in FY 2015.
- ✘ The Harford Waste-to-Energy Facility processed 361,764 scrap tires during FY 2016, a 30.7 percent decrease from the number of scrap tires processed during FY 2015 (522,324). The Harford Waste-to-Energy Facility ceased operations permanently in March 2016.
- ✘ K & K Tire, Inc. in Anne Arundel County processed 280,200 scrap tires in FY 2016, a 15.5 percent decrease from the 331,596 scrap tires processed in FY 2015.
- ✘ Wheelabrator Baltimore LP in Baltimore City processed 15,186 scrap tires in FY 2016, a 585.6 percent increase from the 2,215 scrap tires processed in FY 2015.
- ✘ Fort Detrick in Frederick County processed 84 scrap tires in FY 2016, a 78.7 percent increase from the 47 scrap tires processed in FY 2015.
- ✘ During FY 2016, Holcim US, Inc. in Washington County processed 0 scrap tires, a 100 percent decrease from the reported quantity (894,683 scrap tires) in FY 2015. Holcim is making improvements to their facility and operation, and, as a result, stopped using scrap tire derived fuel in FY2016. Holcim intends to use scrap tire derived fuel after the improvements are completed in FY 2017.

- ✘ A2Z Scrap Tire Recycling Facility has been approved to recycle scrap tires into chips and other products, but they have never purchased the scrap tire recycling equipment and have never actually processed any scrap tires.

Figure 3 – Scrap Tire Flow in FY 2016



Maryland’s Scrap Tire Flow and Destinations

- ▶ The overall amount of scrap tire processing (6,660,088 scrap tires) decreased 3.7 percent from the reported processing for FY 2015 (6,913,697 scrap tires). Three of the Maryland processing facilities decreased their processing of scrap tires (K & K by 15.5 percent, Harford Waste-to-Energy by 30.7 percent, and Holcim by 100 percent), resulting in a combined total decrease of 1,106,639 scrap tires in FY 2016. Four of the Maryland processing facilities increased their processing of scrap tires (Emanuel by 13.6 percent, Auston by 28.5 percent, Fort Detrick by 78.7 percent, and Wheelabrator by 585.6 percent) in FY 2016 by a combined total of 853,030 scrap tires. The percentage of scrap tires that were recycled versus used as fuel in Maryland increased 19 percent during FY 2016.
- ▶ Overall, the scrap tire generation, processing, and handling of the estimated 6.0 million Maryland scrap tires follow the traditional trends, although the percent of Maryland scrap tires recycled versus used as tire derived fuel increased from 52 percent in FY 2015 to 61 percent in FY 2016: 3,668,736 scrap tires were recycled and 377,034 scrap tires were used as fuel in FY 2016. This was, in large part, due to Harford Waste-to-Energy permanently ceasing operations during FY 2016 and Holcim temporarily ceasing use of tire derived fuel in FY 2016. The estimated number of Maryland generated scrap tires exported to other states is based on the assumption that 6.0 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.

Market Challenges

Although the scrap tire markets data indicates only a slight (3.67%) decrease in the amount of scrap tires processed in Maryland during FY 2016, the Department has become aware through communication with stakeholders, licensees, and property owners with illegal stockpiles that the scrap tire markets in the entire Mid-Atlantic and New England regions are slowing and/or declining. This is, in part, due to the current low petroleum prices, which impact the tire derived fuel markets. This is negatively affecting how quickly scrap tires are hauled from licensed sites and illegal stockpile sites to the scrap tire processing facilities, the amount of scrap tires able to be processed by the processors, the prices of recycled scrap tire products produced, and the cost for hauling and processing of scrap tires.

Continued emphasis needs to be given to market development of scrap tire products and processed raw materials.

The Department has tasked MES with taking action toward finding a solution to the slow and declining scrap tire markets by revisiting the issue of the Scrap Tire System that MES is required to establish and maintain. The Department and MES will explore several possible remedies for the problem during FY 2017, including soliciting new applicants for the Scrap Tire System.

Table VI – Maryland Licensed Scrap Tire Processing Facilities

Facility Name/Type	Location	Operation	Telephone	Tires Processed in FY 2016
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	5,617,112
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	385,742
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	361,764
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	280,200
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	15,186
Fort Detrick	393 Beasley Road Frederick MD 21702	The facility burns scrap tires with solid waste and medical waste.	(301) 619-2323	84
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	0
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				6,660,088