

November 5, 2004

Mr. Richard Karney  
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U.S. Department of Energy  
Building Technologies Program  
1000 Independence Avenue, SW  
Washington, DC 20585-0121

**RE: Comments on Proposed Revisions to the Energy Star Clothes Washer Program**

The Department of Energy (“DOE”) has begun the process of examining the Energy Star criteria for its clothes washer program to address changes in the federal minimum efficiency standards which will take effect on January 1, 2007. As stated in its Market Impact Analysis<sup>1</sup> the goals of this revision are to provide differentiation between Energy Star qualifying products and those meeting the federal minimum standard; provide an economic rationale for consumers and others to invest in Energy Star promotions; and to examine ways in which water savings could be included in the Energy Star clothes washer program. Changes to the program could have a significant effect on AHAM member companies, and as such, we are providing these comments for your consideration.

The Association of Home Appliance Manufacturers (“AHAM”) is a not-for-profit trade association representing manufacturers of major, portable and floor care home appliances, and suppliers to the industry and is headquartered in Washington, D.C.

**I. WATER USE LABELING – GENERAL COMMENTS**

AHAM recognizes the importance of water conservation and the desire to educate consumers and provide them with information on water-use in appliance products. Our manufacturers are strong supporters of the Energy Star program and as its principal marketer, we are crucial to the continued success of the program. We note that the Energy Star program has shown considerable market penetration in recent years and this success could possibly be transferable to water usage. However, it is of the utmost importance that a program be based on accurate and relevant engineering and economic

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<sup>1</sup> Market Impact Analysis of Potential Changes to the Energy Star® Criteria for Clothes Washers, August 6, 2004 (the “Market Impact Analysis”)

considerations. We believe that DOE must do more analysis to shape an effective and appropriate program.

Most importantly, if there is to be a voluntary water-use labeling program for clothes washers AHAM believes that the DOE is the most appropriate agency to manage it. DOE has extensive expertise and knowledge of clothes washer products and is clearly the best suited to manage a program.

As a threshold matter, we must also note that as an industry association, AHAM has no position on what the possible qualifying Water Factor ("WF") or Modified Energy Factor ("MEF") levels that the DOE should choose for the Energy Star clothes washer program criteria. Our role is simply to ensure that the Department conduct a sound analysis and use accurate data in making its determination.

## **II. WATER FACTOR AND THE ENERGY STAR CLOTHES WASHER PROGRAM**

If DOE is to consider the addition of a Water Factor to its Energy Star Clothes Washer Program, that decision must be based on an evaluation of the impact of water in the totality of the system of clothes washing. In that context, consumers would need to understand the trade-offs inherent in more water efficient products, including product utility, performance, hygiene issues related to using less energy (usually accompanied by lower water temperatures) and less water. We urge DOE to give careful consideration to the performance/utility issue.

We believe it is essential that consumers understand that cleaning and rinsing ability can be seriously impacted depending upon the amount of water that is used to clean clothes. This can be an issue for many conventional machines as well as for new technologies since proper rinsing is essential for good performance. We must note that progress has been made in developing detergents that clean better at lower water temperatures. This (together with higher spin speeds) has allowed for steady and significant improvements in MEF efficiency levels.

However, the path to lower Water Factor levels is not nearly as straightforward since adequate water for rinsing is needed to remove detergent, distribute fabric softener (used by 70% of consumers) and fully flush particulates and soil from the clothes load (detergent build-up over time, due to inadequate rinsing, leads to yellow, "dingy" looking clothes). This is especially true for large, heavily-soiled loads and can lead to consumer's re-washing or re-rinsing, which results in more water use.

We must also note that ASTM Committee on Detergents (D-12) held a special seminar on October 7, 2004 regarding energy and water issues related to clothes washers in which DOE personnel attended. During that seminar, several presenters noted the hygiene issues associated with inadequate rinsing (i.e. the potential for biofilm build up, cross-contamination and the transfer of microorganisms to people). We urge DOE to consider the information provided at this conference.

Since one of the Energy Star criteria prescribe that "qualified models must perform as well or better than other models on the market" DOE must insure that setting low Water Factors for Energy Star qualifying products does not result in promoting machines that do not perform as well as others on the market.

### **III. GAPS IN DOE'S ANALYSIS**

There are significant gaps in the Market Impact Analysis that must be addressed before any changes to the program should be considered. The current analysis that examines potential levels is overly simplistic and does not consider market dynamics or machine performance. In particular, we do not understand DOE's conclusion that an Energy Star criteria at 1.71 MEF would represent 25% of the models currently manufactured, given that the 1.42 MEF level was intended to capture that same percentage. The primary error in DOE's analysis is that it only evaluates the clothes washer models currently available in the Energy Star program, and ignores what is really being offered in the marketplace. Furthermore, this analysis is based on the number of models that meet various efficiency levels, with no consideration of the actual shipments and volume of those sales. We believe that any modifications to the program should not be based on simply the number of models available – market dynamics must be considered (e.g., shipments, "outliers", niche markets, price, etc...)

As such, we have conducted extensive research and collected data from our membership to more accurately examine the characteristics and market for clothes washer products in anticipation of California's petition for exemption from preemption on clothes washers. The results of our research, in the Attachment, identifies the different types of clothes washers<sup>2</sup> and their impact on the marketplace by identifying them by their MEF and WF efficiencies and their relative market share. The results clearly show the implications for setting Energy Star criteria at different energy and water efficiency levels will have an effect on the availability of different types of clothes washers through the program. For instance, if Energy Star were to set its criteria, as suggested, in 2007 at 1.71 MEF and a Water Factor at 10 or lower, our data show that it is likely that it would effectively eliminate conventional Top-Load clothes washers from the program.

In addition, the potential energy and water savings shown in the DOE analysis in Tables 4, 5 and 6 do not take into consideration the savings that will already occur without any adjustment to the current Energy Star level, due to current programs and market forces. The graph showing a regression analysis of WF versus MEF provides information that demonstrates the effect of energy efficiency on water, but must not be used as a means to suggest specific Water Factor levels without considering its effect on other factors. While increasing the energy efficiency of clothes washers via more

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<sup>2</sup> Top Load clothes washers with an agitator (i.e. conventional Top-Load clothes washers); Top-Load clothes washers without an agitator; Top-Load/Horizontal-Access clothes washers; Front-Load clothes washers; and Front-Load clothes washers with a water heater.

Mr. Richard Karney

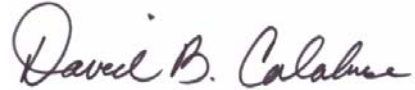
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stringent MEF requirements could result in decreased water usage, however, before DOE establishes individual water factor levels it must consider how such levels would affect platforms, capacity and the possibility that it could drive production off-shore.

We would be pleased to discuss these issues with you in more detail.

Sincerely,

A handwritten signature in dark ink, reading "David B. Calabrese". The signature is written in a cursive style with a large initial 'D' and a stylized 'C'.

David B. Calabrese  
Vice President  
Government Relations

## MEF vs Water Factor

