



Frequently Asked Questions about the Proposed Open Burning Rule Amendments

Overview

The Department of Natural Resources and Environment (DNRE) is amending the open burning provisions of the air pollution and solid waste management rules. The changes will eliminate the current open burning exemption that allows the burning of household trash, including plastics, rubber, paper, shingles, treated wood, and other rubbish. This means that after April 1, 2011 the exemption that allows residents to burn their trash will no longer exist and it will become illegal to open burn residential trash under state regulations. The amendments also add three open burning exemptions that would allow the burning of contraband by a police agency, prescribed burns, and the burning of diseased or infested wooden apple bins. The amendments will not change the provisions that allow the burning of leaves, brush, and other yard clippings nor will they prohibit recreational campfires.

Why are these amendments necessary?

The volume and composition of household trash has changed over the past 40 years; waste today includes treated paper, plastics, foam, metals and other man-made materials. Open burning of trash emits contaminants that can have both long and short term health effects on exposed people, especially those with cardiovascular and respiratory conditions (e.g., asthma). Over the last decade, numerous human studies have demonstrated that the fine particulate matter created from burning is far more hazardous to people's health than previously known. The smoke and odors generated from this activity do not remain on the property on which they are generated. As a result, household trash burning is the source of numerous citizen complaints reported to the DNRE and local authorities. The open burning of trash is a significant source of wildfires and property fires throughout the state. Also, open burning is no longer the only means of trash disposal available to many residents as was the case several decades ago when the rules were first promulgated. Considering these factors, the DNRE has determined that it is appropriate to update the open burning rules to protect the health of Michigan's citizens and its environment. These changes reflect our increased knowledge of the risks associated with this activity and the changes that have occurred in availability of waste disposal services throughout the state. The DNRE also believes these changes will provide local units of government with a regulatory tool to help them address open burning concerns in their communities. By eliminating the current exemption that allows the open burning of household trash the DNRE is no longer promoting or condoning this activity as a waste disposal option under the state rules, which will make it easier for local governments to pass ordinances to address open burning.

What is fine particulate matter?

Fine particulate matter refers to particles smaller than 2.5 microns in diameter. A single particle of this size is too small to see with the human eye. Fine particulate matter reaches deep into the lungs with the smallest of particles entering the blood stream. The fine particulate matter generated by burning is typically smaller than 1 micron in diameter and is made up of hazardous chemicals that release or generated during combustion. These chemicals start as a vapor and as they cool form fine particulate matter. Visible clouds of smoke from burning contain dense amounts of fine particulate matter.

What are the health risks associated with open burning trash?

Open burning of household trash emits particulate matter and toxic air contaminants that may be expected to be present in varying levels in the environment, depending on the material being burned. Some particularly noteworthy chemicals that make up the fine particulate matter emitted from the open burning of household trash can include hydrogen cyanide, sulfur dioxides, polycyclic aromatic hydrocarbons, benzene, lead, mercury, and dioxin. This fine particulate matter containing a variety of chemicals can have acute and chronic health effects on exposed people including cardiovascular and respiratory conditions (e.g., asthma). Small children, the elderly, or people with preexisting respiratory and cardiovascular conditions can be especially vulnerable to fine particulate matter exposure. Long-term and repeated exposure to some of the chemicals emitted during trash burning have been shown to impair neurodevelopment in children, the immune system, reproductive system, and thyroid function. Some pollutants have been shown to contribute to the onset of diabetes and cancer. Many of these pollutants emitted can persist in the environment, resulting in future exposures to both people and wildlife. People conducting open burning of household trash as their main method of disposal will frequently be exposed to these hazardous substances. People living in the surrounding area (i.e., neighbors within several hundred feet) will also be frequently exposed to these hazardous substances. Significant amounts of particulate matter generated from outdoor burning have been shown to enter inside homes. Once particulate matter enters a house it can circulate in the air for at least several hours, extending peoples exposure to the hazardous substances.

Will residents still be allowed to burn leaves, brush, and other yard clippings?

The state rules for burning trees, logs, brush, leaves, and other yard clippings are staying the same; however, residents should contact their local officials to learn what is acceptable in their area.

How will the amended open burning regulations be enforced?

The DNRE does not intend to actively target residents for enforcement of this rule but rather implement the changes via education and outreach in coordination with local units of government. The immediate concern of the DNRE is protecting the health of those adversely affected by trash burning. The DNRE will continue to rely on local units of government for primary enforcement if they choose to do so. It is expected that any necessary enforcement will be complaint driven and conducted by the local units of government or the DNRE, as needed. In other words, if a complaint is received, it may be followed up on by the local unit of government or DNRE. The DNRE will work with local units of government to help implement ordinances to address open burning. Where ordinances do not exist, the DNRE can assist local authorities with writing citations under the state law.

Local units of government do not have to create an ordinance that adopts these changes in order for these open trash burning rules to be enforced by local authorities. The DNRE hopes that the changes will serve as a foundation on which ordinances can be created to allow local communities flexibility in implementing this amendment. If a local unit of government chooses not to have an ordinance that prohibits the burning of household trash they may regulate the open burning of trash and respond to complaints under the state regulations.

Isn't trash burning the only means of trash disposal for some residents?

When Michigan's open burning rules were first promulgated several decades ago, many Michigan residents did not have access to waste disposal services and trash burning was the only practical disposal option. However, since that time, trash pick-up and drop-off sites have become more common and trash burning is no longer the only practical disposal option. All Michigan residents now have access to waste disposal pick up or drop off services. The DNRE is working with County Solid Waste Management personnel as well as solid waste haulers and landfills to help identify

opportunities for waste pick up and drop off. This information will be compiled into a database that will be made available to communities and the general public at www.michigan.gov/openburning.

The DNRE is providing a phase in period to allow communities and residents time to comply with the rule change and are making a concerted effort to work with stakeholders to provide options to those residents that will be affected.

Isn't burning trash better than putting it in a landfill?

No. Sending trash to a landfill has much less of an impact on human health and the environment. The uncontrolled smoke emitted from open burning contains numerous highly toxic compounds and fine particles which can become lodged deeply into a person's lungs, adversely impacting a person's health. Also, the ash from trash burning contains toxic metals and other chemicals that contaminate soil. However, landfills are required to capture and control the gas generated by the decomposing waste and are also required to construct a leachate containment system to capture any liquid at the site.

Landfill disposal of waste is also more protective of the environment than open burning. Landfill design and management has changed dramatically since the time of unlined dumps that were often set on fire. The federal and state regulations that went into effect in the early 1990's regulate landfill disposal. The likelihood of waste contaminating the environment or damaging human health if it is burned is much higher than if the waste is disposed in a landfill or recycled.

Where can I find more information about open burning and the proposed rule amendments?

Information is available at www.michigan.gov/openburning or by calling the DNRE at (800) 662-9278.