



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

OFFICE OF
AIR AND RADIATION

August 8, 2018

Dear ENERGY STAR® Dehumidifiers Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the enclosed [Draft 1 Version 5.0 ENERGY STAR Dehumidifiers specification](#). EPA will hold a stakeholder webinar on August 30, 2018 at 2 p.m. ET to discuss the Draft 1 specification in greater detail. Stakeholders are encouraged to submit comments on this draft proposal to EPA no later than September 7, 2018.

Background

The ENERGY STAR program helps businesses and individuals save money and protect the environment by identifying products with superior energy efficiency. Consistent with maintaining the consumer value associated with the ENERGY STAR label, this revision is prompted by a number of developments. The U.S. Department of Energy (DOE) revised the Federal test method for dehumidifier efficiency which now specifies a new metric, integrated energy factor (IEF), for use in making claims about dehumidifier efficiency. Furthermore, DOE has finalized new standards for dehumidifier efficiency, with a compliance date of June 13, 2019. While the current energy factor (EF) and new IEF metrics are not equivalent, it is apparent that the new federal standard levels approach or exceed the efficiency criteria of the current ENERGY STAR Version 4.0 specification. In addition, the percent of sales of ENERGY STAR units was 63% in 2016 and is anticipated to be higher than that for 2017 data, indicating that the mark may not be providing sufficient differentiation.

Proposal Summary

The basis for this Draft 1 proposal is to align product categories with those adopted by DOE for the 2019 standards, increase stringency to provide better market differentiation for ENERGY STAR dehumidifiers, and capture even greater energy, greenhouse gas, and cost savings compared to the current ENERGY STAR efficiency levels within a reasonable payback period.

Key elements of the Draft 1 Version 4.0 specification include:

- **Updated definitions** to align with DOE's dehumidifier product categories and efficiency metric.
- **Updated test method reference** to 10 CFR 430, Subpart B, Appendix X1.
- **IEF criteria** for portable dehumidifiers ≤25.00 pints/day and 25.01 to 50.00 pints/day as well as for whole-home dehumidifiers with case volumes ≤8.0 cubic feet and >8.0 cubic feet (as tested according to 10 CFR 430, Subpart B, Appendix X1).

More details regarding these elements are included in note boxes throughout the draft specification document. The IEF criteria proposed in this Draft 1 specification are based on DOE's final rule technical support document (TSD) for the 2019 dehumidifier energy conservation standards. EPA has aligned the IEF criteria for two portable dehumidifier categories with trial standard level (TSL) 4 and the two whole-home categories with TSL 3. Data

taken from the DOE's Energy Compliance Certification Database as well as the ENERGY STAR Qualified Products List show that the percentage of models, and likely the percentage of the market, at these proposed levels is around 5%. ENERGY STAR market penetration for dehumidifiers typically climbs quickly after a specification revision, as manufacturers respond by offering a wider selection of efficient models, often reaching above 50% in just a couple years. As such, EPA is confident that the proposed levels will not overly restrict consumer choice among efficient models.

The proposed IEF levels will drive significant greenhouse gas emissions reductions greater than the current ENERGY STAR levels, and provide consumers payback in around 2 years. EPA estimates a potential program unit energy savings of 14% over the 2019 federal standard levels, compared to 8% unit energy savings if the Version 4.0 levels were maintained. More information about EPA's analysis of the available dehumidifier data can be found in the [ENERGY STAR Dehumidifier Draft 1 Data Packet](#).

EPA notes that it proposes to exclude portable dehumidifiers ≥ 50.01 pints/day in this Draft 1. For these units, which comprise less than 1% of the dehumidifier market, EPA was unable to identify a level that provided acceptable payback with the cost and usage estimates in the DOE TSD. EPA is open to receiving any performance, cost, or usage data that might help support the inclusion of this product category in scope.

Stakeholder Meeting

EPA plans to host a stakeholder webinar meeting on **August 30, 2018 at 2 p.m. ET** to discuss the Draft 1 document and address initial stakeholder comments and questions. If you'd like to participate, please register prior to the webinar [here](#). Stakeholders are encouraged to inform EPA of any industry events that may conflict with this proposed date and time.

Comment Submittal Process

Stakeholders are encouraged to provide written comments for EPA consideration to Dehumidifiers@energystar.gov by **September 7, 2018**. All comments will be posted to the [ENERGY STAR Dehumidifier product development webpage](#) unless the submitter requests otherwise.

Please direct any specific questions to Abigail Daken at EPA, Daken.Abigail@epa.gov or 202-343-9375, and Jacob Bayus at ICF, Jacob.Bayus@icf.com or 202-791-8871. Please direct any questions about the test procedure to Ashley Armstrong at DOE, 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 few months.

Sincerely,



Abigail Daken, Manager
ENERGY STAR HVAC Program

Enclosures:

[Draft 1 Version 5.0 ENERGY STAR Dehumidifier Specification](#)
[Draft 1 Version 5.0 Dehumidifier Data Packet](#)