

ARTICLE VIII

SOLID FUEL BURNING DEVICE STANDARDS

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EFFECTIVE: July 15, 2023

SECTION 8.01 PURPOSE

Article VIII establishes emission standards, certification standards and procedures, curtailment rules, and fuel restrictions for solid fuel burning devices in order to attain the National Ambient Air Quality Standards for fine particulate matter (PM_{2.5}) and to further the policy of the Agency as stated in SRCAA Regulation I, Article I, Section 1.01.

SECTION 8.02 APPLICABILITY

The provisions of Article VIII apply to solid fuel burning devices in all areas of Spokane County.

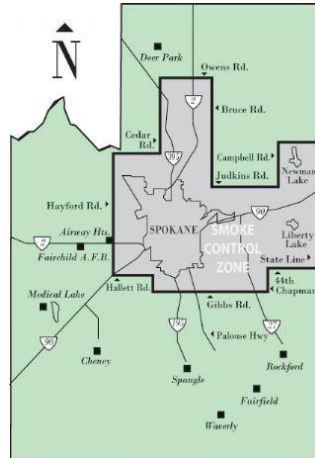
SECTION 8.03 DEFINITIONS

- (A) Unless a different meaning is clearly required by context, words and phrases used in Article VIII shall have the following meaning:
- (1) Agency means the Spokane Regional Clean Air Agency.
 - (2) Coal stove means an enclosed, coal burning appliance capable of and intended for residential space heating, domestic water heating or indoor cooking, which has all the following characteristics:
 - (a) An opening for loading coal which is located near the top or side of the appliance; and
 - (b) An opening for emptying ash which is located near the bottom or the side of the appliance; and
 - (c) A system which admits air primarily up and through the fuel bed; and
 - (d) A grate or other similar device for shaking or disturbing the fuel bed; and

- (e) Listing by a nationally recognized safety testing laboratory for use of coal only, except for coal ignition purposes; and
- (f) Not configured or capable of burning cordwood.
- (3) Commercial establishment is defined to include an establishment possessing a valid business license issued by a governmental entity.
- (4) Cook stove means an appliance designed with the primary function of cooking food and containing an integrally built in oven with a volume of one (1) cubic foot or greater where the cooking surface measured in square inches or square feet is one and one-half times greater than the firebox measured in cubic inches or cubic feet (e.g. a firebox of two (2) cubic feet would require a cooking surface of at least three (3) square feet). It must have an internal temperature indicator and oven rack, around which the fire is vented, as well as a shaker grate ash pan and an ash cleanout below the firebox. Any device with a fan or heat channels used to dissipate heat into the room shall not be considered a cook stove. A portion of at least four sides of the oven must be exposed to the flame path during the oven heating cycle, while a flue gas bypass will be permitted for temperature control. Devices designed or advertised as room heaters that also bake or cook do not qualify as cook stoves.
- (5) Ecology means the Washington State Department of Ecology.
- (6) Emergency Power Outage means any natural or human-caused event beyond the control of a person that leaves the person's residence or commercial establishment temporarily without an adequate source of heat other than the solid fuel burning device; or a natural or human-caused event for which the governor declares an emergency in an area under RCW 43.06.010(12). Emergency power outage ends once power is restored by the utility provider.
- (7) EPA means the United States Environmental Protection Agency or the Administrator of the United States Environmental Protection Agency or his/her designated representative.
- (8) EPA Certified means a woodstove certified and labeled by EPA under 40 CFR Part 60, Subpart AAA - Standards of Performance for New Residential Wood Heaters
- (9) Fireplace means a permanently installed masonry fireplace; or a factory-built solid fuel burning device designed to be used with an air-to-fuel ratio greater than or equal to thirty-five to one and without features to control the inlet air-to-fuel ratio other than doors or windows such as may be incorporated into the fireplace design for reasons of safety, building code requirements, or aesthetics.
- (10) National Ambient Air Quality Standards (NAAQS; 40 CFR Part 50 – National Primary and Secondary Ambient Air Quality Standards) means outdoor air quality standards established by the United States Environmental Protection Agency under authority of the federal Clean Air Act. EPA set standards for six principal air pollutants, called “criteria” pollutants, under the NAAQS. The criteria pollutants are carbon monoxide, sulfur dioxide, nitrogen dioxide, lead, ozone and particulate matter (PM_{2.5} and PM₁₀).

- (11) Non-affected pellet stove means that a pellet stove has an air-to-fuel ratio equal to or greater than 35:1 when tested by an accredited laboratory in accordance with methods and procedures specified by the EPA in 40 CFR Part 60, Appendix A, Method 28A Measurement of Air to Fuel Ratio and Minimum Achievable Burn Rates for Wood-Fired Appliances, as amended through July 1, 1990.
- (12) Nonattainment Area means a clearly delineated geographic area which has been designated by the Environmental Protection Agency because it does not meet, or it affects ambient air quality in a nearby area that does not meet, a national ambient air quality standard or standards for one or more of the criteria pollutants defined in 40 CFR Part 50, National Primary and Secondary Ambient Air Quality Standards.
- (13) Oregon Certified means a woodstove manufactured prior to 1989 which meets the “Oregon Department of Environmental Quality Phase 2” emissions standards contained in Subsections (2) and (3) of Section 340-21-115, and certified in accordance with Oregon Administrative Rules, Chapter 340, Division 21 – Woodstove Certification dated November 1984.
- (14) PM_{2.5} or Fine Particulate Matter means particulate matter with a nominal aerodynamic diameter of two and one half (2.5) micrometers and smaller measured as an ambient mass concentration in units of micrograms per cubic meter of air.
- (15) PM₁₀ means particulate matter with a nominal aerodynamic diameter of ten (10) micrometers and smaller measured as an ambient mass concentration in units of micrograms per cubic meter of air.
- (16) Seasoned Wood means wood of any species that has been sufficiently dried so as to contain twenty percent or less moisture by weight.
- (17) Solid Fuel Burning Device means a device that is designed to burn wood, coal, or any other nongaseous or nonliquid fuels, and includes woodstoves, coal stoves, cook stoves, pellet stoves, and fireplaces, or any similar device burning any solid fuel. It includes devices used for aesthetic or space-heating purposes in a private residence or commercial establishment, which have a heat input less than one million British thermal units per hour.
- (18) Smoke Control Zone means the Spokane/Spokane Valley Metropolitan area and surrounding geographic areas affected by combustion smoke from solid fuel burning devices, after consideration of the contribution of devices that are not Washington certified devices, population density and urbanization, and effect on the public health (RCW 70A.15.3600(2)(a), (b) and (c)), is defined as follows:
Sections 1 through 6, Township 24 N, Range 42 E;
Townships 25 and 26 N, Range 42 E; Sections 1 through 24, Township 24 N, Range 43 N; Townships 25, 26 and 27 N, Range 43 E; Sections 19 through 36, Township 28 N, Range 43 E; Sections 1 through 24, Township 24 N, Range 44 E; Township 25 N, Range 44 E; Sections 19 through 36, Township 26 N,

Range 44 E; Township 25 N, Range 45 E; Sections 1 through 4, 9 through 16 and 19 through 36, Township 26 N, Range 45 E; Sections 33 through 36, Township 27 N, Range 45 E; Sections 6, 7, 18, 19, 30, and 31, Township 25 N, Range 46 E; Sections 6, 7, 18, 19, 30 and 31, Township 26 N, Range 46 E; Section 31, Township 27 N, Range 46 E. See graphic below:



- (19) Treated Wood means wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects, fungus or weathering.
- (20) Washington Certified Device means a solid fuel burning device, other than a fireplace, which has been determined by Ecology to meet emission performance standards, pursuant to RCW 70A.15.3530 and WAC 173-433-100(3).
- (21) Woodstove means an enclosed solid fuel burning device capable of and intended for residential space heating and domestic water heating that meets the following criteria contained in 40 CFR Part 60, Subpart AAA - Standards of Performance for New Residential Wood Heaters as amended through July 1, 1990:
 - (a) An air-to-fuel ratio in the combustion chamber averaging less than 35:1 as determined by EPA Method 28A Measurement of Air to Fuel Ratio and Minimum Achievable Burn Rates for Wood-Fired Appliances; and
 - (b) A useable firebox volume of less than twenty (20) cubic feet; and
 - (c) A minimum burn rate less than 5 kg/hr as determined by EPA Method 28 Certification and Auditing of Wood Heaters; and
 - (d) A maximum weight of 800 kg, excluding fixtures and devices that are normally sold separately, such as flue pipe, chimney, and masonry components not integral to the appliance.

Any combination of parts, typically consisting of but not limited to: doors, legs, flue pipe collars, brackets, bolts and other hardware,

when manufactured for the purpose of being assembled, with or without additional owner supplied parts, into a woodstove, is considered a woodstove.

SECTION 8.04 EMISSION PERFORMANCE STANDARDS

The Agency adopts Chapter 173-433 WAC Solid Fuel Burning Devices by reference and 40 CFR Part 60, Subpart AAA Standards of Performance for New Residential Wood Heaters by reference.

SECTION 8.05 OPACITY STANDARDS

- (A) Opacity Limit. A person shall not cause or allow emission of a smoke plume from any solid fuel burning device to exceed an average of 20% opacity for six (6) consecutive minutes in any one (1) hour period.
- (B) Test Method and Procedures. EPA Reference Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources – shall be used to determine compliance with Section 8.05(A).
- (C) Enforcement. Smoke visible from a chimney, flue or exhaust duct in excess of the opacity limit shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that the smoke was not caused by an applicable solid fuel burning device. The provisions of this requirement shall not apply during the starting of a new fire for a period not to exceed twenty (20) minutes in any four (4) hour period.

SECTION 8.06 PROHIBITED FUEL TYPES

- (A) Prohibited Materials. A person shall not cause or allow any of the following materials to be burned in a solid fuel burning device:
 - (1) Garbage;
 - (2) Treated wood (defined in Section 8.03);
 - (3) Plastic products;
 - (4) Rubber products;
 - (5) Animals;
 - (6) Asphaltic products;
 - (7) Waste petroleum products;
 - (8) Paints;
 - (9) Any substance, other than properly seasoned fuel wood, or coal with sulfur content less than 1.0% by weight burned in a coal stove, which normally emits dense smoke or obnoxious odors; or

- (10) Paper, other than an amount of non-colored paper necessary to start a fire.

SECTION 8.07 CURTAILMENT (BURN BAN)

- (A) Curtailment. Except as provided in Section 8.08, no person shall operate a solid fuel burning device within a defined geographical area under any of the following conditions:
 - (1) Air Pollution Episode. Whenever Ecology has declared curtailment under an alert, warning, or emergency air pollution episode for the geographical area pursuant to Chapter 173-435 WAC and RCW 70A.15.6010.
 - (2) Stage 1 Burn Ban. Whenever the Agency has declared curtailment under a first stage of impaired air quality for the Smoke Control Zone or other geographical area unless the solid fuel burning device is one of the following: a nonaffected pellet stove; or a Washington Certified Device; or an EPA Certified Woodstove; or an Oregon Certified Woodstove.
 - (a) In Spokane County as allowed by RCW 70A.15.3580(1)(b)(i) a first stage of impaired air quality is reached and curtailment may be declared when the Agency determines that particulate matter with a nominal aerodynamic diameter of two and one half (2.5) micrometers and smaller (PM_{2.5}), measured as an ambient mass concentration at any location within Spokane County using a method which has been determined by Ecology or the Agency to have a reliable correlation to the federal reference method, CFR Title 40 Part 50 Appendix L, and updated hourly as a twenty-four (24) hour running average, is likely to exceed thirty-five (35) micrograms per cubic meter of air within forty-eight (48) hours based on forecasted meteorological conditions.
 - (3) Stage 2 Burn Ban. Whenever the Agency has declared curtailment under a second stage of impaired air quality for the Smoke Control Zone or other geographical area. In Spokane County as allowed by RCW 70A.15.3580(1)(c)(ii) a second stage of impaired air quality is reached and curtailment may be declared whenever all of the following criteria are met:
 - (a) Issuing a Stage 2 Burn Ban Following a Stage 1 Burn Ban.
 - 1. A first stage of impaired air quality has been in force for a period of twenty-four (24) hours or longer and, in the Agency's judgment, has not reduced the PM_{2.5} ambient mass concentration, measured as a twenty-four (24) hour running average, sufficiently to prevent it from exceeding thirty-five (35) micrograms per cubic meter of air at any location inside Spokane County within twenty-four (24) hours; and
 - 2. A twenty-four (24) hour running average PM_{2.5} ambient mass concentration equal to or greater than twenty-five (25) micrograms per cubic meter of air is measured at any location inside Spokane County using a method which has

been determined by Ecology or the Agency to have a reliable correlation to the federal reference method, 40 CFR Part 50 Appendix L, or equivalent; and

3. The Agency does not expect meteorological conditions to allow ambient mass concentrations of PM_{2.5} measured as a twenty-four (24) hour running average to decline below twenty-five (25) micrograms per cubic meter of air for a period of twenty-four (24) hours or more from the time that it is measured at that concentration.
- (b) Issuing a Stage 2 Burn Ban Without First Declaring a Stage 1 Burn Ban.
1. A second stage burn ban may be issued without an existing first stage burn ban as allowed by RCW 70A.15.3580 (1)(c)(ii) whenever all of the following criteria are met:
 - a. The ambient mass concentration of PM_{2.5} at any location inside Spokane County has reached or exceeded twenty-five (25) micrograms per cubic meter, measured as a running twenty-four (24) hour average using a method which has been determined, by Ecology or the Agency, to have a reliable correlation to the federal reference method, 40 CFR Part 50 Appendix L, or equivalent; and
 - b. Meteorological conditions have caused PM_{2.5} ambient mass concentrations to rise rapidly; and
 - c. The Agency predicts that meteorological conditions will cause PM_{2.5} ambient mass concentrations measured as a twenty-four (24) hour running average to exceed thirty-five (35) micrograms per cubic meter of air within twenty-four (24) hours; and
 - d. Meteorological conditions are highly likely to prevent smoke from dispersing sufficiently to allow PM_{2.5} ambient mass concentrations to decline below twenty-five (25) micrograms per cubic meter of air within twenty-four (24) hours.
 2. Issuance of a second stage burn ban without an existing first stage burn ban shall require the Agency to comply with RCW 70A.15.3580(3).
- (4) The following matrix graphically illustrates the applicability of SRCAA Regulation I, Article VIII, Sections 8.07(A)(1) – (3).

Burn Condition	Impaired Air Quality		Air Pollution Episode
	First Stage Burn Ban	Second Stage Burn Ban	
Type of Device			
EPA Certified Woodstove	Allowed	Prohibited	Prohibited
Oregon Certified Woodstove	Allowed	Prohibited	Prohibited
Pellet Stove (nonaffected)	Allowed	Prohibited	Prohibited
Washington Certified Device	Allowed	Prohibited	Prohibited
All Other Devices	Prohibited	Prohibited	Prohibited

- (5) After July 1, 1995, if the limitation in RCW 70A.15.3600(2) is exercised, following the procedure in Section 8.09 (Procedure to Geographically Limit Solid Fuel Burning Devices), and the solid fuel burning device is not one of the following:
 - (a) A nonaffected pellet stove; or
 - (b) Washington Certified Device; or
 - (c) EPA Certified Woodstove; or
 - (d) Oregon Certified Woodstove.

- (B) Consideration. When determining whether to declare a curtailment under a stage of impaired air quality, the Agency shall consider the anticipated beneficial effect on ambient concentrations of PM_{2.5}, taking into account meteorological factors, the contribution of emission sources other than solid fuel burning devices, and any other factors deemed to affect the PM_{2.5} mass concentration.

- (C) Extinguish Device. Any person responsible for a solid fuel burning device which is subject to curtailment and is already in operation at the time curtailment is declared under an episode or a stage of impaired air quality shall extinguish that device by withholding new solid fuel for the duration of the episode or impaired air quality. Smoke visible from a chimney, flue or exhaust duct after a time period of three (3) hours has elapsed from the time of declaration of curtailment under an episode or a stage of impaired air quality shall constitute prima facie evidence of unlawful operation of an applicable solid fuel burning device. This presumption may be refuted by demonstration that smoke was not caused by an applicable solid fuel burning device.

- (D) Enforcement. The Agency, Ecology, Spokane Regional Health District, fire departments, fire districts, Spokane County Sheriff's Department, or local police having jurisdiction in the area may enforce compliance with solid fuel burning device curtailment after a time period of three (3) hours has elapsed from the time of declaration of curtailment under an episode or a stage of impaired air quality.

SECTION 8.08 EXEMPTIONS

- (A) Categories. The provisions of Section 8.07 shall not apply to any person who possesses a valid written exemption for his/her residence, issued by the Agency. The Agency may issue written exemptions for residences if any one of the following is demonstrated to the satisfaction of the Agency:
 - (1) Low Income. An economic need to burn solid fuel for residential space heating purposes by qualifying through Spokane Neighborhood Action Partners (SNAP) 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.).
 - (2) No Adequate Source of Heat. An exemption may be issued if all of the following apply:

- (a) The residence was constructed prior to July 1, 1992; and
- (b) The residence was originally constructed with a solid fuel burning device as a source of heat; and
- (c) A person in a residence does not have an adequate source of heat without using a solid fuel burning device (RCW 70A.15.3600(6)(a)).
 - 1. Adequate source of heat means the ability to maintain 70°F at a point three (3) feet above the floor in all normally inhabited areas of a dwelling (WAC 173-433-030(1)); and
 - 2. If any part of the heating system has been disconnected / removed, damaged, or is otherwise nonfunctional, the Agency shall base the assessment of the adequacy of design for providing an adequate source of heat in Section 8.08(A)(2)(c)1., above, on the system's capability prior to the disconnection/removal, damage, improper maintenance, malfunction, or occurrence that rendered the system nonfunctional.
- (d) A person's income level is not a determining factor in the approval or denial of an exemption under this provision. Exemptions based on income level are addressed in Section 8.08(A)(1).
- (3) Primary Heating Source Temporarily Inoperable. That his/her heating system, other than a solid fuel burning device, is temporarily inoperable for reasons other than his/her own actions. When applying for this exemption, the applicant must submit a compliance schedule for bringing his/her heating system, other than a solid fuel burning device, back into operation to be used as his/her primary heating source. Unless otherwise approved by the Agency, exemptions will be limited to thirty (30) calendar days. A person's income level is not a determining factor in the approval or denial of an exemption under this provision.
- (4) Emergency Power Outage. To prevent loss of life, health, or business, Section 8.07 does not prevent burning wood in a solid fuel burning device for heat during an emergency power outage that leaves a person's residence or commercial establishment temporarily without an adequate source of heat [RCW 70A.15.3580(5)(a)]. A written exemption is not required. A person must comply with Section 8.07 after a time period of three (3) hours after power is restored by utility provider. A person must comply with Section 8.05 and 8.06 at all times.
- (B) Exemption Duration and Renewals. Written exemptions shall be valid for a period determined by the Agency, which shall not exceed one (1) year from the date of issuance. Exemptions in Section 8.08(A)(1) and (2) may be renewed by the Agency, provided the applicant meets the applicable requirements at the time of exemption renewal. For renewals under Section 8.08(A)(1), the applicant must demonstrate the low income status is met each time application is made. Exemption requests may be denied by the Agency, regardless of the applicant's exemption history.

- (C) Fees. Exemption requests must be accompanied by fees specified in Article X, Section 10.10 and the Consolidated Fee Schedule. For exemptions which are requested and qualify under the low income exemption in Section 8.08(A)(1), the fee is waived.
- (D) One-Time, 10-Day Temporary Exemption.
 - (1) The Agency may issue one-time, 10-day temporary solid fuel burning device exemptions if persons making such requests qualify and provide all of the information below. Unless required otherwise by the Agency, such exemptions requests may be taken via telephone.
 - (a) Full name; and
 - (b) Mailing address; and
 - (c) Telephone number; and
 - (d) Acknowledgement that he/she believes he/she qualifies for an exemption pursuant to Section 8.08(A)(1), (2), or (3); and
 - (e) Physical address where the exemption applies; and
 - (f) Description of the habitable space for which the exemption is being requested; and
 - (g) Acknowledge that s/he has not previously requested such an exemption for the same physical address, except as provided below, and that all of the information provided is accurate.
 - (2) One-time, 10-day temporary solid fuel burning device exemptions are not valid for any physical address for which a one-time, 10-day temporary solid fuel burning device exemption has previously been issued unless a past exemption was issued for a residence under different ownership or there is a temporary breakdown that qualifies under Section 8.08(A)(3).
- (E) Residential and Commercial Exemption Limitations. Except for commercial establishments qualifying under Section 8.08(A)(3), (A)(4) or 8.08(D), exemptions are limited to residences. Exemptions are limited to normally inhabited areas of a residence, which includes areas used for living, sleeping, cooking and eating. Exemptions will not be issued for attached and detached garages, shops, and outbuildings. For commercial establishments, exemptions will be limited to areas identified in exemption approvals issued by the Agency pursuant to Section 8.08(A)(3) or 8.08(D).

SECTION 8.09 PROCEDURE TO GEOGRAPHICALLY LIMIT SOLID FUEL BURNING DEVICES

- (A) Solid Fuel Burning Devices Contribute to Air Quality Violation. If the EPA finds that the Spokane PM₁₀ Maintenance Area has violated a National Ambient Air Quality Standard for PM₁₀ and emissions from solid fuel burning devices are determined by the EPA, in consultation with Ecology and the Agency, to be a contributing factor to such failure or violation, then one (1) year after such determination, the use of solid fuel burning devices not meeting the standards set

forth in RCW 70A.15.3530 and WAC 173-433-100, is restricted to areas outside the Smoke Control Zone.

- (B) Notice of Determination. Within thirty (30) days of the determination pursuant to Section 8.09(A), the Agency shall publish a public notice in a newspaper of general circulation, informing the public of such determination and of the date by which such restriction on the use of solid fuel burning devices becomes effective.
- (C) Exemptions. Nothing in Section 8.09 shall apply to persons who have obtained an exemption pursuant to Section 8.08.

SECTION 8.10 RESTRICTIONS ON INSTALLATION AND SALES OF SOLID FUEL BURNING DEVICES

- (A) Installation of Solid Fuel Burning Devices. No person shall install a new or used solid fuel burning device that is not a Washington certified device in any new or existing building or structure unless the device is a cook stove or a device which has been rendered permanently inoperable.
- (B) Sale or Transfer of Solid Fuel Burning Devices. No person shall sell, offer for sale, advertise for sale, or otherwise transfer a new or used solid fuel burning device that is not a Washington certified device to another person unless the device is a cook stove or a device which has been rendered permanently inoperable (RCW 70A.15.3530(1)(a)).
- (C) Sale or Transfer of Fireplaces. No person shall sell, offer for sale, advertise for sale, or otherwise transfer a new or used fireplace to another person, except masonry fireplaces, unless such fireplace meets the 1990 United States environmental protection agency standards for wood stoves or equivalent standard that may be established by the state building code council by rule (RCW 70A.15.3530(1)(b)).
- (D) Sale or Transfer of Masonry Fireplaces. No person shall build, sell, offer for sale, advertise for sale, or otherwise transfer a new or used masonry fireplace, unless such fireplace meets Washington State building code design standards as established by the state building code council by rule (RCW 70A.15.3530(1)(c)).

SECTION 8.11 REGULATORY ACTIONS AND PENALTIES

A person violating this Article may be subject to the provisions of Article II, Section 2.11 – Penalties, Civil Penalties, and Additional Means for Enforcement.