

RULE 4901 WOOD BURNING FIREPLACES AND WOOD BURNING HEATERS (Adopted July 15, 1993; Amended July 17, 2003; Amended October 16, 2008; Amended September 18, 2014; Amended June 20, 2019; Amended May 18, 2023)

1.0 Purpose

The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices.

2.0 Applicability

This rule applies to:

- 2.1 Any person who manufactures, sells, offers for sale, or operates a wood burning fireplace, wood burning heater, or outdoor wood burning device.
- 2.2 Any person who sells, offers for sale, or supplies wood intended for burning in a wood burning fireplace or wood burning heater.
- 2.3 Any person who sells or transfers a real property.
- 2.4 Any person who installs a wood burning fireplace or wood burning heater.
- 2.5 Section 5.7.3 shall not become applicable until the effective date of the federal Environmental Protection Agency's (EPA) final and full approval of the California State Implementation Plan (SIP) as meeting the contingency measure requirements of the Clean Air Act section 172(c)(9) for San Joaquin Valley for the applicable PM2.5 National Ambient Air Quality Standards (NAAQS).

3.0 Definitions

- 3.1 APCO: the Air Pollution Control Officer of the San Joaquin Valley Unified Air Pollution Control District.
- 3.2 ASTM: the American Society for Testing and Materials.
- 3.3 Consumer: any person other than a distributor or a retailer who buys a wood burning fireplace, wood burning heater, or outdoor wood burning device.
- 3.4 Distributor: any person other than a manufacturer or a retailer who sells, offers for sale, or supplies wood burning fireplaces, wood burning heaters, or outdoor wood burning devices to retailers or others for resale.
- 3.5 EPA: the United States Environmental Protection Agency.

- 3.6 EPA Certified: any wood burning heater that meets the standards set forth in Title 40 Code of Federal Regulations (CFR), Part 60, Subpart AAA and labeled pursuant to those regulations.
- 3.7 Garbage: any solid, semisolid, and liquid wastes generated from residential, commercial, and industrial sources, including trash, refuse, rubbish, industrial wastes, asphaltic products, manure, vegetable or animal solid or semisolid wastes, and other discarded solid or semisolid wastes.
- 3.8 Low Mass Fireplace: any fireplace and attached chimney, as identified in ASTM E 2558-7, "Determining Particulate Matter Emissions from Fires in Low Mass Wood-burning Fireplaces," that can be weighed (including the weight of the test fuel) on a platform scale.
- 3.9 Manufacturer: any person who constructs or imports a wood burning fireplace or wood burning heater.
- 3.10 Masonry Heater: any site-built or site-assembled, wood burning heating device constructed mainly of masonry materials in which the heat from intermittent fires burned rapidly in its firebox is stored in its structural mass for slow release to the site. Such wood burning heating devices must meet all federal requirements and be designed and constructed per specifications set forth in ASTM E 1602-3, "Guide for Construction of Solid Fuel Burning Masonry Heaters."
- 3.11 New Wood Burning Heater: any wood burning heater that has not been sold, supplied, or exchanged for the first time by the manufacturer, the manufacturer's distributor or agency, or a retailer.
- 3.12 Normal Operating Conditions: the operation of a wood burning fireplace or wood burning heater as defined in this rule, except when a fire is started. Startup of a new fire shall not exceed 15 consecutive minutes in any consecutive four-hour period.
- 3.13 NSPS: New Source Performance Standard. For purposes of this rule the NSPS is the Code of Federal Regulations, Part 60, Title 40, Subpart AAA.
- 3.14 Outdoor Wood Burning Device: any wood burning fireplace, or other device designed to burn wood, and that is located outside of a building or structure. This includes, but is not limited to, burn bowls, fire rings/pits, and chimineas. This does not include fire pits at state parks, national parks, or national forests.
- 3.15 Paints: any exterior and interior house and trim paints, enamels, varnishes, lacquers, stains, primers, sealers, undercoaters, roof coatings, wood preservatives, shellacs, and other paints or paint-like products.

- 3.16 Paint Solvents: any organic solvents sold or used to thin paints or clean up painting equipment.
- 3.17 Pellet-Fueled Wood Burning Heater: any wood burning heater manufactured for the purpose of heating a space and is intended to operate on pellet fuel.
- 3.18 Pellet Fuel: includes, but is not limited to, compressed sawdust, compressed paper products, and compressed forest residue, wood chips and other waste biomass, ground nut-hulls and fruit pits, corn, and cotton seed.
- 3.19 Permanently Inoperable: modified in such a way that a wood burning heater can no longer operate as a wood burning heater.
- 3.20 PM: particulate matter. PM2.5 has an aerodynamic diameter equal to or less than 2.5 microns. PM10 has an aerodynamic diameter equal to or less than 10 microns.
- 3.21 Real Property: the land itself and anything that is permanently affixed to the land, such as buildings and structures.
- 3.22 Remodel: a physical modification to a fireplace or chimney that impacts the physical structure of the fireplace or chimney. Aesthetic modifications that do not affect the physical structure of the fireplace are not considered a remodel, i.e. installing decorative stone/tile in front of fireplace.
- 3.23 Retailer: any person engaged in the sale of wood burning fireplaces, wood burning heaters, or outdoor wood burning devices directly to the consumer.
- 3.24 Seasoned Wood: wood of any species that has been sufficiently dried so as to contain 20 percent or less moisture by weight.
- 3.25 Treated Wood: wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects or weathering.
- 3.26 Used Wood Burning Heater: any wood burning heater that has been used at least once, except wood burning heaters that have been used by retailers for the purpose of demonstration.
- 3.27 Waste Petroleum Product: any petroleum product other than gaseous fuels that has been refined from crude oil, and has been used, and, as a result of use, has been contaminated with physical or chemical impurities.
- 3.28 Wood Burning Fireplace: any permanently installed masonry or factory built wood burning device designed to be used with an air-to-fuel ratio greater than or equal to 35-to-1.

- 3.29 Wood Burning Heater: an enclosed, wood burning appliance capable of and intended for space heating (i.e. wood stove, pellet-fueled wood burning heater, or wood burning fireplace insert).
- 3.30 Wood Burning Season: for purposes of this rule, the months of November, December, January, and February.

4.0 Exemptions

The following devices are exempt from the provisions of this rule:

- 4.1 Devices that are exclusively gaseous-fueled.
- 4.2 Cookstoves, as described in Code of Federal Regulations 60.531.
- 4.3 Any burning occurring on the ground is open burning and is subject to requirements of District Rule 4103.

5.0 Requirements

5.1 Sale or Transfer of Wood Burning Heaters

5.1.1 New wood burning heaters

No person shall advertise, sell, offer for sale, supply, install, or transfer a new wood burning heater unless it is either:

5.1.1.1 EPA certified under the NSPS at time of purchase or installation and at least as stringent as EPA Phase II requirements,

5.1.1.2 A pellet-fueled wood burning heater that is exempt from EPA certification pursuant to requirements in the NSPS, until such time that amendments to the NSPS are finalized to remove exemptions for pellet-fueled wood burning heaters, then all new wood burning heaters must comply with Section 5.1.1.1.

5.1.2 Used wood burning heaters

No person shall advertise, sell, offer for sale, supply, install, or transfer a used wood burning heater unless it has been rendered permanently inoperable, satisfies requirements pursuant to Section 5.1.1, or is a low mass fireplace, masonry heater, or other wood-burning device of a make and model that meets all federal requirements and has been approved in writing by the APCO.

5.1.3 Public Awareness Information

Retailers selling or offering for sale new wood burning heaters shall supply public awareness information with each sale of a wood burning heater in the form of pamphlets, brochures, or fact sheets on the following topics listed in Sections 5.1.3.1 through 5.1.3.6. Public awareness information shall be subject to the review and approval of the APCO.

5.1.3.1 Proper installation, operation, and maintenance of the wood burning heater,

5.1.3.2 Proper fuel selection and use,

5.1.3.3 Health effects from wood smoke,

5.1.3.4 Weatherization methods for the home,

5.1.3.5 Proper sizing of wood burning heaters, and

5.1.3.6 Episodic Wood Burning Curtailment levels as defined in Section 5.7.

5.1.4 Sections 5.1.1 and 5.1.2 do not apply to wood burning heaters subject to Section 5.2.

5.2 Sale or Transfer of Real Property

5.2.1 Effective until December 31, 2019

5.2.1.1 No person shall sell or transfer any real property which contains a wood burning heater without first assuring that each wood burning heater included in the real property is:

5.2.1.1.1 EPA Phase II Certified or has a more stringent certification under the NSPS at time of purchase or installation, or

5.2.1.1.2 A pellet-fueled wood burning heater that was exempt from EPA Certification pursuant to requirements in the NSPS at the time of purchase or installation, or

5.2.1.1.3 Rendered permanently inoperable.

5.2.1.2 Upon the sale or transfer of real property, the seller shall provide to the recipient of the real property, and to the APCO, documentation of compliance with Section 5.2.1.1. Documentation shall be in the

form of a statement signed by the seller describing the type(s) of wood burning heater(s) included in the real property transaction, and any action taken to comply with Section 5.2.1.1. The APCO shall make blank forms available to the public for the purpose of fulfilling this requirement.

5.2.2 Effective on or after January 1, 2020

5.2.2.1 No person shall sell or transfer any real property which contains a wood burning heater without first assuring that each wood burning heater included in the real property:

5.2.2.2.1 Meets certification under the NSPS at time of purchase or installation and is at least as stringent as EPA Phase II requirements,

5.2.2.2.2 Is a pellet-fueled wood burning heater that was exempt from EPA certification pursuant to requirements in the NSPS at the time of purchase or installation, or

5.2.2.2.3 Is rendered permanently inoperable and removed from property.

5.2.2.2 Upon the sale or transfer of any residential real property in the San Joaquin Valley, the seller shall provide to the buyer of the real property and to the APCO, documentation certifying the following:

5.2.2.2.1 The type(s) and number(s) of wood burning heaters and wood burning fireplaces included in the real property transaction. If no wood burning heaters or wood burning fireplaces are included in the real property transaction, this should be documented.

5.2.2.2.2 Any action(s) taken to comply with Section 5.2.2.1.

5.2.2.2.3 Documents required by Section 5.2.2.2 shall be retained by the seller and shall again be made available to the APCO upon request.

5.3 Remodel of Wood Burning Fireplace or Chimney Where Total Cost Exceeds \$15,000, Local Building Permit is Required, and Application for Building Permit is Submitted On or After January 1, 2020

5.3.1 A person may only install a gas-fueled, electric, exempt, or EPA certified

wood burning heater that meets requirements of NSPS at the time of installation.

5.4 Limitations on Wood Burning Fireplaces or Wood Burning Heaters

5.4.1 Effective until December 31, 2019

For any single or multi-family housing unit, for which construction began on or after January 1, 2004. Construction began when the foundation for the structure was constructed.

5.4.1.1 No person shall install a wood burning fireplace in a residential development with a density greater than two (2) dwelling units per acre.

5.4.1.2 No person shall install more than two (2) EPA Phase II Certified or more stringent certification as currently enforced under NSPS, wood burning heaters per acre in any residential development with a density greater than two (2) dwelling units per acre.

5.4.1.3 No person shall install more than one (1) wood burning fireplace or EPA Phase II Certified or more stringent certification, as currently enforced under the NSPS, per dwelling unit in any residential development with a density equal to or less than two (2) dwelling units per acre.

5.4.2 Effective on or after January 1, 2020

Requirements of Sections 5.4. 2.1 and 5.4. 2.2 do not apply to the retrofit or replacement of an existing wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater to a cleaner device.

5.4.2.1 At elevations below 3,000 feet in areas with natural gas service, no person shall install a wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater.

5.4.2.2 At elevations at or above 3,000 feet or in areas without natural gas service, no more than two (2) EPA certified wood burning heaters, that meet NSPS at time of installation, shall be installed per acre.

5.4.2.2.1 No person shall install more than one (1) EPA certified wood burning heater, that meets NSPS at time of installation, per dwelling unit.

5.4.2.2.2 No person shall install a wood burning fireplace, low mass fireplace, masonry heater, or non-certified wood burning heater.

5.5 Advertising Requirements for Sale of Wood

5.5.1 No person shall sell, offer for sale, or supply any wood which is orally or in writing, advertised, described, or in any way represented to be “seasoned wood” unless the wood has a moisture content of 20 percent or less by weight.

5.5.2 The APCO may delegate to another person or agency the authority to test wood for moisture content and determine compliance with Section 5.5.1.

5.6 Prohibited Fuel Types

No person shall cause or allow any of the following materials to be burned in a wood burning fireplace, wood burning heater, or outdoor wood burning device:

5.6.1 Garbage,

5.6.2 Treated wood,

5.6.3 Non-seasoned wood,

5.6.4 Plastic products,

5.6.5 Rubber products,

5.6.6 Waste petroleum products,

5.6.7 Paints and paint solvents,

5.6.8 Coal, or

5.6.9 Any other material not intended by a manufacturer for use as fuel in a wood burning fireplace, wood burning heater, or outdoor wood burning device.

5.7 Episodic Wood Burning Curtailment

This section shall be in effect annually during the months of November through February.

5.7.1 Level One Episodic Wood Burning Curtailment

A wood burning fireplace, low mass fireplace, masonry heater, outdoor wood burning device, or nonregistered wood burning heater shall not be operated within the geographic region for which a Level One Episodic Wood Burning Curtailement is in effect.

5.7.1.1 For the counties of San Joaquin, Stanislaus, Merced, Kings, and Tulare, the APCO shall declare a Level One Episodic Wood Burning Curtailement for a geographic region whenever the potential for a PM_{2.5} concentration is forecast to equal or exceed 20 µg/m³ but not exceed 65 µg/m³ for the geographic region.

5.7.1.2 For the counties of Madera, Fresno, and Kern, the APCO shall declare a Level One Episodic Wood Burning Curtailement for a geographic region whenever the potential for a PM_{2.5} concentration is forecast to equal or exceed 12 µg/m³ but not exceed 35 µg/m³ for the geographic region.

5.7.1.3 A wood burning heater that has an approved and current registration with the District may be operated within the geographic region for which a Level One Episodic Wood Burning Curtailement is in effect provided the wood burning heater:

5.7.1.3.1 Is not fired on a prohibited fuel type pursuant to Section 5.6,

5.7.1.3.2 Is maintained according to manufacturer instructions, and

5.7.1.3.3 Is operated according to manufacturer instructions.

5.7.2 Level Two Episodic Wood Burning Curtailement

A wood burning fireplace, low mass fireplace, masonry heater, outdoor wood burning device, or wood burning heater shall not be operated within the geographic region for which a Level Two Episodic Wood Burning Curtailement is in effect.

5.7.2.1 For the counties of San Joaquin, Stanislaus, Merced, Kings, and Tulare, the APCO shall declare a Level Two Episodic Wood Burning Curtailement for a geographic region whenever the potential for a PM_{2.5} concentration is forecast to exceed 65 µg/m³ or a PM₁₀ concentration is forecast to equal or exceed 135 µg/m³ for the geographic region.

5.7.2.2 For the counties of Madera, Fresno, and Kern, the APCO shall declare a Level Two Episodic Wood Burning Curtailment for a geographic region whenever the potential for a PM2.5 concentration is forecast to exceed 35 $\mu\text{g}/\text{m}^3$ or a PM10 concentration is forecast to equal or exceed 135 $\mu\text{g}/\text{m}^3$ for the geographic region.

5.7.3 Contingency Provision

The effective date of this provision shall be 60 days after the issuance of a final determination by EPA, pursuant to 40 CFR § 51.1014(a), that the San Joaquin Valley has failed to meet one or more of the following Trigger Elements of the applicable PM2.5 NAAQS:

- (1) Any Reasonable Further Progress requirement;
- (2) Any quantitative milestone;
- (3) Submission of a quantitative milestone report; or
- (4) Attainment of the applicable PM2.5 NAAQS by the applicable attainment date.

The Contingency Provisions for the Level One and Level Two Episodic Wood Burning Curtailment shall be implemented in the following order: Paragraph (A) shall be implemented, upon the effective date of the first of any determination by EPA of failure to meet a Triggering Element; and paragraph (B) shall be implemented upon the effective date of any subsequent determination by EPA of failure to meet a Triggering Element as follows:

- (A) Level One curtailment threshold of 12 $\mu\text{g}/\text{m}^3$ and Level Two curtailment threshold of 35 $\mu\text{g}/\text{m}^3$, upon failure to comply with any one of the Trigger Elements, will be in place for all Valley counties;
- (B) Level One curtailment threshold of 11 $\mu\text{g}/\text{m}^3$ and Level Two curtailment threshold of 35 $\mu\text{g}/\text{m}^3$ will be in place for all Valley counties, upon failure to comply with any two of the Trigger Elements.

5.7.4 The following wood burning fireplaces and wood burning heaters are not subject to the provisions of Section 5.7.1 and 5.7.2:

5.7.4.1 Those in locations where natural gas service is not available. For the purposes of this rule, propane and butane are not considered natural gas, or

5.7.4.2 Those for whom a wood burning fireplace or wood burning heater is the sole available source of heat in a residence. This

includes times of temporary service outages, as determined by the gas or electrical utility service.

5.7.5 Episodic Wood Burning Curtailment Notice

The APCO shall notify the public of each Episodic Wood Burning Curtailment by any of the following methods:

5.7.5.1 Provide notice to newspapers of general circulation within the San Joaquin Valley.

5.7.5.2 Broadcast of messages presented by radio or television stations operating in the San Joaquin Valley.

5.7.5.3 A recorded telephone message for which the telephone number is published.

5.7.5.4 Messages posted on the District's website, www.valleyair.org.

5.7.5.5 Any other method as the APCO determines is appropriate.

5.8 Visible Emissions Limitations

5.8.1 Under normal operating conditions, no person shall cause or allow any visible smoke from a registered wood burning heater.

5.8.2 Under normal operating conditions, no person shall cause or allow from a wood burning fireplace or nonregistered wood burning heater a visible emission of any air contaminant, other than uncombined water vapor, that exceeds No. 1 on the Ringelmann Chart or 20 percent opacity for a period or periods aggregating more than 3 minutes in any one (1) hour.

5.9 Registration of Wood Burning Heaters

5.9.1 Eligibility for Registration

A wood burning heater is eligible to be registered with the District provided it is either:

5.9.1.1 Meeting certification under the NSPS at time of purchase or installation and is at least as stringent as EPA Phase II requirements, or

5.9.1.2 A pellet-fueled wood burning heater exempt from EPA certification requirements pursuant to requirements in the NSPS at the time of purchase or installation.

5.9.1.3 Wood burning heaters which do not meet the requirements of Section 5.9.1.1 or 5.9.1.2 are ineligible for registration.

5.9.1.4 Any registration of a wood burning heater which does not meet eligibility requirements is invalid.

5.9.2 Registration Process

Persons applying to register a wood burning heater shall:

5.9.2.1 Submit a completed application and supplemental documentation demonstrating compliance with the eligibility requirements specified in Section 5.9.1 to the District. Supplemental documentation shall include the following:

5.9.2.1.1 Receipt or invoice from the installation or purchase that includes the manufacturer and model name of the wood burning heater, or

5.9.2.1.2 A certification from a District Registered Wood Burning Heater Professional verifying that the wood burning heater meets eligibility requirements pursuant to Section 5.9.1.

5.9.2.1.3 If the wood burning heater was purchased and/or installed more than one year prior to registration with the District, the person must show proof of inspection of the wood burning heater from a District Registered Wood Burning Heater Professional.

5.9.2.2 Pay a registration fee as required by Section 3.0 of District Rule 3901 (Fees for Registration of Wood Burning Heaters).

5.9.2.3 Operate the wood burning heater in compliance with the requirements in Section 5.6 and Section 5.7.

5.10 Renewal of Registration

5.10.1 Registration shall be valid for a period of up to three wood burning seasons from the date of registration issuance, unless the holder of the certificate is disqualified pursuant to Section 5.11.

5.10.2 Registration may be renewed by complying with the following requirements:

5.10.2.1 Complete and submit to the District a Registration Renewal application with verification that the wood burning heater has been inspected by District Registered Wood Burning Heater Professional to verify that it is maintained pursuant to manufacturer specifications.

5.10.2.2 Payment of a registration renewal fee as required by Section 4.0 of District Rule 3901.

5.10.3 Failure to comply with Sections 5.10.1 or 5.10.2 may result in disqualification of registration.

5.11 Disqualification of Registration

5.11.1 If the District finds a registered wood burning heater is operated in violation of the requirements of this rule, the registration may be disqualified, provided that notice and an opportunity for an office conference was afforded pursuant to Section 5.11.4.

5.11.2 A registration disqualified pursuant to Section 5.11.1 may be reinstated if subsequent to the disqualification the operator of the wood burning heater demonstrates compliance with the requirements of Section 5.6 and Section 5.7.

5.11.3 Persons with a disqualified registration pursuant to Section 5.11.1 may appeal the determination by petitioning to the APCO.

5.11.4 Notice of Preliminary Disqualification Determination

If the District makes a preliminary determination that a registered unit is in violation of Section 5.0, the following actions shall be taken:

5.11.4.1 Notify the person who registered the wood burning heater, in writing, that the District has made a preliminary disqualification determination and pursuant to Section 5.11.1 the District may cancel the registration 30 calendar days after the date on the notice. The notice shall include all of the relevant facts relating to the preliminary determination that are known to the District at the time of the notice.

5.11.4.2 Request as part of the notification required by Section 5.11.4.1 that the person who registered the wood burning heater confer with the District, in an office conference within 30 calendar days of the date on the notice to discuss the facts relating to the preliminary disqualification determination.

5.11.4.3 Conduct the office conference required by Section 5.11.4.2 provided that the person who registered the wood burning heater accepts the request for the office conference.

5.11.5 Setting Aside a Disqualification

A disqualification determination pursuant to Section 5.11.1 shall be set aside by the APCO if the petitioner demonstrates to the satisfaction of the APCO that the violations forming the basis for the disqualification were the result of circumstances beyond the reasonable control of the petitioner and could not have been prevented by the exercise of reasonable care.

5.12 Registration of Wood Burning Heater Professionals

5.12.1 To qualify to register as a Wood Burning Heater Professional with the District the applicant must meet one of the following criteria; this must be active, valid, and current:

5.12.1.1 Fireplace Investigation Research and Education (F.I.R.E.) Certified Inspector, or

5.12.1.2 Chimney Safety Institute of America (CSIA) certification, or

5.12.1.3 National Fireplace Institute (NFI) certification, or

5.12.1.4 A person determined to be qualified to perform inspections, maintenance, and cleaning activities on wood burning heaters by the APCO.

5.12.2 Persons applying to register as a Wood Burning Heater Professional with the District shall:

5.12.2.1 Submit a completed application for registration to the District.

5.12.2.2 Submit any necessary supplemental documents as determined by the APCO as necessary to verify statements and qualifications as presented in the application for registration.

5.12.2.3 If the applicant does not have a certification pursuant to Sections 5.12.1.1 through 5.12.1.3 the applicant may submit an application to the APCO with supplemental documentation verifying that the applicant meets the certification standards as required by certifications pursuant to Sections 5.12.1.1 through 5.12.1.3.

5.12.3 Registration as a Wood Burning Heater Professional with the District is valid for up to three years from the date of issuance.

5.12.4 The District shall maintain a list of registered Wood Burning Heater Professionals on the District web page.

5.13 Inspection of Registered Wood Burning Heaters

The District has the right of entry for the purpose of inspecting any wood burning heater registered with the District in order to enforce or administer this rule.

6.0 Administrative Requirements

6.1 Upon request of the APCO, the manufacturer shall demonstrate that each wood burning heater subject to the requirements of Sections 5.1 or 5.2 is compliant with said requirements.

6.2 The person who registers the wood burning heater shall retain a copy of the District issued registration and make it available upon request.

7.0 Test Methods

7.1 Moisture content of wood shall be determined by the current version of ASTM Test Method D 4442.

7.2 Compliance with visible-smoke free operation of the wood burning heater pursuant to Section 5.8.1 shall be determined using EPA Method 22 (Visible Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares).

7.3 Compliance with the visible emission limit pursuant to Section 5.8.2 shall be determined using US EPA Method 9 for visual determination of the opacity of emissions.