



1111 19th Street NW > Suite 402 > Washington, DC 20036  
t 202.872.5955 f 202.872.9354 www.aham.org

October 15, 2014

Via E-Mail

Ann Bailey  
Director  
ENERGY STAR Product Labeling  
U.S. Environmental Protection Agency

appliances@energystar.gov

Re: ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria, Dishwashers

Dear Ms. Bailey:

On behalf of the Association of Home Appliance Manufacturers (AHAM), I would like to provide our comments on the Environmental Protection Agency's (EPA) ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria, Draft 2, regarding cleaning performance requirements for residential dishwashers (Oct. 3, 2014).

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. But, AHAM remains concerned that EPA continues to establish Most Efficient criteria in a way that is not sufficiently transparent, supported by data, consistent with EPA's Guiding Principles for the ENERGY

STAR program, or consistent with actions it has taken with regard to its baseline specifications, thus resulting in actions that could be deemed arbitrary and capricious.<sup>1</sup>

EPA stated in its initial proposal that there is a “higher risk of trade-offs between energy savings and performance at these high efficiency levels” as its rationale for including a minimum per cycle Cleaning Index. But EPA presented no data to support its conclusion that there is a higher risk of trade-offs between energy savings and performance at the levels it proposed. Although it may be true that as efficiency increases, good cleaning performance is more difficult to achieve, EPA did not demonstrate that the models meeting the proposed levels suffer from performance deficiencies. Nor did EPA indicate that stakeholders have presented data-driven information indicating that the proposed levels would cause a cleaning performance-related concern. In short, EPA has presented nothing to support its bald assertion that the proposed levels risk a trade-off between energy savings and performance. And, therefore, EPA has not demonstrated a need for a cleaning performance reporting requirement or minimum per cycle cleaning index scores.

We understand that EPA views the Most Efficient program as a “proving ground,” and, thus, sometimes uses it to test new ideas. But adding a minimum cleaning performance requirement as a “test” will not help EPA gain the information it needs, nor will it “prove” anything. It will not tell EPA what consumers deem acceptable. It will not prove whether or not a minimum cleaning performance requirement is necessary. It will not, without the associated data collection (which can be done independently of a cleaning performance requirement), help EPA understand the relationship between energy/water savings and performance. Accordingly, we urge EPA not to pursue the cleaning performance metric in the Most Efficient program. EPA should, instead, be consistent with its proposal for the dishwasher specification and, at most, include a voluntary cleaning performance reporting requirement.

EPA proposed cleaning performance floors for all three test cycles. To develop these proposed levels, EPA used data from the development of the ENERGY STAR cleaning performance test procedure for dishwashers, “as well as other data recently made available to EPA.” EPA has not identified the sources for the “other data,” though we understand it to be confidential information from manufacturers from their general experience, not empirical data. In our view, the data from the test procedure development is not relevant to setting a floor. Although a range of products were tested during that test procedure development, there is no way to know if those models were representative of what manufacturers might include in the Most Efficient program. And that data was not intended to aid in setting a metric—it was simply aimed at developing a test procedure. Thus, in AHAM’s view, EPA has presented insufficient (if any) data to support its proposed minimum scores for each of the three cycles. Moreover, AHAM raised issue with the proposed minimum score for the heavy cycle, and EPA has done nothing to address those comments. Accordingly, we reiterate those comments here (and, to large extent, these comments also apply to EPA’s proposed levels for all three cycles):

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<sup>1</sup> Note that AHAM is not commenting on whether or not dishwashers should be included in the Most Efficient program. We expect that our member companies will provide individual comments on that point.

EPA proposed a minimum per cycle Cleaning Index of 70 for the heavy test cycle as assessed under the ENERGY STAR Test Method for Determining Residential Dishwasher Cleaning Performance (Rev. Feb-2014). Yet again, EPA presented no consumer data indicating the minimum level of cleaning performance consumers find acceptable. It does not appear EPA has even considered that. Nor did EPA present test data indicating that it tested any of the models it identified as meeting its proposed criteria to see whether those would meet its proposed minimum cleaning performance criterion. Without having tested those models, the only data EPA did present—the number of models and manufacturers that could meet the proposed criteria—is essentially meaningless because it considers only the energy and water criteria and ignores the cleaning performance requirement.

To support its proposal to require a minimum per cycle Cleaning Index of 70 for the heavy test cycle, EPA stated that “a dishwasher scoring below the threshold of 70 might have one quarter of the dishes rated the dirtiest possible score (9 out of 9).” This seems to be EPA’s only rationale for selecting the score of 70. But EPA’s reasoning is oversimplifying the test procedure and is unrealistic. It will not likely be the case that one quarter of the dishes will be uniformly rated with “the dirtiest possible score.” It is more likely that the scores will vary. Furthermore, it is not realistic that a quarter of the dishes will be dirty and the rest will be entirely clean. Because of that, EPA’s rationale does not make sense.

In addition, EPA’s proposed cleaning performance scores suffer from other fatal flaws, which we noted with regard to the proposed heavy cycle minimum performance score. AHAM has commented numerous times (with supporting data from our round robin testing) that the ENERGY STAR Test Method for Determining Residential Dishwasher Cleaning Performance is not sufficiently repeatable or reproducible. And both DOE and EPA have recognized that laboratories need further experience with the test procedure. Because of these concerns, EPA proposed a voluntary reporting requirement in its Draft 2, Version 6.0 dishwasher eligibility criteria for dishwashers. Yet, in the Most Efficient 2015 proposal, EPA has not presented a range of scores or a tolerance to account for the proven variation in the test procedure. More importantly, it does not appear that EPA has considered that variation in selecting its arbitrary Cleaning Index, though the revised proposal does use an average cleaning score. It is impossible to appropriately set a Cleaning Index threshold without understanding how it is impacted by variation. Although using an average may be a better approach, the levels have still not been selected with an understanding of the test procedure variation. In addition, EPA’s voluntary data collection proposal in the Draft 2, Version 6.0 specification recognizes that EPA does not have data upon which to make a determination regarding a Cleaning Index requirement. Nor, as discussed above, does EPA have data demonstrating that a Cleaning Index (or a reporting requirement) is necessary in the first place. Accordingly, EPA has not been able to justify a cleaning performance metric in its ENERGY STAR specification for dishwashers. Yet, EPA proposes one here. Not only is EPA’s proposal arbitrary and capricious, it contradicts other actions EPA is taking for the very same products in the ENERGY STAR program.

In addition, EPA has proposed different cleaning performance minimum scores for each soil level. Consistent with previous AHAM comments, if, despite AHAM’s strenuous objection and

EPA's striking lack of data to support its proposal, there is to be a cleaning performance metric, each soil level should have a minimum performance requirement, and that requirement should be the same for all soil levels. In other words, the heavy, medium, and light test cycles should each be required to perform at a specified level. And that level should be the same for each test cycle. Consumers will expect, and should receive, equal and acceptable cleaning performance at each soil level. That said, AHAM strongly opposes the inclusion of any minimum performance requirement in the Most Efficient criteria. And EPA has no data upon which to base a decision for selecting an appropriate cleaning performance minimum score. Thus, it would be arbitrary, capricious, and an abuse of discretion for EPA to proceed with its proposal.

AHAM appreciates the opportunity to submit comments on the ENERGY STAR Most Efficient 2015 Proposed Recognition Criteria and would be glad to further discuss these matters should you so request.

Best Regards,

A handwritten signature in black ink that reads "Jennifer Cleary". The signature is written in a cursive, flowing style.

Jennifer Cleary  
Director, Regulatory Affairs