- 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)
- 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 transfers or receives a wood burning heater as part of a real property sale or transfer.
- 2.4 Any person who installs a wood burning fireplace or wood burning heater in a new residential development.
- 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: meets the performance and emissions standards set forth in the NSPS.

- 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 Residential Development: 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.
- 3.12 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.
- 3.13 Normal Operating Conditions: the operation of a wood burning heater as defined in this rule, except when a fire is started in the wood burning heater, when fuel is added to the wood burning heater, and when the fire is being extinguished. Visible smoke produced during these three events shall not exceed fifteen minutes per event.
- 3.14 NSPS: New Source Performance Standard. For purposes of this rule the NSPS is the Code of Federal Regulations, Part 60, Title 40, Subpart AAA.
- 3.15 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.
- 3.16 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.

- 3.17 Paint Solvents: any organic solvents sold or used to thin paints or clean up painting equipment.
- 3.18 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.
- 3.19 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.
- 3.20 Permanently Inoperable: modified in such a way that a wood burning heater can no longer operate as a wood burning heater.
- 3.21 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.
- 3.22 Real Property: the land itself and anything that is permanently affixed to the land, such as buildings, and structures. Examples of real property include heating and air conditioning systems, water lines, or electrical systems that primarily are used to control the environment for people and to benefit the land.
- 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 with a Phase II Certification or a more stringent certification as currently enforced in the NSPS at the time of sale or transfer, or
- 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 5.6.
- 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 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 EPA Phase II Certified or has a more stringent certification under the NSPS at time of purchase or installation, or
 - 5.2.1.2 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
 - 5.2.1.3 Rendered permanently inoperable.
 - 5.2.2 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. 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. The APCO shall make blank forms available to the public for the purpose of fulfilling this requirement.

- 5.2.3 Documents required by Section 5.2.2 shall be retained by the recipient of the real property and shall be made available to the APCO upon request.
- 5.3 Limitations on Wood Burning Fireplaces or Wood Burning Heaters in New Residential Developments
 - 5.3.1 Effective until December 31, 2014
 - 5.3.1.1 No person shall install a wood burning fireplace in a new residential development with a density greater than two (2) dwelling units per acre.
 - 5.3.1.2 No person shall install more than two (2) EPA Phase II Certified wood burning heaters per acre in any new residential development with a density equal to or greater than three (3) dwelling units per acre.
 - 5.3.1.3 No person shall install more than one (1) wood burning fireplace or wood burning heater per dwelling unit in any new residential development with a density equal to or less than two (2) dwelling units per acre.
 - 5.3.2 Effective on and after January 1, 2015
 - 5.3.2.1 No person shall install a wood burning fireplace in a residential development with a density greater than two (2) dwelling units per acre.
 - 5.3.2.2 No person shall install more than two (2) EPA Phase II Certified or more stringent certification as currently enforced under the NSPS, wood burning heaters per acre in any residential development with a density greater than two (2) dwelling units per acre.
 - 5.3.2.3 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 Advertising Requirements for Sale of Wood
 - 5.4.1 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.
 - 5.4.2 The APCO may delegate to another person or agency the authority to test wood for moisture content and determine compliance with Section 5.4.1.
- 5.5 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:

- 5.5.1 Garbage,
- 5.5.2 Treated wood,
- 5.5.3 Plastic products,
- 5.5.4 Rubber products,
- 5.5.5 Waste petroleum products,
- 5.5.6 Paints and paint solvents,
- 5.5.7 Coal, or
- 5.5.8 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.
- 5.6 Episodic Wood Burning Curtailment

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

5.6.1 Level One Episodic Wood Burning Curtailment

The APCO shall declare a Level One Episodic Wood Burning Curtailment for a geographic region whenever the potential for a PM2.5 concentration is forecast to equal or exceed 20 μ g/m³ but not exceed 65 μ g/m³ for the geographic region.

- 5.6.1.1 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 Curtailment is in effect.
- 5.6.1.2 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 Curtailment is in effect provided the wood burning heater:
 - 5.6.1.2.1 Is not fired on a prohibited fuel type pursuant to Section 5.5,
 - 5.6.1.2.2 Is maintained according to manufacturer instructions,
 - 5.6.1.2.3 Is operated according to manufacturer instructions, and
 - 5.6.1.2.4 Has no visible smoke when operated under normal operating conditions.
- 5.6.2 Level Two Episodic Wood Burning Curtailment

The APCO shall declare a Level Two Episodic Wood Burning Curtailment for a geographic region whenever the potential for a PM2.5 concentration of greater than 65 μ g/m³ or for a PM10 concentration of 135 μ g/m³ or greater is predicted for the geographic region. No person within the geographic region for which a Level Two Episodic Wood Burning Curtailment has been declared shall operate a wood burning fireplace, low mass fireplace, masonry heater, wood burning heater, or outdoor wood burning device when a Level Two Episodic Wood Burning Curtailment is in effect.

- 5.6.3 The following wood burning fireplaces and wood burning heaters are not subject to the provisions of Section 5.6.1 and 5.6.2:
 - 5.6.3.1 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

- 5.6.3.2 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.
- 5.6.4 Episodic Wood Burning Curtailment Notice

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

- 5.6.4.1 Provide notice to newspapers of general circulation within the San Joaquin Valley.
- 5.6.4.2 Broadcast of messages presented by radio or television stations operating in the San Joaquin Valley.
- 5.6.4.3 A recorded telephone message for which the telephone number is published.
- 5.6.4.4 Messages posted on the District's website, www.valleyair.org.
- 5.6.4.5 Any other method as the APCO determines is appropriate.
- 5.7 Registration of Wood Burning Heaters
 - 5.7.1 Eligibility for Registration

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

- 5.7.1.1 EPA certified with a Phase II Certification or has a more stringent certification as currently enforced under the NSPS at the time of purchase or installation, or
- 5.7.1.2 A pellet-fueled wood burning heater exempt from EPA certification requirements pursuant to requirements in the NSPS at the time of purchase or installation.
- 5.7.1.3 Wood burning heaters which do not meet the requirements of Section 5.7.1.1 or 5.7.1.2 are ineligible for registration.
- 5.7.1.4 Any registration of a wood burning heater which does not meet eligibility requirements is invalid.

- 5.7.2 Interim Registration of Wood Burning Heaters
 - 5.7.2.1 For the wood burning season of 2014/2015 only, an Interim Registration program will be in place. A wood burning heater may participate in the Interim Registration program provided the wood burning heater:
 - 5.7.2.1.1 Meets the eligibility requirements pursuant to Section 5.7.1,
 - 5.7.2.1.2 Is registered in the Interim Registration program prior to use during Level One Episodic Wood Burning Curtailments, and
 - 5.7.2.1.3 Is operated in compliance with Section 5.5 and Section 5.6.
 - 5.7.2.2 Any interim registration of a wood burning heater which does not meet qualifications pursuant to Section 5.7.1 is invalid.
 - 5.7.2.3 Any interim registration of a wood burning heater may be disqualified pursuant to Section 5.9.
- 5.7.3 Registration Process

Effective during and after the 2015/2016 wood burning season, persons applying to register a wood burning heater shall:

- 5.7.3.1 Submit a completed application and supplemental documentation demonstrating compliance with the eligibility requirements specified in Section 5.7.1 to the District. Supplemental documentation shall include the following:
 - 5.7.3.1.1 Receipt or invoice from the installation or purchase that includes the manufacturer and model name of the wood burning heater, or
 - 5.7.3.1.2 A certification from a District Registered Wood Burning Heater Professional verifying that the wood burning heater meets eligibility requirements pursuant to Section 5.7.1.
 - 5.7.3.1.3 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.

- 5.7.3.2 Pay a registration fee as required by Section 3.0 of Rule 3901 (Fees for Registration of Wood Burning Heaters).
- 5.7.3.3 Operate the wood burning heater in compliance with the requirements in Section 5.5 and Section 5.6.
- 5.8 Renewal of Registration
 - 5.8.1 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 5.9.
 - 5.8.2 Registration may be renewed by complying with the following requirements:
 - 5.8.2.1 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.
 - 5.8.2.2 Payment of a registration renewal fee as required by Section 4.0 of Rule 3901.
 - 5.8.3 Failure to comply with Sections 5.8.1 or 5.8.2 may result in disqualification of registration.
- 5.9 Disqualification of Registration
 - 5.9.1 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 5.9.4.
 - 5.9.2 A registration disqualified pursuant to Section 5.9.1 may be reinstated if subsequent to the disqualification the operator of the wood burning heater demonstrates compliance with the requirements of Section 5.5 and Section 5.6.
 - 5.9.3 Persons with a disqualified registration pursuant to Section 5.9.1 may appeal the determination by petitioning to the APCO.

5.9.4 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:

- 5.9.4.1 Notify the person who registered the wood burning heater, in writing, that the District has made a preliminary disqualification determination and pursuant to Section 5.9.1 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.
- 5.9.4.2 Request as part of the notification required by Section 5.9.4.1 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.
- 5.9.4.3 Conduct the office conference required by Section 5.9.4.2 provided that the person who registered the wood burning heater accepts the request for the office conference.
- 5.9.5 Setting Aside a Disqualification

A disqualification determination pursuant to Section 5.9.1 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.

- 5.10 Registration of Wood Burning Heater Professionals
 - 5.10.1 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:
 - 5.10.1.1 Fireplace Investigation Research and Education (F.I.R.E.) Certified Inspector, or
 - 5.10.1.2 Chimney Safety Institute of America (CSIA) certification, or
 - 5.10.1.3 National Fireplace Institute (NFI) certification, or

- 5.10.1.4 A person determined to be qualified to perform inspections, maintenance, and cleaning activities on wood burning heaters by the APCO.
- 5.10.2 Persons applying to register as a Wood Burning Heater Professional with the District shall:
 - 5.10.2.1 Submit a completed application for registration to the District.
 - 5.10.2.2 Submit any necessary supplemental documents as determined by the APCO as necessary to verify statements and qualifications as presented in the application for registration.
 - 5.10.2.3 If the applicant does not have a certification pursuant to Sections 5.10.1.1 through 5.10.1.3 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 5.10.1.1 through 5.10.1.3.
- 5.10.3 Registration as a Wood Burning Heater Professional with the District is valid for up to three years from the date of issuance.
- 5.10.4 The District shall maintain a list of registered Wood Burning Heater Professionals on the District web page.
- 5.11 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 5.6 shall be determined using EPA Method 22 (Visible Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares).