July 22, 2014

Via E-Mail

Melissa Fiffer  
Product Manager  
U.S. Environmental Protection Agency  
ENERGY STAR Appliance Program  
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Dear Ms. Fiffer:

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to provide our comments on the ENERGY STAR Product Specification for Residential Dishwashers, Eligibility Criteria, Draft 2, Version 6.0.

AHAM represents manufacturers of major, portable and floor care home appliances, and suppliers to the industry. AHAM’s membership includes over 150 companies throughout the world. In the U.S., AHAM members employ tens of thousands of people and produce more than 95% of the household appliances shipped for sale. The factory shipment value of these products is more than $30 billion annually. The home appliance industry, through its products and innovation, is essential to U.S. consumer lifestyle, health, safety and convenience. Through its technology, employees and productivity, the industry contributes significantly to U.S. jobs and economic security. Home appliances also are a success story in terms of energy efficiency and environmental protection. New appliances often represent the most effective choice a consumer can make to reduce home energy use and costs.

AHAM supports EPA and the Department of Energy (DOE) in their efforts to provide incentives to manufacturers, retailers, and consumers for continual energy efficiency improvement, as long as product performance can be maintained for the consumer. We appreciate that EPA removed the performance reporting requirement that it initially proposed in Draft 1. We make further suggestions with regard to EPA’s proposed voluntary reporting requirement below.
I. Qualification Criteria

A. Energy and Water Performance Requirements—Technology Options

EPA indicated that it reviewed the DOE Technical Support Document (TSD) and engaged multiple stakeholders to identify methods available to manufacturers to increase efficiency in compact dishwasher products. EPA highlighted four technology options, including additional insulating materials. EPA indicated that “incorporating additional insulation materials allows the water to retain its heat more effectively, thereby allowing the product to work more efficiently.”

AHAM notes that DOE indicated in the TSD that the baseline compact dishwasher is made of stainless steel with bitumen insulation to improve the unit’s noise performance. The DOE TSD indicates that, though bitumen insulation on steel tubs helps to improve noise performance, it actually increases energy consumption due to the bitumen’s thermal mass. DOE did not list additional insulation as an option DOE believes manufacturers would employ. See TSD, 5-20.

B. Reporting Requirement for Cleaning Performance

In Draft 1, EPA proposed a reporting requirement for cleaning performance. EPA did not identify exactly how it plans to use, analyze, or share the data, but it did state that “[o]nce collected, this data will enable EPA to better understand how cleaning performance varies with energy and water use, providing the necessary information to more fully evaluate cleaning performance, energy and water use concurrently during future specification revisions.” EPA proposed that, due to the variation in the ENERGY STAR test method for determining residential dishwasher cleaning performance, EPA would not post the individual-model cleaning performance scores on the ENERGY STAR qualified products list.

In Draft 2, EPA proposed voluntary performance score reporting in lieu of the previously proposed required performance score reporting. Because AHAM opposed the performance reporting requirement, we thank EPA for removing it. Although a voluntary reporting option is far preferable to a reporting requirement, AHAM remains concerned that the data EPA receives will be of questionable value.

As we previously commented, the utility of data collected using the existing ENERGY STAR test method for determining residential dishwasher cleaning performance will be questionable given the level of variation our round robin testing demonstrated. The scoring results, using the AHAM scoring method, from the round robin AHAM conducted showed a range of two standard deviations (99.5 to 71.4 for the soil sensing unit tested and 94.8 to 83.4 for the non-soil sensing unit tested). It will be difficult to accurately or confidently compare data across manufacturers given the concerns we have raised about reproducibility. It would be preferable for the test procedure to first be tightened before engaging in even voluntary data collection. We understand that the timeline for improving the test procedure would likely be too long to allow for the

\[1\] EPA indicates that it followed up with stakeholders regarding concerns about the test procedure’s repeatability and reproducibility. AHAM’s concerns, however, remain the same and have yet to be addressed. In order to address AHAM’s concerns, the test procedure would need to be revised.
collection of data in time for the next specification revision. Nevertheless, we believe that prior to data collection of any kind, test procedure revision to improve repeatability and reproducibility should at least be considered. In addition, the nature of a voluntary data collection process is that it could be self-selecting.

AHAM is also concerned that EPA still has provided no detail on how it plans to use or analyze the data. EPA simply stated that “it continues to seek a better understanding of cleaning performance as it relates to efficiency to ensure that efficiency gains are not achieved at the expense of performance” and that it “intends to use this data to support future specification setting.” We would like to better understand why EPA seeks to collect performance data on the model level and what, exactly, EPA intends to do with the data it receives. EPA also did not address how it would ensure that the reported data remains confidential—EPA stated only that it would “mask any shared data.” That is not enough information for manufacturers to feel comfortable submitting data. EPA should specify the criteria it will use when sharing data in order to ensure its confidentiality.

Because of these flaws, AHAM continues to believe that it is important that experts, i.e., manufacturers, review and analyze the data in order to decide if it is relevant to determine the connection between energy/water use and performance. Accordingly, AHAM suggests that, if EPA continues to include a voluntary reporting requirement in the specification, it expressly permit data to be submitted by AHAM after being aggregated and de-identified. We note that we would not envision providing this data on an ongoing basis, but rather, if relevant, during the next specification development process. It is possible that EPA has already contemplated this option and that is what it means when it states that manufacturers could submit the data “directly to the ENERGY STAR program.” If so, we appreciate EPA allowing for this flexibility.

Despite AHAM’s opposition to performance criteria in specifications, we wish to be clear that AHAM agrees that EPA should evaluate whether performance will be negatively impacted by any specification levels it proposes. It is important for performance to be maintained as efficiency requirements become more stringent. Although EPA has not proposed to do so in this draft, we reiterate that EPA should not include performance metrics in future specifications. Manufacturers themselves have the most interest in ensuring that consumers receive superior performance, regardless of the energy and water efficiency of the product. It should not be the role of government, particularly in a voluntary program authorized to set energy efficiency criteria, to set performance requirements.

II. Connected Criteria

A. Section 5.G.2

In the Clothes Washer Specification, EPA proposed a simpler approach that requires a clothes washer to reduce its average power draw to no more than a specified, fixed level (in watts) during the load reduction period would offer greater test repeatability as well as reduce test burden. However, EPA did not propose this same language in the Dishwasher Specification in Section 5.G.2 although there are similarities in product cycles that would allow for a similar approach.
AHAM continues to agree with EPA that using a fixed level instead of a percentage from a baseline is a simpler approach. We also agree that it will offer greater test repeatability while also reducing burden during product development and testing. AHAM would like to know if EPA intends to propose this approach with dishwashers as well.

B. Section 5.G.2.c

EPA proposed that upon receipt of a signal requesting a temporary appliance load reduction (TALR) response, except as allowed in 5.G.2.b for sanitization cycle, the product will respond within 60 seconds of the requested start time. But in Section 5.G.2.d, it states that the consumer would be able to override the products TALR response before or during the load reduction period. It appears that these two statements are inconsistent, as it is not clear how the consumer would be able to override the response “before” the load reduction period as outlined by EPA. AHAM would like additional clarification on these two statements in the specification.

AHAM appreciates the opportunity to submit comments on the ENERGY STAR Product Specification for Residential Dishwashers, Eligibility Criteria, Draft 2, Version 6.0 and would be glad to further discuss these matters should you so request.

Best Regards,

Jennifer Cleary
Director, Regulatory Affairs