



Michigan Open Burning Guide

Regulations & Alternatives

Michigan Department of Environmental Quality • Environmental Science & Services Division • (800) 662-9278

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What is Open Burning?



Open burning is the burning of unwanted materials such as paper, trees, brush, leaves, grass, and other debris, where smoke and other emissions are released directly into the air without passing through a chimney or stack. It also includes using incineration devices that do not control combustion air to maintain an adequate temperature and do not provide sufficient residence time for complete combustion. Open burning pollutes the air and poses a fire hazard. The air pollution created can irritate eyes and lungs, obscure visibility, soil nearby surfaces, create annoying odors, and is a threat to those with respiratory conditions.

The state's open burning rules are very restrictive. Only certain material may be burned provided that specific criteria are met. What may be burned usually depends on the type of material (such as household waste or brush) and who is doing the burning (such as a business or household). This guide will help you understand when open burning is allowed and when it is prohibited. A discussion of the open burning regulations begins on page 2. Several open burning alternatives are also included in this document to make sure that your waste is disposed of properly.

Who Regulates Open Burning?

In Michigan, the practice of open burning may be regulated at both the state and local level. Although this document focuses on state regulations, **it is important to remember that local ordinances may prohibit the open burning of any material.** Contact your municipality and/or township office to find out if local ordinances are more restrictive than the state rules contained in this guide. Burn permits are required for open burning not conducted in burn barrels when the ground is not snow-covered. Contact your fire department, municipality, or DNR district office for burn permit information. **Remember, you are legally responsible for any fire you start!**

At the state level, open burning is regulated under Parts 55, 115, and 515 of The Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451), and associated administrative rules. There are two state agencies responsible for administering these open burning regulations: The Department of Environmental Quality (DEQ) and the Department of Natural Resources (DNR); however, these regulations may be enforced by local units of government. Page 8 provides an overview of the open burning regulations and where they can be obtained.

Household Waste

Persons may burn solid waste from a one or two family dwelling in an approved container, as long as it is not prohibited by local ordinance and it does not create a smoke or odor nuisance. Solid waste includes refuse and garbage generated at a household (grass clippings, leaves, trees, and brush are regulated separately and therefore addressed elsewhere in this fact sheet). An approved container is one constructed of metal or masonry with a metal covering device with openings no larger than 3/4 inch.



Did You Know... Burn barrels do not provide good combustion. The smoke emitted consists of a number of chemicals that can be irritating or even harmful. Chemicals commonly detected in burn barrel smoke include dioxins, benzene, styrene, formaldehyde, furans, PCBs, lead, mercury, and arsenic.

Commercial/Industrial Waste

Open burning is not an acceptable disposal method for waste generated at commercial and industrial facilities. Neither solid waste nor air quality regulations allow the open burning of commercial and industrial wastes. Taking commercial or industrial waste to another location (such as a household) to be burned is also prohibited.

Grass Clippings and Leaves

The open burning of grass clippings and leaves produces thick smoke which can be a nuisance and is a health threat to those with respiratory conditions. The burning of grass clippings and leaves is prohibited in municipalities with a population of 7,500 or more, unless the local governing body enacts an ordinance authorizing it. If a local government does enact an ordinance authorizing open burning of this material they are required to submit a copy of the ordinance to the DEQ, Waste and Hazardous Materials Division. They are also responsible for enforcement of the ordinance. Some alternatives to open burning are described later in this fact sheet.



Trees and Brush

The open burning of trees, logs, brush, and stumps is allowed if it meets the following criteria (unless prohibited by local law):

1. The burning is conducted further than 1,400 feet from the boundary of an incorporated city or village.
2. The burning is not in a listed priority area. Priority areas are located in parts of Bay, Calhoun, Delta, Genesee, Lapeer, Macomb, Manistee, Midland, Monroe, Muskegon, Saginaw, St. Clair, and Wayne counties. A detailed list of priority areas can be found at www.michigan.gov/deq (click on "Air" then "Open Burning Information").
3. The burning does not violate any other air pollution rules (such as burning that causes a smoke or odor nuisance).

A burn permit is required whenever the ground is not snow-covered. See page 5 for information about where to get a burn permit.

Although open burning of trees, logs, brush, and stumps is allowed, it is recommended that you consider other disposal options such as chipping the material for landscaping or compost or using the wood for fuel.

Structures

Structures (such as houses, barns, and sheds) may not be burned for the purpose of demolition. Air quality regulations allow structures to be intentionally burned for the purpose of fire department training ONLY. However, there are specific guidelines developed by the National Fire Protection Association (NFPA) that fire departments must follow when conducting a training exercise. A guidance document for fire departments conducting fire suppression training can be found on the DEQ's Open Burning web site www.michigan.gov/deq (click on "Air" then "Open Burning Information").

Fire departments must notify the DEQ's Asbestos Coordinator 10 working days prior to any practice burn. Information about the DEQ's asbestos requirements can be found on the Open Burning web site (see address above) or by calling (800) 662-9278.

Construction and Demolition Waste

Construction and demolition (C & D) waste is waste building material, packaging, and rubble that results from construction, remodeling, repair, and demolition operations on houses, commercial or industrial buildings, and other structures. C & D waste may be generated at many sources including households, commercial establishments, and industrial facilities.

The open burning of any C & D waste is prohibited, even if the burning is to be conducted on the person's own property.

A person may NOT take C & D waste to another location (such as a household) to be burned. C & D waste should be reused, recycled, or disposed of in a landfill that accepts C & D waste (see the "Open Burning Alternatives" section of this guide).

Did You Know... Chemically treated lumber, synthetic, and painted building materials contain high concentrations of hazardous compounds which will be emitted into the air if burned.

Beekeeping Equipment

The open burning of beekeeping equipment and products including frames, hive bodies, hive covers, combs, wax, and honey is permitted for the purpose of disease control.

Recreational Fires

The burning of logs, brush, charcoal, and other similar materials for the purpose of food preparation or recreation is allowed, unless prohibited by local law. Recreational fires may also be prohibited if the DNR issues a burning ban because of dangerous fire conditions.



Open Burning Alternatives

Recycling

The increased existence of curbside and drop-off recycling programs has made recycling an appropriate disposal option for households throughout the state. Many items are relatively easy to recycle. Newspaper, corrugated cardboard, metal, plastics, and glass have been recycled for years.

Businesses and industrial operations that generate a large quantity of recyclable or reusable material may want to consider implementing a recycling program as an alternative to paying the high prices associated with solid waste disposal in incinerators and landfills. An excellent resource for industrial facilities interested in recycling is the *Michigan Recycled Materials Market Directory*. This directory helps businesses, institutions, and organizations find processors, collectors, and brokers of reclaimable materials like pallets, drums, plastics, and chemicals. The directory provides information about available markets

for generated waste materials ranging from drums and barrels to batteries and tires. The Michigan Recycled Materials Market Directory can be accessed on the Internet at www.michigan.gov/deq (click on "Pollution Prevention" then "Recycling").

As an alternative to disposing of C & D waste in a landfill, consider reducing, reusing, or recycling. You can find information about different strategies for reducing C & D waste at www.michigan.gov/deq (click on "Air" then "Open Burning Information").

To learn more about recycling in your home or business go to www.michigan.gov/deq (click on "Pollution Prevention" then "Recycling").



Composting

Composting is a way of recycling natural waste products like leaves and grass clippings. Properly managed, it is a controlled process that allows natural elements like the air and soil to aid in the biological decomposition of the waste material. The decomposed matter that results is a very nutrient rich substance that can be used as mulch or fertilizer. However, if not properly managed, it can be a source of nuisance odors.

Composting yard waste in your back yard is an inexpensive way to turn leaves, grass, and even fruit and vegetable scraps into rich brown compost that can be used to enhance garden soil or for mulch used in landscaping.

Compostable waste can be either immediately put back into the soil or allowed to decompose in a compost pile before being added back to the soil. Commercial operations like nurseries, landscaping, and brush removal companies may want to consider composting as an alternative to open burning this waste material.

Many community organizations offer assistance with recycling and composting projects. To learn more about composting go to www.michigan.gov/deq (click on "Air" then "Open Burning Information").

What Can You Compost?

Do Compost

- grass clippings
- leaves
- weeds & garden debris
- small brush, twigs
- clean wood ash
- sawdust & wood chips
- egg shells
- coffee grounds

Do Not Compost

- whole branches, logs
- pet or human waste
- charcoal briquette ash
- saw dust from treated wood

Landfills

Solid waste can be deposited in a licensed municipal solid waste landfill. This is usually done by a private company or municipality. Large items like furniture and appliances are typically dropped off by the resident or picked up on special collection days. Household hazardous wastes like batteries, used oil, pesticides, paint, and other chemicals should be separated and discarded at a designated collection site. To find a collection program near you, go to www.michigan.gov/deq (click on "Pollution Prevention," "Recycling," then "Recycling Composting and Household Hazardous Waste Collection Information for Michigan Residents").

Appliances containing refrigerants (air conditioners, refrigerators, freezers, and dehumidifiers) must have the refrigerant removed by an EPA certified technician before disposal in a landfill. Landfills will not accept these appliances unless an official label is affixed to it stating that the refrigerant has been removed by an EPA certified technician. A listing of landfills can be found on the Internet at www.michigan.gov/deq (click on "Waste," "Solid Waste," then "Solid Waste Facilities").

Commercial establishments and industrial facilities may generate hazardous wastes which cannot be discarded with their normal trash. Hazardous waste disposal requirements will depend upon how much hazardous waste is generated at the facility. If hazardous waste is generated at your business, it is recommended that you contact the DEQ's Waste and Hazardous Materials Division to learn about your disposal options. For more information go to www.michigan.gov/deq (click on "Waste" then "Hazardous Waste").



Did You Know... You can obtain more information on how to dispose of a variety of waste material at www.michigan.gov/deq (click on "Waste" then "How do I Handle This Waste?").

Frequently Asked Questions About Open Burning

Q. Am I allowed to burn waste from my business at my household?

- A.** The open burning of commercial waste is NOT allowed. Once a waste is produced at a commercial establishment it is considered "commercial," no matter where it is disposed. Therefore, commercial waste cannot be taken to a household to be burned.

Q. Is a business allowed to burn trees, logs, brush, and stumps?

- A.** Businesses are allowed to burn trees, logs, brush, and stumps as long as the burning is conducted in accordance with the regulations provided on page 2 of this fact sheet. Although open burning of this material is allowed, businesses are encouraged to consider other disposal options for this type of waste, such as chipping, composting, or burning the wood for fuel.



Q. What am I allowed to burn with a burn permit?

- A.** This usually depends on local ordinances and fire conditions in your area. Most burn permits will only allow you to open burn trees, logs, brush, and stumps.

Q. What is a burn permit?

- A.** A burn permit is required when the ground is not snow-covered and if the burning is not conducted in an approved burn barrel. The permit may be a written document or verbal approval via telephone (see the next question for where to obtain a burn permit).

Q. Where can I get a burn permit?

- A.** This depends on where you live. Residents living in northern counties can usually obtain a permit from their local DNR Forest Management District Offices. Residents who live in southern counties and more populated municipalities may inquire about burn permits through their local fire departments or municipalities. You can find out where to get a burn permit at www.michigan.gov/deq (click on "Air" then "Open Burning Information").

Q. Am I allowed to destroy a structure on my property by open burning?

- A.** No. You may not destroy a standing structure such as a barn or abandoned building by open burning, even if it is to be conducted on your own property. Air Quality rules specifically state that a structure may be burned for fire prevention training ONLY. This means that even the fire department is limited to open burning a structure for training purposes. A structure should not be intentionally burned for any other purpose.

Q. Am I allowed to burn the remnants of a demolished structure on my property?

- A.** No. You may not burn a demolished structure for disposal purposes. This is considered to be "construction and demolition" waste and should be disposed of in a landfill that accepts construction and demolition waste. The landfill discussion on page 4 provides a web site that you can use to locate a disposal facility for this type of waste.

Q. Am I allowed to dispose of waste from remodeling by open burning?

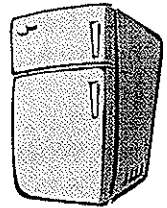
A. The open burning of waste generated as a result of a remodeling operation is NOT allowed. This is considered to be "construction and demolition" waste and should be disposed of in a landfill that accepts construction and demolition waste. The landfill discussion on page 4 provides a web site that you can use to locate a disposal facility for this type of waste.

Q. How do I dispose of old furniture?

A. Consider donating used furniture to a local organization (such as the Salvation Army, Volunteers of America, or Civic Players). You may also try reconditioning the item. If the furniture cannot be donated or reconditioned it should be disposed of in a landfill (see the landfill discussion on page 4).

Q. How do I dispose of old appliances?

A. Consider donating the appliance to a local organization. Appliances containing refrigerants (such as air conditioners, refrigerators, freezers, and dehumidifiers) must have the refrigerant removed before disposal. Only a technician certified by the U.S. Environmental Protection Agency (EPA) may remove refrigerants from appliances and cooling systems. To contact an EPA certified technician look on the Internet or in your phone book under Heating and Cooling, Air Conditioning Repair, etc. When the refrigerant has been removed, the technician will place a sticker on it that indicates the refrigerant has been removed. Most disposal facilities do not accept refrigerators, freezers, or air conditioners without this sticker.



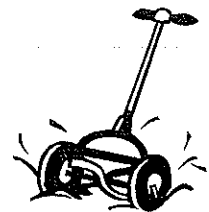
Q. What kind of health effects can open burning have on my family?

A. The smoke drifting from a pile of burning debris may seem harmless, yet this is the visible byproduct of a basic chemical reaction. As the waste burns, the chemical compounds present in solid form are transformed into fine particulate and gases which are emitted into the air we breathe. In addition to eye, lung, and nose irritation, the pollution created by open burning poses a serious threat to many that suffer from asthma and other respiratory conditions. The particles emitted can aggravate the respiratory system and cause the symptoms of some allergies and asthma to worsen. Many waste products such as treated lumber, materials with inks or paints, and plastics release toxic chemicals when burned. For more information about the health effects of open burning see the DEQ's Air Quality Division publication "*Burning Household Waste – A Source of Air Pollution in Michigan.*" You can access it on the Internet at www.michigan.gov/deq (click on "Air" then "Open Burning Information").

Q. What are the alternatives to burning or landfilling leaves and grass clippings?

A. Try using some of these strategies:

- When mowing, don't bag the clippings. Leave them on the ground instead or use a compost mower.
- Put yard debris and vegetable matter back into the soil.
- Start a compost pile. The decomposed matter that results is a very nutrient rich substance that can be used as fertilizer.
- Use chipped yard waste as landscaping mulch.
- Take waste to a composting facility (many communities have special pick-ups for this).
- Some communities have leaf collection programs. Check into the services your community offers.



Q. Is it okay to burn pressure treated lumber?

- A. No. Most pressure treated lumber contains toxic ingredients like arsenic that would be released into the air if burned. Treated lumber waste should be taken to an appropriate landfill for disposal. For more information about wood pressure treated with Chromated Copper Arsenate (CCA) go to www.michigan.gov/deq (click on "Air" then "Open Burning Information").

Q. Am I allowed to use scrap tires to ignite a brush pile?

- A. The open burning of tires is NOT allowed. The pollution emitted from this practice is highly toxic and the thick black smoke produced obscures vision. Consider using natural or non-toxic materials to ignite your brush pile. Many burn permits will identify acceptable or restricted accelerants that can be used.

Q. How do I dispose of tires?

- A. Scrap tires should be taken to a licensed tire disposal facility. Be aware that there are regulations that restrict who can haul scrap tires and how long scrap tires can be stored at a location that is not permitted. For more information about scrap tire disposal go to www.michigan.gov/deq (click on "Waste" then "Scrap Tires").



Q. Is the open burning of empty fertilizer packaging or pesticide containers allowed in agricultural operations?

- A. The open burning of empty fertilizer packaging or empty pesticide containers from agricultural operations is NOT allowed. Consider recycling as an alternative. Many elevators throughout the state will accept empty containers for recycling. The "Michigan Clean Sweep Program" administered by Michigan's Department of Agriculture (MDA), allows farmers to dispose of unused and unwanted pesticides. The MDA's web site has more information at www.michigan.gov/mda (click on "Consumer Information," "Environment," then "Recycling"). The MDA's Environmental Stewardship Division administers a number of other programs to help farmers with pollution prevention strategies, recycling, composting, and ground water stewardship.



Q. Is the open burning of manure allowed?

- A. The open burning of manure is NOT allowed under the air quality regulations. In addition, this practice does not conform with the Michigan Commission of Agriculture Adopted Generally Accepted Agricultural and Management Practices (GAAMPs) for Manure Management and Utilization. For more information about GAAMPs visit the Michigan Department of Agriculture's web site at www.michigan.gov/mda (click on "Farming," "Environment," then "GAAMPs").

Q. Am I allowed to open burn livestock carcasses?

- A. The open burning of livestock carcasses is not allowed under Part 55 of Act 451. According to The Bodies of Dead Animals Act, Public Act 239 of 1982, as amended, livestock carcasses should be disposed of by burial, composting, rendering, or incineration. You will have to obtain a Permit to Install from the DEQ's Air Quality Division before constructing and operating an incinerator. For information about burial, composting, or rendering animal carcasses check out the MDA's publication entitled "Proper Disposal of Animal Carcasses in Michigan," which can be viewed on the internet at www.michigan.gov/mda. For questions about the proper disposal of animal carcasses, contact the Michigan Department of Agriculture at (800) 292-3939.

Summary of Open Burning Regulations in Michigan

All the rules and publications referenced in this document can be found on the DEQ's Open Burning web site. To access the site go to www.michigan.gov/deq (click on "Air" then "Open Burning Information"). You may also contact the Environmental Assistance Center at (800) 662-9278.

Regardless of any of the stipulations contained in this document it is important to always check with city, township, or county officials to see if there are any local ordinances that prohibit open burning in your area. Most localities restrict open burning in one way or another because of the number of nuisance problems that arise from the activity.

Open Burning Statute / Rule	Administered By
Part 115 (Solid Waste Management) of Act 451 <ul style="list-style-type: none"> • Section 324.11522 - <i>Open burning of grass clippings or leaves</i> 	DEQ, Waste and Hazardous Materials Division
Part 115 Rules <ul style="list-style-type: none"> • R 299.4102(g) – <i>"construction and demolition waste" definition</i> • R 299.4103(k) – <i>"household waste" definition</i> • R 299.4104(i) – <i>"open burning" definition</i> • R 299.4128 – <i>Open dumping and open burning prohibited</i> 	DEQ, Waste and Hazardous Materials Division
Air Pollution Control Rules <ul style="list-style-type: none"> • R 336.1115(b) – <i>"open burning" definition</i> • R 336.1310 – <i>Open burning</i> • R 336.1331 (Tables 33 and 34) – <i>Priority I and Priority II areas</i> • R 336.1901 – <i>Air contaminant or water vapor, when prohibited</i> 	DEQ, Air Quality Division
Part 515 (Prevention and Suppression of Forest Fires) of Act 451 <ul style="list-style-type: none"> • Section 324.51501 – <i>Definitions</i> • Section 324.51503 – <i>Burn permits, conditions</i> • Section 324.51504 – <i>Acts prohibited</i> • Section 324.51507 – <i>Extreme fire hazard conditions; proclamation by governor as to use of fire; prohibited acts</i> • Section 324.51510 – <i>Intentionally causing fire</i> 	DNR, Forest, Mineral and Fire Management Division

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