

**Comments on
Energy Star Commercial Dishwasher Specification Draft 1 Version 2.0
Submitted by
Natural Resources Defense Council**

1. **Support for Revision.** We commend Energy Star for undertaking this review of Version 1.1, which went into effect in October 2007. The original specification has rapidly achieved widespread acceptance within the industry. Now, with reported levels of market penetration reaching 80%, it is important that the Energy Star criteria be strengthened for the label to remain a useful guide to the upper echelon of performance in the marketplace.

2. **Support for Coverage of Flight-type Machines.** We support the extension of the criteria to the flight-type conveyor category. These machines serve large institutions, have large energy and water consumption footprints, and have service lives ranging from 15 to 30 years. Thus, it is important to address the issues that present challenges to the establishment of criteria, and to include the category in the Commercial Dishwasher specification as soon as practical, in Version 2.0 if possible.

We offer two suggestions in response to the questions raised by EPA about the suggestion to use a “gallons per 100 dishes” to compare water consumption.

a. Regarding conveyor speed, we agree that care must be taken to avoid manipulation. One possible approach is to consider a weighting scheme where the slowest speed would be averaged with one or more higher speeds that are deemed to be representative of common operating conditions in commercial use. The consumption target in the specification would then be set at a level that considers the consumption at multiple speeds, averaged together. (For a partial analogy, see the EPA WaterSense specification for tank-type toilets, where compliance may be achieved by products employing a uniform flush volume or by products using a differentiated dual flush volume, with the latter subject to a specific weighting of the low and high flush volumes.)

b. Regarding the test load, care should be taken to allow for a load that can be fairly run through machines of different widths, which may vary by 6 inches or more. If the test load is comprised solely of uniform large items, such as 10 inch dinner plates, widths that can accommodate additional small items of ware but not an additional 10 inch plate may be unfairly treated by the test.

3. **Strengthen Water Consumption Criteria for Conveyor Machines.** We note the improvement being proposed in both the idle energy consumption and the water consumption of under counter and door-type machines. However no improvements are being proposed for water consumption of conveyor machines. The data plots posted in support of the proposal, as well as the Energy Star database of currently qualified equipment, indicate that there is room for at least a modest improvement in the water consumption criteria for each category of conveyor machine. Multiple technical pathways (improved nozzles and spray patterns; dual rinse) have enabled multiple brands to perform at these improved levels while still achieving NSF certification, which includes a washability test. We urge that Draft 1 be revised by improving the water efficiency criteria for conveyor machines.