Public Meeting on the WaterSense® Draft High-Efficiency Flushing Urinals Specification February 5, 2009

Roy Sieber of ERG welcomed everyone to the public meeting on the draft high-efficiency flushing urinals specification and EPA and ERG staff introduced themselves. Mr. Sieber then reviewed the administrative details and ground rules for the meeting before relinquishing the floor to Stephanie Tanner of EPA. Ms. Tanner explained that the purpose of this meeting was to review the specification and to clarify and answer any questions concerning EPA's intent with key sections of the specification and to receive the public's comments on any aspects of the specification. The goal was not to attempt to resolve any issues raised during the course of the meeting, but to completely understand the issues raised in order to take these factors into consideration when finalizing the specification. Ms. Tanner provided a brief overview of the WaterSense program's purpose and goals.

Ms. Tanner then described the goal and scope of the draft high-efficiency flushing urinal specification.

One manufacturer asked to what extent WaterSense relied upon the plumbing codes in the development of this draft specification. Mr. Sieber responded that WaterSense typically does not go into code issues in the development of specifications, except to understand that the product operates within a code-driven system. The manufacturer asked for confirmation that the standards listed during the presentation (i.e., ASME A112.19.2, IAPMO Z124.9, and ASSE #1037) are the standards being used to test the performance of these products, and that no other tests or information were used to establish "equivalent or superior performance." Mr. Sieber responded that this was a correct statement. Ms. Tanner further elaborated adding that this was correct, except in situations where WaterSense feels the existing standards are not sufficient to ensure equivalent or superior level of performance, such as with the tank-type high-efficiency toilet specification, which included the addition of the Maximum Performance (MaP) testing requirements. She also clarified that with respect to the flushometer valves, the additional performance criteria added by the draft specification will require some testing beyond what is in the current ASME standard.

The manufacturer also commented that nothing in any of the standards cited in the draft specification and the presentation addresses "customer satisfaction." Ms. Tanner clarified that user satisfaction does figure into WaterSense's approach to developing the specification in that WaterSense examines the existing standards and assesses whether the standards adequately ensure a high level of user satisfaction. She provided the example of low-flow toilets in the early 1990's that met the existing standards but failed to perform up to user expectations in the field. If there are additional requirements that can be added to increase user satisfaction with a product, then WaterSense investigates these and considers including them in the specification. The inclusion of the MaP testing requirement in the tank-type high-efficiency toilet specification is the best example of this.

Another manufacturer commented that the reference to IAPMO Z124.9 should actually be ANSI Z124.9, as it is an ANSI standard. A representative from IAPMO commented that the reference is correct as written as it is an IAPMO standard, and ANSI is the clearinghouse for this standard.

David Frank of ERG then provided a brief overview of the water-efficiency and performance standards of the draft specification.

One participant pointed out that stainless steel urinals have been omitted from the standard and need to be included by adding a reference to the appropriate ASME standard in Section 4.0.

One participant commented that he did not see anything addressing the urinals' performance over time. Specifically, he asked whether WaterSense has any plans to address drainline buildup or other long-term performance issues once the products are installed in the field. He did not feel that simply because a product performs to the specification in the laboratory for a short period of time, that it will continue to perform this way in the field over time. His concern was from a plumber's perspective, that products performing poorly in the field become a plumber's problem. Ms. Tanner explained that this type of issue is not typically addressed in the specification itself, but during the product research leading up to the development of a specification, WaterSense does look at long-term field performance and customer satisfaction with these products. The commenter indicated that he would send WaterSense information about the operation of these products over time.

One manufacturer commented that the requirement prohibiting the interchangeability of parts was unnecessarily design restrictive. His experience has been that with many of the high-efficiency products on the market, replacing the high-efficiency part with a higher-flush volume part results in the plumbing fixture not working, as the fixture cannot handle the increased water volume (i.e., it overflows). He also feels the requirement discourages the retrofitting of existing stock with more water-efficient components, and discounts a large water savings potential by discouraging this practice. He also questioned how many products on the market today can meet this requirement, and that it might be limiting purchaser choices.

To follow up the previous comment, another participant questioned how WaterSense's specification for new products affects existing installed products. The original commenter replied that the requirement discourages purchasers from retrofitting existing fixtures. He feels the language in the specification almost suggests that retrofitting is not a good thing to do.

He also asked if the faucet specification had a comparable non-interchangeability requirement that might serve as a precedent. Ms. Tanner responded that the faucet specification does not have a similar requirement, primarily because it is a specification for a residential product and is sold in very different markets than urinals and other commercial products. The faucet specification, however, does have a packaging

requirement prohibiting the inclusion of instructions for methods to increase flow rate above 1.5 gallons per minute, which is similar to one of the requirements for urinals.

One manufacturer asked whether the non-hold-open requirement would apply to secondary actuators as well (e.g., manual actuators on automatic flush valves that might kick in during a power failure). Mr. Sieber stated that WaterSense has not looked at that in detail and would welcome written comments and recommendations from the public on this topic.

Another participant commented on the "ghost flushing" issue with sensor valves. While acknowledging that this might be a more significant issue with flushometer valve toilets than urinals, he inquired whether the ASSE standard addressed sensor sensitivity. He asked whether WaterSense considered specifying sensor valves separately or addressing them in the future flushometer valve toilet specification. Ms. Tanner stated that WaterSense does not intend to address sensor valves in the flushing urinal specification. She indicated that it was up to the marketplace to work this issue out.

One manufacturer questioned whether sensor valve malfunctioning could be categorized as a "customer satisfaction" issue. He then went on to say that if the standard covers the functioning of the sensor, and the valves meets the standard, then "customer satisfaction" has been addressed. Another participant indicated that ASSE #1037 does not address the performance of sensor valve actuators.

Mr. Sieber then asked whether any of the certifying bodies on the call would care to comment on whether the descriptive criteria provided in Section 5.0 (Pressurized Flushing Device Requirements) was adequate for their testing and certification needs, or whether actual testing protocols would need to be developed and included in the specification. One certifying body commented that they were comfortable with this section of the specification as written and could certify to these requirements.

One participant inquired into the mention of drainline buildup in Section 5.0 of the Supporting Statement and whether EPA had reached any conclusions. Ms. Tanner explained that WaterSense has not seen data to allow it to make a definitive statement about drainline buildup in any type of urinal fixture.

Ms. Wagoner then provided an overview of the certification and labeling process for high-efficiency flushing urinals.

One manufacturer asked why the specification required that a labeled valve or fixture has to be used with a corresponding labeled component. Specifically, if one manufacturer chooses not to have its valve or fixture labeled, why should another manufacturer's labeled valve or fixture not be allowed to be installed with the non-labeled product? He felt this puts an undue burden on the manufacturer of the labeled component.

Ms. Tanner responded explaining that the intent was not to say that such a combination could not be used. Rather the intent was to clarify that for the assurances provided by

the WaterSense label, both the fixture and valve need to be labeled. It is not intended to be a restriction on the manufacturers to whom they can sell their products. WaterSense recognizes that once the labeled component is sold, the manufacturer has very little control on how it is installed and used. The manufacturer also commented that some high-efficiency valves work very well on standard 1.0-gallon-per-flush fixtures, and that WaterSense should consider that when finalizing the specification.

Another participant asked for clarification as to what a valve manufacturer and a fixture manufacturer would need to do to comply with the product documentation requirement in Section 3.0 of Appendix A. Ms. Tanner responded that the manufacturers would not need to provide a list of corresponding labeled parts. The manufacturer would just need to provide a statement that the component should be matched or installed with a corresponding labeled component of the same rated flush volume. If desired, WaterSense could provide sample language for manufacturers to use. Ms. Tanner emphasized that EPA does not expect manufacturers to police how their products are installed in the field.

One commenter suggested that EPA add to Section 3.0 of Appendix A that the installation of a non-labeled part with a counterpart is a violation of the specification criteria.

A participant then asked whether there is a role for suppliers, distributors, retailers, and contractors in informing and educating purchasers about the need to match labeled fixtures and valves. Another commenter indicated that with this product, the effectiveness of the device is governed by the installer. Ms. Tanner responded that yes, there is a role for all of these parties, as well as for EPA, utilities, and all WaterSense partners, supporters, and endorsers. Ms. Tanner added that WaterSense realizes the differences in the specifying and supply chain between urinals, and commercial fixtures in general, and residential plumbing products, and that different outreach and education efforts are needed by the program.

One certifying body commented that his organization is comfortable with the language in Section 3.0 of Appendix A. He did not feel the language needed revision. He further commented that ASSE #1037 does require the testing be done with a minimum of three urinal fixtures of the same rated flush volume. The certifying bodies can help purchasers identify appropriate valve and fixture combinations by making notes on the certification that “this fixture” can be used with “these labeled valves.”

Several participants voiced concern about the mismatching of fixtures and valves and the damage this could cause to the integrity of the WaterSense brand when users see labeled products not performing well in the field (e.g., overflowing, not effectively removing waste). They also expressed concerns about situations where a labeled fixture is mismatched with a non-labeled valve and the presumed water savings are not being realized. Another participant suggested looking at ENERGY STAR’s approach to labeling split systems, such as heating, ventilating, and air conditioning (HVAC) systems, as a possible model. He also suggested that perhaps the Plumbing Manufacturers Institute (PMI) could publish a list of combinations that are labeled.

Ms. Tanner acknowledged these concerns, but went on to say that typically the sector of the market WaterSense is targeting for these high-efficiency products is those groups and individuals who are actively seeking and procuring high-efficiency products. Recognizing that there are an infinite number of ways individuals can circumvent and undermine the WaterSense requirements, WaterSense is expecting the people who are installing these fixtures will genuinely want to achieve higher efficiency levels and that they will make the proper selections.

Another participant expressed the opinion that too much is being made of the mixing-and-matching issue as this issue has existed for a long time with these products and is really not a new phenomenon or a major issue in practice. He feels the specification is sufficient as is. The individuals responsible for purchasing these systems are well-versed in product selection and when WaterSense labeled products are involved, the level of confidence is even higher. Another participant seconded this opinion, saying that in his experience the individuals making these decisions are professionals and, in general, do a good job of ensuring the proper valve and fixture combinations are installed. In addition, many of these products will be specified by green building standards or through rebate programs and there are mechanisms in some cases to do audits to ensure that the components are matched.

Ms. Tanner also clarified that the certification and labeling process and procedures outlined for urinals is unrelated to the existing process for tank-type toilets, in which tanks and bowls must be tested and certified together, or flushometer valves toilets, which have not been addressed by WaterSense at this time.

Ms. Tanner wrapped up the meeting by providing an overview of the next steps and how formal written comments on the draft specification can be submitted. Ms. Tanner encouraged all participants to provide written comments by March 9, 2009, through the WaterSense Helpline (watersense-urinals@erg.com). She explained that all comments become a part of the public record and will be posted on the WaterSense Web site at the conclusion of the comment period. Responses to these comments will be provided with the release of the final specification.