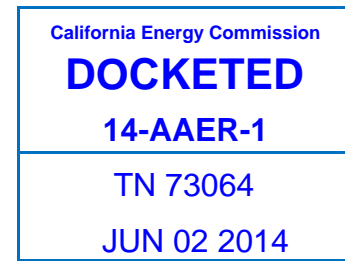




May 30, 2014

California Energy Commission
Docket's Office, MS-4
Re: Docket Number 14-AAER-1
1516 Ninth Street
Sacramento, CA 95814-5512
Attention: Mr. Tuan Ngo, P.E.



Via e-mail: Docket@energy.ca.gov

Dear Mr. Ngo,

Kohler Co. appreciates the opportunity to provide comments to the California Energy Commission regarding Docket 14-AAER-1, 2014 Appliance Efficiency Pre-Rulemaking, Staff Analysis of Toilets, Urinals, and Faucets.

Our comments are as follows:

Page 16: Suggest revising "All toilets, except those designed for prisons or mental health facilities, shall not consume more than 1.28 gpf and shall have a MaP score of no fewer than 350 grams" to read "...and shall meet the performance requirements of ASME A112.19.2/CSA B45.1-2013, Section 7.10 as pass or fail." ASME standards are developed through a consensus process, and therefore would be more appropriate to reference.

Page 23: Potential Clogging Issue With Incompatible Toilet Paper Media – In this paragraph it is suggested that toilet manufacturers voluntarily provide information to the consumer on the product, installation guide, or company website, reminding the consumer not to put anything but urine, feces, and toilet paper into toilets. As the manufacturer of the toilet fixture, we cannot control how consumers use their products, and therefore would suggest that this voluntarily requirement be not included in the rulemaking. Furthermore, this information is already being provided by the manufacturers of the fibrous bathroom wipes.

Appendix A, Section 1602:

- Remove reference to MaP in this section and other sections. Appropriate reference should be to Section 7.10 of ASME A112.19.2/CSA B45.1-2013 because it is a consensus standard.
- Revise the definitions of *replacement accessory*, *plumbing fitting*, *public lavatory faucet*, *blowout type bowl*, *dual-flush water closet*, *electromechanical hydraulic water closets*, *flushometer valve*, *plumbing fixture*, *urinal*, *water closet*, change "waterless urinal" to "nonwater-supplied urinal" to correlate with the definitions found in either ASME A112.18.1/CSA B125.1-2012 and ASME A112.19.2/CSA B45.1-2013 respectively.

Appendix A, Section 1604:

- Remove reference to MaP in this section and other sections. Appropriate reference should be to Section 7.10 of ASME A112.19.2/CSA B45.1-2013 because it is a consensus standard.

Appendix A, Section 1605.1

- In Section (h)(1), reference to Table H-1 should be A-1. Additionally reference to the 1996 edition of ASME A112.18.1M should be updated to the most current version of the standard – ASME A112.18.1/CSA B125.1-2012.

We have also reviewed comments submitted by California Investor Owned Utilities (IOU's) and are concerned with their recommendations to mandate 0.125 gpf urinals, increase the minimum extraction requirement threshold to 600 grams, and reducing the flow rate from 1.5 gpm to 1.0 gpm for lavatory faucets. We offer following comments:

Comments against mandating a maximum of 0.125 gpf for urinals

- A mandatory reduction of 87.5% in urinal flush volume over federal baseline is too excessive and would restrict fixture compatibility with plumbing systems.
- Not having a wider selection of fixture flush volumes to offer also impacts manufacturing inventory levels and availability.
- 0.125 gpf urinals are not proven to be effective in all installation situations and could pose risk in drainline carry.

Comments against mandating a minimum of 600 grams for toilets

- The EPA's WaterSense High Efficiency Toilet Specification, and 350g threshold, has proven to be very effective since its introduction in 2006. Consumer feedback on WaterSense listed toilets has been excellent.
- The 350g limit has been found to represent the 99.5 percentile male output and was set based on thorough vetting from industry experts, medical studies, research, and lab performance.
- While the soy bean paste extraction test properly represents the product performance as it relates to the passage of solid human waste, it does not indicate performance on likelihood of plugging or clogging.
- Manufacturers design toilets around a variety of tests for a well balanced approach. Requirements above 350g do not help the consumer on solid waste, rather encourages manufacturers to focus unduly on solids and not sufficiently on other attributes like cleaning the bowl and preventing plugging/clogging from the usage of toilet paper. Going to 600g will result in products that are less effective in meeting consumer needs, not more effective.
- The IOU proposal adds burdensome labeling requirements as well as testing at 600, 800 and 1000g which is completely unnecessary and arbitrary.
- In some cases, achieving a 600 gram minimum will require manufacturers to rework and redesign the toilet bowls. This change would mean several hundred thousand dollars per toilet, equaling over \$300 million dollars (assuming \$300,00 per design and 1000 bowls) in wasted R&D that will increase consumer prices and reduce consumer innovation while the industry goes

through yet another era of redesign with limited, if any, benefit to consumers. Additionally to re-certify it will cost over \$3.0 million.

- This waste of resources makes no sense when we continue to tolerate toilets that flush 3.0 and 5.0 gallons per flush to remain in homes and industry across nation, including California. What should be done is to embrace the fact that toilets made today work, and as a result, 1.28 gpf toilets should be installed in all homes and businesses. Either incentives or requirements should be put in place to remove these old 3.0 and 5.0 gpf toilets from homes and industry, thereby providing a significant return on consumer investment and lowered water usage than the creation of a questionable standard in terms of whether it creates better consumer experiences.

Comments against mandating a maximum of 1.0 gpm for lavatory faucets

- A result of reducing the flow of water from a lavatory faucet is longer delivery times for hot water to the outlet. The longer delivery time results in greater heat loss within the buildings plumbing system, additional energy required for heating the water due to heat loss, and more cold water that is simply wasted as it flows down the drain.
- Beyond the hot water delivery issues previously mentioned, consumer acceptance of such low flowing faucets will not be favorable due the products inability to assist in some of its intended functions in a timely fashion such as washing hands, cleaning toothbrushes, and filling glasses of water.
- Cost to retrofit existing models would be significant to manufacturers, conservatively we estimate the cost to re-engineer, test, and re-certify would be at least \$4340.00 for every model lavatory faucet.

Again thank you for the opportunity to comment. As a leading manufacturer of kitchen and bath plumbing products worldwide, Kohler Co. applauds the California Energy Commission's efforts and focus on water efficiency. We share this same commitment to environmental stewardship as evidenced by the number of EPA WaterSense-listed products we have in the marketplace, and by our company earning the inaugural EPA WaterSense Manufacturer Partner of the Year award in late 2008 and subsequent awards.

Respectfully submitted,



Shabbir Rawalpindiwala
Manager Codes and Standards