

**ALASKA DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION**



**18 AAC 50 AIR QUALITY CONTROL**

Proposed Regulation Changes Pertaining to:

**Wood-Fired Heating Device Standards**

**&**

**Fine Particulate Matter (PM-2.5) Air Episode and Advisories.**

**Adopted**

**November 14, 2014**

**Sean Parnell  
Governor**

**Larry Hartig  
Commissioner**

**ALASKA ADMINISTRATIVE CODE**

**TITLE 18- DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**Chapter 50. Air Quality Control**

**Article 1. Ambient Air Quality Management**

**Proposed regulation amendments:**

**Adding a new section: Section 50.077 Wood-fired heating device standards;**

**Amending Section 50.245: Air quality episodes and advisories;**

**Amending Section 50.990: Definitions.**

18 AAC 50 is amended by adding a new section to read:

**18 AAC 50.077. Wood-fired heating device standards.** (a) These regulations apply to a person who owns or operates a hydronic heater, woodstove, or wood-fired heating device, in an area identified in 18 AAC 50.015(b)(3), or a person intending to sell, lease, distribute, market or convey a hydronic heater, woodstove, or wood-fired device for use in an area identified in 18 AAC 50.015(b)(3), if the hydronic heater, woodstove, or wood-fired device is installed after *{effective date of regulation}* and not otherwise exempted in this section.

(b) Except as provided in (d) and (e) of this subsection, a person may not use, operate, supply, distribute, lease, sell, convey, or install in an area identified in 18 AAC 50.015(b)(3)

(1) a new hydronic heater unless the model has been

(A) listed on EPA’s Phase 2 Qualified White Tag Model list, provided the unit meets the particulate matter annual average emission rate in (B) of this subsection and its rated size is under 350,000 BTU per hour, as of *{the effective date of regulation}*; or

(B) tested by an EPA-accredited lab to meet an annual average emission level of 0.32 pound per million BTU of heat output, a particulate matter annual average emission rate of 2.5 grams per hour, and a maximum individual test run emission rate of 18.0 grams of fine particles per hour using the appropriate EPA hydronic heater test procedures for the specific device from the EPA Voluntary Phase 2 Hydronic Heater Program, “Test Method 28 WHH, for Measurement of Particulate Emissions and Heating Efficiency of Wood-Fired Hydronic Heating Appliances”, American Standard Testing Manufacturing Method E2618, “Standard Test Method for Measurement of Particulate Emissions and Heating Efficiency of Outdoor Solid Fuel-fired Hydronic Heating

Appliances,” and American Standard Testing Manufacturing Method E2515, “Standard Test Method for Determination of Particulate Matter Emissions Collected in a Dilution Tunnel,” approved by EPA as of October 12, 2011 and adopted by reference with test results submitted to and approved by the department as described in (c).

(2) a new woodstove unless the model has been

(A) listed on EPA’s certified woodstove list, provided the unit meets the emission standard in (B) of this subsection and its rated size is under 350,000 BTU per hour, as of six months after the {*effective date of regulation*}; or

(B) tested by an EPA-accredited lab to meet the particulate matter emission limit of 2.5 grams per hour using the applicable EPA Test “Method 28” and appropriate emission concentration measurement procedures “5G” or “5H” found in 40 C.F.R. 60, Appendix A, revised as of December 23, 1991 and adopted by reference with test results submitted to and approved by the department as described in (c).

(3) a new wood-fired heating device greater than 350,000 BTU per hour unless the model has been tested by an EPA-accredited lab to meet the particulate matter emission limit of 2.5 grams per hour using American Standard Testing Manufacturing test procedures E2515-11, approved as of November 1, 2011, and E2618-09, approved as of February 15, 2009, and adopted by reference with test results submitted to and approved by the department as described in (c).

(c) Prior to selling, conveying, installing, distribution, supplying or leasing of a wood-fired heating device covered under this section, proof of EPA certification or test results demonstrating compliance with the emission standards listed in (b)(1) - (3) shall be submitted by the manufacturer to the department for review and acceptance if the wood-heating device is not already listed by the department. Heating devices certified by the department shall be included on

a list and made publically available on the Internet, at the department’s Division of Air Quality offices in Anchorage, Fairbanks, and Juneau, and upon request. A person who disputes a certification decision by the department under this section may request review under 18 AAC 50.185 or 18 AAC 15 Article 6.

(d) A person may supply, distribute, lease, sell, convey or install a new wood-fired heating device where that person has confirmed in writing with the buyer or user of the device that the device will be installed and used in an area other than the air quality and special protection areas identified in 18 AAC 50.015(b)(3).

(e) Subsection (b) does not apply to wood-fired heating devices located in a fine particulate non-attainment area classified as “moderate” by the Environmental Protection Agency pursuant to 42 U.S.C. 7513 and identified in 18 AAC 50.015(b)(3); where the device is being sold, leased or conveyed as part of an existing building or other property and the device was installed in that building or on that property prior to {*effective date of regulation*}.

(Eff. \_\_/\_\_/\_\_\_\_, Register \_\_)

**Authority:** AS 46.03.020 AS 46.14.020 Sec. 30, ch. 74, SLA 1993  
AS 46.14.010 AS 46.14.030

Editor’s Note: The documents, procedures, and methods adopted by reference in 18 AAC 50.015 may be reviewed at the department’s Anchorage, Fairbanks, or Juneau office. For information on how to obtain a copy of the ASTM documents referred to in 18 AAC 50.015, contact the American Society for Testing and Materials (ASTM), Publications Department, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania, 19428-2959, phone (610) 832-9585, fax (610) 832-9555. The list of EPA-certified woodstoves may be found at,

http://www.epa.gov/compliance/resources/publications/monitoring/caa/woodstoves/certifiedwood.pdf

18 AAC 50.245(a) is amended to read:

**18 AAC 50.245. Air quality episodes and advisories.** (a) The department **or a local air quality control program** may declare an air **quality** episode and prescribe and publicize curtailment action if the concentration of an air pollutant in the ambient air has reached, or is likely in the immediate future to reach, any of the concentrations established in Table 6 in this subsection. **Nothing in this regulation alters a local government’s powers or obligations under a local air quality control program established under AS 46.14.400 and other governing local laws, as applicable.**

The title of 18 AAC 50.245(a) Table 6 is changed to read:

Table 6

Concentrations Triggering an Air **Quality** Episode

(Eff. 1/18/97, Register 141; am 10/1/2004, Register 171; am \_\_/\_\_/\_\_\_\_, Register \_\_\_\_)

**Authority:** AS 46.03.020 AS 46.14.020 Sec. 30, ch. 74, SLA 1993  
AS 46.14.010 AS 46.14.030

18 AAC 50.245(b) is amended to read:

(b) The department **or a local air quality control program** will declare an air quality advisory if, in its judgment, air quality or atmospheric dispersion conditions exist that might threaten public health.

18 AAC 50.245(c) is amended to read:

(c) If the department **or a local air quality control program** declares an air quality advisory under (b) of this section, the department **or a local air quality control program** will

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(Eff. 1/18/97, Register 141; am 10/1/2004, Register 171; am \_\_/\_\_/\_\_\_\_, Register \_\_)

**Authority:** AS 46.03.020 AS 46.14.020 Sec. 30, ch. 74, SLA 1993  
AS 46.14.010 AS 46.14.030

18 AAC 50.990(123) is amended to read:

(123) "wood-fired heating device" means a device designed **or used** for wood combustion so that usable heat is derived for the interior of a building; "wood-fired heating device" includes wood-fired **or pellet-fired** stoves, woodstoves, fireplaces, **wood-fired forced air furnaces, masonry heaters, wood-fired or pellet-fired** cooking stoves, **hydronic heaters** and combination fuel furnaces or boilers that burn wood; "wood-fired heating device" does not include a device that is primarily a part of an industrial process and incidentally provides usable heat for the interior of a building.

18 AAC 50.990 is amended by adding new paragraphs to read:

(135) "hydronic heater" means an outdoor or indoor fuel burning device, which may be equipped with a heat storage unit, designed to burn wood, biomass or other solid fuels that heats building space via the distribution, typically through pipes, of fluid heated in the device, typically water or a water/antifreeze mixture. A forced air furnace is not a hydronic heater.

(136) "solid fuel-fired heating device" means a device designed or used for wood or coal combustion so that usable heat is derived for the interior of a building; "solid fuel-fired heating device" includes wood-fired heating devices, coal stoves, coal forced air furnaces, coal-fired cooking stoves, coal-fired hydronic heaters and combination fuel furnaces or boilers that burn wood and coal; "solid fuel-fired heating device" does not include a device that is primarily a part of an industrial process and incidentally provides usable heat for the interior of a building.

(137) "woodstove" or "wood heater" has the meaning given to "wood heater" in 40 C.F.R. 60.531, revised as of October 17, 2000 and adopted by reference.

(138) "masonry heater" means a heating appliance constructed of concrete or solid masonry which is designed to absorb and store heat from a solid fuel fire built in the firebox by routing the exhaust gases through internal heat exchange channels in which the flow path downstream of the firebox may include flow in a horizontal or downward direction before entering the chimney and which delivers heat by radiation from the masonry surface of the heater, or as otherwise defined in the current version of the International Building Code and compliant with the requirements of ASTM E1602 or UL1482.

(Eff. 1/18/97, Register 141; am 6/14/98, Register 146; am 6/21/98, Register 146; am 9/4/98, Register 147; am 11/4/99, Register 152; am 1/1/2000, Register 152; am 2/2/2002, Register 161; am 5/3/2002, Register 162; am 11/15/2002, Register 164; am 8/8/2003, Register 167; am 10/1/2004, Register 171; am 12/3/2005, Register 176; am 12/30/2007, Register 184; am 7/25/2008, Register 187; am 4/1/2010, Register 193; am 12/9/2010, Register 196; am 9/17/2011, Register 199; am 9/14/2012, Register 203; am \_\_/\_\_/\_\_\_\_, Register \_\_)

|                   |              |              |              |
|-------------------|--------------|--------------|--------------|
| <b>Authority:</b> | AS 44.46.025 | AS 46.14.140 | AS 46.14.250 |
|                   | AS 46.03.020 | AS 46.14.150 | AS 46.14.255 |
|                   | AS 46.03.710 | AS 46.14.160 | AS 46.14.280 |

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|--------------|--------------|---------------------------|
| AS 46.14.010 | AS 46.14.170 | AS 46.14.285              |
| AS 46.14.020 | AS 46.14.180 | AS 46.14.290              |
| AS 46.14.030 | AS 46.14.210 | AS 46.14.300              |
| AS 46.14.120 | AS 46.14.230 | AS 46.14.560              |
| AS 46.14.130 | AS 46.14.240 | Sec. 30, ch. 74, SLA 1993 |