

June 20, 2010

Mr. Christopher Kent  
ENERGY STAR<sup>®</sup> Program Manager  
Environmental Protection Agency  
Ariel Rios Building, SW, MS 6202J  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Mr. Kent:

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to the ENERGY STAR Commercial Dishwashers Version 2 Draft 2 Specification, released by the Environmental Protection Agency (EPA) on May 5, 2011.

CEE is the binational organization of energy efficiency program administrators and a staunch supporter of the ENERGY STAR Program. CEE members are responsible for ratepayer-funded energy efficiency programs in 45 US states and 8 Canadian provinces. In 2010, CEE members directed over \$7.5 billion of energy efficiency program budgets in the two countries. In short, CEE represents the groups that are actively working to make ENERGY STAR the relevant platform for energy efficiency across North America.

CEE highly values the role ENERGY STAR plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments and express our continued support for labeling energy efficient commercial dishwashers. We request that EPA explain further the rationale for setting the performance levels for high temperature, multiple tank conveyer machines and that EPA exclude flight type machines from the Version 2 specification. Our comments are organized as follows: 1) continued support for labeling energy efficient commercial dishwashers; 2) request for clarification of non-flight type machine performance levels; 3) exclusion of flight type machines.

## Continued Support for Labeling Commercial Dishwashers

EPA held a stakeholder meeting on May 23 to discuss the Draft 2 specification proposal. During this stakeholder meeting, CEE heard stakeholders voice concerns related to the market relevance of the ENERGY STAR dishwasher specification as well as the energy efficiency program industry uptake of this specification. The specification relevance was called into question because a very large number of machines qualify for the Version 1 specification, and energy efficiency industry uptake of the specification has been slow. A discussion regarding potentially discontinuing this specification ensued.

CEE supports EPA's efforts to revise this specification to increase its relevance in the marketplace by identifying top performing products. CEE also offers the following information regarding energy efficiency program uptake of the specification: from 2010 to 2011, the number of CEE member programs supporting ENERGY STAR dishwashers increased from 10 in 10 US states and Canadian provinces to 32 in 19 US states and Canadian provinces. Additional CEE members have indicated that they are considering the addition of commercial dishwasher offerings to their commercial kitchens programs pending finalization of this revision. In sum, CEE supports the continued presence of a market relevant ENERGY STAR label for commercial dishwashers.

## Request for Clarification of Non-Flight Type Machine Performance Levels

CEE supports the proposed revisions to performance levels for all of the non-flight type machine categories with the exception of high temperature multiple tank conveyors. According to EPA's analysis, product availability for this machine category would be 11% at the proposed Draft 2 levels. CEE is concerned that this relatively low level of product availability may create challenges for end users trying to find and purchase qualifying machines of this type and impact the ability of CEE members to promote and deliver savings for this product type. CEE asks that EPA clarify its rationale for setting performance levels more aggressively for this product type.

## Exclusion of Flight Type Machines

EPA has requested feedback regarding whether or not to expand the scope of the specification to include flight type machines. Based on the EPA presentation and input from stakeholders at the May 23 stakeholder meeting, CEE understands EPA's options to be as follows:

1. Do not expand the scope of the specification to include flight type machines at this time. Consider adding them again when a total energy consumption metric and associated performance data becomes available.
2. Add flight type machines to the Version 2.0 specification with a metric based solely on water consumption.

CEE recommends that EPA exclude flight type machines at this time and reassess this issue when a total energy consumption metric and associated performance data become available. CEE understands that the only performance data available upon which to base an ENERGY STAR specification is water consumption data that is intended to determine sanitation performance. CEE is not confident that any of the metrics based on these data are indicative of relative energy performance for several reasons.

First, it is our understanding that flight type machines consume energy through many different components, including tank water heaters (wash and rinse), booster heaters, several motors (conveyor, prewash, wash, rinse), and venting. Optional equipment can include both energy saving heat recovery systems and energy consuming blowers. A water consumption metric does not take into account the energy efficiency or availability of any of these components and features in a given model.

Second, there is significant uncertainty about how flight type machines are operated in the field. Our understanding of the conditions under which the data was captured was during maximum conveyor speed, which represents a worst case scenario from a sanitation perspective but is not necessarily representative of how machines are used in the field. It is not clear given the current data and information how the energy consumption of machines may be impacted when operated at different conditions and lower (than maximum) conveyor speeds and further whether or not a water consumption metric is a good proxy or not for energy performance across these actual operating ranges.

Finally, it is not clear whether or not there is a trade off between energy consumption and water consumption. High temperature machines must raise the temperature of dishes to sanitize them. A common strategy to raise the temperature of dishes is through the application of high temperature final rinse water. Performance specifications aimed at reducing final rinse water consumption in gallons per hour do not reduce the need to raise the temperature of dishes for sanitation purposes. Two ways of achieving both final rinse water reductions in gallons per hour and sanitation are: 1) to transfer the energy consumption required to raise the temperature of dishes to other steps in the washing or idle process; and, 2) to force end users to reduce machine speeds, thereby maintaining the same volume of final rinse water applied to dishes. Neither of these options – assuming in the first option that the same amount of energy is used to raise the

temperature in other steps - would yields true net energy savings, and both of these scenarios are possible when making use of only final rinse water consumption in gallons per hour as a basis.

Given these limitations we recommend that EPA not include flight type machines in the Version 2 specification and look forward to working with EPA to consider the addition of flight type machines to the ENERGY STAR commercial dishwasher specification when a total energy consumption metric and supporting data become available.

Once again, CEE would like to thank the EPA for the opportunity to comment on the ENERGY STAR specification for Commercial Dishwashers, Version 2, Draft 2. We look forward to reviewing the final draft soon. Please contact CEE Program Manager Kim Erickson at 617-532-0026 with any questions about these comments.

Sincerely,

A handwritten signature in black ink that reads "Marc J. Hoffman". The signature is written in a cursive style with a large, prominent initial "M".

Marc Hoffman  
Executive Director