February 5, 2025

Submitted electronically to Jessica.Lopez@energy.ca.gov and uploaded to https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=22-AAER-05

California Energy Commission, Appliance Efficiency Standards Unit
Jessica Lopez
715 P Street
Sacramento, CA 95814

Re: Wastewater Comments on California Energy Commission's Appliance Efficiency Regulations for Water Closets

Dear Ms. Lopez,

On behalf of the California Association of Sanitation Agencies (CASA), Clean Water SoCal, and the Central Valley Clean Water Association (CVCWA), thank you for the opportunity to provide comments on the "Appliance Efficiency Regulations for Water Closets" (Water Closets) by the California Energy Commission (CEC) at the California Natural Resources Agency (CNRA). CASA represents more than 135 public agencies and municipalities in California that engage in wastewater collection, treatment, recycling, and resource recovery. Clean Water SoCal represents over 80 public water and wastewater agencies in southern California who provide essential water supply and wastewater treatment for approximately 20 million people in the counties of Los Angeles, Orange, San Diego, Santa Barbara, Riverside, San Bernardino, and Ventura. CVCWA is a non-profit association of public agencies located within the Central Valley region that provides wastewater collection, treatment, and water recycling services to millions of Central Valley residents and businesses.

We recognize and agree that conservation must be a way of life in California, and we want to support the State in securing our water supply future. We respectfully request an additional extension of time for commenting on this proceeding to allow for the wastewater community to further dialogue with CEC staff and evaluate together the analysis of in-depth technical reports about water conservation impacts by the State Water Resources Control Board (SWRCB) at the California Environmental Protection Agency (CalEPA).

After the CEC's 2023 correspondence with the Inland Empire Utilities Agency and CASA's meeting with CEC staff, we had anticipated closer coordination on aspects of this prospective rulemaking and the underlying analysis due to the serious ramifications of declining flows upon our members' infrastructure. Unfortunately, the clean water community was unaware until most recently of the November 2024 Notice and 60-day rulemaking that were initiated 18 months after our check-in with the CEC. Moreover, we were discouraged our prior contacts at the CEC had not reached out to connect with us after representatives from the clean water community did not participate in the public workshop given that our prior concerns with lowering the standards further had been conveyed and understood in 2023.

The CEC's analysis concludes about the Water Closets proceeding that it will "significantly reduce water and energy consumption and are technically feasible and cost effective." However, in regard to wastewater treatment, the staff presentation referenced environmental impacts but only observed that approximately 60% of sewer collection systems and treatment facilities will experience impacts from lowering the indoor residential standard in 2030. The estimates of the gravity of that transition were not contextualized in the staff presentation, and the subsequent slide about ways to mitigate and adapt also were insufficient for fully conveying the material impact the proposed changes will cause.

In more tangible terms, here are our broad concerns about the impacts to wastewater agencies:

1) Most **wastewater treatment plants and collection systems are designed for 100+ gallons per capita per day (GPCD)**, which is 240% more than the 2030 indoor residential standard of 42 GPCD. See Slide 50.[1]

2) The SWRCB relied on a least-cost-approach to estimate the impact of their conservation rulemaking and concluded **the minimum economic impact would be $328M annually to wastewater treatment facilities, and $45M annually for collection systems,** or approximately $375M a year combined in 2022 dollars. See Slide 56.[2]

[1] https://www.waterboards.ca.gov/conservation/regs/docs/wastewater_12221_draft_ecp_rev.pdf
[2] https://www.waterboards.ca.gov/conservation/regs/docs/wastewater_impacts_final.pdf

3) In addition to expected changes from lowering the indoor standard, the SWRCB's Volumetric Annual Report has collected monthly influent and effluent data from approximately 95% of agencies across the state documenting ongoing annual declines. **Over the last three dry years, influent declined 70,000 AFY** from 3,140,000 AFY in 2019 to 3,070,000 AFY in 2022. See Slide 6.[3]

    a. The **CEC's Water Closets proceeding estimates further annual reductions of 50,000 AFY**, so the impacts at our agencies will be exacerbated beyond what previously was projected by the SWRCB when considering this additional reduction.

        i. The CEC's analyses for the proceeding estimated that, "The proposal would save 643 million of gallons (Mgal) of water the first year the standards are in effect… By 2050, the year that stock turns over, the proposed standards would have an annual savings of 15,902 Mgal of water."[4]

        ii. In acre-feet terms, this is approximately 2,000 acre feet per year (AFY) beginning in 2026 (1,973 AFY, or enough water for 4,000 – 6,000 people for one year), and by 2050, it's estimated to be nearly 50,000 AFY (48,801 AFY, or enough water for 100,000 to 150,000 people for one year.)

        iii. The CEC's analyses also observed, "In California there are 1,239 collection systems, 20.3% sewer miles were constructed before 1959, and 52.1% sewer miles were constructed before 1979. These outdated collection systems are generally oversized and not watertight, utilize unprotected concrete pipes. We emphatically disagree with this characterization and note our member agencies' compliance with the SWRCB's SSS WDR order that was first adopted in 2006 and re-issued in 2022 and which governs how collection systems are operated and maintained.

4) For water recycling, when CalEPA evaluated the impacts of lowering the residential indoor standard to 42 GPCD (i.e. "Scenario 2"), it observed that **changing the indoor standard in 2030 to 42 GPCD (i.e. "Scenario 2") would result in decreasing by 51,402 AFY the annual influent flow volume to wastewater reuse facilities**. See Table 6-34 on page 58.[5]

    a. In combination with the CEC's proposal estimating an additional 48,801 AFY reduction across the state, this would result in approximately 100,000 less AFY to recycle which could result in stranded assets.

    b. The SWRCB's Recycled Water Strike Team already concluded in 2023 that "**based on planned projects, additional investments and project planning for 310,000 additional AFY will be needed to achieve the 2040 goals** of the Governor's Water Supply Strategy to recycle 1.8M AFY by 2040**.** See Page 2.[6]

5) The Department of Water Resources (DWR) currently is conducting an evaluation of the impacts under SB 1157 as directed in Governor Newsom's signing message[7] by conducting studies to evaluate the impacts and feasibility of shifting from the 2025 standard (47 GPCD) to the 2030 standard (42 GPCD). Those efforts will provide additional explanatory strength to the concomitant impacts of this CEC rulemaking.

6) The current and expected reductions in flow also have ramifications at the treatment plant with increased loadings of constituents, which oftentimes reduce the ability of treatment plants to achieve effluent limits as low as required in permits due to the strength of the influent since there is less water.

    a. Toward this, the analysis of environmental impacts and benefits did not incorporate the increased energy and water needed for treatment of more concentrated sewage and additional sewer main flushing and vacuum cleaning because of declining flows.

---

[3] https://bacwa.app.box.com/s/52ds1fxflevs1ira4vxkpv27xez5shlx
[4] https://efiling.energy.ca.gov/GetDocument.aspx?tn=259915&DocumentContentId=96120
[5] https://www.waterboards.ca.gov/conservation/regs/docs/task5-wastewater-excerpt.pdf
[6] https://www.waterboards.ca.gov/water_issues/programs/recycled_water/docs/2024/planned-rw-projects.pdf
[7] https://www.gov.ca.gov/wp-content/uploads/2022/09/SB-1157-Signing-Message.pdf

The CEC's analysis concludes that the Water Closets proceeding will "significantly reduce water and energy consumption and are technically feasible and cost effective." In light of all of the above, we respectfully disagree and think it would be beneficial long term to meet and continue to discuss prospective impacts of this proposed action. During a prospective extension, we commit to actively work together near-term to review and understand how the CalEPA's analysis of water conservation impacts comports with the CNRA's projections of reduced water flowing through the sewers, to treatment plants, and available for reuse, as a result of the proposed rulemaking, especially in light of trends in the most recent volumetric annual data that CalEPA collects annually on wastewater and recycled water. We already are collaborating with DWR on evaluations of impacts of lowering the indoor standard in 2030 and would hope CEC staff could be available to confer with DWR staff, SWRCB staff, and wastewater representatives to de-silo the discussion and communicate across agencies about the prospective impacts in more depth.

In the interim of conferring, we also want to provide directly CalEPA's technical evaluations and reports on the impacts of lowering the indoor residential standard:

1) *Evaluating effects of urban water use efficiency standards (AB 1668- SB 606) on urban retail water suppliers, wastewater management agencies, and urban landscapes*

   https://www.waterboards.ca.gov/conservation/regs/docs/task5-wastewater-excerpt.pdf

2) *Description of a Model to Estimate Effects of Reductions of Influent Wastewater Flow on Wastewater Collection Systems*

   https://www.waterboards.ca.gov/conservation/regs/docs/appendix-5-013022.pdf

3) *Analysis of Environmental Effects on Urban Wastewater Collection, Treatment, and Reuse Systems: Literature, Methods, and Results*

   https://www.waterboards.ca.gov/conservation/regs/docs/appendix-3-013022.pdf

In closing, we appreciate your consideration of our comments in regard to an extension and for more robust dialogues with other regulatory agencies and wastewater representatives so that the full impacts of this Water Closets proceeding can be evaluated collaboratively. Please contact me at jvoskuhl@casaweb.org or (916) 446-0388 if you would like to schedule a meeting with us to discuss the concerns in our letter.

Thank you,

Jared Voskuhl
CASA Director of Regulatory Affairs

Steve Jepsen
Clean Water SoCal Executive Director

Debbie Mackey
CVCWA Executive Officer

Cc: Sabrina Cook, DWR
James Nachbaur, SWRCB
Erik Porse, UCANR