July 9, 2012

Dear ENERGY STAR® Water Heater Manufacturer or Other Interested Party:

The purpose of this letter is to share a refined proposal from the U.S. Environmental Protection Agency (EPA) regarding the inclusion of Energy Policy Act (EPACT) covered water heaters offered for sale in the residential market. The Agency would like to acknowledge stakeholders for their continued participation and contributions to the revision of the ENERGY STAR Water Heater specification.

With the development of the Version 2.0 ENERGY STAR Water Heater specification close to completion, the EPA welcomes stakeholder comments on the refined proposal as revised based on the stakeholder comments on Draft 3 and discussions with stakeholders. Comments on this proposal are due by August 3, 2012.

The attached document provides excerpts of the Version 2.0 ENERGY STAR Water Heater specification reflecting proposed refinements, which are characterized below, to both the definition and requirements for EPACT covered units.

Included Products

In Draft 3, EPA proposed inclusion of hybrid units, some of which are NAECA covered and some of which are EPACT covered. Stakeholders generally supported expansion of the scope; however, some commented that the proposed definition of gas hybrid water heaters was overly complex and confusing. Stakeholders also commented that storage water heaters covered by EPACT but designed for and sold into the residential market should be included. Taking this feedback into consideration, EPA proposes to add a definition for EPACT covered residential gas water heaters, such that it covers residential products, and simplify the hybrid unit definition to refer only to NAECA covered units.

Consistent with follow-up discussions with stakeholders, the Agency is proposing that the maximum allowable thermostat setting on the unit might serve as a basis for distinguishing residential products. Research and discussions with stakeholders indicate that most water heater units offered for sale for residential applications are designed with a maximum thermostat setting of 160°F.

In addition, analysis of available models showed that all EPACT covered products currently marketed for residential use have input rate of 100 kBtu/hr or below. This is consistent with EPA’s understanding that any input greater than 100 kBtu per hour would require a larger gas line than the typical ½” gas line found in residential buildings, making products less attractive for emergency replacement.

As previously noted, NAECA covered hybrid water heaters will not be eligible for the ENERGY STAR label until the DOE test procedure is finalized. These products are included in this specification, and requirements defined, with the intention that they will be able to qualify for ENERGY STAR as soon as the DOE test method is finalized.
Qualification Criteria

- **Thermal Efficiency (TE).** Stakeholder comments recommended that the EPACT water heater efficiency level be raised to 0.90 TE, as the standby loss requirements are only likely to be met by products with TE of at least 0.90. In addition, a level at 0.90 TE will encourage the market to move towards the condensing products. EPA concurs with this recommendation and proposes a TE level of 0.90 TE for EPACT covered water heaters.

- **Flammable Vapor Ignition Resistant (FVIR) Requirement.** EPA received many stakeholder comments on this requirement and followed up with conversations with a broad range of stakeholders, including manufacturers, safety regulators and members of the ANSI technical working group on water heater safety. EPA relies on ANSI safety standards for all current ENERGY STAR water heater categories. EPA has decided to rely on the ANSI water heater safety standard without modification for the additional units in scope as well.

Comment Submittal
Stakeholders are encouraged to submit comments on this revised proposal by **August 3, 2012** to Waterheaters@energystar.gov. All comments will be posted to the ENERGY STAR website unless the commenter requests otherwise.

To track EPA’s progress in revising the ENERGY STAR Water Heater specification, visit the Product Development website at www.energystar.gov/revisedspecs and click on “Residential Water Heaters”.

Please direct any specific questions to Abigail Daken at EPA, daken.abigail@epa.gov or (202) 343-9375 and Craig Haglund, D&R International, at chaqlund@drintl.com or 301-588-9387. Thank you for your continued support of ENERGY STAR.

Sincerely,

Abigail Daken
Product Manager,
ENERGY STAR HVAC and Water Heater Programs