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DEPARTMENT OF ENVIRONMENTAL HEALTH
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Rules and Regulations Governing Solid Fuel Burning

Department of Environmental Health
Division of Environmental Protection

Adopted: April 24, 1997

Solid Fuel Burning Rules and Regulations

I. Purpose/Use. These rules and regulations implement Chapter 4, sections 23 and 24, of the Denver Revised Municipal Code (DRMC).

II. Definitions

1. **AIR Program Area:** That area defined as such in section 42-4-307 (8), Colorado Revised Statutes.
2. **Burn down time:** That period of time, not to exceed three hours following the declaration of a high pollution day, required for the cessation of combustion within any solid fuel-fired device pursuant to this regulation and section 4-24 (C) of the Revised Municipal Code.
3. **Department:** The Denver Department of Environmental Health
4. **Fireplace:** A hearth and firebox or similar prepared place in which a fire may be made and which is built in conjunction with a chimney, and which has no specific method for recirculating heat or reducing emissions.
5. **High-pollution Day:** That period of time in which the Colorado Department of Public Health and Environment anticipates levels of carbon monoxide or particulates exceeding federal ambient air quality standards or when air pollution standards are exceeded for particulates, carbon monoxide, or visibility.
6. **Incinerator:** A container, device or other appliance, including residential solid-fuel-fired devices, designed, used or intended to be used for the disposal or reduction of household, commercial or industrial waste material or any commercial or industrial materials by burning.

7. **Manager:** The Manager of the Denver Department of Environmental Health or his or her designated representative.
- 8.. **Natural gas fired device:** A fireplace, stove, or insert which is designed to burn gaseous fuel and which has the gas burner(s) permanently affixed to the fire box of the device in such a way that removal of the burner(s) would cause substantial alteration or severe damage to the device.
9. **New solid-fuel-fired device:** Any solid-fuel-fired device other than one which was acquired by or sold to an individual for his or her personal use prior to January 1, 1993.
10. **Opacity:** The degree to which an air contaminant emission obscures the view of a trained observer expressed in percentage of the obstruction or the degree (percentage) to which transmittance of light is reduced by an air contaminant emission.
11. **Pellet Stove:** A wood heater which meets the following criteria: (1) the manufacturer makes no reference to burning cordwood in advertising or other literature, 920 the unit is safety listed for pellet fuel only, (3) the unit's operating and instruction manual must state the use of cordwood is prohibited by federal law, and (4) the unit must be manufactured and sold including a hopper and auger combination as integral parts.
12. **Permit:** A written authorization to engage in a specified activity issued by the manager, which may include conditions and an expiration date established by the manager.
13. **Phase II wood stove:** A wood burning device which has been certified by the United States Environmental Protection Agency or the Colorado Department of Public Health and Environment to meet the following criteria: wood stoves containing catalytic devices that emit less than 4.1 grams of particulate matter per ^{hour} kilogram of wood burned

or other wood stoves that emit less than 7.5 grams of particulate matter per ^{hour} kilogram of wood burned.

14. **Reduction:** Any process utilizing heat, including but not limited to rendering, drying, dehydrating, digesting, evaporating, and protein concentrating.

15. **Solid-fuel-fired device:** A device designed for the combustion of solid fuels, including but not limited to wood, coal and paper, including wood burning devices, fireplaces, solid-fuel-fired stoves and combustion fuel furnaces which burn solid fuel except such devices as are specifically excluded in these rules and regulations. Solid-fuel-fired devices do not include natural gas-fired devices, commercial ovens or stoves used to prepare food for human consumption, solid-fuel-fired barbecue devices, or public utility facilities generating steam or electricity.

16. **Trained Observer:** A person who is certified by the Colorado Department of Public Health and Environment to be trained in the area of odor and/or opacity identification of air pollutants.

III. Opacity

A. No stationary source, including solid-fuel-fired devices, Phase II wood stoves, and other appliances and fuel burning devices, shall emit any air contaminants which exceed 20 percent opacity as determined by:

1. United States Environmental Protection Agency Method 9 performed by a trained observer; or;
2. a properly calibrated and maintained opacity monitor operated by either the source or the Department.

B. A source required by any local, state, or federal law, rule, regulation or permit to continuously monitor the opacity of its emissions shall properly calibrate, operate and maintain its opacity monitor(s) and make records from such monitoring available to the Department for inspection and copying upon request.

IV. Incinerators; written approval

A. It shall be unlawful to burn any material in any incinerator without prior written approval by the Department. The Department shall consider the following criteria when approving an incinerator for operation:

1. The incinerator is of the multi-chambered or domestic auxiliary-fuel-fired type;
2. The incinerator is capable of continuously meeting the air pollution emission standards of Chapter 4-24, DRMC when operated;
3. The owner/operator has obtained an air pollution emission permit from the Colorado Department of Public Health and Environment, Air Pollution Control Division, or has been notified in writing that such a permit is not required;
4. The Building Division, Department of Public Works, approves of the incinerator and proposed permit;
5. The design, construction and installation of the incinerator is consistent with the above; and

6. Neither the public health nor the environment will be unreasonably impacted by the type of material burned, the location of the incinerator, and the proposed operating practices of the source.

B. A solid-fuel-fired device, phase II wood stove or any other fuel burning device which is used to dispose of commercial, industrial, or household waste or commercial or industrial material, or which is used to reduce the volume of such waste or material, will be considered an incinerator for the purpose of this section.

V. Operation solid-fuel-fired devices on high pollution days; permits

A. It shall be unlawful for any person to burn any solid fuel in any solid-fuel-fired device during a high pollution day unless a permit has been granted by the Department.

B. It shall be the responsibility of any person operating a solid-fuel-fired device to determine if a high-pollution day has been announced by the Colorado Department of Public Health and Environment.

C. The Department may issue a permit authorizing the operation of a solid-fuel-fired device on a high pollution day upon a determination that the applicant has:

1. submitted a complete and accurate application, on a form supplied by the Department, the contents of which is verified to be accurate by the applicants signature;

2. designed, installed and/or constructed the device to be permitted in accordance with the Denver building code;

3. historically made a good faith effort to comply with the requirements of section 4-2 of the Revised Municipal Code; and

4. met one or more of the conditions below:

a. The device to be permitted is:

(i) a Phase II wood stove or insert.

(ii) a pellet stove approved by the Colorado Department of Public Health and Environment, or

(iii) a device that has been approved by the Department for operation on a high pollution day pursuant to Section VII, below.

b. The device is the only source of heat for the dwelling as defined in section 59-2(131), not to include fireplaces without heat recirculation.

c. The primary heating system for a home is temporarily inoperative. Permits issued for this cause shall be issued only for the time required to restore the primary heating system to safe and efficient operation and shall in no case be issued for a period exceeding 30 days.

D. The Department may impose additional permit conditions reasonably necessary to protect the public health and welfare including, but not limited to, conditions regarding:

1. the type of fuel to be burned;
2. the duration of the permit, not to exceed one year, except that permits issued for a device when a dwelling's primary heat source is inoperative shall expire within thirty days; and
3. a requirement to post or otherwise advertise the permit and its conditions.

E. No permit shall be issued under this section to any person for any dwelling in which the primary heating system has been intentionally disconnected, disabled or otherwise rendered inoperative.

F. An applicant may appeal any permit denial or specific permit condition according to the provisions of section V.

VI. Appeals

Any decision of the Department regarding permit conditions or denial may be appealed in accordance with sections 24-1 through 24-4 of the Denver Revised Municipal Code.

VII. Excluded solid-fuel-fired devices; permits

Devices or fuels may be considered by the manager for exclusion under this section if an applicant submits all of the following information:

A. An application for exclusion containing:

1. The applicant's name, address, and telephone number;

2. the place of installation of the device or the type of structure the device is intended to be installed in; and

3. the purpose for and manner in which the device will be used.

B. A statement of the emissions of the device including the method of determination and the place and date of testing. Only audited test data from an United States Environmental Protection Agency accredited laboratory is acceptable for this purpose.

C. A statement of any other certifications or exemptions that the device has received from any recognized government agency, trade organization or other responsible entity.

D. Any other information that the applicant wishes to have considered.

E. A signed statement testifying to the accuracy of the information contained in the application package.

F. The reason for the exclusion: low emissions, no reasonable alternative exists, etc.

G. Any other information the Department deems necessary to approve or deny an exclusion.

VIII. New devices

A. On and after January 1, 1993, no person shall sell, advertise for sale, offer for sale, install, or offer to install any new solid-fuel-fired device unless it is certified to

meet the standards applicable for a Phase II wood stove, with the following exceptions.

1. Pellet stoves approved by the Colorado Department of Public Health and Environment.
2. The sale of a fireplace within the corporate limits of Denver is allowed if documentation is maintained by the seller to demonstrate that the device was installed outside the AIR program area.
3. The sale of a solid-fuel-fired device for installation as a natural-gas-fired device within the AIR program area is allowed if:
 - a. the device is sold to a licensed building contractor and;
 - b. the device is subsequently installed with gas burner(s) that have been permanently affixed to the firebox in a manner that prohibits the burner(s) from being removed without causing substantial alteration or severe damage to the firebox and;
 - c. an invoice or other document recording such sale is signed by the purchaser of the device and retained by the seller of the device and clearly contains the following information:
 - (i) A stamp, imprint or legible printing of the statement:

"Colorado and/or local laws prohibit the sale or installation of this device in the AIR program area unless it is installed as a gas appliance. Persons

installing this device are required to permanently affix any gas burner to the firebox so that it can not be removed without causing substantial alteration or severe damage to the device." and;

(ii) the building permit number for the project which includes the device installation is recorded on the invoice.

4. A solid-fuel-fired device which existed prior to January 1, 1993 and is in a portion of a building which is currently undergoing remodeling or reconstruction is not considered a new solid-fuel-fired device unless the firebox of the device is altered, moved, or completely disassembled and reassembled in place.

B. Only one (1) solid fuel-fired device may be installed in a single-unit dwelling, as defined in subsection 59-2(131) of the Revised Municipal Code, which is constructed or added to after the effective date of this section.

C. Multiple-unit dwellings, as defined in subsection 59-2(88) of the Revised Municipal Code, constructed or added to after the effective date of this section shall be limited to one (1) solid fuel-fired device for every seven thousand (7000) square feet of lot area multiplied by the number of floors in the unit, e.g., a three-story multifamily residential unit located on a seven-thousand-square-foot lot or parcel of land could have three (3) solid fuel-fired devices.

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