

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



OFFICE OF
AIR AND RADIATION

October 18, 2018

Dear ENERGY STAR® Room Air Cleaner Partner or Other Interested Stakeholder,

The U.S. Environmental Protection Agency (EPA) is launching a revision to the ENERGY STAR Version 1.2 Room Air Cleaners Specification. The enclosed [Discussion Guide](#) provides an early opportunity for stakeholders to provide feedback on key questions EPA is considering in the forthcoming specification development process. Stakeholder engagement is a vital aspect to the success of the ENERGY STAR program, and EPA looks forward to working with all parties to develop the ENERGY STAR Version 2.0 specification. Please submit any formal comments on this Discussion Guide to roomaircleaners@energystar.gov by Tuesday, November 27. EPA will host a webinar to enable discussion regarding the guide on **November 7, 2018 from 2 – 4 PM Eastern Time**. Please register [here](#) if you plan on attending.

ENERGY STAR specifications are reviewed and revised periodically to ensure continued relevance in the marketplace. The ENERGY STAR Room Air Cleaners specification was launched in 2004 and energy efficiency performance requirements have remained unchanged. Qualified product data demonstrate that significant technological advancements enabling efficiency improvements have occurred. With this proposed revision, EPA seeks to recognize these advances in efficiency for room air cleaner products. The accompanying discussion guide highlights a list of areas of interest for this specification revision and key questions for stakeholders. These include:

- **Scope** – EPA seeks feedback from stakeholders on adjusting the scope of the Room Air Cleaners Specification to exclude products that EPA has learned may emit harmful byproducts (e.g., formaldehyde, carbon monoxides, etc.).
- **Technological Advancements** – EPA analyzed the product efficiency of models on the ENERGY STAR Qualified Product List (QPL) and found that the efficiency of certified products has increased significantly since Version 1.0 took effect as a result of increased adoption of more efficient alternating current (AC) motors and direct current (DC) motors, for example. EPA is seeking feedback on other advancements that have resulted in increased efficiency.
- **Efficiency and Product Size** – In consideration of the differences in efficiency distribution by product size and potential differences in consumer utility, EPA is considering evaluating efficiency criteria based on a product's size.
- **Smoke and Pollen Clean Air Delivery Rate (CADR)** – CADR is the industry metric for determining product performance, and is measured in terms of cubic feet per minute

(CFM). The Version 1.2 criteria are based on dust CADR only, but the ANSI/AHAM AC-1-2015 test procedure measures CADR for smoke and pollen particles as well. EPA has learned that the Association of Home Appliance Manufacturers (AHAM) and retailers use smoke CADR to estimate the appropriate room size for a given room air cleaner. As a result, EPA seeks feedback on addressing more than one particle type in the ENERGY STAR efficiency requirements to offer increased consumer value.

- **Noise of Room Air Cleaners** – As noted in EPA’s recently published [Guide to Air Cleaners in the Home](#)¹ and companion [Residential Air Cleaners Technical Summary](#)², the noise generated by room air cleaners can be a concern for consumers, who have cited noise as a reason for decreasing the speed of their air cleaner or turning it off. EPA is interested in techniques manufacturers use to reduce the noise produced by room air cleaners and any industry standards for measuring air cleaner noise.
- **Filter Performance** – The Version 1.2 Specification does not reference specific filter types. However, in the EPA Guide to Air Cleaners in the Home, it is noted that filter type does influence the performance of a room air cleaner. As a result, EPA is interested in stakeholder feedback on this specification including minimum filter criteria and on methods for determining filter performance.
- **Testing** – The Department of Energy (DOE) and EPA are reviewing the test procedure requirements for room air cleaners to assess whether the test procedure provides results that are representative of current typical consumer settings and use. DOE seeks, feedback on opportunities to provide greater differentiation in recognizing more efficient products, while maintaining product performance and minimizing the overall test burden. In the Discussion Guide, DOE and EPA welcome feedback on several test method topics where additional analyses and testing may be warranted.

EPA looks forward to working with stakeholders to develop the Version 2.0 specification. Stakeholders are requested to provide comments on the Version 2.0 Specification Discussion Guide **no later than Tuesday, November 27**. Please send comments via e-mail to roomaircleaners@energystar.gov.

All comments received will be posted to the [ENERGY STAR Room Air Cleaners Specification Development webpage](#), unless the submitter specifically requests that his or her comments remain confidential. The exchange of ideas and information between EPA, industry, and other interested parties is critical to the success of ENERGY STAR. To track EPA’s progress on this specification, please visit the [ENERGY STAR Room Air Cleaners Specification Development webpage](#).

Please contact me at Burchard.Robert@epa.gov or (202) 343-9126, or Emmy Feldman, ICF, at Emmy.Feldman@icf.com or (202) 862-1145, with any questions or concerns about the specification. For questions about the test method, please contact Stephanie Johnson, DOE, at Stephanie.Johnson@ee.doe.gov or (202) 287-1943. Thank you for your continued support of the ENERGY STAR program.

¹ EPA, “Guide to Air Cleaners in the Home”, https://www.epa.gov/sites/production/files/2018-07/documents/guide_to_air_cleaners_in_the_home_2nd_edition.pdf

² EPA, “Residential Air Cleaners: A Technical Summary”, https://www.epa.gov/sites/production/files/2018-07/documents/residential_air_cleaners_-a_technical_summary_3rd_edition.pdf

Best Regards,

Robert Burchard

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ENERGY STAR for Room Air Cleaners

Enclosures:

[ENERGY STAR Room Air Cleaners Version 2.0 Specification Discussion Guide](#)