### **Objectives of Circular A119**

Including Federal Revisions through March 16, 2009

Circular A119 establishes policies to improve the internal management of the Executive Branch. Consistent with Section 12(d) of P.L. 104-113, the "National Technology Transfer and Advancement Act of 1995" (hereinafter "the Act"), this Circular directs agencies to use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical. It also provides guidance for agencies participating in voluntary consensus standards bodies and describes procedures for satisfying the reporting requirements in the Act. The policies in this Circular are intended to reduce to a minimum the reliance by agencies on government-unique standards. These policies do not create the bases for discrimination in agency procurement or regulatory activities among standards developed in the private sector, whether or not they are developed by voluntary consensus standards bodies. Consistent with Section 12(b) of the Act, this Circular directs the Secretary of Commerce to issue guidance to the agencies in order to coordinate conformity assessment activities. This Circular replaces OMB Circular No. A-119, dated October 20, 1993.

## EPA WOOD-BURNING MASONRY HEATER PROGRAM

# Partnership Agreement Between The Office of Air Quality Planning and Standards U.S. Environmental Protection Agency And

#### Name of Masonry Heater Builder or Manufacturer

#### **Purpose**

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

#### Background

Masonry heaters have not generally found wide acceptance by consumers in the United States but they have the potential to become more popular as energy costs and environmental considerations gain prominence in the home heating market place. Virtually all masonry heaters sold in the U.S. are intended to burn cord wood. Because masonry heaters burn wood at high temperatures with adequate oxygen, they are generally known to be clean burning appliances. This Voluntary EPA Program was undertaken to encourage the development and sale of a new generation of masonry heaters with even better combustion conditions for generating even lower-emissions than current models have. By encouraging masonry heater builders and manufacturers to

offer new, cleaner burning masonry heater models for sale, this Voluntary EPA Program is expected to reduce air pollution emissions from new masonry heaters sooner than could be achieved by Federal regulation.

This Program includes certification and qualification steps, which will take place after a model has been tested in accordance with the Program test guidelines. After a model has been tested, a certification body will **certify** conformity with Program emissions limits. The EPA will then refer to this certification when reviewing a manufacturer's or a builder's Program qualification request. EPA will have sole responsibility for **qualifying** models under this Program.

EPA's Wood-Burning Masonry Heater Program will initially qualify models achieving a Phase 1 particulate matter emission level of 0.25 g/Mj-output or a Phase 2 particulate matter emission level of 0.13 g/Mj-output. EPA will no longer qualify models at the Phase 1 level after February 19, 2012. Partner may use Program labels and hangtags on units in masonry heater models lines that qualified at the Phase 1 level manufactured prior to February 19, 2012, and such units masonry heater models sold by Partners for up to six additional months after February 19, 2012.

Shortly after kickoff of the Program, EPA will undertake a pollutant dispersion modeling study to determine whether the Phase 2 emission level of 0.13 g/Mj should be revised in consideration of the emission targets that communities may need to achieve for compliance with the NAAQS PM<sub>2.5</sub> level for typical use and siting scenarios. After completion of the modeling study, EPA will provide written notice to the Partners to this Agreement if the Agency determines that the Phase 2 emission level should be revised. Upon this notice, EPA will qualify masonry heater models that achieve the new, modeled Phase 2 emission level, and will no longer qualify models at the initial 0.13 g/Mj Phase 2 level. Models that qualified at the initial Phase 2 emission level prior to any revision of the level based on the modeling study will be recognized as qualified models (and may use Program labels and hangtags) for three years from the date of the EPA letter notifying Partner of the model's qualified status, notwithstanding any revision of the Phase 2 emission level.

#### **Definitions**

For the purposes of this Agreement:

a "masonry heater" is a wood-burning device meeting the defining criteria established by the Masonry Heater Association of North America (MHA). Masonry Heaters:

- Are by weight or burn rate exempt from Title 40 of the U.S.
   Code of Federal Regulations (CFR) Part 60, Subpart AAA;
- Are not cook stoves, boilers, furnaces, or pellet stoves as defined in the 40CFR60, Subpart AAA;

- Comply with the guidelines of ASTM E1602-08 Standard Guide for Construction of Masonry Heaters;
- Are designed for closed-combustion-chamber (ie, closed-loading-door) operation;
- Have enough thermal storage capacity to maintain no less than 50% of its maximum masonry-mass temperature for at least 4.0 hours either:
  - 1. after the maximum masonry-mass temperature has been reached, or
  - 2. after the end of the test period, whichever is later;
- Produce an emissions factor of not more than 6.0 g/kg when operated in accordance with The Masonry Heater Association of North America Standard for Test-Fueling Masonry Heaters and sampled in accordance with ASTM E2515 (Standard Method for Measuring Particulate Emissions Using a Dilution Tunnel; and
- Generate a minimum HHV thermal efficiency of 44% OR a minimum LHV thermal efficiency of 50% when tested in accordance with the Masonry Heater Association of North America Standard Method for Measuring Masonry Heater Thermal Performance. (the relative magnitude of the HHV vs LHV values is based on 20% DB fuel moisture and 7.3% fuel hydrogen content).
- a "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] and, if not accredited by a nationally recognized accreditation body to ISO-IEC Standard 17025, has a QA/QC program in place that:
  - 1. is equivalent to the testing body QA/QC requirements contained in ISO-IEC 17025 Standard and
  - 2. would qualify for ISO-IEC accreditation as a Testing Laboratory.

A A test laboratory that is not accredited to ISO-IEC 17025 by a nationally recognized accreditation body, shall submit its ISO-IEC-equivalent QA/QC program documents to the EPA for review and use for conducting periodic test facility inspections. A test laboratory not accredited by a nationally recognized accreditation body but meeting these requirements under this Program may

perform testing under the Program, but may not certify model lines or perform other functions pertaining to certification (e.g., manufacturing facility inspections).

- a "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.
- a "Phase 1 emissions-level-qualified model" is a model that has been qualified by EPA under the Program as emitting no more than 0.25 g/Mj-output. EPA will no longer qualify models at the Phase 1 level after February 19, 2012. Partner may use Program labels and hangtags on units in masonry heater models lines that qualified at the Phase 1 emissions level and were manufactured prior to February 19, 2012, and on such units masonry heaters sold by Partners for up to six additional months after February 19, 2012.
- a "Phase 2 emissions-level-qualified model" is initially a model that has been qualified by EPA under the Program as emitting no more than 5.10.13 g/Mj. Depending on the results of the EPA pollutant dispersion modeling study, the Program Phase 2 emission level could be revised. If it is revised, EPA would provide written notice to Partners that Phase 2 qualification will occur only at the new Phase 2 emission level, and no additional models will be qualified at the initial Phase 2 emission level (5.12.5 g/kg). Models that qualified at the initial Phase 2 emission level prior to any revision of the level based on the modeling study will be recognized as qualified models for three years from the date of the EPA letter notifying Partner of the model's qualified status, notwithstanding any revision of the Phase 2 emission level. If the Phase 2 emission level has not been revised as of the date when a given model's Phase 2-level qualification has expired, Partner may seek renewal of its qualification for an additional three years by seeking retesting, recertification, and requalification, or may seek a waiver (see Partnership Agreement Attachment 1).

Qualification of models that qualify at a new, modeled Phase 2 emission level would also expire (i.e. they would no longer be considered qualified models) as of three years from the date of the EPA letter notifying Partner of the model's qualification. Use of Program labels and hangtags would be discontinued on units

manufactured as of that time. Partner may seek renewal of the a model qualification of a model for a three-years renewal period by seeking retesting, recertification, and requalification, or may seek a waiver (see Partnership Agreement Attachment 1).

- "Program labeling" means the qualifying label and hangtag described in Attachment 3 and in the Partner Commitments section below)
- an "emissions-critical core component" means any masonry heater component or feature that effects or may effect masonry heater emissions. Emissions-critical core components and features include but are not limited to all the magnitude and configuration of all firebox dimensions, all flue-gas control damper sizes and shapes, all duct sizes and shapes and flue-gas pathway sizes and shapes; all air-supply controlling damper, gate, and valve sizes and shapes; all gaskets and seals that control air leaks to the combustion chamber, ash-removal chambers, or other areas of the combustion system that can adversely effect burn rates and/or emissions; and/or air-supply inlet locations within the firebox.

#### **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, install, construct, and/or market one or more qualified models. 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 1 emissionlevelqualified model" or "Phase 2 emissionlevelqualified model" status for their model(s).
  - Test Guidelines (Attachment 2), identifies the methods by which models will be tested under the Program:. The Masonry Heater Association Standard Method for Test-Fueling Masonry Heaters and ASTM methods E2558 and E2515, and 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), provides format and other specifications for the Program labels and hangtags, and describes the appropriate use of the Program labeling and outreach materials.
- authorize his or her 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 his or her 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 line 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
  - final test results.
- affix permanent, highly visible, yellow "caution" labels that say
  "Operate With Door(s) Closed" on the top line and "Closing doors
  reduces smoke and the wood will burn better" on the second lineto
  units in model lines that are qualified to be operated only with the
  doors closed" to each EPA-qualified masonry heater model being

sold and/or installed The intention is to encourage operators to close masonry heater 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 door(s) is (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 00000FF. For the second line, the font should be Myriad bold, upper and lower case, no less than 12 pt, black, CMYK 00000FF. 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 EPA can provide a template to 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 EPA Program liaison at least every six months to provide an informal status update regarding the development, manufacture, construction, and marketing of qualified models.
- provide technical and sales information to the EPA Program liaison every six months to indicate Partner's progress toward the development and sale of cleaner models. This information should be provided by April 30 and October 31 each year, starting in April October 2009. Information regarding the period from October 1-March 31 should be reported in April each year, and information regarding the period from April 1-September 30 should be reported in October each year. Reports should include the following information:
  - information regarding the nature of any technical issues confronted:
  - the number of units of Phase 1 emission level qualified models sold;

- the number of units of Phase 2 emission level qualified models sold; and
- the total number of low mass wood-burning masonry heater fireplace units sold (includes Phase 1 emission level and Phase 2 emission level qualified models as well as wood-burning masonry heater models that do not qualify under the Program).

#### **EPA Responsibilities**

EPA will oversee the Program, undertake efforts to build awareness of the Program, maintain the credibility of the Program, ensure that the Program is fair and technically sound, and promote the benefits of cleaner low mass woodburning masonry heaters fireplaces over other low mass wood-burning masonry heaters 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 model lines based on test reports from test laboratories and certifications of conformity from certification bodies and respond to Partner regarding the qualification status of submitted models in a timely manner;
- prepare templates for test reports and for hangtags for use on qualified models;
- conduct an air quality dispersion modeling study to evaluate the need for a lower Phase 2 emission level that communities may need to achieve the PM<sub>2.5</sub> NAAQS level for typical use and siting scenarios. All stakeholders (e.g., The Masonry Heater Association HPBA, program Partners, States) will be encouraged to participate fully in the study, but EPA will be solely responsible for final decisions on study design and implementation. EPA will consult with Partners and other stakeholders on the implications of the study results, including whether the study results substantiate a need for a lower Phase 2 emissions target.
- develop SIP guidance for low mass wood-burning masonry heaters fireplaces, after receiving input from stakeholders;
- 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/fireplaces) and/or other means; and
- as appropriate, provide Partners 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 Low Mass-Wood-burning Masonry Heater 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 voluntary and 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 is wholly voluntary and 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: Gil Wood

Title: Environmental Engineer

Mailing Address for Materials That Do Not Contain CBI:

Gil Wood US EPA

OAQPS, Outreach and Information Division

Mail Code C304-05

Research Triangle Park, NC 27711

Mailing Address for Materials Containing CBI:

CBI Center (Attn: Gil Wood)

US EPA

OAQPS/CORE/CBIO

MD - C404-02

Research Triangle Park, NC 27711

Overnight Delivery Address:

Gil Wood

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## Partnership Agreement Signatory for EPA:

Signature:	_ Date
Stephen D. Page	
Director	
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
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 Low Mass** Wood-burning Masonry Heater Fireplace Program

#### I. QUALIFYING PROCESS

- A. Testing should occur via use of The Masonry Heater Association Method for Test-Fueling Masonry Heaters and ASTM E2515, at the "worst case" burn rates identified using the appropriate Program test method (see Attachment 2, The Masonry Heater Association Method for Test-Fueling Masonry Heaters, and the ASTM methods). Testing must be conducted by a test laboratory or a certification body (see Partnership Agreement, Definitions). 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 certification services with a certification body.
- C. A "Quality Control Plan" for assuring that units within a model line accurately reflect emission-critical components of the model line design, and design drawings for the model line 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 0.25 g/Mj-output or less, and the "Quality Control Plan" is adequate to assure that units within the model line accurately reflect emission-critical components of the model line design, the certification body may certify conformity, and the Partner may request that the certification body submit the certification of conformity, test report, and supporting documentation to EPA within the first three years of the Program for qualification under the Program.

If the certification body determines that the test report shows that the model emits 0.13 g/Mj-output or less, and the "Quality Control Plan" is adequate to assure that units within the model line accurately reflect emission-critical components of the model line design, the certification

body may certify conformity, and 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 at any time prior to any change to the Program Phase 2 emission level. If the certification body determines that the test report shows that the model's emissions are at or below any new, modeled Program Phase 2 emission level, and the "Quality Control Plan" is adequate to assure that units within the model line accurately reflect emission-critical components of the model line design, the certification body may certify conformity for either Phase 1 or Phase 2 depending on the reported emissions. Partner may request that the certification body submit the certification of conformity, test report, and supporting documentation to EPA for qualification under the Program at any time.

- 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 final test results.
- F. EPA's Outreach and Information Division, Office of Air Quality Planning and Standards intends to respond to Partner in writing and 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 1 emission level, the model will be considered a "Phase 1 emission level qualified model" until August 19, 2012. 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 (see Partnership Agreement, Definitions) on units within a model line upon written notification by EPA that the model has qualified under the Program. EPA's notification letter will indicate whether the model qualified for use with doors open or doors closed. Partner agrees to use Program Labeling only as described in the Guidelines for Use of Program Labels, Hangtags, and Outreach Materials (Partnership Agreement, Attachment 3).
- I. Where the qualification of a model qualified at the initial Phase 2 level (i.e. 5.10.13 g/Mj-output has expired and the initial Phase 2 level has not been revised OR where the qualification of a model under a new, modeled Phase 2

level has expired, 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 Low Mass Woodburning Masonry Heater 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 unit. 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.

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

- A. There are two quality control plans available to ensure the manufacturer's or builder's "Quality Control Plan" is being implemented satisfactorily: one is applied to masonry heaters whose emissions-critical core components are in-whole factory-built and/or are field-assembled from factory prefabricated sub-components, and the second is applied to masonry heaters whose emissions critical cores are totally-built or even partially-built from construction drawings and masonry supplies (eg, concrete and mortar) and components (bricks and blocks) in the field.
  - For Masonry Heaters That Are Totally Factory-Built and/or Totally Factory Prefabricated With Sub-Components To Be Field Assembled.
  - a) In conformity with ISO-IEC Guide 65 and ISO-EC Standard 17020, the certification body will periodically conduct audits of the factory-built manufacturing facilities or factory pre-fabricating facilities to ensure that the manufacturer's "Quality Control Plan" is being implemented satisfactorily.
  - For Masonry Heaters That Are Field-Built From Drawings or Partially Field-Built From Drawings And Masonry Supplies.
    - a) Each field-built or partially field-built masonry heater shall be inspected and certified before any labels or hangtags are attached to ensure conformity with the builder's "Quality Control Plan."
    - b) To accommodate field inspections the builder shall install an adequate number of site ports at locations around the masonry heater that will provide adequate access for and inspector to verify the dimensions and materials used in building the emissions-critical core components.
    - c) Inspectors shall be employed by a certification body as defined in the Definition Section of the PA.
- 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 or builders 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 certified 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) retest the model, and may seek EPA's re-qualification 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 units from a model line that has been discontinued, or when a model line has been modified in a manner that has the potential to increase emissions.

#### **Partnership Agreement Attachment 2**

### **Test Guidelines**

**EPA Low Mass** Wood-burning Masonry Heater Fireplace Program

#### I. Summary

Particulate emission testing for low mass wood-burning masonry heaters fireplaces under this Program shall be conducted in accordance with The Masonry Heater Association of North America methods for Test-Fueling Masonry Heaters and Measuring Masonry Heater Thermal Performance, and the ASTM E2515 Method for Measuring Emissions Using a Dilution Tunnel. Adequate 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 masonry heater.

#### II. Rationale

- A. Due to the variety of options and accessories that are possible across the range ofmasonry heaters in the marketplace, and the many combinations of possible operating conditions or settings that might result for any givenmasonry heater, qualifying masonry heaters based on their worst case performance under manufacturer's orbuilder's allowable operating conditions or settings will help normalize masonry heater comparisons.
  - EPA will rank all masonry heaters 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 model and what are not and specify only allowable operating conditions or settings in the Owner's Manual for the model.
- B. Specific language must be included in Owner's Manual warning the user that operation of the fireplace 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 Procedure

#### A. General Rules

 Conduct at least one test run in each 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 emission factor for the model.

#### B. Test Configuration Specifics

#### 1. Adjustable Dampers

For masonry heaters 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 masonry heater 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.

#### 2. Blowers or Fans

For masonry heaters 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 masonry heater 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.

#### 3. Other Automatic Adjustments

If the subject masonry heater includes components (other than convection air blowers or fans) that automatically adjust during the course of normal masonry heater operation (micro-processor controlled, for example), the masonry heater should be operated during all test runs with those components being 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.

#### 4. 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 masonry heater 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.

#### 5. Test Run Outliers Procedures

For any test run conducted during masonry heater 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.

#### **Partnership Agreement Attachment 3**

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

**EPA Wood-burning Masonry Heaters Program** 

#### I. PURPOSE

The primary purpose of these Guidelines, which are part of EPA's Woodburning Masonry Heater Program (Program) Partnership Agreement (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 low mass wood-burning masonry heater models. 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 in connection with the Program.

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 either a "Phase 1 emission level qualified model" or a "Phase 2 emission level qualified model," Partner may attach Program qualifying labels to units in the model line. 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 manufacture of the individual unit,
- (2) model number or name.
- (3) serial number,
- (4) one of the following two statements, as applicable:
  - (a) "Qualified EPA Phase 1 Model Until August 19, 2012" or
  - (b) "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 model qualified for use with doors open or doors closed,
  - (6) date of letter from EPA notifying Partner of the model's qualification,
  - (7) result of emissions testing in grams/kilogram,
  - (8) name and location (city and state or province) of manufacturer,
  - (9) 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 one of the following two statements, depending on whether the model is a "Phase 1 emission level qualified model" or a "Phase 2 emission level qualified model":

This model line meets the U.S. EPA Wood-burning Masonry Heater Voluntary Program <u>Phase 1</u> emission level. To minimize smoke, always operate your masonry heater in accordance with the manufacturer's instructions found in the owner's manual. Additional information about EPA's Program is available at <a href="https://www.epa.gov/masonry heaters">www.epa.gov/masonry heaters</a>.

#### OR, as appropriate:

This model line meets the U.S. EPA Wood-burning Masonry Heater Voluntary Program <a href="Phase 2">Phase 2</a> emission level. To minimize smoke, always operate your masonry heater 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/masonry heaters.



The qualifying label should be approximately 7 inches high by 6 inches wide, give or take an inch in either direction, 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 installation) on the exterior of the unit. If there are no flat surfaces in a readily visible location (prior to installation) on the exterior of the unit, the qualifying label may be affixed to the interior surface of the outer door to the unit. Be sure to follow local building inspection procedures to allow inspection prior to installation. 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.

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 Masonry Heater 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 orange background color is PMS 131 for the Phase 1 tag. 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 Woodburning Masonry Heater Program.

Attached are current samples of the 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 Masonry Heater Program Partnership Agreement.

Partner agrees to promptly discontinue use of Program labels and hangtags on all units from a qualified model line 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 line has been terminated or from EPA that qualification of a model line has been terminated;
- (4) a qualified model line 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 qualified model line has expired (i.e. three years have passed since the EPA letter notifying Partner of the model line's qualified status) and requalification has not yet occurred.

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 certified model. Partner may resume use of Program labeling once Partner has re-qualified the model line.

#### 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 qualifying 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. Whether to follow this suggestion would be left to Partner's discretion.

If a revision to the templates for hangtags is made, Partner would begin to use the new templates on all qualified model units manufactured after receipt of the new

templates within a reasonable time. 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:
  - o trash
  - o plastics
  - o gasoline
  - o rubber
  - industrial solvents
  - o flammable liquids
  - o naptha
  - household garbage
  - material treated with petroleum products (particleboard, railroad ties and pressure treated wood)
  - o leaves
  - paper products
  - o cardboard
  - saltwater driftwood
- proper fire starting procedures;
- proper use of air controls, if any;
  - o any air inlets should not be restricted by debris (creosote, ash, etc.)
  - o flame baffle/flue should not be restricted by debris
  - o 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 model is certified 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.
- 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

#### **INCORRECT**

#### QUALIFIED MODEL STATUS

#### **QUALIFIED MODEL STATUS**

 EPA Wood-burning Masonry heater Program qualified  EPA Wood-burning Masonry heater Program compliant

#### model

 EPA Wood-burning Masonry heater Program rated model

## TEST METHODS AND EMISSION LEVELS

#### EPA Wood-burning Masonry heater Program guidelines

- EPA Wood-burning Masonry heater Program test methods
- Model has met the EPA Wood-burning Masonry heater Program Phase 1 or Phase 2 emission level
- EPA-qualified model

## TEST METHODS AND EMISSION LEVELS

- EPA Wood-burning Masonry heater Program standards
- EPA-certified model
- EPA-endorsed model
- EPA-approved model

#### PARTNERS

#### Company X, an EPA Woodburning Masonry heater Program Partner

 A company/manufacturer participating in the EPA Wood-burning Masonry heater Program

#### **PARTNERS**

- Company X, a company endorsed by EPA
- An EPA-approved Woodburning Masonry heater manufacturer

#### C. Websites

Partner may not include the EPA logo on their website, but may link its company website to the EPA Wood-burning Masonry heater Program website (www.epa.gov/masonry heaters).

#### 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.