



The Dangers of Backyard Trash Burning

Ilda T. Hershey, MS
Assistant State Extension Specialist

Nicole L. Wolf
Program Research Assistant

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What is Backyard Trash Burning, and Is It Legal to Burn Trash in Oklahoma?

Backyard trash burning is a serious problem in Oklahoma. From 2004 to 2008, three Oklahomans died and 44 were hospitalized due to backyard trash burning (Oklahoma Department of Health, 2011). Many more Oklahomans are affected though, because smoke and ash from open burning increases the risk of long-term health problems.

Open burning is defined in Oklahoma as the burning of combustible material in such a manner that the products of combustion are emitted to the outside atmosphere (Oklahoma Department of Environmental Quality, 2011).

Backyard burning (or open burning) is different than prescribed burning. Prescribed burning is a burn that is started under specific weather conditions to achieve land manage-

ment objectives, such as the burning of wheat stubble after a harvest.

Typical household trash that is burned includes:

- paper
- cardboard
- food scraps
- plastics
- yard trimmings
- leaves

While trash burning may be legal in some areas, under state law it is illegal to burn household refuse in areas where trash collection services are available. The legality of burning trash may also depend on local ordinances. Even if trash burning is legal, it is illegal to burn tires, furniture, carpet, electrical wire, and non-wood construction debris in Oklahoma (Oklahoma Department of Environmental Quality, 2009).

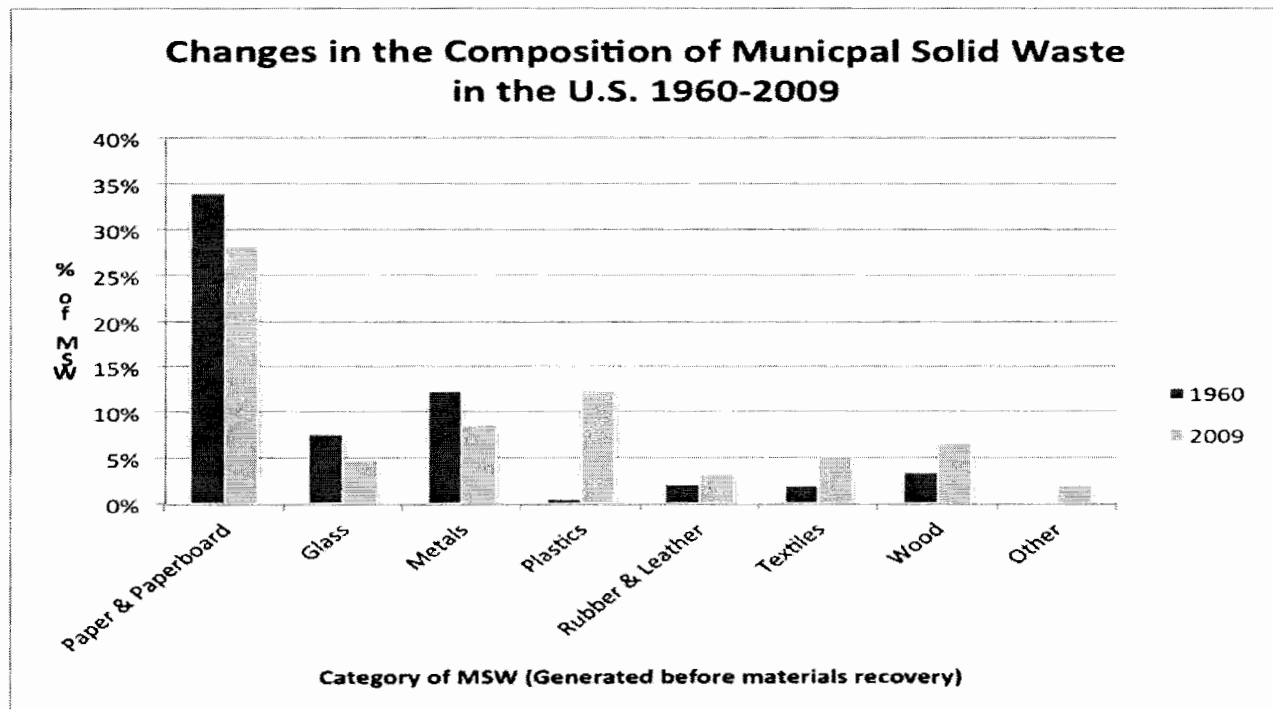


Figure 1. Municipal Solid Waste Composition. Chart Data Source: EPA, 2009.

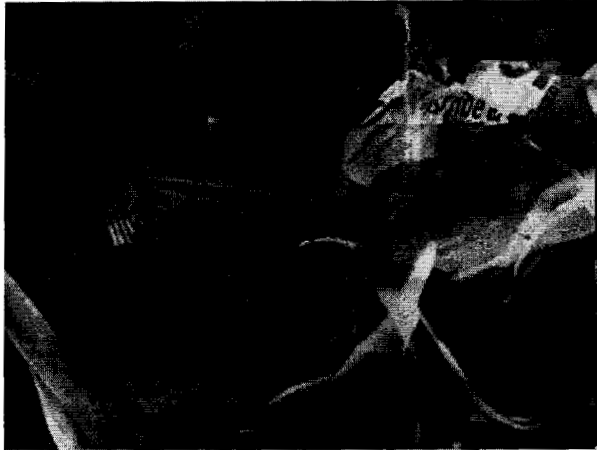


Figure 4. Burning plastics and other materials in an open fire emits hazardous toxins. Photo: Andy Arthur.

The ash produced through open burning can contain heavy metals such as:

- cadmium
- lead
- arsenic
- chromium
- mercury

The release of all of these chemicals and heavy metals has been shown to have negative impacts on human health (EPA, 2009).

The release of particulate matter through trash burning can cause cardiac and respiratory problems. During the last decade it has become known that the particulate matter produced during open burning is more dangerous to human health than was previously thought (Michigan Department of Environmental Quality, 2010). In individuals with preexisting conditions, such as bronchitis, asthma, and emphysema, particulate matter can exacerbate these issues (EPA, 2010).

Furthermore, chemicals contained in smoke produced from open burning can speed the deterioration of man-made materials such as concrete, paint, and metal when these chemicals are mixed with rainwater (Oklahoma Department of Environmental Quality, July 2009).

There is also significant danger of a trash fire getting out of control during burning, which can cause wildfires, injury or death. Between 1988 and 2000, 226 Oklahomans were hospitalized for injuries related to trash burning, including three deaths (Oklahoma Department of Health, 2002). More recent statistics, as stated in the introduction of this fact sheet, indicate that fatalities caused by open burning are actually increasing in Oklahoma.

What are Alternatives to Burning Trash?

There are many alternatives to burning trash. Some of these alternatives include:

- Self-hauling trash
- Reducing the volume of trash
- Recycling
- Composting
- Chipping
- Utilizing the services of a private trash hauler

Residents can self-haul trash to a landfill, transfer station or in the case of recyclable materials, a recycling center. It can also be helpful to reduce the volume of trash. This can be accomplished through buying products with less packaging, reusing products and recycling. Donating used or left over items to charitable organizations can also help to reduce the volume of refuse. In the case of organic materials these can be composted in a compost pile for use as fertilizer or mulch (OCES, 2003).

Chipping natural vegetation for use as mulch can also reduce the volume of trash produced. Many rural areas of Oklahoma are serviced by private trash haulers. These private trash haulers offer the same services as municipal trash haulers, and often offer competitive rates. Contact your local Extension office with questions about your trash hauling options.

While open trash burning may be legal in some areas, the risks of health issues and injury along with the toxic effects to our natural environment do not outweigh the benefits. There are many alternatives to backyard trash burning that do not pose human health risks and are better for the environment.

References/Additional Reading

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Contact:

Ilda T. Hershey
Assistant State Extension Specialist
Oklahoma Cooperative Extension Service
Solid Waste Management Programs
Oklahoma State University
536 Ag Hall, Stillwater, OK 74078
405-744-9806
ilda.hershey@okstate.edu
www.agecon.okstate.edu/waste

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Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

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