ALASKA DEPARTMENT OF

ENVIRONMENTAL CONSERVATION

18 AAC 50 AIR QUALITY CONTROL

Proposed Regulation Changes Pertaining to:

Open Burning,

Wood-fired Heating Device Visible Emission Standards,

Solid Fuel-Fired Heating Device Fuels,

Wood-Fired Heating Device Standards,

&

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

Public Review Draft

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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:

Amending Section 50.065: Open burning;

Amending Section 50.075: Wood-fired heating device visible emission standards;

Adding a new section: Section 50.076 Solid fuel-fired heating device fuel requirements;

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

Amending Section 50.245: Air quality episodes and advisories; and

Amending Section 50.990: Definitions.

18 AAC 50.065(f) is amended to read:

(f) **Wood Smoke Control <u>and PM-2.5 Non-Attainment</u> Areas**. Open burning is prohibited between November 1 and March 31 in **<u>all</u>** [A] wood smoke control **<u>areas</u>** [AREA] identified in 18 AAC 50.025(b) **<u>and in all PM-2.5 non-attainment areas identified in 18 AAC 50.015(b)(3)</u>**.

18 AAC 50.075(b) is amended to read:

(b) **<u>The department may prohibit operation of</u>** [A PERSON MAY NOT OPERATE A] wood-fired heating **<u>devices</u>** [DEVICE] in an area for which the department has declared an air quality episode under 18 AAC 50.245.

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

18 AAC 50.076. Solid fuel-fired heating device fuel requirements. (a) A person operating a solid fuel-fired heating device in areas identified in 18 AAC 50.015(b)(3) may only use the following fuels:

(1) For wood burning devices:

(A) clean wood;

(B) wood pellets made from clean wood;

(C) manufacturer recommended starter fuels including home heating oil, propane, natural gas or wood-based material for dual-fired hydronic heaters; and

(D) biomass fuels approved by the manufacturer.

(2) For coal burning devices:

(A) coal; and

(B) coal pellets.

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

18 AAC 50.077. Wood-fired heating device standards. (a) **Applicability**. These regulations apply to

(1) air quality and special protection areas identified in 18 AAC 50.015(b)(3);

(2) any manufacturer, supplier, distributor or person intending to sell, lease, distribute, market, or convey a new wood-fired heating device for use in areas listed in (a)(1) of this section; and

(3) any person who owns or operates a wood-fired heating device in areas listed in (a)(1) of this section.

(b) **Prohibitions**. Except as provided in (4) of this subsection, no person subject to (a) of this section may supply, distribute, lease, sell, convey, or install

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

(A) tested by an EPA-accredited lab to meet the particulate matter emission limit of 2.5 grams per hour using the EPA hydronic heater test procedure, "Test Method 28 WHH for Measurement of Particulate Emissions and Heating Efficiency of Wood-Fired Hydronic Heating Appliances", approved by EPA as of October 12, 2011 and adopted by reference; or

(B) listed on EPA's Phase II White Tag Model list, provided the unit meets the emission standard in (A) of this subsection and its rated size is under 300,000 BTU as of {*the effective date of regulation*};

(2) a new woodstove unless the model has been

(A) 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 Appendix A to Part 60, revised as of December 23, 1971 and adopted by reference; or

(B) listed on EPA's certified woodstove list, provided the unit meets the emission standard in (A) of this subsection and its rated size is under 300,000 BTU, as of six months after the {*effective date of regulation*}.

(3) a new wood-fired heating device greater than 300,000 BTU unless the model has been

(A) tested by an EPA-accredited lab to meet the particulate matter emission limit of 2.5 grams per hour using ASTM test procedures E2515-11, approved as of November 1, 2011, and E2618-09, approved as of February 15, 2009, and adopted by reference.

(4) the prohibitions in subsection (b) do not apply to:

(A) the supply, distribution, lease, sale, conveyance or installation of a new wood-fired device by a person subject to (a) of this section where that person has confirmed in writing with the buyer or user of the device that they intend the device will be installed and used in an area other than one of the areas described in (a) (1) of this section.

(B) the sale, lease or conveyance of a wood-fired heating device where the device is being sold, leased or conveyed as part of a single or multifamily residence and the device was installed in that residence 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

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 authorized by the department under AS 46.14.400** 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.

Table 6.

Concentrations Triggering an Air **Quality** Episode

Episode Type	Air Pollutant	Concentration in micrograms per cubic meter {and in ppm where applicable}
Air alert	Sulfur dioxide	365 (24-hour average) {0.14 ppm}
	PM-2.5	**56 (24-hour average)**
	PM-10	150 (24-hour average)
	PM-10 from wood burning (wood smoke control areas)	92 (24-hour average)

	Carbon monoxide	10,000 (8-hour average) {8.7 ppm}
Air warning	Sulfur dioxide	800 (24-hour average) {0.31 ppm}
	PM-2.5	**251 (24-hour average)**
	PM-10	350 (24-hour average)
	Carbon monoxide	17,000 (8-hour average) {15 ppm}
Air emergency	Sulfur dioxide	1,600 (24-hour average) {0.61 ppm}
	PM-2.5	**351 (24-hour average)**
	PM-10	420 (24-hour average)
	PM-10 from wood burning (wood smoke control areas)	During an air alert, a concentration measured or predicted to exceed 92 (24-hour average), and to continue to increase beyond the concentration that triggered the air alert

	Carbon monoxide	34,000 (8-hour average) {30 ppm}

18 AAC 50.245(b) is amended to read:

(b) The department **or a local air quality control program authorized by the department under AS 46.14.400** 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 authorized by the department under AS 46.14.400** declares an air quality advisory under (b) of this section, the department **or a local air quality control program authorized by the department under AS 46.14.400** will

. . .

(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, fireplaces, **wood-fired forced air furnaces,** 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) “clean wood” means wood that has no paint, stains, or other types of coatings, and wood that has not been treated with preservatives including copper chromium arsenate, creosote, or pentachlorophenol.

(136) “hydronic heater” means a fuel burning device, including wood boilers and pellet boilers, designed to

(A) burn wood, biomass or other solid fuels;

(B) that the manufacturer specifies for installation in structures not normally occupied by humans (e.g., garages); and

(C) heats building space or water via the distribution, typically through pipes, of a fluid heated in the device, typically water or a water/antifreeze mixture.

(137) "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.

(138) “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. (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 ___)

Authority:	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
	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