



Administration and Effectiveness of the



SUPPLEMENT

Administration and Effectiveness of the Oklahoma Used Tire Recycling Program for FY 2017, FY 2018 and FY 2019

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://go.usa.gov/xpAc4>



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Useful Terms

Used Tire - A used tire means 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.

Priority Cleanup List (PCL) - The PCL is a list of authorized dumps, community-wide tire collection events, and receipt locations authorized 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 as a result of the Act. Activities for state fiscal years (FY) 2017, 2018 and 2019 demonstrate the Used Tire Recycling Program (Program) continues 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 used tire recycling fees (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 November 1, 2017 are reflected in the table below.

Oklahoma Tire Recycling Fees (FY 17 – 19):

Rim Size	Fee
≤ 19 ½ inches	\$2.50
> 19 ½ inches and Tread Width ≤ 12 inches	\$3.50
> 19 ½ inches and Tread Width > 12 inches	\$7.00
Motorcycles/Motorized Bicycles	\$1.00

Agricultural Tires:

Rim Size	Fee
≤ 19 ½ inches and < 30 inches total diameter	\$2.50
> 19 ½ inches and < 30 inches total diameter	\$3.50
> 30 inches and ≤ 44 inches total diameter	\$8.00
> 44 inches and ≤ 72 inches total diameter and not more than 30 inches wide	\$16.00

Tag Agents (First Time Registrations in Oklahoma):

Rim Size	Fee
≤ 19 ½ inches (Automobile and Trailer Tires)	\$2.50
> 19 ½ inches (Other than Automobile)	\$3.50
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. Fee structure during FY 17, 18, and 19.

Used Tire Recycling Indemnity Fund Revenue

The following Table reflects fee revenues for FY 17 - 19 from MLAs and tire dealers. Based on data compiled by the OTC, fees collected during FY 17, 18 and 19 have stabilized, showing a slightly upward trend for Fund revenues over this period.

FY	MLAs	Tire Dealers	Total
2017	\$4,273,569.00	\$8,885,492.28	\$13,159,061.28
2018	\$4,458,932.90	\$9,216,981.99	\$13,675,914.89
2019	\$4,702,949.75	\$9,537,054.42	\$14,240,004.17

Table 2. Fee revenues from MLAs and tire dealers.

Reimbursement to Permitted Recyclers

Permitted facilities (Recyclers) are reimbursed from fees paid into the Fund. The allocation of funds consists of four tiers. Table 3 below reflects 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 \$2.50 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 (i.e., tire derived fuel [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, applicants are prorated for that month. Prior to the most recent fee changes effective this year (FY 20), Recyclers were prorated regularly.

After allocations for Tier 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 reflects monthly allocation of the Fund.

Percentage Of Fund (Rate)	Allocation
28% (of the \$2.50 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 and Market Development

Table 3. Monthly allocation of the Fund.

During FY 17, 18 and 19, Recyclers were reimbursed a total of \$29,451,196.53 from the Fund for managing Oklahoma's used tire stream. DEQ paid recyclers an additional \$893,601.92 to clean up legacy tire dumps. 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 18 than in FY 17 or FY 19. Recyclers collected, transported and processed more tires in FY 19 than in either FY 17 or FY 18. This upward trend was

likely due to an increase in available funding for recycling. Most of the reimbursement for remediation of tire dumps was made to recyclers in FY 17. The downward trend in remediation efforts in FY 19 was due to a lack of funding available to pay recyclers for cleaning up tire dumps.

Tire Dealer Inspections

One way DEQ is able to make sure fees are collected from tire dealers is through periodic inspections. These inspections allow Program staff to identify whether fees are collected and remitted to the OTC and ensure paperwork is maintained properly. During this three-year period (FY 17 - 19) Program staff conducted 343 tire dealer inspections of which 97 tire dealers were found to be out of compliance. Program staff conducted follow-up inspections on tire dealers that were out of compliance. Program efforts to bring tire dealers into compliance ensures all fees are remitted to OTC.

Compliance of Tire Dealers Inspected

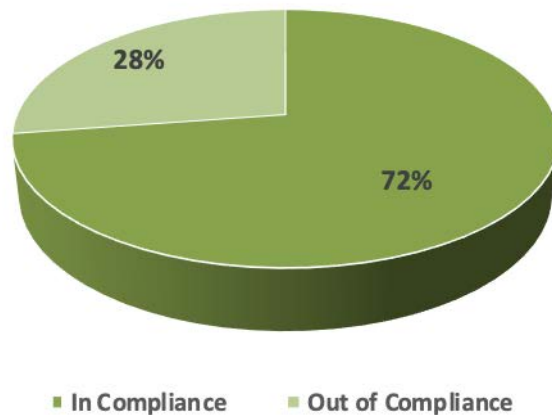


Figure 1. Percentage compliance of tire dealers inspected.

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 number of active MLAs collecting used fees and whether or not there were instances of uncollected fees. The following is a summary of those reports.

- In FY 17 there were 288 MLAs and 6 were found through audits to not be collecting correct fees. An additional amount of \$152.00 was recovered for the Fund.
- In FY 18 there were 283 MLAs and 20 were found through audits to not be collecting correct fees. An additional amount of \$381.00 was recovered for the Fund.
- In FY 19, there were 281 MLAs and 28 were found through audits to not be collecting correct fees. An additional amount of \$1,005.00 was recovered for the Fund.

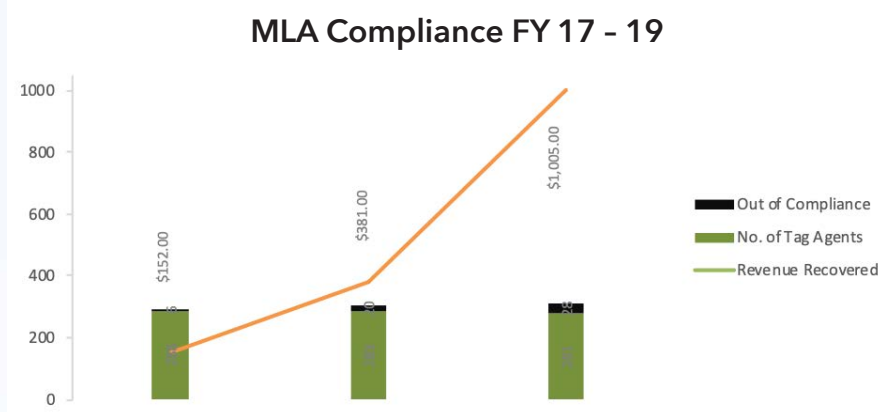


Figure 2. Graph reflecting number of tag agent audits completed, compliance and revenue recovered for FY 17, 18 and 19.

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 11.5 million tires over the three-year period. This is a slight increase from the 10.7 million generated during the previous reporting period (FY 14 - 16). This increase is to be expected as the population of Oklahoma increases.

Tire dealers and salvage operations generated an estimated 10.6 million used tires, while illegal dumps and community-wide tire collection events generated an estimated 800,432 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 prioritize tire dumps and other eligible tire sites and place them on the Priority Cleanup List (PCL). The PCL is a list of 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 the PCL. The most common reason a site ends up on the PCL is when the landowner is a victim of illegal dumping. Another way a tire dump may be placed on the PCL 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 17-FY 19 reporting period, 184 tire dumps were successfully cleaned up totaling 199,999 used tires. These dumps are cleaned up all over the state, as shown by Figure 3 below.

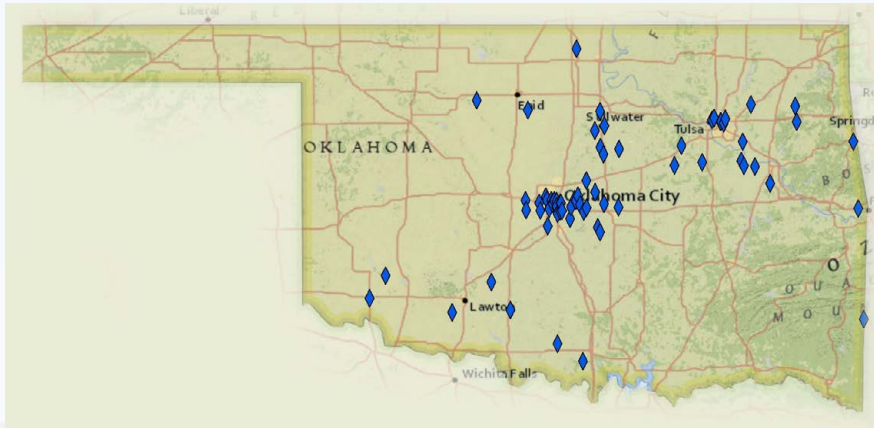


Figure 3. Map of tire dumps picked up in Oklahoma.

Figure 4 below shows the number of tires cleaned up each fiscal year from FY 17 - FY 19. In FY 17, the Program focused on checking the status of historical dumps and closing them. Therefore the tire dumps moving forward for FY 18 were primarily newer dumps. In FY 19 the Program continued to address recent dumps and facilitate the clean-up of tire dumps in a timely manner as they were reported to DEQ.

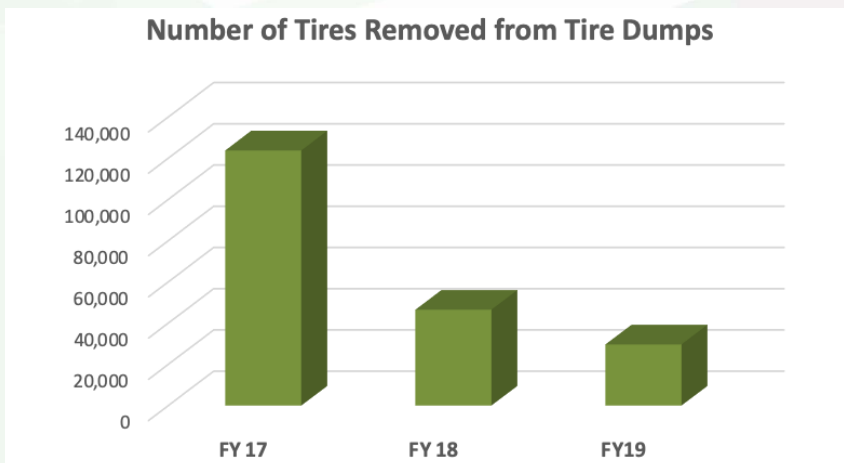


Figure 4. Number of tires cleaned up from tire dumps, FY 17 -19.

There are currently 80 dumps on the PCL. 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 in order 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. The Program refers to these dumps as paid dumps. There are currently 15 paid dumps on the PCL that will only be cleaned up when monies are available in the Fund. The remaining 65 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 a 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 600,433 tires were recovered from such collection events during FY 17- FY 19. The trend shown in Figure 5 indicates that communities continue to take advantage of community-wide events each year, and fewer tires are being dumped illegally. The map in Figure 6 shows events are 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.

Tires Collected from Community Wide Events

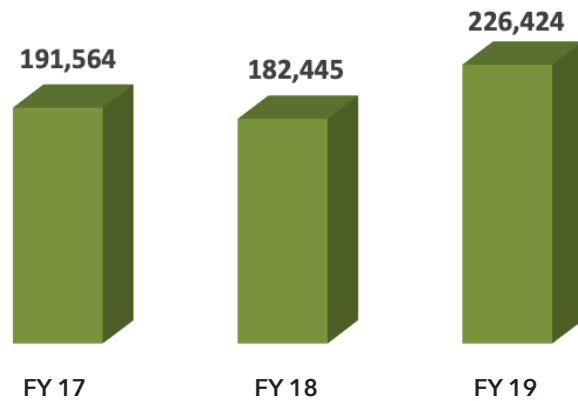


Figure 5. Community Wide Collection Events from FY17-FY19.

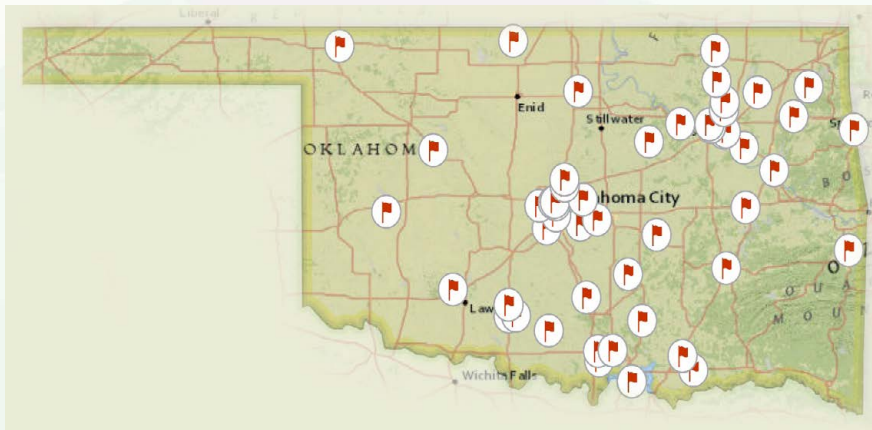


Figure 6. Locations of Community Wide Events across the state.

Oklahoma Clean Community Award

In an effort 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. The Oklahoma Clean Community program 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, the program encourages communities to engage in other environmental service projects. In FY 17, 18, and 19 DEQ and KOB recognized nine communities for their efforts.



Figure 7. City of Midwest City (top) and Pride in McAlester (bottom) 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 the past three years, more markets are needed in Oklahoma that can effectively remove tires from the waste stream and continue to expand the crumb rubber and TDF markets. In order to facilitate more tire markets, the Program is developing an evaluation criteria and eligibility requirements for market development projects.

In 2018, the State Transportation Innovation Council (STIC) funded a collaborative demonstration project that used recycled tires in asphalt. In addition to the grant, DEQ partnered with Oklahoma Department of Transportation (ODOT) and Federal Highways Administration (FHWA) to provide in kind services and support for the project. The equipment at the plant, expertise, mix design, help with specifications, and the ground tire rubber (GTR) was provided by a vendor with expertise in using the dry process and engineered GTR. Other partners include Oklahoma Asphalt Pavement Association (OAPA), Oklahoma State University (OSU), University of Oklahoma (OU), and Cummins Construction. Testing and evaluation is key to developing specifications and demonstrating a viable market. OSU and OU will be looking at cracking and rutting. ODOT will conduct lab analysis and continue to develop specifications. 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 4. Fees were increased in order 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 amount of agricultural tires picked up in the state. In order to remedy this discrepancy, the Program will focus on performing compliance assistance visits for tire dealers that sell agricultural tires in the next year 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

Three Senate Bills were passed during this reporting period. Senate Bill 426 became effective November 1, 2017 and provides clarification of definitions, fee structure changes, and provisions for corrective and remedial actions by DEQ. The changes also allow DEQ to use available money, after reimbursement to the Recyclers, for market development and tire dump remediation. Senate Bill 1412 became effective August 2, 2018 and places an annual allocation on the Program not to exceed the three-year average for FY 15, 16 and 17. Senate Bill 878 became effective July 1, 2019. Although the changes became effective after the reporting period for this document, the changes reflect current fees. Table 4 is a list of current fees for tire dealers and MLAs.

Oklahoma Tire Recycling Fees (FY 20):

Rim Size (Tire Dealers*)	Fee
≤ 19 ½ inches or Automobile* Tires	\$2.90
> 19 ½ inches and Tread Width ≤ 12 inches (example: semi tire)	\$5.50
> 19 ½ inches and Tread Width > 12 inches (example: super singles)	\$10.00
Motorcycles/Motorized Bicycles	\$1.00

Agricultural Tires:

Rim Size (Tire Dealers*)	Fee
≤ 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	\$8.00
> 44 inches and ≤ 72 inches and not more than 30 inches wide	\$16.00

Tag Agents (First Time Registrations in Oklahoma):

Rim Size	Fee
≤ 19 ½ inches (Automobile and Trailer Tires)	\$2.90
> 19 ½ inches (Other than Automobile)	\$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

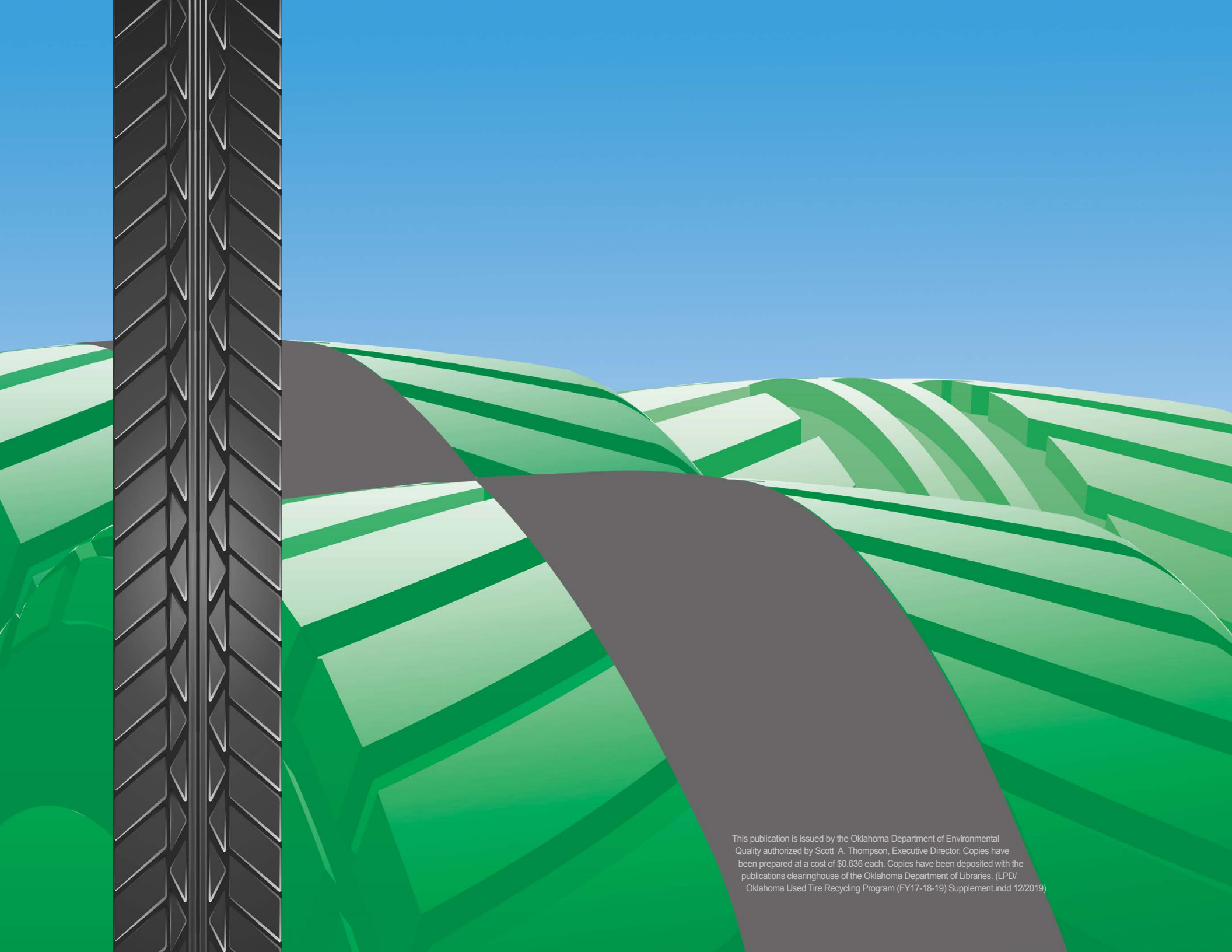
Table 4. Current fee structure.

Paid Cleanups

In FY 17 - 19, the amount of paid cleanups decreased from the previous reporting period due to insufficient funding opportunities. While sites where victims were easily able to stage tires for collection were still picked up, citizens and communities with difficult sites were unable to get assistance with the removal of their tires. With the recent fee increase, the amount of funds available for paid tire dump cleanups has been increased and the Program has already started work on cleaning up several difficult dumps. These additional funds and the corresponding increase in paid cleanups will help expand support to individuals and communities that are the victims of illegal tire dumps.

Conclusion

Oklahoma's Program is successful in recycling tires. In FY 17 - 19 close to \$41 million in fees were collected, which allowed Recyclers to utilize an estimated 11.5 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 800,000 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.



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