# City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: REP 63-14

**Department Source**: Fire

To: City Council

From: City Manager & Staff

Council Meeting Date: July 7, 2014

Re: Report - Open Burning

# **Documents Included With This Agenda Item**

Council memo

**Supporting documentation includes:** Interested Party meeting minutes, Missouri Department of Natural Resources policy on open burning.

## **Executive Summary**

Staff recommendation for a Fire Department internal policy change that will address concerns related to open burning within city limits.

#### Discussion

The Columbia Fire Department in conjunction with Columbia/Boone County Public Health and Human Services held an interested party meeting May 22, 2014 at the Activities and Recreation Center to discuss Columbia's open burning policy and proposed changes to it. This meeting was well attended by stakeholders representing a variety of groups including developers and concerned citizens. Those present offered opinions which were documented. These opinions ranged from a full prohibition of any open burning to leaving the existing ordinance in place with no changes.

Based on citizen feedback, experience with a variety of activities that fall under the definition of open burning and considering the health and welfare of the community staff recommends the following:

- 1. Maintain the current definitions of open burning.
- 2. Maintain the practice of allowing the Fire Department to inspect and permit open burning for those activities currently defined as open burning under the 2012 International Fire Code.
- 3. Existing code language gives the Authority Having Jurisdiction the ability to require an air curtain destructor (ACD) when it is deemed appropriate. Recommend that an internal policy be created that mandates an ACD for any open burning requiring a Department of Natural Resources (DNR) permit. Guidelines for activity that would require a DNR open burning permit are not specific. However, activity that involves land disturbances of one acre or more require a DNR land disturbance permit, generally involve the removal of vegetative waste and consequently a DNR open burning permit. **Note state and federally owned lands fall outside our jurisdiction.**

These recommendations can be achieved by a change in internal policy and no change in ordinance

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## Fiscal Impact

Short-Term Impact: No fiscal impact to the city. Long-Term Impact: No fiscal impact to the city.

# Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Environment, Health, Social Services and Affordable Housing

Strategic Plan Impact: Health, Safety and Wellbeing

Comprehensive Plan Impact: Livable & Sustainable Communities

# **Suggested Council Action**

- 1. Maintain the current definitions of open burning.
- 2. Maintain the practice of allowing the Fire Department to inspect and permit open burning for those activities currently defined as open burning under the 2012 International Fire Code.
- 3. Existing code language gives the Authority Having Jurisdiction the ability to require an air curtain destructor (ACD) when it is deemed appropriate. Recommend that an internal policy be created that mandates an ACD for any open burning requiring a Department of Natural Resources (DNR) permit. Guidelines for activity that would require a DNR open burning permit are not specific. However, activity that involves land disturbances of one acre or more require a DNR land disturbance permit, generally involve the removal of vegetative waste and consequently a DNR open burning permit. Note state and federally owned lands fall outside our jurisdiction.

## Legislative History

Interested Party meeting held May 22, 2014 at the Activities and Recreation Center.

Department Approved

City Manager Approved

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# SUPPORTING DOCUMENTS INCLUDED WITH THIS AGENDA ITEM ARE AS FOLLOWS:

May 22, 2014 Interested Party Meeting Minutes
Missouri Department of Natural Resources Open Burning Regulations

## **Interested Parties Meeting-Open Burning**

**Meeting Minutes** 

May 22, 2014 Time: 5:00 p.m.

Present:

Columbia Fire and Health Departments

I. Forum to Discuss possible changes to the City of Columbia's open burning ordinance.

#### II. Discussion

- -Mrs. Carolyn Amparan stated she had concerns with carbon emissions. She would like to see the wood products repurposed and no burning allowed. If burning was to still be allowed she would compromise and suggest an air curtain device.
- -A contractor requesting to be unnamed advised his main concerns were with the costs comparison between chipping and hauling versus open burning. He was reluctant to provide exact monetary figures based on the fact that numerous variables must be considered when bidding a project. He stated that in general terms open burning costs would be calculated in the hundreds of dollars per acre developed while chipping and hauling would be calculated in the thousands of dollars per acre developed. Again speaking in general terms he advised the cost is approximately 80% less to perform open burning.
- -Two additional contractors joined the conversation and echoed the initial comments. All advised they believe the current permit system is working well and appreciated the current relationship with the Columbia Fire Department.
- -Contractors advised they felt the additional emissions caused by diesel fuel being utilized, the numerous pieces of equipment burning fuel, and the numerous vehicles needed to haul away debris would offset any environmental concerns with open burning.
- -Approximately 3-4 contractors currently own their own ACDs and utilize them regularly depending on the proximity to nearby structures.
- -Contractors are aware of the current proximity regulations and have recently performed removal operations due to such.
- -Mr. Stamper and contractors all stated they believe the permit process should be handled by the "professionals." involved with the permit process and not the City Council.
- -Contractors agree that only professionals experienced in open burning and ACD usage should be allowed to perform any land clearing operations.
- -An individual who identified himself as Tim advised he instructs statewide classes on the use of burning for agricultural purposes and offered the following information:

- -Currently Missouri State House bills HB28, 1077, and 2193 exempt the individual from necessary permits if the operation is for agricultural purposes.
- Stated the Missouri towns of Springfield and Nixa currently have city ordinances in place which allow for agricultural burning.
- -Advised the Missouri Department of Conservation currently teaches courses on the proper utilization of fire for agricultural purposes. When asked what certification he believes is needed he stated a Red Card is needed for wildfires yet there are many courses available for more practical applications.
- -Suggested a burn plan be provided prior to the issuing of any prescribed burns. Plan to include size of area to be burned, proximity to any structures, and any other information requested by the entity granting the permit. This plan would spell out a specific date range for the burn, the hours of operation, the wind speeds which would be allowed, and any other pertinent information.
- -Suggested creating a committee to include members of the fire service, the health department, and the community. This committee would then review any and all permit requests.
- -Discussion at this point resembled more of a round table meeting and consensus statements included:
  - -An approval process needs to remain in place.
  - -If any changes are made that a date is provided to the community as to when such changes will take effect. The City will need to take into consideration any and all current or proposed projects when setting said date as site development bids often take up to a year to bid. Allowing for the "grandfathering" of projects which have already been bid.
  - -The safe use of fire is the most economical way to perform land clearing operations conservation operations.
  - -All such operations must be performed by a "qualified" individual or company.
  - -Proximity to surrounding neighbors must be taken into consideration. If such operations pose environmental or health risks the fire department retains the right to request the operation to cease.
  - -If any project requires a DNR permit then an ACD is required.

Meeting concluded at 6:50 p.m.

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# Missouri Department of Natural Resources

# Facts on Open Burning Under Missouri Regulations

Air Pollution Control Program fact sheet Division of Environmental Quality Director: Leanne Tippett Mosby 02/2014 PUB02047

Open burning is the burning of any materials in which air contaminants are emitted directly into the air without first passing through a stack or chimney. 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 is prohibited because the toxic emissions that can be released are harmful to human health. Smoke from fires also typically produces 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. Studies have indicated the open burning of an individual household's trash could release pollutants in higher levels than the burning of the trash of thousands of homes by a municipal waste incinerator because the lower combustion temperatures prevent complete incineration. These pollutants can include dioxins, volatile organic compounds, acetaldehyde, formaldehyde, hydrogen chloride and naphthalene. Open burning exposes individuals to toxic emissions that may irritate the eyes, skin and upper respiratory tract. The central nervous system can also be affected causing headaches, 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 safer alternatives to open burning.

#### Prohibited Open Burning Under State Regulation

Any waste generated by a business, trade, industry, salvage or demolition operation cannot be burned without a permit issued by the Department of Natural Resources or its delegated local agency. Permits will only be considered for untreated wood wastes. Wastes that may not be burned include but are not limited to tires, rubber products, hazardous materials, Styrofoam<sup>TM</sup>, plastics, petroleum-based products, demolition waste, treated wood and any asbestos-containing material.

#### Allowable Open Burning Under State Regulations

Note: Local governments may have stricter laws and policies

#### **Open Burning of Household Refuse**

General Provisions: Missouri allows open burning of household refuse from four dwelling units or less provided it originates and is burned on the same premises. This exemption does not apply to mobile home

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parks or apartment complexes. Residential waste is solid waste produced by routine household activities, such as paper waste and garbage from daily activities. This does not include home remodeling wastes, wastes from home businesses, durable goods such as old appliances, carpets or furniture, tires or other non-routine household waste. Materials such as tires or used oil may not be used to start the fires or be burned in the fires.

Kansas City and St. Joseph metropolitan areas: Open burning is allowed provided it occurs within an area zoned for agricultural purposes and outside the portion of the metropolitan areas surrounding the corporate limits of Kansas City and St. Joseph and their bordering municipalities.

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 Yard Wastes

General Provisions: Missouri allows open burning of yard wastes from sites provided it originates and is burned on the same premises. Materials such as tires or used oil may not be used to start the fires or be burned in the fires. Yard waste includes trees, tree leaves, brush or other vegetation.

Kansas City metropolitan area: Open burning of trees, tree leaves, brush or any other type of vegetation requires an open burning permit.

St. Joseph metropolitan area: Open burning of residential yard wastes 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 along with state agencies and the state fire marshal.

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

Springfield-Greene County area: The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves.

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

# **Open Burning for Fire Training Purposes**

Missouri allows fires set for the purpose of training fire fighters provided they are conducted in accordance with National Fire Protection Association Standards 600 and 1403. All fire training exercises involving donated or acquired structures must be conducted in compliance with 40 CFR Part 61 Subpart M, The National Emission Standard for Asbestos. The use of donated or acquired structures for training is discussed in Publication 2029. As noted in Publication 2029, there is a ten working day, minimum, notification period to the Air Pollution Control Program for these activities and all petroleum based products and asbestos containing materials must be removed from any structure that is to be-impacted as part of a training exercise. In all cases, timely notification should be provided to the appropriate regional office or delegated local agency.

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# Open Burning in Agricultural, Natural Resource or Land Management Operations

Missouri allows agricultural burning throughout the state. However, several exceptions apply. Materials such as tires or used oil may not be used to start the fires or be burned in the fires. Any burning that creates a health hazard, nuisance or produces smoke that impairs visibility for those operating motor vehicles or airplanes is prohibited. Contact the St. Louis Regional Office before burning in the St. Louis metropolitan area from April 15 to Sept. 15. Botanical nursery operations or 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 without an air curtain destructor or permit 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 used oil may not be used to start the fires or be burned in the fires. Permits containing special conditions may be issued by regional offices or local agencies for sites unable to comply with the requirements above. See the Required Open Burning Permits section below for exceptions in the Springfield-Greene County area, and Kansas City and St. Louis Metropolitan areas.

# **Open Burning at Wood Processing Facilities**

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. The burning also must be done at least 200 yards from the nearest occupied structure.

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. The burning also must be done 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. Fires shall include only vegetative woody materials or untreated wood products.

## **Required Open Burning Permits**

The open burning of certain trade wastes, primarily untreated wood wastes such as pallets or crates, 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. In the St. Louis non-attainment area, permits will not be issued unless it can be shown that emissions from open burning would be less than any other waste management or disposal method. The open burning permit requires the facility, in most cases, to use an air curtain destructor.

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. Air curtain destructors are generally required at dedicated sites where burning occurs.

Commercial and municipal utility tree trimming operations must submit an application for an open burning permit to the appropriate regional office or local agency.

The information provided in this fact sheet should not 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

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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. These counties are also currently a non-attainment area for ground-level ozone.

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, Springfield-Greene County area or the Kansas City metropolitan area.

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

**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 <u>Regional Office</u> or local agency that has jurisdiction over your area. Applications are available at <u>www.dnr.mo.gov/forms</u> or any regional or local agency office.

Untreated Wood: Lumber and other wooden materials that have not been chemically treated for resistance to moisture, fire, fungi, insects and other pests or has not otherwise been treated or manufactured with chemicals, or that does not contain adhesives or resins. Untreated wood does not include plywood, particle board, chipboard or wood with other than minimal amounts of paint, coating or finish.

#### For More Information

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

Missouri Department of Natural Resources Solid Waste Management Program P.O. Box 176, Jefferson City, MO 65102-0176 800-361-4827 or 573-751-5401 office 573-526-3902 fax www.dnr.mo.gov/env/swmp/index.html

Kansas City Air Quality Program Air Quality Section 200 Troost Ave., Suite 3200 Kansas City, MO 64108 816-513-6314 816-513-6173 fax PUB2047 - DNR Page 5 of 5

St. Louis County Department of Health
Air Pollution Control Section
6121 North Hanley Road
St. Louis, MO 63134
314-615-8924
www.stlouisco.com/HealthandWellness/ EnvironmentalServices/AirPollutionControlProgram
Email: airpollution.doh@stlouisco.com

Springfield Air Quality Control Department of Environmental Services P.O. Box 8368 Springfield, MO 65801-8368 417-864-1412

Nothing in this document may be used to implement any enforcement action or levy any penalty unless promulgated by rule under chapter 536 or authorized by statute.

#### For more information

Missouri Department of Natural Resources Air Pollution Control Program P.O. Box 176 Jefferson City, MO 65102-0176 573-751-4817 or 573-751-2706 http://www.dnr.mo.gov/env/apcp