

**DEPARTMENT OF
ENVIRONMENTAL CONSERVATION**



18 AAC 50

Air Quality Control

Adoption Draft

November 3, 2017

**Bill Walker
Governor**

**Larry Hartig
Commissioner**

18 AAC 50.030 is repealed and readopted to read:

18 AAC 50.030. State air quality control plan. (a) Volumes II and III of the *State Air Quality Control Plan* for implementing and enforcing the provisions of AS 46.14 and this chapter, as amended through {*adoption date of the regulations*}, are adopted by reference. The plan includes the following documents which are also adopted by reference:

(1) the department's *Alaska Air Quality Small Business Assistance Program*, April 1994;

(2) the Code of the City and Borough of Juneau, Alaska, Chapter 36.40, amended by the provisions of Ordinance of the City and Borough of Juneau, Alaska, Serial No. 2008-28,sec. 2;

(3) except as provided in 18 AAC 50.090(b), the department's *Air Quality Compliance Certification Procedures for Volatile Liquid Storage Tanks, Delivery Tanks, and Loading Racks*, as amended through December 10, 1992;

(4) the department's *Quality Assurance Project Plan for the State of Alaska Air Monitoring & Quality Assurance Program*, as amended through February 23, 2010;

(5) *Protocol for Determining the Best Performing Model*, EPA-454/R-92-025, December 1992;

(6) *Source Test Report Outline*, as amended through November 1984;

(7) the department's *Performance Audits for COMS*, revised as of August 20, 2008;

(8) the department's *Minor Permit Application Forms*, dated August 30, 2004.

(b) Any sources subject to RACT or BACM/BACT under the *State Air Quality Control Plan*, adopted by reference in 18 AAC 50.030(a), shall comply with RACT or BACM/BACT as

identified in the specific sections of the *State Air Quality Control Plan*.

(Eff. 1/18/97, Register 141; am 6/21/98, Register 146; am 9/4/98, Register 147; am 1/1/2000, Register 152; am 12/30/2000, Register 156; am 9/21/2001, Register 159; am 1/27/2002, Register 161; am 3/27/2002, Register 161; am 5/3/2002, Register 162; am 2/20/2004, Register 169; am 6/24/2004, Register 170; am 10/1/2004, Register 171; am 12/14/2006, Register 180; am 12/30/2007, Register 184; am 5/17/2008, Register 186; am 7/25/2008, Register 187; am 11/9/2008, Register 188; am 5/6/2009, Register 190; am 11/4/2009, Register 192; am 4/1/2010, Register 193; am 10/29/2010, Register 196; am 4/13/2011, Register 198; am 9/17/2011, Register 199; am 8/1/2012, Register 203; am 5/8/2013, Register 206; am 2/5/2015, Register 213; am 4/17/2015, Register 214; am 3/2/2016, Register 217; am 11/26/2016, Register 220; am 12/29/2016, Register 220; am __/__/____, Register ____)

Authority: AS 46.03.020 AS 46.14.030 Sec. 30, ch. 74, SLA 1993
AS 46.14.020 AS 46.14.140

18 AAC 50.075(e)(1) is repealed:

(1) repealed __/__/____; [THE TEMPERATURE IS WARMER THAN ANY THRESHOLD TEMPERATURE IDENTIFIED IN A LOCAL AIR QUALITY PLAN INCORPORATED IN THE *STATE AIR QUALITY CONTROL PLAN*, ADOPTED BY REFERENCE IN 18 AAC 50.030; AND]

...

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

(f) A solid fuel-fired heating device located in an area identified in 18 AAC 50.015(b)(3) shall be operated so that the visible emissions or opacity shall not exceed 20 percent opacity for

more than six minutes in any one hour, except during the first 15 minutes after initial firing of the device when the opacity limit shall be less than 50 percent. Visible emissions are measured as defined in 18 AAC 50.075(a)(2). (Eff. 1/18/97, Register 141; am 5/6/2009, Register 190; am 2/28/2015, Register 213; am 11/26/2016, Register 220; 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 50.077(a)(1) is amended to read:

18 AAC 50.077. Standards for wood-fired heating devices. (a) This section applies to a person who

(1) owns or operates a wood-fired heating device in an area identified in 18 AAC 50.015(b)(3), if the wood-fired heating device

(A) is installed on or after February 28, 2015; [AND]

(B) **was installed before February 28, 2015, and the wood-fired heating device:**

(i) is being sold, leased, or conveyed as part of an existing building or other property; and

(ii) lacked a valid EPA certification under 40 C.F.R. 60.533 or a qualifying “white tag” under EPA’s Phase 2 voluntary partnership program for hydronic heaters; or

(C) is not otherwise exempted in this section;

...

18 AAC 50.077(a)(2) is amended to read:

(2) intends to supply, sell, lease, distribute, convey, or install a wood-fired heating device for operation in an area identified in 18 AAC 50.015(b)(3) [, IF

(A) THE WOOD-FIRED HEATING DEVICE

(i) IS INSTALLED ON OR AFTER FEBRUARY 28, 2015; AND

(ii) IS NOT OTHERWISE EXEMPTED IN THIS SECTION: OR

(B) UNDER 42 U.S.C. 7513 AND 7602, EPA DESIGNATES THE

AREA AS A “SERIOUS” NONATTAINMENT AREA WITH RESPECT TO PM-2.5, AND THE WOOD-FIRED HEATING DEVICE

(i) 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 BEFORE FEBRUARY 28, 2015;

(ii) LACKS VALID EPA CERTIFICATION UNDER 40 C.F.R. 60.533 BEFORE FEBRUARY 28, 2015 OR A QUALIFYING “WHITE TAG” UNDER EPA’S PHASE 2 VOLUNTARY PARTNERSHIP PROGRAM FOR HYDRONIC HEATERS BEFORE FEBRUARY 28, 2015;

(iii) IS BEING SOLD, LEASED, OR CONVEYED AS PART OF AN EXISTING BUILDING OR OTHER PROPERTY ON OR AFTER THE DATE OF EPA’S DESIGNATION OF THE AREA AS A “SERIOUS” NONATTAINMENT AREA: AND

(iv) IS NOT OTHERWISE EXEMPTED IN THIS SECTION].

...

18 AAC 50.077(b)(1) is amended to read:

(1) the model **has been certified** [RECEIVED A QUALIFYING “WHITE TAG”] under **Step 1 of 40 C.F.R. Part 60, Subpart QQQQ, adopted by reference** [EPA’S PHASE 2 VOLUNTARY PARTNERSHIP PROGRAM FOR HYDRONIC HEATERS], **and** meets the particulate matter annual average emission limit in (2) of this subsection, and has a rated size under 350,000 Btu per hour; or

...

18 AAC 50.077(b)(2)(A) is amended to read:

(A) obtained using the test procedures applicable to the specific **device** [IN EPA’S PHASE 2 VOLUNTARY PARTNERSHIP PROGRAM FOR HYDRONIC HEATERS]; those procedures are set out in

...

18 AAC 50.077(b)(2)(A)(i) is repealed:

(i) repealed (___/___/___) [ATTACHMENT 2 TO THE *EPA HYDRONIC HEATER PROGRAM PHASE 2 PARTNERSHIP AGREEMENT*, DATED OCTOBER 12, 2011, CONSISTING OF EPA’S *TEST METHOD 28WHH FOR MEASUREMENT OF PARTICULATE EMISSIONS AND HEATING EFFICIENCY OF WOOD-FIRED HYDRONIC HEATING APPLIANCES*; THE TEST METHOD IS ADOPTED BY REFERENCE];

...

18 AAC 50.077(b)(2)(A)(ii) is amended to read:

(ii) ASTM International **E 2618-13** [E 2618-09], *Standard Test Method for Measurement of Particulate **Matter** Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating **Appliances** [DEVICES], approved **September 1, 2013**, [FEBRUARY 15, 2009] and adopted by reference, **subject to conditions in 40 C.F.R. Part, Subpart QQQQ, adopted by reference in 18 AAC 50.077;***

...

18 AAC 50.077(b)(2)(A)(iii) is amended to read:

(iii) ASTM International E 2515-11, *Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel*, approved November 1, 2011, adopted by reference **or 40 C.F.R. Part 60, Appendix A, Method 5G, adopted by reference in 18 AAC 50.040;**

...

18 AAC 50.077(b)(2)(A) is amended by adding a new sub-subparagraph to read:

(iv) 40 C.F.R. 60, Appendix A-8, Method 28WHH-PTS, adopted by reference in 18 AAC 50.040; and

...

18 AAC 50.077(c)(2) is amended to read:

(2) a laboratory with current EPA accreditation under 40 C.F.R. 60.535 has tested the model to meet a particulate matter annual average emission limit of 2.5 grams per hour; the test results must **be:** [HAVE BEEN]

(A) obtained using the **test procedures**

(i) [TEST PROCEDURES] applicable to the specific device; those procedures are set out in 40 C.F.R. Part 60, Appendix A, Methods 28, [AND] 28A, **and 28R**, adopted by reference in 18 AAC 50.040; **or** [AND]

(ii) **using alternative cordwood methods that have been approved by EPA; and**

(B) **obtained using the** emission concentration measurement procedures applicable to the specific device; those procedures are set out in 40 C.F.R. Part 60, Appendix A, Methods 5G and 5H, adopted by reference in 18 AAC 50.040;

(C) **calculated in grams per hour;** and

(D) submitted to and approved by the department as described in (e) of this section, if the woodstove is not already listed under (e) of this section by the department.

...

18 AAC 50.077(d)(1)(A) is amended to read:

(A) ASTM International **E 2618-13** [E 2618-09], *Standard Test Method for Measurement of Particulate **Matter** Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating **Appliances*** [DEVICES], adopted by reference in

(b)(2)(A)(ii) of this section; **or 40 C.F.R. 60, Appendix A-8, Method 28WHH, adopted by reference in 18 AAC 50.040; or Canadian Standards Administration (CSA) Method B415.1-10, as referenced in 40 C.F.R. Part 60, Subpart QQQQ, adopted by reference in 18 AAC 50.077; and**

...

18 AAC 50.077(g) is amended to read:

(g) Subsections (b) – (d) of this section do not apply to **operation of** a wood-fired heating device that is located in an area that is identified in 18 AAC 50.015(b)(3), if

[(1) UNDER 42 U.S.C. 7513 AND 7602, EPA HAS DESIGNATED THE AREA AS A “MODERATE” NONATTAINMENT AREA WITH RESPECT TO PM-2.5; AND

(2)] the wood-fired heating 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 before February 28, 2015.

...

The lead-in language of 18 AAC 50.077(h)(2)(A)(i) is amended to read:

(h) Subsections (b) – (d) of this section do not apply to the conveyance of a wood-fired heating device under **(a)(1)(B)** [(a)(2)(B)] of this section if the owner requests and receives a temporary waiver from the department or a local air quality program. The department or local air quality program may grant a temporary waiver after considering

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

18 AAC 50.079. Provisions for coal-fired heating devices. (a) This section applies to a person who

(1) owns or operates a coal-fired heating device in an area identified in 18 AAC 50.015(b)(3), if the coal-fired device

(A) is installed before {*effective date of regulations*}; and

(B) is not otherwise exempted in this section;

(2) intends to supply, sell, lease, distribute, convey or install a coal-fired heating device for operation in an area identified in 18 AAC 50.015(b)(3).

(b) A person may not operate, install or reinstall a coal-fired heating device and may not supply, sell, lease, distribute, or convey a coal-fired heating device for operation or installation unless it is a listed device with the local government's air quality program or certified by EPA.

(c) Except as provided under (d) or (e), a person may not sell, lease, or convey, a coal-fired heating device as part of an existing building or other property located in an area identified in 18 AAC 50.015(b)(3) unless the device is listed with the local government's air quality program or certified by EPA.

(d) Subsection (c) of this section does not apply to an installed coal-fired heating device that has undergone an emission source test approved by the department using EPA Method 5 during wintertime operation and the maximum emission rate for any individual test run does not exceed 18.0 grams per hour of total particulate matter.

(e) Subsection (c) of this section does not apply to the conveyance of a coal-fired heating device in an area identified in 18 AAC 50.015(b)(3) if the owner requests and receives a

temporary waiver from the department or a local air quality program. The department or local air quality program may grant a temporary waiver after considering

(1) financial hardship information provided by the owner or operator;

(2) technical feasibility and device design information provided by the owner or operator; and

(3) potential impact to locations with populations sensitive to exposure to PM-2.5;

locations under this paragraph include hospitals, schools, child care facilities, health clinics, long-term care facilities, assisted living 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 50.990(71) is revised to read:

(71) "particulate matter" means a material, except water, that is or has been airborne and exists as a liquid or solid at standard conditions; **for purposes of meeting emissions standards in 18 AAC 50.077, “particulate matter” means “total particulate matter” and has the meaning given “particulate matter” in 40 C.F.R. 60.531, as revised as of July 1, 2017, and adopted by reference;**

...

18 AAC 50.990(138)(C) is revised to read:

(C) does not include a device that is primarily part of an industrial process and incidentally provides usable heat for the interior of a building; **or is a cogeneration boiler that**

provides both steam for electrical generation and steam for a centralized heat distribution system;

...

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

(149) “RACT” has the meaning given the term “reasonably available control technology” given in 40 C.F.R. 51.100(o), as revised as of July 1, 2017, adopted by reference;

(150) “BACT” has the meaning given the term “best available control technology”; for purposes of a serious PM-2.5 nonattainment area plan, “BACT” applies to existing stationary sources and has the meaning given the term “best available control technology” in 40 C.F.R. 52.21(b), adopted by reference in 18 AAC 50.040, except that BACT only applies to direct emissions of PM-2.5 and to PM-2.5 plan precursors;

(151) “BACM” has the meaning given the term “best available control measures” in 40 C.F.R. 51.1000, as revised as of July 1, 2017, 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 10/6/2013, Register 208; am 11/9/2014, Register 212; am 2/28/2015, Register 213; am 4/17/2015, Register 214; am 3/2/2016, Register 217; 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