



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

OFFICE OF  
AIR AND RADIATION

April 3, 2019

Dear ENERGY STAR® Commercial Dishwasher Partner or Other Interested Party:

With this letter, the U.S. Environmental Protection Agency (EPA) is releasing the [Draft 1, Version 3.0 ENERGY STAR Commercial Dishwasher Product Specification](#). This draft includes proposals in response to stakeholder feedback on the previously released discussion guide and ongoing work with stakeholders to assemble data on which this specification could be based. The deadline to provide comments on this Draft 1 specification is May 9, 2019.

Since the effective date (February 2013) of the current Version 2.0 ENERGY STAR Commercial Dishwasher specification, the American Society for Test and Materials (ASTM) revised the commercial dishwasher test methods to include washing energy performance test procedures. On July 14, 2017, EPA distributed a Discussion Guide and Data Assembly Template to stakeholders to generate a more robust dataset inclusive of washing energy performance data. The Agency received some performance data in response, along with a request to extend the data submission deadline. As a result, on December 20, 2017, EPA announced a data submission deadline extension to February 28, 2018. Throughout the remainder of the 2018 calendar year, EPA continued working with stakeholders, assembling additional information used to inform this specification.

Due to the introduction of the new wash energy metric and high ENERGY STAR market share (approximately 67% in 2017), EPA is launching development of Version 3.0. EPA highlights key changes reflected in the Draft 1 below and provides rationale in note boxes throughout the specification. To support stakeholder review, a [data package](#) that includes the EPA dataset, proposed levels, and savings estimates, accompanies this Draft 1.

Terms and Definitions: EPA has proposed the addition of the following new terms and definitions in the Draft 1 Version 3.0 specification:

- Heat Recovery Machine
- Washing Energy
- Water Consumption

Scope: The EPA is proposing a scope reduction to exclude low-temperature pot, pan, utensil (PPU) and low-temperature flight type machines considering the absence of performance data and limited availability of these products in the market.

Test Method: As noted above, the ASTM F1696-18 *Standard Test Method for Energy Performance of Stationary-Rack, Door-Type Commercial Dishwashing Machines* and ASTM 1920-15 *Standard Test Method for Energy Performance of Rack Conveyor Commercial Dishwashing Machines* have been revised to include washing energy performance test procedures in addition to idle energy and water consumption, and as such, EPA is effectively replacing the current Version 2.0 *ENERGY STAR Test Method for Commercial Dishwashers (Rev. May-2012)* with the referenced ASTM standards.

To effectively characterize the total energy profile of dishwashers and potential for energy and water savings, it is necessary to analyze performance data from both washing and idle settings, from both wash and idle energy tests. The current ENERGY STAR test method does not include a test procedure to measure wash energy consumption. EPA believes this metric is critical to accurately compare total energy performance of these products. Thus, EPA is proposing to align with ASTM test methods that include washing energy performance, water consumption rate, and idle energy rate tests.

EPA is proposing maximum washing energy performance limits for undercounter, single tank door, PPU, single tank conveyor, and multiple tank conveyor machines, expressed in kWh/rack. Insufficient washing energy data precludes proposing a washing energy limit for flight type products at this time. As a result, EPA is proposing washing energy performance as a reporting requirement for single tank and multiple tank flight type machines in order to continue certifying flight type machines while collecting washing energy performance data.

Performance Requirements: While the Agency did not receive wash energy for all models in the ENERGY STAR dataset, EPA does have ample idle energy and water consumption data and combined this with more limited wash energy data to propose levels. EPA anticipates that the proposed levels reflect a reasonable step forward for idle energy and water performance and allow for a reasonable first application of wash energy requirements. EPA's full data package including data plots can be found on the ENERGY STAR Version 3.0 Draft 1 Commercial Dishwashers [Product Development website](#).

#### Stakeholder Webinar

EPA will host a webinar to answer any questions on this Draft 1, Version 3.0 ENERGY STAR Commercial Dishwashers Product Specification on **April 25, 2019 from 1:30-3:30 PM Eastern Time**. Please register [here](#) if you plan on attending.

#### Comment Submittal

EPA welcomes stakeholder input on the attached Draft 1, Version 3.0 ENERGY STAR Commercial Dishwasher Product Specification. Stakeholders are encouraged to submit any comments to [commercialdishwashers@energystar.gov](mailto:commercialdishwashers@energystar.gov) by **May 9, 2019**. EPA will also accept additional wash energy data submitted by this same deadline. Please send an email to [commercialdishwashers@energystar.gov](mailto:commercialdishwashers@energystar.gov) for further details.

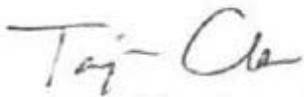
All comments will be posted to the ENERGY STAR [Product Development website](#) unless the submitter requests otherwise.

The exchange of ideas and information between the EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Specifications and meeting materials will be distributed via email and posted on the ENERGY STAR website. To track the EPA's progress on this specification, please visit the [Product Development website](#).

Please contact me at [Crk.Tanja@epa.gov](mailto:Crk.Tanja@epa.gov) or 202-566-1037 and Adam Spitz at [Adam.Spitz@icf.com](mailto:Adam.Spitz@icf.com) or 916-231-7685 with questions or concerns. For any other commercial dishwasher related questions, please contact [commercialdishwashers@energystar.gov](mailto:commercialdishwashers@energystar.gov).

Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Tanja Crk, Product Manager  
ENERGY STAR Commercial Food Service

Enclosures:

[Draft 1 Version 3.0 ENERGY STAR Commercial Dishwasher Specification](#)

[Draft 1 Version 3.0 Commercial Dishwasher Data Package](#)