

# Missoula City-County Air Pollution Control Program January 25, 2023

# CHAPTER 9 SOLID FUEL BURNING DEVICES

## Subchapter 1 – General Provisions

#### Rule 9.101 - Intent

The intent of this rule is to regulate and control the emissions of air pollutants from solid fuel burning devices in order to further the policy and purpose declared in Chapter 1.

#### **Rule 9.102 - Definitions**

For the purpose of this rule the following definitions apply:

- (1) "Burning season" means from the first day of July through the last day of June of the following year.
- (2) "Alert permit" means an emission permit issued by the department to operate a solid fuel burning device during an air pollution Alert and during periods when the air stagnation plan is not in effect. Solid fuel burning devices must meet Lowest Achievable Emission Rate to qualify for an Alert class emissions permit.
- (3) "Central heater" means a fuel-burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the device is located, by the distribution of air heated by the furnace through ducts or liquid heated in the device and distributed typically through pipes. Unless otherwise specified, these devices include, but are not limited to, residential forced-air furnaces (small and large) and residential hydronic heaters that burns less than 1,000,000 BTU's per hour.
- (4) "Install" means to put in position for potential use, and includes bringing a manufactured home or recreational vehicle containing a solid fuel burning device into the County.
- (5) "Installation permit" means an emissions permit issued by the department to install and operate a solid fuel burning device within the County.
- (6) "EPA method" means 40 CFR Part 60, Subpart AAA or 40 CFR Part 60 Subpart QQQQ.
- (7) "Fireplace" means a solid fuel burning device with an air-to-fuel ratio of greater than thirty which is a permanent structural feature of a building. A fireplace is made up of a concealed masonry or metal flue, and a masonry or metal firebox enclosed in decorative masonry or other building materials.
- (8) "New solid fuel burning device" means any solid fuel burning device installed, manufactured, or offered for sale inside the Missoula Air Stagnation Zone after July 1, 1986 or outside the Missoula Air Stagnation Zone in Missoula County after May 14, 2010.
- (9) "Oregon method" means Oregon Department of Environmental Quality "Standard Method for Measuring the Emissions and Efficiencies of Woodstoves", Sections l through 8 and O.A.R. Chapter 340. Division 21 Sections 100, 130, 140, 145, 160, 161, 163, 164, 165.
- (10) "Pellet stove" means a solid fuel burning device designed specifically to burn pellets or other non-fossil biomass pellets that is commercially produced, incorporates induced air flow, is installed with an automatic pellet feeder, and is a free-standing room heater or fireplace insert.

- (11) "Seeley Lake Wood Stove Zone" means the area defined by the Seeley Lake Wood Stove Zone map in Appendix A.
- (12) "Solid fuel burning device" means any fireplace, fireplace insert, woodstove, wood burning heater, wood fired boiler, coal-fired furnace, coal stove, or similar device burning any solid fuel used for aesthetic, cooking, disposal, or heating purposes, that burns less than 1,000,000 BTU's per hour.
- (13) "Sole source of heat" means one or more solid fuel burning devices that:
  - (a) constitute the only source of heat in a private residence for purpose of space heating, or
  - (b) constitutes the main source of heat in a private residence where the residence is equipped with a heating system that is only minimally sufficient to keep the plumbing from freezing.
- (14) "Woodstove" means a wood fired appliance with a heat output of less than 40,000 BTU per hour with a closed fire chamber that maintains an air-to-fuel ratio of less than thirty during the burning of 90 percent or more of the fuel mass consumed in a low firing cycle. The low firing cycle means less than or equal to 25 percent of the maximum burn rate achieved with doors closed or the minimum burn achievable, whichever is greater. Wood fired forced air combustion furnaces that primarily heat living space, through indirect heat transfer using forced air duct work or pressurized water systems are excluded from the definition of "woodstove".

#### Rule 9.103 - Fuels

(1) Within Missoula County a person may not burn any material in a solid fuel burning device except uncolored newspaper, untreated wood and lumber, and products manufactured for the sole purpose of use as fuel. Products manufactured or processed for use as fuels must conform to any other applicable provision of this Program.

#### Rule 9.104 - Non-Alert Visible Emission Standards

- (1) A person owning or operating a solid fuel burning device may not cause, allow, or discharge emissions from such device that are of an opacity greater than forty (40) percent.
- (2) The provisions of this section do not apply to emissions during the building of a new fire, for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.

## Subchapter 2 – Permits

#### Rule 9.201 - Swan River Watershed Exempt From Subchapter 2 Rules

(1) Chapter 9 Subchapter 2 does not apply to the Swan River watershed of northern Missoula County (also described as those portions of Airshed 2 which lie inside Missoula County.)

#### Rule 9.202 - Permits Required for Solid Fuel Burning Devices

- (1) After July 1, 1986, a person may not install or use any new solid fuel burning device in any structure within the Air Stagnation Zone without an Installation permit.
- (2) After May 14, 2010 a person may not install or use a new solid fuel burning device in any structure within Missoula County without an installation permit.

#### Rule 9.203 - Installation Permit Requirements Inside the Air Stagnation Zone

- (1) Inside the Air Stagnation Zone, the department may only issue installation permits for the following solid fuel burning devices:
  - (a) Pellet stoves with emissions that do not exceed 1.0 gram per hour weighted average when tested in conformance with the EPA method (Subpart AAA).
  - (b) Pellet fueled central heaters that:

- (i) meet the 2020 EPA Method (Subpart QQQQ) standards; and
- (ii) have particulate matter emissions less than or equal to 0.1 pounds per million Btu heat output for each individual burn rate, and
- (iii) have permanent label affixed specifying the EPA standard met.
- (c) Solid fuel burning devices installed in a licensed mobile food service establishment if the following conditions are met.
  - (i) The mobile food service establishment must have a current Montana food purveyor's license. Permit will be considered automatically revoked if the Montana food purveyor's license lapses.
  - (ii) Mobile food trailer or vehicle must only be used for food preparation purposes.
  - (iii) The mobile food vendor may not operate the solid fuel burning device in Missoula County from November 1 through the end of February each winter.
  - (iv) The mobile food vendor shall not operate more than 7 consecutive days at any one location in Missoula County.
  - (v) The permitted solid fuel burning device must not create a nuisance. The department may revoke the installation permit and require the removal of the solid fuel burning device for a licensed mobile food service establishment if the department determines that the solid fuel burning device creates a nuisance.
- (2) An installation permit expires 180 days after issuance unless a final inspection is conducted or unless the department receives adequate documentation to ensure the type of device, and installation are in compliance with the provisions of this Program.
- (3) New solid fuel burning devices may not be installed or used with a flue damper unless the device was so equipped when tested in accordance with Rule 9.401.

#### Rule 9.204 - Installation Permit Requirements Inside the Seeley Lake Wood Stove Zone

- (1) Inside the Seeley Lake Wood Stove Zone, the department may only issue solid fuel burning device installation permits for:
  - (a) Pellet stoves with emissions that do not exceed 2.0 gram per hour when labeled and tested in conformance with the EPA method (Subpart AAA). Pellet stoves must be 70% energy efficient or greater using the EPA method (Subpart AAA).
  - (b) Solid fuel burning devices with emissions that do not exceed 2.0 grams per hour when tested with crib wood or solid fuel burning devices with emissions that do not exceed 2.5 grams per hour when tested with cord wood. The solid fuel burning devices must be labeled and tested in accordance with the EPA method (Subpart AAA). Solid fuel burning devices must be 70% energy efficient or greater using the EPA method (Subpart AAA).
  - (c) Central heaters that:
    - (i) meet the 2020 EPA Method (Subpart QQQQ) standards; and
    - (ii) have particulate matter emissions less than or equal to 0.15 pounds per million Btu heat output for each individual burn rate, and
    - (iii) have permanent label affixed specifying the EPA standard met.
- (2) An installation permit expires 180 days after issuance unless a final inspection is conducted or unless the department receives adequate documentation to ensure the type of device, and installation are in compliance with the provisions of this Program.
- (3) Solid fuel burning devices approved for installation must be installed, maintained and operated in the same condition under which they were tested.

# Rule 9.205 - Installation Permit Requirements outside the Air Stagnation Zone and outside the Seeley Lake Wood Stove Zone

- (1) Outside the Missoula Air Stagnation Zone and outside the Seeley Lake Wood Stove Zone, only the following solid fuel burning devices may be installed in Missoula County.
  - (a) A solid fuel burning device with emissions less than or equal to 4.5 grams per hour weighted average when labeled and tested in accordance with the EPA method (Subpart AAA).
  - (b) Central heaters that:
    - (i) meet the 2020 EPA Method (Subpart QQQQ) standards; and
    - (ii) have particulate matter emissions less than or equal to 0.15 pounds per million Btu heat output for each individual burn rate, and
    - (iii) have permanent label affixed specifying the EPA standard met.
  - (c) A solid fuel burning device not included in (a), (b), or (c) above which has been tested by an independent lab using an alternative testing method approved by the department that shows it has a particulate emission rate of less than or equal to 4.5 grams per hour. Prior to approval for installation, testing methods used to determine compliance with this emission rate and sufficient documentation to show the device meets the emission requirements must be submitted to the department. Approval of the alternative testing method is at the sole discretion of the department.
  - (d) Solid fuel burning devices installed in a licensed mobile food service establishment if the following conditions are met.
    - The mobile food service establishment must have a current Montana food purveyor's license. Permit will be considered automatically revoked if the Montana food purveyor's license lapses.
    - (ii) Mobile food trailer or vehicle must only be used for food preparation purposes.
    - (iii) The mobile food vendor may not operate the solid fuel burning device in Missoula County from November 1 through the end of February each winter.
    - (iv) The mobile food vendor shall not operate more than 7 consecutive days at any one location in Missoula County.
    - (v) The permitted solid fuel burning device must not create a nuisance. The department may revoke the installation permit and require the removal of the solid fuel burning device for a licensed mobile food service establishment if the department determines that the solid fuel burning device is creates a nuisance.
- (2) An installation permit expires 180 days after issuance unless a final inspection is conducted or the department receives adequate documentation to insure the type of device and installation comply with the provisions of this program.
- (3) New solid fuel burning devices may not be installed or used with a flue damper unless the device was so equipped when tested in accordance with Rule 9.401.
- (4) Solid fuel burning devices approved for installation must be installed, maintained and operated in the same condition under which they were tested.

#### **Rule 9.206 - Alert Permits**

- (1) Those woodstoves that have a valid alert permit issued by the department may be operated during a Stage I Air Alert subject to the opacity limitations in Rule 9.302.
- (2) The department may issue a new alert permit for a pellet stove if the emissions do not exceed 1.0 gram per

hour weighted average when tested in conformance with the EPA method.

- (3) The department may renew an alert permit for a woodstove that has emissions that do not exceed 6.0 grams per hour weighted average when tested using the Oregon method or 5.5 grams per hour weighted average when tested using the EPA method if the original application for an alert permit was received prior to June 30, 1988 and the permit has never lapsed.
- (4) The department may renew an alert permit for a woodstove that has emissions that do not exceed 4.0 grams per hour weighted average when tested using the Oregon Method or 4.1 grams per hour when tested using the EPA method if the original application for the Alert permit was received prior to October 1, 1994 and the permit has never lapsed.
- (5) Before renewing an alert permit, the department may require information to determine if the woodstove is capable of meeting emission requirements. If an inspection of the appliance during operation is not allowed by the applicant, the department shall require evidence that any non-durable parts (e.g. catalytic combustor, gaskets, by-pass mechanisms) have been replaced as necessary to meet applicable emission limitations.
- (6) To qualify for an alert permit or a renewal, catalyst-equipped woodstoves must be equipped with a permanent provision to accommodate a commercially available temperature sensor that can monitor combustor gas stream temperature within or immediately downstream (within 1.0 inch or 2.5 cm) of the combustor surface.
- (7) An alert permit is valid for two years for any woodstove that uses a catalyst or other nondurable part as an integral part, and five years for other devices.

#### **Rule 9.207 - Sole Source Permits**

- (1) A solid fuel burning device with a valid sole source permit issued by the department may be operated during Stage I Air Alerts and Stage II Warnings subject to the opacity limitations of Rule 9.302.
- (2) Inside the Air Stagnation Zone the department may only issue a new sole source permit for a pellet stove that:
  - (a) constitutes the sole source of heat in a private residence; and
  - (b) emits less than 1.0 gram per hour weighted average when tested using the EPA method.
- (3) Inside Impact Zone M and outside the Air Stagnation Zone, the department may only issue a sole source permit for a solid fuel burning device that:
  - (a) constitutes the sole source of heat in a private residence; and
  - (b) was a sole source of heat prior to May 14, 2010, or the property is not served by an electric utility.
- (4) Inside the Air Stagnation Zone the department may renew a sole source permit for a solid fuel burning device that constitutes the sole source of heat in a private residence if the solid fuel burning device is:
  - (a) a pellet stove that emits less than 1.0 gram per hour weighted average when tested using the EPA method; or
  - (b) a woodstove that has a continuously renewed sole source permit originally issued prior to July 1, 1985.
- (5) In the Air Stagnation Zone, a sole source permit is not eligible for renewal when the ownership of the property is transferred from person to person.
- (6) In the Air Stagnation Zone, a sole source permit is valid for one year beginning July 1st through the last day of June the following year.
- (7) In Impact Zone M but outside the Air Stagnation Zone, a sole source permit is valid until the property changes ownership or another method of heating is installed for the structure.

#### **Rule 9.208 - Special Need Permits**

- (1) Woodstoves with a valid special need permit issued by the department may be used during an Alert subject to the opacity limitations of Rule 9.302.
- (2) A person who demonstrates an economic need to burn solid fuel for space heating purposes by qualifying for energy assistance according to economic guidelines established by the U.S. Office of Management and Budget under the Low Income Energy Assistance Program (L.I.E.A.P.), as administered in Missoula County by the District XI Human Resources Development Council, is eligible for a Special Need permit.
- (3) Special need permits may be renewed providing the applicant meets the applicable need and economic guidelines at the time of application for renewal.
- (4) Special need permits are issued at no cost to the applicant.
- (5) A special need permit is valid for up to one (1) year from the date it is issued.

#### **Rule 9.209 - Temporary Sole Source Permit**

- (1) Woodstoves with a valid temporary sole source permit may be used during Stage 1 Air Alerts and Stage 2 Warnings, subject to the opacity limitations of Rule 9.302.
- (2) A person may apply for a temporary sole source permit in an emergency situation if their solid fuel burning devices do not qualify for a permit under Rule 9.204 or 9.205. An emergency situation includes, but is not limited to, the following situations:
  - (a) where a person demonstrates his furnace or central heating system in inoperable other than through his own actions;
  - (b) where the furnace or central heating system is involuntarily disconnected from its energy source by a utility or fuel supplier; or
  - (c) where the normal fuel or energy source is unavailable for any reason.
- (3) The department may issue a temporary permit if it finds that:
  - (a) the emissions proposed to occur do not constitute a danger to public health or safety;
  - (b) compliance with the air stagnation plan and Rule 9.302(1) would produce hardship without equal or greater benefits to the public; and
  - (c) compliance with the air stagnation plan and Rule 9.302(1) would create unreasonable economic hardship to the applicant or render the residence as equipped severely uncomfortable for human habitation, or cause damage to the building or its mechanical or plumbing systems.
- (4) The department may place conditions on a temporary permit to insure that the permittee is in compliance with the Program when the permit expires.
- (5) The department shall arrange for an applicant interview to be conducted within five (5) working days of receipt of a written request for a temporary permit and shall render its decision within ten (10) working days of receipt of the written request.
- (6) Application to and denial by the department for a temporary permit does not prevent the applicant from applying to the Control Board for a variance under the appropriate provisions of this Program.
- (7) A temporary permit issued pursuant to this section is valid for a period determined by the department, but may not exceed one (1) year and is not renewable.

#### **Rule 9.210 - Permit Applications**

- (1) The department shall issue a permit pursuant to the regulations of this chapter when the applicant has submitted information, on forms supplied by the department, which indicates compliance with this chapter, local building codes, and other applicable provisions of this Program.
- (2) The department shall decide whether to issue a permit or permit renewal within ten (10) working days after receiving an application.

#### **Rule 9.211 - Revocation or Modification of Permit**

- (1) A permit issued under this chapter may be revoked for a violation of:
  - (a) A condition of the permit;
  - (b) A provision of this Program;
  - (c) An applicable regulation, rule or standard adopted pursuant to the FCAA; or
  - (d) A provision of the Clean Air Act of Montana.
- (2) A permit issued under this chapter may be modified for the following reasons:
  - (a) Changes in an applicable provision of this Program adopted by the Control Board, or rules adopted under the Clean Air Act of Montana;
  - (b) When the department or Control Board determines modifications are necessary to insure compliance with the provisions of this Program or an implementation plan approved by the Control Board.
- (3) The department shall notify the permittee in writing of its intent to revoke or modify the permit. The department's decision to revoke or modify a permit becomes final unless the permittee requests, in writing, an administrative review within fifteen (15) days after receipt of the department's notice. Departmental receipt of a written request for a review initiates the department's appeal process outlined in Chapter 14 of this Program and postpones the effective date of the of the department's decision until the conclusion of the administrative appeals process.

#### Rule 9.212 - Transfer of Permit

 A permit issued under this chapter may not be transferred from one location to another or from one solid fuel burning device to another. A permit may not be transferred from one person to another, unless reissued by the department.

## Subchapter 3 – Alert and Warning Requirements

#### Rule 9.301 - Applicability

(1) The regulations of Subchapter 3 apply within the Missoula Air Stagnation Zone and Impact Zone M.

#### Rule 9.302 - Prohibition of Visible Emissions during Air Pollution Alerts and Warnings

- (1) Within the Air Stagnation Zone, a person owning, operating or in control of a solid fuel burning device may not cause, allow, or discharge any visible emission from such device during an air pollution Alert declared by the department pursuant to Rule 4.104 unless a sole source permit, a Temporary Sole Source permit, a special need permit, or an Alert permit has been issued for such device pursuant to this chapter.
- (2) Within the Air Stagnation Zone, a person owning, operating or in control of a solid fuel burning device for which a sole source permit or special need permit has been issued may not cause, allow, or discharge any emissions from such device that are of an opacity greater than twenty (20) percent during an air pollution Alert declared by the department pursuant to Rule 4.104. The provisions of this paragraph do not apply to emissions during the building of a new fire or for refueling for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.
- (3) Within the Air Stagnation Zone, a person owning, operating, or in control of a solid fuel burning device for which an Alert class permit has been issued may not cause, allow, or discharge any emissions from such device that are of an opacity greater than ten (10) percent during an air pollution Alert declared by the department pursuant to Rule 4.104. The provisions of this subsection do not apply to emissions during the building of a new fire, or for refueling for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.

- (4) When declaring a Stage 1 Air Alert, the department shall take reasonable steps to publicize that information and to make it reasonably available to the public at least three (3) hours before initiating any enforcement action for a violation of this section.
- (5) Every person operating or in control of a solid fuel burning device within the Air\_Stagnation Zone has a duty to know when an air pollution Alert has been declared by the department.
- (6) Within Impact Zone M, a person owning, operating, or in control of a solid fuel burning device may not cause, allow, or discharge any visible emissions from such device during an air pollution Warning declared by the department pursuant to Rule 4.104 unless such device has a sole source permit or a temporary sole source permit. Within Impact Zone M, a person owning, operating or in control of a solid fuel burning device for which a sole source permit has been issued may not cause, allow, or discharge any emissions from such device that are of an opacity greater than twenty (20) percent during an air pollution Warning declared by the department pursuant to Rule 4.104. The provisions of this paragraph do not apply to emissions during the building of a new fire, for a period or periods aggregating no more than ten (10) minutes in any four (4) hour period.

#### Subchapter 4 – Emissions Certification

#### **Rule 9.401 - Emissions Certification**

- (1) The Control Board hereby adopts the Oregon method for the sole purpose of establishing an uniform procedure to evaluate the emissions and efficiencies of woodstoves for compliance with the emission limitation imposed in Rules 9.203 and 9.204. Beginning January 1, 1988 the department shall also use the EPA method for the purpose of establishing a uniform procedure to evaluate the emissions and efficiencies of woodstoves.
- (2) Devices exempted from the definition of "woodstove" listed in the Oregon method or "wood heater" listed in the EPA method may not be issued an Alert class or Installation class emissions certification unless tested to either method using modifications in the test procedure approved by the department.
- (3) The department shall accept as evidence of compliance with the emission limitation imposed in Rules 9.203, 9.204, 9.205 and 9.501, labels affixed to the stove in compliance with OAR 340-21-150, 40 CFR Part 60, Subpart AAA, Section 60.536, or documentation that, in the opinion of the department, is sufficient to substantiate that the specific model, design, and specifications of the stove meet standards specified in Rules 9.203, 9.204, 9.205 and 9.501.

#### Rule 9.402 - Sale of New Solid Fuel Burning Devices

- (1) New solid fuel burning devices sold or offered for sale in Missoula County shall be labeled as follows:
  - (a) A clearly visible, legible label must be placed on each device offered for sale;
  - (b) The label must clearly state where the solid fuel burning device can legally be installed in Missoula County, the label must use language approved by the department, and the label must include an informational contact phone number for the Missoula City-County Health Department; and
  - (c) The lettering on the label must be in block letters no less than 20-point bold type and the letters and numbers shall be in a color that contrasts with the background.

## Subchapter 5 – Solid Fuel Burning Device Removal Program

#### Rule 9.501 - Removal of Solid Fuel Burning Devices Upon Transfer of the Property.

(1) After (Insert date of approval by State DEQ), before a property is sold, transferred or conveyed in the Air Stagnation Zone all solid fuel burning devices contained on the property that is sold, transferred or conveyed must be removed from the property or rendered permanently inoperable unless they meet the specifications listed in Section (2) of this rule.

- (2) The following solid fuel burning devices may remain on a property that is sold, transferred or conveyed in the Air Stagnation Zone.
  - (a) Pellet Stoves installed with a valid permit if the emissions do not exceed:
    - (i) 6.0 grams per hour weighted average when tested in conformance with the Oregon Method; or
    - (ii) 5.5 grams per hour weighted average when tested in conformance with the EPA Method.
  - (b) Commercially manufactured pellet stoves:

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- (i) that have not been tested, but were installed prior to October 1, 1994; or
- (ii) with emissions that do not exceed 1.0 grams per hour when tested in conformance with the EPA Method.
- (c) Fireplaces meeting the definition of Rule 9.102(6).
- (d) Wood-fired, forced-air combustion furnaces that primarily heat living space, through indirect heat transfer using forced air duct work or pressurized water systems.

## Subchapter 6 – Contingency Measures

# Rule 9.601 - Contingency Measures listed below in this subchapter go into effect if the non-attainment area fails to attain the NAAQS or to make reasonable progress in reducing emissions (see Chapter 3).

- (1) Rule 9.302(1) is modified to delete Alert class permitted devices, and Rules 9.302(3) and 9.205(1) are void.
- (2) All portions of this chapter that allow Alert permits to burn during alerts or warnings are hereby rescinded.