



Senator Patricia L. Birkholz  
Representative David W. Palsrok  
Page 2  
August 11, 2006

cc/enc: Ms. Teresa A. Bingman, Governor's Office  
Ms. Dana Debel, Governor's Office  
Mr. Jim Sygo, Deputy Director, DEQ  
Ms. Carol Linteau, Legislative Liaison, DEQ  
Ms. JoAnn Merrick, Senior Executive Assistant to the Director, DEQ  
Mr. Frank Ruswick, Special Assistant to the Director, DEQ  
Mr. George Bruchmann, DEQ  
Mr. Steven Sliver, DEQ  
Ms. Rhonda Oyer Zimmerman, DEQ  
Ms. Julie Vallier, DEQ

**Michigan Department of Environmental Quality  
Report to the Legislature Assessing the Impact of the  
Scrap Tire Market Development Grants**

**August 11, 2006**

**EXECUTIVE SUMMARY**

Part 169, Scrap Tires, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), requires that not later than 4 years after the July 2002 effective date of the amendatory act that added Subsection 16908(5), the Michigan Department of Environmental Quality (DEQ) prepare an assessment of the impact that the Scrap Tire Market Development Grants have had on the reduction in the surplus of scrap tires in the state and on the establishment of new end uses for scrap tires. A copy of this assessment is to be provided to the standing committees of the Senate and the House of Representatives with jurisdiction over subject matter pertaining to natural resources and the environment. This report was prepared by the DEQ, Waste and Hazardous Materials Division (WHMD), which oversees the Scrap Tire Program (Program), including grant, registration, compliance, and enforcement activities.

**Market Development Grants have not had an impact on the reduction in the surplus of scrap tires in the state and on the establishment of new end uses for scrap tires. Only one Market Development Grant has been issued to date due to the lack of approvable applications.** However, this report has been expanded to describe the effect of overall efforts to address proper scrap tire management.

Overall, the Program has been very successful. Throughout the state, **stockpiles of scrap tires have decreased, compliance rates have increased, and markets for scrap tires have increased.** Behind the Program's success to date are: (1) a continuing appropriately funded Scrap Tire Cleanup Grant Program to address abandoned scrap tires and those collected prior to 1991 when Part 169 was enacted and (2) consistent enforcement of Part 169, which helps to ensure a level playing field for those voluntarily meeting Part 169 requirements. It should be noted that **although markets for scrap tire material have continued to increase on their own with minimal governmental subsidies, the ongoing need for state funding for cleanup grants, compliance, and enforcement is clear.**

As part of an ongoing effort to continuously improve the Program, the DEQ has sought input from key stakeholders. In 2005 the DEQ formed the Scrap Tire Work Group, an *ad hoc* group of stakeholders, to assist with developing recommendations for statutory amendments and other regulatory or policy changes concerning Part 169. The stakeholders identified proposed **administrative and legislative changes to the Program including the creation of an ongoing Scrap Tire Advisory Committee (STAC).** The STAC will meet periodically to advise the DEQ on implementation of the recommendations contained in the Work Group report and to serve as a forum for both the DEQ and stakeholders to identify and address challenges and opportunities in the Program as they arise.

## INTRODUCTION AND BACKGROUND

### ***THE SCRAP TIRE PROBLEM***

Over 290 million scrap tires are generated each year in the United States. Michigan contributes ten million scrap tires annually to that waste stream. In the past, millions of these scrap tires were abandoned or illegally stockpiled each year on vacant lands and inner city back alleys. These illegal accumulations resulted in public health, environmental, and aesthetic problems for many communities, particularly from fires and mosquitoes.

According to the 2003 Rubber Manufacturers Association Scrap Tire Market Report, there were 270 million scrap tires remaining in stockpiles throughout the United States in 2003. Ninety percent of these were concentrated in 11 states including: Texas (53 million tires), New York (40 million), Colorado (35 million), Michigan (25 million), Connecticut (20 million), Alabama (20 million), Ohio (20 million), Pennsylvania (12 million), Massachusetts (10 million), New Jersey (8 million), and Washington (6 million). Figure 1 (page 4) shows the known regulated scrap tire collection sites in Michigan as of July 2005.<sup>1</sup>

Some experts no longer consider the question of “if” an improperly managed stockpile will catch fire but “when” it will. As a general rule, it is five to ten times more expensive to remediate a tire fire site than to simply remove the tires before they catch fire. For this reason, the United States Environmental Protection Agency (U.S. EPA) established a group of individuals representing various stakeholders to formulate a strategy for addressing scrap tires. The group established a recommended goal for mitigation of 55 percent of known stockpiled scrap tires by 2008.



---

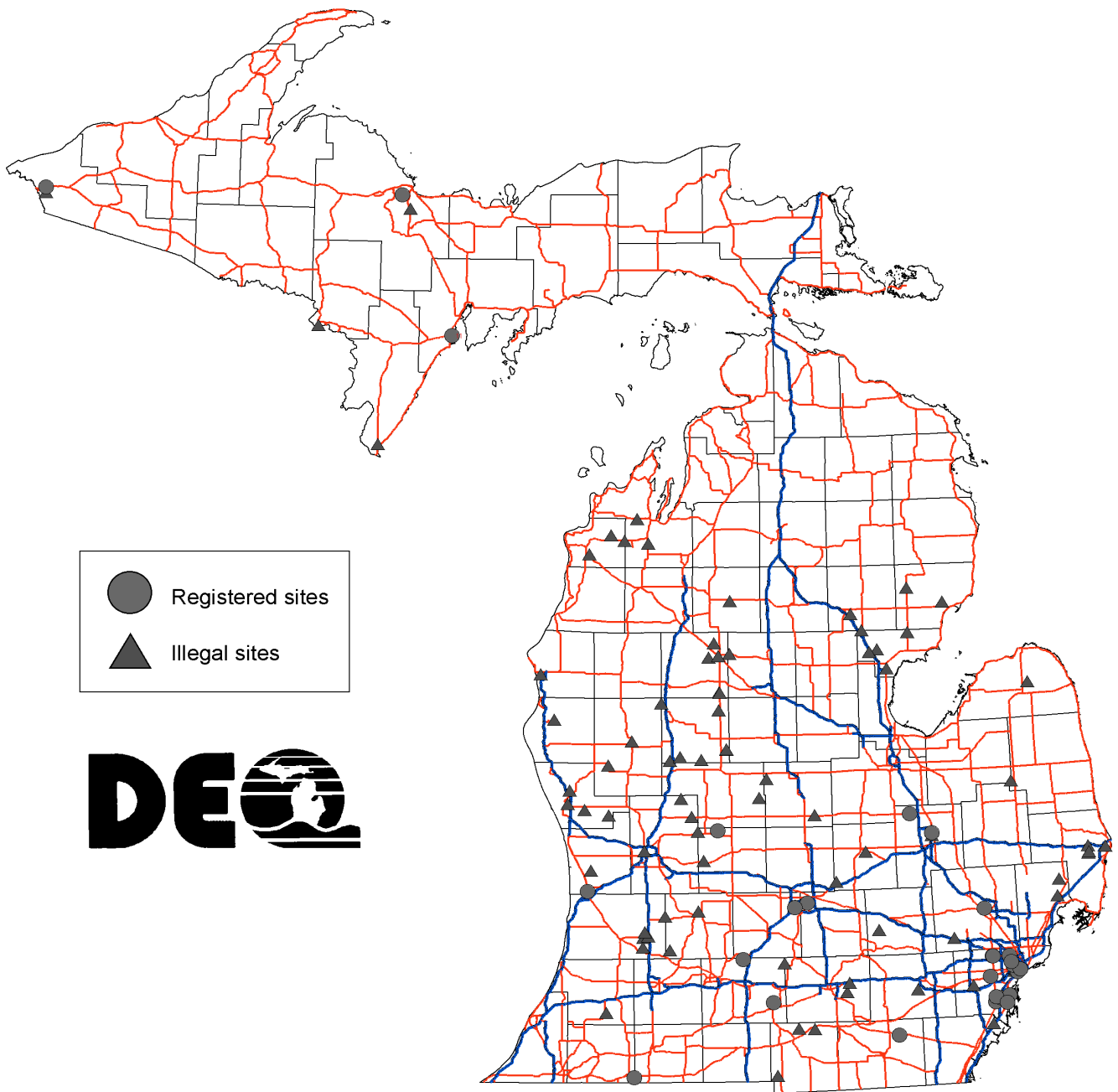
<sup>1</sup> 2006 data is available, see page 7, but locations have not yet been depicted on a map.

Unregulated management of scrap tires in Michigan before 1991 led to an estimated 30 million tires located in stockpiles in Michigan by 1991, and more than 7.5 million additional scrap tires were being generated annually at that time. Tire retailers were seeking the lowest price for disposal of their scrap tires, and without regulation, tires were being stored in anticipation of the tires having a future value. The operating costs of these facilities were greater than the amount being charged to “dispose” of the scrap tires. With no funds for proper disposal or recycling, greater than 75 percent of the scrap tires were dumped or stored in unmanaged stockpiles.

Whole motor vehicle tires have been prohibited from disposal in Michigan landfills since March 2004. While portions of tires (e.g., tire shreds) can still be disposed of in a landfill, the challenge continues to be promoting other management options, such as the use of scrap tires as raw materials for products or to produce energy.



Figure 1  
**Scrap Tire Sites**  
(July 2005)



Michigan's policy response to the scrap tire problem in the state is two-pronged: encourage market development and require proper management of tires. This approach is embodied in the Scrap Tire Regulatory Act (1991 PA 133), which was recodified in 1994 as Part 169 of the NREPA. The purpose of Part 169 is to help reduce illegal scrap tire accumulations and the public health and environmental concerns associated with these solid waste piles. Under this approach, the DEQ's goals were to:

- Create regulatory incentives (such as a bonding exemption for sites that are in compliance for one year) to recycle tires, and financial disincentives (such as higher bonding requirements and penalties for noncompliance) to improperly store or dump tires;
- Assist in the development of viable end uses and markets for scrap tires;
- Require acceptable management of scrap tires through registration and manifesting requirements for transporters and requiring proper storage (registration of sites, pile restrictions, mosquito control, and bonding requirements for storage according to the number of tires);
- Conduct site, hauler, and retailer inspections to assess management of scrap tires;
- Conduct appropriate enforcement with criminal and civil culpability for violations and prosecution of violations; and
- Allow private enterprise to establish costs.

Part 169 was substantially amended in July 2002. Amendments were made to the definitions, scrap tire hauler registration exemptions, bonding provisions, manifest requirements, grant provisions, and penalty provisions. Some of the more significant changes included:

- Encouraging the alternate use of tire material by promoting the use of tire material in septic systems;
- Requiring haulers to have a manifest and provide copies to the generator and disposal location to close the loop in the manifest process and better track the movement of tires in order to ensure these tires are going to a proper location;
- Increasing funding for cleanup, market development, and end-user grants; and
- Changing the options for mosquito control and lowering the penalty for noncompliance with the mosquito control provisions.

The DEQ did not fully support all of the July 2002 amendments to Part 169 because some, such as reducing the need for bonding and lessening sanctions for illegal activity, were contrary to the goals of the Program and would present unique challenges from a regulatory perspective.

## ***SCRAP TIRE PROGRAM***

Part 169 creates a Program consisting of financial incentives (Scrap Tire Cleanup, Market Development, and End-User Grants), registration of scrap tire haulers and collection sites, financial assurance, and compliance (inspection and enforcement) activities. The objectives of the Program are:

- Ensuring the proper and environmentally protective management of scrap tires through disposal or reuse;
- Ensuring that adequate bond funds are available and posted by the collection sites to bring collection sites into compliance and conduct cleanup activities if necessary;
- Providing grants for the removal of certain scrap tires from scrap tire piles located throughout the state;
- Providing grants for increasing the end use of scrap tires;
- Providing grants for the development of markets for scrap tires other than tire-derived fuel (TDF); and
- Promoting market development to ensure proper outlets for scrap tires are available.

The Program is funded by a tire disposal surcharge on each motor vehicle certificate of title that is collected by the Secretary of State pursuant to Section 806 of the Michigan Vehicle Code, 1949 PA 300, as amended (MVC), and deposited into the Scrap Tire Regulatory Fund established pursuant to Section 16908 of Part 169. The administrative costs to the Secretary of State associated with collection of the fees come from the Fund. Amendments to the MVC in July 2002 extended the sunset for the Program funding to December 31, 2007, and increased the title certificate transfer fee from \$.50 to \$1.50. This increase has generated revenue of \$3-\$4.5 million per year. These fees provide money for cleanup, market development, and end-user grants and administration of the Program.

The July 2002 amendments to Part 169 decreased the number of DEQ full-time equated positions (FTEs) working on the Program from 13.5 to 11. The DEQ currently splits these 11 FTEs among ten staff in the eight District Offices carrying out inspection, compliance, and registration activities; three staff in the Lansing central office issuing registrations, overseeing scrap tire grants, and providing overall Program coordination; one staff person coordinating enforcement actions; and staff in the DEQ, Office of Criminal Investigations (OCI), conducting criminal investigations.

## ***COMPLIANCE AND ENFORCEMENT***

Each year, the DEQ discovers additional regulated collection sites and develops more accurate figures on scrap tire stockpile inventories. Most of the newly-identified sites are not active and often not in a visible location. Therefore, as expected, the documented number of scrap tires stockpiled at identified noncompliant sites has increased since 1991. Tires were also accumulated in buildings and trailers in order to avoid the larger outdoor tire storage area collection site bonding requirements. Many of these sites are not immediately visible as



tire stockpiles. The number of tires reported as being removed may also change over time due to improved tracking and data quality methods.

In 2004, 127 collection sites containing 11.9 million scrap tires were found by the DEQ to be in noncompliance. Of these, approximately 6 million were accumulated prior to 1991. Part 169 draws several distinctions between tires accumulated prior to 1991—when indiscriminate storage of scrap tires became illegal under the predecessor to Part 169—and tires accumulated after that date. These distinctions are discussed in this report.

Scrap tire stockpile abatement is a technical, economic, and political challenge. Obtaining and maintaining a landowner's cooperation facilitates cleanup operations. If the property owner will not cooperate, a court order must be obtained to enter the property and remove the scrap tires. This takes a significant amount of time and DEQ and Department of the Attorney General (DAG) resources. Scrap tire stockpiles do not have a positive net value, as abating stockpiles costs more than can be derived from product revenue. Many of these pre- and post-1991 accumulations are not in compliance with Part 169, are without financial assurance, and are abandoned by the operator, becoming public liabilities, so taxpayers will ultimately end up taking the financial responsibility for dealing with these piles.

Michigan's current scrap tire industry consists of the following:

- 315 registered scrap tire haulers
- 418 collection sites that are in compliance, including 42 registered scrap tire collection sites<sup>2</sup>
- 117 collection sites that are not in compliance
- 8 registered scrap tire processors
- 8 certified end-users

The DEQ annually conducts over 300 inspections of these facilities, including annual inspections of each collection site that applies for registration.

On average, the DEQ holds 40 financial instruments for the necessary financial assurance for scrap tire collection sites. Scrap tire collection sites are required to bond outdoor tire storage areas at \$25,000 per quarter acre or fraction thereof and \$2.00 per square foot of tire storage area in a building. Collection sites with fewer than 2,500 tires need maintain only a \$2,500 bond. Qualifying tire chip storage areas up to a total of one acre are not required to be bonded, and collection sites that remain in compliance with the applicable requirements of Part 169 for at least one year are not required to be bonded.

The DEQ can address noncompliance with Part 169 requirements through administrative, civil, and criminal enforcement activities. Criminal enforcement is used when a person or company refuses to comply with the law or intentionally commits a violation. Criminal sanctions include probation, community service, jail, fines, court costs, and restitution for

---

<sup>2</sup> Some collection sites are not required to be registered.

damages. These sanctions do not directly require the removal of illegal tires. Therefore, either administrative or civil enforcement tools are used to require the clean up of large illegal tire piles.

Administrative enforcement consists of a series of steps. The first is a letter informing a person how his or her activities fail to meet legal requirements. This letter provides a period of time, typically about 30 days, to correct the violations without penalty or further ramifications. The DEQ may send subsequent letters reiterating the need to correct violations and providing more time before the DEQ will consider penalties necessary. If the violations are not corrected after a reasonable period of time, the matter becomes more serious and the DEQ takes the position that not only must violations be corrected, but a financial penalty is also appropriate. The DEQ offers to negotiate an agreement that will describe what steps will be taken to correct violations, the penalties to be paid, and how the agreement will be enforced. If this offer is refused, or agreement cannot be reached, the DEQ may ask the DAG to file civil litigation seeking a judicial order to compel compliance with the law and payment of financial penalties. The DEQ may also seek a judicial order authorizing DEQ access to the site in order to clean up tires with public funds.

The later stages of this process are very time-consuming and expensive. Therefore, the DEQ very much prefers to work with regulated parties to obtain compliance during the early stages.

### ***SCRAP TIRE WORK GROUP***

The Work Group is an *ad hoc* group of stakeholders formed by the DEQ in 2005 to assist with the development of recommendations for statutory amendments and other regulatory or policy changes to improve the Program. The Work Group consisted of retailers, retreaders, scrap tire processors, scrap tire haulers, scrap tire collection site owners, end-users, as well as representatives from the Michigan Association of Counties, the Michigan Townships Association, the Michigan Municipal League, and staff of the DEQ (WHMD, Air Quality Division, and OCI) and the Michigan Department of Transportation. The Work Group met on April 27, 2005; May 25, 2005; June 23, 2005; and August 11, 2005.

The Work Group's initial focus was on the grant programs and their effectiveness, and most of the discussion was focused on enforcement of Part 169 and improvement of the regulatory requirements. During discussion of the grant programs, it was felt that more discussion was necessary and that the DEQ should look at the goals of the grant program and work backwards from there. If the goal is to increase the removal of stockpiled scrap tires, the economics of doing so needs to be investigated. It is important that grant funding be spent in the most efficient and effective way possible. Innovative ways of doing this need to be further explored.

The DEQ drafted recommendations based on these Work Group discussions and then shared them with a broader group of stakeholders, including registered scrap tire collection sites, haulers, designated solid waste planning agencies, WHMD Program staff, and WHMD District Supervisors.

The Work Group process resulted in the WHMD providing over 23 issues and recommendations for amending Part 169 and the MVC (for removal of the surcharge sunset) and changing the Program based on consideration of the Work Group’s input. Some of the proposed legislative changes were recognized as controversial, and others were seen as more widely accepted. The DEQ intends to: (1) pursue those legislative recommendations that were more widely accepted and (2) reserve for further consideration those issues and recommendations that are controversial.



## **RESULTS**

Overall, the Program has been very successful. Throughout the state:

- Stockpiles of scrap tires have decreased,
- Compliance rates have increased, and
- Markets for scrap tires have increased.

The following activities and factors have contributed to this success:

### ***CLEANUP GRANTS***

Much of the reduction in illegal stockpiles is due to Scrap Tire Cleanup Grants. Since the Legislature first appropriated funding in 1993, more than \$16.2 million in public funds have cleaned up approximately 16.2 million passenger tire equivalents (PTEs), restoring the environmental quality and economic value of more than 1,000 sites across the state (See Figure 2). It is estimated that another 3.8 million PTEs, will be removed from 35 sites with the approximately \$3.9 million allocated for cleanup grants in FY 2006.

The 1991 enactment date of Part 169 is important in administration of the Scrap Tire Cleanup Grants. Until the 2002 amendments to Part 169, only tires accumulated prior to that date or “abandoned”<sup>3</sup> were eligible for cleanup funds. In 2002 the Legislature expanded eligibility to post-1991 tires, but established a priority for the removal of all pre-1991 tires and other tires that pose an imminent threat to public health and the environment.

---

<sup>3</sup> Part 169 defines “abandoned” as scrap tires where the property owner is not partially or wholly responsible for the accumulation of the tires.

The DEQ believes that tires collected after 1991 should be treated differently for the purpose of public funding than pre-1991 tires. Removing scrap tires can turn property that is a liability into one that can be sold for value. When public funds remove illegal tires to address a public health and environmental risk, a person responsible for the illegally accumulated tires should not profit from the resulting increase in market value. Therefore, a lien against the property is imposed as a condition of a grant to clean up post-1991 tires. This helps to protect the State's interest by potentially recouping some of the grant funds spent on cleanup and prevents the unjust enrichment of liable parties.

### ***REGISTRATION, COMPLIANCE, AND ENFORCEMENT***

The registration, compliance, and enforcement activities conducted under Part 169 have also been effective in addressing illegally stored tires. As a direct result of these activities, approximately 7 million illegal tires have been removed from uncontrolled stockpiles. This is coupled with increased compliance with management requirements at operating collection sites and at least some environmental or public health improvements at most sites throughout the state.

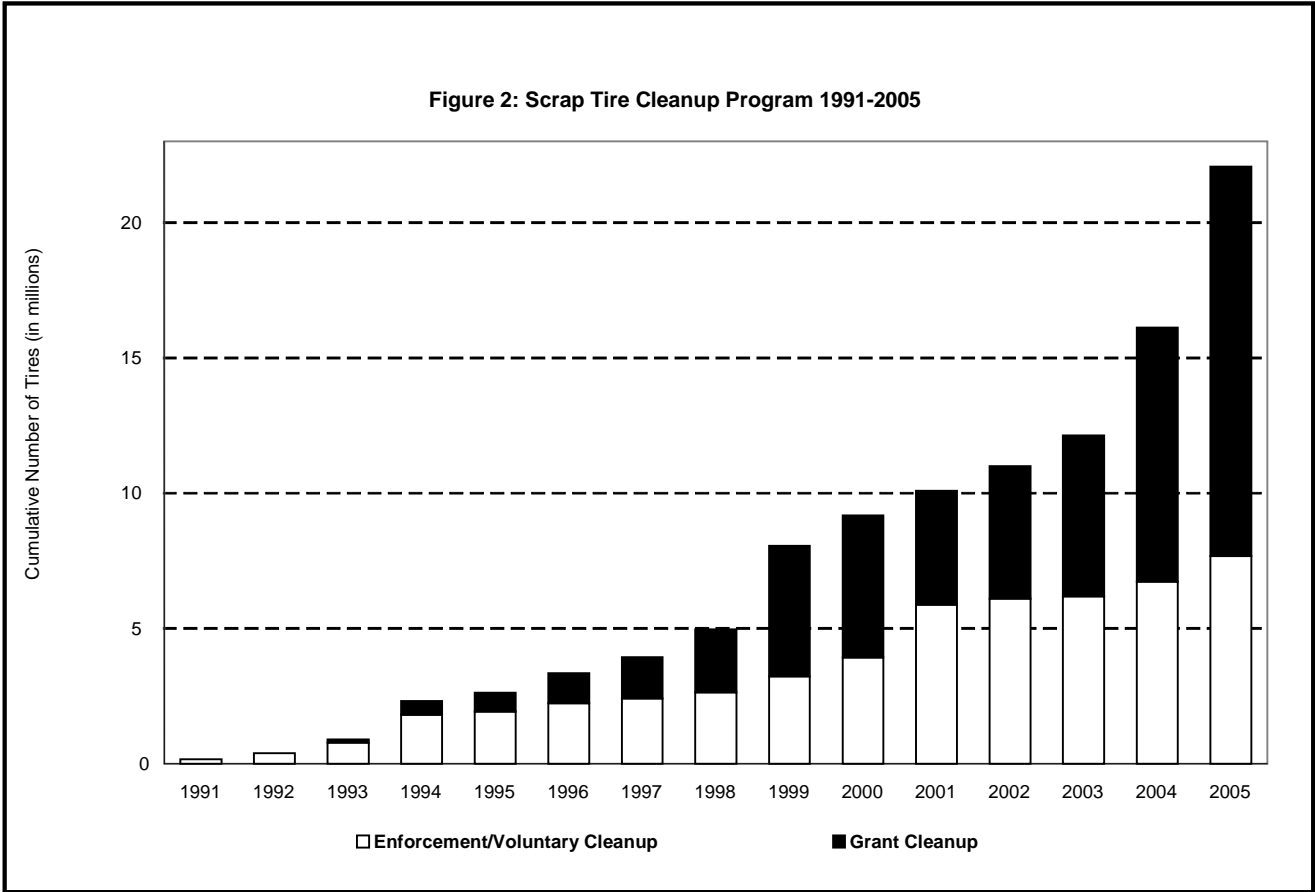
In 2001 the DEQ estimated approximately 26 million tires were being illegally stored in Michigan. The current estimate is approximately 11 million—over 6 million pre-1991 tires plus at least 5 million post-1991 tires located at collection sites posing an imminent threat to public health, safety, welfare, or the environment.

Michigan's results are similar to those of other states with large numbers of stockpiled scrap tires. Current<sup>4</sup> U.S. EPA estimates of remaining tire stockpiles and the percent reduction since 2003 in the states with the largest numbers of stockpiled tires are: Texas (13.5 million tires, 86 percent), New York (26 million, 65 percent), Michigan (11.9 million, 76 percent), Ohio (2-4 million, 80 percent), and Pennsylvania (10 million, 16 percent). Current estimates are not available for Colorado, Connecticut, Alabama, Massachusetts, New Jersey, and Washington. These results are consistent with the EPA's goal of a 55 percent reduction in scrap tire stockpiles throughout the country.<sup>5</sup>

---

<sup>4</sup> As of September 2005

<sup>5</sup> It is noteworthy that the U.S. EPA provides no funding to support removal of abandoned scrap tires.



**MARKET DEVELOPMENT**

The tire processing industry and product markets have a finite capacity to use the 10 million tires per year that Michigan currently generates in addition to historically stockpiled tires. Done properly, stockpile cleanups can help to develop new markets or add supply volumes to existing markets. Done improperly, cleanups can negatively impact existing markets and the businesses of processors.

As a result of the Scrap Tire Cleanup Grants and DEQ efforts to ensure compliance with Part 169 storage requirements, a large and continuing supply of scrap tires has become available for use in the marketplace. This supply has increased Michigan scrap tire market capacity from less than 3 million to 20 million scrap tires per year giving Michigan capacity sufficient to handle newly-generated scrap tires and the accelerated cleanup of stockpiled scrap tires.

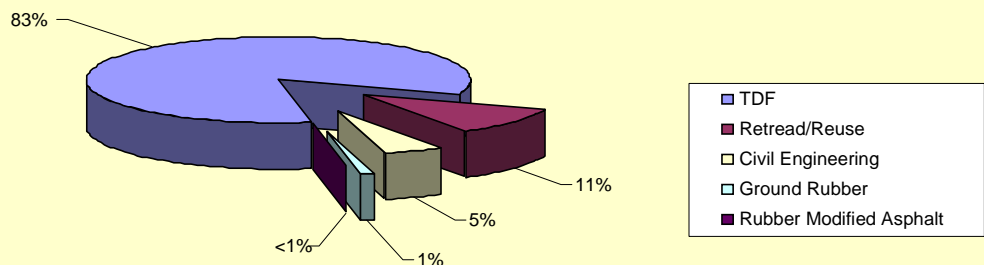
The primary uses of scrap tires in Michigan include TDF, which is used in the generation of electricity, the manufacturing of cement, and the retreading market for truck tire casings. Based on the WHMD’s best estimate of the current usage and capacity of existing and potential scrap tire material end-users (see Figure 3), approximately 17 million scrap tires per year are permitted under Part 55, Air Pollution Control, of the NREPA, to be burned as TDF (8 permitted TDF facilities; 7 of which were certified as end users in Fiscal Year [FY] 2005 and FY 2006) and 2.25 million scrap tires are retreaded or reused each year. Scrap tire

chips also have been used as lightweight aggregate for construction activities at landfills (approximately one million tires per year); septic drain fields, landscaping activities, and athletic turf (approximately 250,000 scrap tires per year for these three uses); and rubberized asphalt for parking lots and roads (minimal use of scrap tires). These numbers are estimates based on issued permits or in the application process and on staff's knowledge of usage based on market contacts.

Michigan has achieved this market expansion with only limited direct government subsidies. Wisconsin, which encouraged markets through significant governmental subsidies, experienced a substantial decline in markets and an increase in illegal accumulations when the subsidies ended.

In FY 2005 and FY 2006, eight end users certified to the DEQ that they used at least 75 percent of the scrap tire material delivered to their site. Seven are TDF users and the eighth uses tire chips for landfill daily cover over the refuse. Table 1, below, shows usage by these eight facilities for FY 2005 and FY 2006. The number of tons used increased from a total of 81,494 tons in FY 2005 to 93,441 tons in FY 2006.

**Figure 3: Current Scrap Tire Markets**



Notes: TDF means tire-derived fuel; Civil Engineering includes tire shreds used in road and landfill construction, septic tank leach fields, and other construction; Ground Rubber includes new products, playground and athletic turf, and landscaping; and Rubber Modified Asphalt means ground rubber used in road surface construction.

**Table 1: Scrap Tire End-User Certifications for FY 2005 and 2006**

End-User	Year	Use	Tons Received	Tons Used	Tons Remaining On-Site
Grayling Generating Station	2005	TDF	7,247	7,356	124
	2006		6,993	6,945	172
Hillman Power	2005	TDF	12,754	12,655	116
	2006		11,783	12,041	0
Holcim US Inc.	2005	TDF	13,673	13,676	3
	2006		17,200	16,780	3
Marquette Co. Solid Waste Management Authority	2005	Landfill Daily Cover	247	228	19
	2006		217	215	2
T.E.S. Filer City Station	2005	TDF	4,131	4,485	35
	2006		5,016	5,311	0
Viking Energy of Lincoln	2005	TDF	13,594	13,305	883
	2006		14,456	14,907	432
Viking Energy of McBain	2005	TDF	11,731	11,336	754
	2006		11,412	12,223	341
Wyandotte, Dept. of Municipal Service	2005	TDF	18,767	18,453	137
	2006		24,969	25,019	400
TOTALS	2005	—	82,144	81,494	2,071
	2006		92,046	93,441	1,350

**SCRAP TIRE MARKET DEVELOPMENT AND END-USER GRANTS**

The Scrap Tire Market Development Grant Program and the Scrap Tire End-User Grant Program are designed to supplement the Scrap Tire Cleanup Grant Program to promote proper use of scrap tire material in Michigan. The development of additional markets and uses for scrap tires will further accelerate the cleanup of stockpiled scrap tires. Up to \$500,000 from the Scrap Tire Regulatory Fund is available for the Scrap Tire Market Development and End-User Grants for FY 2006.

**End-User Grants**

The Scrap Tire End-User Grant Program was started in FY 2004. Approximately 3-5 scrap tire end-user grant applications are received each year, and approximately three grants are awarded each year. The scrap tire end-user grants have resulted in only a slight increase in the number of tires used each year. Facilities are often limited in the amount of TDF they can burn because of limits on emissions in air permits. However, use of tires by other facilities for fuel is expected to increase with the increased cost of other fuel sources.

**Market Development Grants**

The Scrap Tire Market Development Grant was established in FY 2004 but has not been successful. Only one such grant has been issued and is scheduled to be completed in August 2006. Only two other incomplete applications have been received since the grants became available. This lack of interest is due in part to the statutory requirement that

grant-funded activities must use tires cleaned up from stockpiles. These tires may not be suitable for all uses because of the physical and chemical breakdown of the tires during long-term storage and contamination by dirt, water, and other materials. In addition, Part 169 only allows funding for 50 percent of the purchase price of the scrap tires. The cost of scrap tires is relatively inexpensive in comparison to equipment, research and development, and testing costs associated with market development activities. Potential applicants have also indicated that the application process is difficult and, thus, costly in comparison to the small amount of funding available through the grant.

### **PROCESSING CAPACITY**

Michigan now has the capacity to process more than the 10 million scrap tires generated annually in the state. Michigan operations reported processing 10,004,846 in 2004 and 13,775,927 in 2005. The number of processors has also increased.

### **OTHER DEQ EFFORTS**

The DEQ has also helped to decrease the number of scrap tires generated by providing information on proper tire maintenance—including proper tire inflation, rotation, and driving habits—through posters, press releases, and the DEQ Web site.<sup>6</sup> Extending tire life decreases the number of scrap tires generated.



Aerial view of tire piles before cleanup grant awarded.



Aerial view of site after cleanup grant completed.

---

<sup>6</sup> See <http://www.deq.state.mi.us/documents/deq-whm-stsw-CheckYourTirePressurePoster.pdf> and <http://www.deq.state.mi.us/documents/deq-whm-stsw-Tire-Tips-Fact-Sheet.pdf>



## **CONTINUING NEEDS**

Though great progress has been made by the Program, needs remain for:

- Reliable funding
- Cleaning up remaining tire stockpiles (11 million tires)
- Managing ongoing scrap tire generation (10 million annually)
- Administering and enforcing Program requirements to prevent new stockpile formation and tire dumping
- Developing and supporting markets for scrap tires
- Collecting data on end-users, markets, and actual numbers of tires used

Effective scrap tire programs require reliable funding. Part 169 requires the DEQ to ensure that all abandoned scrap tires accumulated at collection sites prior to January 1, 1991, are cleaned up by September 30, 2009. In addition to the approximately 6 million pre-1991 scrap tires in that category, there are at least 5 million scrap tires accumulated after 1991 that pose an imminent threat to public health, safety, welfare, or the environment. However, the funding mechanism provided in the MVC sunsets on December 31, 2007.

The average cost of scrap tire cleanup is \$1 per PTE. At current revenue and expenditure levels for the Scrap Tire Regulatory Fund (see Table 2: Status of Scrap Tire Regulatory Fund as of April 2006), it is likely that the 6 million pre-1991 scrap tires could be cleaned up by the sunset date along with about 1.8 million of the post-1991 tires, but approximately 3.2 million post-1991 tires that pose an imminent threat would remain after the sunset of funding.

Beyond removal of existing stockpiles, ongoing monitoring and enforcement activities are needed to prevent creation of new, unmanaged stockpiles. Since whole motor vehicle tires are prohibited from disposal in landfills, the 10 million scrap tires Michigan generates annually should be directed to proper uses such as the production of energy or use as raw materials for products. Unfortunately, there continue to be scrap tire generators, haulers, and collection site operators who illegally dump scrap tires and speculatively accumulate tires without regard for Part 169 or their future liability. Continued administration and enforcement of Part 169 is necessary to ensure that market prices for the beneficial uses of scrap tires are not undercut by the lower costs of unmanaged storage resulting in creation of new illegal scrap tire piles throughout the state. The DEQ is currently attempting to meet this need with compliance staff reduced below historical levels by the 2002 amendments to Part 169.

	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>
<b>Beginning Fund Balance:</b>	<b>\$ 571.8</b>	<b>\$ 3,980.0</b>	<b>\$ 4,746.3</b>	<b>\$ 3,629.8</b>	<b>\$ 1,681.3</b>
Appropriated for Operations:	1,121.5	1,153.5	1,399.2	1,457.5	1,540.2
Appropriated for Grants:	3,200.0	3,500.0	5,250.0	4,500.0	4,500.0
<b>Total Appropriations:</b>	<b>4,321.5</b>	<b>4,653.5</b>	<b>6,649.2</b>	<b>5,957.5</b>	<b>6,040.2</b>
<b>Expenditures:</b>					
Operations	986.7	899.9	1,363.0	1,457.5	1,540.2
Grants	496.9	3,185.0	4,478.9	5,091.0	4,400.0
<b>Total Expenditures:</b>	<b>1,483.6</b>	<b>4,084.9</b>	<b>5,841.9</b>	<b>6,548.5</b>	<b>5,940.2</b>
<b>Revenue (including interest):</b>	<b>4,891.8</b>	<b>4,851.2</b>	<b>4,725.4</b>	<b>4,600.0</b>	<b>4,500.0</b>
<b>Year-End Fund Balance:</b>	<b>\$ 3,980.0</b>	<b>\$ 4,746.3</b>	<b>\$ 3,629.8</b>	<b>\$ 1,681.3</b>	<b>\$ 241.1</b>

Notes:

- 1) Figures in shaded areas represent estimated or projected amounts.
- 2) Expenditures in a given fiscal year may include expenditures from previous appropriations, due to encumbrances carried forward and expended in subsequent fiscal years. For example, FY 2006 expenditures include \$691,000 of encumbered FY 2005 grants that were not completed during FY 2005, but were completed in FY2006, and the grant funds were expended in FY 2006.
- 3) FY 2003 and subsequent revenue projections reflect the increased tire disposal surcharge of \$1.50 per vehicle title issued, which took effect on October 1, 2002. This fee sunsets on December 31, 2007.

As scrap tire stockpiles are cleaned up, it is appropriate to begin discussions of shifting funding to other program priorities, such as market development. Given recent changes contemplated to the Internal Revenue Service (IRS) production tax credit rules regarding biomass, greater emphasis on market development may soon be appropriate. Several Michigan power plants have stopped or are contemplating stopping use of TDF as a result of the biomass energy production tax credit. The IRS has not promulgated production tax credit rules regarding biomass fuel alternatives such as TDF. It has, however, verbally communicated to some TDF users that blended fuels would not be eligible for this tax credit. This could impact the use of over four million tires at just two power plants believed to be intending to stop burning tires in favor of the tax credit and could cause others to do the same. This would undermine TDF facilities as viable long-term markets, which is important to maintaining scrap tire consumption in Michigan.

The DEQ currently estimates scrap tire markets based on indirect information, such as consumption limits in air permits and staff's contacts with individual markets. In order to more fully understand the management of scrap tires and make good policy decisions to address

changes like those experienced in the TDF market, Michigan needs a more accurate means of collecting data on end-users, markets, and actual numbers of tires used.



### **NEXT STEPS/LOOKING FORWARD**

The DEQ is pursuing Program needs through two current efforts. First, the DEQ is seeking amendments to Part 169 consistent with the widely accepted recommendations of the Work Group. The amendments include:

1. Extending the surcharge sunset in the MVC;
2. Improving the definition of an end-user;
3. Clarifying the definition of a scrap tire hauler;
4. Redefining crumb rubber/adding high end-use products;
5. Connecting portable shredding operations to a collection site;
6. Exempting tire retreaders from certain requirements;
7. Clarifying that tires can go to locations that have legally accumulated scrap tires below the regulatory threshold;
8. Clarifying that tire shreds cannot be placed between tire piles;
9. Clarifying that tires must be in the tire storage area;
10. Defining an all-weather road;
11. Limiting the growth of unbonded sites;
12. Specifying that sites must be in compliance to be registered;
13. Correcting the bonding citation;
14. Simplifying manifest requirements by allowing a consolidated load manifest;
15. Expanding funding eligibility under the Market Development and End-User Grant Programs;
16. Detailing how liens preventing unjust enrichment for post-1991 stockpiles are applied; and
17. Adding explicit inspection authority.

Second, building on the success of the Work Group, the DEQ has organized a permanent STAC, which will meet periodically to advise the DEQ on implementation of the recommendations contained in the Work Group report and serve as a forum for both the DEQ and stakeholders to identify and address challenges and opportunities in the Program as they arise. The STAC will also hold further discussions on those controversial issues that were not resolved during the initial Work Group process, including:

1. Requiring generator record-keeping;
2. Improving the DEQ's capability to use performance bonds for a site;
3. Vehicle forfeitures for violations involving those vehicles;
4. Increased/improved penalty provisions;
5. DEQ rule-making authority;
6. Changing the feed storage location exemption;
7. Changes to the Market Development and End-User Grant Programs; and
8. Promoting the use of rubber modified asphalt and other engineered uses of tires.

The first meeting of the STAC was held on May 11, 2006, with subsequent meetings to be held on a quarterly or as needed schedule. The DEQ is committed to working with stakeholders to continuously improve the Program.

