



Part 247: Outdoor Wood Boilers

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For administrative information about this posting, contact: [Division of Air Resources](#). The Bureau of Air Quality Planning at (518) 402-8396 is the contact for technical questions pertaining to this rule.

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§247.1 Applicability.

This Part applies to outdoor wood boilers. Sections 247.3 and 247.4 of this Part apply generally to all outdoor wood boilers. In addition to the general provisions, sections 247.5 through 247.9 apply specifically to new outdoor wood boilers.

§247.2 Definitions.

(a) To the extent that they are not inconsistent with the specific definitions in subdivision (b) of this section, the general definitions of Part 200 and Subpart 201-2 of this Title shall apply to this Part.

(b) For the purposes of this Part, the following definitions apply:

(1) *Agricultural land*. The land and on-farm buildings, equipment, manure processing and handling facilities, and practices that contribute to the production, preparation and marketing of crops, livestock and livestock products as a commercial enterprise, including a *commercial horse boarding operation* and *timber processing*. Such farm operation may consist of one or more parcels of owned or rented land, which parcels may be contiguous or noncontiguous to each other.

(2) *Clean wood*. Wood that has not been painted, stained, or treated with any other coatings, glues or preservatives, including, but not limited to, chromated copper arsenate, creosote, alkaline copper quaternary, copper azole or pentachlorophenol.

- (3) *Commence operation.* The initial start-up of the combustion chamber of a new outdoor wood boiler after all piping and electrical connections between the new outdoor wood boiler and the structure(s) it serves have been completed.
- (4) *Commercial-size new outdoor wood boiler.* A new outdoor wood boiler with a thermal output rating greater than 250,000 British thermal units per hour (Btu/h).
- (5) *Distributor.* Any person who sells or leases a new outdoor wood boiler to an end user. A distributor may be a manufacturer or agent thereof or an independent contractor.
- (6) *End user.* Any person who purchases or acquires any new outdoor wood boiler for personal, family, household, commercial or institutional use. Persons acquiring a new outdoor wood boiler for resale are not end users for that product.
- (7) *Manufacturer.* Any person who makes or produces a new outdoor wood boiler that is ultimately operated in New York.
- (8) *Model.* All new outdoor wood boilers manufactured by a single manufacturer that are similar in all material and design respects.
- (9) *New outdoor wood boiler.* An outdoor wood boiler that commences operation on or after April 15, 2011.
- (10) *Outdoor wood boiler.* A fuel burning device that (a) is designed to burn wood or other fuels; (b) is specified by the manufacturer for outdoor installation or installation in structures not normally occupied by humans; and (c) is used to heat building space and/or water via the distribution, typically through pipes, of a gas or liquid (e.g., water or water/antifreeze mixture) heated in the device.
- (11) *Residential-size new outdoor wood boiler.* A new outdoor wood boiler that has a thermal output rating of 250,000 Btu/h or less.
- (12) *Responsible official.* A president, vice president, secretary, treasurer, general partner, proprietor, principal executive officer, or any other person who performs policy or decision making functions and is authorized to legally bind a corporation, partnership, or sole proprietorship which is subject to the provisions of this Part.
- (13) *Test Method 28-OWHH.* "EPA Test Method 28 OWHH for Measurement of Particulate Emissions and Heating Efficiency of Outdoor Wood-Fired Hydronic Heating Appliances", Attachment 2 of the "EPA Outdoor Wood-fired Hydronic Heater Program Phase I Partnership Agreement" dated March 16, 2007 (see Table 1, Section 200.9 of this Title).
- (14) *Thermal output rating.* The heat value in Btu/h that a manufacturer specifies a particular model of new outdoor wood boiler is capable of supplying at its design capacity.

§247.3 Prohibitions.

- (a) No person shall operate an outdoor wood boiler that does not meet the requirements set forth in this Part.
- (b) Prohibited fuels. No person shall burn any of the following items in an outdoor wood boiler:
- (1) wood that does not meet the definition of clean wood;
 - (2) unseasoned wood;

- (3) garbage;
- (4) tires;
- (5) yard waste, including lawn clippings;
- (6) materials containing plastic;
- (7) materials containing rubber;
- (8) waste petroleum products;
- (9) paints or paint thinners;
- (10) household or laboratory chemicals;
- (11) coal;
- (12) paper except as described in paragraph 247.4(a)(4) of this Part;
- (13) construction and demolition debris;
- (14) plywood;
- (15) particleboard;
- (16) fiberboard;
- (17) oriented strand board;
- (18) manure;
- (19) animal carcasses;
- (20) asphalt products;
- (21) salt water driftwood; or
- (22) any other fuel that is not recognized as an approved fuel pursuant to Section 247.4 of this Part.

(c) No person shall cause or allow emissions of air contaminants from an outdoor wood boiler to the outdoor atmosphere of a quantity, characteristic or duration which is injurious to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property. This prohibition applies, but is not limited to, the following conditions:

- (1) activating smoke detectors in neighboring structures;
- (2) impairing visibility on a public highway; or
- (3) causing a visible plume migrating from an outdoor wood boiler and contacting a building on an adjacent property.

The prohibition further applies to any particulate, fume, gas, mist, odor, smoke, vapor, toxic or deleterious emission, either alone or in combination with others, emitted from an outdoor wood boiler that results in the conditions or circumstances listed in this subdivision notwithstanding the existence of specific air quality standards or emission limits.

(d) No person shall operate an outdoor wood boiler in such a manner as to create a smoke plume with an opacity of 20 percent or greater (six minute mean) as determined using EPA Reference Method 9 (or equivalent) (see Table 1, Section 200.9 of this Title).

§247.4 Approved Fuels.

(a) A person who operates an outdoor wood boiler may only burn the following fuels in such outdoor wood boiler:

- (1) seasoned clean wood;
- (2) wood pellets made from clean wood;
- (3) heating oil in compliance with Subpart 225-1 of this Title, L.P. gas or natural gas may be used as starter fuels for dual fuel-fired outdoor wood boilers;
- (4) non-glossy, non-colored papers, including newspaper, may be used only to start an outdoor wood boiler; and
- (5) other fuels approved by the department per the certification requirements of Section 247.8 of this Part.

§247.5 Residential-Size New Outdoor Wood Boilers.

(a) Emission limits. In order for a residential-size new outdoor wood boiler to be certified pursuant to Section 247.8 of this Part, it must not emit particulate emissions at a rate greater than a weighted average of 0.32 pounds per million British thermal units heat output using the year-round weighting factors in Test Method 28-OWHH (see Table 1, Section 200.9 of this Title). The particulate emission rate for any test run with a burn rate less than or equal to 1.5 kilograms per hour must not exceed 15.0 grams per hour. The particulate emission rate for any test run with a burn rate greater than 1.5 kilograms per hour must not exceed 18.0 grams per hour.

(b) Setback. A residential-size new outdoor wood boiler shall not be located less than 100 feet from the nearest property boundary line.

(1) Notwithstanding the above, a residential-size new outdoor wood boiler installed on contiguous agricultural lands larger than five acres shall not be located less than 100 feet or more from the nearest residence not served by the outdoor wood boiler.

(c) Stack height. A residential-size new outdoor wood boiler shall be equipped with a permanent stack extending a minimum of 18 feet above ground level. Notwithstanding the foregoing, the Department may require that the permanent stack extend up to two feet above the peak of any roof structure within 150 feet of the OWB when necessary to adequately disperse smoke emitted from an outdoor wood boiler.

§247.6 Commercial-Size New Outdoor Wood Boilers.

(a) A commercial-size new outdoor wood boiler shall not be used in a solely residential application.

(b) Emission limits. In order for a commercial-size new outdoor wood boiler to be certified pursuant to Section 247.8 of this Part, it must not emit particulate emissions at a rate greater than a weighted average of 0.32 pounds per million British thermal units heat output using the year-round weighting factors in Test Method 28-OWHH (see Table 1, Section 200.9 of this Title). Further, the particulate emission rate for any test run must not exceed 20.0 grams per hour.

(c) Setbacks. A commercial-size new outdoor wood boiler shall not be located:

- (1) less than 200 feet from the nearest property boundary line;
- (2) less than 300 feet from a property boundary line of a residentially zoned property; and
- (3) less than 1000 feet from a school.

(4) Notwithstanding the above, a commercial-size new outdoor wood boiler installed on contiguous agricultural lands larger than five acres must be sited 300 feet or more from the nearest residence not served by the outdoor wood boiler and 1000 feet or more from a school.

(d) Stack height. A commercial-size new outdoor wood boiler shall be equipped with a permanent stack extending a minimum of 18 feet above ground level. Notwithstanding the foregoing, the Department may require that the permanent stack extend up to two feet above the peak of any roof structure within 150 feet of the OWB when necessary to adequately disperse smoke emitted from an outdoor wood boiler.

§247.7 Permanent label.

(a) A permanent label shall be affixed to all new outdoor wood boilers by the manufacturer.

(1) The label shall be made of a material that is sufficiently durable to last the lifetime of the new outdoor wood boiler.

(2) The label shall be affixed to the new outdoor wood boiler in a readily visible or accessible location.

(3) The label shall be affixed in such a manner that it cannot be removed from the new outdoor wood boiler without causing damage to the label.

(4) The following information shall be displayed on the label:

(i) name and address of the manufacturer;

(ii) date of manufacture;

(iii) model name and number;

(iv) serial number;

(v) thermal output rating in Btu/h; and

(vi) certified particulate emission rate in pounds per million British thermal units heat output.

§247.8 Certification of new outdoor wood boilers.

(a) Certified models. No person shall sell, lease or operate a new outdoor wood boiler unless the model has been certified by the department pursuant to this section.

(b) Emission limits. In order to receive certification, a residential-size new outdoor wood boiler shall meet the emission limits in section 247.5 of this Part, and a commercial-size new outdoor wood boiler shall meet the emission limits in section 247.6 of this Part.

(c) Application. Manufacturers requesting certification of a model shall submit an application to the department. An application shall consist of two complete copies of the application on a form provided by the department, along with two copies of the supporting documents required by this subdivision.

Both copies of the application shall be signed by a responsible official of the manufacturer, and shall include the following:

(1) name and address of the manufacturer, the model name and number, serial number, date of manufacture and the thermal output rating, in Btu/h, of the new outdoor wood boiler tested;

(2) four individual, color photographs of the tested unit showing the front, back and both sides of the unit;

(3) engineering drawings and specifications for each of the following components:

(i) firebox including a secondary combustion chamber;

(ii) air induction systems;

(iii) baffles;

(iv) refractory and insulation materials;

(v) catalysts;

(vi) catalyst bypass mechanisms;

(vii) flue gas exit;

(viii) door and catalyst bypass gaskets;

(ix) outer shielding and coverings;

(x) fuel feed system; and

(xi) blower motors and fan blade size.

(4) final test report prepared by the testing laboratory; and

(5) a copy of the operation and maintenance instructions.

(d) Certificate of compliance. The department shall issue a certificate of compliance for a model if the certification application is determined to be complete and accurate and the model is determined to be compliant with the requirements set forth in this Part.

(1) Only fuels listed in the certificate of compliance may be burned in the model.

(2) The certificate of compliance is valid for five years and shall expire on the date listed in the certificate unless it is renewed by the certificate holder.

(3) A change in the design of a model resulting in a change in the thermal output rating of the model constitutes the creation of a new model which must be certified pursuant to this section.

(4) Upon written notice to the certificate holder, a certificate may be withdrawn by the Department if it is determined that the application contained false or inaccurate information, or for other good cause.

(e) Test method. To meet certification requirements for this section, particulate emissions from new outdoor wood boiler models shall be determined using Test Method 28-OWHH (see Table 1, Section 200.9 of this Title), as defined in paragraph 247.2(b)(15) of this Part. Alternative methods may be used upon prior written approval from the department.

(f) Test laboratory. All certification testing shall be conducted by a laboratory accredited by the EPA in accordance with 40 CFR 60 Subpart AAA, Section 60.535 (see Table 1, Section 200.9 of this Title), or another accrediting organization approved by the department, which has no conflict of interest or financial gain in the outcome of the testing.

§247.9 Notice to buyers.

(a) *Written notice.* Prior to the execution of a sale or lease agreement for a new outdoor wood boiler, the distributor shall provide the prospective buyer or lessee with a copy of this Part and a written notice which includes:

- (1) an acknowledgement that the buyer or lessee was provided with a copy of this Part;
- (2) a list of the fuels that may be burned in the outdoor wood boiler as set forth in paragraph 247.8(d)(1) of this Part; and
- (3) a statement that even if the requirements set forth in this Part are met, there may be conditions or locations in which the use of a new outdoor wood boiler unreasonably interferes with another person's use or enjoyment of property or even damages human health, and if such a situation occurs, the owner or lessee of the new outdoor wood boiler causing the situation may be subject to sanctions that can include a requirement to remove the device at their own expense, as well as any other penalty allowed by law.

(b) *Completed notice.*

(1) The written notice required by this section shall be signed and dated by the buyer or lessee and the distributor when the sale or lease of the new outdoor wood boiler is completed. In addition, the following information shall be included in the completed notice:

- (i) name and address of the owner or lessee of the new outdoor wood boiler;
- (ii) street address where the outdoor wood boiler was installed (if different from item (i) above);
- (iii) name of the manufacturer, model and date of manufacture of the new outdoor wood boiler;
- (iv) height of the permanent stack for the new outdoor wood boiler; and
- (v) distance from the new outdoor wood boiler to the nearest property boundary line or, if paragraph 247.5(b) or 247.6(c) is applicable, the distance to the nearest residence not served by the outdoor wood boiler.

(2) The distributor shall submit the original signed copy of the notice to the department's regional office for the location where the new outdoor wood boiler is installed or as otherwise specified by the department within seven (7) days of making delivery of the new outdoor wood boiler to the buyer or lessee.

§247.10 Severability.

Each provision of this Part shall be deemed severable, and in the event that any provision of this Part is held to be invalid, the remainder of this Part shall continue in full force and effect.