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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: AHRI Comments to CARB on Zero-Emission Space and Water Heater Standards
May 29, 2024 Public Workshop**

The Air-Conditioning, Heating & Refrigeration Institute (AHRI) submits this letter to provide input on the two regulatory concepts presented at the California Air Resources Board's (CARB or Agency) Zero-Emission Space and Water Heater Standards Public Workshop on May 29, 2024. AHRI appreciates the opportunity to provide these comments. For the reasons discussed below, AHRI has significant concerns regarding CARB's Draft Zero-GHG Regulatory Proposal (Refined Concept B).

AHRI represents more than 330 manufacturers of heating, ventilation, air conditioning, and refrigeration (HVACR) and water heating equipment. It is an internationally recognized advocate for the HVACR and water heating industry and certifies the performance of many of the products manufactured by its members. In North America, the annual economic activity resulting from the HVACR industry is approximately \$211 billion. In the United States alone, AHRI member companies, along with distributors, contractors, and technicians employ more than 704,000 people.

AHRI and its members are committed to greenhouse gas (GHG) and oxides of nitrogen (NOx) emissions reductions that support human health and the environment while protecting the jobs and the products that are essential to our society's well-being.

I. Discussion

As described above, the HVACR industry has been at the forefront of developing technologies to reduce emissions, and AHRI and its members have already made significant reductions. As CARB explores solutions to further reduce emissions, the Agency must understand the unique realities and challenges facing the HVACR industry before promulgating any additional regulations. AHRI would like to discuss the following issues:

A. Regulations Should Not Limit Use or Repair of Existing Equipment

AHRI supports CARB’s statement that Refined Concept B “would not limit use or repair of existing space and water heaters.” The South Coast Air Quality Management District’s (SCAQMD) Proposed Rule 1146.2 rule does impact the use or repair of existing equipment. CARB should not place limits on existing equipment lifetimes or require mandatory replacement dates for space and water heating equipment.

B. Regulatory Certainty

AHRI supports regulatory certainty. The following three tenets provide for the regulatory certainty needed by Industry. The promulgation of rules (1) harmonized with other California jurisdictions, (2) based on date of manufacture, and (3) cognizant of Energy Policy and Conservation’s (EPCA) preemption provisions discussed by the Ninth Circuit court in *California Restaurant Association v. City of Berkeley (Berkeley)*.¹ AHRI encourages CARB to consider the potential effect of this proposal on space and water heaters, in consideration of the court’s decision in *Berkeley*. For more information on EPCA’s preemption provisions and *Berkeley*, refer to detailed comments submitted by AHRI on March 27, 2024.

C. Additional Refinement Suggestions for “Refined Concept B”

First, the date CARB has proposed for residential water heater is misaligned with new Department of Energy (DOE) standards, which are effective for products manufactured on or after May 6, 2029.² These new federal standards are so stringent, only heat pump technologies can comply.

Second, AHRI is concerned with the proposed scope expansion to include commercial furnaces. The California Energy Commission (CEC) has proposed significant restrictions on the use of commercial furnaces in proposed changes to the 2025 Energy Code (Title 24, Part 6), published on June 13, 2024.³ For example, CEC has proposed prescriptive requirements that offices either contain a variable refrigerant flow (VRF) and dedicated outdoor air system (DOAS) or a four-pipe fan coil (FPFC) with heating hot water supplied by an air-to-water heat pump (ATWHP) and DOAS for ventilation throughout California. For schools, only one prescriptive system choice exists – an FPFC with ATWHP and DOAS. Significant energy efficiency measures are required if a nonresidential building needs to use commercial furnace and compliance must be obtained through the performance pathway.

D. Exemptions

AHRI appreciates CARB’s commitment to evaluate developing “a process to allow an off-ramp to account for implementation issues, including projects that reasonably demonstrate infeasibility.” We again reiterate that CARB’s regulation needs to ensure a pathway for

¹ *California Rest. Ass’n v. City of Berkeley*, 89 F.4th 1094 (9th Cir. 2024).

² <https://www.regulations.gov/document/EERE-2017-BT-STD-0019-1426>

³ Docket 24-BSTD-01

compliance if there is not a significant supply of commercially available products to meet state requirements. Additionally, we have identified the following technological areas of concern: high temperature equipment operation, back-up fuel-fired generation and energy, and unique processes. AHRI strongly recommends continued collaboration regarding exemptions.

E. Dual Fuel

AHRI supports the development of “dual fuel” space and water heating equipment provisions. When coupled with a heat pump, the furnace has low operating hours and provides certainty for backup. Dual fuel technologies also provide decarbonization measures while the grid is still dirty.

II. Supplementary Comments

AHRI has additional feedback on several questions raised by CARB at the May 29th meeting and plans to file supplementary comments by July 12, 2024.

III. Conclusion

AHRI looks forward to continuing to work together to address these issues thoughtfully and reasonably. Please do not hesitate to contact us with questions or if we may provide additional information. We look forward to a continued robust partnership now and in the years to come.

Sincerely,



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