

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



OFFICE OF
AIR AND RADIATION

June 5, 2013

Dear ENERGY STAR[®] Clothes Washer Manufacturer or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) is pleased to share with you the attached Draft 2 Version 7.0 Clothes Washer specification, and documents that outline the U.S. Department of Energy's (DOE) preliminary approach for addressing the cleaning and rinsing performance of residential clothes washers, for your review and input. Comments on these documents should be submitted via email to appliances@energystar.gov no later than July 3, 2013.

In 2011, when the ENERGY STAR criteria for residential clothes washers were last changed, the market responded remarkably quickly, with over 60% of clothes washer shipments meeting the new requirements that first year. Consistent with the Agency's commitment to maintain up-to-date ENERGY STAR specifications across all categories, EPA launched a new revision of the specification last summer, with the intent of making it effective by the end of 2013. This would have allowed EPA to address the current high market share and maintain ENERGY STAR's relevancy as an indicator of high performance in this category, with a reasonable amount of time before the change in federal test procedures scheduled for 2015. For various reasons, including additional time required to finalize connected criteria that were to form the basis for the clothes washer connected proposal, the release of this Draft 2 specification was delayed, such that the earliest possible effective date would be less than a year before the federal test procedure change. In light of this, EPA is now proposing a Version 7.0 Clothes Washer effective date that aligns with the federal test procedure change on March 7, 2015.

While a later effective date may be warranted in this circumstance, it does present an added challenge in terms of anticipating advances in the clothes washer market such that the new performance levels will effectively distinguish the highest performers when it goes into effect in 2015. EPA welcomes information that might supplement our current clothes washer data, both on expected efficiency improvements and reductions in the incremental cost associated with those improvements. The Agency recognizes that potential advances in efficiency may be constrained by cleaning and rinse performance considerations.

Clothes Washer Categories

As a general principle, the ENERGY STAR program seeks to make it easy for consumers to find the most efficient product, regardless of technology, that performs the desired function (e.g. washing clothes). In some instances, the Agency sub-divides product categories so that products with enhanced features or functionality can be compared with each other rather than with more basic models. Because top-load and front-load clothes washers perform the same basic function, EPA proposed in Draft 1, that they be considered together for purposes of ENERGY STAR qualification. Upon further review and based on feedback on Draft 1, the Agency believes there may be enough of a difference in functionality, particularly wash-time, to warrant two separate categories. As a result, the Agency is proposing separate product classes in Draft 2.

As highlighted in note boxes through-out the document, Draft 2 reflects the following key changes:

- Revised Energy & Water Criteria. For residential clothes washers greater than 2.5 cu-ft, an Integrated Modified Energy Factor (IMEF) and Integrated Water Factor (IWF) are proposed as follows:
 - Front-loading residential clothes washers: $IMEF \geq 2.28$ and $IWF \leq 3.7$ (equivalent to $MEF \geq 2.80$ and $WF \leq 3.5$).
 - Top loading residential clothes washers: $IMEF \geq 2.11$ and $IWF \leq 4.3$ (equivalent of $MEF \geq 2.55$ and $WF \leq 3.8$).

Based on currently available data, this Draft 2 proposal reflects the performance of the top 24 percent of residential clothes washers larger than 2.5-cu-ft, and balances the program's goal of differentiating highly efficient models while ensuring adequate consumer choice of products with reasonable pay back periods. The Agency's data set, charts and supporting analysis are available to stakeholders through an Excel file now available on the ENERGY STAR Version 7.0 clothes washer specification development website and are also attached for your convenience.

The Agency welcomes additional insights on potential advances in the market that might support more stringent requirements, as well as additional information stakeholders might provide on the differences in consumer functionality between a top and front load residential clothes washer.

EPA has expressed the Draft 2 proposal using the DOE's new metrics: IMEF and IWF. The supplemental data file provides more information on the crosswalk between MEF and IMEF, and WF and IWF.

In response to stakeholder feedback, EPA further evaluated the model data for units that range from 1.6 to 2.5 cu-ft. Based on this analysis and in light of the unique consumer need met by this space saving product size, the Agency is proposing new levels for this class of products in Draft 2: $IMEF \geq 2.07$ and an $IWF \leq 4.2$ (equivalent to $MEF \geq 2.45$ and a $WF \leq 4.0$).

- Optional Connected Criteria. EPA is proposing optional connected criteria for residential clothes washers that build upon the connected functionality in the final Version 5.0 Residential Refrigerators and Freezers specification. Through close work with a range of stakeholders, EPA developed connected criteria that deliver immediate consumer utility as well as the promise of greater benefit as additional infrastructure is built and the use of variable electricity rates increases. In addressing connected functionality as part of this specification, EPA seeks to promote the well-proven benefits of standardization – a level playing field for manufacturers, interoperability and thus convenience for consumers, and reduced costs.

Concurrently, DOE will be initiating an effort to develop a test procedure for clothes washers with connected functionality. As part of this process, DOE will initiate discussions with manufacturers on obtaining products for testing or the possibility of visiting manufacturers' facilities as it did to develop a connected test method for refrigerators.

- Cleaning and Rinse Performance. EPA and DOE received multiple stakeholder responses on cleaning and rinse performance. In response, DOE is launching a process to develop an ENERGY STAR cleaning and rinse performance test for clothes washers. Please see the attached Preliminary Approach for Determining Clothes Washer Performance and the Discussion Document on the Initial Approach for Measuring Clothes Washer Performance and Analysis of Primary Issues for Stakeholder Comment that detail DOE's preliminary approach for addressing the cleaning and rinsing performance of residential clothes washers and areas where DOE is seeking stakeholder feedback.

Factoring in development time for this new test procedure, EPA is proposing a reporting requirement for cleaning and rinse performance in Version 7.0 that would be applicable to models

certified after the ENERGY STAR test procedure is completed. The Agency is not planning to include a minimum cleaning and rinse performance requirement in the Version 7.0 specification.

EPA appreciates the comments stakeholder provided on the Draft 1 specification. Many of these comments and the proposed changes highlighted above are discussed in detail in note boxes found throughout the attached Draft 2 specification document.

Comment Submittal

Stakeholders are encouraged to provide written comments via email to appliances@energystar.gov no later than July 3, 2013. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

Stakeholder Webinar to Discuss Draft 2 and Launch Test Method Development

EPA and DOE intend to host a webinar on June 26, 2013, from 1:00 p.m. to 3:00 p.m. (EST) to discuss the Draft 2 specification and to launch the effort to develop an ENERGY STAR cleaning and rinse performance test for clothes washers. DOE plans to cover the test procedure development for clothes washers with connected functionality and cleaning and rinsing performance of clothes washers. To RSVP, please email appliances@energystar.gov. Further details will be distributed to confirmed attendees in advance of the webinar.

To follow EPA's progress in revising the ENERGY STAR Clothes Washer specification, visit the ENERGY STAR Product Development website at www.energystar.gov/revisedspecs and next to "Clothes Washers" click on "Version 7.0 is in development".

Please direct any specific questions to Amanda Stevens, EPA at stevens.amanda@epa.gov or (202) 343-9106 or Ryan Fogle, D&R International, at rfogle@drintl.com or (301) 588-9387. Please direct questions on the clothes washer test method as well as the planned cleaning and rinse performance test to Ashley Armstrong, DOE, at Ashley.Armstrong@ee.doe.gov or (202) 586-6590. Thank you for taking the time to review this draft specification and your continued support of ENERGY STAR.

Sincerely,



Amanda Stevens, Product Manager
ENERGY STAR Clothes Washers