REGULATION 6 PARTICULATE MATTER AND VISIBLE EMISSIONS RULE 3 WOOD-BURNING DEVICES

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REGULATION 6 PARTICULATE MATTER AND VISIBLE EMISSIONS RULE 3 WOOD-BURNING DEVICES

(Adopted July 9, 2008)

6-3-100 GENERAL

- **6-3-101 Description:** The purpose of this rule is to limit emissions of particulate matter and visible emissions from wood-burning devices used either for primary source of heat, supplemental heat or ambiance.
- 6-3-110 Natural Gas Service Unavailability: The requirement of Section 6-3-301 shall not apply to any person who operates a wood-burning device in an area where natural gas service is not available (which includes temporary service outages), as determined by gas utility service to an area or household. A person may qualify for this exemption even though propane fuel is available for space heating purposes.

Limited Exemption, Sole Source of Heat: Until October 31, 2016, the requirements of Section 6-3-301 shall not apply to any person whose sole source of heat is a wood burning device.

110.1 Effective November 1, 2016, the requirements of Section 6-3-301 shall not apply to any person whose sole source of heat is an EPA certified wood burning device that is registered with the District per the requirements of Sections 6-3-404 and 405. Qualification for exemption is subject to verification.

6-3-111 Limited Exemption, Electrical Power Service Unavailability: The requirements of Section 6-3-301 shall not apply to any person in an area where electrical power service is not available (which includes temporary service outages), as determined by electrical utility service to an area or household.

Limited Exemption, Non-functional, Permanently Installed Heater: Effective November 1, 2016, the requirement of Section 6-3-301 shall not apply to any person whose only non-wood-burning, permanently-installed source of heat is non-functional and requires repair to resume operation. A dwelling may qualify for a 30-day exemption if there is no alternate form of heat and the non-functional heater is repaired to resume function within 30 days. Qualification for this exemption is subject to verification and must be supported by documentation of repair, which must be submitted to the District within 10 days of a receipt of a request for such records.

6-3-112 Limited Exemption, Only Source of Space Heat: The requirement of Section 6-3-301 shall not apply to any person whose only source of heat for residential space heating is a wood-burning device. A person claiming this exemption cannot have use of another form of functioning space heating.

Limited Exemption, Loss of Natural Gas and/or Electric Power: The requirement of Section 6-3-301 shall not apply to a person whose dwelling is in an area that has a temporary loss of gas and/or electric utility service and there is no alternate form of heat available. Qualification for exemption is subject to verification.

6-3-200 DEFINITIONS

Alternate Form of Heat: A form of heat that does not burn wood or any other solid fuels. Alternate forms of heat include, but are not limited to gas-fueled (e.g. propane or natural gas) or electric heat.

- **6-3-2012 APCO:** The Air Pollution Control Officer of the Bay Area Air Quality Management District (District) or the designee thereof.
- **6-3-2023 Builder:** Any individual or company that constructs or sells any residential or commercial property. unit with a wood-burning device installed therein.
- **Curtailment Period:** Any period so declared to the public by the APCO when a negative impact upon public health is anticipated, resulting from PM_{2.5} levels forecast to exceed 35 micrograms/m³. Members of the public can verify status of a curtailment period through the following methods:
 - Listen to local TV or Radio News;
 - Call 1-800-HELP-AIR; or
 - Check www.sparetheair.org.

The APCO may use any or all of the following methods to provide public information about a curtailment period:

- Media outlets of general circulation in the Bay Area including, but not limited to: newspapers, radio or television stations;
- Recorded telephone messages on District informational phone numbers;
- Emails to recipients of the District "Spare the Air" list server;
- Messages posted on the District website, www.sparetheair.org; or
- Other means of communication as appropriate.
- **6-3-204 Electric-powered Heating Device:** Any device that produces heat through use of an element utilizing resistance from alternating current or other means of electrical space heating, including, but not limited to, electric fireplaces, heat pumps, or wall heaters.
- **6-3-205 EPA:** United States Environmental Protection Agency.
- **6-3-206 EPA Certified:** Any wood-burning heater that meets the standards set forth in Title 40 Code of Federal Regulations (CFR), Part 60, Subpart AAA in effect at the time of installation and is certified and labeled pursuant to those regulations. An EPA certified wood heater may be freestanding, built-in, or an insert within a fireplace.
- **6-3-2057 Fireplace:** Any installed masonry or factory-built wood-burning device designed to operate with an air-to-fuel ratio greater than or equal to 35-to-1., a burn rate over 11 pounds per hour, or a weight over 1760 pounds.
- **6-3-2068 Garbage:** Any solid, semisolid, or liquid waste 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.
- **6-3-2079 Gas-fueled Heating Device:** Any device that utilizes natural gas or propane as a fuel source exclusively supplied by a natural gas service utility, including, but not limited to, gasfueled fireplaces, gas-fueled room heaters, or gas-fueled inserts, or gas-fueled log sets.
- **6-3-210 Insert:** A wood or gas-fueled heater designed to be installed in an existing masonry or factory-built fireplace.
- 6-3-208 Low Mass Fireplace: Any fireplace and attached chimney, as identified in American Society for Testing and Materials (ASTM) E 2558-07, "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.

- 6-3-209 Masonry Heater: Any site-built or site-assembled, solid-fueled 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 solid-fueled heating devices must meet the design and construction specifications set forth in ASTM E 1602-03, "Guide for Construction of Solid Fuel Burning Masonry Heaters."
- **Mandatory Burn Ban:** Any period during which the air quality is forecast by the District to be unhealthy due to ambient levels of particulate and burning wood or any solid fuels is illegal in the Bay Area. A Mandatory Burn Ban is announced through a Winter Spare the Air Alert.
- **6-3-212 Manufacturer:** Any person who constructs or imports a wood-burning fireplace or wood burning heater.
- **New Building Construction:** Any single or multi-family housing unit, for which construction began on or after November 1 2016. Construction is deemed to occur when the foundation for the structure is installed.
- **Pellet-fueled Device Wood Heater:** Any solid-fueled A wood-burning device which is operated on pellet-fuel and is either—U.S.—EPA Phase II certified or exempted under U.S. EPA requirements set forth in Title 40 Code of Federal Regulation (CFR), Part 60, Subpart AAA. Pellet fuel may be composed of compressed wood, corn or other biomass.
- **6-3-215 Permanently Installed:** A device that is fixed to the structure of a dwelling or unit and is not readily movable.
- **6-3-216 Particulate Matter (PM):** Any material that is emitted as liquid or solid particles, or as gaseous material that becomes liquid or solid particles at the testing temperatures specified in the source test method, excluding combined water.
- **6-3-217 PM_{2.5}:** PM_{2.5} has an aerodynamic diameter equal to or less than 2.5 microns.
- **6-3-2148 Real Property:** The land and anything affixed to the land, such as a building or structures.
- **6-3-219** Remodel: A change to the appearance and/or functional utility of a fireplace or chimney that requires a building permit.
- **6-3-220** Retailer: Any person engaged in the sale of wood-burning fireplaces, wood-burning heaters, or outdoor wood-burning devices.
- **6-3-21221 Ringelmann Chart:** A numerical ranking system whereby graduated shades of gray varying by five equal steps between white and black are visually compared to the density of smoke. The chart, as distributed by the United States Bureau of Mines, provides the graduated shades 1, 2, 3, 4 and 5, which are known as Ringelmann No. 1, 2, 3, 4 and 5, respectively. The system is used in determining whether emissions of smoke are within limits or standards of opacity.
- **6-3-21322 Seasoned Wood:** Firewood that has a moisture content of 20 percent or less by weight using the testing method specified in Section 6-3-602.
- **Sole Source of Heat:** The only permanent source of heat that is capable of meeting the space heating demands of a dwelling.
- **6-3-21424 Solid Fuel:** Any wood, wood-based product, non-gaseous or non-liquid fuel, including but not limited to: manufactured logs, pressed logs, wood or other pellet products. This definition does not include solid fuel intended for cooking food, such as charcoal.

- **6-3-24525 Treated Wood:** Wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects or weathering.
- **6-3-226 Uncertified Wood Heater:** A wood heater that is not certified by the U.S. EPA to meet requirements in Title 40 Code of Federal Regulations, Part 60, Subpart AAA.
- 6-3-226 U.S. EPA Phase II Certified Device: Any device certified by the U.S. EPA to meet the performance and emission standards as set forth in Title 40 CFR, Part 60, Subpart AAA.
- **6-3-21727 Visible Emissions:** Emissions which are visually perceived by an observer. Restrictions on visible emissions in District regulations are expressed as numbers on the Ringelmann Chart, as published by the United States Bureau of Mines.
- **6-3-228 Winter Spare the Air Alert (WSTA):** An alert by the APCO that notifies the public when a negative impact upon public health is anticipated resulting from $PM_{2.5}$ levels forecast to exceed 35 μ g/m³ and that results in a Mandatory Burn Ban. Members of the public can verify status of a burn ban through the following methods:
 - Listen to local TV or Radio News;
 - Call 1-877-4NO-BURN; or
 - Check <u>www.sparetheair.org</u>.
- **6-3-229 Winter Spare the Air Season:** The months of November, December, January and February.
- **6-3-230 Wood Heater:** An enclosed wood burning device capable of and intended for space heating such as a. wood stove, pellet-fueled wood heater, or wood-burning fireplace insert.
- **6-3-21831 Wood-burning Device:** Any wood-burning stove or heater, pellet-fueled device, fireplace, or any indoor permanently installed device used to burn any solid fuel for space-heating or aesthetic purposes. This definition does not include wood-burning devices intended exclusively for cooking food, such as wood-fired ovens or barbecues.
- 6-3-300 STANDARDS
- 6-3-301 Mandatory Burn Ban Solid-fuel Burning Curtailment: Effective November 1, 2008, dDuring the months of November through February, no person shall operate or combust wood or solid-fuel products in any wood-burning device during a curtailment period Mandatory Burn Ban. This curtailment requirement shall not apply to a gas-fueled heating device or an electric powered heating device.
- **Requirements for Wood Heater Manufacturers and Retailers:** No manufacturer or retailer shall advertise, sell, offer for sale or resale, supply, install or transfer a new or used wood-burning device intended for use within District boundaries unless the device meets or exceeds the requirements of Title 40 Code of Federal Regulations, Part 60, Subpart AAA, which are as follows:
 - **302.1** Effective May 15, 2015, any wood heater that is manufactured must be certified to meet the 4.5 g/hr emissions rating specified in 40 C.F.R. § 60.532(a).
 - **302.2** Effective December 31, 2015, any wood heater that is sold at retail must be certified to meet the emissions rating of 4.5 g/hr as specified in 40 C.F.R. § 60.532(a).
 - **302.3** Effective May 15, 2020, any wood heater that is manufactured or sold at retail must meet an emissions rating of 2.5 g/hr if crib tested, or 2.0 g/hr if cordwood tested, as specified in 40 C.F.R. § 60.532(b) and (c).

- 6-3-303 Criteria for Sale, Resale or Installation of Wood-burning Devices: Effective January 1, 2009, no person shall sell, offer for sale or resale, supply, install, or transfer a new or used wood-burning device intended for use within District boundaries unless it is one of the following:
 - 303.1 A U.S. EPA Phase II certified wood-burning device;
 - 303.2 A pellet-fueled device;
 - 303.3 A low mass fireplace, masonry heater or other wood-burning device of a make and model that meets EPA emission targets and has been approved in writing by the APCO.

This requirement does not apply if a wood-burning device is an installed fixture included in the sale or transfer of any real property. Any gas-fueled heating device or electric-powered heating device is allowed under this standard.

Sale, Resale, Transfer or Installation of Wood-Burning Devices: Effective December 1, 2015, no person shall advertise, sell, offer for sale or resale, supply, install or transfer a new or used wood-burning device intended for use within District boundaries unless the device meets or exceeds the requirements of Title 40 Code of Federal Regulations, Part 60, Subpart AAA. This requirement does not apply if a wood-burning device is an installed fixture included in the sale or transfer of any real property.

- **6-3-304 Disclosure Requirements for Real Property:** Effective November 1, 2015, any person selling, renting or leasing real property shall provide sale or rental disclosure documents that describe the health hazards of PM_{2.5} from burning wood or any solid fuel as a source of heat. Disclosure documents must disclose PM_{2.5} health hazards in accordance with guidance made available on the District's website.
- **Requirements for Rental Properties:** Effective November 1, 2018, all real property offered for lease or rent in areas with natural gas service shall have a permanently-installed form of heat that does not burn solid fuel.
- **Criteria for Wood-burning Devices in Requirements for New Building Construction:**Effective November 1, 2016, for construction permits issued after January 1, 2009, no person or builder shall commence construction of a new building or structure permitted to contain or install a or containing a wood-burning device or install a new wood-burning device in a new building construction. resulting from a remodel unless the device meets the requirements of Section 6-3-303. Any gas-fueled heating device or electric-powered heating device is allowed under this standard.
- **6-3-307** Requirements for Remodeling a Fireplace or Chimney: Effective November 1, 2016, no person shall remodel a fireplace or chimney unless a gas-fueled, electric, or EPA certified device is installed that meets requirements in Title 40 Code of Federal Regulations, Part 60, Subpart AAA. This requirement is triggered by a fireplace or chimney remodel where a total cost exceeds \$15,000 and requires a local building permit. The total cost excludes the cost of a building permit.
- **6-3-3028 Visible Emissions Limitation:** Effective November 1, 2015, no person shall cause or allow a visible emission from any wood-burning device in any building or structure that exceeds No. 1 on the Ringelmann Chart or 20 percent opacity for a period or periods aggregating more than 3 minutes in any hour six consecutive minutes in any one-hour period. Visible emissions from the startup of a new fire for a period not to exceed twenty consecutive minutes in any consecutive four-hour period are not subject to this provision.
- **6-3-3059** Prohibition Against Burning Garbage, Non-Seasoned Wood or Certain Materials: No person shall cause or allow any of the following materials to be burned in a wood-burning device: garbage, treated wood, non-seasoned wood, used or contaminated wood pallets, plastic products, rubber products, waste petroleum products, paints and paint solvents,

coal, animal carcasses, glossy or colored paper, salt water driftwood, particle board, and any material not intended by a manufacturer for use as a fuel in a wood-burning device.

6-3-30610 Requirements for Sale of Wood: No person shall sell, offer for sale, or supply any wood (not to include manufactured logs) intended for use in a wood-burning device that does not meet one of the following requirements:

30610.1 Have a moisture content of 20 percent or less by weight, or

30610.2 For moisture content of greater than 20 percent by weight, be identified as unseasoned wood and include instructions on how to dry out the wood, as required in Section 6-3-4043.3, before combustion.

6-3-400 ADMINISTRATIVE REQUIREMENTS

- **6-3-401 Verification of Violation:** The APCO has sole authority over enforcing requirements of this rule and will independently verify any violation before issuing a Notice of Violation or taking other enforcement action.
- 6-3-4021 Device Sale or Installation, Public Awareness Information: Effective January 1, 2009, Any person or builder offering for sale, selling or installing a new or used wood-burning device subject to Sections 6-3-302 and 6-3-303 shall provide public awareness information to each purchaser of a wood-burning device in the form of pamphlets, brochures, or fact sheets addressing proper installation, operation, and maintenance of the wood-burning device and the health effects of wood smoke. The information on health effects of wood smoke shall include the following statement:

"Wood smoke contains harmful particulate matter (PM) which is associated with numerous negative health effects."

- **Device Manufacturer's Certification or Proof of Equivalency:** The manufacturer and seller retailer of any wood-burning device shall provide documentation to any purchaser that the device is U.S. EPA Phase II certified or that the device meets the equivalent U.S. EPA Title 40 Code of Federal Regulations (CFR), Part 60, Subpart AAA. Phase II emission limits.
- **6-3-4043** Labeling for Solid Fuel or Wood Sale: Any person offering for sale, selling or providing solid fuel or wood intended for use in a wood-burning device within District boundaries shall:
 - 4043.1 Attach a label to each package of solid fuel or wood sold that states the following:

"Use of this and other solid fuels may be restricted at times by law. Please check 1-877-4-NO-BURN [Toll-Free Number] or [Web Address] http://www.8774noburn.org/ before burning."

The effective date of this subsection is one year following the date the APCO makes public the Toll-Free telephone number and Web Address specified in this subsection.

4043.2 Effective January 1, 2009, If wood is seasoned (not to include manufactured logs), then the label must also state the following:

"This wood meets air quality regulations for moisture content to be less then 20 % (percent) by weight for cleaner burning."

4043.3 Effective January 1, 2009, If wood is not seasoned (not to include manufactured logs), then the label must state the following:

"This wood does **NOT** meet air quality regulations for moisture content and must be properly dried before burning."

In addition to the disclosure listed above, any person offering for sale or selling wood that is not seasoned for use in a wood-burning device shall also provide written instructions on how to properly dry the wood to achieve a 20% (percent) by weight moisture content.

- **Registration of EPA Certified Wood Heaters:** Effective November 1, 2016, any person seeking to claim the exemption provided in Section 6-3-110 must have previously registered their EPA certified wood heater in the District's registration program and must maintain documentation that the device is operated according to manufacturer's specifications. The following wood heaters are eligible to be registered:
 - **404.1** Wood heaters that are EPA Certified to meet performance and emission standard of 7.5 g/hr.or less.
 - **404.2** A pellet-fueled wood heater exempt from EPA certification requirements pursuant to the requirements in Title 40 Code of Federal Regulations (CFR), Part 60, Subpart AAA at time of purchase or installation.
- **Registration Renewal:** Registration pursuant to Section 6-3-404 shall be for a term of 5 years. Application for renewal of registration must be received by the District prior to expiration of the 5-year term.

6-3-500 MONITORING AND RECORDS

- **Burden of Proof:** The burden of proof of eligibility for exemption pursuant to Section 6-3-1120, 111, and 112 is on the claimant. Any person claiming such an exemption shall maintain adequate documentation or records explaining why demonstrating that the registered device is the only sole source of heat. and whether the situation is temporary or permanent. Such records will must be furnished provided to the APCO upon request. Qualification for the exemption provided in Section 6-3-110 is subject to inspection and verification.
- **6-3-502 Proof of Certification or Equivalency:** Upon request of the APCO, a manufacturer shall demonstrate that each wood burning device subject to the requirements of Section 6-3-3032 meets the standards set forth in this regulation.

6-3-600 MANUAL OF PROCEDURES

- **6-3-601 Determination of Visible Emissions:** Ringelmann standard shall be determined by Manual of Procedures-Volume 1 Enforcement Procedures, Evaluation of Visible Emissions or any other EPA method that has been approved by APCO.
- **6-3-602 Determination of Moisture Content:** Moisture content of wood shall be determined by ASTM Test Method D 4442-92 or a hand-held moisture meter operated in accordance with ASTM Test Method D 4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters.
- **Determination of EPA Certification or Equivalency:** EPA certification or demonstration of equivalence for wood burning-devices shall be performed in accordance with EPA Guidance Document for Residential Wood Combustion, Method 28, 5G, 5H, or other EPA approved methodology.