

# Administration and Effectiveness of the



# SUPPLEMENT

Administration and Effectiveness of the Oklahoma Used Tire Recycling Program for FY 2020, FY 2021 and FY 202022

A reporting requirement pursuant to 27A O.S. § 2-11-401.6(B)(5)

For a quick overview of this report, click the following link: https://tinyurl.com/3vwen748



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#### **Useful Terms**

**Used Tire** - An unprocessed whole tire or tire part that can no longer be used for its original intended purpose but can be beneficially reused as approved by DEQ.

**Used Tire Recycling Indemnity Fund (Fund)** - The Fund contains fees collected by tire dealers for every tire sold and tag agents for newly registered vehicles in Oklahoma. These fees are used to pay for recycling old tires.

Motor License Agent (MLA) - MLAs are also known as tag agents.

**Recyclers** - Recyclers are facilities permitted by DEQ to collect, transport, and process used tires.

**Automotive Dismantlers and Parts Recyclers** - Also known as salvage operations, these businesses are licensed by the Used Motor Vehicle Commission to dismantle vehicles and recycle parts.

**Rubber Modified Asphalt (RMA)** - RMA is the addition of crumb rubber to asphalt cement to form a high-performance grade asphalt.

**Tire Derived Fuel (TDF)** - Shredded or whole used tires that may be mixed with coal or other fuels, such as wood or chemical wastes, to be burned in cement kilns, power plants, or paper mills.

## Background

The Oklahoma Used Tire Recycling Act (Act) has been successful in recycling old tires since its inception in 1989. Before the Act, Oklahoma had millions of tires in illegal dumps across the state. Traditional means of tire disposal were no longer effective or legal resulting in few outlets for old tires. As a result of the Clean Air Act and Solid Waste Disposal Act, open burning was no longer allowed in the State. Additionally, landfills refused to accept tires because they would float to the surface. The Act provided a solution to this growing problem by providing a legal way to dispose of tires. The intent of the Act is to clean up existing dumps, prevent new dumps and provide incentives for recycling tires so they may be used as feedstock for various products and energy production.

The Act requires the Department of Environmental Quality (DEQ) to file a report with the Legislature and the Governor detailing the administration of the Act and its effectiveness in implementing the cleanup of existing tire dumps and in preventing the development of new dumps. The report is to be filed every three years [27A O.S. §2-11-401.6(B)(5)]. This report contains information on legislation, administration, and activities because of the Act. Activities for fiscal years (FY) 2020, 2021 and 2022 demonstrate the Used Tire Recycling Program to benefit Oklahomans by facilitating proper recycling of tires.

## **Used Tire Recycling Fees**

#### Fee Structure

Tire dealers and motor license agents (MLAs) are required to collect tire recycling fees on tires sold and for tires associated with newly registered vehicles in the state. Fees are remitted to the Oklahoma Tax Commission (OTC) where they are maintained in the Used Tire Recycling Indemnity Fund (Fund). Amendments to the Act effective July 1, 2019, are reflected in the table below.

Oklahoma Tire Recycling Fees (FY 20 - 22	2):		
Rim Size (Tire Dealers*)	Fee		
≤ 19 ½ inches or Automobile* Tires	\$2.90		
> 19 ½ inches and Tread Width ≤ 12 inches	\$5.50		
(example: semi tire)	Ψ0.00		
> 19 ½ inches and Tread Width > 12 inches	\$10.00		
(example: super singles)	4.0.00		
Motorcycles/Motorized Bicycles	\$1.00		
,,	*		
Agricultural Tires:			
	Fee		
Rim Size (Tire Dealers*)			
≤ 19 ½ inches and < 30 inches total diameter	\$2.90		
> 19 ½ inches and < 30 inches total diameter	\$5.50		
Total Diameter			
> 30 inches and ≤ 44 inches total diameter	\$8.00		
> 44 inches and ≤ 72 inches total diameter	\$16.00		
and not more than 30 inches wide			
Tag Agents (First Time Registrations in Oklahoma):			
Rim Size	Fee		
≤ 19 ½ inches (Automobile* and Trailer Tires)	\$2.90		
> 19 ½ inches (Automobile" and Trailer Tires)	\$2.90 \$5.50		
Semi Trucks First Registered in Oklahoma 47 O.S. § 1120	\$7.00		
Trailers First Registered in Oklahoma 47 O.S. § 1133	\$5.00		
Motorcycles/Motorized Bicycles	\$1.00		

Table 1. Table showing fee structure during FY 20 - FY 22

# Used Tire Recycling Indemnity Fund Revenue

The following Table reflects used tire fee revenues for FY 20 - FY 22 from MLAs and tire dealers. Based on data compiled by the OTC, fees collected during FY 20, FY 21 and FY 22 have stabilized, showing a slightly upward trend over this period.

FY	MLAs	Tire Dealers	Total
2020	\$5,752,347.47	\$11,079,087.28	\$16,821,434.75
2021	\$6,199,510.36	\$11,478,259.52	\$17,677,769.88
2022	\$4,702,949.75	\$11,894,853.15	\$17,621,796.76

Table 2. Table showing fee revenues from MLAs and tire dealers for FY 20 - FY 22

#### **Reimbursement to Permitted Recyclers**

Recyclers are reimbursed from fees paid into the Fund. The allocation of funds consists of four tiers. Table 3 shows the tiers and respective percentages for each allocation. Monies accruing in the Fund are first allocated to DEQ for implementing requirements related to the control of mobile and area sources of air emissions and other environmental programs or projects. The amount allocated for this purpose is 28% of the fund produced by the \$2.90 fee. After this allocation is made, 2.25% goes to OTC and 5.75% goes to DEQ for administering the requirements of the Act. The remaining Fund balance is used to reimburse Recyclers.

Recyclers are first paid \$53.00 per ton for collection and transportation of used tires and \$54.00 per ton for processing them. Recyclers are then reimbursed for producing crumb rubber or using tires as fuel (such as TDF) at \$29.00 per ton. One change effective November 2014 moved the \$20/ton paid for

capital investment to the fourth tier. This change has allowed capital investment to be paid at 100% of the amount requested for subsequent reporting periods. If there are insufficient monies in the Fund, Recyclers are prorated for that month. Prior to the most recent fee changes effective in FY 17, Recyclers were prorated regularly.

After allocations for Tiers I, II, III and IV are made, any remaining monies in the Fund can be used as additional compensation for tire dump cleanup and market development. Table 3 shows the allocation of the Fund.

Percentage Of Fund (Rate)	Allocation	
28% (of the \$2.90 fee)	DEQ - Mobile and Area Sources of Air Emissions	
2.25%	OTC - Administration	
5.75%	DEQ - Administration	
TIER II \$54/ton	Processing	
TIER I \$53/ton	Collection and Transportation	
TIER III \$29/ton	Crumb Rubber or Tire Derived Fuel	
TIER IV \$20/ton	Capital Investment	
Remaining Balance	Tire Dump Remediation	

Table 3. Table showing the monthly allocation of the Fund

During During FY 20, FY 21 and FY 22, Recyclers were reimbursed a total of \$39,880,740.97 from the Fund for managing Oklahoma's used tires. The amount reimbursed to Recyclers reflects tons of tires collected, transported and processed over the three-year period. Fewer tires were collected, transported and processed in FY 21 than in FY 20 or FY 22. Recyclers collected, transported and processed more tires in FY 22 than in either FY 20 or FY 21. This upward trend is likely due to an increase in available funding for recycling.

DEQ paid Recyclers an additional \$521,716.66 to clean up difficult tire dumps. Most of the reimbursement for remediation of tire dumps was made to Recyclers in FY 20. The downward trend in remediation efforts in FY 22 was due to a lack of funding available to pay Recyclers for cleaning up tire dumps.

#### **Tire Dealer Inspections**

DEQ ensures fees are collected from tire dealers through periodic inspections. These inspections allow staff to identify whether fees are collected and remitted to the OTC and ensure paperwork is maintained properly. During this three-year period (FY 20 - FY 22), 260 tire dealer inspections were conducted. In the later part of FY20 and for most of FY21, Staff conducted distant tire dealer inspections due to the pandemic. Distant inspections included driving by tire dealers and calling the tire dealers to get the necessary information needed. Follow-up inspections were conducted on tire dealers that were out of compliance. DEQ's efforts to bring tire dealers into compliance ensure all fees remitted to OTC.



Figure 1. This figure shows the number of tire dealers inspected each fiscal year

#### **Motor License Agent Inspections**

To minimize duplication of effort, DEQ coordinates with the Motor Vehicle Division of OTC to ensure MLAs are collecting the fees. In basic and complete audits, OTC checks to ensure that the MLAs are collecting and generating the waste tire fee receipt. If collected improperly, a ledger adjustment is processed, and fees are transferred to the appropriate account. The number of agents varies during the year as some close and others open..

OTC Motor Vehicle Division provides an annual audit report to DEQ on the fees recovered by MLAs. The following is a summary of those reports.

- In FY 20 there were over 280 MLAs, and 74 were found through audits to not be collecting correct tire recycling fees. An additional amount of \$2147.20 was recovered for the Fund.
- In FY 21 there were over 280 MLAs, and 59 were found through audits to not be collecting correct tire recycling fees. An additional amount of \$2377.90 was recovered for the Fund.
- In FY 22, there were over 280 MLAs, and 75 were found through audits to not be collecting correct tire recycling fees.
   An additional amount of \$3,050.60 was recovered for the Fund.



Figure 2. This graph reflects the revenue recovered for FY 20 - FY 22

#### Sources of Oklahoma Used Tires

There are three primary sources of used tires in Oklahoma. These sources include: 1) tire dealers and licensed automotive dismantlers and parts recyclers (i.e., salvage operations); 2) illegal tire dumps; and 3) community-wide tire collection events. These sources generated an estimated 12.1 million tires over the generated during the previous reporting period (FY 17 - FY 19). This increase is to be expected as the population of Oklahoma increases.

Tire dealers and salvage operations generated an estimated 11.7 million used tires, while illegal dumps and community-wide tire collection events generated an estimated 894,656 used tires.

#### Tire Dealers and Automotive Dismantlers and Parts Recyclers

Recyclers are required to collect tires from tire dealers in all 77 counties. These businesses may include any business that sells tires, such as tire dealerships, auto dealerships, auto repair shops, and licensed salvage operations. Most of the used tires in Oklahoma are generated by tire dealers. The tire dealer keeps any used tires that are not for resale to be collected by a permitted Recycler.

Instead of collecting and remitting a fee, licensed salvage operations can show proof of purchase of a salvage vehicle registered in Oklahoma. These businesses may have up to five used tires per vehicle purchased on or after January 1, 1996. This legislation has been successful in eliminating tire piles at salvage operations.

#### **Illegal Tire Dumps**

DEQ is authorized to maintain a list of tire dumps and other eligible tire sites and assign them priority for cleanup. The list contains qualified tire dumps, community-wide tire collection events, and businesses that maintain adequate records showing they have paid fees on tires for their fleet vehicles.

There are two ways a tire dump can qualify for this list. three-year period. This is a slight increase from the 11.5 million. The most common reason a site ends up on DEQ's list is when the landowner is a victim of illegal dumping. Another way a dump is place on the list is when the administrative enforcement process has been exhausted. In such cases, DEQ may provide for the cleanup of the dump pursuant to 27A O.S. § 2-11-401.7. During the FY 20 - FY 22 reporting period, 127 tire dumps were successfully cleaned up totaling 178,864 used tires. These dumps are cleaned up all over the state, as shown by Figure 3., below.



Figure 3. This figure shows a map of tire dumps cleaned up in FY 20 - FY 22

Figure 4., below, shows the number of tires cleaned up each fiscal year from FY 20 - FY 22. In FY 20, the focus was on checking the status of historical dumps and closing them. Therefore, the tire dumps moving forward for FY 21 were primarily newer dumps. In FY 22 there were continued efforts to address recent dumps and facilitate the clean-up of tire dumps in a timely manner as they were reported to DEQ. .



Figure 4. This figure shows the number of tires cleaned out of tire dumps from FY 20 - FY 22

There are currently 125 dumps on the DEQ maintained list. In some cases, tire dumps cannot be picked up easily by Recyclers. Such tire dumps are often found in steep ravines or deep in the woods requiring heavy equipment to clear trees and other debris to remove the tires. In these cases, DEQ collaborates with the Recyclers and pays them from available funds in the Fund for the extra work and heavy equipment needed for the cleanup. There are currently 5 such dumps that will only be cleaned up when monies are available in the Used Tire Recycling Indemnity Fund. The remaining 120 dumps will be picked up pending scheduling with a Recycler, which could take several months or longer as the landowner may be in the process of staging tires for pickup.

#### **Community Wide Events**

In addition to illegal tire dumps, the Act provides for the collection of tires from landfills and community-wide tire collection events approved by DEQ. These events provide an outlet for residents of a community to recycle their tires free of charge which prevents tires from being dumped illegally. An estimated 737,935 tires were recovered from such collection events during FY 20 - FY 22. The trend shown in Figure 5., below, shows that communities continue to take advantage of community-wide events each year, and fewer tires are being dumped illegally. The map in Figure 6., below, shows events held statewide. These results are consistent with the DEQ objectives for this period to increase the number of community-wide tire collection events while eliminating illegal dumps.



Figure 5. This figure shows the number of tires collected from Community-Wide Collection Events from FY 20 - FY 22



Figure 6. A map showing locations of Community-Wide Events across the state

#### Oklahoma Clean Community Award

To deter illegal dumping, DEQ continues to focus on community-wide tire collection events. In 2013, DEQ and Keep Oklahoma Beautiful (KOB) partnered to create the Oklahoma Clean Community Award. This award provides recognition to local governments that have community-wide tire collection events and implement other preventive measures to stop illegal tire dumping in their communities. Additionally, DEQ encourages communities to engage in other environmental service projects. In FY 20, 21 and 22 DEQ and KOB recognized four communities for their efforts.





Figures 7 and 8. Photos of the Choctaw Nation receiving the Oklahoma Clean Community Award

# **Moving Forward**

#### **Market Development**

New viable markets have become increasingly important as the demand for burning tires in cement kilns and the use of shreds in landfills has decreased in Oklahoma. While the production of crumb rubber has increased over recent years, more markets are needed in Oklahoma that can effectively remove tires from the waste stream and continue to expand the crumb rubber and tire derived fuel (TDF) markets. To facilitate more tire markets, DEQ is developing a reimbursement grant program for market development projects.

In 2018, DEQ collaborated with several state and federal partners on a road construction project that included a test strip of Rubber Modified Asphalt. Rubber Modified Asphalt is new to Oklahoma so testing and evaluation are key to developing specifications and demonstrating a viable market. Oklahoma State University and the University of Oklahoma is looking at cracking and rutting. Oklahoma Department of Transportation (ODOT) is performing lab analysis and continuing to develop specifications. Currently, ODOT is conducting performance monitoring on the RMA test strip, and intends to add four new tests strips this upcoming paving season. Additionally, ODOT is in the process for developing a specification for industry standard GTR. Such projects will pave the way to the development of new markets.

#### **Agricultural Tire Compliance**

Fees on agricultural tires were increased on July 1, 2019, as shown by Table 1. (page 4). This increase was to address a gap between the cost of transporting and processing agricultural tires and the amount reimbursed to Recyclers. There is a discrepancy in the fees paid for agricultural tires and the number of agricultural tires picked up in the state. To remedy this discrepancy, DEQ will focus on performing compliance assistance visits for tire dealers that sell agricultural tires to help educate them on charging and reporting fees accurately. In addition, a targeted post card will be mailed to each tire dealer explaining the breakdown of fees for agricultural tires.

#### **Statutory Changes**

One legislative bill was passed during this reporting period. Senate Bill 878 became effective July 1, 2019. The highlight of this bill increased fees for passenger tires from \$2.50 to \$2.90 and further eliminated confusion surrounding fees. Table 1. (page 4) is a list of current fees for tire dealers and tag agents.

#### **DEQ Funded Cleanups**

In FY 20 - FY 22, the number of DEQ funded cleanups decreased from the previous reporting period due to insufficient funding. The nature of the global pandemic drastically impacted the remediation process and its required steps. Those sites where dumping victims were easily able to stage tires for collection were cleaned up. However, the difficult sites were not. With the recent fee increase, the amount of funds available for paid tire dump cleanups has been increased and DEQ has already started work on cleaning up several difficult dumps. These additional funds and the corresponding increase in DEQ funded cleanups will help expand support to individuals and communities that are the victims of illegal tire dumps.

### **Conclusion**

Oklahoma's Used Tire Recycling Program is successful in recycling tires. In FY 20 - FY 22 close to \$40 million in fees were collected, which allowed Recyclers to utilize an estimated 12.1 million used tires. The current recycling rate is an increase from the last reporting cycle by approximately one million tires. Recyclers collectively cleaned up approximately 900,000 tires from illegal tire dumps, community-wide tire collection events, and landfills. The state continues to make significant progress in cleaning up tire dumps and deterring illegal dumping by encouraging participation in community-wide tire collection events and rewarding communities for their efforts by recognizing them as Oklahoma Clean Communities. If this trend continues as expected, proper disposal of Oklahoma's used tires is assured in the future.

