

**ALASKA DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**



18 AAC 50 AIR QUALITY CONTROL

**Purpose and Applicability of Chapter,
Open Burning,
Wood-fired Heating Device Visible Emission Standards,
Solid Fuel-Fired Heating Device Fuels,
Commercial Wood Seller Disclosure Program,
Wood-fired Heating Device Standards,
&
Fine Particulate Matter (PM-2.5) Air Episode and Advisories**

Adoption

December 24, 2014

**Bill Walker
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 50.005: Purpose and applicability of chapter;

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;

Amending Section 50.077: Wood-fired heating device standards;

Adding a new section 50.246: Air quality episodes and advisories for PM-2.5;

and

Amending Section 50.990: Definitions.

18 AAC 50.005 is amended by adding a new subsection to read:

(c) Nothing in this Article 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. (Eff. 1/18/97, Register 141; am 10/1/2004, Register 171; am __/__/____, Register ____)

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

AS 46.14.010

18 AAC 50.065(f) is amended to read:

(f) **Wood Smoke Control and PM-2.5 Non-Attainment Areas.** Open burning is prohibited between November 1 and March 31 in **all** [A] wood smoke control **areas** [AREA] identified in 18 AAC 50.025(b) **and in all PM-2.5 non-attainment areas identified in 18 AAC 50.015(b)(3). In PM-2.5 non-attainment areas, a local air quality open burn permit program may replace the seasonal open burning prohibition in this section provided the program does not cause or contribute to violations of the PM-2.5 ambient air quality standards adopted in 18 AAC 50.010 and the open burn program is part of a local air quality plan included in the State Air Quality Control Plan adopted under 18 AAC 50.030.**

(Eff. 1/18/97, Register 141; am __/__/____, Register ____)

Authority: AS 46.03.020 AS 46.14.010 AS 46.14.030
AS 46.03.710 AS 46.14.020 Sec. 30, ch. 74, SLA 1993

The introductory language at 18 AAC 50.075 is amended to read:

18 AAC 50.075. Wood-fired heating device visible emission standards.

18 AAC 50.075 (a) is amended to read:

(a) A person may not operate a wood-fired heating device in a manner that causes

- (1) black smoke; or
- (2) visible emissions that exceed 50 percent opacity for more than six [15] minutes in any one hour, except during the first 15 minutes after initial firing of the unit, in an area for which an air quality advisory is in effect under 18 AAC 50.245 or 18 AAC 50.246. Visible emissions are measured following opacity reading procedures as required by Vol. 3., sec. IV-3, Appendix IV-3, of the state air quality control plan, adopted by reference in 18 AAC 50.030 or EPA's approved Method 9 Alternative Method, ALT-082, Revised 5/17/2012.

18 AAC 50.075 is amended by adding a new subsection to read:

(d) A person may operate a wood-fired heating device in an area for which the department has declared a PM-2.5 air quality episode under 18 AAC 50.246 or under emergency episode provisions included in a local air quality plan incorporated in the *State Air Quality Control Plan* adopted under 18 AAC 50.030, only if:

- (1) visible emissions or opacity from the wood-fired heating device is below the opacity limits identified in the episode announcement for that area as defined in the *State Air Quality Control Plan* adopted by reference in 18 AAC 50.030 or

(2) the owner or operator of the wood-fired heating device obtains a written temporary waiver from the department or local air quality program from the opacity limits identified in the episode announcement; the department or local air quality program may grant a temporary waiver after considering:

- (i) financial hardship information provided by the owner or operator
- (ii) technical feasibility information provided by the owner or operator;
- (iii) potential impacts to sensitive locations including hospitals, schools, day care centers, health clinics, nursing homes, and senior centers;
- (iii) mitigation measures implemented by the owner or operator to prevent adverse health impacts to sensitive individuals; and
- (iv) the contribution of the device to the exceedance of the PM-2.5 concentration triggering the episode announcement.

(Eff. 1/18/97, Register 141; am 5/6/2009, Register 190; 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 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-fired heating devices:
 - (A) wood;

(B) wood pellets, manufactured compressed wood logs, bricks, or pucks made from clean wood;

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

(D) biomass fuels approved by the manufacturer.

(2) For coal burning devices:

(A) coal; and

(B) coal pellets.

(3) For all solid fuel-fired heating devices:

(A) a fuel that is approved by the manufacturer that is not prohibited by the department in (3)(B);

(B) persons are prohibited from burning or incinerating the following items: wood that has paint, stains, or other types of coating, wood that has been treated with preservatives including copper chromium arsenate, creosote, or pentachlorophenol, asphalt, rubber or tar products including materials contaminated with petroleum, petroleum derivatives, oily wastes or oil cleanup materials; chlorinated or halogenated organic compounds including plastics, polyurethane products, pesticides, herbicides, fungicides; compounds containing cyanide or asbestos; animal carcasses; or putrescible garbage.

(b) Effective October 1, 2015, between October 1 and March 31 each year, a person operating a wood-fired heating device in areas identified in 18 AAC 50.015(b)(3) may only use the following fuels:

(1) dry wood;

(2) wood pellets, manufactured compressed wood logs, bricks, or pucks made from clean wood;

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

(4) biomass fuels approved by the manufacturer; and

(5) a fuel that is approved by the manufacturer, other than wet wood or a fuel that is not prohibited by the department under (a)(3).

(c) Commercial Wood Seller Registration Program:

(1) a commercial wood seller, an individual or business who sells wood for use in space heating, is required to register in the commercial wood seller registration program and is subject to all requirements of this section, except 18 AAC 50.076(c)(7), if they sell or provide wood to entities located in a fine particulate matter non-attainment area classified by the Environmental Protection Agency as “serious” pursuant to 42 U.S.C. 7513 and identified in 18 AAC 50.015(b)(3) where the department has issued a finding that wood smoke is a significant component of the fine particulates leading to an area being designated as “non-attainment”;

(A) requirements on wood sellers shall become effective on the sixty-first day after the department publishes a notice identifying the need for and establishment of the program for the serious fine particulate matter non-attainment area;

(B) that departmental notice shall be published, no less than 60 days before the implementation of a wood seller registration program, in a newspaper of general circulation, posted in the local air pollution control program office, and on the state online public notice system;

(C) wood pellets, manufactured compressed wood logs, bricks, or pucks made from clean wood are exempt from the requirements of the commercial wood seller registration program;

(D) retailers whose principle business is not selling wood for space heating and that sell only wood pellets, manufactured, compressed wood logs, bricks, or pucks made from clean wood or seasoned split wood bundles sized 0.75 cubic feet or less are not considered "commercial wood sellers".

(2) a commercial wood seller subject to this section shall:

(A) prior to selling or providing wood, initially register with the department by submitting a registration application and required documentation to the department in a format provided by the agency;

(B) have available for use a department-approved wood moisture content meter;

(C) have a valid Alaska business license as required under AS 43.70 and 12 AAC 12;

(D) renew registration by submitting a renewal application and required documentation to the department, in a format provided by the agency, 30 days before the expiration date of the existing registration.

(3) upon receipt of a complete registration application and associated documentation, the department may:

(A) issue a unique registration identification number to the wood seller;

(B) identify the time period covered by the registration, not to exceed three years;

(C) issue a batch of uniquely numbered three-part moisture disclosure forms for use in this program; and

(D) add the registered wood seller to the publically available registration list.

(4) a registered commercial wood seller shall:

(A) upon sale or point of delivery of wood to the consumer,

(i) test the moisture content of the wood in accordance with 18 AAC 50.076 (c)(6);

(ii) fully complete and sign the uniquely numbered moisture content disclosure form;

(iii) obtain the buyer's signature or mark on the form that the buyer is 'unavailable'; and

(iv) provide the buyer with a copy of the signed form.

(B) after sale or delivery of wood to the consumer:

(i) submit to the department the ADEC copy of the fully completed forms no later than the fifteenth day of the month for sales conducted during the preceding month; and

(ii) retain the seller copy of the completed forms for two years after date of sale or delivery.

(C) provide the seller copy of completed forms for inspection at the request of the department;

(D) account for all of the moisture content disclosure forms received from the department. At the time of the monthly submittal under (B)(i), any moisture content

disclosure forms not given to a customer due to damage or errors must be submitted, and for any forms lost, the unique number must be reported;

(E) upon loss of registration or non-renewal of registration return to the department any unused moisture content disclosure forms;

(F) failure to comply with the requirements of (4)(A) - (E) may result in any or all of the following actions:

(i) remedial training on program requirements;

(ii) notice of violation;

(iii) removal from publically available registration list until deemed in compliance;

(iv) revocation of registration; or

(v) enforcement under AS 46.03.020, AS 46.03.760, AS 46.03.761, or AS 46.03.790.

(5) the department shall approve commercially-available moisture test meters for use by commercial wood sellers and provide a list of approved devices on the ADEC Division of Air Quality Internet web site and upon request.

(6) the commercial wood seller shall test the moisture content of the wood in the delivered or purchased load, except as provided by 18 AAC 50.076(c)(6)(B), (C), and (D), using a moisture meter approved by the department under (5) as follows:

(A) for split wood, wood rounds, or logs that are cut at the time of, or prior to, sale, and are marketed, sold, or provided as dry wood,

(i) moisture content shall be measured in a minimum of three pieces of wood for each cord of wood purchased;

(ii) the commercial wood seller shall randomly select the wood to be tested from differing locations throughout the entire load; and

(iii) each selected piece of wood shall undergo a fresh cut, be tested in the center of the fresh cut end and the measured moisture content documented on the department-provided form;

(B) for frozen wood, wood cut and sold or delivered at freezing temperatures below 32 degrees Fahrenheit, the commercial wood seller shall note on the moisture content disclosure form that the wood is frozen and assumed to be wet with greater than 20 percent moisture content;

(C) for wood marketed, sold, or provided as wet wood, the commercial wood seller shall note on the moisture content disclosure form that the wood is wet and assumed to be greater than 20 percent moisture content; and

(D) for wood split prior to freezing, provided the split wood is covered and stacked for ventilation, a commercial wood seller may report the wood to the consumer as dry provided that

(i) the moisture content of the wood sold is measured randomly after splitting while stacking and storing and meets the definition of dry wood;

(ii) the moisture content and the date of the measurements are recorded and saved; and

(iii) upon actual sale or delivery, if the temperature is at or below 32 degrees Fahrenheit, the commercial wood seller documents the previously recorded moisture content and date on the department-provided form.

(7) a registered commercial wood seller may be certified as a “Certified Dry Wood Seller” provided:

(A) the department has reviewed the registered commercial wood seller’s business practices and determined that the business is capable of consistently providing dry wood or manufactured compressed wood logs;

(B) the registered commercial wood seller commits to consistently providing buyers dry wood or manufactured compressed wood logs; and

(C) the registered commercial wood seller signs an acknowledgement form that failure to provide dry wood or accurately provide moisture content information for wood sold is subject to 18 AAC 50.076(c)(4)(f) and revocation of certification as a “Certified Dry Wood Seller”. (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 50.077(b) is amended to read:

(b) **Prohibitions.** Except as provided in (d) [AND], (e) **and (f)** of this subsection, no person subject to (a) of this section may supply, distribute, lease, sell, convey, or install in an area identified in 18 AAC 50.015(b)(3)

...

18 AAC 50.077 is amended by adding a new subsection to read:

(f) the prohibitions in subsection (b) do not apply to the following wood-fired heating devices located in a fine particulate matter non-attainment area classified by the Environmental

Protection Agency as “Serious” pursuant to 42 U.S.C. 7513 and identified in 18 AAC 50.015(b)(3):

(1) a wood stove certified by the Environmental Protection Agency or the department to be compliant with federal and state performance standards applicable to fine particulate emissions from that device and in effect prior to *{effective date of regulation}* or the date of installation of the device at its present location, whichever is later; or

(2) a hydronic heater approved or certified by the Environmental Protection Agency or the department to be compliant with federal and state performance standards applicable to fine particulate emissions from that device and in effect prior to *{effective date of regulation}* or the date of installation of the device at its present location, whichever is later; or

(3) a wood-fired heating device for which the owner has received a written temporary waiver from the prohibitions in subsection (b) from the department or a local air quality program. The department or local air quality program may grant a temporary waiver after considering:

(i) financial hardship information provided by the owner or operator

(ii) technical feasibility information provided by the owner or operator;

and

(iii) potential impacts to sensitive locations including hospitals, schools, day care centers, health clinics, nursing homes, and senior centers.

(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 is amended by adding a new section to read:

18 AAC 50.246. Air quality episodes and advisories for PM-2.5. (a) The department or a local air quality control program may declare an air quality episode and prescribe and publicize the actions to be taken if the concentration of PM-2.5 in the ambient air has reached, or is likely in the immediate future to reach, any of the concentrations established in Table 6a in this subsection. The episode thresholds and actions prescribed for any area that has a local air quality plan included in the State Air Quality Control Plan adopted under 18 AAC 50.030 shall be consistent with the emergency episode provisions included in that plan.

Table 6a

Concentrations Triggering an Air Quality Episode for PM-2.5

Episode Type	Air Pollutant	Concentration in micrograms per cubic meter
Air alert	PM-2.5	35.5 (24-hour average)
Air warning	PM-2.5	55.5 (24-hour average)
Air emergency	PM-2.5	150.5 (24-hour average)

(b) The department or a local air quality control program authorized by the department under AS 46.14.400 will declare a PM-2.5 air quality advisory if, in its judgment, PM-2.5 air quality or atmospheric dispersion conditions exist that might threaten public health.

(c) If the department or a local air quality control program declares a PM-2.5 air quality advisory under (b) of this section, the department or a local air quality control program will

(1) request voluntary emission curtailments from any person issued a permit under this chapter whose stationary source's emissions might impact the area subject to the advisory; and

(2) publicize actions to be taken to protect public health. (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 50.990(65) is amended to read:

(65) "open burning" means the burning of a material that results in the products of combustion being emitted directly into the ambient air without passing through a stack, flare, vent, or other opening of an emission unit from which an air pollutant could be emitted; **camp fires as defined in 18 AAC 50.990(140), barbeques, candles, tobacco, and celebratory fireworks are not considered open burning.**

(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

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

(139) "dry wood" means wood with a moisture content of 20 percent or less.

(140) "camp fire" means any open fire less than 3 feet in diameter used for cooking, personal warmth, lighting, ceremonial or aesthetic purposes that is hand built and that is not associated with any debris disposal activities.

(141) "wet wood" means wood with moisture content of more than 20 percent.

(142) "manufactured compressed wood logs" means logs that have been made from 100 percent compressed sawdust, wood chips, and/or other organic material with no additive.

(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

