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

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 <u>Service</u> Unavailability: Wood-burning devices in areas <u>The requirement of Section 6-3-301 shall not apply to any person who operates a wood-burning device in an area</u> where natural gas service is not available (which includes temporary service outages), as determined by gas utility service to an area or household are exempt from the requirement of Section 6-3-301. A person may qualify for this exemption even though propane fuel is available for space heating purposes.
- 6-3-111 Limited Exemption, Sole Source of Space Heat: Wood-burning devices relied upon as the sole source of heat for residential space heating are exempt from the requirement of Section 6-3-301. A household claiming this exemption cannot contain another means of functioning space heating. <u>Electrical Power Service</u> <u>Unavailability:</u> 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, Startup of New Fire: Visible emissions from the startup of a new fire for a period that is not to exceed twenty minutes in any consecutive fourhour period is exempt from the requirements of Section 6-3-302. Only Sole Source of Space Heat: The requirement of Section 6-3-301 shall not apply to any person whose Wood-burning devices relied upon as the only sole source of heat for residential space heating is a wood-burning device are exempt from the requirement of Section 6-3-301. A person household claiming this exemption cannot contain 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.
- **6-3-201**<u>2</u> **Builder:** Any individual or company that constructs and/or sells any residential or commercial, single or multi-dwelling unit with a wood-burning device installed therein.
- **6-3-202**<u>3</u> **Curtailment Period:** Any period so declared to the public by the <u>Air Pollution</u> Control Officer (APCO) when a negative impact upon public health <u>is anticipated</u>, resulting from <u>PM_{2.5}</u> levels of particulate matter of 2.5 micrograms in size or less (PM_{2.5}), is <u>forecast to exceed 35 micrograms/m³</u>. In declaring such curtailment period, the APCO shall notify the public of each curtailment by providing any or all of the following communications:

202.1 Notices to newspapers, radio stations or television stations of general circulation within the Bay Area Air Quality Management District (BAAQMD);

- 202.2 Recorded telephone messages on BAAQMD informational phone numbers;
- 202.3 Emails to recipients of the BAAQMD "Spare the Air" list server;

202.4 Message posted on the BAAQMD website, www.sparetheair.org; and/or; 202.5 Any other such communication as the APCO determines to be appropriate. 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
- <u>Check www.sparetheair.org.</u>

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

- <u>Media outlets of general circulation in the Bay Area including, but not</u> <u>limited to: newspapers, radio or television stations;</u>
- <u>Recorded telephone messages on District informational phone</u> <u>numbers;</u>
- 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.
- 6-3-2034 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.
- **6-3-2035 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.
- **6-3-2046 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.
- 6-3-2047 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.
- **6-3-2058** Low Mass Fireplace: Any fireplace and attached chimney, as specified 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.
- 6-3-206 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."
- **6-3-2079 Pellet-Fueled Device:** Any solid-fueled burning device which is operated on pellet-fuel, <u>and</u> 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. <u>Pellet fuel may be composed of compressed wood, corn or other biomass</u>.
- 6-3-207<u>10</u> Real Property: The land and anything permanently affixed to the land, such as building and structures.
- 6-3-211 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.
- **6-3-20912** 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.
- **6-3-20713 Solid Fuel:** Any wood, wood-based product, non-gaseous, or non-liquid fuel, including but not limited to: seasoned wood, manufactured logs, wood or other pellet products. This definition does not include solid fuel intended for cooking food, such as charcoal.

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- **6-3-211<u>4</u> Treated Wood:** Wood of any species that has been chemically impregnated, painted, or similarly modified to improve resistance to insects and/or weathering.
- **6-3-215 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.
- <u>6-3-216</u> 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.
- **6-3-2137 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 for cooking food, such as wood-fired ovens or barbecues.

6-3-300 STANDARDS

- 6-3-301 Mandatory Solid Fuel Burning Curtailment: 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 Prohibition of Exceeding Ringelmann No. 1 (20 Percent Opacity)Visible Emissions Limitation:
 - 302.1 No person(s) 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 in any building or structure. Visible emissions from the startup of a new fire for a period that is not to exceed twenty consecutive minutes in any consecutive four-hour period are not subject to this provision.
 - 302.2 Smoke visible from a chimney, flue or exhaust duct in excess of the Ringelmann No. 1 limitation is presumed to be unlawful operation of a woodburning device. This presumption may be refuted by demonstration that the smoke was not caused by a wood-burning device.
- **6-3-303 Criteria for Sale, Transfer or Installation of Wood-burning Devices**: Effective <six months after rule adoption>, no person shall sell, offer for sale or resale, supply, install, or transfer a new or used wood-burning device <u>intended for use within District</u> <u>boundaries</u> 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 masonary heater;
 - 303.43 A low mass fireplace of a make and model that meets EPA low mass fireplace emission targets and has been approved in writing by the APCO.

The requirements of Section 6-3-303 are not intended to apply This restriction 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 <six months after rule adoption>, no person or builder shall commence construction of a new building or structure designed permitted to contain a wood-burning device unless the device meets the requirements of Section 6-3-303. <u>Any gas-fueled heating device or electric-powered heating device is allowed under this standard.</u>
- 6-3-305 Prohibition Against Burning Garbage, Non-Seasoned Wood and/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 and/or colored

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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 <u>Sale of</u> Seasoned Wood: No person shall sell, offer for sale, or supply any seasoned wood intended for use in a wood-burning device that does not have a moisture content of 20 percent or less by weight. <u>meet one of the following requirements:</u>
 - <u>306.1 Have a moisture content of 20 percent or less by weight, or</u>
 - <u>306.2</u> Be identified as unseasoned wood and include instructions on how to dry out the wood, as required in Section 6-3-404.2, before combustion.

6-3-400 ADMINISTRATIVE REQUIREMENTS

- <u>6-3-401</u> 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.
- **6-3-4012 Device Sale/** <u>or</u> Installation, Public Awareness Information: Effective <three six months after rule adoption>, any person or builder offering for sale, selling or installing <u>a</u> new or used wood-burning device subject to Section 6-3-303 shall: 401.1 <u>Pp</u>rovide to the purchaser public awareness information to each purchaser of a wood-burning device in the form of pamphlets, brochures, or fact sheets 401.2 Include in public awareness information the following: <u>addressing</u> proper sizing installation, operation, and maintenance of the wood-burning device, and its use; and the health effects of wood smoke. <u>The information on health effects of wood smoke</u> shall include the following statement:

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

- **6-3-4023 Device Manufacturer's Certification:** The manufacturer and seller of any woodburning 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.
- 6-3-403<u>4</u> Solid Fuel, Public Awareness Information Labeling for Solid Fuel or Wood Sale: Effective <three <u>six</u> months after rule adoption>, any person offering for sale, selling or providing solid fuel <u>or</u> wood <u>intended</u> for use in a wood-burning device <u>within</u> <u>District boundaries</u> shall:
 - 403<u>5</u>.1 Attach a label to each package of <u>solid fuel or</u> wood or solid fuel sold that states the following:

Solid Fuel Labeling Requirement

HEALTH WARNING: Wood smoke contains harmful particulate matter. On cold, windless days the Bay Area Air Quality Management District may announce a curtailment on burning wood or any solid fuel. On these days you should not burn either indoors in your fireplace or woodburning device or outdoors in fire pits.

Burning during a curtailment is a violation of air quality regulations, unless an exemption applies.

CHECK BEFORE YOU BURN

LISTEN to local TV or Radio New CALL 1-800-HELP-AIR CHECK <u>www.sparetheair.org</u>.

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"HEALTH WARNING: This product and similar solid-fuel products produce particulate matter when burned which can be harmful to public health. Your city, county or air pollution control district may prohibit the use of this product and wood burning on days when air pollution levels may be high. Please check before using."

403<u>5</u>.2 If the solid fuel wood is seasoned wood, then the label must also state the following in addition to the requirements of Section 6-3-403.1:

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

4045.23 If the wood 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. Persons 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.

6-3-600 MANUAL OF PROCEDURES

- **6-3-601** Determination of Ringelmann No 1 (20 Percent Opacity) Visible Emissions: Ringelmann No 1 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.