

# **EPA QUALIFIED WOOD-BURNING FIREPLACE PROGRAM**

## **Partnership Agreement Between the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency and**

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**(Revised June, 2012)**

### **Purpose**

This Partnership Agreement (Agreement) is a commitment between \_\_\_\_\_ (Partner) and the Office of Air Quality Planning and Standards (OAQPS), United States Environmental Protection Agency (EPA), by which Partner agrees to participate in the EPA Qualified Wood-burning Fireplace Program. The primary purpose of the Program is to promote the manufacture and sale of: (1) cleaner wood-burning fireplaces over other wood-burning fireplaces, and (2) retrofit devices to reduce wood smoke pollution from existing fireplaces, unless prohibited by law or by regulation. EPA is not promoting the sale of wood-burning fireplaces over other devices.

This Agreement sets out the commitments Partner agrees to make as part of its participation in this program. It does not impose any legally binding obligations on EPA, nor is EPA imposing any legally binding obligations on Partner through this Agreement.

By signature of this Partnership Agreement, fireplace manufacturers are not promoting the use of any particular retrofits and make no claims regarding their safety or installation in existing fireplaces. Retrofit manufacturers are responsible for assuring the safety and application of these devices in existing fireplaces.

### **Background**

Fireplaces are widely used in the United States, particularly in new construction. They provide home builders with an option for homeowners to enjoy the hearth experience. Some fireplaces are equipped with gas log sets and burn natural gas or propane. However, the majority of the fireplaces sold are intended to burn cordwood. This Program was undertaken to encourage the development and sale of a new generation of lower-emitting fireplaces that burn

cordwood. By encouraging manufacturers to develop and offer new, cleaner wood-burning fireplace models, this Program is expected to reduce air pollution emissions sooner than could be achieved by Federal regulation.

The original version of this Partnership Agreement was dated February 19, 2009 and pertained to low-mass fireplaces or builder boxes. In July 2009, EPA expanded the Program to include masonry fireplaces. In June 2012, EPA expanded the Program to include retrofit devices for installation into existing wood-burning fireplaces. Existing fireplaces are not regulated by EPA. To promote wood smoke reductions from the large number of existing fireplaces, EPA has added retrofit devices to the Program to encourage the development, sale and use of these devices.

This Program includes certification and qualification steps, which occur after a new fireplace model or retrofit device has been tested per the Program test guidelines. A certification body will **certify** conformity of tests and results with Program emission levels, and EPA will refer to this certification when reviewing a manufacturer's Program qualification request. EPA will have sole responsibility for **qualifying** models under this Program.

EPA qualification of fireplace models achieving a Phase 1 particulate matter emission level of 7.3 g/kg ended on February 19, 2012. EPA will no longer qualify fireplaces at the Phase 1 emission level.

EPA will qualify fireplace and retrofit device models that meet the Phase 2 particulate matter emission level of 5.1 g/kg.

## **Definitions**

For purposes of this Agreement:

- “cordwood” means wood obtained from a tree that is round or split
- “wood-burning fireplace” means a fireplace which is intended to burn cordwood, and for which testing via American Society for Testing and Materials (ASTM) Method E2558 is appropriate.
- “test laboratory” means an independent third party test laboratory that is (1) accredited by a nationally recognized accrediting body to perform testing under ASTM test methods E2558 and E2515 under ISO-IEC Standard 17025, or (2) accredited for wood stove certification testing under the residential wood heater NSPS [40 CFR Part 60, Subpart AAA]. A test laboratory may perform testing under the Program, but may not certify model lines or perform other functions pertaining to certification (e.g., manufacturing facility inspections).
- “certification body” means an independent third party test laboratory that is accredited by a nationally recognized accrediting body to perform certifications and inspections under ISO-IEC Guide 65, and ISO-IEC Standard 17020. A certification

body would certify conformity with Program emission levels and perform other functions pertaining to certification (e.g., manufacturing facility inspections). A certification body may also be a test laboratory under the Program.

- “retrofit device” means a device for installation into an existing wood-burning fireplace. The existing fireplace can either be factory built or masonry construction. The primary purpose of the retrofit is to reduce wood smoke pollution from existing fireplaces.
- “baseline fireplace” is a typical existing fireplace in which the retrofit device will be installed for testing.
- “Phase 2 emission level qualified model” is a fireplace model or retrofit device that has been **qualified** by EPA under the Program as emitting no more than 5.1 g/kg. Models qualified at the Phase 2 emission level will be recognized as qualified for three years from the date of the EPA letter notifying Partner of the model’s qualified status. Partner may seek renewal of its qualification beyond three years by retesting, recertification, and requalification, or it may seek a waiver (see Partnership Agreement Attachment 1).
- “Program labeling” means the qualifying label and hangtag (see Attachment 3). In addition, the Program includes “caution” labels for new fireplace models that are intended to be used only with the doors closed (see Partner Commitments section below).

## **General Commitments**

Partner and EPA should each designate a single liaison point for the Program, and should notify one another within two weeks of any change in liaison identity, contact information, or responsibilities. All relevant correspondence (including the original, signed Partnership Agreement) should be sent to these designated liaisons.

## **Partner Commitments**

Partner commits to use its best efforts to develop, manufacture, and market one or more qualified fireplace models or retrofit devices. To this end, the Partner agrees to:

- adhere to the terms of this Agreement, including the Program Guidelines which are part of this Agreement and are included as attachments to this Agreement:
  - Qualifying Process (Attachment 1), describes the process that Partners will follow to achieve “Phase 2 emission level qualified model” status.
  - Test Guidelines (Attachment 2), identifies the methods by which models will be tested under the Program. The methods currently accepted are ASTM Method

2558 with reasonable and necessary variances (if any) approved by EPA and ASTM Method E2515. The test procedure in the Test Guidelines for determining “worst case” operating conditions will be used for testing all models offered for certification and qualification under the Program. Partner and EPA recognize that these test methods and procedures are relatively new, and that issues may surface during their use. Partner and EPA agree to work together in good faith to resolve any such issues.

- Guidelines for Use of Program Labels, Hangtags, and Outreach Materials (Attachment 3), provide format and other specifications for the Program labels and hangtags, and describe the appropriate use of the Program labeling and outreach materials.
- authorize test laboratories and certification bodies to submit to EPA all certifications of conformity, test reports, and supporting documentation for models for which Program qualification is sought. EPA needs a version of the test report that contains all confidential business information (CBI) in hard copy and electronic form and also needs a version of the test report from which all CBI has been removed in hard copy and electronic form.
- authorize test laboratories and certification bodies to submit redacted (i.e. non-CBI) certifications of conformity, test reports, and supporting documentation to state or local governments that request this information for EPA-qualified models.
- report the particulate emissions test information, as listed below. Partner (or a test laboratory or certification body, if authorized by Partner) will submit the test report showing that a test laboratory used the appropriate Program test method for each model that Partner is seeking to qualify under this Program. Partner (or a test laboratory or certification body, if authorized by Partner) should provide a complete test report consisting of all test documentation such as:
  - raw data,
  - laboratory technician notes,
  - calculations sheets,
  - design information (e.g. CAD drawings, perspective drawings, operational drawings showing air, water, and smoke flow paths), and
  - test results.
- include an Owner’s Manual with each model. The intention is for the manual to include best practices for wood burning, e.g., Burn Wise information and how to operate the fireplace to minimize emissions. See Attachment 3, Section 6 for more details.

- Affix permanent, highly visible, yellow “caution” labels to new fireplace models that are qualified to be operated only with the doors closed. The intention is to encourage operators to close fireplace doors for proper operation, and to reduce emissions to the indoor and outdoor environments. The “caution” label must be clearly visible to the user when the doors are open. The label should say “OPERATE WITH DOORS CLOSED” on the top line and “Closing doors reduces smoke and the wood burns better.” on the second line. For the top line, the font should be Myriad bold, all caps, no less than 24 pt, red, CMYK 00FFFF00. The font outline should be 1 pt stroke in black, CMYK 000000FF. For the second line, the font should be Myriad bold, upper and lower case, no less than 12 pt, black, CMYK 000000FF. The tag should measure no less than 4.75 in. wide by 0.6 in. high and the background color should be yellow, CMYK 0000FF00. An example “caution label” is attached and can be used as a template by the Partner.
- identify information entitled to protection as Confidential Business Information (CBI) under 40 Code of Federal Regulations (CFR) Part 2 and other applicable law, and authorize test laboratories and certification bodies to release CBI to EPA. Please note that emission data are generally subject to disclosure to the public per Clean Air Act section 114(c). See 40 CFR section 2.301(a)(2). Note that it is important that state regulatory agencies and the public have access to sufficient information to enable them to confirm that the test calculations were performed correctly.
- enter into and maintain a contract for certification services with a certification body.
- call or e-mail EPA Program liaison at least every year to provide an informal status update regarding the development, manufacture, and marketing of qualified models.
- provide technical and sales information to the EPA Program liaison every year to indicate Partner’s progress toward the development and sale of qualified models. This information should be provided to EPA by August 15 of each year. Reports from each partner should include the following information for the period from August 1 the previous year through July 31 of the current year:
  - information regarding the nature of any technical issues confronted;
  - the number of Phase 2 emission level qualified fireplaces sold;
  - the total number of wood-burning fireplace units sold (includes Phase 2 emission level qualified as well as wood-burning fireplaces that do not qualify under the Program); and
  - the total number and identity of Phase 2 emission level qualified retrofit devices sold.

## **EPA Responsibilities**

EPA will oversee the Program, undertake efforts to build awareness of the Program, maintain the credibility of the Program, and ensure that the Program is fair and technically sound. EPA will also promote the benefits of cleaner wood-burning fireplaces over other wood-burning fireplaces and the benefits of lower-emitting retrofit device installation into existing wood-burning fireplaces. To this end, EPA intends to:

- maintain a website where Partners and EPA furnish information on program efforts and identify EPA and Partner contacts;
- qualify fireplace and retrofit models based on test reports from test laboratories and certifications of conformity from certification bodies and respond to Partner regarding the qualification status of submitted reports in a timely manner;
- prepare templates for test reports and for hangtags for use on qualified models;
- maintain any confidential business information (CBI) submitted to EPA under this Agreement according to 40 CFR part 2 and other applicable law (emission data generally cannot be withheld from disclosure, however);
- release aggregated sales information as appropriate, as long as CBI is not revealed;
- make accessible Program materials such as the Qualifying Process document, the Test Guidelines (note that ASTM guidelines are only available for purchase from ASTM), and the Guidelines for Use of Program Labels, Hangtags, and Outreach Materials through the Internet ([www.epa.gov/burnwise](http://www.epa.gov/burnwise)) and/or other means; and
- provide Partners, as appropriate, with public recognition for their efforts as part of the Program.

## **Limitations**

Partner agrees not to construe, claim, or imply that its participation in EPA's Qualified Wood-burning Fireplace Program constitutes federal government approval, acceptance, or endorsement of anything other than Partner's commitment to the Program. Partner agrees not to claim that qualified models are regarded by EPA as adequate to meet air quality management objectives. Partner understands its participation in the Program does not constitute federal government endorsement of Partner or its products. Partner acknowledges that under 5 CFR Section 2653.702(c), EPA may not endorse the purchase or sale of commercial products and services provided by the Partner. The Partner agrees to ensure that outreach materials describing this Agreement include statements that EPA does not endorse any particular product, service, or enterprise.

Partner understands that the activities it undertakes in connection with the Program are not intended to provide services to the federal government. As such, Partner will not submit a claim for compensation to any federal agency.

All commitments made by EPA in this Agreement are subject to the availability of appropriated funds and budget priorities. Nothing in this Agreement, in and of itself, obligates EPA to expend appropriations or enter into any contract, assistance agreement, interagency agreement, or incur other financial obligations. This Agreement does not exempt Partner from Agency policies requiring competition for financial assistance and contracts. Any endeavor involving EPA funding will be handled in accordance with applicable laws, regulations, policies and procedures, and will be subject to separate agreements.

This Agreement does not create any right or benefit, substantive or procedural, enforceable by law or equity against the Partner or EPA, their officers or employees, or any other person. This Agreement does not direct or apply to any person outside the Partner and EPA.

### **Dispute Resolution**

Partner and EPA will assume good faith as a general principle for resolving conflicts under the Program. Both Partner and EPA will endeavor to resolve all matters informally, so as to preserve maximum public confidence in the Program.

In the event informal channels do not produce a mutually agreeable resolution to a matter in dispute, either Partner or EPA may notify the other in writing as to the nature of the dispute, the specific corrective action sought and their intent to terminate the Agreement unless specific corrective actions sought are undertaken.

### **Effective Date and Duration of Agreement**

This Agreement will become effective when signed by both Partner and EPA, and may be amended by mutual written agreement. Partner and EPA understand that this Agreement may be terminated in writing by either Partner or EPA at any time and for any reason with no penalty. If EPA terminates the Agreement, the authorization to use Program labeling and hangtags is also terminated and Partner agrees to cease using them. Unless amended by mutual consent or terminated sooner, the terms of the Agreement will remain in effect until the termination of the Program by EPA, except as otherwise provided in this Agreement.

## Signatures

The undersigned hereby execute this Partnership Agreement on behalf of their organization. The signatories affirm that they have the authority to execute this Agreement on behalf of Partner and EPA.

### **EPA Program Liaison:**

Name: Tom Braverman

Mailing Address for Materials That Do Not Contain CBI:

Tom Braverman  
US EPA  
OAQPS, Outreach and Information Division  
Mail Code C304-05  
Research Triangle Park, NC 27711

Overnight Delivery Address:

Tom Braverman  
US EPA  
OAQPS, Outreach and Information Division  
Mail Code C304-05, Room 311  
4930 Page Road  
Durham, NC 27703

Mailing Address for Materials Containing CBI:

CBI Center (Attn: Tom Braverman)  
US EPA  
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Research Triangle Park, NC 27711

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**Partnership Agreement Signatory for EPA:**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Gregory A. Green  
Director, Outreach and Information Division  
Office of Air Quality Planning and Standards

**Partner Program Liaison:**

Name:

Title:

Mailing Address:

Overnight Delivery Address:

Telephone:

Fax:

E-mail:

**Partnership Agreement Signatory for <company name>** \_\_\_\_\_

**Specify Fireplace Manufacturer or Retrofit Device Manufacturer or both:**

\_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name:

Title:

Mailing Address:

City:

State:

Zip Code:

Country:

Telephone:

Fax:

E-mail:

Company web site:

## Partnership Agreement Attachment 1

# Qualifying Process

## EPA Qualified Wood-burning Fireplace Program

### I. QUALIFYING PROCESS

- A. Qualification of models should occur via use of ASTM Methods E2558 and E2515 at the “worst case” burn rates identified using the appropriate Program test method (see Attachment 2 and the ASTM methods). For retrofit device qualification, some variances of the above test methods may be necessary. Any variances will need to be approved by EPA, preferably in advance of testing. Testing must be conducted by an EPA accredited test laboratory or a certification body (see Partnership Agreement, Definitions section). A test report will be prepared using a template supplied by EPA.
- B. After testing by a test laboratory is complete, certification of conformity with the Program emission levels will be performed by a certification body (see Partnership Agreement, Definitions section). Partner commits to enter into and maintain a contract for services with a certification body.
- C. A “Quality Control Plan” for assuring that test models accurately reflect emission-critical components of the model design, and design drawings will be included as attachments to the application for certification of conformity by the certification body. The design drawings may be submitted to the certification body either in hard copy or electronic format. Partner should clearly indicate information in the application that is Confidential Business Information (CBI).
- D. If the certification body determines that the test report shows that the model emits 5.1 g/kg or less, and the “Quality Control Plan” is adequate to certify conformity, the Partner may request that the certification body submit the certification of conformity, test report, and supporting documentation to EPA for qualification under the Program.
- E. The test materials that should be submitted to EPA when qualification is sought include raw data, laboratory technician notes, calculations sheets, design information (e.g. CAD drawings, perspective drawings, operational drawings showing air, water, and smoke flow paths), and test results.
- F. EPA’s Outreach and Information Division, Office of Air Quality Planning and Standards intends to respond to Partner in writing in a timely manner regarding qualification status once it has received a complete submission and any errors have been corrected.

- G. If EPA acknowledges in writing that the model meets the Phase 2 emission level, the model will be considered a “Phase 2 emission level qualified model” for three years from the date of EPA’s letter. If EPA’s response identifies a problem with Partner’s submission, EPA and Partner will work together to determine next steps, which may involve retesting. In such a case, Partner should not begin to use Program labels and/or hangtags until EPA acknowledges that the model is qualified.
- H. Partner may begin to use Program labeling upon written notification by EPA of model qualification under the Program. EPA’s notification letter will indicate whether, in the case of new fireplaces, the fireplace model qualification is for use with doors open and closed, or doors closed only. Partner agrees to use Program Labeling only as described in the Guidelines for Use of Program Labels, Hangtags, and Outreach Materials (Attachment 3).
- I. Where the qualification of a model at the Phase 2 level (i.e. 5.1 g/kg) is expiring, partner may seek to retest, recertify, and requalify the model per the Program qualifying process, or may seek a waiver. To request a waiver of requalification, Partner should state in writing that, since the model’s original qualification under EPA’s Wood-burning Fireplace Program, the model has not undergone any modifications that have the potential to increase emissions. Modifications that have the potential to increase emissions may include, among other things, changes in firebox dimensions, airflow rates, airflow direction, heat output, and pressure differential through the model. In addition, Partner should send updated design drawings along with its waiver request. As appropriate, EPA will approve waiver requests in writing. The granting of such a waiver by EPA would not relieve Partner of its other commitments under the Partnership Agreement.
- J. For retrofits, Partner will identify the baseline fireplace, its dimensions and the rationale for its selection for the testing of a retrofit device. Partner will report the average percent reduction in particulate emissions of the retrofit device, utilizing a baseline fireplace emissions level of 12 g/kg and the average of the three test runs for worst case conditions (doors open or doors closed) with the retrofit device installed in the baseline fireplace. Retrofit devices cannot qualify with doors closed only; they may qualify for doors open and closed. The percent reduction achieved by the retrofits (as compared with the baseline) will not be used to determine whether the retrofit device qualifies, but provides the consumer with useful comparison data and will be part of the Program labeling (Attachment 3).

## **II. AUDITS TO ASSURE CONFORMITY WITH QUALITY CONTROL PLANS**

- A. In conformity with ISO-IEC Guide 65 and ISO-EC Standard 17020, the certification body will periodically conduct audits to assure that the manufacturer’s “Quality Control Plan” is being implemented satisfactorily.
- B. The certification body will prepare a report for each audit that will fully document the results of the audit, and Partner will authorize and request the certification body to

submit all such reports to EPA. Deviations from the manufacturer's Quality Control Plan will be identified in the audit report. The report will specify the corrective actions that need to be taken to address each identified deficiency.

- C. Partner will promptly report to the certification body and to EPA its responses to any deficiencies identified in an audit report.
- D. Serious deficiencies, or failure to implement corrective actions, may result in revocation of certification by the certification body and/or qualification by EPA. Partner should promptly discontinue use of Program labels on units manufactured after notification from the certification body of revocation of certification or from EPA of revocation of qualification, whichever is received first. Partner will authorize and request the certification body to submit a copy of any revocations of certification to EPA.

### **III. DISCONTINUATION OR MODIFICATION OF QUALIFIED MODELS**

- A. Partner is responsible for promptly informing the certification body and EPA when a qualified model is discontinued or Partner plans to modify or has modified the model in a manner that has the potential to increase emissions (for example, changes in firebox dimensions, airflow rates, airflow direction, heat output, or pressure differential through the unit).
- B. If a modification has the potential to increase emissions, Partner may request that a test laboratory (which may also be a certification body) re-test the model, and may seek EPA's requalification of the model based on the test results, by using the procedures in this attachment.
- C. Partner should promptly discontinue use of Program labels on models that have been discontinued, or models that have been modified in a manner that has the potential to increase emissions.

# Test Guidelines

## EPA Qualified Wood-burning Fireplace Program

### I. Summary

- Particulate emission testing for **new wood-burning fireplaces** under this Program should be conducted in accordance with ASTM test methods E2558 and E2515. Test runs will be conducted to determine the average “worst case” particulate emission performance of the fireplace when operated in accordance with the Owner’s Manual provided with the fireplace.
- Particulate emission testing for **retrofits** will be conducted in accordance with ASTM Test Methods E2558 and E2515 with reasonable and necessary variances (if any) approved by EPA, preferably in advance. Test runs will be conducted to determine the average “worst case” particulate emission performance of the fireplace when operated in accordance with the Owner’s Manual provided with the fireplace.

### II. Rationale

- A. Due to the variety of options and accessories that are possible across the range of fireplaces and retrofits in the marketplace, and the many combinations of possible operating conditions or settings that might result, qualifying fireplaces and retrofits based on their worst case performance under manufacturer’s allowable operating conditions or settings will help normalize comparisons.
- EPA will rank all fireplaces or retrofits based on their particulate emission performance when tested at their worst allowable operating configuration as determined by a series of initial test runs by the test laboratory.
  - Manufacturers will make their own determination about what operating conditions or settings are allowable for a given fireplace or retrofit and what are not and specify only allowable operating conditions or settings in the Owner’s Manual.
- B. Specific language must be included in an Owner’s Manual warning the user that operation of the new fireplace or retrofit in a manner that is inconsistent with the instructions included in the Owner’s Manual or on any permanent or temporary labeling may be a violation of state air quality regulations, could subject the user to enforcement actions, and would void the warranty.

### III. Test Procedures for Fireplaces and Retrofit Devices

#### A. General Rules

- Conduct at least one test run for doors open and one test run for doors closed operating configuration, permitted per the operating instructions in the Owner's Manual, to determine the worst case particulate emission condition. An outlier procedure is permissible for handling any suspected aberrant test runs.
- Once the worst case particulate emission condition is determined, conduct a minimum of two additional test runs on the model under the same worst case condition. An outlier procedure is permissible for handling any suspected aberrant test runs. Arithmetically average the results of no fewer than three test runs under the worst case condition to determine the reported average particulate emissions level for the fireplace or retrofit device.

#### B. Test Configuration Specifics

##### 1. Fireplace Doors

For fireplaces that are intended to be operated with the front doors in either the fully open or fully closed position (per the instructions in the Owner's Manual), conduct at least one test run with the doors fully open and at least one test run with the doors fully closed.

##### 2. Adjustable Dampers

For fireplaces with adjustable combustion air or bypass dampers, conduct at least one test run at each setting (or combination of settings) that is recommended in the Owner's Manual to determine where the worst emission performance occurs. Exception: If the fireplace includes a two position bypass damper (fully open and fully closed) and the operating instructions included in the Owner's Manual give specific instructions regarding how to operate the bypass damper to achieve optimal particulate emission performance, the fireplace should be operated in a manner consistent with the Owner's Manual during each test run.

##### 3. Blowers or Fans

For fireplaces with convection air blowers or fans, either as standard or optional equipment, conduct all test runs with the blower or fan operating at the highest air flow setting. This is presumed to represent the worst case. Exception: If during the course of normal fireplace operation, the blower or fan is designed to automatically turn on and off (using a thermal switch, for example), set the blower or fan control to the highest air flow setting but allow the automatic control to function normally.

#### 4. Other Automatic Adjustments

If the subject fireplace includes components (other than convection air blowers or fans) that automatically adjust during the course of normal fireplace operation (micro-processor controlled, for example), the fireplace should be operated during all test runs with those components allowed to operate automatically. Initial settings for those components (at the start of the test run) should be in accordance with the instructions in the Owner's Manual.

#### 5. Excluded Configurations

When it is stated in the Owner's Manual that a particular component should be adjusted to an "off" or closed position only after the fire in the fireplace is substantially burned out (i.e. this setting is not part of the manufacturer's "allowable operating conditions or settings"), testing should not be conducted with the component in that position.

For example: Recommending closing the front doors, closing the exhaust outlet damper or closing an air control, as a way of conserving energy by reducing or eliminating room air flow up the chimney when a fire is not burning.

#### 6. Spark Screens

All fireplaces should be tested with the spark screen in place when operated with the doors open. Spark screen usage is indicated in the Owner's Manual for every fireplace that has an Owner's manual that allows open door operation.

### C. Test Run Outliers Procedures

For any test run conducted during emission testing, additional test runs under the same operating condition may be conducted to determine the emissions performance for that operating condition.

Two options are provided for calculating the average emission factor for a particular operating condition when additional test run data are available.

Option 1: Determine the average by using the results for all test runs under the same operating condition.

Option 2: Determine the average by using at least two-thirds of the results for all test runs under the same operating condition.

### D. Reporting

The results of all test runs whether used in the calculation of any average or not will be included in the test report.



#### IV. Additional Procedures for Retrofit Device Testing

- Retrofit devices, should generally be tested in a Heatilator E36 or Majestic BR42 fireplace. No baseline tests are needed when either of these fireplace models is used for retrofit device testing.
- Retrofit device testing in any fireplace other than the Heatilator E36 or Majestic BR42 models should either include: (1) baseline testing without the retrofit device to establish that the fireplace's baseline emissions are  $\geq 10$  g/kg, or (2) a demonstration of equivalency to either the Heatilator E36 or Majestic BR42 fireplaces. No retrofit device should be tested in a fireplace that has baseline emissions of less than 10 g/kg, such as fireplaces that meet-the Phase 2 emission level of 5.1 g/kg.
- Partners that choose to test retrofit devices in a fireplace other than the Heatilator E36 or Majestic BR42 fireplace should demonstrate the fireplace's equivalency to the Heatilator E36 or Majestic BR42 to EPA's satisfaction. The criteria EPA will use for establishing equivalency include, but are not limited to:
  - Firebox volume is within 15 percent of Heatilator E36 or Majestic BR42; 4.53 to 6.13 ft<sup>3</sup> (Heatilator) or 5.13 to 6.93 ft<sup>3</sup> (Majestic).
  - Flue diameter is the same as Heatilator/Majestic (8 inches).
  - Concrete refractory mix has a thickness in the range of 0.75 to 1.25 inches.
  - Refractory density is in the range of 85 to 125 pounds per cubic foot.
  - Contains the original grate, as specified by the fireplace manufacturer, for the firebox.
  - Minimum grate height is 3 inches (measured from the floor of the firebox to the top of the fuel load bar).
  - Minimum width between each horizontal fuel support in the fireplace grate is 3 inches.
- EPA will consider other reasonable equivalency approaches submitted by Partners on a case-by-case basis.
- To become Phase 2 qualified, the retrofit device installed into the existing fireplace should be tested according to the test procedure described in Section III. of these test guidelines, and must be shown to emit less than or equal to 5.1 g/kg.
- The percent reduction achieved by the retrofit device from a baseline emissions level of 12 g/kg will be included on the Phase 2 qualifying hangtag.

# **Guidelines for Use of Qualifying Labels, Hangtags, and Outreach Materials**

## **EPA Qualified Wood-burning Fireplace Program**

### **I. PURPOSE**

The primary purpose of these Guidelines, which are part of EPA's Wood-burning Fireplace Program Partnership Agreement, is to ensure Program-wide consistency with regard to content, use, appearance, placement, and other matters related to Program qualifying labels and hangtags, collectively referred to as "Program Labeling." Consistent representation of information and appearance of these items are important in order to maximize consumers' recognition of the Program. In addition, it will help build consumer confidence in the Program and will facilitate comparison of available wood-burning fireplace models and retrofit devices. These Guidelines also are intended to minimize misstatements in public communications about the Program and misuse of Program labeling and outreach materials.

### **II. GENERAL COMMITMENTS**

Partner agrees to use Program Labeling and outreach materials only in the manner specified in these Guidelines and only on or with reference to qualified models.

Partner agrees not to imply that EPA endorses a particular model, product, service, or company. Partner also agrees not to use the EPA logo or seal in any manner.

Partner also agrees not to misuse Program labeling and outreach materials, or misrepresent the Program or Partner's model(s) qualified status under the Program. EPA may terminate the Partnership Agreement, including the authorization to use Program labeling, if Partner fails to act in accordance with the Agreement, which includes these Guidelines.

EPA intends to provide any new or revised guidance on labels, hangtags, or outreach materials to Partner in draft, and to give Partner an opportunity to comment prior to the guidance being issued in final form. However, the final decision on the content of EPA documents will be made by the Agency.

### III. QUALIFYING LABELS AND HANGTAGS

#### A. Qualifying Labels

Once EPA has notified Partner that a model qualifies as a “Phase 2 emission level qualified model,” partner may attach Program qualifying labels to units. Partner agrees to generate qualifying labels based on the following guidance, thus ensuring that the appearance and content of the labels are consistent across all qualified models.

The Qualifying Label lists:

- (1) month and year of the manufacturer of the individual unit,
- (2) model number or name,
- (3) serial number,
- (4) “Qualified EPA Phase 2 Model until [fill in date 3 years from the date of the EPA letter notifying Partner of the model’s qualified status]”
- (5) whether the fireplace model qualifies for use with doors open and doors closed, or doors closed only
- (6) for retrofit devices, the percent of emissions reductions from the 12 g/kg baseline emissions level
- (7) date of letter from EPA notifying Partner of the model’s qualification,
- (8) result of emissions testing in grams of PM<sub>2.5</sub> emissions per kilogram of wood burned (g/kg)
- (9) name and location (city and state or province) of manufacturer,
- (10) reference to ASTM E2558 and ASTM E2515.

All of the preceding information should be printed in the same font and size. In addition, the qualifying label includes the following statement:

This model meets the U.S. EPA Wood-burning Fireplace Program **Phase 2** emission level. To minimize smoke, always operate your fireplace in accordance with the manufacturer’s instructions found in the owner’s manual. Additional information about EPA’s Program is available at [www.epa.gov/burnwise](http://www.epa.gov/burnwise).

The qualifying label should be approximately 7 inches high by 6 inches wide, with font sized to fit this space. “U.S. Environmental Protection Agency” and “EPA” should be no larger than the other lettering in the statement portion of the label.

The qualifying label should be affixed in a readily visible location prior to completion of installation/construction. Be sure to follow local building inspection procedures to allow inspection prior to completion of installation/construction. The label should be made of a neutral colored material (i.e. similar to the color(s) used for required safety labels such as those conveying Underwriters Laboratories (UL) or Canadian Standards Association (CSA) information) material that is expected to last the lifetime of the unit, and should present the EPA statement (above) in a manner that is likely to remain legible for the lifetime of the unit.

For retrofit devices, consult EPA if there are issues of size and/or location of the qualifying label.

The qualifying label text and hangtag should not be used on or in connection with advertising or other materials featuring models that are not qualified under EPA’s Wood-burning Fireplace Program.

## **B. Hangtags**

Partner may attach Program hangtags to its qualified model(s). EPA will supply hangtag templates to Partner. Partner agrees to generate hangtags via use of the template without modification, thus ensuring that the appearance (font type, size, and color; background color; label size; spacing) and the general content of the hangtags are consistent across all qualified models in the Program. The EPA Program Liaison is available to assist with use of the template.

Hangtags should be printed on a durable waterproof substrate such as 70 or 90 pound waterproof bond paper, and should measure 5 inches wide by 8 inches long. All hangtags should be printed in black ink. The entire template should appear on one side of the label (i.e. the text should not carry over to the other side), although Partner may choose to print the entire template on each side. The Phase 2 background color is white, with PMS 131 orange trim.

The hangtag should not be used on or in connection with advertising or other materials featuring models that are not qualified under EPA’s Wood-burning Fireplace Program.

The qualifying label, hangtags and outreach material requirements and contents for qualifying retrofit devices will be analogous to those described for qualifying new fireplaces with three exceptions. These exceptions are: (1) contents of the hangtags can be printed on or attached to the packaging if a hangtag cannot be reasonably attached to the retrofit device due to its physical size or shape; (2) a statement on the hangtag that the retrofit device reduced particulate emissions by “X” percent, as specified in Section IV, Attachment 2; and (3) dimensions of the baseline fireplace and a statement that results may vary for other fireplaces.

Attached to the Partnership Agreement are current samples of the Program hangtags for the various categories of models that can qualify under the program.

#### **IV. COMMENCEMENT AND DISCONTINUATION OF USE OF PROGRAM LABELING**

Partner agrees that use of Program labeling on a qualified model would begin no sooner than the date of EPA's qualification letter to Partner. For example, Partner may not begin to use qualifying labels and/or hangtags once it signs an EPA Wood-burning Fireplace Program Partnership Agreement.

Partner agrees to promptly discontinue use of Program labels and hangtags on all qualified models that are manufactured as of the date on which any of the following occurs:

- (1) termination of Partnership Agreement by either Partner or EPA;
- (2) termination of this Program;
- (3) receipt of notification from the certification body that certification of a model has been terminated or from EPA that qualification of a model has been terminated;
- (4) a qualified model has been discontinued
- (5) any change is made to a qualified model that has the potential to increase emissions;
- (6) qualification of a Phase 2 emission level model has expired (3 years have passed since the EPA letter notifying Partner of the model line's qualified status) and requalification or issuance of a waiver has not yet occurred;
- (7) EPA determines that the qualification or information on the labels, hangtags, or outreach materials is based on false, erroneous, misleading, or questionable information.

Partner should discontinue use of Program labeling with respect to any unit manufactured and should promptly notify the certification body and EPA when any change that has the potential to increase emissions is made to a qualified model. Partner may resume use of Program labeling once EPA has re-qualified the model.

#### **V. MODIFICATION OF QUALIFYING LABEL OR HANGTAG TEMPLATES**

The goals of the Program will be best served by having consistent, easy-to-read qualifying labels and hangtags. However, should modification of the templates for these materials be called for, the Agency would distribute revised guidance or a new template to Partner as soon as possible.

Partner should begin to use the revised templates for Program labels within a reasonable time after receiving them for qualified model units which do not already bear a qualifying label at the time the revised guidance is received. For those qualified model units that already have labels affixed at the time a revised template is received, EPA may suggest that Partner exchange existing labels for the newer version.

If a revision to the templates for hangtags is made, Partner would begin to use the new templates within a reasonable time on all qualified model units manufactured after receipt of the new templates. Failure to implement label and hangtag modifications as described in this paragraph may result in Partner being dropped from the Program.

## **VI. OUTREACH MATERIALS**

### **A. Owner's Manual Statement**

Partner agrees to include in the Owner's Manual for qualified model(s) the following information:

1. Proper installation instructions;
2. Operation and maintenance instructions, including:
  - fuel loading procedures, and recommendations on fuel use and selection;
  - a statement indicating that the following are among the materials/substances that should not be used as fuel:
    - trash
    - plastics
    - gasoline
    - rubber
    - industrial solvents
    - flammable liquids
    - naptha
    - household garbage
    - material treated with petroleum products (particleboard, railroad ties and pressure treated wood)
    - leaves
    - paper products
    - cardboard
    - saltwater driftwood

- painted wood
  - any substance that emits dense smoke or an obnoxious odor
  - proper fire starting procedures;
  - proper use of air controls, if any;
    - any air inlets should not be restricted by debris (creosote, ash, etc.)
    - flame baffle/flue should not be restricted by debris
    - chimney should not be restricted by debris
  - ash removal procedures;
  - for catalytic models, information pertaining to maintaining catalyst performance, maintenance procedures, procedures for determining catalyst failure or deterioration, procedures for replacement, and warranty rights.
3. A statement indicating that the new fireplace model is qualified for use only with doors closed, if applicable. This statement should be included toward the beginning of the owner's manual, and should be provided in large font as compared with the text around the statement. Retrofit devices cannot qualify with doors closed only; they may qualify for doors open and closed.
  4. A statement indicating that operators must comply with all applicable laws or other requirements, such as state laws or regulations and local ordinances, and stating that the warranty would be voided if the unit is not used in accordance with the operation and maintenance instructions.

## **B. Other Outreach Materials**

EPA may offer Program outreach materials to Partner. If Partner would like to use these materials, Partner agrees to adhere to any guidelines and/or use any templates EPA provides. Failure to do so may result in Partner being dropped from the Program. Partners are welcome to submit suggestions to the EPA liaison for the Program at any time suggesting additional EPA-generated outreach materials that they believe would enhance the effectiveness of the Program.

## **VII. PROGRAM COMMUNICATIONS**

### **A. General**

To maximize consumer confidence in the Program, Partner agrees not to misrepresent the Program or Partner's model(s) qualification status in the Program. Partner will not make misleading statements that suggest that EPA endorses a particular model. The Program name, labeling and other related items should not be used in a manner that would imply EPA endorsement of a company, products, or services. Consequently, the EPA logo cannot be used in any manner in connection with the Program by the Partner.

## B. Suggested Wording

EPA recommends use of the terminology in the left column in communications about the Program:

### CORRECT

#### QUALIFIED MODEL STATUS

- EPA Wood-burning Fireplace Program qualified

#### TEST METHODS AND EMISSION LEVELS

- EPA Wood-burning Fireplace Program guidelines
- EPA Wood-burning Fireplace Program test methods
- Model has met the EPA Wood-burning Fireplace Program Phase 2 emission level
- EPA-qualified model under the Wood-burning Fireplace Program

#### PARTNERS

- Company X, an EPA Wood-burning Fireplace Program Partner
- A company/manufacturee participating in the EPA Wood-burning Fireplace Program

### INCORRECT

#### QUALIFIED MODEL STATUS

- EPA Wood-burning Fireplace Program compliant model
- EPA Wood-burning Fireplace Program rated model

#### TEST METHODS AND EMISSION LEVELS

- Wood-burning Fireplace Program standards
- EPA-certified model
- EPA-endorsed model
- EPA-approved model

#### PARTNERS

- Company X, a company endorsed by EPA
- An EPA-approved Wood-burning Fireplace or Retrofit Device manufacturer



### **C. Websites**

Partner may not include the EPA logo on their website, but may link its company website to the EPA-Qualified Wood-burning Fireplace Program website ([www.epa.gov/burnwise](http://www.epa.gov/burnwise)).

### **D. Education of Employees and Others about Program**

Partner agrees to provide information about the Program to its employees, to persons or entities that participate in the development, manufacture, marketing, sales/distribution, and service of qualified models, and to homebuilder organizations. In addition, Partner agrees to take steps to encourage these persons or entities to act in accordance with the Partnership Agreement.

**OPERATE WITH DOORS CLOSED**  
Closing doors reduces smoke and the wood burns better.

**Tag Specifications:**



Tag should measure no less than 4.75 in. wide by 0.6 in. high  
Tag color background is yellow, CMYK 0000FF00

**OPERATE WITH DOORS CLOSED**

Font: Myriad bold

Font size: should be no less than 24 pt.

Font color: red, CMYK 00FFFF00

Font outline: 1 pt stroke in black, CMYK 000000FF

**Closing doors reduces smoke and the wood burns better.**

Font: Myriad Bold

Font size: should be no less than 12 pt

Font color: black, CMYK 000000FF



# PHASE 2 QUALIFIED

## U.S. Environmental Protection Agency Wood-burning Fireplace Program

Phase 2 Qualified models are cleaner and pollute less than those models that have not met this emissions level. Exposure to smoke has been associated with respiratory illness and other health problems. Models that have lower smoke emissions may reduce your risk.

### FIREPLACE SMOKE EMISSIONS RANGE

Lower Emissions

Higher Emissions

0

12.0

Better

Worse



Fireplaces with lower emissions produce less smoke when installed and operated properly.

MANUFACTURER:

XXXXXX

MODEL NAME:

XXXXXX

SMOKE (PARTICLE EMISSIONS):

4.4 GRAMS/KG OF WOOD BURNED

EPA has determined, based on testing by an accredited independent laboratory, that this model qualifies at the Phase 2 emissions level for U.S. EPA's Voluntary Fireplace Program.

**Burn  Wise**  
Program of U.S. EPA

For more information go to [www.epa.gov/burnwise](http://www.epa.gov/burnwise)



# PHASE 2 QUALIFIED

## U.S. Environmental Protection Agency Wood-burning Fireplace Program

Phase 2 Qualified retrofit devices installed in fireplaces can reduce smoke. Exposure to smoke has been associated with respiratory illness and other health problems. Fireplaces that have lower smoke emissions may reduce your risk.

### RETROFIT DEVICE SMOKE EMISSIONS RANGE

Lower Emissions

Higher Emissions

0

12.0

Better

Worse



3.6

5.1

EPA PHASE 2 EMISSIONS LEVEL

**THIS MODEL**

Fireplaces with lower emissions produce less smoke when installed and operated properly.

MANUFACTURER:

XXXXXX

MODEL NAME:

XXXXXX

SMOKE (PARTICLE EMISSIONS):

3.6 GRAMS/KG OF WOOD BURNED  
70% REDUCTION (as compared to an  
existing fireplace that emits 12 grams/kg)

As tested on the <insert Model Name and W"xH"xD">, results may vary for other fireplaces. EPA has determined, based on testing by an accredited independent laboratory, that this retrofit device qualifies at the Phase 2 emissions level for U.S. EPA's Voluntary Fireplace Program.

**Burn  Wise**  
Program of U.S. EPA

For more information go to [www.epa.gov/burnwise](http://www.epa.gov/burnwise)