



Missouri Department of Natural Resources

Facts on Open Burning Under Missouri Regulations

Air Pollution Control Program fact sheet

6/2006

Open burning is the burning of any materials in which air contaminants resulting from combustion are emitted directly into ambient air without first passing through a stack or chimney from an enclosed chamber. This fact sheet summarizes allowable and prohibited open burning under Missouri regulations. It does not include open burning restrictions that city or county governments may impose in addition to Missouri's state regulations. Prior to conducting any open burning, businesses and citizens should contact the city or county of jurisdiction for any local restrictions.

The open burning of certain trade wastes and tires produces toxic emissions harmful to human health and is therefore prohibited. Combustion sources, such as fires, typically produce large amounts of small particulate matter that can be inhaled, causing respiratory problems.

The burning of common household trash, including paper products and food wastes, can also have severe consequences. A recent study performed by the U.S. Environmental Protection Agency (EPA) concluded that the open burning of one household's trash could release certain dangerous pollutants in higher levels than the burning of the trash of thousands of homes by a municipal waste incinerator. Because of lower combustion temperatures, trash burned at private homes burns less efficiently, releasing high levels of several dangerous pollutants, including dioxins, volatile organic compounds (VOCs), acetaldehyde, formaldehyde, hydrogen chloride and naphthalene. These contaminants can be very harmful to air quality, especially in areas that already have higher pollution levels, such as Kansas City and St. Louis. They also pose a wide range of health risks. Open burning exposes individuals to toxic emissions that may irritate the eyes, skin and upper respiratory tract, and depress the central nervous system to cause headache, dizziness and fatigue.

Because of these potential dangers, the Missouri Department of Natural Resources strongly discourages open burning of any material prior to investigating alternatives. Some rural areas can participate in a "green box" service, which provides a trash collection point near a centrally located county road for local residents to use. Green boxes are usually picked up or emptied once a week. Other options include waste disposal services, waste diversion, recycling and composting. Contact your local Solid Waste Management District for assistance in implementing these cleaner alternatives to open burning.

Prohibited Open Burning Under State Regulation

Any waste generated by a business, trade, industry, or any demolition operation cannot be burned. This would include, but is not limited to paper, cardboard boxes, pallets, tires, rubber products, hazardous materials, styrofoam, plastics, petroleum based products and treated wood. Any asbestos-containing material cannot be burned.

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Allowable Open Burning Under State Regulations (Local governments may have stricter laws and policies)

Open Burning of Household Refuse

Missouri allows open burning of household refuse originating on premises from four dwelling units or less and burned on the same premises. Materials such as tires or waste oil may not be used to start the fires or be burned in the fires.

Kansas City metropolitan area: Open burning is allowed provided the burning takes place within an area zoned for agricultural purposes and outside the portion of the metropolitan area surrounded by the corporate limits of Kansas City and every bordering municipality and outside the portion of the metropolitan area surrounded by the corporate limits of St. Joseph.

Outstate area: No special day, time or location restrictions.

Springfield-Greene County area: Open burning is allowed provided that burning takes place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District.

St. Louis metropolitan area: Open burning of household refuse is prohibited in the St. Louis metropolitan area.

Open Burning of Household Yard Wastes

Missouri allows open burning of household yard wastes originating on premises from four dwelling units or less and burned on the same premises. Materials such as tires or waste oil may not be used to start the fires or be burned in the fires.

Kansas City metropolitan area: Open burning is allowed provided the open burning takes place within an area zoned for agricultural purposes and outside the portion of the metropolitan area surrounded by the corporate limits of Kansas City and every bordering municipality and outside the portion of the metropolitan area surrounded by the corporate limits of St. Joseph. Open burning of yard wastes in the city of St. Joseph is allowed only during a three-week period in spring and during a three-week period in fall between 10 a.m. and 3:30 p.m. The two, three-week periods are to be determined by the city of St. Joseph along with state agencies and the state fire marshal.

Outstate area: No special day, time or location restrictions.

Springfield-Greene County area: Open burning is allowed provided that open burning takes place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District.

St. Louis metropolitan area: Open burning of tree leaves or residential brush is allowed only in areas outside of incorporated municipalities and is limited to the period beginning Sept. 16 and ending April 14 of each calendar year. These brush piles are limited to 16 square feet and the burning is allowed from 10 a.m. through 4 p.m.

Open Burning for Fire Training Purposes

Missouri allows fires to be set for the purpose of training fire fighters in the outstate, Springfield-Greene County and St. Louis metropolitan areas provided proper and timely notification to the appropriate regional office occurs. Fire training in the outstate area requires a written request be submitted to the appropriate regional office, a minimum of one week prior to the training. The St. Louis metropolitan area requires a written request a minimum of 24 hours prior to the training. All fire training exercises must be in compliance with 40 CFR part 61 subpart M, *National Emission*

Standard for Hazardous Air Pollutants, for asbestos and National Fire Protection Association (NFPA) 1403. In the Kansas City area, see the requirements in the section on Required Open Burning Permits.

Open Burning in Agricultural Operations

Missouri allows agricultural burning throughout the state. However, several exceptions apply. Materials such as tires or waste oil may not be used to start the fires or be burned in the fires. Any burning which produces smoke in such a manner as to impair visibility for those operating motor vehicles or airplanes is prohibited. Any open burning which creates a health hazard is also prohibited. Contact the St. Louis Regional Office before burning in the St. Louis metropolitan area between April 15 and Sept. 15. Botanical nursery operations (greenhouses) are not considered agricultural operations.

Open Burning in Land Clearing Operations

Open burning of tree trunks, tree limbs and vegetation from land clearing operations is allowed only in the outstate area if the burning takes place outside the city limits of any incorporated area or municipality and at least 200 yards from the nearest inhabited dwelling. Materials such as tires or waste oil may not be used to start the fires or be burned in the fires.

Open Burning at Wood Processing Facilities

In the outstate area, open burning of untreated wood waste from wood processing facilities is allowed if production is less than 8,000 board-feet per day and the facility was in existence as of March 25, 1976, but has not relocated to a new site, and if the burning is done at least 200 yards from the nearest occupied structure.

In the outstate area, open burning of untreated wood waste from wood processing facilities is allowed if production is less than 8,000 board-feet per day and the facility has relocated or from new wood processing facilities not in existence as of Sept. 18, 1970 and the facility and the burning are at least one mile outside city limits, and at least 200 yards from the nearest occupied structure.

Open Burning for Recreational Purposes

Campfires and other fires used solely for recreational purposes, ceremonial occasions, or for outdoor noncommercial preparation of food are allowed in Missouri.

Required Open Burning Permits

In the Kansas City Metropolitan area an open burning permit is required to set fires for the purpose of training firefighters. All fire training exercises must be in compliance with 40 CFR part 61 subpart M, *National Emission Standard for Hazardous Air Pollutants*, for asbestos and National Fire Protection Association (NFPA) 1403.

Tree trunks, tree limbs, vegetation (excluding leaves or lawn clippings) or untreated waste lumber at a landfill, compost plant, transfer station or salvage operation can be burned, throughout the state, with an issued and valid open burning permit. The open burning permit requires the facility, in most cases, to use an air curtain destructor.

The open burning of certain trade wastes throughout the state, and vegetation from land clearing operations in the Springfield-Greene County area and the Kansas City and St. Louis Metropolitan areas, may be permitted only when it can be shown that open burning is the only feasible method of disposal and that disposal is in the public interest. Household refuse and household yard waste in the Springfield-Greene County area and the Kansas City and St. Louis metropolitan areas may be open burned in the off-season if permitted under these same conditions. The open burning permit requires the facility, in most cases, to use an air curtain destructor. In the

outstate area, commercial and municipal utility tree trimming operations must submit a request to the appropriate regional office for an annually renewable open burning permit. The request must describe the general size, condition, and age of the tree trunks and tree limbs to be open burned.

In the Springfield-Greene County and Kansas City and St. Louis metropolitan areas, commercial and municipal utility tree trimming operations must submit an application for an open burning permit to the appropriate regional office.

Nothing in this fact sheet may be construed to permit open burning that causes or constitutes a public health hazard, nuisance or a hazard to vehicular or air traffic or violates any other rule or statute.

Definitions

St. Louis metropolitan area: The geographical area comprising St. Louis, St. Charles, Jefferson and Franklin Counties and the city of St. Louis.

Springfield-Greene County area: The geographical area contained within Greene County.

Kansas City metropolitan area: The geographical area comprising Jackson, Cass, Clay, Platte, Ray and Buchanan counties.

Outstate area: The geographical area comprising those counties not contained in the St. Louis metropolitan area, the Springfield-Greene County area or the Kansas City metropolitan area.

Air Curtain Destructor: An air pollution control device designed to increase burning efficiency, thereby reducing air contaminant emissions during open burning.

Open Burning: The burning of any materials in which air contaminants resulting from combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber.

Open Burning Permit: A permit that must be applied for and then granted in order to open burn or open burn with restrictions. Permit applications must be sent to the Regional Office that has jurisdiction over your area.

Open Burning Permit Application

The open burning permit application is to be completed and then submitted to the Missouri Department of Natural Resources' Regional Office that has jurisdiction over your area. The application is to contain the following:

- The name, address and telephone number of the person submitting the application;
- The type of business or activity involved;
- A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and vegetation to be burned and expected composition and amount of air contaminants to be released to the atmosphere, if known;
- The schedule of burning operations;
- The location where the open burning will be performed;
- Reasons why an emergency exists or no method other than open burning is feasible; and
- Evidence that the proposed open burning has been approved by the fire control authority and other local agencies that have jurisdiction over burning in the area.

For more information call or write:

Missouri Department of Natural Resources
Kansas City Regional Office
500 NE Colbern Road
Lee's Summit, MO 64086-4710
(816) 622-7000 office
(816) 622-7044 fax

Missouri Department of Natural Resources
Northeast Regional Office
1709 Prospect Drive
Macon, MO 63552-2602
(660) 385-8000 office
(660) 385-8090 fax

Missouri Department of Natural Resources
St. Louis Regional Office
7545 S Lindbergh, Suite 210
St. Louis, MO 63125
(314) 416-2960 office
(314) 416-2970 fax

Missouri Department of Natural Resources
Southeast Regional Office
2155 N Westwood Blvd.
P.O. Box 1420
Poplar Bluff, MO 63901-1420
(573) 840-9750 office
(573) 840-9754 fax

Missouri Department of Natural Resources
Southwest Regional Office
2040 W Woodland
Springfield, MO 65807-5912
(417) 891-4300 office
(417) 891-4399 fax

All regional offices can receive mail through the P.O. Box 176, Jefferson City, MO 65102-0176 address, but for faster delivery, please use the direct address listed above.

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 751-4817 office
(573) 751-2706 fax
www.dnr.mo.gov/env/apcp Program Home Page

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P.O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or (573) 751-5401 office
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www.dnr.mo.gov/env/swmp Program Home Page