

Air Cleaner Certification Program Procedural Guide

Version 5





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FOREWORD

The Association of Home Appliance Manufacturers ("AHAM") sponsors the Air Cleaner Certification Program in the U.S. ("Program"). The Program provides a uniform and commercially practical verification of manufacturers' Clean Air Delivery Rates ("CADR") for tobacco smoke, dust and pollen. The Program provides verification of operating and standby energy usage under the requirements of the U.S. Environmental Protection Agency ("EPA") for models that are part of the ENERGY STAR^{*} program. U.S. Government Agencies have specified the number of tests required to obtain a certified value that is representative of a model's energy use. The intent of this industry program is to verify that each portable electric room air cleaner (see definition in Section 1.20) model represented by a manufacturer or brand name owner is consistent within the Program. Participation in the Program is voluntary. An independent laboratory under contract to AHAM provides verification in accordance with the most recent edition of ANSI/AHAM AC – 1 Standard – Method for Measuring Performance of Portable Household Electric Room Air Cleaners, referenced by the EPA for qualification to the ENERGY STAR Program. Testing relating to values relating to qualification or verification of ENERGY STAR must be performed to the edition of the ANSI/AHAM AC-1 Standard referenced by EPA.

Product energy certification is the responsibility of the product manufacturer. The AHAM Program is not a certification program for energy – it does not test products prior to their entry into market and it does not submit certification compliance information to U.S. government agencies on behalf of the manufacturers.

Other programs, such as the voluntary US ENERGY STAR program administered by the EPA, require that manufacturers obtain third-party qualification their products prior to distributing them into the U.S. market place. The AHAM Program does not qualify products for the EPA ENERGY STAR Program. Qualification for participation in ENERGY STAR is a separate process controlled by the EPA.

The EPA ENERGY STAR program, as of January 1, 2011, requires that any air cleaner enrolled in the ENERGY STAR program must be part of a third-party verification program. The AHAM Air Cleaner Certification Program has been recognized as a Verification Administrator for ENERGY STAR.

Verification of a product's stated energy consumption is typically conducted through random selection and testing of products already on the market based upon Program selection criteria. The AHAM Program provides a uniform and commercially practical verification of CADR and energy consumption values. The intent of this industry Program is to verify CADR performance values. The Program cannot and will not enforce a product's compliance with energy efficiency standards or other voluntary program requirements.

To participate in the Program, the Licensee must certify and list with AHAM **all** models of portable electric room air cleaners it manufactures unless the models are outside the scope of ANSI/AHAM AC-1 (latest edition) (see Section 2.13). The CADR Seal which appears on the packaging of each unit is the participant's public representation that the stated CADRs of its portable electric room air cleaners have been verified through the program. This seal (and the applicable ratings) must appear on each certified unit.

Additionally, the Licensee must certify and list the operating and standby power of all models which are listed in the ENERGY STAR program.

The AHAM License Agreement ("Agreement") is a contract and is the governing document for participation in the Certification Program. This Procedural Guide ("Guide") is an extension of, and is incorporated into, the Agreement and provides for the administration and uniform execution of the Program. General information, procedural details and copies of forms are included in the Guide.

AHAM's Air Cleaner Certification Task Force, as needed, and at their sole discretion, may revise the Guide if such revision is deemed necessary by the Air Cleaner Certification Task Force.

The Certification Program provides verification only for those room air cleaners that have a CADR within the following parameters:

CADR Range (cubic feet per minute, cfm)

Tobacco Smoke	10 to 450
Dust	10 to 400
Pollen	25 to 450

The above values constitute the limits of the ANSI/AHAM AC-1 Standard Test Procedure (latest edition) and, as such, represent the smallest and largest CADR values that are verifiable under the Program.

A number of forms are used to administer this Program. The current forms and the accompanying instruction booklet, AHAM Portable Electric Room Air Cleaner Certification Program – Instructions for Completing Forms, can be obtained from AHAM or the Program Laboratory.

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1. DEFINITION OF TERMS

1.1 AIR CLEANER TYPES

Portable electric room air cleaners may be positioned as floor, table, plug-in or wall mounted appliances. Some portable electric room air cleaners may be designed to operate in more than one location - floor, table or wall mounted positions.

1.2.1 Room Air Cleaner - Floor Type

Floor type portable electric room air cleaners are designed to stand alone on the floor of a room and are designated as stand-alone floor models by the manufacturer. Appliances of this type are tested on the floor.

1.2.2 Air Cleaner - Table Type

Table type room air cleaners are designed to set on a table or counter by the manufacturer. Appliances of this type are tested on the table stand.

1.2.3 Air Cleaner - Wall Type

Wall type room air cleaners are designed to attach to a wall and are designated as a wall mountable or plug-in unit by the manufacturer. A wall type unit must include appropriate wall mounting brackets or specifically designated instructions to mount the room air cleaner integrally to the wall (i.e. not a shelf). Appliances of this type are tested on the wall mount stand shown in Annex G of ANSI/AHAM AC-1 (latest edition).

1.2.4 Air Cleaner - Combination Type

Combination type portable electric room air cleaners are designed to operate in one or more orientations/positions (floor, table, wall). A combination type portable electric room air cleaner may be tested at any of the three locations (floor, table, wall) for which it has been designated by the manufacturer.

1.2.5 Air Cleaner - Ceiling Type

At this time no marketable ceiling-type portable electric room air cleaners have been tested through these procedures. Uniform testing practices and statistical examination of such appliances have not been conducted and are considered outside the scope of this method as defined in Section 2.

1.2 AHAM VERIFIDE MARK

The AHAM Verifide Mark ("The Mark") is the mark or marks owned by AHAM and authorized by AHAM for the use by manufacturers and private brand resellers of air cleaners who are Licensees in the Program. The Mark is applied to the model(s) included in the AHAM Program (See Appendix "D").

The Licensor owns registered trademark, service mark, and/or certification mark (hereafter The Mark and The Seal as more fully identified in the Procedural Guide) in the countries and jurisdictions which are listed in Exhibit C of Appendix B which is attached hereto and incorporated herein by reference, and hereby licenses rights to use The Mark and The Seal only in those countries and jurisdictions. Although the Licensor does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit C, such use is at Licensee's own risk since Licensor owns no registered rights in those countries and jurisdictions. Licensor agrees that Licensee will not claim proprietary rights to The Seal and The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit C.

1.3 APPROPRIATE STAKEHOLDERS

The Appropriate Stakeholder for the program is EPA Energy Star and will be notified in the event of a finding of final non-compliance for a given model.

1.4 BASIC MODEL

A basic model is a single unit that represents a unique performance design configuration. Models identical to the basic model in functional design, performance characteristics and CADR values are considered derivative models including models of different brand names manufactured by the same Licensee. Collectively these models are called a "Basic Model". Different brand-name models may be in a Basic Model. A unit shall not be designated as a separate basic model if it has the same CADR as a designated basic model but differs from it only in decorative treatment or operating power (Voltage and Frequency); rather, it shall be considered a derivative of the basic model.

1.5 BRAND NAME

The commercial name by which a product line is known to the consumer as determined and provided by the Program participant.

1.6 Brand Name Owner

Brand Name Owners are entities having exclusive rights to models offered into the Market and are able to fully execute the provisions of the Procedural Guide.

1.7 CERTIFICATION TESTING

Initial testing to determine the CADR values (and for energy verified models, the standby and operating power) for tobacco smoke, dust and pollen, determined in accordance with ANSI/AHAM AC-1 Standard, Method for Measuring Performance of Portable Household Electric Room Air Cleaners (latest edition). For energy verified models, licensee shall also provide the standby and operating power, in accordance with ENERGY STAR test procedure.

1.8 CLEAN AIR DELIVERY RATE (CADR)

The measure of the delivery of contaminant free air by a portable electric room air cleaner, always expressed in cubic feet per minute (cfm) or cubic meters per minute (cmm). More technically, CADR is the rate of contaminant reduction in the test chamber when the unit is turned on, minus the rate of natural contaminant decay when the unit is not running, times the volume of the test chamber as measured in cubic feet.

CADRs are always the measurement of a unit's performance as a complete system. CADRs have no linear relationship to air movement or to the characteristics of any particular filter media.

1.9 DERIVATIVE MODEL

A unit that has the same performance characteristics and CADR values as the basic model. For true derivative models (Color, Packaging, Distributer SKU), use of the A-2 form is acceptable. All other derivatives including models with different components and intended for different market voltage/frequency require testing of a single unit and a comparison is to be performed. If identified that the model requested is a true derivative, an A-1 and A-2 form

is to be submitted to list the model in the Program. Should a unit not be identified as a derivative, it will be treated as a base model.

1.10 DIRECTORY

A document listing all certified models, CADR ratings and appropriate room size for each participating Licensee. The Directory will also detail information such as if the unit was rerated. Compliance with current ozone emission limits is also listed in the Directory. The listing provides an opportunity for the Licensee to report ozone emission information to the public; the Program Laboratory collects this information, but this information is not verified by the Program Laboratory.

1.11 DOCUMENTED INTERVIEW

A Documented Interview is an interview between the Program Lab and Licensee after a finding of potential non-compliance with Program requirements, or to complete the initiation of a challenge. If conducted via telephone call or in person, the results are documented by the Program Laboratory and issued to the Licensee, with AHAM copied on the report. If conducted via email, AHAM shall also be copied on the mailing.

1.12 ENERGY VERIFICATION MODEL

A model for which the operating power and standby power have been certified by an EPAapproved Certification Body (CB) and which is subject to energy verification testing under the AHAM program, in accordance to the requirements of the EPA for ENERGY STAR. All models a Licensee has in both the AHAM program and ENERGY STAR program must be verified for energy. Models that have not been submitted to ENERGY STAR are not to be submitted to AHAM for energy verification.

1.13 FIRST LINE OF DISTRIBUTION

The initial customer(s) to whom the Licensee and/or its branch office is/are selling its products that are covered by the AHAM Certification Program. The initial customer may be, for example, another manufacturer that is being supplied with the Licensee's products, a private brander, a distributor that will be selling the products to a retailer, or a retailer to whom the Licensee is selling directly.

1.14 GOVERNMENT AGENCIES

For the AHAM Air Cleaner Certification Program, the only government agency to which AHAM reports is the US Environmental Protection Agency ("EPA") for those units voluntarily listed with the ENERGY STAR Program.

1.15 INITIATION FEE

Fee paid by new Licensees to cover the costs associated with executing the requirements of the Procedural Guide. These fees include verification testing of all Basic Models of new Licensees within the first year (365 days) in the Program.

1.16 LETTERS OF INSTRUCTION

Letters of Instruction are documents developed by AHAM staff that define or otherwise detail the operation of the program and associated procedural guides. Letters of Instruction are published as an interim step before updating and balloting of the Procedural Guide is completed. Letters of Instruction may be issued when EPA or other stakeholders issue

amended rulings and/or guidance, indicating the implementation of such amendment and/or guidance within the AHAM Program. As Letters of Instruction are published, they will be disseminated to program participants. All such letters will be controlled by a revision coding system and maintained under AHAM's document control policy. Letters of Instruction are to be differentiated from AHAM Interpretations, as Interpretations refer only to AHAM Standards.

1.17 LICENSE AGREEMENT

A contract between AHAM and Licensees that specifies the obligations of each party as part of the AHAM Room Air Cleaner Certification Program. This Procedural Guide acts as a supplement to and as part of the License Agreement.

1.18 LICENSEE

A manufacturer or brand name owner that executed a license agreement as a Licensee with AHAM and is authorized to participate in the Portable Electric Room Air Cleaner Certification Program.

1.19 LICENSOR

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (AHAM), a not-for-profit business association incorporated in the District of Columbia, having its principal office at 1111 19th Street, N.W., Suite 402, Washington, DC 20036.

1.20 MANUFACTURER

An entity that manufactures room air cleaners.

1.21 MAXIMUM CERTIFIED RATINGS

Maximum CADR value a manufacturer can display on the "AHAM CADR Seal" for tobacco smoke, dust, pollen and room size. The Maximum Certified Ratings are calculated using the average of three (3) test values that are supplied by the Program Laboratory to the Licensee.

1.22 MIXED BASIC MODELS

Mixed Basic Models are Basic Models that include both ENERGY STAR and non-ENERGY STAR qualified models. In these circumstances, any model selected will be expected to meet the verification criteria for ENERGY STAR verification, regardless of the ENERGY STAR qualification of the model selected.

1.23 OPERATING POWER

The operating power of an air cleaner, as measured per Section 9 of ANSI/AHAM AC-1 (latest edition), expressed in Watts.

1.24 OZONE EMISSION LIMIT

Underwriters Laboratory Safety Standard 867 (UL 867, Part 37) recognizes 50 parts per billion (ppb) as a maximum ozone emission limit. The Licensee voluntarily provides this information to the Program Laboratory, but this information is not verified by the Program Laboratory.

1.25 PARTICIPANT

An entity whose portable electric room air cleaner model(s) are certified. A participant may or may not be an AHAM Licensee. A non-Licensee participant's air cleaner may be certified if

submitted to the Program by another company (either the manufacturer or the brand-name owner) who is an AHAM Licensee.

1.26 PLUG-IN ROOM AIR CLEANER

A fixed location room air cleaner directly connected to an electric receptacle (outlet) by means of direct plug-in (no electric cord).

1.27 PORTABLE ELECTRIC ROOM AIR CLEANER

An Alternating Current electric appliance with the function of removing particulate matter from the air and which may be moved from room to room.

1.28 PRIVATE BRAND OWNER

An entity that markets but does not manufacture its own brand name units.

1.29 PRODUCTION SURVEY

A survey distributed by AHAM on July 1 of each year. The survey is used to determine the production volume of models within the Program, as well as the number of Basic Models, for each Licensee between July 1 of the previous year and June 30 of the current year to calculate Program participation and basic model fees.

1.30 Program

The AHAM Air Cleaner Certification Program in its entirety, including Licensee certification, verification testing, challenge testing, the Directory and use of the AHAM Mark.

1.31 PROGRAM LABORATORY (TECHNICAL ADMINISTRATOR)

An independent testing laboratory under contract to AHAM to determine Maximum Certified Ratings, administer product directory, select models for testing, perform verification tests, and collect certified data. (See section 3.2)

1.26.1 Alternate Test Facility

An independent testing laboratory correlated to the Program Laboratory, qualified to determine Maximum Certified Ratings, and deliver ratings to the Program. See the Alternate Laboratory Annex for further information.

1.32 PROGRAM MODELS SOLD IN THE UNITED STATES

All models sold in the United States whose ratings are required to be certified and submitted to the Program under the terms of the License Agreement, the Procedural Guide and Letters of Instruction from AHAM. Each Licensee shall certify the CADR and supply data on all air cleaner models sold or advertised by the manufacturer as portable room air cleaners which are manufactured by it or for it under its brand name(s) for sale within the United States Each Licensee shall also certify the CADR and supply data on all private-brand models which the Licensee itself is to distribute within the United States. Each Licensee shall also certify the operating and standby power ratings for all air cleaner models sold or advertised by it or for it that are also certified to the EPA as ENERGY STAR compliant, in compliance with EPA certification requirements in the United States.

1.33 PROGRAM MODELS SOLD IN COUNTRIES OUTSIDE THE UNITED STATES

Basic Model(s) of portable electric room air cleaners that the Licensee chooses to include in the AHAM Air Cleaner Certification Program must be certified. Each Licensee shall supply

data on all air cleaner models within the Basic Model which are sold in other countries. Models included in the AHAM Air Cleaner Certification Program must display The Seal in accordance with this on packaging of units sold in countries listed in Exhibit C of Appendix B of the License Agreement in which AHAM owns a registration for The Mark. Although AHAM does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit C, such use is at Licensee's own risk since Licensor owns no registered rights in those countries and jurisdictions. Licensor agrees that Licensee will not claim proprietary rights to The Seal and The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit C.

1.34 PROGRAM PARTICIPATION FEE

A fee calculated annually that Licensees pay to AHAM for the administration of the Program. Participation Fees are based on the volume of product shipped during a twelve month period between July 1 of the previous year and June 30 of the current year. The Program Participation Fee applies to licensees following the first full year (365 days) of participation in the Program, which is covered by the Initiation Fee.

1.35 PROGRAM YEAR

The Program Year extends from January 1 through December 30 of each calendar year. Models produced and available for sale during this period are considered to be models of the current Program Year even though a manufacturer or private brand reseller may market at another time.

1.36 QUALIFIED PRODUCT LIST ("QPL")

The ENERGY STAR program's list of all ENERGY STAR qualified products available for sale in the United States

1.37 RUN-IN PERIOD

A 48 hour pre-conditioning of portable electric room air cleaners performed by the Program Laboratory prior to verification testing.

1.38 AHAM SEAL

The AHAM Air Cleaner Seal ("The Seal") is the mark or marks owned by AHAM and authorized by AHAM for use by all manufacturers and private brand resellers of portable electric room air cleaners who are Licensees in the Program. According to the Program, manufacturers certify and AHAM verifies that the CADR for tobacco smoke, dust and pollen (based upon use of an identified filter, where applicable) of all portable electric room air cleaners whose packaging display The Seal are determined and accurately stated in accordance with the ANSI/AHAM AC-1 Standard (latest edition). The Seal is to be applied to the product packaging and can be used in all advertisement and literature associated with program models (See Appendix "D").

1.39 Specified Countries

Countries in which products are sold or distributed that are different from those sold or distributed in the United States.

The United States are distinguished from Specified Countries because of more stringent Program requirements. The United States includes all of the states, the District of Columbia,

the Territories and other geographical areas associated with, or subject to the jurisdiction of the United States.

1.40 STAKEHOLDER

Individuals, groups or entities that have a concern in the process and results of the Program. Entities may include, but not be limited to: Program Licensees, the Environmental Protection Agency (EPA) and Natural Resources Canada (NRCan).

1.41 STANDBY POWER

The power used by an air cleaner in a stable non-operational mode, as measured per Section 10 of ANSI/AHAM AC-1 (latest edition), expressed in Watts.

1.42 TEST PROCEDURE

Certification, Verification, and Challenge testing will be based on ANSI/AHAM AC-1 (Latest Edition) procedures and this Guide to verify the CADR for tobacco smoke, dust and pollen; and, for energy verified models, the operating and standby power, with additional specificity provided by approved interpretations and collectively referred to as "Test Procedure". ENERGY STAR testing will be performed according to test procedure specified by EPA.

1.43 TEST UNITS

Individual air cleaners that are certified by Program Lab or Alternate Test Facility, or verified by the Program Laboratory

1.44 TOLERANCE

Tolerances allow for variations that inevitably occur in any given manufacturing or testing facility. They are not to be used to rate a given model at values other than measured performance. For non-ENERGY STAR products, during verification testing, the CADR of any unit shall not be less than 90% of its certified CADR for tobacco smoke and dust, and no less than 80% of its CADR for pollen. For ENERGY STAR products, the tolerances are determined in accordance with EPA Directive 2011-04 Determination of Testing Failure for ENERGY STAR Verification Program.

1.45 VERIFICATION TESTING

Annual tests conducted by the Program Laboratory under contract to AHAM in accordance with ANSI/AHAM AC-1 (latest edition) and ENERGY STAR procedures to verify the CADR for tobacco smoke, dust and pollen. For Energy Star verified models, the operating and standby power will also be verified.

1.46 VERIFIED

Confirmation of the Licensee's certified ratings for operating power, standby power, and the removal of tobacco smoke, dust, and pollen by AHAM according to Program procedures.

1.47 WITHDRAW FROM THE MARKET

All instances in which a Licensee exercises the option to Withdraw Basic Model(s) from the AHAM Air Cleaner Certification Program shall result in immediate removal of all units within the Basic Model(s) under the Licensees control as of the date of notification of withdrawal from the market.

2. PROGRAM SCOPE

The Program will certify the CADR for portable room air cleaners. For air cleaners participating in the ENERGY STAR program, the AHAM Program will verify the Smoke CADR/Watt ratio and Standby Power. The program will verify the reported values are consistent with the rated CADR, Operating Power and Standby Power reported by the Licensee. The rated CADR, Operating Power and Standby Power reported to the Program by Licensees will be equivalent to the values reported to U.S. government agencies. While the Program will communicate with appropriate regulatory agencies within the United States, including notification of non-compliances, the Program will not determine compliance with any regulatory or other voluntary program requirements.

2.1 APPLICABLE STANDARD

Under the Program, Licensees certify the operating power, standby power, and CADR for tobacco smoke, dust and pollen (based upon use of an identified filter, if applicable), determined in accordance with the ANSI/AHAM AC-1 Standard (latest edition).

The Program Laboratory will conduct random verification tests and evaluate test data within the framework of the Standard, License Agreement and Procedural Guide requirements and ENERGY STAR eligibility requirements, where applicable.

Licensees must use all practical means at their command to continuously assure that the certified ratings of their air cleaners are in compliance with Program requirements.

2.2 FACTORS CERTIFIED

Under this Program, the Licensee uses the Maximum Certified Rating provided by the Program Laboratory or Alternate Test Facility to certify the operating power, standby power, and CADR for tobacco smoke, dust and pollen in accordance with the ANSI/AHAM AC-1 Standard (latest edition). For Energy Star verified models, the standby and operating power shall also be provided. The Licensee is solely responsible for certifying these values with the EPA.

2.3 TOLERANCE

The intent of the industry is to assure that the CADR for all portable electric room air cleaners produced by each Licensee are 100% of the certified ratings. Tolerances allow for variations that inevitably occur in any given manufacturing or testing facility. They are not to be used to rate a given model at values other than the average performance values of all unit from the assembly line.

The CADR of any production unit tested during verification tests shall not be less than 90% of its claimed CADR for dust, 90% of its claimed CADR for tobacco smoke and 80% of its claimed CADR for pollen.

For ENERGY STAR models, the determination of compliance with ENERGY STAR eligibility requirements for CADR/ Watt and standby power shall be made according to the requirements of Appendix F (EPA Directive No. 2011-04, most recent date)

2.4 GLOBAL REQUIREMENTS

2.4.1 Units

CADR will be reported as cubic feet per minute (cfm) for all units, regardless of country of manufacture or distribution. Maintaining units in cfm is important to ensure consistency of reporting between all portable electric room air cleaner models.

Room size calculations will be specified in U.S. units (square feet) and/or SI units (square meters).

2.4.2 Voltage/Frequency

Certified CADR for tobacco smoke, dust and pollen shall be reported at the operating voltage and frequency of the equipment, as described on the model's nameplate and reported on Form A-1: Model Data for Directory. If multiple voltages are specified, CADR values for tobacco smoke, dust and pollen will be measured and reported for each typical voltage/frequency combination (see Section 2.5 for a list of typical voltage/frequency combinations).

If required by Licensee, a models rated for different voltages/frequencies can be considered derivative models given that they meet the CADR acceptability criteria.

Verification will be completed at the voltage and frequency specified on the equipment's nameplate. All verification reports will specify the voltage and frequency used during verification.

2.5 PUBLICATION OF DIRECTORIES

AHAM will maintain a listing of all current certified models. This list will be displayed in the on-line Directory of Certified Portable Electric Room Air Cleaners. This listing will be made available to anyone requesting it.

A PDF version of the Directory is published quarterly in January, April, July and October. The AHAM online Directory is continuously updated.

Models will be listed in the Directory by standard voltage/frequency combinations. All voltage/frequency combinations will be specified on Form A-1: Model Data for Directory. Typical voltage/frequency combinations are listed below and should be used when specifying electrical supply details for testing and the Directory:

Room size will be reported in U.S. (square feet) and/or SI (square meters) units, depending on the units specified in Form A-1: Model Data for Directory.

All fees and submission of a completed Form A-1: Model Data for Directory to the Program Laboratory is required before models will be published in the Directory. Form A-1 serves as authorization for AHAM to publish a model's certified values.

2.6 DIRECTORY INFORMATION

The Air Cleaner Certification Directory displays currently listed models with their CADR ratings and appropriate room size. The Directory will also detail information such as if the unit was re-rated.

2.7 PROGRAM FORMS

The forms listed below are used to administer this Program. The forms and the accompanying instruction booklet, Portable Electric Room Air Cleaner Certification Program –

Instructions for Completing Forms, can be obtained from AHAM or the Program Administrator.

Form Number

<u>Title</u>

A-1	Model Data for Directory
A-2	Cross Index of Model Numbers by Brand
A-3	Contact and Selection Site Form
A-3A	Additional Contact Information Form
A-4	Portable Electric Room Air Cleaner Selection Report
A-5	Portable Electric Room Air Cleaner Verification Testing Report
A-6	Non-Compliance Notification
A-7	Notice of Maximum Certified Rating
A-8	Request for Model Deletion
A-9	Challenge Request Form
A-11	Model Enrollment Form

2.8 ELIGIBLE MODELS

Each Program Licensee shall report the certified CADR on all air cleaners it manufacturers for its brand name(s) or for other Licensee's brand name(s) for sale within the United States. Each model participating in the ENERGY STAR Program must have the certified CADR, Operating Power, and Standby Power reported. Each manufacturer who is a Licensee shall also report the certified CADR on all private brand models which the Licensee itself is to distribute within the United States. Certified values shall be consistent with those submitted to the U.S. government agencies for compliance purposes.

2.9 SUBMISSION OF DATA

Certification data for a new model subject to the Program must be submitted no later than the first day the model is sold or advertised as a portable electric room air cleaner, whichever occurs first. The estimated date on which production of certified units will begin must be included in the data provided to the Program Laboratory.

2.9.1 Licensee Information

Licensees shall provide the Program Laboratory with the following information to determine the proper identification of models and responsible individuals. Further information on Program forms can be found in Portable Electric Room Air Cleaner Certification Program – Instructions for Completing Forms.

- a. Models Data for Directory (Form A-1)
- b. Participants' certified basic models and all derivatives of each basic model (Form A-2)
- c. Contact information and sample selection site (Form A-3)
- d. Models no longer produced (Form A-8)

e. All certified models currently available for sale, annually (Form A-11)

2.9.2 Mandatory Program Models

Each Licensee shall report the certified CADR on all air cleaner models sold or advertised by the manufacturer as air cleaners which are manufactured by it or for it under its brand name(s) for sale within the United States. Each model participating in the ENERGY STAR program must have the certified CADR, Operating power, and Standby Power reported. Reported CADR values must be identical to certified compliance values submitted to the U.S. government agencies.

These requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area.

The United States includes all of the states, the District of Columbia, the Territories and other geographical areas associated with, or subject to, the jurisdiction of the United States.

2.9.3 Optional Models

The Licensee may, at its option, selectively certify and supply data on air cleaners Basic Model(s) for sale within Specified Countries. If such units are to be certified in the AHAM Program they must be reported to AHAM and the Program Laboratory for verification and inclusion in any appropriate production surveys. Licensee must display The Seal in accordance with the Procedural Guide on units sold in Specified Countries listed in Exhibit C of Appendix B of the License Agreement in which AHAM owns a registration for The Mark. Although AHAM does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit C, such use is at Licensee's own risk since Licensee will not claim proprietary rights in The Seal and The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit C.

These certification requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area.

2.9.4 Private Brand Models

The Licensee must report the certified CADR data on private-brand air cleaners that it sells within the United States that are manufactured by an entity separate from and unrelated to it. In order to have such private brands included in the Certification Program, the manufacturer shall report the certified CADR (and Operating Power and Standby Power for ENERGY STAR models) on <u>all</u> air cleaners that it manufactures for the same private brand for sale within the United States.

In order for private brands to participate in the program, private brand owners who sell models from multiple manufacturers must ensure that all manufacturers for their brand are Licensees. If not all manufacturers are Licensees, the private brand owner must become a Licensee and certify those models not certified by the manufacturer.

2.10 MODEL ENROLLMENT FORM

To ensure that models in the Program are consistent with those available in the market, Licensees shall provide an updated model list to the Program Laboratory, with certified values consistent with those submitted to the EPA for Energy Verification Models, using the model enrollment form provided by the Program Laboratory, at the beginning of each calendar year. This form will be made available electronically to Licensees once they join the Program. The Program Laboratory will ensure consistency between the information submitted in January and the Program Directory at that time. Models for selection in the next program year will be selected from the updated model listing received each January. The licensee is responsible to assure that the values provided on the model enrollment form are equivalent to those reported to the EPA.

2.10.1 Carry-Over Models

Once a model has been submitted for verification, it must continue to be verified throughout the lifetime of the model, (i.e., for as long as the model is available for sale at the distributor level). Identical model numbers are to be carried over from a prior year if no physical changes are made to the models that affect their certified ratings. However, if a carry-over model is to have a different certified rating from its previous rating, the Licensee must provide the Program Laboratory with the old model number and the updated model numbers, which shall be consistent with model numbers reported to government agencies. This will be considered a new base model.

A carry-over model is subject to testing again even though tested during the prior year. The Licensee is responsible for maintaining the performance of that model and must advise the Program Laboratory of any changes in production that may affect its certified values.

2.10.2 Models of Prior Production Still Being Marketed

The Licensee may also submit data on models no longer being produced but which are still available for sale by the brand-name owner. Models shall continue to be submitted as long as they are being marketed by the brand-name owner and will be subject to random selection and verification testing.

2.11 OPTIONAL CERTIFIED MODELS

The manufacturer-Licensee may certify operating power, standby power, CADR and supply data on private-brand portable electric room air cleaner models that it manufactures for sale within the United States by an entity separate from and unrelated to it. In order to have such private brands included in the Certification Program, the manufacturer shall certify operating power, standby power, CADR and supply data on all portable electric room air cleaner models that it manufactures for the same private brand for sale within the United States.

The Licensee may, at its option, selectively certify and supply data on portable electric room air cleaner model(s) for sale within Specified Countries. If such units are to be certified in the AHAM Program they must be reported to AHAM and the Program Laboratory for verification and inclusion in any appropriate production surveys. Packaging for these units must display the Seal in accordance with the Procedural Guide on units sold in countries listed in Exhibit C of Appendix B to the License Agreement in which AHAM owns a registration for The Mark. Although AHAM does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit C, such use is at Licensee's own risk since Licensee will not claim proprietary rights in The Seal and The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit C.

These certification requirements apply to all models to be sold, whether or not they are sold for test market purposes, in a limited quantity, or in a specified market area.

One half of each Licensee's basic models are subject to verification testing requirements (Section 5.2). The Licensee is responsible for maintaining the performance of that model and must advise the Program Laboratory of any changes in production that may affect its certified values. For new participants in the Program, each certified basic model will be verified during the first year.

2.12 UNIT SELECTION

Licensees must provide units for sample selection within thirty (30) days from the Program Laboratory request for samples. Preferred selection methods of the Program Laboratory are to select the test units randomly from manufacturer or distributor inventory or from a current shipment to a distribution point as advised by the manufacturer. Alternatively, test units may be purchased on the open retail market.

Licensees shall assure that all basic models are available for testing within each Program year for as long as those models are in the stream of commerce. If the manufacturer does not supply a sample for unit selection or give the location of a retail outlet to purchase the product, the model will be removed from all subsequent directories until such a time that the samples are provided and tested (Section 5.2.1).

The participant company will not be informed of what models will be selected prior to the selector's arrival at the selection site. If selecting from a manufacturer warehouse, the random model(s) must be selected from at least ten (10) units. All units selected must be of the same model family. If selecting from a distributor, the random model(s) must be selected from a transport to the selected from a minimum lot size of at least three (3) units.

A model may be excused from testing where its manufacturer or private labeler is able to demonstrate that an identical model or model from the same family was procured for verification testing in the preceding 12 months, or has already been procured by an EPA-approved CB for verification testing. The program laboratory may decide to select alternative models for testing based on the production schedule.

When a selector identifies a unit for testing in a Licensee's warehouse, the identified and marked units must leave the facility for shipping to the Program Lab within 48 hours of identification.

2.13 PARAMETERS FOR ELIGIBILITY

The lower and upper limits of measurability of ANSI/AHAM AC-1 and therefore this Certification Program, are noted below: <u>CADR Ranges (lower limit to upper limit)</u>

Tobacco Smoke	10 to 450 cfm
Dust	10 to 400 cfm
Pollen	25 to 450 cfm

A portable electric room air cleaner is eligible for the AHAM Certification Program if at least one of the unit's CADR values (tobacco smoke, dust or pollen) falls at or above the lower limit of measurability noted above.

Each CADR of a unit that meets the lower limits of measurability must be certified if the model is sold or advertised by the Licensee as a portable electric room air cleaner. The Seal appearing on unit packaging with a rating below the lower limits of measurability must carry the following type of statement (or equivalent) for the CADR values that fall below the limits:

Tobacco Smoke	"Less than 10 CADR"
Dust	"Less than 10 CADR"
Pollen	"Less than 25 CADR"

All applicable statements above must follow any pollutant for which the CADR is too small to be accurately quantified under this Certification Program.

CADR values above the upper limit of measurability (see above) cannot be accurately quantified under this Certification Program. Therefore, if the CADR for tobacco smoke, dust or pollen exceeds the upper limit of measurability, the AHAM CADR seal must carry the following type of statement (or equivalent):

Tobacco Smoke	" <u>450</u> CADR or greater"
Dust	" <u>400</u> CADR or greater"
Pollen	" <u>450</u> CADR or greater"

2.14 ROUNDING PROCEDURES

Licensees may choose to round the room size issued by the Program Laboratory on Form A-7: Notice of Maximum Certified Rating as follows:

	<u>U.S. Units</u>	Metric Units
Room size calculation ending in 4 or less	Round down to nearest 10 square feet	Round down to nearest one square meter
Room size calculation ending in 5 or more	Round up to nearest 10 square feet	Round up to nearest one square meter

No rounding is allowed for the CADR values provided on Form A-7: Notice of Maximum Certified Rating. Rounding procedures for data and calculations follow Annex D of ANSI/AHAM AC-1 Standard (latest edition).

2.15 DETERMINATION OF MODELS TO BE SELECTED FOR VERIFICATION

The Program Laboratory will select models for verification testing from 33% of each Licensee's Basic Models (see Section 1.4) provided in Model Submission/Change Form, with at least two (2) models selected from each Licensee, per year. Unless Licensee's total basic models do not exceed 5, then only 1 model will be selected from each Licensee, per year. Models from Mixed Basic Models will be selected, obtained and tested according to ENERGY STAR eligibility requirements.

If a model selection results in CADR non-compliance, the model is required to be tested the following year

Total number of models will be rounded up from the 33% value. Model selection includes three parts:

2.15.1 Part 1: ENERGY STAR Selection

The Program is to select models from 10% of each Licensees ENERGY STAR qualified Basic Models for verification testing, while operating under the 33% overall testing requirement for each Licensee.

If a Licensee meets the minimum selection criteria of two models, at least one of the models selected will be an ENERGY STAR qualified model, if applicable.

2.15.2 Part 2: Targeted Selection

EPA may provide suggestions to AHAM regarding specific product classes or energy platforms they would like to see tested. AHAM will provide, prior to the start of each program year, to EPA, a confidential list of ENERGY STAR qualified models and Basic Models subject to verification testing.

These lists will include the Name of the Licensee, Original Equipment Manufacturer (OEM), Basic Model, Brand and model number the consumer will see. AHAM will request that EPA indicate which targeted selections are priorities and will make a good faith attempt to make these selections, while still adhering to ENERGY STAR and AHAM Verification Program requirements. As stated in Section 2.5, the AHAM program will strive to ensure that 50% of a Licensee's non ENERGY STAR Basic Model selections are randomly chosen. AHAM will also provide EPA with a list of the final testing selections. AHAM shall provide EPA with a semiannual report of models tested, including a summary of the results. Any targeted models not selected will be included in this report. Reasons for models not being selected could include, but are not limited to, over-sampling by the EPA nominations, initially targeted models not being available, and other models from the same Basic Model being selected.

2.15.3 Part 3: Random Selection

Any remaining Basic Models which have not been directed for, or excluded from, selection will be randomly selected by the Program Laboratory from all product classes.

2.16 SELECTION EXAMPLES

Example 1: Assume a Licensee has 50 Basic Models and 10 of these Basic Models are ENERGY STAR.

- 33% of 50 total Basic Models is rounded up to 17 Basic Models, so the Licensee will have a total of 17 Basic Models selected for verification testing.
- 10% of 10 ENERGY STAR Basic Models is 1 Basic Model, so 1 of the 17 Basic Models selected for verification testing will be ENERGY STAR Basic Models, as defined in section 2.15.1.
- The remaining 16 Basic Models will be selected. Models selected for testing in the previous twelve months should not be selected during the current year unless it was non-compliant. Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

Example 2: Assume a Licensee has 50 Basic Models and 25 of these Basic Models are ENERGY STAR.

- 33% of 50 total Basic Models is rounded up to 17 Basic Models, so the Licensee will have a total of 25 Basic Models selected for verification testing.
- 10% of 25 ENERGY STAR Basic Models is rounded up to 3 Basic Models, so 3 of the 17 Basic Models selected for verification testing will be ENERGY STAR Basic Models, as defined in section 2.15.1.
- The remaining 14 Basic Models will be selected. Models selected for testing in the previous twelve months should not be selected during the current year unless it was

non-compliant. . Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

Example 3: Assume a Licensee has 50 Basic Models and all 50 of these Basic Models are ENERGY STAR

- 33% of 50 total Basic Models is rounded up to17 Basic Models, so the Licensee will have a total of 17 Basic Models selected for verification testing, all of which will be ENERGY STAR Basic Models, as defined in section 2.15.1.
- There will be no Basic Models available for directed or random selection. Models selected for testing in the previous twelve months should not be selected during the current year unless it was non-compliant. . Any ENERGY STAR models selected will be required to meet all ENERGY STAR eligibility requirements.

2.17 AHAM CADR SEAL

The AHAM CADR Seal ("The Seal") is a graphic and a certification mark for which AHAM owns registered rights in the countries listed in Exhibit C to the License Agreement. The Seal is authorized by AHAM for use by all manufacturers and private brand owners of air cleaners who are Licensees in the Program. According to the Program, manufacturers certify and AHAM verifies that the CADR for smoke, pollen and dust for all Air Cleaners that display The Seal are determined and accurately stated in accordance with the Test Procedure. The Seal is composed of The Mark, the certified CADR values for the model and the estimated room size in which the model will best function.

The Seal must appear on the air cleaner packaging or some other surface clearly visible by the consumer and/or retailer independently from any other label of all units sold in the United States. The Seal must appear on models included within the AHAM Air Cleaner Certification program that are sold in countries listed in Exhibit B to the License Agreement in which AHAM owns a registration for The Seal. Use of The Seal signifies that the Licensee has agreed that any of their models may be selected at any time for verification by the Program. Either The Mark or Seal may also appear, at the Licensee's option, on the air cleaner itself and on advertising literature (See Section 7.1). As Licensees may selectively certify models sold in Specified Countries, sales or advertising literature must clearly distinguish which models are AHAM Certified.

The Seal artwork is available directly from AHAM. The Seal shall be incorporated on all products upon which use is required within six (6) months after executing the Program Licensee Agreement. The Seal requirements are included in Appendix D. The Air Cleaner Certification Task Force may, at their discretion, change the design of The Seal. The redesigned seal must replace prior designs on the packaging box within six (6) months after approval.

3. PROGRAM REQUIREMENTS

3.1 GOVERNANCE

All actions regarding the Procedural Guide, as well as other program developments and approvals will be acted upon by the AHAM Air Cleaner Certification Task Force, a task force of Air Cleaner Certification Program Licensees that are members of AHAM ("Task Force"). AHAM staff may make small editorial, non-substantive changes to the Procedural Guide without requiring the full approval process. When these changes are made to the Program Licensees and Program Laboratory will be notified and edition numbering will be changed accordingly.

3.2 AHAM OBLIGATIONS

- 3.2.1 License manufacturers and private-brand resellers to certify, in accordance with the Program, the CADR accuracy of portable electric room air cleaners sold in the United States and specified countries.
- 3.2.2 Administer verification of operating and standby power ratings under a system acceptable to the EPA for ENERGY STAR verification.
- 3.2.3 Provide administrative staff for the Program.
- 3.2.4 Authorize use of The Seal and The Mark reproductions to companies licensed in the Program and provide artwork and text for The Seal and The Mark.
- 3.2.5 Oversee publication and distribution of Certification Directory and web page.
- 3.2.6 Collect Certification Fees and provide an annual budget report to the Air Cleaner Certification Task Force.
- 3.2.7 Upon notification from the Program Laboratory, alerts Licensee to the presence of models found on the EPA Qualified Product List (QPL) that are not in the AHAM Directory.
- 3.2.8 Monitor:
 - a. Program participation
 - b. Re-ratings of all models
 - c. Challenges by Program participants. AHAM staff will review a challenge to understand if sufficient information is presented for a challenge.
- 3.2.9 Inform participants of:
 - a. All re-ratings
 - b. Exclusion of any Licensee from the Program
- 3.2.10 Notify EPA of non-compliance with ENERGY STAR eligibility requirements.
- 3.2.11 Contract with an independent testing laboratory (Program Laboratory) for:
 - Examination and monitoring of Licensee's test facilities and quality control procedures or data for those manufacturers submitting data from an alternative test facility.
 - b. Collection and compilation of model data.
 - c. Random test sample acquisition.

- 3.2.12 Issue Letters of Instruction when necessary.
- 3.2.13 Audit the Program Laboratories to ensure that testing and procedures are in accordance with this Guide.

3.3 LICENSEE OBLIGATIONS

- 3.3.1 Pay AHAM certification fees, based on a fee structure determined by the Task Force. These fees are billed in four installments, during each calendar quarter of the current year.
- 3.3.2 Certify the CADR of tobacco smoke, dust and pollen under standard test conditions for <u>all</u> portable electric room air cleaners sold in the United States.
- 3.3.3 Certify the operating and standby power for all models submitted to ENERGY STAR.
- 3.3.4 Promptly submit model data, contact information and sample acquisition information to the Program Laboratory under contract to AHAM for verification test selection using Forms A-1, A-2, A-3, A-3A, and A-11. If any information on the above forms changes throughout the Program Year, then the Licensee should resubmit the updated form(s).
- 3.3.5 Annually provide AHAM with a comprehensive and accurate list of model data for all certified models presently available on the market, on the Product Submission Form.
- 3.3.6 Annually provide AHAM with the Production Survey in July for all models in the Program.
- 3.3.7 Accept the Maximum Certified Rating for CADR determined by the Program Laboratory or Alternate Laboratory during testing of the unit.
- 3.3.8 Furnish test specimens at no cost to the Program and pay all shipping costs.
- 3.3.9 Display a facsimile of The Seal on the packaging of each certified model sold in the United States. Display a facsimile of The Seal on models included within the AHAM Air Cleaner Certification Program that are sold in countries listed in Exhibit B, identifying its certified ratings and the recommended room size for effective use. Challenge, if warranted, certified ratings of other Licensees and provide a detailed report documenting the challenge (Section 6).
 - a. Forward challenge report with supporting documentation to the Program Laboratory and AHAM.
 - b. Authorize Program to conduct challenge procedure and agree to be responsible for testing costs if the challenged product is determined to be within acceptable tolerances.
- 3.3.10 Change certified ratings in accordance with Program procedures.
 - a. Process a voluntary change in ratings (see Section 6.3).
 - b. Mandatory re-ratings. (Section 5.2.9).
- 3.3.11 Submit copies of specification sheets and promotional material to AHAM periodically upon request.
- 3.3.12 Review Directory information and remove models that are no longer available.
- 3.3.13 Abide by all requirements in this Procedural Guide and the License Agreement.

3.4 LABORATORY OBLIGATIONS

- 3.4.1 Examination and monitoring of Licensees' testing facilities and quality control procedures or data, as needed.
- 3.4.2 Collection of certified data, basic model information, etc.
- 3.4.3 Random test samples acquisition.
- 3.4.4 Verification testing in accordance with ANSI/AHAM Standard AC-1 (latest edition) and this Guide (including specified tolerances), giving priority to those models which each Licensee sells in greatest volume and /or has voluntarily re-rated.
 - 1) Annual testing of each basic model;
 - 2) Verification under challenge procedure;
 - 3) Verification of voluntary re-rates.
- 3.4.5 Issuance of verification test reports (and notices of non-compliance should testing indicate re-rating necessary).
- 3.4.6 Determination of revised rating to be verified in case of mandatory (either as result of regular Program testing or challenge procedure) or voluntary re-rating.
- 3.4.7 Disposition of all test samples.
- 3.4.8 Compilation and dissemination to AHAM of all verified models' ratings by brand for subsequent Directory publication.
- 3.4.9 Compilation and issuance of annual report summarizing individual participant test results and overall Verification Program test data.
- 3.4.10 Compares models listed in the AHAM Directory with the current ENERGY STAR QPL for accuracy. Reports the finding of any units shown on the QPL but not on the AHAM Directory to AHAM.
- 3.4.11 Review packaging for content and placement of The Mark and The Seal (See Section 5.2.3).
- 3.4.12 Verify there is no information conflicting with The Seal statements (See Section 7.1.1.m)
- 3.5 ALTERNATE TEST FACILITY OBLIGATIONS
 - 3.5.1 Qualifies to be approved as an Alternate Test Facility by completing all requirements of the Alternate Lab Annex.
 - 3.5.2 Maintains facility and correlation as required by the Alternate Lab Annex.
 - 3.5.3 Performs initial qualification tests of models Program Licensees wish to add to the Program and issues A-7 form, stating maximum certified rating, to the licensee.
 - 3.5.4 Transmits, the maximum certified ratings to the Program Laboratory.

4. PROGRAM FUNDING

The Air Cleaner Certification Task Force determines the annual Certification Fees, which are based on total sales volume and the estimated number of basic models. The Task Force may, at their discretion, change the funding options for the Certification Program. From this funding, AHAM pays all costs associated with first sample testing, except sample acquisition costs. A portion of this funding may be used for the promotion of the Program to retailers and consumers, as determined by the Air Cleaner Certification Task Force.

4.1 FEES

Upon joining the Program, and annually in July thereafter, Licensees are required to complete a Production Survey (Appendix E) advising AHAM of the certified sales volume of all room air cleaners in the Program for the twelve-month period from July 1 of the previous year through June 30 of the current year. The certified sales volume shall include all models sold in the United States and any models sold in Specified Countries that bear The Seal. The survey will also request information on the number of air cleaner Basic Models in production and the number of these Basic Models which are part of the ENERGY STAR program. The survey will also request information on the number of brands included in the program. Production surveys are held confidential within AHAM, maintained for seven (7) years, and then destroyed.

Certified Sales Volume will be used to determine Program Participation Fees. The number of Basic Models will be compared to the current Directory and will be used to determine Basic Model Fees. The reported number of Basic Models and ENERGY STAR Basic Models will be used to select models for Verification Testing during the following year.

4.1.1 Program Participation Fees

The amount payable by the Licensee during the Program year will be determined by multiplying the current AHAM member or non-member Participation Fee by the certified sales volume. If this amount is less than the minimum Participant Fee specified in the AHAM Production Survey, the Licensee pays the minimum fee. One-quarter of the fee is billed by AHAM at the beginning of each quarter and is payable quarterly by Licensee during the calendar year.

4.1.2 Basic Model Fees

The Basic Model Fees will be determined from the Production Survey submitted in July of each Program Year. Basic Model Fees will be paid in full to AHAM at the beginning of the Program Year to ensure funds for Program testing. If the actual testing fees incurred by the licensee differ from the amount invoiced at the beginning of the Program Year, the difference will either be refunded to the licensee or an additional invoice will be sent to cover the additional testing fees.

Additional basic model fees (if required) will not be billed until after all ENERGY STAR testing has been complete for the model under test.

4.1.3 Sample Selection Fees

The Program Laboratory will coordinate the selection of test samples for verification. The Program Laboratory will bill fees for the selection of units directly to the Licensee.

4.1.4 Manufacturers Entering Market

All Manufacturers entering the market who become Licensees will be assessed the Initiation Fee upon joining the program.

4.1.5 Fee Administration

AHAM pays all Program administration and testing costs except those costs involved in the challenge procedure, additional sample acquisition and testing, additional filter acquisition and testing, shipping costs and costs associated with the Laboratory having to purchase samples on the open retail market. The Program will invoice Licensees for these expenses.

4.2 YEARLY PRODUCTION SURVEY

AHAM issues a yearly Production Survey to each Licensee in order to calculate fees for the Program (Appendix E). The Licensee is responsible for returning and certifying that the information is accurate and correct.

The following guidelines are to be used to determine which entity involved in a sourcing agreement is responsible for the model:

- If a Licensee buys products from another Licensee, the purchasing Licensee is responsible for the resulting Program fees and must include the sourced units in its own production figures.
- If a Licensee buys products from a non-Licensee, the Licensee is responsible for the resulting Certification Fees and must therefore include the sourced units in its product figures.
- A retailer who is a private brand owner and purchases units from both Licensee and non-Licensee manufacturers may be a Program Licensee. Such a licensee must claim the units manufactured by a non-Licensee as its production and will be responsible for all fees associated with these models.
- In the case of an alternative arrangement (i.e., selling Licensee agrees to pay the Certification Fees), the purchasing Licensee has the ultimate responsibility of ensuring the sourced product production data is properly reported and Program fees are paid.

Failure to return the yearly Production Survey by the due date may result in termination from the program.

4.3 BILLING/INVOICES

Licensees are invoiced quarterly. If invoices are not paid within 90 days after the invoice date, the participant will be given written notice that they have an additional 45 days to become current, or may be subject to termination from the program. Upon termination, all models will be removed from the AHAM directory and The Mark and/or Seal must be removed from the products and packaging (see Section 7.1.8). If a terminated company wishes to rejoin the program, it will be required to pay all outstanding invoices, and a full year Program fees in advance.

4.3.1 Shipping and Invoicing Information

If the Program Laboratory finds it necessary to purchase a test unit, the Licensee will be invoiced for the full purchase price plus travel costs and time at the Program Laboratory's normal rate. If the test sample has been supplied to the Program Laboratory on a consignment basis, it remains the property of the supplier and will be returned accordingly.

4.4 **TERMINATION**

A Licensee who is terminated from this Program shall not, upon receipt of notice from AHAM of its termination, reproduce The Seal or The Mark on the packaging of any air cleaners thereafter manufactured by or for its company and shall make no further reference to AHAM's CADR Seals or Certification Program. This includes all sales literature, websites, and advertising. Money paid to AHAM quarterly as Certification Fees will not be refunded

5. PROGRAM PROCEDURES

5.1 CERTIFICATION

Under the Program, Licensees certify the operating power, standby power, and CADR for tobacco smoke, dust and pollen (based upon use of an identified filter, if applicable), determined in accordance with the ANSI/AHAM AC-1 Standard (latest edition). This standard is published under separate cover and is available to all interested parties upon request from AHAM. For ENERGY STAR models, third party certification is required for smoke CADR/Watt and Standby Power ratings, per ENERGY STAR procedures.

The Program Laboratory will conduct random verification tests and evaluate test data within the framework of the Standard, License Agreement and Procedural Guide requirements and ENERGY STAR eligibility requirements, where applicable. It is the responsibility of each participant to rate units in accordance with these documents and test results obtained from the Program Laboratory, or an Alternate Test Facility.

Licensees must use all practical means at their command to continuously assure that the certified ratings of their air cleaners are in compliance with Program requirements.

5.1.1 Entry to the Program

Licensees enter the Program by having an authorized company representative sign a License Agreement with AHAM and remitting all necessary initiation fees. Contact AHAM for application information and the Program Laboratory for testing information and testing fees.

5.1.2 All Licensees and New Participants

All portable electric room air cleaner models in production in a new participant's product line on and after the date the License Agreement is signed must be certified. All models must have established CADR ratings based on ANSI/AHAM AC-1 Standard (latest edition) before entering the Program. These tests may be performed by the Program Laboratory or an approved Alternate Test Facility (see Section 1.2.5).

5.1.3 New Models

5.1.3.1 New Models

New models must be submitted to the Program on Form A-1: Model Data for Directory, no later than the first day they are advertised or sold by the Licensee as portable electric room air cleaners.

5.1.3.2 Preliminary Testing

All models must have established CADR ratings based on ANSI/AHAM AC-1 Standard (latest edition) before entering the Program. This testing must be performed by either the Program Laboratory or an approved Alternate Test Facility. Payment to the laboratory for such testing is the responsibility of the Licensee and is to be handled strictly between the laboratory and the Licensee.

5.1.3.3 Establish CADR

To establish the CADR rating, at least three production units or three units of the prototype model must be submitted to the Program Laboratory or approved Alternate Test Facility to ascertain certified ratings. Maximum Certified Rating values will be displayed on Form A-7: Notice of Maximum Certified Rating within ten (10) business days. The Licensee determines the certified CADR, based on the Maximum Certified

Rating values and communicates this rating to the appropriate test lab using form A-1 (Model Data for Directory).

5.2 VERIFICATION

The Program Laboratory under contract to AHAM will perform annual verification testing. Tests at the Program Laboratory are to be performed on a randomly selected sample (new and unused) from the Licensee's regular production. One half of each Licensee's basic models (or derivatives thereof) submitted for certification shall be tested annually. One hundred percent (100%) of all Licensee basic models shall be tested within a two (2) year period. A minimum of ten percent (10%) of ENERGY STAR models shall be tested for CADR, standby power, and operating power each program year.

If more than one-third of the Licensee's basic models result in a final test failure, then one hundred percent (100%) of the Licensee's basic models shall be tested in the following Program Year. If the test failure rate for one hundred percent (100%) of the Licensee's basic models is less than or equal to one-third, then testing will resume to one half of the Licensee's basic models the following year.

For new participants in the program, each certified basic model will be verified during the first year. If samples must be purchased on the open market, fees will be billed directly to the Licensee.

Verification testing may be performed throughout the year. However, certified models may be re-tested at any time if there is reason to believe that there has been a detrimental change in a model's performance. This will be considered an Administrative Challenge, and the party in error (Licensee or Program) will pay fees for the testing (see Section 6).

Testing at the Program Laboratory will be conducted in accordance with the methods specified in ANSI/AHAM AC-1 Standard (latest edition). Units packaged and ready for distribution with a filter enclosed in the carton will be tested with the enclosed filter.

The test will be done in the order of tobacco smoke, dust and pollen.

5.2.1 Unit Selection

The Program Laboratory determines which models will be tested in a given year consistent with Section 2.15.

Once specific models are selected, the Program Laboratory will send a selector to obtain Test Units for verification testing. The selector must be able to choose random model(s) from a manufacturer or distributor warehouse. The Licensee will not be informed of what models will be selected prior to the selector's arrival at the selection site. If selecting from a manufacturer warehouse, the random model(s) must be selected from a lot of at least ten (10) units of the model to be selected. If selecting from a distributor, the random unit(s) must be selected from a lot of at least three (3) units if a single unit is selected.

A model may be excused from testing if a Licensee is able to demonstrate that an identical model or model from the same family was procured for verification testing in the preceding 12 months, or has already been procured by an EPA-approved Certification Body ("CB") for verification testing. The Program Laboratory may decide to select alternative models for testing based on the production schedule.

All units selected and sealed by the Program Laboratory selector are provided by the Licensee on a consignment basis and shipped to the Laboratory on a prepaid freight basis.

Samples may be purchased by the Laboratory on the open retail market when stock is not available from manufacturers, criteria for selection cannot be met, or at the request of the Licensee. All costs associated with open retail market purchase must be paid for by the Licensee. The Licensee must be contacted to determine the least burdensome method of obtaining samples.

Licensees shall assure that all Basic Models are available for testing within each Program year for as long as those models are in the stream of commerce. If the manufacturer does not supply a sample for unit selection or give the location of a retail outlet to purchase the product, the model will be removed from all subsequent directories until such a time that the samples are provided and tested.

If a specific sample is unable to be selected by the Program Laboratory, another random sample must be selected in its place. At the time of selection, all models in the AHAM Directory and models added during the Program Year about which the Program Laboratory have been notified are eligible to be selected.

The Program Laboratory will work with the Licensee to determine the age of the selected product, whether obtained in a Licensee's warehouse, in distribution or retail.

If a second or subsequent unit must be tested (due to a defect as defined in section 5.2.6), the Licensee will assume all costs incident to the selection, testing and handling of such units. The Laboratory will invoice the Licensee directly in accordance with the current fee schedule in the Service Contract between the Program Laboratory and AHAM.

5.2.2 Testing of Models for ENERGY STAR Verification

For ENERGY STAR models, a licensee has the option of selecting to have the laboratory test the unit 3 times, using a new filter each test. The Program Lab must be notified of election of this option prior to the beginning of verification testing. The results of the 3 tests will be averaged and must exceed the ENERGY STAR requirement with no tolerance. The average of the 3 tests will also be used to determine compliance with program requirements.

The requirements of this section are consistent with EPA Directive 2011-04, current version (see Appendix F), and if there are any inconsistencies, the EPA Directive 2011-04, current version (see Appendix F) shall determine the testing protocol.

5.2.3 Verification of AHAM CADR Seal

During verification testing, the Program Laboratory will review The Seals, The Mark, and the packaging with reference to the Program to determine if it is in accordance with this Guide and compare the stated values on The Seal to the Certified Rating. When violations occur, the Program Laboratory will notify AHAM within ten (10) business days. AHAM will take appropriate action in accordance with this Guide (See Section 7).

5.2.4 Run-in Period

All air cleaners will be run-in by the Program Laboratory prior to verification testing. The pretest run-in period will be conducted in a clean environment for approximately 48 hours. Filter models will be run-in with their filters removed from the machine to prevent any build-up of pollutants on the filter. If an air cleaner cannot be operated without the filter in place, then the Program Laboratory will contact the manufacturer to determine how the mechanism can be bypassed in order for the unit to be operated without a filter, or the Licensee has the option of providing an extra production filter at the time of selection to be used during the run-in period only. Non-filter models will be thoroughly cleansed after the run-in period and before verification testing to assure a comparably clean condition. A run-in period will precondition all types of air cleaners to average use conditions prior to testing at standard conditions.

5.2.5 Verification Test Report

The Program Laboratory will provide verification test results to the Licensee responsible for the model using a standard report, Form A-5: Report of Verification of a Portable Electric Room Air Cleaner. This report will not be further distributed by the Program Laboratory, except to AHAM in the instance that it is part of a confirmed non-compliance test report.

Once a model has been added to the Program, it must continue to be eligible for selection throughout the life of the model (i.e., for as long as it is offered for sale in that market.) The Program Laboratory will hold the results of all testing in strict confidence, except for:

- 1. Communication with the Licensee with regard to test results and findings on Licensee's own unit(s); or
- 2. Communication with Challenger with regard to test results on a challenged unit(s); or
- 3. Communication with AHAM in regard to test results and findings that indicate noncompliance with the AHAM Program or which AHAM deems necessary for the proper operation of the Program.

5.2.6 Random Defect

In order for a unit to be considered a random production defect, there must be some aspect of the unit that is noticeably defective in a functional or visual manner to the consumer. If a sample is found to be defective by the Program Laboratory during setup and run in only, the Program Laboratory will select a second sample of the same model. The Licensee is responsible for any additional selection and shipping costs. Any unit found to be defective will be replaced by the Licensee, including all units for ENERGY STAR verification.

5.2.7 Finding of Compliance

5.2.7.1 Smoke CADR

The measurement for any production unit shall not be less than 90.0% of the claimed CADR value listed in the AHAM directory for tobacco smoke.

5.2.7.2 Pollen CADR

The measurement for any production unit shall not be less than 80.0% of the claimed CADR value listed in the AHAM directory for pollen.

5.2.7.3 Dust CADR

The measurement for any production unit shall not be less than 90.0% of the claimed CADR value listed in the AHAM directory for dust.

When the model is compliant with the AHAM Program requirements, reported CADR for Smoke, Pollen and Dust are continued in the Directory and a copy of the test report is forwarded to the Licensee and is available to AHAM. Compliance with the AHAM Program does not imply that the product is in compliance with the requirements set forward by government agencies.

5.2.8 Finding of Compliance with ENERGY STAR Eligibility Requirements

For ENERGY STAR models, the determination of compliance with ENERGY STAR eligibility requirements for CADR/Watt and Standby Power shall be made according to the requirements of Appendix F (EPA Directive No. 2011-04, most recent date).

5.2.9 Finding of Non-Compliance with Program Requirements

If the results of the first sample verification test are not within the tolerances outlined in section 5.2.7, the Program Lab will immediately notify the Licensee of potential noncompliance with the requirements. Communication with the Licensee in this manner is not permitted when determining compliance with ENERGY STAR eligibility requirements. The Licensee must confirm receipt of the potential non-compliance communication with the Program Laboratory within 24 hours. If receipt is not confirmed within this time, the Program Laboratory will continue to contact the Licensee and document the date when receipt of the potential non-compliance for the Program are initiated when the Licensee confirms receipt of the potential non-compliance to a maximum of 10 business days from first attempted contact.

Once the Licensee confirms receipt of the potential non-compliance notification, the Licensee may participate in a Documented Interview with the Program Laboratory. If a Documented Interview is requested, it must occur within five business days of the notification of potential non-compliance to determine where differences in rating may have arisen. The Licensee must comply with any requests from the Program Laboratory regarding data, schematics or procedures used by the Licensee to determine the reported certified ratings.

If the Program Laboratory or Licensee identifies a random defect (see Section 5.2.6), the test result will be voided provided the Licensee provides an analysis/explanation of the defect within ten (10) calendar days of notification of non-compliance.

If random defect analysis is performed in the Program Laboratory and the defect is obvious to the Program Laboratory, the test result will be voided and a second sample will be randomly selected and tested per Section 5.2.6. The purchase cost and test costs of the second sample will be billed to the Licensee. At the Licensee's request, the Program Laboratory technical staff is available to assist the Licensee in verifying relevant energy-using components and interpreting the Test Procedure.

If the test unit is not identified as having a random defect, the Licensee must select one of the following options within ten (10) calendar days after receiving notification of potential Program non-compliance:

Option 1: Request that new filters be tested by the Program Laboratory (See Section 5.2.9.1).

Option 2: Re-Rate the model (See Section 5.2.9.2).

Option 3: Request that a second sample of the model be tested (See Section 5.2.9.4)

Option 4: Withdraw its product from the market (See Section 5.2.9.5).

Figure 1 provides a summary of the options available and the timing for selecting an option when a Licensee receives a preliminary non-compliance notice. Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

Program Non-Compliance

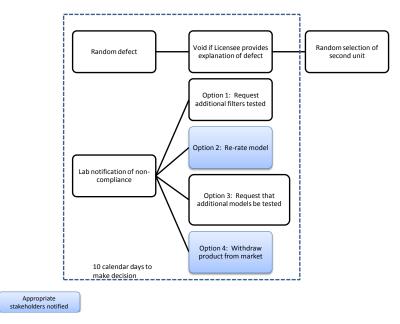


Figure 1

If the Licensee does not select an option within 10 calendar days, or the Program noncompliance is not sufficiently addressed within 60 calendar days, the Program Laboratory will notify AHAM. AHAM will notify the Licensee that: 1) the Licensee will be removed from the Program, which means all models will be deleted from the Program Directory; 2) The Mark and/or Seal must be removed from all Licensee's products and packaging; and 3) AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance and the removal of the Licensee from the Program. The manufacturer must come into Program compliance within the timeframe specified in Table 1. Timing for coming into Program compliance varies by the option chosen.

Table 1

Option	Description	Days to Notification*	Maximum days to resolution*
1	New filters	10	45
2	Re-rate	10	60
3	Second sample testing	10	45
4	Withdraw product from market	10	30

*After confirmed receipt of potential non-compliance

5.2.9.1 Option 1 – New filters tested

Request (at the Licensee's expense) that the unverified pollutant(s) be tested an additional two times with new filters. The request to test the specific unit an additional two times, with a new filter in the unit for each test, must be made within ten (10) business days from the receipt of Form A-6: Non-Compliance Notification. The Program Laboratory (at the Licensee's expense) will choose a random filter sample. If the filters are not available, another choice must be made from the listed options below. Using the average of the three tests as the result, the verification is complete if the average rating falls within tolerance. If the average of the three tests is outside the tolerance allowed for its stated values, the Licensee may choose to test a second sample (Option 3), re-rate (Option 2) or discontinue the model (Option 4).

Figure 2 provides a summary of the steps required and the timing for selecting test using new filters. Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

Option 1: New Filter Testing

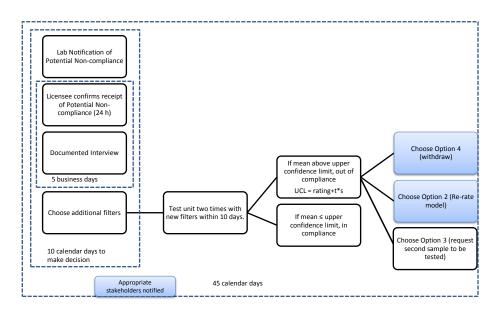


Figure 2

5.2.9.2 Option 2 – Re-rate the model

If model re-rating is required, the Program Laboratory will send Form A-6: Notice of Non-Compliance, using certified return receipt mail, to the Licensee responsible for the model. This notice clearly states the next steps to be taken by the Licensee:

- a. Shall, within ten (10) business days from the receipt of Form A-6: Non-Compliance Notification, revise all future stated claims, in accordance with the Program Laboratory's determination for the Basic Model. The revised claim must not be greater than the Program Laboratory's findings. The Licensee must submit to the Program Laboratory an updated Form A-1: Model Data for Directory, and if appropriate, Form A-2: Cross Index of Model Numbers by Brand.
- b. Shall, at its expense, within ten (10) business days from the receipt of Form A-6: Non-Compliance Notification, give written notice of the revised claim for each model within the Basic model (whether or not all are currently in production) to AHAM and the Program Laboratory.
- c. Shall, within fifteen (15) days of receipt of Form A-6: Non-Compliance Notification, correct the certified rating displayed in conjunction with the AHAM CADR Seal facsimile on the packaging of all future units of that model(s) produced, and shall furnish copies of such revised CADR Seal facsimile rating to AHAM.
- d. Shall revise labels of existing inventory within two (2) months.
- e. Shall revise all literature and advertising (for example, specification sheets, full line folders, ad mats, plus any other sales promotion and/or advertising materials that could be used with potential customers) within two (2) months.

f. Shall provide corrected copies of literature, publicity, packaging, etc. to AHAM and all channels in its first line of distribution within two (2) months of re-rate.

When the Licensee, within the allowable time period, takes the required actions, AHAM will advise other Licensees by letter of the re-rate action.

If the Licensee fails to take any of these actions in the allowable time period, AHAM will notify the Licensee that it is in default under the Licensee Agreement, and request that the notices be sent immediately. All other Licensees will be advised of the re-rate action by a letter from AHAM. If the above actions are not completed, AHAM will take appropriate steps to terminate the Licensee from the program.

Revised ratings will be kept on file at AHAM and made available to anyone requesting information on certified ratings. Notice of termination of a participant will be sent to other Licensees, appropriate Government Agencies, and relayed to other interested parties on request.

Licensees observing or receiving reports of re-rated models on display or advertised at other than the re-rated value are urged to report the fact, with identifying details, such as the safety listing agency date code, to AHAM. AHAM will bring the facts to the attention of the Licensee responsible for the brand involved without identifying the source of the complaint, and request a report of corrective action taken. Within fifteen (15) business days, the Licensee responsible for the brand must take corrective action and furnish a report evidencing such action to AHAM, or will be excluded from the Program.

5.2.9.3 Basic Model Brand Name Re-ratings

The Program requires that a basic model and all models derived from that basic model shall be re-rated if any one derivative of that Basic Model is re-rated. This includes all brands of the basic model whether manufactured by the Licensee or for the Licensee by another manufacturer.

Figure 3 provides a summary of the steps required and the timing for selecting to rerate the tested model(s). Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

Option 2: Re-Rate the Model

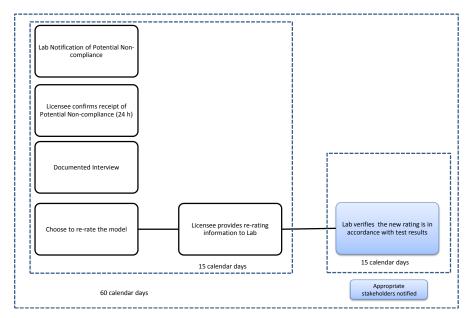


Figure 3

5.2.9.4 Option 3 – Second Sample Selection

This option authorizes the Program Laboratory to obtain and test an additional unit of the same basic model (at the Licensee's expense). The request for a selection of a second sample of the model must be made within ten (10) business days from the receipt of Form A-6: Non-Compliance Notification from the Program Laboratory.

A verification test, using the methods in ANSI/AHAM AC-1 Standard (latest edition), will then be performed. The certified ratings are continued if the results of the second sample indicate that the certified ratings are within the allowable tolerances. If the unit performs outside the tolerance for its stated values, the Licensee must choose to either re-rate or discontinue the model (see Option 2 above and Option 4 below).

If a second sample is not available for random selection within ten (10) business days from receipt of Form A-6: Non-Compliance Notification, the Licensee must re-rate (See Section 5.2.9.2), or discontinue the unit and all derivative models based on the Program Laboratory's test results of the operative sample or samples(See Section 5.2.9.5).

If the Licensee exercises Option 3, Second Sample Selection and the test unit fails, the Licensee shall re-rate the model to the average of the first and second sample tests (See Section 5.2.9.2), or withdraw the model from the market (See Section 5.2.9.5).

Figure 4 provides a summary of the steps required and the timing for selecting a second sample test. Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

Option 3: Second Sample

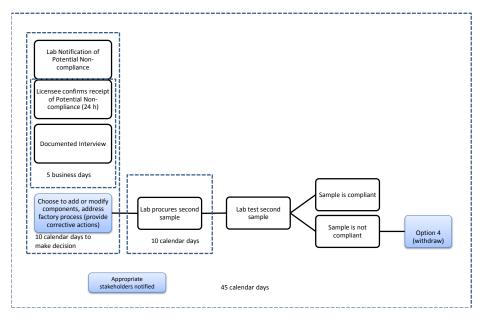


Figure 4

5.2.9.5 Option 4 Withdraw the Model

The Licensee must withdraw the model, produce no additional units of that model, and show it as a revised rating in the next edition of the Directory under the heading "Discontinued Models." In the subsequent Directory edition, it will show as a deleted model if no further units are in the marketplace. The Licensee must send written notice to AHAM and the Program Laboratory within ten (10) business days from the receipt of Form A-6: Non-Compliance Notification, stating no further production will occur for this model. This constitutes an acceptance of the Program non-compliance and AHAM will notify appropriate Stakeholders (See Section 5.2.11)

When a model has failed verification testing, has been discontinued by the Licensee and has been replaced by a counterpart model, the counterpart model shall carry a new model number and shall be subjected to the provisions under New Models (see Section 5.1.3).

If the Licensee believes that the unit selected for Verification Testing is not representative of units produced, the Licensee may request the Program Laboratory to analyze the unit or choose to have the unit returned for analysis.

Figure 5 provides a summary of the steps required and the timing when withdrawal of the model(s) is required. Shaded boxes indicate when AHAM will notify appropriate Stakeholders (See section 5.2.11) of Program non-compliance.

Option 4: Withdraw model

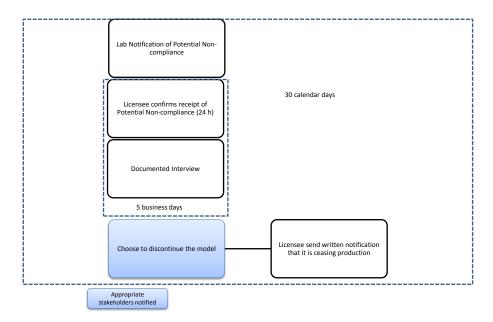


Figure 5

5.2.10 Finding of Non-compliance with ENERGY STAR eligibility requirements ENERGY STAR models found to be non-compliant with the ENERGY STAR eligibility requirements, as outlined in Section 5.2.8, will be reported to EPA within 2 business days of confirmation of non-compliance. If this model is known to be offered into the Canadian marketplace, NRCan will be notified at the same time. EPA will then proceed as outlined in EPA Directive 2011-04, current version (see Appendix F). If the values measured during a verification test fall within the tolerance of ENERGY STAR verification, but are not compliant with AHAM verification tolerance, as outlined in section 5.2.7, the model is considered potentially non-compliant with the AHAM program and the process outlined in section 5.2.9

If the participant chooses to withdraw the model from the ENERGY STAR program, but continues marketing the model, then the responses to non-compliance outlined in Section 5.2.9 apply to the model.

will commence. EPA will not be notified of this type of potential non-compliance.

5.2.11 Notification of Non-Compliance for ENERGY STAR models

In all cases of accepted non-compliance with ENERGY STAR eligibility requirements, AHAM will notify EPA ENERGY STAR and NRCan, when appropriate.

5.2.12 Termination

Upon being notified of termination from the Certification Program, the terminated licensee will, within sixty (60) days, cease distribution into commerce portable electric room air cleaners with packaging bearing The Seal or The Mark. AHAM will immediately remove the listing of their models from the web site (<u>www.AHAMVerifide.org</u>) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of termination (See Section 7.1.8).

A Licensee who is terminated from this Program shall not, upon receipt of notice from AHAM of its termination, reproduce The Seal or The Mark on the packaging of any air cleaners thereafter manufactured by or for its company and shall make no further reference to AHAM's CADR Seals or Certification Program. This includes all sales literature, websites, and advertising. Money paid to AHAM quarterly as Certification Fees will not be refunded.

5.2.13 Withdrawal

Upon notifying AHAM of a withdrawal from the Certification Program, the licensee will, within sixty (60) days, cease distribution into commerce portable electric room air cleaners with packaging bearing The Seal or The Mark. AHAM will immediately remove the listing of their models from the web site (<u>www.AHAMVerifide.org</u>) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of withdrawal (See Section 7.1.8).

5.2.14 Return of Units

Test units, or units selected for ENERGY STAR testing that did not need to be tested shall be returned to the appropriate Licensee approximately fifteen (15) calendar days after the Licensee receives the final test report for all units tested for that Licensee. Returned unit(s) will be sent on a COD basis, unless the Licensee has made previous billing or disposition arrangements with the Program Laboratory.

6. CHALLENGE PROCEDURE

6.1 CHALLENGE RULES

A Licensee within the Program may challenge another Program Licensee, using the Challenge Request Form A-9. The Challenge Request Form must be submitted to the Program Laboratory. Challenges shall be in "good faith," with substantial supporting documentation provided to the Program Laboratory at the time of the challenge. Program Licensees may not challenge non-Licensees; this is outside the scope of this Program.

However, if AHAM receives multiple indications from Program Licensees that a non-Licensee may have questionable CADR for smoke, pollen and/or dust, AHAM may initiate a challenge of the specified non-Licensee working through the Task Force. There must be unanimous agreement of the Task Force to challenge the non-Licensee, as Program funds will be used for the Challenge.

AHAM may not challenge a Program Licensee.

6.2 INITIATING A CHALLENGE

A Licensee may challenge CADR for smoke, pollen and/or dust. For all challenges, the challenging Licensee ("Challenger") must complete and submit Challenge Request Form A-9 to the Program Laboratory. For the challenge to take place, the Challenger must include an explanation of why the challenge should be granted. To exercise challenges, the Challenger must authorize the Program Laboratory to proceed at the Challenger's expense for the initial Program Laboratory test.

Upon receipt of this form, the Program Laboratory shall notify AHAM. AHAM will notify the challenged Licensee ("Challenged Manufacturer") in writing, with a copy to the Program Laboratory, of the challenge. The Program Laboratory will then acquire a sample of the challenged model and perform verification testing. AHAM and the Program Laboratory shall keep the identity of the Challenger and Challenged Manufacturer under this challenge procedure in confidence throughout the challenge proceedings.

If the challenge is not upheld, the Challenger must pay the Program Laboratory for all costs incidental to the test(s). Upon completion of testing, the test unit will be shipped, COD, to the challenger.

If the Program Laboratory results do not verify the Challenged Manufacturer's reported certified ratings, this will be considered a "Verified Challenge." The Program Laboratory shall inform the Challenged Manufacturer of the Verified Challenge, including all test data and test report information. The Challenged Manufacturer may also select to have more filters or additional samples tested, as provided in section 5.2.9.

In either case (Verified Challenge or not upheld Challenge), the Program Laboratory shall inform both the Challenger and Challenged Manufacturer of the testing results and provide test data and test report information.

Within thirty (30) calendar days of receipt of a Verified Challenge, the Challenged Manufacturer shall submit a written statement to the Program Laboratory, with copy to AHAM, either 1) disputing the Verified Challenge or 2) agreeing to withdraw its product from the market.

If the Challenged Manufacturer does not dispute the Verified Challenge, it must withdraw its product from the market within thirty (30) calendar days of the receipt of the Verified Challenge. The Challenged Manufacturer must pay all Program Laboratory testing costs incidental to the Verified Challenge.

If the Challenged Manufacturer disputes the Verified Challenge it must, within thirty (30) calendar days of receipt of the Verified Challenge, provide a detailed written summary of its method for determining CADR for the challenged parameter and support for why this is the correct method to the Program Laboratory. Within fifteen (15) calendar days of receipt, the Program Laboratory will either accept the Challenged Manufacturer's method and withdraw its Verified Challenge or reject the Challenged Manufacturer's method and reinstate the Verified Challenge. Upon reinstatement of the Verified Challenge, the Challenged Manufacturer must, within thirty (30) calendar days, withdraw its product from the market.

6.3 VOLUNTARY CHANGES IN RATINGS

Licensees are allowed to make adjustments to the certified ratings as warranted by reason of quality control data review or annual verification testing. This may be done at any time and does not affect the Licensee's financial obligations under the challenge procedure if it should be in effect during the time the voluntary change is made.

Licensees must notify the Program Laboratory and AHAM when a voluntary change in certified rating is made and provide the Program Laboratory with the revised rating for the model on a revised Form A-1: Model Data for Directory. If the rating is to be greater than previously certified, the Program Laboratory must first select and test a sample of the model to support the increased rating. This additional test is not necessary if all previous Program Laboratory verification test results on the model support the increased rating. The Licensee will be responsible for all fees associated with the testing. In the event the Program Laboratory's test is unable to verify a Licensee's increased voluntary change in rating, the original certified rating will remain in force.

The Licensee shall provide corrected copies of literature, publicity, packaging, etc. to AHAM and all channels in its first line of distribution within two (2) months of re-rate. The voluntary change in ratings will also be kept on file at AHAM and relayed to interested parties on request.

6.4 MULTIPLE CHALLENGES

If the Program Laboratory is working on a challenge and receives a separate challenge relating to the ongoing challenge, the Program Laboratory will notify AHAM, and then notify the second Challenger that a challenge is already underway. Confidentiality between both the Challengers and the Challenged Manufacturer will be maintained. Ultimately, if the challenge is not upheld, the Challengers will split the challenge costs. The Program Laboratory may receive multiple challenges on a similar issue. The Program Laboratory is responsible for reviewing the technical viability of each challenge.

7. RULES FOR USE OF THE SEAL, ADVERTISING AND PROMOTIONAL REFERENCES TO THE PROGRAM

AHAM has no interest in or authority to limit any claims that do not directly impinge on the validity or credibility of the AHAM Portable Electric Room Air Cleaner Certification Program Scope. Validation of claims made outside the Program parameters requires separate and independent substantiation.

7.1 RULES FOR USE OF THE SEAL AND ADVERTISING

Licensees are encouraged to properly use and promote the Certification Program and The CADR Seal in specifications, literature and advertising.

7.1.1 The CADR Seal

Packaging for these units must display the Seal in accordance with this Procedural Guide on units sold in countries listed in Exhibit B to the License Agreement in which AHAM owns a registration for The Mark. Although AHAM does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit B, that such use is at Licensee's own risk since Licensor owns no registered rights in those countries and jurisdictions. The Licensor agrees that Licensee will not claim proprietary rights in The Seal and The Mark in any country or jurisdictions not listed in Exhibit B, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit B.

The Seal and The Mark when used on air cleaner packaging or on any sales or advertising literature shall conform to the following guidelines:

- a. Certified values must be empirical, not estimated.
- b. Size of The Seal shall be such that all lettering is legible.
- c. The word content of The Seal shall be identical to the artwork provided by AHAM. For languages other than English, see Section 7.1.2.
- d. Voltage and frequency of the unit shall be stated. If the unit has multiple voltage/frequency combinations and only one combination will be verified, the CADR at the lowest voltage must be reported.
- e. The certified ratings and room size must be accurate, clearly distinguishable and filled into the appropriate areas of The Seal. The CADR value cannot be greater than the Maximum Certified Rating provided by the Program Laboratory.
- f. CADR is to be displayed in a manner in which the pollutant is clearly defined for the given rating.
- g. In the event of a difference between the AHAM Program and local governmental requirements in the country of sale, (i.e. room size markings), the AHAMVerifide Seal and relevant ANSI/AHAM AC-1 performance claim shall be located on the same retail packaging panel. Each performance claim must be listed with reference to the appropriate standard.
- h. Only CADR for tobacco smoke, dust and pollen are certified. No implication shall ever be made that The Seal covers any other feature or performance factor.

i. Room size is based on removal of 80% tobacco smoke particles on a continuous steady-state basis, assuming one room air exchange per hour. The following formulas shall be used to calculate room size:

CADR Value _____ x 1.55 = _____ (Room square feet) CADR Value _____ x0.144 = _____ (Room square meters)

- j. Room size is based on an 8 foot (2.4 meter) ceiling, which should be so stated in any literature or documentation that refers to the room size.
- k. Claims may be made on the basis of the stated room sizes or by direct conversion of room sizes to area (length x width).
- I. Room size in square feet or square meters, based on 80% removal of tobacco smoke particles, must be displayed on the "AHAM CADR Seal." No other implication shall be made about the removal of particles as they relate to room size.
- m. Room size or area claims on Licensees' packaging shall not be in conflict with certified values. Performance claims must be at or below the allowable room size based on the CADR for tobacco smoke.
- n. Non-particulate claims (e.g. odors, gases, chemicals, etc.) must be kept distinct from claims on certified particulates (i.e. tobacco smoke, dust and pollen).
- o. A claim similar to the following example shall NOT be made on certified products: "Make your room 3,000 times cleaner."

7.1.2 Language Translation of AHAM Seal

For models produced and/or distributed in languages other than English, Licensees must provide AHAM with a representative translation of The Seal and The Mark. After confirmation of the translation, AHAM will add the approved, translated seal to the AHAM graphics. A one-time administrative cost, determined by the Air Cleaner Certification Task Force, will be charged to the Licensee for translation verification and development of The CADR Seal in the approved language. This Seal would then be available for use by all Licensees in accordance with the terms of this License Agreement and Guide.

7.1.3 Improper Ratings and Claims

During annual verification testing, the Program Laboratory will evaluate The Seal to determine if it is in compliance with the current ratings listed in the Directory. In the event an incorrect room size or area claim is made on either unit packaging or in advertising or promotional literature, AHAM will immediately notify the Licensee making the incorrect claim that it is in violation of Program procedures and instruct the Licensee to correct the information. Within thirty (30) days of written notice from AHAM, all units being produced shall have the correct information on the package. Within two (2) months following AHAM's written notification, all warehouse inventories, advertising, packaging, and literature must have the correct information.

In the event of an improper rating or claim, AHAM will notify all other Licensees of the improper ratings and claims. Failure to take the actions as specified within the allowable time period will result in termination of the Licensee by AHAM.

7.1.4 Statement to Accompany Seal Reproductions on Literature

The Seal and The Mark may be used in advertising or promotional literature. However, there may be no alteration in the design of The Mark and Licensee must still follow brand guidelines as cited in Appendix D.

7.1.5 Mixing Certified and Non-Certified Models

Portable electric room air cleaner models that are not certified may not be listed, indicated or described in literature, advertisements, or point-of-purchase material in which AHAM certified models are also listed or described in such a way as to imply that all are certified. If certified and non-certified models are displayed in literature or catalogs, a designation shall be shown of which units are and are not AHAM certified.

7.1.6 Defining What is Being Certified

Only the CADR for tobacco smoke, dust and pollen (based upon use of an identified filter, if applicable) are certified. No implication shall ever be made that The Seal covers any other feature or performance factor.

Any other quantitative performance claims for tobacco smoke, dust or pollen removal appearing on the same packaging or literature as the AHAM Mark and Seal must be clearly defined by AHAM test data, must include a time period and room size and shall be shown to be a scientifically sound derivation of certification test results. Other performance claims cannot imply or state that they are based on AHAM test results.

Literature that refers to models available with alternate filters should carry a statement such as:

"Certified ratings as stated are based on _____ filter, and may be affected by use of other filters."

7.1.7 Reference to the Program Laboratory

Any reference to the Program Laboratory under contract to AHAM must clearly indicate that its function in the Program is limited to testing and technical administration.

For instance, the statement "Clean Air Delivery Rate is verified by AHAM based on tests by a Laboratory under contract to AHAM" is acceptable. But the statement "Clean Air Delivery Rate is verified by AHAM and a laboratory" is not acceptable, for it implies incorrectly that the Program Laboratory has a separate verifying function.

7.1.8 Examples of Improper Use or Statements

These rules and suggestions were established to properly promote the Air Cleaner Certification Program and are not intended to otherwise limit or restrict participants' advertising.

Examples that are unacceptable because they might cause confusion as to the scope of the AHAM Portable Electric Room Air cleaner Certification Program are:

- a. Accurate uses of The CADR Seal and statement of scope, except when the statement is immediately followed by a phrase such as: "You know you're getting all the clean air delivery you're paying for." (AHAM makes no verification as to the sales value of any particular model).
- b. Any use of the following is unacceptable:

"AHAM rated clean air delivery. The Association of Home Appliance Manufacturers' seal is found on the packaging of all (brand name) air cleaners and signifies that all performance data are certified as accurate." (All performance data are not certified.)

"Every ... air cleaner rating is AHAM verified." (Every rating is not verified -- only clean air delivery rates.)

"Clean air delivery rates are certified by AHAM." (The clean air delivery rate is certified by the Licensee, and verified by AHAM.)

7.1.9 Discontinuing Use of Mark and References to AHAM Certification Program

Upon notifying AHAM of intent to Withdraw, or, being notified of termination from, the Certification Program, the withdrawing or terminated licensee will, within sixty (60) days, cease distribution into commerce portable electric room air cleaners with packaging bearing The Seal or The Mark. AHAM will immediately remove the listing of their models from the web site (<u>www.AHAMVerifide.org</u>) and the Directory and, in the event the company is an ENERGY STAR partner, EPA will be notified of termination.

Said Licensee must immediately discontinue publication of documents (including advertisements, websites, etc.,) containing The CADR Seal or The Mark or any reference to the Licensee's participation in the Certification Program.

The Licensee must also notify all channels in their first line of distribution of the withdrawal or termination. This notification is required to ensure that the initial customers to whom the Licensee is selling are made aware of the removal of products from the AHAM Certification Program

7.2 SUBMISSION OF SPECIFICATION SHEETS AND PROMOTIONAL MATERIALS FOR PROGRAM INSPECTION

Two copies of the following shall be forwarded to AHAM upon request:

- a. Two copies of specification sheets for models subject to the Program;
- b. Two copies of promotional literature which refer to, illustrate, or describe certified models.

AHAM will review these to assure that references to The Seal and Program provisions are in accordance with these recommendations.

8. OZONE EMISSION INFORMATION

8.1 Scope

AHAM provides Program Licensees the opportunity to report portable electric room air cleaner compliance with UL 867, Part 37 in the AHAM Portable Electric Room Air Cleaner Directory. Inclusion of ozone emission information is voluntary. Information is collected by the Program Laboratory, but this information is not subject to independent verification testing by AHAM.

8.2 DEFINITION OF AND BASIS FOR OZONE EMISSION LIMIT

An ozone emission limit of 50 parts per billion (ppb) is recognized by the U.S. Food & Drug Administration for medical products and is referred to in U.S. EPA guidelines for indoor air quality as measured by UL 867 (latest edition). This value, as measured by UL 867 (latest edition), is also recognized by California Law as the limit for emissions from portable electric room air cleaners sold in the state.

8.3 DATA SUBMISSION FOR INCLUSION IN CERTIFICATION DIRECTORY

Voluntary submission of ozone information will be included in the Certification Directory for Portable Electric Room Air Cleaners. Licensees interested in providing ozone emission information must do so on Form A-1: Model Data for Directory.

8.4 INCLUSION OF OZONE EMISSION INFORMATION ON PACKAGING

Licensees may communicate their ozone emission information on their packaging by whatever method they determine. Since ozone emission information is not part of the Program, no statements shall be made that are similar to the following:

"Ozone emission information is certified by AHAM." (Ozone emission information is neither certified nor verified by AHAM.)

"The safety of this unit has been certified (or verified) by AHAM." (AHAM does not evaluate, certify or verify the safety of portable electric room air cleaners.)

APPENDIX A: APPROVED TEST PROCEDURE CLARIFICATIONS FOR USE IN THE AHAM AIR CLEANER CERTIFICATION PROGRAM

1. All testing within the AHAM Air Cleaner Certification will be performed in accordance with the following test procedure clarifications:

http://www.energystar.gov/index.cfm?fuseaction=products_for_partners.showRoomAircleaners

2. AHAM Letters of Instruction, as issued, until the substance of the Letter of Instruction is incorporated into a new edition of this Procedural Guide.

APPENDIX B: AHAM AIR CLEANER CERTIFICATION PROGRAM LICENSE AGREEMENT Air Cleaner Certification Program LICENSE AGREEMENT

This Agreement, made this ______ day of ______, 20___, by and between ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (AHAM), a not-for-profit business association incorporated in the District of Columbia, having its principal office at 1111 19th Street, N.W., Suite 402, Washington, DC 20036, hereinafter called "Licensor," and ______ having its principal offices at the following location (full address), ______ hereinafter called "Licensee."

WITNESSETH:

WHEREAS, Licensor has developed and caused to be recognized as a national standard in the USA for determining certain performance characteristics as referenced in "Exhibit A," the title of which standard is also referenced in "Exhibit A";

WHEREAS, Licensor is the sponsor of a Certification Program in the USA ("Certification Program" or "Program") in support of the acceptance and use of that standard and the procedures set forth in the Procedural Guide, all in the public interest, to the end that public confidence in said performance characteristics may be effectively promoted;

WHEREAS, Licensee wishes to participate in said Certification Program;

NOW, THEREFORE, it is agreed by and between the parties hereto as follows:

LICENSEE:

A.1. Shall, upon the signing of this Agreement, have (1) the same person signing this Agreement on its behalf and (2) the engineer designated by such person sign and submit to Licensor the Certification Affidavit attached hereto as "Exhibit A."

A.2. Shall abide by and comply with all provisions of the Procedural Guide developed by AHAM for the implementation of the Certification Program.

A.3. Shall abide by, comply with and have the right to be apprised of all decisions made by the governing AHAM product council or committee which affect this Certification Program. This product council/committee shall meet periodically with AHAM staff for communication, advice and counsel on the operation of the Certification Program, and shall determine all policy for the Certification Program.

A4. Shall abide by the following Certification Program Payment Policy: For certification program participants, if invoices are not paid within 90 days after the invoice date, the participant will be given written notice that they have an additional 45 days to become current, or have its product ratings removed from the Certification Program directory. Removal from the directory will result in termination from the program. If a terminated company wishes to rejoin the program, it will be required to pay all outstanding invoices, and a full year program fees in advance.

A.5. Acknowledges that Licensor only owns the registered trademark, service mark, and/or certification mark rights in The Mark and The Seal (as more fully identified in the Procedural Guide) in the countries and jurisdictions which are listed in Exhibit C which is attached hereto and incorporated herein by reference, and hereby licenses rights to use the use The Seal and The Mark only in those countries and jurisdictions. Further acknowledges that although Licensor does not object to Licensee's use of The Seal and The Mark in countries and jurisdictions other than those listed in Exhibit C, that such use is at Licensee's own risk since Licensor owns no registered rights in those countries and jurisdictions. Agrees that Licensee will not claim proprietary rights in The Seal and The Mark in any country or jurisdictions not listed in Exhibit C, and will not file any applications for registration of the Seal or The Mark in any countries or jurisdictions not listed in Exhibit C.

LICENSOR AND LICENSEE:

B.1. Agree that the Procedural Guide is an extension of this License Agreement, provides all necessary details for participation in the Certification Program and is incorporated by reference into this Agreement. Agree that Licensor has the right in its sole discretion to make changes to any aspect of the Procedural Guide and Licensee will be bound by those changes. Revisions to procedures which become effective before the Procedural Guide is reprinted will be outlined in Letters of Instruction from Licensor to Licensees; such letters will automatically amend the Procedural Guide upon issuance.

B.2. Agree that this Agreement shall extend for an initial period of one (1) year and shall be automatically renewable for successive additional periods of one (1) year each unless either party, at least thirty (30) days prior to the date of expiration, gives notice in writing that it does not wish the

Agreement to be renewed; provided, however, that either Licensor or Licensee may terminate this License Agreement upon sixty (60) days' written notice to the other party.

B.3. Agree that in the event that Licensee defaults under this Agreement, Licensor may immediately exclude Licensee from the Program by written notice sent by certified mail to Licensee. Under such circumstances, this Agreement will be considered void upon the date of Licensee's receipt of said written notice, and the remaining provisions concerning exclusion of a Licensee outlined in the Procedural Guide shall be followed.

B.4. Agree that the initial data on Licensee's certified rating(s) for models subject to the Program as submitted to the independent testing laboratory under contract to Licensor on forms provided by that laboratory (see the Procedural Guide) shall not be treated as confidential by either the laboratory or Licensor.

B.5. Agree that in the event Licensor promptly notifies all participants of any incorrect rating published in any Certification Directory, supplement thereto, or elsewhere, Licensee agrees not to hold Licensor liable in any way for any damage caused by any such incorrect published rating, unless such damage was the result of an intentional tort, a willful act, or of gross negligence by Licensor in which case the Licensor's liability is limited to any fees AHAM receives directly or indirectly from the Licensee's participation in the Program during the period in which incorrect or improper testing or rating or administration of the Program has occurred. Agree that Licensor shall not indemnify Licensee for any claims of any nature whatsoever that may be asserted against Licensee as a result of its use of either The Seal or The Mark or as a result of its participation in any aspect of this Program.

B.6 Except as provided in this paragraph, Licensee agrees to indemnify and hold harmless AHAM, its board of directors, officers and employees, their successors and assigns, for and from any and all claims, demands, lawsuits, judgments, contracts, debts, and expenses (including reasonable attorney's fees), of any kind or nature, whether at law or in equity, arising out of or in connection with the Licensee's participation in the AHAM Room Air Cleaner Verification Program (including, but not limited to, a Licensee's conduct constituting a breach of this agreement and license), the use or misuse of AHAMVerifide^{*}, and/or the manufacture, design, information for use, warranties and representations, and use of Licensee's Room Air Cleanerss. No claim for indemnity under this paragraph shall be effective until Licensee has received from AHAM written notice of the claim for which AHAM believes it is entitled to indemnification hereunder. Licensee shall promptly reimburse AHAM for all costs and expenses incurred in defending AHAM against any such claims, demands, causes of action, or liability, including,

but not limited to, attorney's fees. This indemnification shall survive termination of this agreement and license.

AHAM affirmatively disclaims any obligation to indemnify or hold harmless the Licensee from any and all claims, demands, lawsuits, judgments, contracts, debts, and expenses (including attorney's fees), of any kind or nature, whether at law or in equity, arising out of or in connection with any claims asserting infringement of a third party's trademark and/or arising out of or in connection with any challenge to the validity or enforceability of any AHAM mark. In the event a third party files a claim against the Licensee asserting infringement of a third party's trademark and/or strademark and/or challenging the validity or enforceability of any AHAM mark. In the event a third party files a claim against the Licensee asserting infringement of a third party's trademark and/or challenging the validity or enforceability of any AHAM mark, Licensee is required to provide AHAM with written notice of the claim within 14 days. AHAM will consider, in good faith but without obligation and in its sole discretion, whether it is appropriate to assist, intervene, indemnify or take any action with respect to the reported claim.

AHAM's policy is to defend its marks and other intellectual property globally through market surveillance and legal actions as required and determined by its Board of Directors. To that end, AHAM requests Licensees to notify it of any improper use of AHAM Marks.

B.7. The interpretation of this Agreement and the parties' performance thereunder shall be governed by the laws of the District of Columbia.

B.8. In the event that any part or parts of this Agreement and/or the Procedural Guide are found to be void, the remaining provisions shall nevertheless be binding, to the extent practicable, with the same effect as though the void parts were deleted.

B.9. This Agreement being the final and complete understanding between the above parties, supersedes and nullifies all prior agreements.

Air Cleaner Certification Program LICENSE AGREEMENT

To be completed by AHAM:

ASSOCIATION OF HOME APPLIANCE MANUFACTURERS (Licensor)

Signed by:	

Print Name: _____

Title: _____

Date:	_
-------	---

To be completed by Licensee [See page 5 also]:	
Company Name:	(Licensee)
Signed By:	
Print Name:	
Title:	
Date:	

"Exhibit A"

CERTIFICATION AFFIDAVIT

(To be completed by Licensee)

The	undersigned	hereby	certify	and	state,	on	behalf	of
	License (License Ertification under ance with the cur	•	ng program b	by said Lice	ensee are a			
To be completed	d by Engineer [Re	ference Sect	ion A.1 (2)]:					
Signed by:								
Print Name:								
Title:								
Date:								

To be completed by same individual that signed the License Agreement on page 5 [Reference Section A.1 (1)]:

Print Name:	

Title: _____

Date: _____

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PRIMARY CONTACT FOR ADMINISTRATIVE ISSUES

(Note: All verbal and written communications will be in English)

NAME:		
TITLE:		
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PHONE NUMBER:		_
MAILING ADDRESS:		_
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SECONDARY CONTACT FOR ADMINISTRATIVE ISSUES

	(Note: All verbal and written communications	will be in English)
NAME:		
TITLE:		
E-MAIL ADDRESS:		
PHONE NUMBER:		
MAILING ADDRESS:		
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CITY:		
COUNTRY:		
	SECONDARY CONTACT FOR INVOICING/BILL	ING/PAYMENT
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TITLE: E-MAIL ADDRESS: PHONE NUMBER: MAILING ADDRESS:	(Note: All verbal and written communications	

EXHIBIT C

Mark	Country
AHAM VERIFIED Reg. No. 4478903	USA
AHAM VERIFIED Reg. No. 4478902	USA
AHAM VERIFIED Reg. No. 4467623	USA
CADR Mark Reg. No. 013728134	German (European Union)
CADR Mark Reg. No. 013728167	English (European Union)
AHAM Verifide Reg. No. 013728118	European Union
AHAM Verifide Reg. No. 013728191	European Union
AHAM Verifide Reg. No. 5796527	Japan

AHAM Verifide Reg. No. 5796526	Japan
CADR English Reg. No. 5796528	Japan
CADR Japanese Reg. No. 5796529	Japan
AHAM Verifide Reg. No. 17153947	China
AHAM Verifide Reg. No. 17163946	China
AHAM Verifide Reg. No. 17153945	China
AHAM Verifide Reg. No. 17163944	China
AHAM Verifide Reg. No. TMA999381	Canada
AHAM Verifide Reg. No. TMA1001421	Canada
CADR Energy Tested English Reg. No. TMA1006649	Canada

CADR Energy Tested French Reg. No. Canada TMA1006646

CADR English Reg. No. Canada

TMA1006648

CADR French Reg. No. Canada

TMA1006647

APPENDIX C: AHAM AIR CLEANER CERTIFICATION PROGRAM CHALLENGE REQUEST FORM

Date of Request:

Brand Name:	Model Number:	
Manufactured By:	Manufactured For:	

Reason for Challenge (check all t	t apply): Required Information for Su	ubmittal
CADR	Reason for challenge	
	Test data or calculations to suppor	rt challenge

Licensee Approval:	
AHAM Approval:	
Laboratory Approval:	

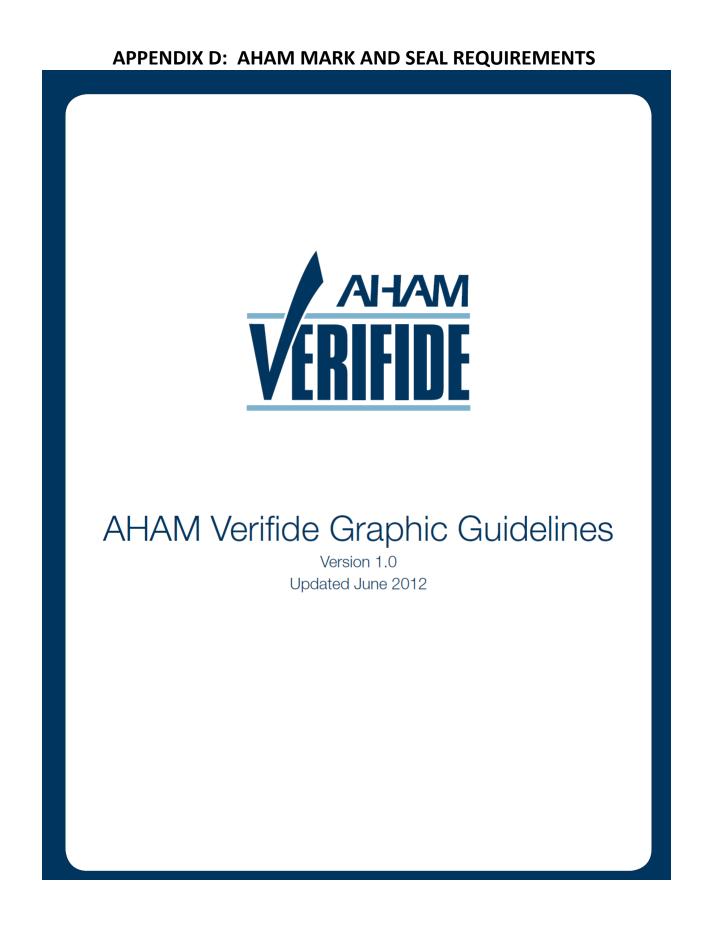


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CADR Seal

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LOGO GUIDELINES

AHAM Verifide Logos



Core Logo

Independently Tested. Consumer Trusted.







Contained Logo

Basic Design & Usage

The AHAM Verifide Mark is issued to only licensees in AHAM Verification Programs and is used to signify that the specific program attributes (performance, volume, and/or energy) have been certified accurate by the manufacturer and verified by AHAM in conjunction with the appropriate test procedures. To maximize its impact, the AHAM Mark must appear consistently and legibly as required by each specific Program. At the manufacturer's option, the AHAM Mark may appear in a licensee's product literature, website, or other promotional materials, and in advertising.

The word "Verifide" in the AHAM Mark is a coined term combining the words verified and bonafide, two words that capture what it means to offer trustworthy and accurately rated products.

The logo itself consists of the core AHAM wordmark coupled with a type treatment for the word "Verifide." The "V" in the word "Verifide"

is treated as a check mark, quickly signifying that the product that bares this Mark is eligible for ongoing random testing through the AHAM Verification Program.

In addition to the core AHAM Mark, there is also guidance in this document on the AHAM Mark with tagline (see page 9 for details) and a version of the AHAM Mark reversed out of a color (see page 8 for details).

Licensees will note that AHAM is providing flexibility to choose from the color options provided and the optional containment of the logo based on the application. Because each of AHAM's Verification Programs has unique requirements, please refer to page 4 for details on the acceptable size and location requirements.

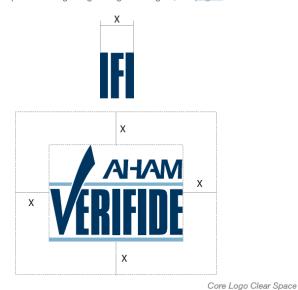
Licensees should refer to each Program's Procedural Guide for additional guidelines and requirements about advertising and claims.

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Clear Space

A clear space tolerance has been established around the AHAM Verifide Mark to protect its integrity on marketing materials and on other applications. The clear space ensures that the AHAM Mark is never visually dominated by other elements. It should be kept clear of all type, graphic elements, and imagery whenever possible.

The clear space is defined in relation to the size of the "Verifide" wordmark. It is equal to 1x the width of the letters "IFI." The same clear space rule applies when using the contained version of the logo. For clear space rules regarding the logo with tagline, see <u>page 9</u>.



In instances where space is limited, the clear space for all logos is defined by the width of the letter "I" in the word "Verifide." This ensures that the logo is reproduced as large as possible while still maintaining clearance from other elements.

Please note, clear space does not mean white space. The logo can be reproduced on a light-colored background that complements the logo color, but must be a significantly lighter tone than the lightest color of the logo.







Contained Logo Clear Space

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Minimum Size & Location

The practical requirement of any logo is that it can be clearly seen and maintains legibility without altering the proportions or composition. The minimum size established for the AHAM Verifide Mark is based on its width. Both the core version of the logo and the contained version of the logo should not be reproduced at less than .5" in width.

Further, each AHAM Verification Program has unique size and location requirements as follows:

AHAM Refrigerator, Refrigerator–Freezer, and Freezer Verification Program

Licensees must incorporate the AHAM Mark on the rating label of the Refrigerator, Refrigerator–Freezer, or Freezer. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and the Mark must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.

AHAM Clothes Washer Verification Program

Licensees must incorporate the AHAM Mark on the rating label of the Clothes Washer. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.

AHAM Dishwasher Verification Program

Licensees must incorporate the AHAM Mark on the rating label of the Dishwasher. If the AHAM Mark cannot fit on the rating label, it may be permanently affixed adjacent to the rating label. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. An example of the nameplate is included below.



Example of Core Verifide Logo on Nameplate



Example of Contained Verifide Logo on Nameplate

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AHAM Room Air Conditioner Verification Program

Licensees must display the AHAM Mark on the product packaging of each unit marketed as a Room Air Conditioner. The AHAM Mark may also appear, at the licensee's discretion, on the Room Air Conditioner itself or in product literature and advertising. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. Where the Mark appears on the packaging, it should be placed on a prominent panel on the packaging and shall not appear on the bottom of the retail packaging. If the manufacturer elects to display the Mark on the product, it should appear in a location that is visible without having to remove grills or covers.

AHAM Dehumidifier Verification Program

Licensees must display the AHAM Mark on the product packaging of each unit marketed as a Dehumidifier. The AHAM Mark may also appear, at the licensee's discretion, on the Dehumidifier itself or in product literature and advertising. The size of the AHAM Mark shall be no smaller than 0.5" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. Where the Mark appears on the packaging, it should be placed on a prominent panel on the packaging and shall not appear on the bottom of the retail packaging. If the manufacturer elects to display the Mark on the product, it should appear in a location that is visible without having to remove grills or covers.

AHAM Room Air Cleaner Verification Program

Licensees must display the AHAM Mark on the front panel of the product packaging, and the AHAM Seal also must appear on the packaging of each unit marketed as a portable electric Room Air Cleaner. The AHAM Mark or the AHAM Seal may also appear, at the licensee's discretion, on the air cleaner itself or in product literature and advertising. The size of the AHAM Mark on the front of the product packaging must be no smaller than 1.0" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines. The size of the AHAM Seal on the side of the product packaging must be no smaller than 3.0" in width, and must be proportionate and in accordance with all other graphic specifications detailed in these guidelines.

Unacceptable Uses

In order to build a consistently favorable perception of the AHAM Verifide Mark, it is essential that the Mark be used correctly. This page illustrates some incorrect uses of the Mark:



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Color Reproduction

The AHAM Verifide Mark should be reproduced in the approved Pantone colors or their CMYK process equivalents, which are shown below. For on-screen applications, in PowerPoint or on the Web, the RGB color breakdown should be used. For print applications of only two or three colors, the Mark should be reproduced in the AHAM Navy Blue (Pantone 7463) and AHAM Light Blue (Pantone 550). In instances where only one color printing is available (such as on a rating nameplate), there are several acceptable versions of the Mark that may be used depending on the printing specifications.



Color Matching

1 Pantone Color With Tint

1 Pantone Color No Tint

When producing the logo in print, always match the color printed by the vendor to the color breaks on the right (also for visual reference, check against a current Pantone book). This will ensure that the logo is reproduced consistently across all materials.

Spot Color	Process/CM	′ к	On-screen/F	RGB
AHAM Navy Blue	AHAM Navy	Blue	AHAM Navy	Blue
 Pantone 7463 	 Cyan 	100	• Red	0
	 Magenta 	43	 Green 	53
AHAM Light Blue	 Yellow 	0	 Blue 	95
 Pantone 550 	 Black 	65		
	AHAM Light	Blue	AHAM Light	t Blue
	 Cyan 	38	 Red 	126
	 Magenta 	4	 Green 	176
	 Yellow 	0	 Blue 	204
	 Black 	19		

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Knock-Out Versions

The AHAM Verifide logo may be reproduced in white in cases where it appears on a field of color. When printing a knock-out version of the logo, it must appear on a shade with a tonal value greater than 40% black for optimal contrast. The AHAM Light Blue may be used on the knock-out version of the logo only if the tonal value of the color behind it is greater than 60%. Below are examples of acceptable uses for the knock-out logo. Only the core logo or core logo with tagline should be used as a knock-out logo. The contained version of the logo should not be reversed and used as a knock-out logo.



Logo on AHAM Navy Blue With Accent Color



Logo on 100% Black With Accent Color



Logo on 60% Black With Accent Color



Logo on AHAM Navy Blue Without Accent Color



Logo on 100% Black Without Accent Color



Logo on 40% Black Without Accent Color

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Basic Design & Usage

The AHAM Verifide tagline is "Independently Tested. Consumer Trusted." The words "Independently Tested" are set in "Trade Gothic." The words "Consumer Trusted" are set in "Trade Gothic Bold No. 2" for added emphasis. The tagline should be set in AHAM Navy Blue.

The tagline should be used whenever feasible in marketing promotions or collateral materials. Its proportions and placement should not be altered in any way. Be sure to follow the unacceptable uses outlined on page 10.

There are vertical and horizontal versions of the logo and tagline lock-up. The horizontal treatment is the preferred layout; however, the vertical version may be used in instances where the horizontal space is limited. The tagline is only for use with the core logo. It should not be used with the contained version of the logo.

When used in body copy, always bold the words "Consumer Trusted."

The tagline may be separated from the logo and used as an independent design element. When moving the tagline away from the logo, it must appear on the same communication piece as the logo and in proximity to the logo so it always shows a connection. Adhere to all of the same rules as the full version of the logo with tagline.



Independently Tested. Consumer Trusted.

Logo with Tagline - Horizontal



Independently Tested. Consumer Trusted.

Logo with Tagline - Vertical

Minimum Size

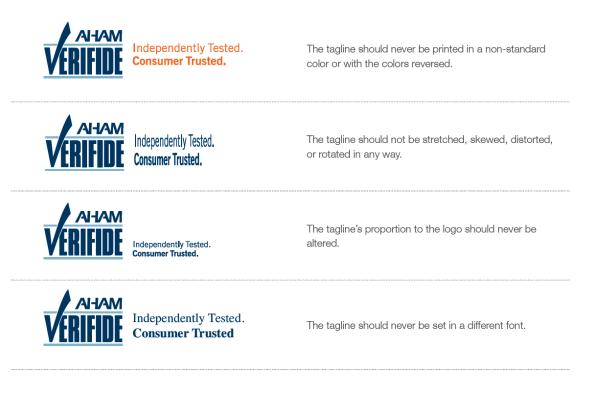
The practical requirement of any logo is that it can be clearly seen and maintains legibility without altering the proportions or composition. The minimum size established for the AHAM Verifide logo with the tagline is based on its width. The horizontal version of the logo with tagline should never be reproduced smaller than 1.25" wide. The vertical version of the logo with tagline should never be reproduced smaller than .685" wide.

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AHAM Verifide Graphic Guidelines > Tagline > 9

Unacceptable Uses

In order to build a consistently favorable perception of the AHAM Verifide wordmark with tagline, it is essential that the logo be used correctly. The logo should follow all of the unacceptable uses outlined on <u>page 6</u>. This page illustrates some additional incorrect uses specifically for the logo with tagline:



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AHAM Verifide Graphic Guidelines > Tagline > 10

CADR SEAL

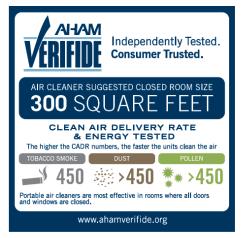
Basic Design & Usage

The AHAM CADR Seal is comprised of the AHAM Verifide Mark along with basic CADR information for a product. There are two main versions of the AHAM Seal, one for "Clean Air Delivery Rate Tested" products and one for "Clean Air Delivery Rate & Energy Tested" products. In addition to these two versions, there are various color versions available for use to match your printing process (see page 12). For placement of the AHAM Seal on packaging, see page 4. When using the AHAM Seal, you will need to enter the appropriate values for square footage, tobacco smoke, dust, and pollen. If the values for dust or pollen are over 450, use the > symbol in front of the number.

NOTE: In order to edit the label, you will need Adobe Illustrator CS3 or higher. You will also need the font "Trade Gothic" installed on your computer. This font is included in the graphic files.



Clean Air Delivery Rate Tested Label



Clean Air Delivery Rate & Energy Tested Label

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AHAM Verifide Graphic Guidelines > CADR Seal > 11

Color Versions

The AHAM CADR Seal may be reproduced in 4-color process (CMYK) or 1-color process (Black).



4-Color Label



1-Color Label (Black)

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AHAM Verifide Graphic Guidelines > CADR Seal > 12

APPENDIX E: EXAMPLE OF PROGRAM PRODUCTION SURVEY

CONFIDENTIAL

AHAM ROOM AIR CLEANER PROGRAM PRODUCTION SURVEY

DATE:	July 1, 2019
TO:	Room Air Cleaner Certification Licensees
FROM:	Randy Cooper, Vice President, Technical Operations and Standards
CA:	Charles Samuels
RE:	CERTIFIED PRODUCTION SURVEY
ACTIONS	Confirm receipt to AHAM (<u>amartin@aham.org</u>) upon receipt.
REQUESTED:	(2) Complete and return to AHAM (<u>accounting@aham.org</u>) by <u>July 31, 2018</u>

The AHAM Room Air Cleaner Certification Program requires that Licensees in the program complete a Certified Product Survey annually so that certification fees for the upcoming calendar year (2020) can be accurately determined. The information provided in the survey is kept strictly confidential within AHAM.

Attached is a certified survey form to be completed with your <u>actual</u> **certified sales volume** in U.S. Dollar value of Room Air Cleaners shipped for the twelve-month period of July 1, 2018 through June 30, 2019. The dollar value sales volume for all models included in the AHAM program, the packaging of which is required to bear the AHAM Verifide Mark, regardless of the individual country of sale, are required to be included in this accounting. Licensees that have completed their first year of participation (and payment of the 1st year Initiation Fee) will be invoiced at the beginning of the **2020** program year based on the fees shown on the attached survey form.

Please note the "Officer Verification" required on the attached form. An officer of each participating company should verify all figures reported to AHAM Certification Programs for accuracy and completeness.

As indicated on the INSTRUCTIONS form (page 2), please

- 1. Confirm receipt of this form to Angela Martin (amartin@aham.org) upon delivery; and
- Complete and return the enclosed confidential survey and Officer Verification (pages 3 5) by July 31, 2019 to AHAM's Accounting Department at <u>Accounting@aham.org.</u>

It is very important that the survey be returned by this due date. If the survey is not returned in a timely manner, it may be necessary for AHAM to remove the Licensee's certified model data from the Directory of Certified Room Air Cleaners.

If you believe that the survey should be submitted to someone else within your organization, please forward the survey to that individual and notify Angela Martin via e-mail at <u>amartin@aham.org</u> immediately. Thank you for your cooperation.

INSTRUCTIONS

- 1. Confirm receipt of this production survey to Angela Martin via e-mail at <u>amartin@aham.org</u> upon receipt.
- 2. Review instructions and Guidelines.

- 3. Fill out Certified Production Survey Form by country as described on the form.
- 4. Review Billing Information.
- 5. Have an officer execute the Officer Verification Form.
- 6. Return Certified Production Survey Form and Officer Verification Form to:

E-MAIL: <u>accounting@aham.org</u> (scan and send) AHAM Accounting Department Association of Home Appliance Manufacturers 1111 19th Street N.W., Suite 402 Washington, D.C. 20036 FAX: (202) 872-9354

GUIDELINES FOR OUTSOURCED CERTIFIED UNIT PRODUCT REPORTING

Please use the following guidelines to determine which entity involved in an outsourcing agreement is responsible for reporting and ensuring payment of the certification fees.

- 1. If a Licensee buys products from another Licensee, the purchasing licensee is responsible for the resulting certification fees and must therefore include the outsourced units in its own dollar value sales production figures (i.e., count the outsourced units as their own production). See attached list of licensees.
- 2. If a Licensee buys products from a non-licensee, the Licensee is responsible for the resulting certification fees and must therefore include the outsourced units in its product figures (i.e., count the outsourced units as their own production).
- 3. In the case of an alternative arrangement (i.e., selling licensee agrees to pay the certification fees), the purchasing licensee has the ultimate responsibility of ensuring the outsourced product production data is properly reported and certification fees are paid.

BILLING INFORMATION

- The Certification Participation fee will be divided by four and invoiced at the beginning of each quarter in the calendar year.
- AHAM Member Licensees will be invoiced in January for testing for calendar year 2020 in the amount of \$1,442¹ per basic model times 33 % (sampling rate) then quarterly for the participation fee with total calculation shown on page 4 in #5, *calculation of total fees*.
- At the conclusion of the program year, the actual test fees incurred will be reconciled to the estimated test fees in the production survey. Any difference in test fees will be invoiced to the participating company if great than the estimate or refunded to the participating company if less that estimated.

¹ The fee shown reflects the current fee for the Basic Model. 2020 fees are subject to change based on actions of the division Board of Directors.

AHAM ROOM AIR CLEANER CERTIFICATION PROGRAM

DOLLAR VALUE OF SHIPMENTS OF ROOM AIR CLEANERS

CERTIFIED PRODUCTION SURVEY July 1, 2018 - June 30, 2019 <u>REPORT IS DUE July 31, 2019</u> FOR NEW Licensees: RETURN WITH LICENSE AGREEMENT

OPTIONS FOR RETURNING COMPLETED FORMS

Via E-MAIL to <u>accounting@aham.org</u> OR

Via FAX to Accounting Department at FAX No.: (202) 872-9354.

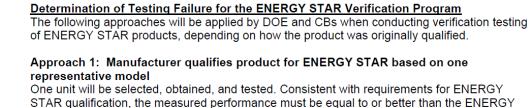
		Send Invoices to:
Company	Name	
Contact Person	Address	
Title		
Phone #	Email:	

Please use the spreadsheet to list the country of sale and sales figures, in US dollars. List each country by name. The Total Sales noted below will auto-calculate and is to be carried over into the worksheet on the following page used to calculate the Participation Fees for the 2020 Program Year.

Country of Sale	Sales Figures (in U.S. Dollars			
U.S.				
Other Country (NAME)				
Total Sales				

APPENDIX F: ENERGY STAR VERIFICATION TESTING

Energy STAR	THIRD PARTY CERTIFICATION IMPLEMEN ENERGY STAR [®] PRODUCTS	TATION
	ENERGY STAR Verification Testing for Certification Bodies - e Sizes and Determining Testing Failures (Non-Lighting Products)	DIRECTIVE NO. 2011-04 Date: 5/09/2011
Agency qualifie progran to conti product More in	Interpretation rd-party certification requirements put in place by the U.S. Environmer r (EPA) for ENERGY STAR products include provisions for verifying th d products through verification and challenge testing. In conjunction w in being run by certification bodies (CBs), The U.S. Department of Ene nue to operate a parallel, targeted verification testing program for ENE is that also evaluates how models comply with Federal energy conser formation on DOE's program is available at ww1.eere.energy.gov/buildings/appliance_standards/.	ne performance of rith the verification ergy (DOE) intends ERGY STAR
the unit establis expecta testing categor specific sample certified qualifica	ners who rely on the ENERGY STAR label in making a purchase deci they purchase will meet ENERGY STAR requirements. EPA has trad shed program testing requirements with the intention of fulfilling that co ation and ensuring that all units of a qualified model, irrespective of ma variability, meet the ENERGY STAR performance requirements. For of ries currently subject to Federal energy conservation standards, the El cation has allowed for testing consistent with DOE standards, which re comprised of no less than two units, and using statistical methods to d rating of each basic model. Recognizing this variation in sample size ation, EPA and DOE are proposing that products will be tested for pur tion consistent with how they were tested for purposes of qualification g approaches:	litionally onsumer anufacturing and certain product NERGY STAR quire testing a determine the e approach for poses of
2.	If a product was qualified based on a single test, which ENERGY S require for products not subject to Federal energy conservatio verification testing will involve a single test. ¹ If a product was qualified based on multiple test samples, (e.g., pe sampling plan associated with Federal energy conservation standard will be procured at once for verification testing. A spot check will be first unit. If the test result of the spot check fails by 5% or more, the a be tested and statistical methods applied to the results for purpose failure.	n standards, then er DOE certification ds ²), then four units e performed on the dditional 3 units will
regardii respect	failures will be referred to EPA for further consideration and a final de ng ENERGY STAR compliance. Testing failures that indicate a potent to Federal energy conservation standards will be referred to DOE for ent with DOE's sampling plans for enforcement testing of products as 9.	ial issue with further testing
individua ² Approa ENERG	ch 1 will apply if multiple tests are required to determine qualification, but all ally meet the ENERGY STAR requirements (e.g., displays, imaging equipme ach 2 may also apply to products not subject to Federal energy conservation Y STAR specification allows for and the manufacturer chooses to qualify a p al combination of tests on multiple units.	nt). standards if the



STAR specification requirements.

 $Consumption_{Test} \leq ESTAR$ consumption specification

$Efficiency_{Test} \ge ESTAR \ efficiency \ specification$

Approach 2: Manufacturer qualifies product for ENERGY STAR based on multiple test samples

Four units will be selected and obtained at once. One unit will initially be tested for a spot check. If the tested unit fails to meet the requirement by less than 5% of the applicable ENERGY STAR specification, no further tests will be conducted and the model will be considered to meet ENERGY STAR requirements. If the measured performance is not within this range, the three additional units will be tested immediately. In this case, manufacturers shall not be notified of the spot check test results until all four units are tested, at which time a testing failure can be determined.

Test results from the four units will be used to determine if the model meets the ENERGY STAR specification. DOE may also use these results for evaluation of compliance with Federal energy conservation standards.

The following will be calculated on the sample of four units:

Mean (<i>x</i>)	$x = \frac{1}{n} \left(\sum_{i=1}^{n} x_i \right)$	 n = 4 (number of units tested) X_i = measured energy efficiency or consumption from test i
Standard Deviation (<i>s</i>)	$s = \sqrt{\frac{\sum_{i=1}^{n} (x_i - x)^2}{n - 1}}$	
Standard Error (<i>s_x</i>)	$s_x = \frac{s}{\sqrt{n}}$	
Lower Confidence		EES = energy efficiency specification or standard
Limit (LCL)	$LCL = EES - ts_x$	<i>t</i> = 3.182 (97.5% one-sided student's t statistic for a sample size of 4)
Upper Confidence Limit (UCL)	$UCL = ECS + ts_x$	ECS = energy consumption specification or standard
5% tolerance on LCL	LCL(0.05) = 0.95 * EES	
5% tolerance on UCL	UCL(0.05) = 1.05 * ECS	

For an energy efficiency specification, the *LCL* and *LCL*(0.05) are compared, and the greater value is compared to the mean (x). The model meets the ENERGY STAR specification if the sample mean is equal to or greater than the lower control limit.

Mean $(x) \ge LCL$ or LCL (0.05), whichever is greater

For an energy consumption specification, the *UCL* and *UCL*(0.05) are compared, and the smaller value is compared to the mean (x). The model meets the ENERGY STAR specification if the sample mean is equal to or less than the upper control limit.

 $Mean(x) \leq UCL \text{ or } UCL(0.05), which ever is smaller$

Consequences of Testing Failures

CBs are required to report testing failures to EPA within 2 days of determining a testing failure. EPA will then notify the manufacturer and provide 20 days for a written response. This may include the submission of additional relevant information to EPA. EPA will review submitted information from the manufacturer and determine if any additional evaluation is necessary. Where applicable, EPA will consult DOE regarding the appropriate application of test methods.

EPA will provide additional time to resolve questions of potential non-compliance as appropriate. If a decision is made to disqualify the product, the manufacturer will be required to discontinue labeling of the product and institute other corrective actions as directed by EPA.

Relationship to Enforcement of Federal energy conservation standards

If verification testing performed in support of the ENERGY STAR program suggests that a model is not compliant with Federal energy conservation standards, DOE will proceed in accordance with 10 CFR Part 429, as appropriate.

Relationship to Enforcement of DOE Certified Ratings

If verification testing performed in support of the ENERGY STAR program suggests that the test data do not support the DOE certified rating, DOE will proceed in accordance with 10 CFR Part 429, as appropriate.

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