

(3) Appliances that are not residential heating devices (for example, manufactured or site-built masonry fireplaces).

(4) Traditional Native American bake ovens that meet the definition in § 60.531.

§ 60.531 What definitions must I know?

As used in this subpart, all terms not defined herein have the meaning given them in the Clean Air Act and subpart A of this part.

Adjustable burn rate wood heater means a wood heater that is equipped with or installed with a damper or other mechanism to allow the operator to vary burn rate conditions, regardless of whether it is internal or external to the appliance. This definition does not distinguish between heaters that are free standing, built-in or fireplace inserts.

Approved test laboratory means a test laboratory that is approved for wood heater certification testing under § 60.535 or is an independent third-party test laboratory that is accredited under ISO-IEC Standard 17025 to perform testing using the test methods specified in § 60.534 by an accreditation body that is a full member signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement and approved by the EPA for conducting testing under this subpart.

Camp stove (sometimes also called cylinder stove or wall tent stove) means a portable stove equipped with a pipe or chimney exhaust capable of burning wood or coal intended for use in a tent or other temporary structure used for hunting, camping, fishing or other outdoor recreation. The primary purpose of the stove is to provide space heating, although cooking and heating water may be additional functions.

Catalytic combustor means a device coated with a noble metal used in a wood heater to lower the temperature required for combustion.

Chip wood fuel means wood chipped into small pieces that are uniform in size, shape, moisture, density and energy content.

Coal-only heater means an enclosed, coal-burning appliance capable of space heating or space heating and domestic

water heating, which is marketed and warranted solely as a coal-only heater and has all of the following characteristics:

(1) An opening for emptying ash that is located near the bottom or the side of the appliance;

(2) A system that admits air primarily up and through the fuel bed;

(3) A grate or other similar device for shaking or disturbing the fuel bed or a power-driven or mechanical stoker;

(4) Installation instructions, owner's manual and marketing information that state that the use of wood in the stove, except for coal ignition purposes, is prohibited by law; and

(5) A safety listing as a coal-only heater, except for coal ignition purposes, under accepted American or Canadian safety codes, as documented by a permanent label from a nationally recognized certification body.

Commercial owner means any person who owns or controls a wood heater in the course of the business of the manufacture, importation, distribution (including shipping and storage), or sale of the wood heater.

Cook stove means a wood-fired appliance that is designed, marketed and warranted primarily for cooking food and that has the following characteristics:

(1) An oven, with volume of 0.028 cubic meters (1 cubic foot) or greater, and an oven rack;

(2) A device for measuring oven temperatures;

(3) A flame path that is routed around the oven;

(4) An ash pan;

(5) An ash clean-out door below the oven;

(6) The absence of a fan or heat channels to dissipate heat from the appliance;

(7) A cooking surface with an area measured in square inches or square feet that is at least 1.5 times greater than the volume of firebox measured in cubic inches or cubic feet. Example: A cook stove with a firebox of 2 cubic feet must have a cooking surface of at least 3 square feet;

(8) A portion of at least four sides of the oven (which may include the bottom and/or top) is exposed to the flame path during the heating cycle of the

oven. A flue gas bypass may exist for temperature control.

Fireplace means a wood-burning appliance intended to be used primarily for aesthetic enjoyment and not as a space heater. An appliance is a fireplace if it is in a model line that satisfies the requirements in paragraphs (1), (2) or (3) of this definition.

(1) The model line includes a safety listing under recognized American or Canadian safety standards, as documented by a permanent label from a nationally recognized certification body affixed on each unit sold, and that said safety listing only allows operation of the fireplace with doors fully open. Operation with any required safety screen satisfies this requirement.

(2) The model line has a safety listing that allows operation with doors closed, has no user-operated controls other than flue or outside air dampers that can only be adjusted to either a fully closed or fully opened position, and the requirements in either paragraph (2)(i) or (2)(ii) of this definition are satisfied.

(i) Appliances are sold with tempered glass panel doors only (either as standard or optional equipment), or

(ii) The fire viewing area is equal to or greater than 500 square inches.

(3)(i) A model line that is clearly positioned in the marketplace as intended to be used primarily for aesthetic enjoyment and not as a room heater, as demonstrated by product literature (including owner's manuals), advertising targeted at the trade or public (including web-based promotional materials) or training materials is presumptively a fireplace model line.

(ii) The presumption in paragraph (3)(i) of this definition can be rebutted by test data from an EPA-approved test laboratory reviewed by an EPA-approved third-party certifier that were generated when operating the appliance with the door(s) closed, and that demonstrate an average stack gas carbon dioxide (CO₂) concentration over the duration of the test run equal to or less than 5.00 percent and a ratio of the average stack gas CO₂ to the average stack gas carbon monoxide (CO) equal to or greater than 15:1. The stack gas average CO₂ and CO concentrations for

the test run shall be determined in accordance with the requirements in CSA B415.1–10 (IBR, see §60.17), clause 6.3, using a sampling interval no greater than 1 minute. The average stack gas CO₂ and CO concentrations for purposes of this determination shall be the average of the stack gas concentrations from all sampling intervals over the full test run.

Manufactured means completed and ready for shipment (whether or not assembled or packaged) for purposes of determining the date of manufacture.

Manufacturer means any entity that constructs or imports into the United States a wood heater.

Model line means all wood heaters offered for sale by a single manufacturer that are similar in all material respects that would affect emissions as defined in this section.

Particulate matter (PM) means total particulate matter including coarse particulate (PM₁₀) and fine particulate (PM_{2.5}).

Pellet fuel means refined and densified fuel shaped into small pellets or briquettes that are uniform in size, shape, moisture, density and energy content.

Pellet stove (sometimes called pellet heater or pellet space heater) means an enclosed, pellet or chip fuel-burning device capable of and intended for residential space heating or space heating and domestic water heating. Pellet stoves include a fuel storage hopper or bin and a fuel feed system. Pellet stoves include, but are not limited to:

(1) Free-standing pellet stoves—pellet stoves that are installed on legs or on a pedestal or other supporting base. These stoves generally are safety listed under ASTM E1509, UL–1482, ULC S627 or ULC–ORD C1482.

(2) Pellet stove fireplace inserts—pellet stoves intended to be installed in masonry fireplace cavities or in other enclosures. These stoves generally are safety listed under ASTM E1509, UL–1482, ULC–S628 or ULC–ORD C1482.

(3) Built-in pellet stoves—pellet stoves intended to be recessed into the wall. These stoves generally are safety listed under ASTM E1509, UL–127, ULC–S610 or ULC–ORD C1482.

Representative affected wood heater means an individual wood heater that is similar in all material respects that

would affect emissions to other wood heaters within the model line it represents.

Residential masonry heater means a factory-built or site-built wood-burning device in which the heat from intermittent fires burned rapidly in the firebox is stored in the refractory mass for slow release to building spaces. Masonry heaters are site-built (using local materials or a combination of local materials and manufactured components) or site-assembled (using factory-built components), solid fuel-burning heating appliances constructed mainly of refractory materials (e.g., masonry materials or soapstone). They typically have an interior construction consisting of a firebox and heat exchange channels built from refractory components, through which flue gases are routed. ASTM E-1602 "Standard Guide for Construction of Solid Fuel Burning Masonry Heaters" provides design and construction information for the range of masonry heaters most commonly built in the United States. The site-assembled models are generally listed to UL-1482.

Sale means the transfer of ownership or control, except that a transfer of control of an affected wood heater for research and development purposes within the scope of § 60.530(b)(2) is not a sale.

Similar in all material respects that would affect emissions means that the construction materials, exhaust and inlet air systems and other design features are within the allowed tolerances for components identified in § 60.533(k)(2), (3) and (4).

Single burn rate wood heater means a wood heater that is not equipped with or installed with a burn control device to allow the operator to vary burn rate conditions. Burn rate control devices include stack dampers that control the outflow of flue gases from the heater to the chimney, whether built into the appliance, sold with it, or recommended for use with the heater by the manufacturer, retailer or installer; and air control slides, gates or any other type of mechanisms that control combustion air flow into the heater.

Sold at retail means the sale by a commercial owner of a wood heater to

the ultimate purchaser/user or non-commercial purchaser.

Third-party certifier (sometimes called *third-party certifying body* or *product certifying body*) means an independent third party that is accredited under ISO-IEC Standards 17025 and 17065 to perform certifications, inspections and audits by an accreditation body that is a full member signatory to the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement and approved by the EPA for conducting certifications, inspections and audits under this subpart.

Traditional Native American bake oven means a wood or other solid fuel burning appliance that is designed primarily for use by Native Americans for food preparation, cooking, warming or for instructional, recreational, cultural or ceremonial purposes.

Unseasoned wood means wood with an average moisture content of 20 percent or more.

Valid certification test means a test that meets the following criteria:

- (1) The Administrator was notified about the test in accordance with § 60.534(g);
- (2) The test was conducted by an approved test laboratory as defined in this section;
- (3) The test was conducted on a wood heater similar in all material respects that would affect emissions to other wood heaters of the model line that is to be certified; and
- (4) The test was conducted in accordance with the test methods and procedures specified in § 60.534.

Wood heater means an enclosed, wood burning-appliance capable of and intended for residential space heating or space heating and domestic water heating. These devices include, but are not limited to, adjustable burn rate wood heaters, single burn rate wood heaters and pellet stoves. Wood heaters may or may not include air ducts to deliver some portion of the heat produced to areas other than the space where the wood heater is located. Wood heaters include, but are not limited to:

- (1) Free-standing wood heaters—Wood heaters that are installed on legs, on a pedestal or suspended from the ceiling. These products generally

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are safety listed under UL–1482, UL–737 or ULC–S627.

(2) **Fireplace insert wood heaters**—Wood heaters intended to be installed in masonry fireplace cavities or in other enclosures. These appliances generally are safety listed under UL–1482, UL–737 or ULC–S628.

(3) **Built-in wood heaters**—Wood heaters that are intended to be recessed into the wall. These appliances generally are safety listed under UL–1482, UL–737, UL–127 or ULC–S610.

§ 60.532 What standards and associated requirements must I meet and by when?

(a) *2015 particulate matter emission standards.* Unless exempted under § 60.530(b), each affected wood heater manufactured, imported into the United States, and/or sold at retail on or after May 15, 2015 must be certified to not discharge into the atmosphere any gases that contain particulate matter in excess of a weighted average of 4.5 g/hr (0.010 lb/hr), except that a wood heater manufactured before May 15, 2015 may be imported into the United States and/or sold at retail on or before December 31, 2015. Compliance for all heaters must be determined by the test methods and procedures in § 60.534.

(b) *2020 particulate matter emission standards.* Unless exempted under § 60.530(b) or electing to use the cord wood alternative means of compliance option in paragraph (c) of the section, each affected wood heater manufactured or sold at retail for use in the United States on or after May 15, 2020 must not discharge into the atmosphere any gases that contain particulate matter in excess of a weighted average of 2.0 g/hr (0.0044 lb/hr). Compliance for all heaters must be determined by the test methods and procedures in § 60.534.

(c) *2020 cord wood alternative compliance option.* Each affected wood heater manufactured or sold at retail for use in the United States on or after May 15, 2020 must not discharge into the atmosphere any gases that contain particulate matter in excess of a weighted average of 2.5 g/hr (0.0055 lb/hr). Compliance must be determined by a cord wood test method approved by the Ad-

ministrator and the procedures in § 60.534.

(d) *Chip wood fuel requirements.* Operators of wood heaters that are certified to burn chip wood fuels must only burn chip wood fuels that have been specified in the owner’s manual. The chip wood fuel must meet the following minimum requirements:

- (1) Moisture content: less than 35 percent;
- (2) Inorganic fines: less than or equal to 1 percent;
- (3) Chlorides: less than or equal to 300 parts per million by weight;
- (4) Ash content: no more than 2 percent;
- (5) No demolition or construction waste; and
- (6) Trace metals: less than 100 mg/kg.

(e) *Pellet fuel requirements.* Operators of wood heaters that are certified to burn pellet fuels must only burn pellets that have been specified in the owner’s manual and graded under a licensing agreement with a third-party organization approved by the EPA. The Pellet Fuels Institute, ENplus and CANplus are initially deemed to be approved third-party organizations for this purpose, and additional organizations may apply to the Administrator for approval. The pellet fuel must meet the following minimum requirements as assured through a quality assurance program licensed by a third-party organization approved by the EPA:

- (1) Density: consistent hardness and energy content with a minimum density of 38 pounds/cubic foot;
- (2) Dimensions: maximum length of 1.5 inches and diameter between 0.230 and 0.285 inches;
- (3) Inorganic fines: less than or equal to 1 percent;
- (4) Chlorides: less than or equal to 300 parts per million by weight;
- (5) Ash content: no more than 2 percent;
- (6) Contains no demolition or construction waste;
- (7) Trace metals: less than 100 mg/kg; and
- (8) None of the prohibited fuels in paragraph (f) of this section.

(f) *Prohibited fuel types.* No person is permitted to burn any of the following materials in an affected wood heater: