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



OFFICE OF AIR AND RADIATION

December 19, 2017

Dear ENERGY STAR® Pool Pump Brand Owner or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) welcomes your input on the attached Draft 2 Versions 2.0 and 3.0 ENERGY STAR Pool Pumps specification. EPA will hold a stakeholder webinar on January 8, 2018 to discuss the Draft 2 specification in greater detail. Stakeholders are encouraged to submit comments on this draft proposal to EPA no later than January 19, 2018.

On September 28, 2017, EPA proposed Draft 1, Versions 2.0 and 3.0 ENERGY STAR Pool Pumps specification. The Agency hosted a webinar to discuss this proposal and also invited written comment. EPA has carefully considered all of this stakeholder feedback and is proposing changes in Draft 2, outlined below.

**Version 2.0 Level:** EPA received multiple comments from stakeholders in support of increasing the efficiency requirements on self-priming pumps to EL6 (the 2021 standard level), due to current product availability, benefits for preparing the marketplace to adopt the 2021 federal standard, and industry agreement that the EPA data conversions specific to the new test method were conservative and higher efficiency criteria are acceptable. EPA reviewed the submitted comments and data, and is proposing to raise the large pump self-priming requirement to EL6 in this draft.

As stated in Draft 1, EPA is proposing to ultimately include replacement motors in this specification and has made this intention clear with TBDs in Table 1: Pool Pump Weighted Energy Factor Criteria. In response to Draft 1, stakeholders shared additional information about test methods in development. When a test method becomes final and sufficient data is available, EPA plans to add replacement motor criteria to the specification in a minor revision that will not affect Version 2.0 certified products. Lastly, EPA received no feedback on the Version 3.0 levels and has maintained them from Draft 1.

**Freeze Protection and Timers:** In response to stakeholder comments, EPA is proposing to add DOE's freeze protection requirements and requirements for timers for integral sand and cartridge filter pumps.

**Data Collection:** EPA is proposing to continue collecting Curve A/B/C data. In Draft 1, EPA proposed eliminating the reporting requirements for Curves A and B. However, EPA received stakeholder input that the Curve A/B/C information at maximum speed is useful to installers and consumers for sizing a pool pump to their installation, especially if that installation is using 2" (Curve A) or 1.5" (Curve B) plumbing. EPA understands that the tests are relatively easy to implement when testing with the DOE DPPP Test Procedure and that this data is a collection requirement for other regulatory organizations.

EPA is also proposing to collect Power Factor information, a reporting requirement in the DOE DPPP Test Procedure, because the data provides information valuable to utilities, efficiency organizations, installers, and consumers. There is no additional testing burden.

**Demand Response:** EPA is proposing to change the Demand Response requirements from RPM based requirements to flow based requirements. The primary driver of this change is to allow testing by measuring flow, as is typically done when testing pool pumps. A revised test method with more traditional flow based measurements will be easier for manufacturers and test labs to implement, reducing testing burden. Additionally, flow rate and RPM are linked by physical equations, thus current RPM requirements are easily translated to the new flow based requirements. This has the added benefit of writing requirements based on the parameter with the most utility to the consumer, the pump operating flow.

EPA is gathering stakeholder and industry feedback on Type 3 responses, which are designed to support load shifting in low demand periods. Version 1.0 does not specify the amount of increase in activity for a Type 3 response, particularly for a pump that is already active. EPA is proposing to set a minimum incremental response within the pump operating conditions and manufacturer recommended operating ranges. For idle pumps, EPA proposes specifying initiating flow at a rate appropriate for filtering. EPA welcomes feedback on this proposal.

**Definitions:** EPA has aligned the definitions with 10 CFR 431.462, including proposing to add definitions for freeze protection controls, timer, integral cartridge filter pump, and integral sand filter pump. EPA has also added definitions for demand response override and time-stamped override signal, to support further clarity in the DR test method.

**Other Changes:** EPA is proposing to align test procedure sampling requirements with that of the federal standard.

## Stakeholder Meeting:

EPA plans to host a stakeholder webinar meeting on January 8, 2018 at 2:30 pm – 4:30 pm EST to discuss Draft 2 and address stakeholder comments and questions. If you would like to participate, please register prior to the webinar <a href="here">here</a>. Stakeholders are encouraged to inform EPA of any industry events that may conflict with this proposed date.

## **Submitting Comments:**

Stakeholders are encouraged to provide written comments for EPA consideration to <a href="PoolPumps@energystar.gov">PoolPumps@energystar.gov</a> by January 19, 2018. All comments will be posted to the ENERGY STAR Product Development website unless the submitter requests otherwise.

To track EPA's progress in revising the ENERGY STAR Pool Pumps specification, visit the Product Development website at www.energystar.gov/revisedspecs and click on the Pool Pumps "Version 2.0 is in development" link.

Please direct any questions to either Sharon Frey, EPA; frey.sharon@epa.gov (202-566-1480) or Abigail Daken, EPA; daken.abigail@epa.gov (202-343-9375) and Dan Baldewicz, ICF; dan.baldewicz@icf.com (518-452-6426). Please direct questions about DOE's standards and test procedures to Ashley Armstrong at DOE, ashley.armstrong@ee.doe.gov (202-586-6590).

Thank you for taking the time to review this draft specification. We look forward to working with you to develop this specification.

Sincerely,

Sharon Frey

ENERGY STAR Program