Mississippi Open Burning Laws & Requirements

What is Prohibited?

In Mississippi, it is generally unlawful to cause air pollution. Specifically, the open burning of the following is generally prohibited:

- Residential, Commercial, Institutional, or Industrial Solid Waste.
- Garbage, Rubbish containing garbage, or other materials that can decompose.
- Hazardous Waste
- Plastic and Vinyl
- Rubber Tires
- Residential Structures*
- Any substance that releases pollutants exceeding state standards.





What Can Be Burned and under what Controls and Conditions?

- Agricultural and Silvicultural Wastes: Infrequent burning of agricultural wastes in fields and silvicultural wastes for forest management is allowed if a permit from the Mississippi Forestry Commission is obtained. The burning must allow for adequate smoke diffusion as defined by the permit and daily weather guides. Starter fuels are limited to dried vegetation and certain petroleum fuels; the use of materials like rubber tires and plastics is forbidden.
- Land-Clearing Debris: Burning of land-clearing debris is not allowed if prohibited by local ordinances, if it poses a traffic hazard, or during a High Fire Danger Alert. There are also buffer zone requirements:
 - Without a forced-draft air system, burning must not occur within <u>500 yards</u> of an occupied dwelling.
 - o With a forced-draft air system (ie. an air curtain burner), burning can occur within 500 yards but not within 50 yards of an occupied dwelling.
 - Burning must not occur within 500 yards of a commercial airport property.
- Leaves and Yard Waste: The prohibition of open burning of residential solid waste applies to open burning of leaves and other yard waste by residential property owners, except when the Department has deferred the regulation of the burning of leaves and other yard wastes to a county board of supervisors and/or municipal governing body. If a local ordinance is approved by MDEQ, residential property owners may burn leaves and other yard waste only on the property where it originated. These local ordinances must be deemed protective of air quality, and fire safety. Contact your local county or city officials or MDEQ to see if they have an approved ordinance for your area. Municipalities can contact MDEQ for a review and get on a list of approved ordinances that we defer to.
- Emergency Clean-up Debris (vegetation only): After severe weather events, MDEQ may approve exceptions to manage large volumes of vegetative debris. Local governments must declare an emergency, complete an application, and adhere to site specific siting and operational criteria. Contact the MDEQ Waste Division for additional emergency debris management guidance.

Sources: Miss. Code Ann. §§ 11-2-1 Rule 1.3(G), 17-17-9, 49-17-29(1), 37-138-1 through 37-138-31

Respiratory, Health and Environmental Concerns

Open burning of brush, trash, and synthetic materials create harmful pollutants like dioxins, particulate matter, ozone, and other pollutants which pose risks to human health and the environment:

- **Dioxins:** These highly toxic and long-lasting compounds are formed from the incomplete burning of organic materials. They are linked to cancer and developmental and reproductive disorders. Dioxins accumulate in the food chain by settling on crops and in water.
- Particulate Matter (PM & PM_{2.5}): Smoke from open burning is a major source of particulate matter, which can create haze and reduce visibility. These fine particles, especially PM_{2.5}, are small enough to be inhaled deep into the lungs and can even enter the bloodstream. Exposure to particulate matter can irritate the eyes, nose, and throat, and can cause or worsen respiratory conditions such as asthma, bronchitis, and other lung diseases.
- **Ground-Level Ozone:** Smoke from open burning releases nitrogen oxides (NO_X) and volatile organic compounds (VOCs) which help form ground-level ozone, a primary component of smog. While ozone in the upper atmosphere is beneficial, ground-level ozone is a harmful air pollutant which may also cause or aggravate respiratory problems like coughing, throat irritation, chest pain, asthma, bronchitis, and emphysema.
- Other Pollutants: Burning trash and synthetic materials can release a variety of toxic substances including arsenic, mercury, lead, and other hazardous air pollutants.

Mississippi's Air Quality Standing with EPA (2024-2025)

The U.S. EPA sets National Ambient Air Quality Standards (NAAQS) for six major pollutants: ozone, particulate matter (PM₁₀ & PM_{2.5}), lead, carbon monoxide, nitrogen dioxide, and sulfur dioxide. Mississippi is currently meeting, or in "attainment" of, the national standards for all these pollutants. However, the state is actively monitoring concerns related to ozone and fine particulate matter.

- Ozone: DeSoto County shows an ozone level of 71 ppb which exceeds the 2015 standard of 70 ppb. A multi-state collaboration is underway to reduce the emissions that form ozone.
- Fine Particulate Matter (PM_{2.5}): With the new, more stringent 2024 standard of 9.0 μg/m³, both Hattiesburg (9.3 μg/m³) and Hernando in DeSoto County (9.1 μg/m³) have levels that exceed this. The MDEQ however is seeking "exceptional event" exemptions for impacts from wildfires and Saharan dust.

Implications of "Non-Attainment"

If an area is designated as "non-attainment" for a federal air quality standard, it can lead to:

- Constraints on economic development and industrial growth,
- Longer and more complicated permitting processes for new and expanding facilities, and
- Restrictions on transportation projects such as highway expansion.

For More Information

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MDEQ's Open Burning Webpage: www.mdeq.ms.gov/air/other-air-information/open-burning