



June 25, 2024

California Air Resources Board
1001 I Street
Sacramento, California 95814

[Submitted electronically via: <https://ww2.arb.ca.gov/public-comments/zero-emission-space-and-water-heater-standards-may-29-2024-workshop-public-comments>]

Re: Zero-Emission Space and Water Heater Standards May 29, 2024 Workshop

To Whom It May Concern:

On behalf of my client, the California Pool & Spa Association (hereafter CPSA), as well as its parent organization, the Pool & Hot Tub Alliance (PHTA) and the affiliated International Hot Tub Association (IHTA), I submit these comments relative to the **Zero-Emission Space and Water Heater Standards May 29, 2024 Workshop**.

CPSA/PHTA are state and national trade associations that represent every segment of the swimming pool and spa industry in California and Nationally including pool builders, sub-contractors, manufactures of pool & spa equipment and chemicals, distributors and pool service and maintenance professionals.

The pool industry is local. Over 10,000 small and medium-sized businesses in this state operate in the design, construction, maintenance, and repair of California pools. This economic activity is estimated to generate some 95,000 jobs together with the resulting state income tax payments. It also generates significant sales taxes, permitting fees, and increased property tax payments as an inground pool is considered an improvement to the property. In total, the swimming pool and spa industry has an annual economic impact that exceeds \$3.6 billion in California, with a tax impact just under \$2 billion.

There are approximately 1.3 million residential swimming pools located in California in addition to over 200,000 commercial swimming pools located in public schools, colleges and universities, local boys' and girls' clubs, children's camps, commercial gyms, and public pools operated by public entities.

CPSA has been active in public proceedings before numerous cities on the issue of REACH codes and water conservation plans. The association has testified and filed public comments with the Department of Water Resources, the State Water Resources Control Board relative to water conservation regulations, and the Energy Commission relative to pool pumps and water heaters. CPSA has also been a partner with the State in the Save Our Water Campaign and has been active on social media on water conservation issues.

Despite this public profile, the industry's economic impact on the state economy, the large number of small businesses in this industry and the number of persons employed by the swimming pool, spa and hot tub industry, CPSA was not sought out as a stakeholder in regulations recently announced by the South Coast Air Quality Control Board (SCAQCB) relative to Emissions of Oxides of Nitrogen from Large Water Heaters, Small Boilers and Process Heaters, nor was the association involved with similar regulation implemented on the same topic previously by the Bay Area Air Quality Board (BAAQCB). This is even more surprising and concerning in that the June 7th LA Times article announcing the regulations adopted by the SCAQCB lead with the story line: "Own a pool in Southern California? New air-quality rule requires electric heaters."

The lack of representation at the stakeholder level in these regulatory actions accounts for the fact that the analysis prepared by the staff relative to swimming pool and spa heaters is flawed. In addition, the regulations do not account sufficiently for current technology, feasibility, impact on the state's electrical grid and the effect of these regulations on consumer satisfaction.

The California Air Resources Board has now held four public workshops relative to these same issues without the benefit of input or expertise from the state's swimming pool, spa and hot tub industry. In developing new regulations, state agencies have an obligation to outreach to key stakeholder groups, consider the effect of such regulation on small businesses and state employment and to consider alternative proposals to less the impact on small businesses and employment. Thus far in the process of these workshops those obligations have not been met relative to the swimming pool, spa and hot tub industry in California.

CPSA will make every effort to catch up to the work of the Board relative to space and water heaters. However, we would request that the Board staff make every effort to meet with experts from the swimming pool heater manufacturers who are in California in order to assist in this effort.

Although heat pump water heaters may be practical in some residential and commercial applications, they are currently not practical or efficient for heating water in commercial pools or residential swimming pools where an in-ground spa and a pool are combined. The largest heat pump water heater is about one-third of the size of a natural gas water heater used in a typical residential in-ground swimming pool. In these applications the use of the heater is more about its ability to heat the water in the spa in a timely manner to meet consumer expectations, than to heat the pool itself.

A typical 400 kw pool heater will accomplish this goal in about an hour or less in most any climate, depending on size of the spa and air temperature. The industry builds heaters as high as 95% efficient. The largest heat pump water heater would require several hours, 4 hrs. to 6 hrs. of run time to obtain a typical temperature of 102 degrees and, depending on air temperature, might never attain that goal or be able to maintain that temperature for consumer use. A heat pump water heater is efficient for its size at 80 degrees air temperature but loses 10% of its efficiency for every 10 degrees drop in air temperature. In order to be efficient, heat pump water heaters require high humidity and ambient temperatures to operate at peak efficiency.

For commercial applications, such as typical school swimming pools, numerous heat pump water heaters would need to run almost continuously to meet and maintain the required water temperatures. In addition, heat pump water heaters are significantly larger than a typical natural gas heater and would likely require expensive building modifications to accommodate. Expensive electrical service issues must also be considered given a heat pump water heater typically requires a

50-amp circuit breaker which alone, and in combination with indoor heaters and EV charging requirements, would over run the electrical service provided to many homes and commercial businesses today.


Lastly, the California Building Industry Association has indicated that their members are currently restrained from building housing in the state due to the inability to connect to the electrical grid and grid capacity issues. Heat pump water heaters for swimming pool and spa applications can only exacerbate this problem because such heaters will have to operate many hours more at a much higher cost to the homeowner, business owner and public entity to accomplish the same task. The recent rule enacted by the SCAQCB would alone add over 1 million heaters to the state's grid in just a four-county area.

In conclusion, the CPSA, along with its affiliates, respectfully urge the California Air Resources Board to carefully consider the unique needs and technical constraints of the swimming pool, spa and hot tub industry when formulating zero-emission space and water heater standards. Our industry contributes significantly to the state's economy, supports thousands of small businesses and provides numerous jobs. It is crucial that any new regulations be developed with comprehensive stakeholder engagement and a thorough understanding of the practical challenges and economic impacts involved.

We appreciate the opportunity to provide our input and look forward to collaborating with the Board and its staff to develop practical and effective regulations. We are committed to advancing sustainable practices within our industry and believe that our expertise can greatly contribute to the achievement of California's environmental goals without unduly burdening small businesses and consumers.

Thank you for your consideration of our comments.

Respectfully,

A handwritten signature in black ink, appearing to read 'John Norwood', is centered on a light gray rectangular background.

John Norwood
Norwood Associates, LLC