



October 14, 2020

The Honorable Daniel R. Simmons
 Assistant Secretary
 Office of Energy Efficiency & Renewable Energy
 U.S. Department of Energy
 1000 Independence Avenue, S.W.
 Washington, DC 20585-0121

Appliance and Equipment Standards Program
 U.S. Department of Energy
 Building Technologies Office
 950 L'Enfant Plaza, SW., Suite 600
 Washington, DC, 20024

RE: Comments on Docket ID No. EERE-2020-BT-TP-0002 Energy Conservation Program: Test Procedure for Showerheads

Dear Assistant Secretary Simmons:

The Alliance for Water Efficiency (AWE) and the undersigned 60 organizations write to express our firm opposition to the redefinition of a showerhead proposed by the US Department of Energy (DOE), which will allow multiple shower flows in a single stall. The current federal

definition of a maximum flow of 2.5 gallons per minute (gpm) from a single shower has helped Americans save billions of dollars on their water and energy bills. DOE has not provided any technical analysis to document the cumulative water and energy impact that this proposed change would have, and which we believe would be financially harmful to the American public. We are specifically opposed to the redefinitions of “body spray” and “safety shower showerhead” that would remove both of these products from the legal definition of a showerhead. These proposed changes would be the most significant step backward on water and energy efficiency in 30 years.

The undersigned organizations believe this rulemaking is ill-advised for the following eight reasons:

1. **The current definition of showerhead should be updated to align with the definitions in the current ASME A112.18.1/CSA B125.1 and ISEA Z358.1-2014 standards.** DOE states that the current definition of showerhead is “ambiguous and does not mandate DOE’s prior interpretation” as justification for the redefinition. The proposed rulemaking states that greater alignment with the ASME showerhead definition is needed. To fulfill the intent of greater alignment, DOE should also incorporate the definitions for accessory, body spray, showerhead, and safety shower showerhead in the current ASME A112.18.1/CSA B125.1 and ISEA Z358.1-2014 standards. Manufacturers utilize this standard, including the definitions, so showerheads can comply with the requirements in the U.S. model plumbing codes.
2. **The proposed rulemaking would allow wasteful showers in a wide variety of configurations.** The changes to the definitions and test procedures will legalize the sale of multiple showerhead systems, legitimizing the profligate use of water and energy, and contradicts with current industry design. This end result from the DOE’s action is unacceptable from the perspective of water efficiency. For nearly a decade, industry has been manufacturing and consumers have been purchasing showerheads designed to meet DOE’s 2011 Guidance. The proposed rulemaking would allow multiple shower head systems to increase flows from the current federally legal 2.5 gallons per minute (gpm) to 5.0 gpm or more, depending upon the number of shower heads. This could increase national water use by 161 billion gallons in just 1 year.¹
3. **Specifically exempting body sprays from the definition of a showerhead is illegal backsliding.** The DOE also proposes to define the term “body spray” to clarify that these products are not subject to the current energy conservation standards and thus can flow at any flow rate. We are concerned that the proposed rulemaking will result in wasteful and unnecessary “deluge” showers, which will also consume much more hot water. We also believe that this proposed rulemaking would be illegal and subject to anti-backsliding provisions under the federal statute². Additionally, the U.S. plumbing codes require body sprays to comply with the current ASME A112.18.1/CSA B125.1

¹ Mitchell D. (June 2020) Showerhead Water & Energy Savings. M.Cubed. Oakland, CA. Available from AWE.

² 42 U.S.C. 6295(o)(1) (commonly referred to as the “anti-backsliding provision”) prohibits DOE from prescribing a standard that increases the maximum allowable energy use of a covered product.

standard. The standard requires body sprays flow no more than 2.5 gpm. If DOE exempts body sprays instead of aligning the definition with that in the industry standard, consumers will be able to purchase higher flow body sprays, but they will not be able to legally install them.

4. **This illegal backsliding will only spur states to adopt their own showerhead standards and requirements.** The unnecessary redefinition will also create confusion and uncertainty in the market because at least eight states – which contain 40% of the nation’s population and housing – already have laws in place that effectively restrict shower flows to lower than the 2.5 gpm federal standard. It was exactly this type of state-by-state patchwork regulation that led to the passage of the Energy Policy Act in 1992 (EPAAct 1992).
5. **The process for this rulemaking has not followed past DOE protocols, and does not qualify for a categorical exclusion under the National Environmental Policy Act of 1992 (NEPA).** DOE Notices of Proposed Rulemakings have always had at least 60 days for public review, even in cases where there was clear pre-release information. This proposed rulemaking is on a very fast track with far less than the usual 60 days’ notice and no pre-release communication. Given the magnitude of the potential impact, the proposed rulemaking should allow at least 90 days or more for public comment and review, and should also not qualify for a categorical exclusion under NEPA since there are clear water resource and energy impacts to the environment that have not yet been analyzed.
6. **The proposed rulemaking will increase consumption of drinking water that will have a severe impact on water supplies across the country.** 40 of the 50 states are already confronting serious water shortages, as documented in a US Government Accountability Office Report³. Increasing the consumption of treated drinking water through this proposed rulemaking will increase water utility costs for providing new supplies – and therefore increase customer bills, as those costs for procuring needed new supplies are then passed on to the consumers.
7. **Every 1 gpm of increased flow in a shower would cost Americans \$1.14 Billion.** Even a small change in average shower flow rates would have a huge impact on national water and energy demands, and the proposed redefinition will clearly result in increased water and energy bills across the US. For each 1 gpm increase in shower flow rate, national annual domestic water use would increase by 55 billion gallons and national annual energy use for that added hot water would increase by 25,000 billion Btu⁴. This would, in turn, increase annual water and energy bills for American consumers by an estimated \$1.14 billion⁵. While these are our best estimates, this is the kind of

³“Freshwater Supply Concerns Continue, and Uncertainties Complicate Planning.” US Government Accountability Office Report, May, 2014 - www.gao.gov/assets/670/663343.pdf

⁴ Mitchell, IBID

⁵ Mayer, Peter. Memo to AWE on the Costs of 1 gpm Increase in Shower Flow. Available from AWE

technical analysis that DOE needs to undertake itself as part of this rulemaking proceeding.

8. **The water supply and energy savings from the current regulation are critical for the nation.** To provide some perspective on the importance of the water and energy savings, AWE has analyzed the future impact that might result if showerhead flow rates were raised or lowered, using data describing the installed base of showerheads in 2011-2012 from the Residential End Uses of Water Study that documented actual flow rates in the field⁶. Based on projections for new development and for existing home showerhead replacements, AWE estimates that 2.5 gpm showerheads provide 11 billion gallons per year in water savings and 5 trillion Btu per year in energy savings. Ultra-efficient showerheads (<1.6 gpm) provide 19 billion gallons per year in water savings and 9 trillion Btu per year in energy savings. These are significant savings; in ten years the savings for 2.5 gpm showerheads at the federal standard alone accumulate to the equivalent of supplying 1 million homes with water and 670,000 homes with energy.

The country needs more water and energy efficiency – not less – and thus the undersigned organizations firmly recommend that these proposed rulemaking changes be rejected.

Sincerely,

Alliance for Water Efficiency
Chicago, IL

Amy Vickers and Associates
Amherst, MA

Arizona Municipal Water Users Association
Phoenix, AZ

Association of California Water Agencies
Sacramento, CA

Association of Metropolitan Water Agencies
Washington, DC

Bay Area Water Supply & Conservation Agency
San Mateo, CA

California Water Efficiency Partnership
Sacramento, CA

California Water Service Company
Torrance, CA

Cascade Water Alliance
Bellevue, WA

Center for Water-Energy Efficiency,
University of California, Davis
Davis, CA

Citizens Water Advocacy Group
Prescott, AZ

City of Big Bear Lake
Big Bear Lake, CA

City of Charlottesville
Charlottesville, VA

City of Durham
Durham, NC

⁶ DeOreo, W., P. Mayer, et. al. 2016. Residential End Uses of Water, Version 2. Water Research Foundation. Denver, CO.

City of Flagstaff Flagstaff, AZ	Electric & Gas Industries Association Sacramento, CA	Monterey Peninsula WMD Monterey, CA
City of Hays Hays, KS	Foothill Municipal Water District La Canada Flintridge, CA	Municipal Water District of Orange County Fountain Valley, CA
City of Mesa Mesa, AZ	Green Builder Coalition Glen Carbon, IL	National Wildlife Federation Merrifield, VA
City of Round Rock Round Rock, TX	Jurupa Community Services District Jurupa Valley, CA	Orange Water and Sewer Authority Carrboro, NC
City of Sacramento Sacramento, CA	Las Vegas Valley Water District Las Vegas, NV	Plumbing-Heating-Cooling Contractors Association Falls Church, VA
City of Santa Barbara Santa Barbara, CA	Los Angeles Department of Water and Power Los Angeles, CA	Regional Water Authority Sacramento, CA
City of Santa Monica Santa Monica, CA	Maureen Erbeznik & Associates Los Angeles, CA	Regional Water Providers Consortium Portland, OR
City of Surprise Surprise, AZ	Medford Water Commission Medford, OR	Sacramento Suburban Water District Sacramento, CA
City of Westminster Westminster, CO	Metropolitan North Georgia Water Planning District Atlanta, GA	San Antonio Water System San Antonio, TX
Connecticut Water Company Clinton, CT	Metropolitan Water District of Southern California Los Angeles, CA	Santa Rosa Water Santa Rosa, CA
Denver Water Denver, CO	Miami-Dade Water and Sewer Department Miami, FL	Southern Nevada Water Authority Las Vegas, NV
East Bay Municipal Utility District Oakland, CA		Sonoma Water Santa Rosa, CA
Eastern Municipal Water District Perris, CA		
Ecosystems, LLC Miami, FL		

Texas Water Foundation
Austin, TX

Valley Water
San Jose, CA

Water Use it Wisely
Phoenix, AZ

Tucson Water
Tucson, AZ

Water Demand Management
Boulder, CO

Water Supply Citizens
Advisory Committee
Belchertown, MA

Turfgrass Water Conservation
Alliance
Albany, OR

Walnut Valley Water District
Walnut, CA

WaterNow Alliance
San Francisco, CA

Upper San Gabriel Valley
MWD
Monrovia, CA