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12-BSTD-1	
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In the matter of:

Docket No. 12-BSTD-01
2013 Title 24 Building Energy Efficiency

May 16, 2012

Robert B. Weisenmiller, PhD
Commissioner, California Energy Commission
Dockets Office, MS-4
Re: Docket No. 12-BSTD-1
Adoption of 15-Day Language for the 2013 Energy Efficiency Building Standards
1516 Ninth Street
Sacramento, CA 95814-5512
docket@energy.ca.gov [Via email]

EXECUTIVE SUMMARY

PMI Positions

- PMI has supported water efficiency throughout the United States and participated in California water conservation initiatives such as AB 715.
- PMI is also cognizant of the efficiencies in harmonizing these requirements which permit the economic availability of these products.
- PMI has been a strong supporter of the US EPA WaterSense program which ensures increased efficiency, product safety and consistent performance.

PMI Concerns

- The proposals in this docket are inconsistent with the requirements within WaterSense.
- These proposals have been added to the wrong section in Title 24 which will create confusion by manufacturers, consumers, builders and inspectors.
- The plumbing industry was made aware of and so was not able to provide input to these changes since new sections were added to the incorrect section of Title 24.
- The added sections are duplicative of the CALGreen codes and California State Plumbing Code.
- There are several seriously flawed errors in the added changes that create technical problems.

Dear Dr. Weisenmiller,

First, Plumbing Manufacturers International (PMI) supports water efficiency efforts and specifically supported California water conservation initiatives such as AB 715 on water closets and urinals. To ensure optimal consumer safety and product performance, we ask that the regulation reference WaterSense¹ certified products in the proposed language for the 2014 California Plumbing and Building Standards.

This 2007 effort to set water closet levels at 1.28 gallon per flush (gpf) and urinals at 0.5 gpf is consistent with plumbing manufacturers' products participating in the WaterSense certification program. Several governmental bodies around the US have adopted WaterSense performance levels for regulations in jurisdictions where water availability is a major issue. Second, we will continue to support water conservation levels where health, safety and performance requirements are incorporated into proposals that accommodate water efficiency and affordable consumer choice. Third, the proposed rulemakings introduced by several California agencies set duplicative and inconsistent standards for plumbing fixtures and fittings which are inconsistent with Environmental Protection Agency (EPA) WaterSense high efficiency water regulations.

PMI is the international trade association representing the majority of plumbing products sold in this industry. PMI promotes the efficient use of water while maintaining public health and safety. We represent 28 manufacturers, including well-known companies such as American Standard, Delta Faucet, Kohler, Moen, Symmons, and Toto. Our collective group of manufacturers is responsible for a conservative 80 % of all the products sold in California. PMI is a strong advocate for the efficient use of water, a commitment that is evident in our extensive cooperation with the WaterSense Program as a Partner and with organizations such as the Alliance for Water Efficiency. We also advocate for public health and safety and product performance as well as harmonization of requirements.

PMI has been collaborating with staff at the California Department of Housing and Community Development (HCD) and the California Building Standards Commission (BSC) to work towards new water efficiency levels for the 2014 California Plumbing Code that will provide safe, sanitary and properly performing plumbing fixtures and fittings. We had understood this collaboration would be the correct working group to provide input into the California regulatory process to enact water efficiency levels for the 2014 code. The California Energy Commission (CEC) efforts in Title 20 (Docket 12-AAER-02) and CEC efforts in Title 24 Part 6 (Docket 12-BSTD-01) are duplicative activities also working on water efficiency levels for plumbing fittings. This has caused confusion and has been particularly troublesome since the plumbing industry has been excluded from these actions and not notified since they were covered under the title and scope of other industries.

The case in point is the 45-day language, and now the 15-day language, in the 2013 Building Energy Efficiency Standards – Title 24 – Part 6, with new, revised regulations in the Section 110.3 titled “Mandatory Requirements for Service Water Heating Systems and Equipment” that note proposed regulations on shower heads with the following proposal (new language):

¹ See WaterSense - [Executive Order \(E.O.\) 13423](#)

7. Showers-Heads.

~~A. At least one single shower head must be attached to each shower valve installed directly on each pipe that terminates at a shower. Shower valves/heads must be placed no closer than four feet from each other, as measured directly from one shower head valve to the next. Shower heads shall conform to applicable requirements in ASME A112.18.1/CSA B125.1 2011 and must have a rated flow rate of no more than 2.0 gallons per minute at 80 psi. When a shower valve supplies more than one shower head, the shower shall be fitted with a valve or diverter that limits the maximum flow rate of the shower to 2.0 gallons per minute. Each mixing valve must supply only one shower head. The piping connecting the shower head to the heater or recirculation loop must be no greater than 1/2 inch at any point.~~

~~**EXCEPTION 2 to Section 110.3(c)7A:** Showers that recirculate hot water from the drain to the shower head.~~

This section is already covered under Title 24 Part 11 in chapters 4 and 5 in the California Green Plumbing Code. This proposal does not acknowledge any performance requirement (a problem noted in the Robert Mowris & Associates report in the CEC 45-day public comments section) and has no provision for third party certification as prescribed in the EPA WaterSense Program. Aside from being in the wrong part of the plumbing and building code, the water efficiency level simply needs to state compliance with WaterSense to assure compliance with this regulation.

PMI points:

1. We continue to be concerned that showerheads are being added within “service water heating systems and equipment” which is not the appropriate categorization and is not only difficult to locate, but will create confusion on the part of manufacturers, consumers, building contractors and plumbing inspectors. In most respects, this Title 24 Part 6 proposal duplicates what is already published Title 24 Part 11 (CALGreen)². Duplication consumes resources and creates confusion on the part of the manufacturers, consumers, building contractors and plumbing inspectors. If there is a problem that needs to be resolved, revise Cal Green. We would propose that the CEC strike part A completely and strike the 1st exception (we are unaware of anyone manufacturing a shower that redeposits drain water back onto the shower user).
2. Reporting requirements for the CEC are duplicative to the water efficiency information provided to the Department of Energy (DOE)³ and the Federal Trade Commission (FTC). The FTC⁴ has recently issued a Federal Register Notice for a Notice of Proposed Rulemaking [FR Doc No: 2012-4865] to accept the data provided by manufacturers of plumbing products under proposed FTC amendments allowing manufacturers to meet FTC reporting requirements by using DOE's new web-based tool for energy reporting (the “Compliance and Certification Management System” (CCMS)). PMI would strongly recommend that the CEC also adopt the use of the CCMS database as means to secure manufacturers efficiency data while reducing program costs and eliminate redundancy of this reporting requirement as the FTC is now accommodating.
3. We haven’t seen the updated provisions for other plumbing products and fixtures so there could be concerns with products added to other newly duplicated areas within Title 24 outside of Part 11 (CALGreen).

² See CALGreen – California Assembly Bill AB32

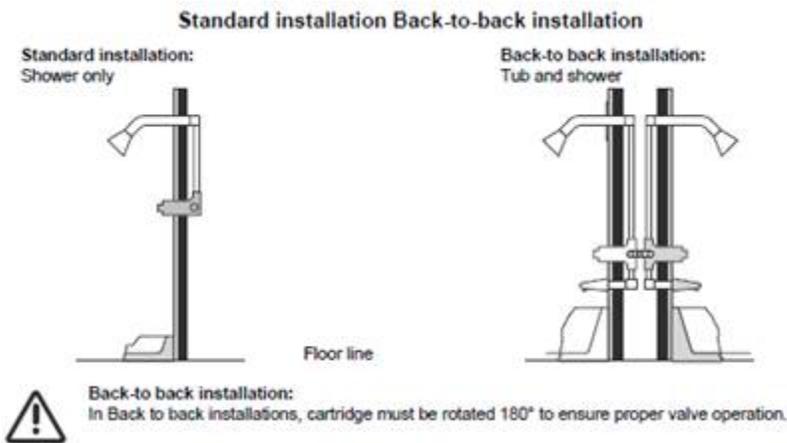
³ See DOE Docket Number: EERE-2010-BT-CE-0014

⁴ See FTC Rulemaking: RIN 3084-AB15

4. We continue to be concerned that different state agencies appear to be developing standards without coordination, that are duplicative, and that are inconsistent.

5. The technical accuracy of the added language in Title 24 Part 6, Section 110.3 is also problematic. There continues to be unresolved issues that we see in the added process in Title 24 Part 6 and errors in the technical merits of this effort of adding duplicate language to the water heater section:

a) This proposal disregards back-to-back showers:



- b) This proposal does not account for tub fillers which are connected to shower valves and not to a shower head in many instances.
- c) This proposal eliminates column showers and panel showers used in locker rooms or other multi-user installations which are used in institutional settings.



EXAMPLE:

PMI is quite concerned that the Energy Commission is proposing move forward with a maximum 2.0 gpm requirement without taking into consideration the three years of significant investigative work that has taken place on WaterSense and the ASME⁵ standard as they relate to showerheads, customer feedback, and the force and coverage performance tests developed by the various groups involved.

⁵ ASME A112.18.1-2011/CSA B125.1-11 and ASME A112.19.2-2008/CSA B45.1-08

Consumer acceptance of high efficiency plumbing products pivots on expectations of good performance, as is specified within the US EPA WaterSense program and should be part of a successful program to save water in California. When referring to the language proposed by the California Building Standards Commission (CBSC)⁶ last week, they have clearly defined language on shower head flow rates within Title 24 Part 11 (CALGreen) and have proposed amending Table 5.303.2.3 to account for the performance ratings already established for the EPA WaterSense program:

TABLE 5.303.2.3 FIXTURE FLOW RATES

Fixture Type	Flow-rate	Maximum flow rate at 20% Reduction
Showerheads	2.5 gpm @ 80 psi	2 gpm @ 80 psi ⁴
Lavatory faucets nonresidential	0.5 gpm @ 60 psi	0.4 gpm @ 60 psi ³
...
Gravity tank type water closets	1.6 gallons per flush	1.28 gallons per flush ^{3,3}
	1.6 gallons per flush	1.28 gallons per flush ^{3,3}
	1.6 gallons per flush	1.28 gallons per flush ^{3,3}
	1.6 gallons per flush	1.28 gallons per flush ^{3,3}
...

³ Where complying faucets are unavailable, aerators rated at .35 gpm or other means may be used to achieve reduction.

^{4,3} Includes single and dual flush water closets with an effective flush of 1.28 gallons or.

Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is the average flush volume when tested in accordance with ASME A112.19.233.2.

Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush. Flush volumes will be tested in accordance with ASME A112.19.2 and ASME A112.19.14.

⁴ Showerheads shall be certified to the performance criteria of the U.S. EPA Water Sense Specification for showerheads.

Changes to plumbing fixture and fitting water efficiency levels need to accommodate the three aspects of the voluntary WaterSense specifications which has a proven track record of providing higher water efficiency levels and consumer acceptance throughout the United States; 1) Establishment of reduced water usage based on data from industry and independent research firms, 2) Provision of performance criteria for these levels that accommodate consumer expectations and 3) Execution and maintenance of accredited certification programs that insure the performance of products labeled with the WaterSense mark. Consumers across the country acknowledge and understand this trusted mark as one of the few credible “green” labels. Using WaterSense allows an informed decision and freedom of choice for the consuming public.

PMI continues to endorse efforts to conserve water through the use of products that are both efficient and highly effective. PMI and its members have worked diligently with the EPA WaterSense program over the past several years to develop product specifications that meet both objectives. These efforts have brought together the EPA, water efficiency experts, standards developers, plumbers, and manufacturers to consider and balance the range of technical and performance issues unique to each product. To date, that effort has resulted in WaterSense High Efficiency Toilet and High Efficiency Residential Lavatory Faucet specifications, among others.

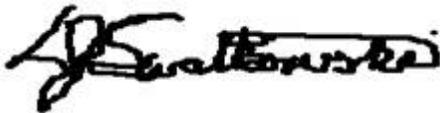
To the best of our knowledge, our industry has not been consulted and engaged in the development of this CEC proposal on Title 24 Part 6 and only had the opportunity to engage at our request immediately prior to the issuance of the 15-day language.

⁶ CALGreen document BSC-07-12-DraftET-Pt11_5-16-12

The PMI technical committee would be very interested in establishing a dialogue with the Energy Commission and any other appropriate individuals at the Commission to address the concerns set forth in this letter. PMI has an engaged and active technical committee that is comprised of representatives of its member companies and is chaired by headquarters staff.

In summary, PMI strongly endorses efforts to ensure that water is used efficiently. We also believe these efforts need to adhere to the US EPA WaterSense specifications where consumers can be provided with products that conserve water, provide the high level of performance and safety they have come to expect and are third party certified to these levels. We would urge the CEC to take action to resolve all water efficiency efforts within Title 24 Part 11 by deleting the new language in Title 24 Part 6 referencing shower heads, eliminate the redundancy in reporting requirements and adopt the DOE CCMS database and continue to revise the language in the CALGreen water efficiency regulations to coordinate fully with the WaterSense program.

Sincerely,



Len Swatkowski

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p.s. – We just received the notice of withdrawal regarding Part 6, Section 110.3 (c) 7. We appreciate the recognition of our concerns regarding this section, but wish to place our comments on that section as presented in the 15-day language on the record. We look forward to continued future dialogue regarding the water efficiency needs of the residents of California.

American Standard Brands, Inc. * Amerikam, Inc. * Bradley Corporation * BrassCraft Mfg. Co. * Caroma Industries Limited * Delta Faucet Company * Dornbracht Americas * Duravit USA * Elkay Manufacturing Company * Fisher Manufacturing Company * Fluidmaster, Inc. * Gerber/Danze Plumbing Fixtures LLC * Hansgrohe, Inc. * InSinkErator * Kohler Company * KWC America, Inc. * Lavelle Industries * LSP Products * Moen Incorporated * NEOPERL, Inc. * Pfister * Sloan Valve Company * Speakman Company * Symmons Industries Inc. * T & S Brass and Bronze Works, Inc. * TOTO USA * VitrA USA * WCM Industries, Inc.