

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

February 25, 2014

Dear ENERGY STAR[®] Residential Dishwasher Manufacturer or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is sharing the Draft 1, Version 6.0 ENERGY STAR Residential Dishwasher Product Specification and the Test Method for Determining Residential Dishwasher Cleaning Performance Rev. Feb-2014 (Test Method). EPA welcomes stakeholder input on the Draft 1 specification; please provide written comments via email to appliances@energystar.gov no later than March 31, 2014.

The current ENERGY STAR specification has been in place since January 2012, with minor revisions since that time due to changes in the U.S. Department of Energy (DOE) minimum standards and test procedure for dishwashers. This specification is being revised in response to several different factors. Presently, the 2013 Federal standards for dishwashers are only modestly less stringent than those in the current ENERGY STAR specification. Revised energy- and water- criteria will offer both greater savings and better differentiation relative to standard products in the marketplace. This revision will also offer the opportunity for the Agency to engage stakeholders on new levels for compact dishwashers, which have been suspended from the program due to the lack of differentiation between the ENERGY STAR requirements and the current Federal standard. EPA has also seen the market respond quickly to the last specification change in 2012; in that year, an estimated 89% of residential dishwashers sold in the U.S. were ENERGY STAR.

Key elements of the Draft 1, Version 6.0 proposal include:

Revised energy and water criteria

EPA is proposing that to qualify for ENERGY STAR, standard dishwashers use less than or equal to 270 kilowatt hours per year (kWh/yr) and 3.5 gallons of water per cycle. Compact dishwashers would need to use 195 kWh/yr and 2.6 gallons per cycle. This would reduce the energy use by 12% and water use by 25% relative to a dishwasher that just meets the Federal standard. EPA estimates that approximately 27% of standard size residential dishwashers on the market meet the proposed criteria.

A reporting requirement for cleaning performance

During the Version 5.0 dishwasher specification development process, a number of stakeholders expressed concern that dishwasher efficiency was reaching a point at which the product's cleaning performance may be negatively impacted. Manufacturers cautioned that if product performance does not meet consumer expectations, energy and water savings will be reduced as consumers opt to use of more intensive energy and water cycles or other measures to compensate, i.e., increasing pre-washing or hand-washing.

In order to evaluate and guard against possible impacts in cleaning performance, EPA is proposing that manufacturers report the dishwasher's cleaning performance as part of ENERGY STAR Version 6.0 certification, using the ENERGY STAR Test Method for Determining Residential Dishwasher Cleaning Performance. Once 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. Although some manufacturers have expressed concern that the Test Method is not yet sufficiently reliable and

repeatable, EPA and DOE believe that there is benefit with having labs begin to use and develop experience with the Test Method, and in particular, grading the dishware. The test burden involved with collecting and reporting cleaning indexes will be modest because the cleaning performance test can be carried out at the same time as the DOE energy and water test, with only an added step to grade the dishware and flatware. Considering that labs have not yet had sufficient experience with this Test method, EPA is proposing to collect and analyze the data, but will not post individual-model cleaning indexes on the ENERGY STAR product list.

Optional ‘connected’ criteria

Consistent with the approach and connected criteria developed for other ENERGY STAR appliance categories, EPA is proposing optional connected criteria for dishwashers designed to provide enhanced functionality to consumers, such as alerts/messages and energy information, as well as new demand response capabilities to support future smart grid interconnection. Products that meet these optional criteria and are certified using a future test method to validate the demand response capabilities could take advantage of a 5% energy use allowance.

Final Test Method

The Test Method for Determining Residential Dishwasher Cleaning Performance contains one change from the Draft Final Test Method for Determining Residential Dishwasher Cleaning Performance (Draft Final Test Method) published on February 28, 2013. The Draft Final Test Method referenced International Electrotechnical Commission (IEC) standard 60436, “Electric dishwashers for household use – Methods for measuring the performance” Edition 3.1, 2009-11 (IEC standard 60436 Ed. 3.1, 2009-11) for the grading requirements. In response to stakeholder comments, DOE revised the grading requirements in the Test Method to reference American National Standards Institute (ANSI) and AHAM standard, ANSI/AHAM DW-1-2010, “Household Electric Dishwashers” (ANSI/AHAM standard DW-1-2010).

Comment Submittal

Stakeholders are encouraged to provide written comments via email to appliances@energystar.gov no later than March 31, 2014. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

Stakeholder Webinar to Discuss Draft 1

EPA intends to host a webinar on Friday, March 21, 2014, from 1:00 p.m. to 2:00 p.m. (EST) to discuss the Draft 1 specification. You may register to participate by visiting the following Go To Webinar link [here](#).

The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. To follow EPA’s progress in developing new criteria for residential dishwashers please visit the ENERGY STAR Product Development website at www.energystar.gov/revisedspeccs and follow the Version 6.0 link for Residential Dishwashers.

Please direct any specific questions to Amanda Stevens at EPA, stevens.amanda@epa.gov, (213) 244-1811 or Jessica Lyman, ICF International at jessica.lyman@icfi.com, 202-862-1557. Dishwasher test method questions should be directed to Ashley Armstrong, DOE, at Ashley.Armstrong@ee.doe.gov or (202) 586-6590. Thank you for taking the time to review this Draft 1 specification and provide feedback and for your continued support of the ENERGY STAR program. I look forward to working with you over the coming months.

Sincerely,



Amanda Stevens, Product Manager
ENERGY STAR Appliances