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Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

# **Subpart QQQQ—Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces**

#### §60.5472 Am I subject to this subpart?

- (a) You are subject to this subpart if you manufacture, sell, offer for sale, import for sale, distribute, offer to distribute, introduce or deliver for introduction into commerce in the United States, or install or operate a residential hydronic heater, forced-air furnace or other central heater manufactured on or after May 15, 2015, except as provided in paragraph (c) of this section.
- (b) Each residential hydronic heater, forced-air furnace or other central heater must comply with the provisions of this subpart unless exempted under paragraphs (b)(1) through (b)(3) of this section. These exemptions are determined by rule applicability and do not require additional EPA notification or public notice.
- (1) Affected residential hydronic heaters, forced-air furnaces or other central heaters manufactured in the United States for export are exempt from the applicable emission limits of §60.5474 and the requirements of §60.5475.
- (2) Affected residential hydronic heaters, forced-air furnaces or other central heaters used for research and development purposes that are never offered for sale or sold and that are not used to provide heat are exempt from the applicable emission limits of §60.5474 and the requirements of §60.5475. No more than 12 affected residential central heaters manufactured per model line may be exempted for this purpose.
- (3) Appliances that do not burn wood or wood pellets or wood chips (such as coal-only central heaters that meet the definition in §60.5473 or corn-only central heaters) are exempt from the applicable emission limits of §60.5474 and the requirements of §60.5475 provided that all advertising and warranties clearly denote that wood burning is prohibited in these appliances.
  - (c) The following are not affected central heaters and are not subject to this subpart:
  - (1) Residential wood heaters subject to subpart AAA of this part.
  - (2) Residential masonry heaters as defined in §60.5473.

### §60.5473 What definitions must I know?

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

Approved test laboratory means a test laboratory that is approved for central heater certification testing under §60.5477 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 §60.5476 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.

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

Central heater means a fuel-burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the device is located, by the distribution of air heated by the furnace through ducts or liquid heated in the device and distributed typically through pipes. Unless otherwise specified, these devices include, but are not limited to, residential forced-air furnaces (small and large) and residential hydronic heaters.

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

Coal-only hydronic heater or forced-air furnace means an enclosed, coal-burning appliance capable of space heating or domestic water heating that has all of the following characteristics:

- (1) Installation instructions, owner's manual and marketing information that state that the use of wood in the appliance, except for coal ignition purposes, is prohibited by law; and
- (2) The model is listed by a nationally recognized safety-testing laboratory for coal use only, except for coal ignition purposes.

Commercial owner means any person who owns or controls a residential hydronic heater, forced-air furnace or other affected central heater in the course of the business of the manufacture, importation, distribution, or sale of the unit.

Large residential forced-air furnace means a residential forced-air furnace that is capable of a heat output of 65,000 BTU per hour or greater.

*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 central heater.

*Model line* means all central 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 (PM $_{10}$ ) and fine particulate (PM $_{2.5}$ ).

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

Representative affected wood or central heater means an individual heater that is similar in all material respects that would affect emissions as defined in this section to other heaters within the model line it represents.

Residential forced-air furnace means a fuel burning device designed to burn wood or wood pellet fuel that warms spaces other than the space where the furnace is located, by the distribution of air heated by the furnace through ducts.

Residential hydronic heater means a fuel burning device designed to burn wood or wood pellet fuel for the purpose of heating building space and/or water through the distribution, typically through pipes, of a fluid heated in the device, typically water or a water and antifreeze mixture.

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 E1602 "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 central heater for research and development purposes within the scope of §60.5472(b)(2) is not a sale.

Similar in all material respects that would affect emissions means that the construction materials, exhaust and inlet air system, and other design features are within the allowed tolerances for components identified in §60.5475(k).

*Small residential forced-air furnace* means a residential forced-air furnace that is only capable of a maximum heat output of less than 65,000 BTU per hour.

*Sold at retail* means the sale by a commercial owner of a central heater to the ultimate purchaser/user or noncommercial 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.

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 §60.5476(h);
- (2) The test was conducted by an approved test laboratory as defined in this section;
- (3) The test was conducted on a central heater similar in all material respects that would affect emissions as defined in this section to other central 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 §60.5476.

Wood heater under this subpart means an enclosed, wood burning-appliance capable of and intended for residential central heating or central heating and domestic water heating. Unless otherwise specified, these devices include, but are not limited to, hydronic heaters and forced-air furnaces.

### §60.5474 What standards and requirements must I meet and by when?

- (a) Standards. Unless exempted under §60.5472, no person is permitted to:
- (1) On or after May 15, 2015, manufacture, import into the United States or sell at retail a residential hydronic heater unless it has been certified to meet the 2015 particulate matter emission limits in paragraph (b)(1) of this section, except that a residential hydronic heater that was manufactured on or before May 15, 2015 may be imported into the United States and/or sold at retail on or before December 31, 2015.
- (2) On or after May 15, 2020 manufacture or sell at retail a residential hydronic heater unless it has been certified to meet the 2020 particulate matter emission limit in paragraph (b)(2) or (b)(3) of this section.
- (3) On or after May 15, 2015, manufacture or sell at retail a residential forced-air furnace unless it complies with the work practice and operating standards in paragraphs (d), (e), (f) and (g) of this section and the owner's manual requirements in appendix I.
- (4) On or after May 16, 2016, manufacture or sell at retail a small residential forced-air furnace unless it has been certified to meet the 2016 particulate matter emission limits in paragraph (b)(4) of this section
- (5) On or after May 15, 2017 manufacture or sell at retail a large forced-air furnace unless it has been certified to meet the 2017 particulate matter emission limits in paragraph (b)(5) of this section.
- (6) On or after May 15, 2020 manufacture or sell at retail a small or large residential forced-air furnace unless it has been certified to meet the 2020 particulate matter emission limit in paragraph (b)(6) of this section.
- (b)(1) 2015 residential hydronic heater particulate matter emission limit: A weighted average of 0.32 lb/mmBtu (0.137 g/MJ) heat output and a maximum per individual burn rate of 18.0 g/hr (0.041 lb/hr) as determined by the test methods and procedures in §60.5476 or an alternative crib wood or cord wood test method approved by the Administrator.
- (2) 2020 residential hydronic heater particulate matter emission limit: 0.10 lb/mmBtu (0.026 g/MJ) heat output per individual burn rate as determined by the crib wood test methods and procedures in  $\S60.5476$  or an alternative crib wood test method approved by the Administrator .
- (3) 2020 residential hydronic heater cord wood alternative compliance option for particulate matter emission limit: 0.15 lb/mmBtu (0.026 g/MJ) heat output per individual burn rate as determined by the cord wood test methods and procedures in §60.5476 or an alternative cord wood test method approved by the Administrator.
- (4) 2016 small forced-air furnace particulate matter emission limit: A weighted average of 0.93 lb/mmBtu (0.40 g/MJ) heat output as determined by the test methods and procedures in §60.5476.

- (5) 2017 large forced-air furnace particulate matter emission limit: A weighted average of 0.93 lb/mmBtu (0.40 g/MJ) heat output as determined by the test methods and procedures in §60.5476.
- (6) 2020 forced-air furnace particulate matter emission limit: 0.15 lb/mmBtu (0.026 g/MJ) heat output per individual burn rate as determined by the cord wood test methods and procedures in §60.5476 or cord wood test methods approved by the Administrator.
  - (c) [Reserved]
- (d) Chip wood fuel requirements. Operators of wood central heaters, including hydronic heaters and forced-air furnaces, that are certified to burn chip wood fuels may only burn wood chips 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 central heaters, including outdoor residential hydronic heaters, indoor residential hydronic heaters, and residential forced-air furnaces, that are certified to burn pellet fuels may burn only 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 (including a certification by the third-party organization that the pellets do not contain, and are not manufactured from, any of the prohibited fuels in paragraph (f) of this section). 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.
- (f) *Prohibited fuel types*. No person is permitted to burn any of the following materials in an outdoor residential hydronic heater, indoor residential hydronic heater, residential forced-air furnace or other affected central heater:
  - (1) Residential or commercial garbage;
  - (2) Lawn clippings or yard waste;
  - (3) Materials containing rubber, including tires;
  - (4) Materials containing plastic;
  - (5) Waste petroleum products, paints or paint thinners, or asphalt products;
  - (6) Materials containing asbestos;

- (7) Construction or demolition debris;
- (8) Paper products; cardboard, plywood or particleboard. The prohibition against burning these materials does not prohibit the use of fire starters made from paper, cardboard, saw dust, wax and similar substances for the purpose of starting a fire in an affected central heater;
  - (9) Railroad ties or pressure treated lumber;
  - (10) Manure or animal remains;
  - (11) Salt water driftwood or other or other previously salt water saturated materials;
  - (12) Unseasoned wood;
- (13) Any materials that are not included in the warranty and owner's manual for the subject heater or furnace; or
- (14) Any materials that were not included in the certification tests for the subject heater or furnace.
- (g) Operation of affected wood heaters. A user must operate an outdoor residential hydronic heater, indoor residential hydronic heater, residential forced-air furnace or other affected central heater in a manner consistent with the owner's manual. The owner's manual must clearly specify that operation in a manner inconsistent with the owner's manual would void the warranty.
- (h) *Temperature sensor requirement.* An affected wood heater equipped with a catalytic combustor must be equipped with a temperature sensor that can monitor combustor gas stream temperatures within or immediately downstream [within 2.54 centimeters (1 inch)] of the catalytic combustor surface.

[80 FR 13715, Mar. 16, 2015, as amended at 85 FR 18455, Apr. 2, 2020]

### §60.5475 What compliance and certification requirements must I meet and by when?

- (a) Certification requirement. (1) Each affected residential hydronic heater, forced-air furnace and other central heater must be certified to be in compliance with the applicable emission standards and other requirements of this subpart. For each model line manufactured or sold by a single entity, e.g., company or manufacturer, compliance with applicable emission standards of §60.5474 must be determined based on testing of representative affected central heaters within the model line. If one entity licenses a model line to another entity, each entity's model line must be certified. If an entity intends to change the name of the entity or the name of the model, the manufacturer must apply for a new certification 60 days before making the change.
- (2) The manufacturer of each model line must submit the information required in paragraph (b) of this section and follow either the certification process in paragraphs (c) through (e) of this section (for forced-air furnaces) or the certification procedure specified in paragraph (f) of this section.
- (3) Models qualified as meeting the Phase 2 emission levels under the 2011 EPA hydronic heater partnership agreement are automatically deemed to have a certificate of compliance for the 2015 particulate matter emission standards and be valid until the effective date for the 2020 particulate matter emission standards.

- (4) Models certified by the New York State Department of Environment and Conservation to meet the emission levels in §60.5474(b) are automatically deemed to have a certificate of compliance for the 2015 particulate matter emission standards and be valid until the effective date for the 2020 particulate matter emission standards.
- (5) Models approved by the New York State Energy Research and Development Authority under the Renewable Heat New York (RHNY) Biomass Boiler Program are automatically deemed to have a certificate of compliance for the 2015 particulate matter emission standards and be valid until the effective date for the 2020 particulate matter emission standards provided that they comply with the thermal storage requirements in the RHNY program.
- (6) Small forced-air furnace models that are certified under CSA B415.1-10 (IBR, see §60.17), by an EPA approved third-party certifier, to meet the 2016 particulate matter emission level will be automatically deemed to have a certificate of compliance for the 2016 particulate matter emission standards and be valid until the effective date for the 2020 particulate matter emission standards.
- (7) Large forced-air furnace models that are certified under CSA B415.1-10 (IBR, see §60.17), by an EPA approved third-party certifier, to meet the 2017 particulate matter emission level will be automatically deemed to have a certificate of compliance for the 2017 particulate matter emission standards and be valid until the effective date of the 2020 particulate matter emission standards.
- (b) Application for a certificate of compliance. Any manufacturer of an affected residential hydronic heater or forced-air furnace or other central heater must apply to the Administrator for a certificate of compliance for each model line. The application must be submitted to: WoodHeaterReports@epa.gov. The application must be signed by a responsible representative of the manufacturer or an authorized representative and must contain the following:
- (1) The model name and/or design number. The model name and/or design number must clearly distinguish one model from another. The name and/or design number cannot include the EPA symbol or logo or name or derivatives such as "EPA."
- (2) Engineering drawings and specifications of components that may affect emissions (including specifications for each component listed in paragraph (k) of this section). Manufacturers may use assembly or design drawings that have been prepared for other purposes, but must designate on the drawings the dimensions of each component listed in paragraph (k) of this section. Manufacturers must identify dimensions of components listed in paragraph (k)(2) of this section that are different from those specified in that paragraph, and show that such differences cannot reasonably be anticipated to cause central heaters in the model line to exceed the applicable emission limits. The drawings must identify how the emission critical parts, such as air tubes and catalyst, can be readily inspected and replaced.
- (3) A statement whether the firebox or any firebox component (including the materials listed in paragraph (k)(3) of this section) will be composed of material different from the material used for the firebox or firebox component in the central heater on which certification testing was performed and a description of any such differences and demonstration that any such differences may not reasonably be anticipated to adversely affect emissions or efficiency.
- (4) Clear identification of any claimed confidential business information (CBI). Submit such information under separate cover to the EPA CBI Office; Attn: Residential Wood Heater Compliance Program Lead, 1200 Pennsylvania Ave. NW., Washington, DC 20004. Note that all emissions data, including all information necessary to determine emission rates in the format of the standard, cannot be claimed as CBI.

- (5) All documentation pertaining to a valid certification test, including the complete test report and, for all test runs: Raw data sheets, laboratory technician notes, calculations and test results. Documentation must include the items specified in the applicable test methods. Documentation must include discussion of each test run and its appropriateness and validity, and must include detailed discussion of all anomalies, whether all burn rate categories were achieved, any data not used in the calculations and, for any test runs not completed, the data collected during the test run and the reason(s) that the test run was not completed. The documentation must show that the burn rate for the low burn rate category is no greater than the rate that an operator can achieve in home use and no greater than is advertised by the manufacturer or retailer. The test report must include a summary table that clearly presents the individual and overall emission rates, efficiencies and heat outputs. Submit the test report and all associated required information according to the procedures for electronic reporting specified in §60.5479(f).
- (6) A copy of the warranties for the model line, which must include a statement that the warranties are void if the unit is used to burn materials for which the unit is not certified by the EPA and void if not operated according to the owner's manual.
- (7) A statement that the manufacturer will conduct a quality assurance program for the model line that satisfies the requirements of paragraph (m) of this section.
- (8) A statement describing how the tested unit was sealed by the laboratory after the completion of certification testing and asserting that such unit will be stored by the manufacturer in the sealed state until 5 years after the certification test.
  - (9) Statements that the central heater manufactured under this certificate will be—
- (i) Similar in all material respects that would affect emissions as defined in this subpart to the central heater submitted for certification testing, and
  - (ii) Labeled as prescribed in §60.5478.
- (iii) Accompanied by an owner's manual that meets the requirements in §60.5478. In addition, a copy of the owner's manual must be submitted to the EPA and be available to the public on the manufacturer's Web site.
- (10) A statement that the manufacturer has entered into contracts with an approved laboratory and an approved third-party certifier that satisfy the requirements of paragraph (f) of this section.
- (11) A statement that the approved laboratory and approved third-party certifier are allowed to submit information on behalf of the manufacturer, including any claimed to be CBI.
- (12) A statement that the manufacturer will place a copy of the certification test report and summary on the manufacturer's Web site available to the public within 30 days after the Administrator issues a certificate of compliance.
- (13) A statement of acknowledgment that the certificate of compliance cannot be transferred to another manufacturer or model line without written approval by the Administrator.
- (14) A statement acknowledging that it is unlawful to sell, distribute, or offer to sell or distribute an affected wood heater without a valid certificate of compliance.

- (15) Contact information for the responsible representative of the manufacturer and all authorized representatives, including name, affiliation, physical address, telephone number and email address.
- (c) Administrator approval process. (1) The Administrator may issue a certificate of compliance for a model line if the Administrator determines, based on all information submitted by the applicant and any other relevant information available, that:
- (i) A valid certification test demonstrates that the representative affected central heater complies with the applicable emission standards in §60.5474;
- (ii) Any tolerances or materials for components listed in paragraph (k)(2) or (3) of this section that are different from those specified in those paragraphs may not reasonably be anticipated to cause central heaters in the model line to exceed the applicable emission limits; and
  - (iii) The requirements of paragraph (b) of this section have been met.
- (2) The Administrator will deny certification if the Administrator determines that the criteria in paragraph (c)(1) of this section have not been satisfied. Upon denying certification under this paragraph, the Administrator will give written notice to the manufacturer setting forth the basis for this determination.
- (d) Level of compliance certification. The Administrator will issue the certificate of compliance for the most stringent particulate matter emission standard that the tested representative central heater meets under §60.5474.
- (e) Conditional, temporary certificate of compliance. A conditional, temporary certificate of compliance with the Step 1 p.m. emission standards may be granted by the Administrator until May 16, 2016 for small or large forced-air furnaces based on the manufacturer's submittal of a complete certification application meeting all requirements in §60.5475(b). The application must include the full test report by an EPA-approved laboratory and all required compliance statements by the manufacturer with the exception of a certificate of conformity by an EPA approved third-party certifier. The conditional, temporary approval would allow early marketing of forced-air furnaces as having a conditional, temporary certificate of compliance with the Step 1 p.m. emission standards until May 16, 2016 or until the Administrator completes the review of the application, whichever is earlier.
- (f) *Third-party certifier-based application process.* (1) Any manufacturer of an affected central heater must apply to the Administrator for a certificate of compliance for each model line. The manufacturer must meet the following requirements:
- (i) The manufacturer must contract with a third-party certifier for certification services. The contract must include regular (at least annual) unannounced audits under ISO-IEC Standard 17065 to ensure that the manufacturer's quality assurance plan is being implemented. The contract must also include a report for each audit under ISO-IEC Standard 17065 that fully documents the results of the audit. The contract must include authorization and requirement for the third-party certifier to submit all such reports to the Administrator and the manufacturer within 30 days of the audit. The audit report must identify deviations from the manufacturer's quality assurance plan and specify the corrective actions that need to be taken to address each identified deficiency.

- (ii) The manufacturer must submit the materials specified in paragraph (b) of this section and a quality assurance plan that meets the requirements of paragraph (m) of this section to the third-party certifier. The quality assurance plan must ensure that units within a model line will be similar in all material respects that would affect emissions to the wood heater submitted for certification testing, and it must include design drawings for the model line.
- (iii) The manufacturer must apply to the third-party certifier for a certification of conformity with the applicable requirements of this subpart for the model line.
- (A) After testing by an approved test laboratory is complete, certification of conformity with the emission standards in §60.5474 must be performed by the manufacturer's contracted third-party certifier.
- (B) The third-party certifier may certify conformity if the emission tests have been conducted per the appropriate guidelines: The test report is complete and accurate; the instrumentation used for the test was properly calibrated; the test report shows that the representative affected central heater meets the applicable emission limits specified in §60.5474; and the quality assurance plan is adequate to ensure that units within the model line will be similar in all material respects that would affect emissions to the central heater submitted for certification testing, and that the affected heaters would meet all applicable requirements of this subpart.
- (iv) The manufacturer must then submit to the Administrator an application for a certificate of compliance that includes the certification of conformity, quality assurance plan, test report and all supporting documentation specified in paragraph (b) of this section.
- (v) The submission also must include a statement signed by a responsible official of the manufacturer or authorized representative that the manufacturer has complied with and will continue to comply with all requirements of this subpart for certificate of compliance and that the manufacturer remains responsible for compliance regardless of any error by the test laboratory or third-party certifier.
- (2) The Administrator will issue to the manufacturer a certificate of compliance for a model line if it is determined, based on all of the information submitted in the application for certification and any other relevant information, that:
- (i) A valid certification of conformity has demonstrated that the representative affected central heater complies with the applicable emission standards in §60.5474;
- (ii) Any tolerances or materials for components listed in paragraph (k)(2) or (3) of this section that are different from those specified in those paragraphs may not be reasonably anticipated to cause central heaters in the model line to exceed the applicable emission limits;
  - (iii) The requirements of paragraphs (b) of this section have been met; and
  - (iv) A valid certificate of conformity for the model line has been prepared and submitted.
- (3) The Administrator will deny certification if the Administrator determines that the criteria in paragraph (f)(2) of this section have not been satisfied. Upon denying certification under this paragraph, the Administrator will give written notice to the manufacturer setting forth the basis for the determination.

- (g) Waiver from submitting test results. An applicant for certification may apply for a potential waiver of the requirement to submit the results of a certification test pursuant to paragraph (b) of this section, if the central heater meets either of the following conditions:
- (1) The central heaters of the model line are similar in all material respects that would affect emissions, as defined in §60.5473 and paragraph (k) of this section, to another model line that has already been issued a certificate of compliance. A manufacturer that seeks a waiver of certification testing must identify the model line that has been certified, and must submit a copy of an agreement with the owner of the design permitting the applicant to produce central heaters of that design.
- (2) The manufacturer has previously conducted a valid certification test to demonstrate that the central heaters of the model line meet the applicable standard specified in §60.5474.
- (h) *Certification period*. Unless revoked sooner by the Administrator, a certificate of compliance will be valid for 5 years from the date of issuance or until a more stringent standard comes into effect, whichever is sooner.
- (i) Renewal of certification. (1) The manufacturer must renew a model line's certificate of compliance or recertify the model line every 5 years, or the manufacturer may choose to no longer manufacture or sell that model line after the expiration date. If the manufacturer chooses to no longer manufacture that model line, then the manufacturer must submit a statement to the Administrator to that effect.
- (2) A manufacturer of an affected residential hydronic heater or forced-air furnace or other central heater may apply to the Administrator for potential renewal of its certificate of compliance by submitting the material specified in paragraph (b) and following the procedures specified in paragraph (f) of this section, or by affirming in writing that the central heaters in the model line continue to be similar in all material respects that would affect emissions to the representative central heater submitted for testing on which the original certificate of compliance was based and requesting a potential waiver from certification testing. The application must include a copy of the review of the draft application and approval by the third-party certifier.
- (3) If the Administrator grants a renewal of certification, the Administrator will give written notice to the manufacturer setting forth the basis for the determination and issue a certification renewal.
- (4) If the Administrator denies the request for a renewal of certification, the Administrator will give written notice to the manufacturer setting forth the basis for the determination.
- (5) If the Administrator denies the request for a renewal of certification, the manufacturer and retailer must not manufacture or sell the previously-certified central heaters after the expiration date of the certificate of compliance.

### (j) [Reserved]

(k) Recertification. (1) The manufacturer must recertify a model line whenever any change is made in the design submitted pursuant to paragraph (k)(2) of this section that affects or is presumed to affect the particulate matter emission rate for that model line. The manufacturer of an affected central heater must apply to the Administrator for potential recertification by submitting the material specified in paragraph (b) of this section and following the procedures specified in paragraph (f) of this section or by affirming in writing that the change will not cause the central heaters in the model line to exceed applicable emission limits and requesting a waiver from certification testing. The application for recertification must be reviewed and approved by the contracted third-party certifier

and a copy of the review and approval must be included. The Administrator may waive this requirement upon written request by the manufacturer, if the manufacturer presents adequate rationale and the Administrator determines that the change may not reasonably be anticipated to cause central heaters in the model line to exceed the applicable emission limits. The granting of such a waiver does not relieve the manufacturer of any compliance obligations under this subpart.

- (2) Any change in the design tolerances of any of the following components (where such components are applicable) is presumed to affect particulate matter and carbon monoxide emissions and efficiency if that change exceeds  $\pm 0.64$  cm ( $\pm 1/4$  inch) for any linear dimension and  $\pm 5$  percent for any cross-sectional area relating to air introduction systems and catalyst bypass gaps unless other dimensions and cross-sectional areas are previously approved by the Administrator under paragraph (c)(1)(ii) of this section:
  - (i) Firebox: Dimensions;
- (ii) Air introduction systems: Cross-sectional area of restrictive air inlets and outlets, location and method of control:
  - (iii) Baffles: Dimensions and locations;
  - (iv) Refractory/insulation: Dimensions and location;
  - (v) Catalyst: Dimensions and location;
- (vi) Catalyst bypass mechanism and catalyst bypass gap tolerances (when bypass mechanism is in closed position): Dimensions, cross-sectional area, and location;
  - (vii) Flue gas exit: Dimensions and location;
  - (viii) Door and catalyst bypass gaskets: Dimensions and fit;
  - (ix) Outer thermal shielding and thermal coverings: Dimensions and location;
- (x) Fuel feed system: For central heaters that are designed primarily to burn wood pellet fuel or wood chips and other central heaters equipped with a fuel feed system, the fuel feed rate, auger motor design and power rating, and the angle of the auger to the firebox; and
- (xi) Forced air combustion system: For central heaters so equipped, the location and horsepower of blower motors and the fan blade size.
- (3) Any change in the materials used for the following components is presumed to affect particulate matter emissions and efficiency:
  - (i) Refractory/insulation; or
  - (ii) Door and catalyst bypass gaskets.
- (4) A change in the make, model, or composition of a catalyst is presumed to affect particulate matter and carbon monoxide emissions and efficiency, unless the change has been requested by the central heater manufacturer and has been approved in advance by the Administrator, based on

test data that demonstrate that the replacement catalyst is equivalent to or better than the original catalyst in terms of particulate matter emission reduction.

- (I) Criteria for revocation of certification. (1) The Administrator may revoke certification of a product line if it is determined that the central heaters being manufactured or sold in that model line do not comply with the requirements of this subpart. Such a determination will be based on all available evidence, including but not limited to:
- (i) Test data from retesting of the original unit on which the certification test was conducted on a unit that is similar in all material respects that would affect emissions;
- (ii) A finding that the certification test was not valid. The finding will be based on problems or irregularities with the certification test or its documentation, but may be supplemented by other information;
- (iii) A finding that the labeling of the central heater model line or the owner's manual or the associated marketing information does not comply with the requirements of §60.5478;
- (iv) Failure by the manufacturer to comply with the reporting and recordkeeping requirements of §60.5479;
- (v) Physical examination showing that a significant percentage (as defined in the quality assurance plan approved pursuant to paragraph (m) of this section, but no larger than 1 percent) of production units inspected is not similar in all material respects that would affect emissions to the representative affected central heater submitted for certification testing; or
- (vi) Failure of the manufacturer to conduct a quality assurance program in conformity with paragraph (m).
- (vii) Failure of the approved laboratory to test the central heater using the methods specified in §60.5476.
- (2) Revocation of certification under this paragraph (I) of this section will not take effect until the manufacturer concerned has been given written notice by the Administrator setting forth the basis for the proposed determination and an opportunity to request a hearing under §60.5481.
- (m) Quality assurance program. On or after May 16, 2016, for each certified model line, the manufacturer must conduct a quality assurance program that satisfies the requirements of paragraphs (m)(1) through (5) of this section.
- (1) The manufacturer must prepare and operate according to a quality assurance plan for each certified model line that includes specific inspection and testing requirements for ensuring that all units within a model line are similar in all material respects that would affect emissions to the central heater submitted for certification testing and meet the emissions standards in §60.5474.
- (2) The quality assurance plan must be approved by the third-party certifier as part of the certification of conformity process specified in paragraph (f) of this section.
- (3) The quality assurance plan must include regular (at least annual) unannounced audits by the third-party certifier under ISO-IEC Standard 17065 to ensure that the manufacturer's quality assurance plan is being implemented.

- (4) The quality assurance plan must include a report for each audit under ISO-IEC Standard 17065 that fully documents the results of the audit. The third-party certifier must be authorized and required to submit all such reports to the Administrator within 30 days of the audit. The audit report must identify deviations from the manufacturer's quality assurance plan and specify the corrective actions that need to be taken to address each identified deficiency.
- (5) Within 30 days after receiving each audit report, the manufacturer must report to the third-party certifier and to the Administrator its corrective actions and responses to any deficiencies identified in the audit report. No such report is required if an audit report did not identify any deficiencies.
- (n) EPA compliance audit testing. (1)(i) The Administrator may select by written notice central heaters or model lines for compliance audit testing to determine compliance with the emission standards in §60.5474.
- (ii) The Administrator will transmit a written notification of the selected central heaters or model line(s) to the manufacturer, which will include the name and address of the laboratory selected to perform the audit test and the model name and serial number of the central heater(s) or central heater model line(s) selected to undergo audit testing.
- (2)(i) The Administrator may test, or direct the manufacturer to have tested, the central heater(s) from the model line(s) selected under paragraph (n)(1)(i) of this section in a laboratory approved under §60.5477. The Administrator may select any approved test laboratory or federal laboratory for this audit testing.
- (ii) The expense of the compliance audit test is the responsibility of the central heater manufacturer.
- (iii) The test must be conducted using the same test method used to obtain certification. If the certification test consisted of more than one particulate matter sampling test method, the Administrator may direct the manufacturer and test laboratory as to which of these methods to use for the purpose of audit testing. The Administrator will notify the manufacturer at least 30 days prior to any test under this paragraph, and allow the manufacturer and/or his authorized representatives to observe the test.
- (3) Revocation of certification. (i) If emissions from a central heater tested under paragraph (n)(2) of this section exceed the applicable emission standard by more than 50 percent using the same test method used to obtain certification, the Administrator will notify the manufacturer that certification for that model line is suspended effective 72 hours from the receipt of the notice, unless the suspension notice is withdrawn by the Administrator. The suspension will remain in effect until withdrawn by the Administrator, or the date 30 days from its effective date if a revocation notice under paragraph (n)(3)(ii) of this section is not issued within that period, or the date of final agency action on revocation, whichever occurs earliest.
- (ii)(A) If emissions from a central heater tested under paragraph (n)(2) of this section exceed the applicable emission limit, the Administrator will notify the manufacturer that certification is revoked for that model line.
- (B) A notice under paragraph (n)(3)(ii)(A) of this section will become final and effective 60 days after the date of written notification to the manufacturer, unless it is withdrawn, a hearing is requested under §60.5481(a)(2), or the deadline for requesting a hearing is extended.

- (C) The Administrator may extend the deadline for requesting a hearing for up to 60 days for good cause.
- (D) A manufacturer may extend the deadline for requesting a hearing for up to 6 months, by agreeing to a voluntary suspension of certification.
- (iii) Any notification under paragraph (n)(3)(i) or (ii) of this section will include a copy of a preliminary test report from the approved test laboratory or federal test laboratory. The test laboratory must provide a preliminary test report to the Administrator within 14 days of the completion of testing, if a central heater exceeds the applicable emission limit in §60.5474. The test laboratory must provide the Administrator and the manufacturer, within 30 days of the completion of testing, all documentation pertaining to the test, including the complete test report and raw data sheets, laboratory technician notes, and test results for all test runs.
- (iv) Upon receiving notification of a test failure under paragraph (n)(3)(ii) of this section, the manufacturer may request that up to four additional central heaters from the same model line be tested at the manufacturer's expense, at the test laboratory that performed the emissions test for the Administrator.
- (v) Whether or not the manufacturer proceeds under paragraph (n)(3)(iv) of this section, the manufacturer may submit any relevant information to the Administrator, including any other test data generated pursuant to this subpart. The manufacturer must bear the expense of any additional testing.
- (vi) The Administrator will withdraw any notice issued under paragraph (n)(3)(ii) of this section if tests under paragraph (n)(3)(iv) of this section show either—
- (A) That exactly four additional central heaters were tested for the manufacturer and all four met the applicable emission limits; or
- (B) That exactly two additional central heaters were tested for the manufacturer and each of them met the applicable emission limits and the average emissions of all three tested heaters (the original audit heater and the two additional heaters) met the applicable emission limits.
- (vii) If the Administrator withdraws a notice pursuant to paragraph (n)(3)(vi) of this section, the Administrator will revise the certification values for the model line based on the test data and other relevant information. The manufacturer must then revise the labels and marketing information accordingly.
- (viii) The Administrator may withdraw any proposed revocation, if the Administrator finds that an audit test failure has been rebutted by information submitted by the manufacturer under paragraph (n)(3)(iv) of this section and/or (n)(3)(v) of this section or by any other relevant information available to the Administrator.

### §60.5476 What test methods and procedures must I use to determine compliance with the standards and requirements for certification?

Test methods and procedures specified in this section or in appendices of this part, except as provided under §60.8(b), must be used to determine compliance with the standards and requirements for certification under §§60.5474 and 60.5475 and for reporting carbon monoxide emissions and efficiency. The EPA will post all approved alternative test methods on the EPA Web

site. The manufacturer or the manufacturer's authorized representative must submit a summary and the full test report with all supporting information, including detailed discussion of all anomalies, whether all burn rate categories were properly achieved, any data not used in the calculations and, for any test runs not completed, the data that were collected and the reason that the test run was not completed. The burn rate for the low burn rate category must be no greater than the rate that an operator can achieve in home use and no greater than is advertised by the manufacturer or retailer.

- (a) Canadian Standards Administration (CSA) Method B415.1-10, sections 13.7-13.10 (IBR, see §60.17), must be used to measure the thermal efficiency and CO emissions of outdoor and indoor residential hydronic heaters and forced-air furnaces, except that the burn rates specified in Method 28WHH must be used for hydronic heaters.
- (b) Testing conducted with continuously fed biomass as the fuel(s) must be conducted according to the relevant section of the ASTM E2618-13 (IBR, see §60.17) or adaptations approved by EPA. The EPA will post all approved alternative test methods on the EPA Web site.
- (c)(1) For outdoor and indoor residential hydronic heaters to be tested under the 2015 particulate matter emission standards in §60.5474(b)(1), the manufacturer must have an EPA-approved test laboratory use:
  - (i) Method 28WHH;
  - (ii) Method 28WHH PTS;
  - (iii) ASTM E2618-13 (IBR, see §60.17) (using crib wood); or
  - (iv) EN 303-5 (IBR, see §60.17), only for units sold with thermal storage.
- (2) For outdoor and indoor residential hydronic heaters to be tested under the 2020 particulate matter emission standards in §60.5474(b)(2), the manufacturer must have an EPA-approved test laboratory use:
  - (i) Method 28WHH;
  - (ii) Method 28WHH PTS; or
  - (iii) ASTM E2618-13 (IBR, see §60.17) (using crib wood).
- (3) If the heater is equipped with full or partial heat storage, the manufacturer, retailer and installer must not sell or install the heater with less heat storage capacity than is used in the certification test.
- (4) The manufacturer and approved laboratory must make the following adjustments to the methods listed in paragraphs (a), (c)(1) and (2) of this section:
- (i) For ASTM E2618-13 (IBR, see §60.17), the burn rate categories specified in Method 28WHH must be used;
- (ii) For EN 303-5 (IBR, see §60.17), the organic compounds must be included as part of the PM.

- (iii) For ASTM 2618-13 (IBR, see §60.17) Appendix A1 for full thermal storage certification tests, the test must use the large scale as required in the test method unless the manufacturer requests a variance, in advance of testing, contingent upon measuring flue gas temperature, oxygen and CO, using a simple electronic spreadsheet calculator to estimate efficiency and conducting a comparison to the delivered efficiency to determine if a more detailed examination should be made.
- (5) For particulate matter emission concentrations measured with ASTM E2515-11 (IBR, see §60.17), four-inch filters and Teflon membrane filters or Teflon-coated glass fiber filters may be used.
- (6) For all tests conducted using ASTM 2515-11 (IBR, see §60.17) pursuant to this section, the manufacturer and approved test laboratory must also measure the first hour of particulate matter emissions for each test run using a separate filter in one of the two parallel trains. The manufacturer and approved test laboratory must report the test results for the first hour separately and also include them in the total particulate matter emissions per run.
- (d)(1) For hydronic heaters subject to the 2020 cord wood alternative compliance option specified in §60.5474(b)(3), the manufacturers must have the approved laboratory conduct cord wood testing using the test methods listed below:
  - (i) Method 28WHH;
  - (ii) Method 28WHH PTS; or
  - (iii) ASTM E2618-13 (IBR, see §60.17) (using cord wood).
- (2) If the heater is equipped with full or partial heat storage, the manufacturer, retailer and installer must not sell or install the heater with less heat storage capacity than is used in the certification test.
- (3) The manufacturer and approved laboratory must make the following adjustments to the methods listed in (d)(1) of this section:
- (i) For ASTM E2618-13 (IBR, see §60.17), use the burn rate categories specified in Method 28WHH;
  - (ii) For all methods, report the results separately per burn rate category.
- (e) For forced-air furnaces, use CSA Method B415.1-10 (IBR, see §60.17) to measure the heat output (mmBtu/hr) and particulate matter emission rate (lb/mmBtu heat output), except use the burn rate categories in Method 28WHH for the 2020 particulate matter emission standards. For the 2020 particulate matter emission standards, report the particulate matter, efficiency and CO emission results separately per burn rate category.
- (f) For affected wood heaters subject to the particulate matter emission standards, emission concentrations must be measured with ASTM E2515-11 (IBR, see §60.17), except for the 2015 certification tests using EN303-5 (IBR, see §60.17). As required in paragraph (c)(4)(ii) of this section, the manufacturer and approved laboratory must add the organic gases to the PM for EN 303-5. Four-inch filters and Teflon membrane filters or Teflon-coated glass fiber filters may be used in ASTM E2515-11. Method 5H is not allowed for certification testing.

- (g) Douglas fir may be used in ASTM E2618-13 and CSA B415.1-10 (IBR, see §60.17).
- (h) The manufacturer of an affected central heater model line must notify the Administrator of the date that certification testing is to begin, by email, to <code>WoodHeaterReports@epa.gov</code>. This notice must be at least 30 days before the start of testing. The notification of testing must include the manufacturer's name and physical and email addresses, the approved test laboratory's name and physical and email addresses, third-party certifier name, the model name and number (or, if unavailable, some other way to distinguish between models), and the dates of testing. The laboratory may substitute certification testing of another affected central heater on the original date in order to ensure regular laboratory testing operations.
- (i) The approved test laboratory must allow the manufacturer, the manufacturer's approved third-party certifier, the EPA and delegated state regulatory agencies to observe certification testing. However, manufacturers must not involve themselves in the conduct of the test after the pretest burn has begun. Communications between the manufacturer and laboratory or third-party certifier personnel regarding operation of the central heater must be limited to written communications transmitted prior to the first pretest burn of the certification test series. During certification tests, the manufacturer may communicate with the third-party certifier, and only in writing to notify them that the manufacturer has observed a deviation from proper test procedures by the laboratory. All communications must be included in the test documentation required to be submitted pursuant to §60.5475(b)(5) and must be consistent with instructions provided in the owner's manual required under §60.5478(f).

[80 FR 13715, Mar. 16, 2015, as amended at 85 FR 63410, Oct. 7, 2020]

## §60.5477 What procedures must I use for EPA approval of a test laboratory or EPA approval of a third-party certifier?

- (a) *Test laboratory approval.* (1) A laboratory must apply to the Administrator for approval to test under this rule by submitting documentation that the laboratory is accredited by a nationally recognized accrediting entity under ISO-IEC Standard 17025 to perform testing using the test methods specified under §60.5476. Laboratories accredited by EPA prior to May 15, 2015 may have until May 15, 2018 to submit documentation that they have accreditation under ISO-IEC Standard 17025 to perform testing using the test methods specified under §60.5476. ISO accreditation is required for all other laboratories performing hydronic heater testing beginning on May 15, 2015, and performing forced-air furnace testing beginning on November 16, 2015.
  - (2) As part of the application, the test laboratory must:
- (i) Agree to participate biennially in an independently operated proficiency testing program with no direct ties to the laboratories participating;
- (ii) Agree to allow the Administrator, regulatory agencies and certifying bodies access to observe certification testing;
- (iii) Agree to comply with calibration, reporting and recordkeeping requirements that affect testing laboratories; and
- (iv) Agree to perform a compliance audit test at the manufacturer's expense at the testing cost normally charged to such manufacturer if the laboratory is selected by the Administrator to conduct the compliance audit test of the manufacturer's model line. The test laboratory must provide a preliminary audit test report to the Administrator within 14 days of the completion of testing, if a

central heater exceeds the applicable emission limit in §60.5474. The test laboratory must provide the Administrator and the manufacturer, within 30 days of the completion of audit testing, all documentation pertaining to the test, including the complete test report and raw data sheets, laboratory technician notes, and test results for all test runs.

- (v) Have no conflict of interest and receive no financial benefit from the outcome of certification testing conducted pursuant to §60.5475.
- (vi) Agree to not perform initial certification tests on any models manufactured by a manufacturer for which the laboratory has conducted research and development design services within the last 5 years.
- (vii) Agree to seal any wood heater on which it performed certification tests, immediately upon completion or suspension of certification testing, by using a laboratory-specific seal.
- (viii) Agree to immediately notify the Administrator of any suspended tests through email and in writing, giving the date suspended, the reason(s) why, and the projected date for restarting. The laboratory must submit the operation and test data obtained, even if the test is not completed.
- (3) If the EPA approves the laboratory, the Administrator will provide the test laboratory with a certificate of approval for testing under this rule. If the EPA does not approve the laboratory, the Administrator will give written notice to the laboratory setting forth the basis for the determination.
- (b) Revocation of test laboratory approval. (1) The Administrator may revoke the EPA laboratory approval if it is determined that the laboratory:
  - (i) Is no longer accredited by the accreditation body;
  - (ii) Does not follow required procedures or practices;
  - (iii) Has falsified data or otherwise misrepresented emission data;
- (iv) Failed to participate in a proficiency testing program, in accordance with its commitment under paragraph (a)(2)(i) of this section; or
  - (v) Failed to seal the central heater in accordance with paragraph (a)(2)(vii) of this section.
- (2) Revocation of approval under this paragraph (b) will not take effect until the laboratory concerned has been given written notice by the Administrator setting forth the basis for the proposed determination and an opportunity for a hearing under §60.5481. However, if revocation is ultimately upheld, all tests conducted by the laboratory after written notice was given will, at the discretion of the Administrator, be declared invalid.
- (c) *Period of test laboratory approval.* (1) With the exception of laboratories meeting the provisions of paragraph (c)(2) of this section, and unless revoked sooner, a certificate of approval for testing under this rule is valid for 5 years from the date of issuance.
- (2) Laboratories accredited by the EPA by May 15, 2015, under the provisions of §60.535 as in effect prior to that date may continue to be EPA accredited and deemed EPA approved for testing under this subpart until May 15, 2018, at which time the EPA accreditation and approval ends unless the laboratory has obtained accreditation under §60.5477 as in effect on that date.

- (d) *Third-party certifier approval.* (1) A Third-party certifier may apply to the Administrator for approval to be an EPA-approved third-party certifier by submitting credentials demonstrating that it has been accredited by a nationally recognized accrediting entity to perform certifications and inspections under ISO-IEC Standard 17025, ISO-IEC Standard 17065 and ISO-IEC Standard 17020.
  - (2) As part of the application, the third-party certifier must:
- (i) Agree to offer to contract with central heater manufacturers to perform third-party certification activities according to the requirements set out in this subpart.
- (ii) Agree to periodically conduct audits as described in §60.5475(m) and the manufacturer's quality assurance program;
- (iii) Agree to comply with reporting and recordkeeping requirements that affect approved central heater testing laboratories and third-party certifiers;
- (iv) Have no conflict of interest and receive no financial benefit from the outcome of certification testing conducted pursuant to §60.5475;
- (v) Agree to make available to the Administrator supporting documentation for each central heater certification and audit; and
- (vi) Agree to not perform initial certification reviews on any models manufactured by a manufacturer for which the third-party certifier has conducted research and development design services within the last 5 years.
- (3) If approved, the Administrator will provide the third-party certifier with a certificate of approval. The approval will expire 5 years after being issued unless renewed by the third-party certifier. If the EPA denies the approval, the Administrator will give written notice to the third-party certifier for the basis for the determination.
- (e) Revocation of third-party certifier approval. (1) The Administrator will revoke the third-party certifier's EPA approval if it is determined that the certifier:
  - (i) Is no longer accredited by the accreditation body;
  - (ii) Does not follow required procedures or practices; or
  - (iii) Has falsified certification data or otherwise misrepresented emission data.
- (2) Revocation of approval under this paragraph (e) will not take effect until the certifier concerned is given written notice by the Administrator setting forth the basis for the proposed determination and an opportunity for a hearing under §60.5481. However, if revocation is upheld, all certifications by the certifier after written notice was given will, at the discretion of the Administrator, be declared invalid.

### §60.5478 What requirements must I meet for permanent labels, temporary labels (hangtags), and owner's manuals?

- (a) General permanent label requirements. (1) Each affected central heater manufactured or sold on or after the date the applicable standards come into effect as specified in §60.5474, must have a permanent label affixed to it that meets the requirements of this section.
  - (2) The permanent label must contain the following information:
  - (i) Month and year of manufacture of the individual unit;
  - (ii) Model name and number;
  - (iii) Certification test emission value, test method, and standard met; and
  - (iv) Serial number.
  - (3) The permanent label must:
- (i) Be affixed in a readily visible or accessible location in such a manner that it can be easily viewed before and after the appliance is installed (a easily removable façade can be used for aesthetic purposes);
  - (ii) Be at least 8.9 cm long and 5.1 cm wide (3½ inches long and 2 inches wide);
  - (iii) Be made of a material expected to last the lifetime of the central heater;
- (iv) Present the required information in a manner so that it is likely to remain legible for the lifetime of the central heater; and
  - (v) Be affixed in such a manner that it cannot be removed without damage to the label.
- (4) The permanent label may be combined with any other label, as long as the required information is displayed, the integrity of the permanent label is not compromised, and the permanent label meets the requirements of §60.5478(a)(3).
- (5) Any label statement under paragraph (b) of this section constitutes a representation by the manufacturer as to any central heater that bears it:
- (i) That a certification of compliance was in effect at the time the central heater left the possession of the manufacturer;
- (ii) That the manufacturer was, at the time the label was affixed, conducting a quality assurance program in conformity with §60.5475(m); and
- (iii) That all the central heaters individually tested for emissions by the manufacturer under its quality assurance program pursuant to §60.5475(m) met the applicable emissions limit.

- (b) Permanent label requirements for central heaters. If a central heater belongs to a model line certified under §60.5475, and no unit in the model line has been found to exceed the applicable emission limits or tolerances through quality assurance testing, one of the following statements, as appropriate, must appear on the permanent label:
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with the 2015 particulate emission standards. Not approved for sale after May 15, 2020" or
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with the 2016 particulate emission standards. Not approved for sale after May 15, 2020" or
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with the 2017 particulate emission standards. Not approved for sale after May 15, 2020" or
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with the 2020 particulate emission standards using crib wood." or
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply with the 2020 particulate emission standards using cord wood."
- (c) Additional permanent label content. The permanent label for all certified central heaters must also contain the following statement on the permanent label:
- "This appliance needs periodic inspection and repair for proper operation. Consult owner's manual for further information. It is against federal regulations to operate this appliance in a manner inconsistent with operating instructions in the owner's manual."
- (d) Permanent label requirements for affected wood heaters with exemptions under §60.5472(b). (1) If an affected central heater is manufactured in the United States for export as provided in §60.5472(b)(1), the following statement must appear on the permanent label:
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Export appliance. May not be sold or operated in the United States."
- (2) If an affected central heater is manufactured for use for research and development purposes as provided in §60.5472(b)(2), the following statement must appear on the permanent label:
- "U.S. ENVIRONMENTAL PROTECTION AGENCY Not certified. Research Appliance. Not approved for sale or for operation other than for research."
- (3) If an affected central heater is a non wood-burning central heater exclusively as provided in §60.5472(b)(3), the following statement must appear on the permanent label:
- "U.S. ENVIRONMENTAL PROTECTION AGENCY This appliance is not certified for wood burning. Use of any wood fuel is a violation of federal regulations."
- (e) *Temporary label (hangtag) voluntary options.* (1) Each model line certified to meet the 2020 particulate emission standards prior to May 15, 2020 may display the hangtags specified in section 3 of appendix I of this part. The electronic template will be provided by the Administrator upon approval of the certification.
  - (2) The hangtags in paragraph (e)(1) of this section end upon May 15, 2020.

- (3) Each model certified to meet the 2020 Cord Wood Alternative Compliance Option may display the cord wood temporary label specified in section 3 of appendix I of this part. The electronic template will be provided by the Administrator upon approval of the certification.
- (f) Owner's manual requirements. (1) Each affected central heater offered for sale by a commercial owner must be accompanied by an owner's manual that must contain the information listed in paragraph (f)(2) of this section (pertaining to installation), and paragraph (f)(3) of this section (pertaining to operation and maintenance). Such information must be adequate to enable consumers to achieve optimal emissions performance. Such information must be consistent with the operating instructions provided by the manufacturer to the approved test laboratory for operating the central heater during certification testing, except for details of the certification test that would not be relevant to the ultimate user. The commercial owner must also make current and historical owner's manuals available on the company Web site and upon request to the EPA.
- (2) Guidance on proper installation information, including stack height, heater location and achieving proper draft.
  - (3) Proper operation and maintenance information, including minimizing visible emissions.
- (i) Fuel loading and re-loading procedures, recommendations on fuel selection and warnings on what fuels not to use, such as unseasoned wood, treated wood, colored paper, cardboard, solvents, trash and garbage;
  - (ii) Fire starting procedures;
- (iii) Proper use of air controls, including how to establish good combustion and how to ensure good combustion at the lowest burn rate for which the heater is warranted:
  - (iv) Ash removal procedures;
- (v) Instructions for replacement of gaskets and other parts that are critical to the emissions performance of the unit and other maintenance and repair instructions;
- (vi) For catalytic models, information on the following pertaining to the catalytic combustor: Procedures for achieving and maintaining catalyst activity, maintenance procedures, procedures for determining deterioration or failure, procedures for replacement and information on how to exercise warranty rights;
  - (vii) For catalytic models, the following statement—
- "This wood heater contains a catalytic combustor, which needs periodic inspection and replacement for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual, or if the catalytic element is deactivated or removed"; and
  - (viii) For noncatalytic models, the following statement—

<sup>&</sup>quot;This wood heater needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual."

- (4) Any manufacturer using the EPA-recommended language contained in appendix I of this part to satisfy any requirement of this paragraph (f) will be considered to be in compliance with that requirement, provided that the particular model language is printed in full, with only such changes as are necessary to ensure accuracy for the particular model line.
- (g) Central heaters that are affected by this subpart, but that have been owned and operated by a noncommercial owner, are not subject to paragraphs (e) and (f) of this section when offered for resale.

### §60.5479 What records must I keep and what reports must I submit?

- (a)(1) Each manufacturer who holds a certificate of compliance pursuant to §60.5475(a)(2) for a model line must maintain records containing the information required by paragraphs (a)(2) through (4) of this section with respect to that model line for at least 5 years.
- (2) All documentation pertaining to the certification test used to obtain certification, including the full test report and raw data sheets, laboratory technician notes, calculations, and the test results for all test runs, and discussions of the appropriateness and validity of all test runs, including runs attempted but not completed. The retained certification test documentation must include, as applicable, detailed discussions of all anomalies, whether all burn rate categories were properly achieved, any data not used in the calculations and, for any test runs not completed, the data that were collected and the reason that the test run was not completed. The retained certification test also must include documentation that the burn rate for the low burn category was no greater than the rate that an operator can achieve in home use and no greater than is advertised by the manufacturer or retailer.
  - (3) Results of the quality assurance program inspections required pursuant to §60.5475(m).
- (4) For emissions tests conducted pursuant to the quality assurance program required by §60.5475(m), all test reports, data sheets, laboratory technician notes, calculations, and test results for all test runs, the corrective actions taken, if any, and any follow-up actions such as additional testing.
- (b) Each approved test laboratory and third-party certifier must maintain records consisting of all documentation pertaining to each certification test, quality assurance program inspection and audit test, including the full test report and raw data sheets, technician notes, calculations, the test results for all test runs. Each approved test laboratory must submit accreditation credentials and all proficiency test results to the Administrator. Each third-party certifier must submit each certification test, quality assurance program inspection report and ISO-IEC accreditation credentials to the Administrator.
- (c) Each manufacturer must retain each central heater upon which certification tests were performed and certification granted under §60.5475(a)(2) at the manufacturer's facility for 5 years after the certification test. Each central heater must remain sealed and unaltered. Any such central heater must be made available upon request to the Administrator for inspection and testing.
- (d) Each manufacturer of an affected central heater model line certified pursuant to §60.5475(a)(2) must submit a report to the Administrator every 2 years following issuance of a certificate of compliance for each model line. This report must include the sales for each model by state and certify that no changes in the design or manufacture of the model line have been made that require recertification pursuant to §60.5475(k).

- (e)(1) Unless otherwise specified, all records required under this section must be maintained by the manufacturer, commercial owner of the affected central heater, approved test laboratory or third-party certifier for a period of no less than 5 years.
- (2) Unless otherwise specified, all reports to the Administrator required under this subpart must be made to: *WoodHeaterReports@epa.gov*.
- (f) Within 60 days after the date of completing each performance test (e.g., initial certification test, tests conducted for quality assurance and tests for renewal or recertification), each manufacturer must submit performance test data electronically to <code>WoodHeaterReports@epa.gov</code>. Owners or operators who claim that some of the information being submitted for performance tests is CBI (e.g., design drawings) must submit a complete file, including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives), by mail, and the same file with the CBI omitted, electronically. The compact disk must be clearly marked as CBI and mailed to U.S. EPA, OECA CBI Office, Attention: Residential Wood Heater Compliance Program, Washington, DC 20004. Emission data and all information necessary to determine compliance, except sensitive engineering drawings and sensitive detailed material specifications, cannot be claimed as CBI.
- (g) Within 30 days of receiving a certification of compliance for a model line, the manufacturer must make the full non-CBI test report and the summary of the test report available on the manufacturer's Web site.
- (h) Each manufacturer who uses the exemption for R&D heaters under §60.5472(b)(2) must maintain records for at least 5 years documenting where the heaters were located, that the heaters were never offered for sale or sold and that the heaters were not used for the purpose of heating.

### §60.5480 What activities are prohibited under this subpart?

- (a) No person is permitted to advertise for sale, offer for sale, sell or operate an affected residential hydronic heater or forced-air furnace or other central heater that does not have affixed to it a permanent label pursuant to §60.5478(b) through (d), as applicable.
- (b) No person is permitted to advertise for sale, offer for sale, or sell an affected central heater labeled under §60.5478(d)(1) except for export. No person is permitted to operate an affected central heater in the United States if it is labeled under §60.5478(d)(1).
- (c)(1) No commercial owner is permitted to advertise for sale, offer for sale, or sell an affected central heater permanently labeled under §60.5478(b) unless:
- (i) The affected appliance has been certified to comply with the particulate emission standards pursuant to §60.5474 as applicable; and
- (ii) The commercial owner provides any purchaser or transferee with an owner's manual that meets the requirements of §60.5478(f), a copy of the warranty and a moisture meter.
- (2) A commercial owner other than a manufacturer complies with the requirements of paragraph (c)(1) of this section if the commercial owner:
- (i) Receives the required documentation from the manufacturer or a previous commercial owner; and

- (ii) Provides that documentation unaltered to any person to whom the central heater that it covers is sold or transferred.
- (d)(1) In any case in which the Administrator revokes a certificate of compliance either for the knowing submission of false or inaccurate information or other fraudulent acts, or based on a finding under §60.5475(I)(1)(ii) that the certification test was not valid, the Administrator may give notice of that revocation and the grounds for it to all commercial owners.
- (2) On and after the date of receipt of the notice given under paragraph (d)(1) of this section, no commercial owner is permitted to sell any central heater covered by the revoked certificate (other than to the manufacturer) unless the model line has been recertified in accordance with this subpart.
- (e) No person is permitted to install or operate an affected central heater except in a manner consistent with the instructions on its permanent label and in the owner's manual pursuant to §60.5478(f), including only using fuels for which the unit is certified.
- (f) No person is permitted to operate, sell or offer for sale an affected central heater that was originally equipped with a catalytic combustor if the catalytic element is deactivated or removed.
- (g) No person is permitted to operate, sell or offer for sale an affected central heater that has been physically altered to exceed the tolerance limits of its certificate of compliance, pursuant to §60.5475(k).
- (h) No person is permitted to alter, deface, or remove any permanent label required to be affixed pursuant to §60.5478(a) through (d), as applicable.
- (i) If a temporary label is affixed to the central heater, retailers may not sell or offer for sale that central heater unless the temporary label affixed is in accordance with §60.5478(e), as applicable.

#### §60.5481 What hearing and appeal procedures apply to me?

- (a)(1) The affected manufacturer, laboratory or third-party certifier may request a hearing under this section within 30 days following receipt of the required notification in any case where the Administrator—
  - (i) Denies an application for a certificate of compliance under §60.5475 (a)(2);
  - (ii) Denies an application for a renewal of certification under §60.5475(i);
  - (iii) Issues a notice of revocation of certification under §60.5475(I);
  - (iv) Denies an application for laboratory approval under §60.5477(a);
  - (v) Issues a notice of revocation of laboratory approval under §60.5477(b).
  - (vi) Denies an application for third-party certifier approval under §60.5477(d); or
  - (vii) Issues a notice of revocation of third-party certifier approval under §60.5477(e).

- (2) In any case where the Administrator issues a notice of revocation under §60.5475(n)(3)(ii), the manufacturer may request a hearing under this section with the time limits set out in §60.5475(n)(3)(ii).
- (b) Any hearing request must be in writing, must be signed by an authorized representative of the petitioning manufacturer or laboratory, and must include a statement setting forth with particularity the petitioner's objection to the Administrator's determination or proposed determination.
- (c)(1) Upon receipt of a request for a hearing under paragraph (a) of this section, the Administrator will request the Chief Administrative Law Judge to designate an Administrative Law Judge as Presiding Officer for the hearing. If the Chief Administrative Law Judge replies that no Administrative Law Judge is available to perform this function, the Administrator will designate a Presiding Officer who has not had any prior responsibility for the matter under review, and who is not subject to the direct control or supervision of someone who has had such responsibility.
- (2) The hearing will commence as soon as practicable at a time and place fixed by the Presiding Officer.
- (3)(i) A motion for leave to intervene in any proceeding conducted under this section must set forth the grounds for the proposed intervention, the position and interest of the movant and the likely impact that intervention will have on the expeditious progress of the proceeding. Any person already a party to the proceeding may file an answer to a motion to intervene, making specific reference to the factors set forth in the foregoing sentence and paragraph (c)(3)(iii) of this section within 10 days after service of the motion for leave to intervene.
- (ii) A motion for leave to intervene in a proceeding must ordinarily be filed before the first prehearing conference or, in the absence of a prehearing conference, prior to the setting of a time and place for a hearing. Any motion filed after that time must include, in addition to the information set forth in paragraph (c)(3)(i) of this section, a statement of good cause for the failure to file in a timely manner. The intervener shall be bound by any agreements, arrangements and other matters previously made in the proceeding.
- (iii) A motion for leave to intervene may be granted only if the movant demonstrates that his presence in the proceeding would not unduly prolong or otherwise prejudice the adjudication of the rights of the original parties, and that movant may be adversely affected by a final order. The intervener will become a full party to the proceeding upon the granting of leave to intervene.
- (iv) Persons not parties to the proceeding may move for leave to file amicus curiae briefs. The movant must state his interest and the reasons why the proposed amicus brief is desirable. If the motion is granted, the Presiding Officer or Administrator will issue an order setting the time for filing such brief. An amicus curia may participate in any briefing after his motion is granted, and will be served with all briefs, reply briefs, motions, and orders relating to issues to be briefed.
- (4) In computing any period of time prescribed or allowed in this subpart, the day of the event from which the designated period begins to run will not be included. Saturdays, Sundays, and federal legal holidays will be included. When a stated time expires on a Saturday, Sunday or legal holiday, the stated time period will be extended to include the next business day.
- (d)(1) Upon his appointment the Presiding Officer must establish a hearing file. The file will consist of the notice issued by the Administrator under §60.5475(c)(2), §60.5475(f)(3), §60.5475(i)(4), §60.5475(l)(2), §60.5475(n)(3)(ii)(A), §60.5477(a)(3), §60.5477(b)(2), §60.5477(d)(3) or §60.5477(e)(2), together with any accompanying material, the request for a hearing and the

supporting data submitted therewith, and all documents relating to the request for certification or approval, or the proposed revocation of either.

- (2) The hearing file must be available for inspection by any party, to the extent authorized by law, at the office of the Presiding Officer, or other place designated by him.
- (e) Any party may appear in person, or may be represented by counsel or by any other duly authorized representative.
- (f)(1) The Presiding Officer, upon the request of any party, or at his discretion, may order a prehearing conference at a time and place specified by him to consider the following:
  - (i) Simplification of the issues;
  - (ii) Stipulations, admissions of fact, and the introduction of documents;
  - (iii) Limitation of the number of expert witnesses;
  - (iv) Possibility of agreement disposing of all or any of the issues in dispute; and
- (v) Such other matters as may aid in the disposition of the hearing, including such additional tests as may be agreed upon by the parties.
- (2) The results of the conference must be reduced to writing by the Presiding Officer and made part of the record.
- (g)(1) Hearings shall be conducted by the Presiding Officer in an informal but orderly and expeditious manner. The parties may offer oral or written evidence, subject to the exclusion by the Presiding Officer of irrelevant, immaterial and repetitious evidence.
- (2) Witnesses will not be required to testify under oath. However, the Presiding Officer will call to the attention of witnesses that their statements may be subject to penalties under title 18 U.S.C. 1001 for knowingly making false statements or representations or using false documents in any matter within the jurisdiction of any department or agency of the United States.
- (3) Any witness may be examined or cross-examined by the Presiding Officer, the parties, or their representatives.
- (4) Hearings must be recorded verbatim. Copies of transcripts of proceedings may be purchased by the applicant from the reporter.
- (5) All written statements, charts, tabulations and similar data offered in evidence at the hearings must, upon a showing satisfactory to the Presiding Officer of their authenticity, relevancy and materiality, be received in evidence and will constitute a part of the record.
- (h)(1) The Presiding Officer will make an initial decision which must include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the record. The findings, conclusions and written decision must be provided to the parties and made a part of the record. The initial decision will become the decision of the Administrator without further proceedings unless there is an appeal to the Administrator or motion for

review by the Administrator. Except as provided in paragraph (h)(3) of this section, any such appeal must be taken within 20 days of the date the initial decision was filed.

- (2) On appeal from or review of the initial decision the Administrator will have all the powers which he would have in making the initial decision including the discretion to require or allow briefs, oral argument, the taking of additional evidence or the remanding to the Presiding Officer for additional proceedings. The decision by the Administrator must include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the appeal or considered in the review.
- (3) In any hearing requested under paragraph (a)(2) of this section the Presiding Officer must render the initial decision within 60 days of that request. Any appeal to the Administrator must be taken within 10 days of the initial decision, and the Administrator must render a decision in that appeal within 30 days of the filing of the appeal.

### §60.5482 Who implements and enforces this subpart?

- (a) Under section 111(c) of the Clean Air Act, the Administrator may delegate the following implementation and enforcement authority to a state, local or tribal authority upon request:
- (1) Enforcement of prohibitions on the installation and operation of affected central heaters in a manner inconsistent with the installation and owner's manual:
- (2) Enforcement of prohibitions on operation of catalytic central heaters where the catalyst has been deactivated or removed;
  - (3) Enforcement of prohibitions on advertisement and/or sale of uncertified model lines;
- (4) Enforcement of prohibitions on advertisement and/or sale of affected central heaters that do not have required permanent label;
  - (5) Enforcement of proper labeling of affected central heaters;
  - (6) Enforcement of compliance with other labeling requirements for affected central heaters.
  - (7) Enforcement of certification testing procedures;
- (8) Enforcement of requirements for sealing of the tested central heaters and meeting parameter limits; and
  - (9) Enforcement of compliance requirements of EPA-approved laboratories.
  - (b) Delegations shall not include:
  - (1) Decisions on certification;
  - (2) Revocation of certification;
  - (3) Establishment or revision of standards;

- (4) Establishment or revision of test methods;
- (5) Laboratory and third-party certifier approvals and revocations;
- (6) Enforcing provisions governing content of owner's manuals; and
- (7) Hearings and appeals procedures.
- (c) Nothing in these delegations will prohibit the Administrator from enforcing any applicable requirements.
- (d) Nothing in these delegations will limit delegated entities from using their authority under section 116 of the Clean Air Act to adopt or enforce more restrictive requirements.

### §60.5483 What parts of the General Provisions do not apply to me?

The following provisions of subpart A of part 60 do not apply to this subpart:

- (a) Section 60.7;
- (b) Section 60.8(a), (c), (d), (e), (f) and (g); and
- (c) Section 60.15(d).