



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

OFFICE OF  
AIR AND RADIATION

February 26, 2013

Dear ENERGY STAR<sup>®</sup> Boiler Manufacturer or Other Interested Party:

With this memorandum, the U.S. Environmental Protection Agency (EPA) is launching efforts to revise the ENERGY STAR<sup>®</sup> Version 2.1 Boiler specification. As a first step, EPA is pleased to share with you a Draft 1 Version 3.0 proposal for your review and comment. EPA plans to hold a stakeholder meeting on **March 12, 2013** to discuss the Draft 1 specification in greater detail.

EPA's consideration of a specification revision for boilers was prompted by the following factors:

- The current ENERGY STAR specification has been in place since April 1, 2002 and several market indicators suggest a trend toward greater efficiencies.
- In 2011, estimated market penetration of ENERGY STAR qualified boilers reached 46% (gas boilers at 42% and oil boilers at 52%). This progress represents a positive indication of the impact the program has had in transforming the market and paves the way for potentially more stringent requirements.
- New federal minimum efficiency standards for boilers took effect in September 2012. The new minimum levels – gas boilers at 82% AFUE and oil boilers at 84% AFUE – are close to the current ENERGY STAR requirements.

EPA is committed to helping consumers save money and reduce their environmental impact. To ensure that ENERGY STAR continues to distinguish the top performers in terms of energy efficiency, providing significant energy and cost savings to the consumer, EPA is revising the Version 2.1 Boiler specification. Specifically, the Draft 1 proposes the following changes and identifies other areas for further discussion:

**AFUE Levels:** EPA's initial market research supports raising the ENERGY STAR levels to condensing levels for gas boilers. As such, in this Draft 1, EPA is proposing to raise the Annual Fuel Utilization Efficiency (AFUE) level to 90% for gas and 87% for oil boilers.

**Combined Appliance Annual Fuel Utilization Efficiency (CAafue):** EPA proposes to delete the CAafue metric from the specification as this metric is seldom used by the manufacturers to rate combined appliances and the federal test method does not include a test method for it. Accordingly, the definition and test method for CAafue are deleted from the respective sections in the specification.

**Idle Loss for Combined Appliances:** Apart from raising the AFUE levels, EPA has identified energy efficiency features in currently available products that provide additional savings. For example, through stakeholder discussions, EPA has learned that addressing idle loss for combined space heating and water heating appliances would potentially deliver additional savings. The Department of Energy (DOE) plans to begin the relevant test method development

in 2013; once complete, EPA intends to include a requirement in a later version of the boilers specification.

More details regarding EPA's rationale for proposing these changes are included in note boxes throughout the draft specification document.

### **Comment Submittal**

Stakeholders are encouraged to provide written comments for EPA consideration to [Boilers@energystar.gov](mailto:Boilers@energystar.gov) by **March 26, 2013**. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

### **Stakeholder Meeting**

EPA plans to host a stakeholder meeting on **March 12, 2013 from 2:00 pm to 4:00 pm Eastern time** to discuss the Draft 1 specification and address initial stakeholder comments and questions. Stakeholders are encouraged to inform EPA of any industry events that may conflict with this proposed date. EPA will distribute further information about this meeting over the next few weeks.

To track EPA's progress in developing the ENERGY STAR Boilers specification, visit the Product Development website at [www.energystar.gov](http://www.energystar.gov).

Please direct any specific questions to Abigail Daken, EPA, at [Daken.Abigail@epa.gov](mailto:Daken.Abigail@epa.gov) or 202-343-9375 or Sarah Medepalli, ICF International, at [Sarah.Medepalli@icfi.com](mailto:Sarah.Medepalli@icfi.com) or 202-677-5201. Please direct specific questions regarding test methods to Ashley Armstrong, DOE, at [Ashley.Armstrong@ee.doe.gov](mailto:Ashley.Armstrong@ee.doe.gov) or 202-586-6590. Thank you for taking the time to review this draft specification. I look forward to working with you over the next several months.

Sincerely,



Abigail Daken, Product Manager  
ENERGY STAR for HVAC