Summary of Revisions to the WaterSense® Specification for Private Lavatory Faucets

The U.S. Environmental Protection Agency (EPA) is announcing the release of the draft Version 2.0 of its *WaterSense Specification for Private Lavatory Faucets*.[1] The purpose of this document is to summarize the draft revisions made to the specification, share the reasoning behind the changes, and provide a proposed timeline for compliance with the new requirements.

Within the revisions to the specification, EPA is clarifying the scope of the specification and its exclusions and modifying the water efficiency criteria by reducing the maximum flow rate for private lavatory faucets and lavatory faucet accessories. EPA is also incorporating optional criteria for a lavatory faucet to be designated as a cold-start faucet. Lastly, EPA is incorporating multiple technical clarifications that have been made to the specification since its original publication and updating or incorporating language to maintain consistency with more recently published WaterSense specifications.

EPA considers the proposed updates referenced in this document to constitute a major revision, because the planned revisions will affect the certification status of some existing WaterSense labeled faucets and faucet accessories. EPA expects that these revisions will reflect advancements in the marketplace while ensuring that WaterSense labeled faucets and faucet accessories continue to achieve performance expectations and anticipated water savings.

I. Background

EPA released the *High-Efficiency Lavatory Faucet Specification* in 2007, and this is the first revision that EPA is making to the specification. To date, dozens of WaterSense manufacturer partners have produced more than 20,000 WaterSense labeled lavatory faucet and faucet accessory models. Since the publication of the specification, several states have adopted state regulations that require private lavatory faucets to have a maximum flow rate at or below the current WaterSense criteria of 1.5 gallons per minute (gpm), and at least six states and Canada have established a maximum flow rate of 1.2 gpm. As a result of regulations requiring private lavatory faucets to flow at 1.2 gpm or less, many manufacturers have transitioned product models to meet these requirements. Faucets with a maximum flow rate of 1.2 gpm have become the predominant flow rate of faucets available within retail settings, even outside of these states.

EPA is revising the specification to lower the maximum flow rate for faucets to earn the WaterSense label so that the WaterSense label continues to represent the more water-efficient options in the marketplace.

EPA published its *WaterSense Notice of Intent (NOI) to Revise the High-Efficiency Lavatory Faucet Specification* in March 2024, which formally initiated the specification revision process and identified revisions it was considering, including lowering the maximum flow rate to acknowledge the marketplace shift and expanding the scope of the specification to include kitchen faucets, public lavatory faucets, and metering faucets. EPA accepted written comments and held a public meeting to discuss the NOI and obtain recommendations from interested parties. EPA considered this feedback when creating the draft of Version 2.0 of the *WaterSense*

[1] Version 1.0 of this specification is titled the *High-Efficiency Lavatory Faucet Specification*. EPA is modifying the title as part of this revision.

Specification for Private Lavatory Faucets and ultimately decided to move forward with the revision to the maximum flow rate without substantially modifying the scope. While comments that EPA received from some interested parties on the NOI indicated support for labeling other faucet categories, it was suggested that developing separate specifications would be the preferred pathway. Therefore, while EPA may still develop new specifications for other faucet types, they would be addressed under a separate specification development effort.

Because EPA made the decision to complete a major revision to the specification, it also plans to make other minor and editorial updates to better align the specification with similar WaterSense specifications and industry standards. EPA is incorporating several technical clarifications throughout the specification, as manufacturers and licensed certifying bodies are required to adhere to active technical clarifications when certifying products to meet the specification.

II. Summary of Specification Revisions

Section 1.0 Scope and Objective

The current scope of the specification includes lavatory faucets and lavatory faucet accessories intended for private use. Within the revisions to the scope, EPA is adjusting the context surrounding lavatory faucets in private use to align with proposed definitions that EPA is working with the American Society of Mechanical Engineers (ASME) A112.18.1/Canadian Standards Association (CSA) B125.1 *Plumbing Supply Fittings* technical committee to incorporate into that product standard. EPA is clarifying that lavatory faucets in private use should be restricted from walk-in traffic. Private lavatory faucets, by definition, are found in homes/dwelling units and private restrooms in hotels, motels, hospitals, congregate living facilities, and senior care facilities. Similarly, EPA is adjusting the context surrounding public lavatory faucets to clarify that they are intended to be installed in non-residential bathrooms that are exposed to walk-in traffic, consistent with the definition included for public lavatory fittings in the ASME A112.18.1/CSA B125.1 *Plumbing Supply Fittings* standard.

EPA is explicitly excluding bar faucets within the scope of this revised specification. EPA has previously indicated that bar faucets can earn the WaterSense label; however, this is not explicitly stated in the current specification and has never been formally clarified. EPA intends to develop a specification for kitchen faucets to earn the WaterSense label and will include bar faucets within the scope of that specification due to their similar function. Until that specification is developed, bar faucets that currently bear the WaterSense label and meet the requirements of the Version 2.0 specification can remain on certification listings. See Section III for more information on the transition as it relates to bar faucets.

EPA is explicitly excluding several faucet types from the specification that are solely intended for volumetric activities or otherwise not suitable for water savings. These exclusions are:

- Laundry and service sink faucets, which are used for filling a laundry sink, mop buckets, or other basins;
- Lawn or sediment faucets (i.e., hose bibbs);
- Tub faucets, including Roman tub faucets, which are used for filling a bathtub;
- Pot fillers, which are typically installed over a stovetop or range or in a commercial kitchen for filling pots with water; and

- Drinking water dispensers, which typically are connected to an under-sink or whole-house water treatment, cooling, or heating system and are used for glass or pot filling.

EPA is proposing to reverse its clarification *LF-1215-2: Metering Faucets* by incorporating metering faucets into the scope of the specification. *LF-1215-2* currently prohibits metering faucets that use a WaterSense labeled aerator from earning the WaterSense label. With this revision, EPA now intends to allow metering faucets in private use that are equipped with a WaterSense labeled aerator and that otherwise meet the requirements of the specification to earn the WaterSense label.

Section 2.0 General Requirements

EPA is creating this new section to address general requirements for private lavatory faucets and faucet accessories that were previously included under "Water Efficiency and Performance Criteria" (see new Section 3.0). The requirements remain the same; however, EPA also updated the text to clarify references to the current applicable standards: ASME A112.18.1/CSA B125.1 *Plumbing Supply Fittings,* and NSF International Standard (NSF)/American National Standard (ANSI)/National Standard of Canada (CAN) 61 *Drinking Water System Components – Health Effects*, Section 9.

Although metering faucets are excluded from NSF/ANSI/CAN 61, Section 9, EPA considers the requirements included in the standard applicable to metering faucets seeking to earn the WaterSense label. Therefore, EPA is also explicitly requiring metering faucets equipped with a WaterSense labeled aerator to conform to NSF/ANSI/CAN 61, Section 9.

Section 3.0 Water Efficiency and Performance Criteria

EPA's current maximum flow rate in the specification is 1.5 gpm at 60 pounds per square inch (psi), but many WaterSense labeled faucets have flow rates below this criterion. The majority (63.1 percent) of labeled faucets and faucet accessories have a maximum flow rate of 1.2 gpm or less, and 6.8 percent have flow rates of 1.0 gpm or less. Within the NOI, EPA proposed reducing the maximum flow rate to either 1.2 gpm or 1.0 gpm. Interested parties recognized that many faucets and faucet accessories exist with a flow rate of 1.2 gpm, but they expressed concern about the impacts a lower flow rate could have on drainline performance and water stagnation. After considering this feedback, EPA is reducing the maximum flow rate to 1.2 gpm at 60 psi.

The current minimum flow rate in the specification is 0.8 gpm at 20 psi. This requirement provides two important benefits to private lavatory users. First, it ensures an adequate flow rate at lower water pressures that can be found in homes on well water or in some high-rise buildings. Second, it provides sufficient flow for the many different uses of water in private lavatories, such as shaving and face washing. Faucets in public lavatories, by contrast, are designed solely for handwashing and can provide sufficient satisfaction at lower flow rates (e.g., 0.5 gpm) that would be inappropriate in a private setting. To maintain a high level of satisfaction with faucets labeled under this specification, EPA is not revising the minimum flow rate requirement or the flow rate testing procedures.

EPA is incorporating three clarifications within this section. *LF-1214-1: Maximum Flow Rate Verification Protocol* updates the reference to the federal regulation that outlines testing verification protocol. *LF-1214-2: Minimum Flow Rate Verification Protocol* outlines applicable

modifications to 10 CFR 429.28 for evaluating the minimum flow rate, which have been placed in a new Appendix B. *LF-1213-2: Applicability of Minimum Flow Rate Requirement* clarifies that at least one mode of the faucet shall meet all water efficiency and performance requirements and that all modes shall meet the maximum flow rate requirement.

Section 4.0 Optional Criteria for Cold-Start Faucets

EPA is creating a new section to identify criteria that manufacturers may choose to meet that can differentiate and highlight a feature that helps lower energy consumption. Cold-start faucets lower energy consumption because they deliver only cold water when turned on in a neutral or middle position. These faucets can only deliver hot or warm water when the handle or lever is moved away from the middle position. Within this new section, EPA is establishing criteria for cold-start faucets so that if a manufacturer opts in to this designation and meets the outlined criteria, EPA can highlight the cold-start feature with the WaterSense Product Search Tool. EPA also included a detailed test protocol within Appendix C of the specification.

Section 5.0 Product Marking and Documentation

EPA is combining the requirements from Version 1.0, Section 3.0 Non-Adjustability Criteria and Section 4.0 Flow Rate Marking into a new section that addresses all product marking and documentation requirements.

EPA is modifying the text of the non-adjustability criteria to reflect the updated maximum flow rate of 1.2 gpm. Otherwise, the applicability of the non-adjustability criteria remains the same.

ASME A112.18.1/CSA B125.1 provides additional marking requirements for faucets not included in 16 CFR 305.24. Because all WaterSense labeled faucets are required to adhere to this standard, EPA is clearly stating that the marking requirements also apply.

EPA is modifying the example of digit resolution within the flow rate marking criteria to avoid confusion and reflect the updated maximum flow rate of 1.2 gpm.

Lastly, EPA is incorporating three clarifications within this section. In accordance with *LF-1221-1: Faucet Marking Requirements*, EPA is updating the reference to the federal regulation that outlines faucet marking requirements. *LF-0113-1: Flow Rate Marking* allows the manufacturer to mark the product with the maximum “rated” flow rate, and *LF-1219-1: Number of Digits for Flow Rate Marking* clarifies that manufacturers can include flow rate markings in either two or three digit resolution.

Section 6.0 Effective Date

When the specification revision and a timeline for compliance with the revisions is finalized, EPA will include an effective date in Section 5.0. See Section III for more details.

Section 8.0 Definitions

EPA is revising this section to define cold-start faucets, due to the new optional criteria for this function that are included in the draft specification. EPA is including a definition for sink faucets (and sub-definitions for bar faucets, kitchen faucets, laundry faucets, and service sink faucets), which are not currently defined in ASME A112.18.1/CSA B125.1 but that EPA is working with

the ASME A112.18.1/CSA B125.1 technical committee to define within the standard. EPA is also updating the definition for private use and public use to align with intended definitions within the standard.

Appendix A: Requirements for WaterSense Labeling

EPA is modifying Appendix A to maintain consistency with the current *WaterSense Program Guidelines* and more recent product specifications. There is no change to any of the requirements.

WaterSense Partnership

EPA is removing footnote 4, which defines the term "manufacturer" with reference to the *WaterSense Program Guidelines*. EPA has removed this definition from recent versions of the *WaterSense Program Guidelines* and instead defines the roles and responsibilities of a manufacturer, rendering the reference in footnote 4 unnecessary.

Conformity Assessment

EPA is updating the language of the conformity assessment requirement to align with the requirements included in more recent WaterSense specifications. There is no change to the requirement itself.

WaterSense Label Use

EPA is adding requirements for WaterSense label use to clarify marking guidelines for product packaging and online and printed specification sheets. This language is intended to align with requirements included in more recent WaterSense specifications and ensure consistent application of the *WaterSense Program Mark Guidelines* across product categories.

Appendix B: Minimum Flow Rate Verification Protocol

EPA is adding Appendix B, which incorporates the clarification *LF-1214-2: Minimum Flow Rate Verification Protocol* and outlines applicable modifications to 10 CFR 429.28 for evaluating the minimum flow rate. As required by the clarification, licensed certifying bodies shall apply this flow rate verification protocol described in Appendix B when evaluating the minimum flow rate for lavatory faucets and accessories.

Appendix C: Cold-Start Faucet Test Procedure

EPA is adding Appendix C, which outlines the testing procedure that licensed certifying bodies shall perform in order to designate a private lavatory faucet as a cold-start faucet. EPA used the Unified Water Label Association's *Taps & Showers Technical Criteria,* which includes a test procedure for cold-start faucets, as a basis for the criteria included in Appendix C. EPA expanded on this basis to provide more specific test procedures and align with similar test protocols in ASME A112.18.1/CSA B125.1. The test procedure is designed to confirm that the cold-start faucet supplies only cold water when turned on with the handle within a 10-degree arc of the middle position and that there is no water flow or leakage from the hot water inlet. The procedures are also intended to verify that the faucet supplies hot or warm water only when the handle is moved away from the middle position towards the hot position.

Appendix D: Transition Period

EPA is adding Appendix D, which outlines the timeline for compliance with the revisions in Version 2.0 of this specification and the applicable requirements expected of manufacturers, private labelers, and licensed certifying bodies. This information is also summarized in Section III below.

III. Timeline for Compliance With Version 2.0 of the Specification

The revisions included in Version 2.0 of this specification will impact the certification status of private lavatory faucets with a maximum flow rate greater than 1.2 gpm and eventually the certification status of all labeled bar faucets. Otherwise, EPA anticipates that the revisions will not impact the certification status and will not require the retesting or recertification of private lavatory faucets that have a maximum flow rate less than or equal to 1.2 gpm. Further, the revisions will not impact the current licensing status of certifying bodies, and EPA will not require edits to licensing agreements or licensing agreement amendments currently in effect.

While the effective date of the specification is dependent on the future publication date for the final specification, EPA anticipates that the specification will take effect approximately 12 months following publication. Manufacturers may begin delisting ineligible products from their certification listing at any time ahead of the effective date. Further, private lavatory faucets manufactured after the effective date that do not meet the water efficiency criteria in the revised specification are not permitted to bear the WaterSense label. Upon the effective date, EPA will designate models deemed ineligible under the revised specification (e.g., all private lavatory faucet models with a maximum flow rate greater than 1.2 gpm) as delisted. Models will remain on the WaterSense Product Search Tool for six months following the date they were delisted, which allows time for previously manufactured and labeled models to be sold in the marketplace. Bar faucets are not permitted to earn the WaterSense label upon the effective date of Version 2.0, but previously labeled bar faucets that otherwise meet the requirements of the Version 2.0 specification may remain on certification listings until EPA releases a new WaterSense specification with criteria for kitchen and bar faucets.

Within 90 days of the effective date, certifying bodies are required to remove ineligible products from their certification listings and submit updated product notification templates (PNTs). Certifying bodies must use Version 4.0 of the PNT (currently in draft form and available for comments), which reflects the revisions included in Version 2.0 of the specification.

EPA plans to have a six-month grace period between the effective date and the discontinue date, during which packaged inventories of private lavatory faucet models that were manufactured and labeled prior to the effective date may still be distributed and sold. During this time period, for products no longer earning the WaterSense label, manufacturers and private labelers should discontinue use of the WaterSense label or associated language communicating WaterSense certification on product packaging of ineligible products. Product packaging includes specification sheets, product web pages, and other online or newly printed materials. In acknowledgement of the time it will take for manufacturers and private labelers to make comprehensive updates to these materials associated with products that are no longer labeled, EPA will pause brand monitoring related to private lavatory faucets during this time. Further, as has always been EPA's policy, EPA will not require previously labeled products or previously printed materials associated with models that are ineligible under Version 2.0 of the specification to be destroyed or recalled from the market.

Upon the discontinue date (e.g., six months following the effective date of the specification), all private lavatory faucet models with a maximum flow rate greater than 1.2 gpm will be removed from the WaterSense Product Search Tool. However, EPA will still be able to confirm the prior labeled status of models upon inquiries from consumers, utilities, or other interested parties. EPA expects that, by the discontinue date, manufacturers and private labelers have suspended use of the WaterSense label and associated language on any online or newly printed materials for all previously labeled products that are no longer eligible. EPA will resume brand monitoring following the discontinue date and will work with manufacturers, private labelers, and certifying bodies to ensure product certification listings and product documentation are current and compliant.

EPA's intended timeline and associated activities are summarized below in Table 1.

Table 1. Proposed Timeline and Activities Associated With the *WaterSense Specification for Private Lavatory Faucets*, Version 2.0

Date	Estimated Timeline	Activities
Publication date	2025	• EPA publishes the final *WaterSense Specification for Private Lavatory Faucets*, Version 2.0. • Manufacturers, at their discretion, can begin to remove ineligible models from product certification listings.
Effective date	Publication date + 12 months	• *WaterSense Specification for Private Lavatory Faucets*, Version 2.0 takes effect. • Faucet models that are unable to meet the specification criteria can no longer bear the WaterSense label. • New bar faucet models are unable to earn the WaterSense label. • EPA designates all private lavatory faucet models no longer meeting specification criteria as "delisted." Existing bar faucet models that otherwise meet the Version 2.0 specification criteria may remain on the certification listings until publication of a specification for kitchen and bar faucets.
Certifying body transition period	Effective date + 90 days	• Licensed certifying bodies are required to update certification listings and submit Version 4.0 of the PNT with up-to-date product listings.
Grace period	Effective date until the discontinue date	• EPA pauses brand monitoring activities related to private lavatory faucets to offer manufacturers and private labelers the opportunity to update materials associated with previously labeled models. • Manufacturers and private labelers work on updates to online and newly printed materials associated with previously labeled models to remove the WaterSense label and any language associated with WaterSense labeling.

Date	Estimated Timeline	Activities
Discontinue date	Effective date + six months	• All private lavatory faucet models no longer meeting specification criteria that were designated as "delisted" are removed from the WaterSense Product Search Tool.
Ongoing	Following discontinue date	• EPA resumes brand monitoring activities related to private lavatory faucets and works with manufacturers, private labelers, and licensed certifying bodies, as applicable, to resolve any identified brand monitoring issues. • EPA releases a specification for kitchen faucets at a later date. EPA will work with manufacturers and licensed certifying bodies to transition bar faucets to this new product category. When this specification is published, new bar faucet models may apply to earn the WaterSense label.

IV. Opportunities for Additional Research and Future Revisions

EPA acknowledges that the *America's Water Infrastructure Act* of 2018 limits the allowed frequency of revisions of specification performance criteria to no more than once every six years after a major revision, such as the development of Version 2.0 of this specification. The revisions included in Version 2.0 of this specification will ensure the WaterSense label continues to represent the more water-efficient options in the marketplace.

EPA received feedback from interested parties on the NOI that offer opportunities for research that may facilitate future development of separate faucet specifications or further revisions to the *WaterSense High-Efficiency Lavatory Faucet Specification*. While some interested parties suggested EPA lower the maximum flow rate of private lavatory faucets to 1.0 gpm to increase water efficiency, many noted that this may negatively impact drainline transport, water stagnation, and user satisfaction. Other commenters said that the expected water savings from a reduced maximum flow rate may not be achieved if a user opens the faucet valve partially with higher-flow faucets but opens a lower-flow faucet more fully. EPA intends to coordinate with its program partners to facilitate research that investigates the effect of maximum flow rates lower than 1.2 gpm on performance and drainline transport. EPA aims to collaborate with these partners to analyze customer experience and understand whether the concerns raised by interested parties have been realized in application.

Interested parties generally supported the development of water-efficiency criteria for kitchen faucets, metering faucets, and public lavatory faucets, but many suggested developing separate specifications for distinct faucet types. EPA intends to coordinate with standards committees to finalize definitions for distinct faucet types, and it may consider developing separate specifications at a later time.

In the meantime, moving forward with Version 2.0 of the current specification will bolster water efficiency while upholding the importance of thorough research to identify potential for future revisions and new specification development.