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January 30, 2014

Ms. Brenda Edwards
U.S. Department of Energy
Building Technologies Program, EE-2J
Proposed Determination for Hearth Products
EERE-2013-BT-DET-0057
1000 Independence Avenue, S.W.
Washington, D.C. 20585-0121

Re: Proposed Determination of Coverage
Docket No. EERE-2013-BT-0057

Dear Ms. Edwards:

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) is the trade association representing manufacturers of air conditioning, space heating, water heating and commercial refrigeration equipment. AHRI's 315 member companies include many of the major manufacturers of gas-fired direct heating equipment (vented and vent-free) doing business in the U.S. We submit the following comments in response to the Proposed Determination of Coverage issued in the December 31, 2013, Federal Register. The notice identified four issues on which DOE seeks comments. Following our general comments, we address those issues in the order in which they were listed in the NOPR.

General

There is a paragraph in the DOE notice which exemplifies our basic concern with this proposed determination of coverage. In the section "Current Rulemaking Process" it is noted that DOE had conducted a rulemaking on energy conservation standards for vented hearth heaters. It further notes that the DC Circuit Court invalidated that rule and vacated the definition of "vented hearth heater." The next paragraph states that vented hearth heaters are no longer covered products as a result of the Court ruling. DOE appears to be citing this situation as justification for its action to consider establishing this new category of covered product. The resolution of the current situation regarding the regulation of gas-fired vented hearth heaters does not require any special determination such as proposed in this notice and it does not justify this action.

In the February 8, 2013 decision issued by the DC Circuit Court, it is specifically noted that DOE could define Direct Heating Equipment (DHE) to encompass gas fireplace heaters without first classifying fireplace heaters as a new covered product (footnote 8 page 13). This is contrasted by the last sentence on page 20 of the decision: "If the Department still wishes to regulate decorative fireplaces, it must do so through the EPCA's catch-all provision, § 6292(a)(20)." The Court's ruling makes it clear that DOE

could cover gas-fired vented hearth heaters through a rulemaking to add that product to the definition of vented DHE. A proposed determination of coverage is unnecessary for this product. We must note that up to the NOPR stage of the 2010 revised efficiency standard final rule, it was our understanding that DOE was proposing to cover gas-fired vented hearth heaters precisely as the Court noted.

DOE should be clear on its intent. If its objective is to regulate gas-fired vented hearth heaters, then that activity should be a separate rulemaking within the context of DHE covered products. If its objective is to regulate gas-fired decorative appliances, then DOE must go through the process of establishing the determination of coverage specifically for those products.

The notice provides a brief mention of DOE's intent of developing test procedures and minimum efficiency standards for this new class of covered product. We request that DOE provide more information on its plans for this activity. Specifically, we would like to know the schedule for completing this determination? Also, what is the schedule for developing an efficiency test procedure for hearth products and what is the schedule for developing a minimum efficiency standard for hearth products?

Issues on Which DOE Seeks Comment

Definition(s) of "hearth product";

The actual text of the definition of "Hearth products" is innocuous. The subsequent explanation that "this proposed includes (but is not necessarily limited to) all vented and unvented hearth products. More specifically, it includes vented decorative hearth products, vented heater hearth products, vented gas logs, gas stoves, outdoor hearth products, and ventless hearth products." is inconsistent with this definition and troublesome. We cannot read the proposed definition in any way that supports a conclusion that it includes all the types of products noted by DOE. Two of the types, gas vented heater hearth products, and gas ventless hearth products, are heating appliances that should not be grouped with gas decorative appliances. There is no need to go through this formal determination of coverage process to establish gas vented and gas ventless heaters as covered products.

As the definition of vented home heating equipment indicates, the products are designed to provide heat (i.e., warm air) to the living space. That is the primary purpose of their design and function. There is no option that gas-fired vented hearth heaters "may provide space heating." Thus these products do not fit the definition of hearth products as proposed by DOE.

Lacking any further clarification in the notice, we understand ventless gas hearth products to be gas-fired vent-free heaters; at least insofar as it describes units installed indoors. These products are already a covered product, identified as unvented home heating equipment by current DOE regulations. Also, DOE regulations have included a test procedure for unvented home heating equipment (Part 430, Appendix G to Subpart B) since 1978. Although vent-free gas logs are designed to simulate a wood fire, these products are not the same as decorative gas logs that are installed in a vented fireplace. There is only one Z21 safety standard for gas unvented heaters; ANSI Z21.11.2, American National Standard for Gas-Fired Room Heaters, Volume II, Unvented Room Heaters." This standard applies to all gas fired, unvented

heaters used indoors, regardless of the appearance of the heater. As in the case with vented home heating equipment, these products are designed to provide heat to the space. From the perspective of nationally recognized appliance safety standards and building codes, there is no such thing as an unvented, decorative gas appliance that is not a room heater. Therefore, the establishment of “hearth products” as a new category of covered products should not include unvented gas fired heaters or, as the notice identifies them, ventless hearth products.

“Whether classifying hearth products as a covered product is necessary or appropriate to carry out the purposes of EPCA”;

The answer to this question cannot be provided until DOE establishes a correct definition for hearth products and provides clear, detailed information on their energy consumption.

“Calculations and values for average household energy consumption of hearth products”;

The information and calculations provide on the estimated consumption of hearth products is incomplete and confusing. The difference in estimated annual operating hours between vented heaters and vented decorative appliances is insufficiently analyzed. The referenced HPBA study only addresses vented heater and vented decorative hearth products. Since unvented heaters are an existing covered product which should not be part of this analysis, there is no need to estimate the annual operating hours of ventless hearth products. Furthermore, since vent free heaters are significantly more efficient than typical vented heaters, a vent free heater does not have to operate as long to provide the same amount of heat to the space as a similar sized vented heater.

Also, DOE cites some shipment information from HPBA, but only mentions percentages without noting the total of those shipments. Consequently, it is difficult to determine how DOE developed the weighted average annual energy use per hearth product. Furthermore, the aggregate national energy use was derived from the EIA 2009 Residential Energy Consumption Survey, but no explanation is provided regarding the correlation of industry shipment data and estimates of the overall number of installed products in the U.S. Without this information we cannot assess whether DOE has properly distinguished between existing covered products (i.e. vented heaters and vent free heaters) and the products that would be included in the new covered product category of hearth products.

The calculations do not account properly for the fundamental difference between how vented heaters and vented decorative appliances are operated. As in the case with central heating equipment, the primary factor affecting the operation of vented heaters is weather. If it is cold outside, the product is expected to operate to provide heat. In the case of space heaters, the operation of the equipment is affected by a secondary factor. That factor is the occupancy pattern (i.e. frequency, duration, and time of day) of the space in which the heater is installed.

In contrast, the use of decorative gas hearth products may be influenced by the weather but the more likely influencing factor is the desire of the occupant. These products are operated when the occupant wants to enjoy the ambience of the simulated solid fuel fire. This may occur more often in the heating

season but it does occur at other times of the year too. Furthermore, the total time of operation during any one usage period will differ from a vented heater, which will operate based on providing a desired level of comfort in the space. Decorative hearth products will be operated as long as the occupant(s) want to enjoy the simulated wood fire.

This notice also attempts to address outdoor hearth products. To our knowledge, there have been no studies characterizing the average annual use of an outdoor hearth product. A comparison of the basic installation conditions of indoor and outdoor units would establish clearly that these products do not have the same usage patterns. The analysis of these outdoor products is further flawed by DOE's lack of any attempt to distinguish products used in residential outdoor applications from those used in commercial outdoor applications.

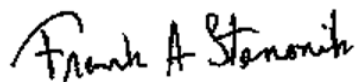
In estimating the usage and average energy consumption of gas hearth products, DOE must analyze the geographic distribution of these units across the United States. It would be inaccurate to apply national average winter conditions to these products. EIA's 2009 Residential Energy Consumption Survey shows that of the 10 million housing units that use natural or propane gas as a secondary heating fuel, 4 million of those housing units were in the South. This is the largest amount of any single census region. If just natural gas is considered, the Midwest and West regions have the same number of housing units, 1.9 million, using that fuel for secondary heating. This data clearly suggests that the largest percentage of gas hearth products is used in regions of the country (i.e. South and West) that have below average heating seasons.

“Availability or lack of availability of technologies for improving the energy efficiency of hearth products.”

Comments on this issue cannot be provided until DOE establishes a correct definition for hearth products and provides clear, detailed information on their current energy efficiency.

We appreciate this opportunity to provide comments. We trust that DOE will recognize that there are significant issues with this proposed determination of coverage and we recommend that it be withdrawn.

Respectfully submitted,



Frank A. Stanonik
Chief Technical Advisor