

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



OFFICE OF
AIR AND RADIATION

November 9, 2009

Dear ENERGY STAR® Geothermal Heat Pump Partner or Other Interested Stakeholder:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the **Final Draft** ENERGY STAR Version 3.0 Geothermal Heat Pump specification. This Final Draft specification reflects comments received on the previous Draft 1 document and is the final opportunity to provide feedback on proposed revisions prior to finalization. Comments on the Final Draft document are due **November 23, 2009**.

The following key changes have been made in this Final Draft version:

- The definition of a Direct Ground Exchange (DGX) geothermal heat pump has been expanded to include units that utilize direct refrigerant to water heat exchange. EPA understands that there are direct geotexchange technologies available today that use water baths for direct heat exchange instead of the ground. According to industry sources, these types of units are able to be tested under AHRI 870. Therefore, EPA is considering allowing these products to be covered by this specification and has therefore proposed modifications to the DGX and Ground Heat Exchanger definitions in the specification.
- A reference to implement quality control practices, such as those described in ISO/IEC Guide 65:1996, has been included to provide additional guidance for third-party organizations operating a product certification system. While some organizations already have accreditation to ISO/IEC Guide 65:1996, EPA recognizes that many well-regarded, third-party certification organizations currently are not accredited to this standard. Therefore, EPA is encouraging certification organizations to implement quality control procedures, such as those described in ISO/IEC Guide 65:1996.
- The effective date for Tier 2 has been moved to January 1, 2011. Previously, the Draft 1 specification proposed an August 1, 2010 effective date. This new Tier 2 effective date provides manufacturers with slightly more than one year to transition to the new requirements for water-to-air and DGX models.
- EPA received questions regarding the nature of the refrigerants that could be used with DGX units. EPA is evaluating the implications of different refrigerants, their related performance, and the potential environmental impacts of their use and will be issuing further guidance appropriately.

Revisions to the specification text are noted in red font for ease of comparing this Final Draft to Draft 1. Note boxes throughout the document address stakeholder comments on Draft 1 and explain any modifications made in the Final Draft.

Water-to-Water Geothermal Heat Pumps

EPA is expecting that the new Version 3.0 specification will go into effect on December 1, 2009. At that time, water-to-water geothermal heat pumps will be eligible for ENERGY STAR qualification. **Please note: manufacturers cannot use the ENERGY STAR mark to label or promote qualifying water-to-water geothermal heat pumps until December 1, 2009 and after the manufacturer has submitted and received EPA approval on a QPI form for each model.** In order to accommodate manufacturers and consumers with regard to the tax credit (see Federal Tax Incentives below), manufacturers can begin submitting QPI forms for these products starting November 23, 2009. EPA will make every effort to review and approve these QPI forms within one week of submission for posting on the ENERGY STAR Web site, so that they can be eligible for the Federal tax credit starting December 1. EPA expects to update the water-to-water qualified product list on a weekly basis through the end of the year.

Partnering under the Version 3.0 Specification

Existing ENERGY STAR Partners: To continue your partnership with ENERGY STAR under Version 3.0, please complete and submit the enclosed Commitment Form. Existing partners must recommit to the Version 3.0 specification by **November 30, 2009** to ensure uninterrupted partnership status. Please send your completed Commitment Form to join@energystar.gov.

New ENERGY STAR Partners: Manufacturers that are not currently an ENERGY STAR partner will need to complete and submit both a Partnership Agreement and a Commitment Form (packaged together as a "Partnership Agreement Packet" on the ENERGY STAR Web site). The Partnership Agreement needs only to be signed once; after that, you may expand your participation into other product areas, as appropriate, by submitting an updated Commitment Form.

The Partnership Agreement Packet can be found on the ENERGY STAR Web site at www.energystar.gov/join. Click on "Manufacturers of ENERGY STAR Qualified Products."

Comment Submittal

The exchange of ideas and information among EPA, industry, and other interested parties is critical to the success of ENERGY STAR. As such, you are strongly encouraged to provide written feedback to ghps@energystar.gov by **November 23, 2009**.

All comments will be posted to the ENERGY STAR Product Development Web site unless the submitter requests that their comments remain confidential. If you support the Final Draft specification, please state this in writing or via email. It is equally important that EPA understand which portions of the draft specification meet with stakeholder approval, in addition to identifying the sections that may need further revision.

To track EPA's progress in revising the ENERGY STAR specification for geothermal heat pumps, visit the Product Development Web site at www.energystar.gov/revisedspeccs.

Federal Tax Incentives

Over the last few months, EPA has received questions regarding federal tax incentives for geothermal heat pumps. Currently only those geothermal heat pumps that meet ENERGY STAR requirements and are listed on the ENERGY STAR Qualified Product list are eligible for a 30% tax credit. According to the Internal Revenue Service (IRS) guidance, the Federal tax credit is tied to the date of purchase and is not retroactive. However, once the ENERGY STAR Version 3.0 specification goes into effect (expected December 1, 2009), water-to-water units that meet the ENERGY STAR requirements and have been submitted to EPA for approval will be eligible for the tax credit. Additional guidance is provided on the ENERGY STAR Frequently Asked Questions (FAQ) Web site at www.energystar.gov/faqs. (Search for "GHP.")

Please note that Congress determines the eligibility requirements for Federal tax incentives. The IRS is responsible for implementing Congress' decisions and for handling consumer inquiries. EPA only has jurisdiction over the requirements of the ENERGY STAR geothermal heat pump specification. Therefore, stakeholders with specific questions regarding the requirements of the tax incentive itself should contact the IRS directly.

Thank you for taking the time to review this draft specification. Please feel free to contact me directly with any questions or concerns at (206) 553-6377 and via e-mail at fanara.andrew@epa.gov or Bijit Kundu, ICF International, at (202) 862-1157 and via e-mail at bkundu@icfi.com.

Sincerely,



Andrew Fanara
U.S. EPA
Climate Protection Partnership Division
ENERGY STAR Product Development Team