

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: A copy of the list of commercially available moisture test meters that the Department of Environmental Conservation has approved under 18 AAC 50.076(g) for use by commercial wood sellers is available at the department's offices in Anchorage, Fairbanks, and Juneau, and can be obtained by contacting the Department of Environmental Conservation, Division of Air Quality, at (907) 465-5100, or can be obtained from the Internet at http://burnwise.alaska.gov/moisture_disclosure_program.htm.

The list of registered commercial wood sellers described in 18 AAC 50.076(f) is available at the department's offices in Anchorage, Fairbanks, and Juneau, and can be obtained by contacting the Department of Environmental Conservation, Division of Air Quality, at (907) 465-5100, or can be obtained from the Internet at http://burnwise.alaska.gov/moisture_disclosure_program.htm.

18 AAC 50.077. Standards for wood-fired heating devices. (a) Except as provided in this section, a person may not install, reinstall, sell, lease, distribute, or convey the following devices for use in an area identified in 18 AAC 50.015(b)(3):

- (1) a wood-fired hydronic heater;
- (2) a woodstove;
- (3) a wood-fired heating device with a manufacturer-rated heat output capacity of 350,000 Btu per hour or more;

(b) Notwithstanding (a) of this section, the department will approve models of pellet fueled wood-fired hydronic heaters for use in an area identified in 18 AAC 50.015(b)(3) that

- (1) have a manufacturer-rated heat output capacity under 350,000 Btu per hour;
- (2) have a valid certification from EPA under 40 C.F.R. 60.5474(a) and (b), revised as of July 1, 2019, and adopted by reference, for which the department has reviewed and accepted the underlying certification test results; and
- (3) meet an average particulate matter emission level of 0.10 pounds per million Btu of heat output for each individual burn rate as tested by a laboratory with current EPA accreditation under 40 C.F.R. 5477, revised as of July 1, 2019, and adopted by reference; the laboratory test results must be

(A) obtained using one of the following test methods that is applicable to the specific device:

- (i) ASTM International E 2618-13, *Standard Test Method for Measurement of Particulate Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating Appliances*, approved by EPA September 1, 2013,

and adopted by reference, subject to conditions in 40 C.F.R. Part 60, Subpart QQQQ, revised as of July 1, 2019, and adopted by reference;

(ii) 40 C.F.R. Part 60, Appendix A-8, Method 28WHH-PTS, revised as of July 1, 2019, and adopted by reference;

(iii) alternative test methods, including broadly applicable test methods, if approved by EPA and the department; and

(B) obtained using one of the following emission concentration measurements that is applicable to the specific device:

(i) ASTM International E2515-11, *Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel* approved by EPA on November 1, 2011, and adopted by reference;

(ii) 40 C.F.R. Part 60, Appendix A, Method 5G, revised as of July 1, 2019, and adopted by reference; and

(C) approved by the department together with the supporting data.

(c) Notwithstanding (a) of this section, the department may approve specific models of woodstoves and pellet stoves for operation in an area identified in 18 AAC 50.015(b)(3). The department will approve models that

(1) have a manufacturer-rated heat output capacity of less than 350,000 Btu per hour;

(2) have a valid certification from EPA under 40 C.F.R. 60.533, revised as of July 1, 2019, and adopted by reference, for which the department has reviewed and accepted the underlying certification test results; and

(3) meet a particulate matter annual average emission limit of 2.0 grams per hour as tested by a laboratory with current EPA accreditation under 40 C.F.R. 60.535 revised as of July 1, 2019, and adopted by reference; the test result must be

(A) obtained using of the following test methods applicable to the specific device:

(i) 40 C.F.R. Part 60, Appendix A, Methods 28, 28 A, or 28 R, revised as of July 1, 2019, and adopted by reference;

(ii) alternative test methods, including broadly applicable test methods, if approved by both EPA and the department; and

(B) obtained using one of the following emission concentration measurements, as applicable to the specific device:

(i) 40 C.F.R. Part 60, Appendix A-3, Method 5G or 5H, revised as of July 1, 2017, and adopted by reference; and

(ii) after September 1, 2020, with either a tapered element oscillating microbalance (TEOM) or 1-hour filter data from the EPA certification report for the device; TEOM data must be obtained following the procedures set out in the Northeast States for Coordinated Air Use Management (NESCAUM) Standard Operating Procedures for use of Thermo 1405 TEOM for use in a dilution tunnel using Option 2 in Section 6 and excluding Section 7, revised as of May 17, 2019, and adopted by reference; if using TEOM data, the department may approve devices only if the TEOM data indicates that no rolling 60-minute period exceeds 4.0 grams per hour; if using the 1-hour filter data, the department may approve devices only if no reported valid test run measurement exceeds 6.0 grams per hour;

(C) calculated in grams per hour, to a tenth of a gram; and

(D) approved by the department together with the supporting data.

(d) Notwithstanding (a) of this section, the department may approve specific models of wood-fire heating devices with a manufacturer-rated heat output capacity of 350,000 Btu per hour or more for operation in an area identified in 18 AAC 50.015(b)(3) if a laboratory with current EPA accreditation under 40 C.F.R. 60.535 or 40 C.F.R. 60.5477 has tested the model to meet a particulate matter emission limit of 2.0 grams per hour; the test results must be

(1) obtained using one of the following test methods applicable to the specific device:

(A) ASTM International E 2618-13, *Standard Test Method for Measurement of Particulate Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating Appliances*, adopted by reference in (b)(3)(A)(i) of this section;

(B) 40 C.F.R. Part 60, Appendix A-8, Method 28WHH, revised as of July 1, 2019, and adopted by reference;

(C) Canadian Standards Association (CSA) Method B415.1-10, *Performance Testing of Solid-Fuel-Burning Heating Appliances*, dated March 2010, reaffirmed 2015, and adopted by reference, as referenced in 40 C.F.R. Part 60, Subpart QQQQ, revised as of July 1, 2019, and adopted by reference;

(D) alternative test methods, including broadly applicable test methods, if approved by both EPA and the department; and

(2) obtained using ASTM International E 2515-11, *Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel*, adopted by reference in (b)(3)(B)(i) of this section; and

(3) approved by the department together with the supporting data.

(e) The department will publish a list of devices that meet the criteria in (b) - (d) of this section and that the department has approved for operation in an area identified in 18 AAC 50.015(b)(3). The department may review laboratory test data with or without submission by the manufacturer.

(f) Notwithstanding (a) of this section, a person may sell, lease, distribute, convey, or install a new wood-fired heating device if the buyer or operator of the device confirms in writing that the device will be installed in an area other than an area identified in 18 AAC 50.015(b)(3).

(g) In response to a request from the owner or operator of a wood-fired heating device, the department or local air quality program may temporarily waive the requirements of (a) and (l) – (n) of this section after considering

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

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

(3) potential impact to locations with populations sensitive to PM-2.5 exposure including hospitals, schools, child care facilities, health clinics, long-term care facilities, assisted living homes, and senior centers.

(h) As applicable, the owner, vendor, or dealer of a wood-fired hearing device shall register the device, using a form or method provided by the department, in the following circumstances

(1) upon the sale or conveyance of a device;

(2) before closing, if the device is being sold, leased, or conveyed as part of an existing building or property;

(3) when applying for a waiver described in the local air quality control plan incorporated in the *State Air Quality Control Plan*;

(4) to participate in the Burn Right Program;

(5) to participate in a woodstove change-out or conversion program in the local air quality control plan incorporated in the *State Air Quality Control Plan*; and

(6) before closeout of any compliance or enforcement action.

(i) The owner or operator of a wood-fired heating device shall ensure that a device and any retrofit control devices are properly sized and professionally installed. Following each installation of a wood-fired heating device or retrofit control device in an area identified in 18 AAC 50.015(b)(3), the installer shall provide confirmation to the department that the device was installed correctly on a form provided by the department. Installers must meet the following

requirements

(1) for a woodstove, pellet stove, or pellet-fired hydronic heater, the certification criteria in the National Fireplace Institute Policy Handbook, revised as of November 19, 2019, and adopted by reference, or demonstrate equivalent training and qualification approved by the department;

(2) for new masonry heaters, the certification criteria in The Masonry Heater Association of North America Reference Manual, revised as of January 2019 and adopted by reference, or demonstrate equivalent training and qualification approved by the department;

(3) for retrofit control devices, such as electronic precipitators, certification as described in (1) – (2) of this subsection or be representatives trained by the manufacturer.

(j) A person may not install

(1) a pellet fueled wood-fired hydronic heater within 330 feet from the closest property line or within 600 feet from a school, clinic, hospital, or senior housing unit;

(2) a wood-fired heating device as the primary or only source of heat in

(A) new construction, except new construction of a dry cabin located on a two acre or larger parcel; or

(B) a structure used as a rental unit, unless the structure has been used as a rental prior to January 8, 2020, and qualifies for a No Other Adequate Heat Source waiver, as identified in a local air quality control plan incorporated in the *State Air Quality Control Plan*.

(k) Vendors of wood-fired heating devices

(1) may not advertise devices prohibited by this section for sale within an area identified in 18 AAC 50.015(b)(3); and

(2) shall provide a buyer with curtailment information and proper operating instructions at the time of sale.

(l) In an area identified in 18 AAC 50.015(b)(3), a person who owns a woodstove or pellet stove that does not have valid certification from EPA under 40 C.F.R. 60.533 or a non-pellet fueled wood-fired outdoor hydronic heater shall render the device inoperable before December 31, 2024; or before the device is sold, leased, or conveyed as part of an existing structure, whichever is earlier.

(m) In an area identified in 18 AAC 50.015(b)(3), a person who owns a device that, under this section, may not be reinstalled within the area shall ensure that the device is rendered inoperable when it is removed.

(n) If EPA publishes a finding under 40 C.F.R. 51.1014(a)(1) - (4) related to the local air quality control plan incorporated in the *State Air Quality Control Plan* for an area identified in 18 AAC 50.015(b)(3), the owner of a wood-fired heating device other than a masonry heater in an area identified in 18 AAC 50.015(b)(3) that has a particulate matter emission rating of greater than 2.0 grams per hour shall render the device inoperable, notwithstanding a valid EPA certification, by the following deadlines

(1) for a device manufactured 25 years or more before the effective date of the EPA finding, before December 31, 2024; or before the device is sold, leased, or conveyed as part of an existing building, whichever is earlier;

(2) for a device manufactured less than 25 years before the effective date of the EPA finding, before 25 years from the date of manufacture.

(o) A person who disputes a decision by the department under this section may request review under 18 AAC 15.185 or 18 AAC 15.195 – 18 AAC 15.340.

(p) In this section, “dry cabin” means a residential structure 1,000 square feet or less that does not have a well or water provided by a public utility.

(q) In this section “TEOM” means tapered element oscillating microbalance. (Eff. 2/28/2015, Register 213; am 11/26/2016, Register 220; am 1/12/2018, Register 225; am 1/8/2020, Register 233)

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Editor’s note: For the convenience of consumers, the United States Environmental Protection Agency (EPA) keeps a list of wood heaters certified under 40 C.F.R. 60.533. That list can be found on the Internet at: <https://www.epa.gov/compliance/list-epa-certified-wood-stoves>. For additional information whether a heater appearing on that list is in compliance with 18 AAC 50.077, please contact the Department of Environmental Conservation, Division of Air Quality, P.O. Box 111800, Juneau, AK 99811-1800; telephone (907) 465-5100.

The test methods adopted by reference in 18 AAC 50.077 may be reviewed at the department’s Anchorage, Fairbanks, or Juneau office. For information on how to purchase a copy of the ASTM International documents adopted by reference in 18 AAC 50.077, contact ASTM International, Publications Department, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania, 19428-2959; telephone (877) 909-2786; fax (610) 832-9555 or <http://www.astm.org>. For information on how to obtain a copy of the Canadian Standards Association document adopted by reference in 18 AAC 50.077, contact the Canadian Standards Association (CSA), 178 Rexdale Boulevard, Etobicoke, ON, M9W 1R3, Canada; telephone (416) 747-4139; fax (416) 401-6621.

The list of wood-fired heating devices maintained under 18 AAC 50.077(e) is available at the department’s offices in Anchorage, Fairbanks, and Juneau; is available on the Internet at <https://dec.alaska.gov/burnwise/>; or can be obtained by contacting the Department of

Environmental Conservation, Division of Air Quality, P.O. Box 111800, Juneau, AK 99811-1800; telephone (907) 465-5100.

The following document adopted by reference are available at the Division of Air Quality's Reference Materials for 18 AAC 50 web page at <https://dec.alaska.gov/air/anpms/sip/18AAC50-reference-materials/>: The Northeast States for Coordinated Air Use Management (NESCAUM) Standard Operating Procedures for use of Thermo 1405 TEOM for use in dilution tunnel, May 17, 2019; The National Fireplace Institute Policy Handbook, revised as of November 19, 2019; and The Masonry Heater Association of North America Reference Manual, revised as of January 2019.

18 AAC 50.078. Additional control measures for a serious PM-2.5 nonattainment area. (a) This section applies to an individual or business whose activities emit PM-2.5 or PM-2.5 precursor pollutants within an area identified in 18 AAC 50.015(b)(3).

(b) After September 1, 2022, only fuel oil, containing no more than 1,000 parts per million sulfur, may be sold or purchased for use in fuel oil-fired equipment, including space heating devices. This subsection does not apply to major stationary sources subject to a Best Available Control Technology determination or to diesel-fired equipment or vehicles subject to more stringent federal diesel fuel sulfur requirements.

(c) Small area source of PM-2.5 listed below shall provide the following information to the department by March 15, 2020, or 60 days after commencing operations

(1) commercial charbroilers shall identify the

(A) name and location of the commercial cooking operation;

(B) operation type – chain-driven or under-fired;

(C) number and size, in cooking surface square feet, of each charbroiler at the commercial cooking operation;

(D) type of fuel used to heat each charbroiler;

(E) type and quantity, in pounds, of meat cooked on each charbroiler on a weekly basis for the previous 12-month period;

(F) daily operating hours of the commercial cooking operation;

(G) air flow rate, measure in cubic feet per minute, of hood or exhaust system serving each charbroiler; and

(H) manufacturer and model of any installed pollution control devices designed to reduce particulates, kitchen smoke, or odor;