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July 24, 2020

Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

*Via regulations.gov*

**Re: Comments of the International Code Council in Response to the Environmental Protection Agency's (EPA) Notice of Recent Specifications Review and Request for Information on the WaterSense Program, Docket Number EPA-HQ-OW-2020-0026**

The International Code Council (ICC) is nonprofit organization, driven by the engagement of its more than 64,000 members, that is dedicated to helping communities and the building industry provide safe, resilient, and sustainable construction through the development and use of model codes (I-Codes) and standards used in design, construction, and compliance processes. Most U.S. states and communities, federal agencies, and many global markets choose the I-Codes to set the standards for regulating construction and major renovations, plumbing and sanitation, fire prevention, and energy conservation in the built environment. The Code Council appreciates the opportunity to submit the following comments in response to EPA's notice of recent specifications review and request for information (RFI) in the above-named matter.

The I-Codes are widely utilized and supported at the federal, state, and local levels. All 50 states use the International Building Code (IBC) as the basis for commercial and multifamily housing construction and safety regulation. The IBC references the International Plumbing Code (IPC), which is adopted or in use in 37 states. The International Residential Code (IRC) is adopted or in use in 49 states. The IRC addresses all components, including plumbing, of a house or townhouse less than four stories tall. The IPC and IRC incorporate all the minimum prescriptive regulations pertaining to plumbing system installations. This includes water flow (and pressure) specifications along with faucet and fixture design, performance, and operation criteria.

The 2018 International Green Construction Code (IgCC), a collaboration between the Code Council, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, and the U.S. Green Building Council, establishes maximum plumbing fixture consumption rates consistent with WaterSense specifications for water closets, urinals, residential lavatory sink faucets, and residential showerheads. The IgCC is in use in 16 states and the District of Columbia. The Code Council also partners with the American Society of Agricultural and Biological Engineers (ASABE) to publish the ASABE/ICC 802-2014 Landscape Irrigation Sprinkler and Emitter Standard, which ensures adequate safety and performance of landscape irrigation systems, and which also establishes testing methods that EPA's WaterSense program utilizes to quantify product performance for pressure-reducing sprinkler bodies. The General



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Services Administration (GSA) requires the IRC, IPC, and IgCC for all civilian governmental buildings<sup>1</sup> and the Department of Defense (DOD) requires the IRC and IPC for all U.S. military bases.<sup>2</sup>

ICC's Evaluation Services' (ICC-ES) licensed engineers conduct evaluations of products, components, methods, and materials including a host of plumbing products. ICC-ES also certifies whether products conform to required or voluntary standards. The evaluation process culminates with the issuance of technical reports that manufacturers use to help determine code compliance and regulators use to enforce building regulations. ICC-ES is a licensed WaterSense certifying body. In addition to ICC-ES's services, ICC's International Accreditation Service (IAS) is an approved accreditation body under the WaterSense program that EPA has authorized to provide accreditation services for WaterSense certifying bodies.

The International Code Council (ICC) and ICC Evaluation Services (ICC-ES), applaud EPA for all it has done to lead water savings efforts for more than a decade. The ICC Family of Solutions has, and always will, support the EPA WaterSense program.

## **I. Customer Satisfaction and WaterSense**

The Code Council supports the continued success of the WaterSense program and fully understands the importance of end-user customer satisfaction. Therefore, it is our belief that EPA should look to the WaterSense program's market outcomes to inform its understanding of customer satisfaction. According to EPA data from 2019, since its inception in 2006, the WaterSense public-private partnership has helped save a cumulative 4.4 trillion gallons of water and more than \$87 billion in water and energy bills.<sup>3</sup> These accomplishments are all the more remarkable given the program was not formally authorized until 2018, and has historically received limited federal investment. For example, in 2017, EPA's Office of Inspector General found that consumers saved \$1,100 for every federal dollar invested in the program.<sup>4</sup> The program's success is a striking indicator of customers' satisfaction with WaterSense products.

EPA can have confidence in the performance of WaterSense products because, per the RFI "WaterSense has included strong performance requirements in its specifications and used independent organizations to certify that labelled products meet the EPA criteria." EPA ensures the performance of WaterSense products through certifying bodies, like ICC-ES. In certifying that a product conforms to WaterSense's product specifications, ICC-ES not only ensures the specification's water efficiency criteria are satisfied, it also ensures that the specification's performance criteria are satisfied.

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<sup>1</sup> General Services Administration, *Facilities Standards for Public Buildings Service ("GSA P-100")* (July 2018).

<sup>2</sup> Department of Defense, *Unified Facilities Criteria, DoD Building Code (General Building Requirements)* (Oct. 2019).

<sup>3</sup> EPA, *WaterSense Accomplishments 2019*, (June 2020).

<sup>4</sup> EPA, Office of Inspector General, *EPA's Voluntary WaterSense Program Demonstrated Success*, Report No. 17-P-0352 (Aug. 1, 2017).



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WaterSense performance criteria rely on the same standards that base plumbing codes require for products that do not carry the WaterSense label.<sup>5</sup> For example, although WaterSense requires water closets adhere to a maximum flush volume of 1.28 gallons versus 1.6 gallons for the IRC and IPC, both the IPC/IRC and WaterSense require adherence to the same hydraulic performance requirements (ASME A112.19.2/CSA B45.1).

EPA should continue to rely on the existing process for verifying product performance, which ensures products meet defined metrics through independent testing and verification. Manufactures, at their option, are best and most appropriately positioned to measure customer satisfaction.

## **II. WaterSense Specifications Review**

The Code Council supports EPA’s decision to retain current WaterSense specifications for water efficient plumbing products. Although lower flow rates and water consumption values may be technically feasible, additional research is necessary to ensure that doing so would not negatively impact the overall plumbing system’s integrity. Per a National Institute of Standards and Technology (NIST) technical note released in May 2020, “[r]esearch is needed to address these gaps in support of water efficiency and water quality goals to ensure the effectiveness of these systems today and in the future.”<sup>6</sup>

The Code Council supports sustaining the current WaterSense specifications as written and published.

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Thank you for the opportunity to provide comments. If you have any questions concerning ICC’s recommendations, please do not hesitate to contact me.

Sincerely,

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<sup>5</sup> In the RFI, the Agency states its interest in “ensur[ing] that our performance criteria review is in fact ensuring that labelled products are meeting the same standards as products on the market before the WaterSense label was adopted.” The question should not be whether WaterSense labeled products are meeting the same standards as products on the market prior to 2006, the question should be whether WaterSense labeled products are meeting the same standards as plumbing code-compliant products, that do not have WaterSense labels, today.

<sup>6</sup> NIST, *Measurement Science Research Needs for Premise Plumbing Systems*, Technical Note 2088 (May 2020).