Recycling Tires &
The Hazards of Illegal Dumping of Tires

BY

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COMANCHE NATION ENVIRONMENTAL
The Comanche Nation Jurisdictions covers eight counties across the Southwest Region of Oklahoma (Comanche, Caddo, Grady, Cotton, Stevens, Kiowa, Tillman and Jefferson)

15,000 plus Comanche Tribal Members
The mission of the Comanche Nation Environmental Programs is to protect, preserve and maintain the health of the Nation's environment.

The Comanche Nation Environmental Program:

- Hosts environmental awareness events
- Performs routine water quality testing of major lakes, rivers, streams, and creeks within the jurisdictional boundaries of the Comanche Nation
- Conducts residential water, mold, and air testing services
- Provides dump-site inspections
- Offers recycle bins at several Comanche Nation locations.
- Assists with tire and battery disposal and bulk item pick-up
The CNERP recycles a variety of items such as: Plastics (#1,#2), aluminum cans, cardboard, appliances, scrap metals, printer cartridges, batteries, and tires.

The Recycle Division also host a number of recycles events throughout the year to help our tribal members and non tribal members be more aware of recycling.

The events are: Appliance Drive, E-Waste Drive, Earth Day and Tire & Battery Drive.
Comanche Nation Environmental Recycling Division
What is Illegal Dumping?

- Dumping waste on public or private property that is not licensed or permitted to receive waste
- Dumping waste, without a license or permit into sewers or waterways
- Allowing another to dump waste on one’s land, without being licensed to receive such waste
- Illegal dumping can be a misdemeanor or a felony, depending on the state
Examples of Illegal Dumping
Illegal Dumping of Tires

- One of the biggest problems of illegal dumping is the illegal dumping of tires

- This happens because people don’t want to pay for the safe disposal of them which on average in the state of Oklahoma can run a $1 up to $3 per tire.

- Illegal dumpsites are usually found on private land, roadsides, creeks, rivers or streams
Illegal Dumping of Tires
Causes & Effects of Illegal Tire Dumping

- Illegal dumped tires can be an eye sore to the area

- Tires are excellent breeding ground for mosquitos – tires filled with water from past rain often go undisturbed allowing the larvae to develop into full adult.
  - This brings an ever alarming issue with a variety of virus’s including West Nile Virus, Zika Virus, Yellow Fever, Malaria and Chikungunya.

- Discarded old tires also provide shelter for disease-carrying rodents (field mice)
  - Some of the most common diseases associated with rodents: Hantavirus, Lymphocytic Choriomeningitis, tularemia, and plague

- Tires can also start to break down into rubber particulate matter and if left in waterways for long periods of time can contaminate the river, stream or standing bodies of water with polycyclic aromatic hydrocarbons which are carcinogenic agents that can harm us as well as aquatic life.

- Tires have potential to catch on fire: The smoke can produce acid vapor thats harmful to humans and the environment, can be difficult to extinguish, can pollute the air, contaminate the soil and eventually leachate into the water ground table.
Example on how mosquitos breed inside tires
Example of how diseases can be spread by rodents
Ground contamination from waste disposal sites such as Illegal Dumping of Tires
Tires fires are events that involve the combustion of large quantities of tires. The fires produce smoke that carries toxic chemicals from the breakdown of synthetic rubber compounds while burning.
The Tire & Battery Drive is held every year in the month of February.

2018 was the 7th Annual of the event.

We host the event at five locations in the Comanche Nation Jurisdiction (Walters, Elgin, Cache, Lawton and Apache).

The total average number of tires brought in for the Tire & Battery drive each year is around 3,000 – 5,000 tires.

We also accept tires year round at our office.
The Tire & Battery Drive came to be by an illegal dumpsite clean up on Comanche Trust land.

Tires were dug up by the thousands.

The total number of tires for the cleanup was around 4,500 tires.

One of the employees suggested the event, so that it would prevent people from dumping tires onto Comanche Lands and other lands, creeks and rivers.
Comanche Nation
Environmental Tire & Battery Drive
2017 Tire & Battery Drive
2018 Tire & Battery Drive
Oklahoma Tire Recycling

- We work with the Dept. of Environmental Quality
- The DEQ has helped us set up a number that gets us help with Recycling companies around the State of Oklahoma
- Oklahoma has a few business’s that recycles tires throughout the state
- The main goal for recycling tires is to:
  - **Reclaim**: OKR offers multiple ways to get used tires off your property such as, Back door pickup, drop and hook, and drop off of scrap tire materials
  - **Resale**: Reselling of good quality used tires
  - **Recycle**: Some used tires are no longer safe for the road and they have a variety of solutions to recycle the tire materials
# Oklahoma Tire Recycling Programs

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<tr>
<th>Company</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
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<tbody>
<tr>
<td>BFP Management/Oklahoma Tire Recyclers (OTP)</td>
<td>100 Old Trail Road, Bristow, OK 74010</td>
<td>(918) 367-9595</td>
<td>(918) 367-9598</td>
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<tr>
<td>Four-D Corp.</td>
<td>900 McCurdy Road, Duncan, OK 73533</td>
<td>(580)255-8496</td>
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<tr>
<td>Holcim Cement Kiln/Geo-cycle LLC</td>
<td>1100 West 18th Street, Ada, OK 74820</td>
<td>(580)421-8984</td>
<td></td>
</tr>
<tr>
<td>RTR Environmental</td>
<td>8802 Industrial Drive, Noble, OK 73068</td>
<td>(580) 872-7877</td>
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Oklahoma Tire Recyclers LLC

Provider of logistic solutions for businesses to Reclaim, Resale, and Recycle used tires.

Hiring Box Truck Driver
In Bristow, OK
Full Benefits After 60 days

Contact Veronica Barnett
vbarnett@oktirerecyclers.com
918-367-9595

100 Old Trail Road
Bristow, OK 74010
Office: 918.367.9595
DOT#2494613
MC#864163
Benefits of Recycling Tires

- One of the more obvious benefits of recycling is to reduce the amount of natural resources we use.

- When materials are brought to a recycling facility, they don’t end up in areas that cannot support such as river banks, lakes, and so on.

- According to the EPA, reclaiming or recycling rubber uses less energy than producing new rubber.

- Limits the demand for new natural rubber.

- This helps eliminate rubber tree plantations expanding into sensitive natural habitats.
Benefits of Recycling (cont.)

- The Process: Rubber can be recycled using three different methods
- The first is referred to as refurbishing.
  - Ex: Retreading Tires
- Second, rubber can be broken down and formed into an entirely new product
- Third, is incineration.
  - Ex: breaking down to produce energy for manufacturing processes
Benefits of Recycling Tires (cont.)

- Creates Beneficial Products: Many valuable materials can be made from recycled tires. Playground mulch, roadbed material, running tracks, etc.
- Conserves Landfill Space
- Prevents the spreading of diseases
Benefits of Recycling Tires

- Collection & Transportation
- Sorting
- Shredding
- Steel removal
- Grinding into finished products
- Testing & distribution

- Rubber mulch
- Mouse pads
- Car mats
- Carpet underlay
Benefits of Recycling Tires

Top Left: Asphalt
Top Right: Retreading tires
Bottom Left: Incineration
Bottom Right: Rubber can be broken down and made into new products such as this track