

**Stakeholder Comment Response
Draft 2 Version 5.0 Residential Dishwasher Specification**

Key	Topic	Comment	EPA Response
1	Specification Levels	EPA is encouraged to maintain the originally planned product criteria and effective date: ≤307 kWh per year and ≤5 gallons of water per cycle effective July 1, 2011. EPA's efforts to address earlier comments are appreciated, but it is believed that the Tier 2 requirements established under Version 4.1 of the dishwasher spec should stand rather than setting the precedent that Tier 2 specifications are meaningless and subject to change on short notice.	In a November 14, 2008 letter to stakeholders, ENERGY STAR reserved the right to revisit the July, 2011 ENERGY STAR criteria if anticipated qualifying rates warranted more stringent requirements. EPA reiterates its concern that the ENERGY STAR label will not be a meaningful differentiator to consumers if high market share persists. For this reason, EPA has maintained the levels proposed in Draft 2 in this Final Draft of the specification. EPA has also removed the Tier 2 levels from the Final Draft and will finalize these levels at a future date, in order to incorporate the most up-to-date market information at the time the specification is reviewed.
2	Specification Levels	EPA is encouraged to consider the following alternative proposal. Version 5.0 Tier 1 (equivalent to V4.1 Tier 2): ≤307 kWh per year and ≤5 gallons of water per cycle effective July 1, 2011. V5 Tier 2: ≤280 kWh per year and ≤4 gallons of water per cycle effective July 1, 2012. This proposal would maintain the integrity of the process for setting Tier 2 specifications and, by moving up the date for the most stringent proposed level, should provide for strong energy and water savings. This would also encourage manufacturers to provide higher efficiency products while providing the time needed to develop these products.	EPA remains concerned that the ENERGY STAR label will not be a meaningful differentiator to consumers if high market share persists and will therefore keep the levels proposed in Draft 2, Version 5.0. Several stakeholders have stated their preference to have a cleaning performance test procedure and metric in place before moving to more stringent energy and water consumption requirements. By planning for a Tier 2 effective date of July 1, 2013, more time is being provided to accommodate the revisions to the existing industry cleaning performance test methods that are currently underway.
3	Specification Levels	Concerns have been raised in the past about setting second tier criteria levels in the future. In order to avoid leaving savings on the table and maintaining relevance in the market, ENERGY STAR would ideally continue to evaluate all specifications frequently and make revisions as dictated by market changes. ENERGY STAR should include a market review at least 6 months before a scheduled change will go into effect to ensure they will be in line with the ENERGY STAR guiding principles. If the strategy of specifying future requirements goes forward, EPA would be well served to explicitly inform stakeholders they reserve the right to amend the future requirements to protect the integrity of ENERGY STAR. To this point, ENERGY STAR is supported in its effort to update the requirements based on current market conditions.	It is EPA policy to evaluate market conditions before a new specification goes into effect, to ensure that consumer savings are in line with program objectives and that the ENERGY STAR brand continues to be a differentiator in the marketplace. EPA has removed the Tier 2 requirements from this draft of the specification and will plan to reassess the market in advance of the proposed July 1, 2013 effective date.
4	Specification Levels	Thank ENERGY STAR for providing additional analysis that reveals the proposed ENERGY STAR Tier 1 level represents 21% of products in the market. With this assurance, the proposed level is supported.	EPA appreciates this comment and the support for the Draft 2, Version 5.0 proposal.
5	Cleaning Performance	If EPA elects to move forward with the outlined approach, it is requested that EPA share the cleaning performance data with efficiency programs. This data could be provided on a quarterly basis, as an additional column on the list of ENERGY STAR qualified dishwashers. This information is intended to be used to assess whether cleaning performance declines with reduced energy and water consumption and ensure that dishwashers bring promoted by efficiency programs are meeting consumer cleaning needs.	EPA has removed Tier 1 cleaning performance reporting requirements from the Final Draft specification. This topic will be revisited during the next specification revision process.
6	Cleaning Performance	Any efficiency level that exceeds Version 4.0 must have a performance metric. Implementing unprecedented energy and water ENERGY STAR levels without a cleaning score will drive compensating behavior by the consumer, negating any efficiency and monetary benefits the consumer was expecting. Some manufacturers will accelerate this consumer behavior by gaming and proliferating dishwashers that do not clean dishes in the name of meeting the new levels if there is no cleaning performance test.	EPA's analysis indicates that 21% of models currently in the market meet the proposed levels. Further, CEE uses this level for its Tier 2, and EPA also notes that tax credits for these models may soon be available. EPA believes that the current timeline will allow for finalization of an acceptable cleanability test procedure that will ensure a level playing field.

7	Tier 1 Cleaning Performance	A cleaning index reporting requirement would be supported as long as it is done through AHAM and there is further clarification on test procedure details not outlined in the DW-1 test procedure, such as position of the upper and lower dishwasher rack, loading pattern, etc. The latter would ensure greater consistency across all manufacturers while submitting the data through AHAM would keep the data anonymous because of the 3 participant minimum requirement. Alternative reporting methods, which would assure these 2012 scores remain confidential, would be entertained.	EPA appreciates the comment and the support for its proposal. After considering all of the feedback received, EPA has decided to remove Tier 1 cleaning performance reporting requirements from the Final Draft. EPA plans to incorporate a minimum cleaning performance requirement through the next revision of the specification.
8	Specification Levels	Manufacturers have been planning and investing resources in designs that would be consistent with the agreement that meet the ENERGY STAR levels current set to increase in July, 2011. If ENERGY STAR changes the specification at this late date, it will result in market disruption and the potential for stranded investments. Manufacturers took the previous Tier 2 proposal seriously. To change things now risks stranding some of their investments and also could make manufacturers less willing to invest in Tier 2 products in the future, undermining the rapid progress that Tier 2 standards are designed to foster. Also, by delaying the start of a new ENERGY STAR tier by six months, significant energy savings will be lost that will take more than six months to make up with the proposed version 5.0 specification. EPA's proposal to drop the July 1, 2011 specification and further increase the eligibility criteria will make the transition to the 2013 energy efficiency standard much more difficult.	EPA commends manufacturers' investments to increase the energy and water efficiency of their product lines. However, as noted in the Draft 1 specification, EPA believes that more stringent energy and water requirements are necessary to reduce the market share of qualified dishwashers and maintain the relevance of the ENERGY STAR brand.
9	Specification Levels	Based on the latest data from AHAM, the number of products currently meeting the new proposed level is less than ENERGY STAR's goal of achieving approximately 25% of the market.	EPA believes that the currently proposed levels would allow for a number of different brands from a variety of manufacturers to earn the ENERGY STAR label giving consumers a variety of choices. Further, EPA estimates that more than 25% of products on the market will meet the proposed requirement once the specification is in effect.
10	Cleaning Performance	Under the Memorandum of Understanding between EPA and DOE, DOE is the body with the responsibility for developing federal test procedures and metrics. Accordingly, DOE, which has considerable knowledge and experience with test procedures, is the proper agency to decide whether and how to incorporate performance into the test procedure residential dishwashers, and EPA should not circumvent DOE's expertise by deciding what test procedure should measure performance. Instead, EPA should rely on DOE's expertise, and avoid redundant development of expertise in the federal government that would be a wasteful use of resources.	Under the 2009 Memorandum of Understanding, DOE is the lead for developing product test procedure and metrics for the ENERGY STAR program, with EPA assisting where necessary. As ENERGY STAR criteria become increasingly stringent, it is EPA's responsibility to ensure consumer satisfaction with qualified products. In the Final Draft, EPA has proposed that cleaning performance of residential dishwashers will not be addressed in Version 5.0 and instead, be added to the next version of the specification that would be effective July 1, 2013. DOE will lead the effort to develop a test procedure for dishwasher cleanability that will not impact the DOE-measured energy ratings and intends to work with industry, where possible, on the development.
11	Cleaning Performance	Should EPA move forward selecting a test procedure for measuring residential dishwasher performance without DOE's assistance, it is encouraged to wait until there is a test procedure robust enough to provide a solid foundation.	All cleaning performance requirements have been removed from the Final Draft specification. EPA plans to work with DOE to incorporate cleaning performance testing and a minimum cleaning performance requirement in the next revision of the ENERGY STAR specification, effective July 1, 2013.

12	Cleaning Performance	Necessary revisions are underway for both AHAM DW-1 and IEC 60436, which will improve accuracy, representativeness, repeatability, and reproducibility. Both will take a significant amount of time to be completed. The AHAM procedure is working to harmonize with the new IEC procedure, where appropriate for the U.S. market, and also do round robin testing. Thus, the AHAM revisions are not likely to be completed for some time. Even if the AHAM working group were to put this effort on an extremely fast track, it cannot be completed in a way that yields accurate repeatable, reproducible, or enforceable results in time for a performance requirement with an effective date of January 1, 2013.	EPA recognizes the time that is needed to revise a test procedure and has therefore proposed a new effective date of July 1, 2013 for all cleaning performance requirements. This will provide industry with more time to complete the test procedure revisions, currently underway.
13	Cleaning Performance	Revisions of AHAM DW-1-2009 will be completed by 2013, in time for the next change in energy efficiency standards levels, which is also when we would expect ENERGY STAR would review its eligibility levels again as well. It is not anticipated that EPA would want to adopt an incomplete test procedure in its specification, which is what would be required with a January 1, 2013 effective date.	Given the joint industry/advocate proposal for changes to Federal minimum standards on January 1, 2013, the need for a new ENERGY STAR specification around the same time is necessary to maintain the integrity of the ENERGY STAR brand.
14	Data	During the webinar EPA held on February 22, 2011, EPA stated that it believes cleaning performance is generally at an acceptable level today. Would EPA be willing to share that data and its source with stakeholders. In addition, does EPA know what percentage of consumers prewash their dishes prior to running the dishwasher, and was that considered when determining the range of performance.	EPA believes that the current residential dishwasher market has been largely self-regulating with respect to cleaning performance, though a number of stakeholders have expressed concerns that more stringent efficiency requirements could adversely impact dishwasher cleaning performance. EPA is aware of data from the DOE 2001 report, <i>Review of Survey Data to Support Revisions to DOE's Dishwasher Test Procedure</i> , that indicates that roughly 70 percent of consumers pre-rinse their dishes. EPA is unaware of the impact, if any, that higher efficiency dishwashers have on pre-rinsing behaviors, and welcomes further feedback and data on this issue.
15	Tier 1 Cleaning Performance	A number of concerns exist with data reporting and collection that indicates that the Tier 1 would be an unnecessary burden on manufacturers. The data EPA would receive is not likely to be useful for two reasons. First the data to be reported in 2012 would be an average cleaning index score obtained per AHAM DW-1-2009. But, as the test procedure is being revised and EPA has stated its intent to give "primary consideration to the harmonized AHAM DW-1 test method for use in ENERGY STAR cleaning performance testing, contingent upon its completion." Second, for the proposed reporting requirement, EPA proposes requiring reporting for a minimum of two "sensor heavy response" soil runs per the DOE test procedure, and then an evaluation and reporting based on AHAM DW-1-2009. There are a number of differences between the two. One being the sensor heavy response load is for 4 place settings and not the 10 for the AHAM procedure. Also, the sensor heavy uses clean utensils and serving pieces, while under AHAM the utensils and serving pieces are soiled. Finally, EPA is only requiring 2 runs, while AHAM requires 3.	EPA appreciates this feedback on the Tier 1 cleaning performance reporting requirement. Based on this and similar responses, the proposed Tier 1 cleaning performance requirements have been removed from the Final Draft specification.
16	Definitions	EPA is commended for attempting to harmonize its definitions with DOE. However, the harmonization is incomplete. The definition of "residential dishwasher," for example adds the phrase "used in a residential setting" to DOE's definition. That addition is minor, but the definitions should be identical. A better way to distinguish between residential and commercial products would be to cite DOE's definition for "consumer product" and state that the specification applies only to dishwashers that also meet the definition.	EPA has removed the clause "used in a residential setting" and added a reference to the DOE definition for "consumer product" to the specification scope in order to differentiate between Residential and Commercial Dishwasher products.
17	Definitions	The definitions for "compact dishwasher" and "standard dishwasher" are harmonized substantially to DOE definitions, but are still missing some important details.	The definitions for compact dishwasher and standard dishwasher have been amended to exactly match the DOE definitions.

18	Definitions	The definition for Basic Model also differs slightly from DOE's definition. With DOE releasing its final rule on certification, compliance, and enforcement, in which it has somewhat changed the definition of "basic model." EPA is encouraged to harmonize with this new definition.	EPA has edited the Basic Model definition to harmonize with the updated March 7, 2011 DOE definition from the Federal Register Vol. 76, No. 44, page 12429.
19	Definitions	It is critical that EPA's requirements are consistent with DOE regulations and test procedures. To achieve consistency, the relevant definitions must be identical to each other at all times. EPA must have substantial reasons for varying from DOE regulations, and if EPA varies from any DOE requirement, it is requested that it provide its reasons for doing so and give stakeholders the opportunity to comment.	EPA will continue to work with stakeholders to ensure that all ENERGY STAR definitions are kept up to date.
20	Sampling	EPA stated that it plans to incorporate the latest available requirements into the ENERGY STAR specification in order to maintain harmonization, and so, EPA is urged to now cite the relevant sampling procedure in what will be 10 CFR 429.19.	EPA has cited the latest DOE sampling requirements for certification, in the Final Draft specification.