

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

6-3-100 GENERAL

- 6-3-101 Description
- 6-3-110 Limited Exemption, Natural Gas Service Unavailability
- 6-3-111 Limited Exemption, Electrical Power Service Unavailability
- 6-3-112 Limited Exemption, Only Source of Space Heat

6-3-200 DEFINITIONS

- 6-3-201 APCO
- 6-3-202 Builder
- 6-3-203 Curtailment Period
- 6-3-204 Electric-powered Heating Device
- 6-3-205 Fireplace
- 6-3-206 Garbage
- 6-3-207 Gas-fueled Heating Device
- 6-3-208 Low Mass Fireplace
- 6-3-209 Masonry Heater
- 6-3-210 Pellet-fueled Device
- 6-3-211 Real Property
- 6-3-212 Ringelmann Chart
- 6-3-213 Seasoned Wood
- 6-3-214 Solid Fuel
- 6-3-215 Treated Wood
- 6-3-216 U.S. EPA Phase II Certified Device
- 6-3-217 Visible Emissions
- 6-3-218 Wood-burning Device

6-3-300 STANDARDS

- 6-3-301 Mandatory Solid-Fuel Burning Curtailment
- 6-3-302 Visible Emissions Limitation
- 6-3-303 Criteria for Sale, Resale or Installation of Wood-burning Devices
- 6-3-304 Criteria for Wood-burning Devices in New Building Construction
- 6-3-305 Prohibition Against Burning Garbage, Non-Seasoned Wood or Certain Materials
- 6-3-306 Requirements for Sale of Wood

6-3-400 ADMINISTRATIVE REQUIREMENTS

- 6-3-401 Verification of Violation
- 6-3-402 Device Sale or Installation, Public Awareness Information
- 6-3-403 Device Manufacturer's Certification or Proof of Equivalency
- 6-3-404 Labeling for Solid Fuel or Wood Sale

6-3-500 MONITORING AND RECORDS

- 6-3-501 Burden of Proof

6-3-502 Proof of Certification or Equivalency

6-3-600 MANUAL OF PROCEDURES

6-3-601 Determination of Visible Emissions

6-3-602 Determination of Moisture Content

6-3-603 Determination of EPA Certification or Demonstration of Equivalency

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.

6-3-110 Limited Exemption, 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.

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.

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.

6-3-200 DEFINITIONS

6-3-201 APCO: The Air Pollution Control Officer of the Bay Area Air Quality Management District (District) or the designee thereof.

6-3-202 Builder: Any individual or company that constructs or sells any residential or commercial unit with a wood-burning device installed therein.

6-3-203 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.

- 6-3-205 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.
- 6-3-206 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.
- 6-3-207 Gas-fueled Heating Device:** Any device that utilizes natural gas as a fuel source supplied by a natural gas service utility, including, but not limited to, gas-fueled fireplaces, gas-fueled room heaters, gas-fueled inserts, or gas-fueled log sets.
- 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."
- 6-3-210 Pellet-fueled Device:** Any solid-fueled 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.
- 6-3-211 Real Property:** The land and anything permanently affixed to the land, such as a building and structures.
- 6-3-212 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.
- 6-3-213 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.
- 6-3-214 Solid Fuel:** Any wood, wood-based product, non-gaseous or non-liquid fuel, including but not limited to: manufactured logs, wood or other pellet products. This definition does not include solid fuel intended for cooking food, such as charcoal.
- 6-3-215 Treated Wood:** Wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects or weathering.
- 6-3-216 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.
- 6-3-217 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.
- 6-3-218 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 Solid-fuel Burning Curtailment:** Effective November 1, 2008, during the months of November through February, no person shall operate (combust wood or solid-fuel products in) any wood-burning device during a curtailment period. This

curtailment requirement shall not apply to a gas-fueled heating device or an electric-powered heating device.

6-3-302 Visible Emissions Limitation: 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 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.

6-3-303 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.

6-3-304 Criteria for Wood-burning Devices in New Building Construction: Effective 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 containing a wood-burning device or install a new wood-burning device 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.

6-3-305 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.

6-3-306 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:

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

306.2 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 6-3-404.3, 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.

6-3-402 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 Section 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."

6-3-403 Device Manufacturer's Certification or Proof of Equivalency: The manufacturer and seller 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. Phase II emission limits.

6-3-404 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:

404.1 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 [Toll-Free Number] or [Web Address] 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.

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

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

404.3 Effective January 1, 2009, if wood (not to include manufactured logs) is not seasoned, 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.

6-3-500 MONITORING AND RECORDS

6-3-501 Burden of Proof: The burden of proof of eligibility for the exemption pursuant to Section 6-3-112 is on the claimant. Any person claiming such an exemption shall maintain adequate documentation or records explaining why the device is the only source of heat and whether the situation is temporary or permanent. Such records will be furnished to the APCO upon request.

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 6-3-303 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.

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.

6-3-603 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.