

November 10, 2010

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Dear Ms. Stevens,

Please find the comments below concerning the ENERGY STAR Program Requirements Product Specification for Residential Dishwashers, Eligibility Criteria, Draft 1 Version 5.0.

A. Proposed Levels for 2011

The EPA does not have wash performance data with current dishwashers in the market. Dishwashers that have met the current ENERGY STAR, CEE tier 1 and tier 2 levels may have already impacted wash performance and thus consumers have either started pre-rinsing their dishes or have been forced to select a longer cycle or additional options that use more energy in order to achieve cleaning.

Other attributes of the dishwasher's performance that are directly affected by the reduction of water and energy and effect consumer satisfaction are drying performance, spotting, filming and etching of dishware. Other outside factors that also drive performance are detergent, rinse additive and water hardness.

Understanding of how the 10% of the current dishwashers are meeting the proposed 2011 levels is needed. Are these units sensor based which limit the fills due to the soil level in the water? How do these units perform in consumers homes with respect to wash performance?

B. Consumer Survey

An independent marketing survey is needed to gather wash performance data from consumers with respect to their satisfaction with their current purchase of an energy star dishwasher. Data should be gathered from the 10% of dishwashers that currently meet the proposed 2011 levels, dishwashers that meet CEE levels of tier 1, tier 2 and dishwashers that meet current 2009 ENERGY STAR levels.

C. Cleaning Performance testing at an Independent Lab

Cleaning performance testing at an independent lab to collect wash performance data is needed. The current AHAM DW-1 2009 cleaning performance standard should be used as the cleaning metric. Data should be gathered from the 10% of dishwashers that currently meet the proposed 2011 levels, dishwashers at CEE tier1, tier 2 and dishwashers that meet the 2009 ENERGY STAR levels.

By collecting this data the EPA would be able to insure that the proposed levels for 2011 would not have the potential to further degrade performance and also have a base line for wash performance that is currently being achieved with current energy efficiency levels.

D. Comments from Laboratories

If EPA was to add a cleaning metric, comments from labs are needed to understand the impact of adding such a metric as to additional costs, testing time, training and etc.

E. Test Standards for Wash Criteria

1. AHAM DW-1 2009: Currently under going revision and being competed by the fall of 2011 is highly unlikely.
2. IEC 60436 3rd edition: Currently undergoing revision and being competed by the fall of 2011 is highly unlikely.

The development of Test Standards is a complex and involved process. Completion of such test methods take considerable amounts of time and testing to ensure the test methodology is repeatable, reproducible and accurate.

3. NSF International 184, 2003 edition is used for testing the sanitizing cycle or option of a dishwasher to insure the dishwasher meets the sanitization criteria listed in the test procedure. Consumer Union and Good Housekeeping test procedures are both proprietary and not available to the public. None of these test standards have gone through the same stringent review process as the IEC 60436 3rd edition and AHAM DW- 1 2009. To even begin, EPA must first get approval from the private entities to start the lengthy process.
4. If EPA was to require a cleaning metric then only one cleaning criteria should be used to substantiate wash performance. All dishwashers need to be subjected to the same evaluation and scoring process as depicted in the chosen test standard.
5. If EPA went forward with requiring a wash performance criterion, the AHAM DW-1 2009 would be the most favorable test procedure. Although, this test does not necessarily represent consumer's habits and practices, it would be the most applicable for the U.S. dishwasher market and would be less of a cost burden to laboratories than the current IEC 60436 3rd edition.
6. For acceptable cleaning performance using the AHAM DW-1 2009 standard test procedure, dishwashers should not have a wash score less than 80%. The scoring methodology should be as written in the test

procedure. It would be in the best interest of all labs involved in energy qualification and verification testing, to have a standard spreadsheet for calculation and submittal of the wash performance metric.

F. Calculations for energy consumption and Definitions:

All calculation and definitions listed in the Energy Star Product Specification for Residential Dishwashers need to be harmonized with the Department of Energy Test Standard.

G. Design Options to reach new Energy Star levels

Currently most of the components listed have already been implemented into current dishwasher designs to achieve the lowest possible energy and water consumption. Some of the components listed would have the potential to add significant cost to the products which would directly impact the manufacturer and the consumer.

The EPA's proposed new levels for ENERGY STAR should be delayed until all marketing surveys, testing and comments are completed, collected and analyzed to insure that wash performance has not been negatively affected. Completion of the revisions of the AHAM DW- 1 2009 and IEC 60436 3rd edition also need to happen prior to EPA adding a wash performance metric to ENERGY STAR certification.

Sincerely,
Debra L. Bengtson
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