

**FINAL STATEMENT OF REASONS  
FOR PROPOSED BUILDING STANDARDS  
OF THE STATE FIRE MARSHAL  
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4  
(SFM 05/22)**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a Final Statement of Reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

**UPDATES TO THE INITIAL STATEMENT OF REASONS:**

Government Code Section 11346.9(a)(1) requires an update of the information contained in the Initial Statement of Reasons. If the update identifies any data or any technical, theoretical or empirical study, report, or similar document on which the state agency is relying that was not identified in the Initial Statement of Reasons, the state agency shall comply with Government Code Section 11347.1.

The State Fire Marshal (SFM) has not added any data (including technical, theoretical, or empirical studies, reports, or similar documents relied upon) that would necessitate an update of the information contained in the Initial Statement of Reasons.

**MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS**

Pursuant to Government Code Section 11346.9(a)(2), if the determination as to whether the proposed action would impose a mandate, the agency shall state whether the mandate is reimbursable pursuant to Part 7 of Division 4. If the agency finds that the mandate is not reimbursable, it shall state the reasons for the finding(s).

The State Fire Marshal has determined that the proposed regulatory action would not impose a mandate on local agencies or school districts. The proposed regulations are minimum standards for the prevention of fire and for the protection of life and property against fire.

**OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).**

Government Code Section 11346.9(a)(3) requires a summary of EACH objection or recommendation regarding the specific adoption, amendment, or repeal proposed, and an explanation of how the proposed action was changed to accommodate each objection or recommendation, or the reasons for making no change. This requirement applies only to objections or recommendations specifically directed at the agency's proposed action or to the procedures followed by the agency in proposing or adopting the action, or reasons for making no change. Irrelevant or repetitive comments may be aggregated and summarized as a group.

The text with proposed changes was made available to the public for a 45-day comment period from April 21, 2023, until June 5, 2023. The following comments were received during the comment period.

## ITEM 5

**Chapter 11 REFRIGERATION, Sections 1103.1.1, Table 1103.1.1, Table 1104.1, 1104.2, 1104.5, 1104.6, 1104.6.1, 1104.6.2, 1104.6.2.1, 1104.6.2.2, 1104.6.2.3, 1104.6.2.4, 1104.6.3, 1104.6.4, 1104.6.5, 1104.6.6, 1104.7, 1104.8, 1104.8.1, 1104.8.2, 1104.8.3, 1104.8.4, 1104.9, 1106.2.2, 1106.2.3, 1106.2.4, 1106.2.5, 1106.2.6, 1106.2.7, 1106.2.8, 1106.2.9, 1106.2.9.1, 1106.2.5.2, Table 1106.2.5.2, 1106.4, 1106.11, 1106.11.1, 1106.11.2, 1106.11.3, 1106.11.4, 1106.11.5, 1106.11.6, 1106.11.6.1, 1106.11.6.2, 1106.11.7, 1106.11.8, 1106.11.9, 1106.11.10, 1106.11.10.1, 1106.11.10.2, Table 1106.11.10.2, 1106.11.10.3, 1106.11.10.4, 1106.11.11, 1106.11.11.1, Table 1106.11.11.2, 1106.11.11.2, 1106.11.11.3, 1106.11.11.4, Figure 1106.11.11.4(1), Figure 1106.11.11.4 (2), 1107.1.7.1, 1107.1.7.3, 1112.11.1, 1115.5**

The SFM proposes to adopt text from the 2024 Uniform Mechanical Code (UMC) and print as an amendment to the 2022 California Mechanical Code.

### 1. Commenter(s) and Recommendation:

Robert E. Raymer, PE

Representing: California Building Industry Association  
California Apartment Association  
California Business Properties Association  
Building Owners & Managers Association

Our support is predicated on the understanding that the new language being proposed by the Office of the State Fire Marshal is essentially the same as that being published in IAPMO's 2024 Uniform Mechanical Code. While this edition of the UMC is not available for public purchase yet, the SFM has noted numerous times in their Initial Statement of Reasons that:

***“The SFM has evaluated the published copy of the 2024 Uniform Mechanical Code provided by courtesy of IAPMO; there are no changes required from the initial proposal to match exactly what is published.”***

Given this assurance by the SFM, the groups cited above will support the early adoption of the A2L language.

We are, however, asking the Office of the State Fire Marshal to reconvene their A2L Working Group to review and comment on this language during the upcoming Triennial Code Adoption Cycle to ensure California's adoption mirrors that of the International Association of Plumbing & Mechanical Officials.

### Agency Response:

The State Fire Marshal appreciates the support from Robert E. Raymer and all the organizations he represents. The SFM will be utilizing a workgroup in the pre-rulemaking activities for the next triennial adoption.

## 2. Commenter(s) and Recommendation:

Robert S. Glass, Daikin Comfort Technologies North America, Inc.

Daikin fully supports these amendments and asks the CBSC to adopt these amendments as presented by SFM. However, there are a couple of minor editorial corrections that I would like to put forward at this time for committee consideration:

### ITEM 5-12

#### Section 1104.6.2.4 Refrigerant Concentration Above Limit.

Propose to adopt new section re: refrigerant concentration maximum value limits.

In Item 5-12 Section 1104.6.2.4(2) - (page 11 of 32) it notes in the 2nd sentence "The supply air fan shall continue to operate for at least five minutes after the refrigerant detection system has sensed a drop in the refrigerant concentration below the value specified in Section 1104.6.6(b)." To align with the final changes to the 2024 UMC, this should state "The supply air fan shall continue to operate for at least five minutes after the refrigerant detection system has sensed a drop in the refrigerant concentration below the refrigerant detection system set point value specified in Section 1104.6.6(b)."

### ITEM 5-31

#### Section 1106.11.1 Flame-Producing Device.

Propose to adopt new section re: Flame-Producing Device.

In Item 5-31 Section 1106.11.1 - (page 19 of 32) it notes a temperature of 1290oF (70oC). This metric conversion is incorrect. This should read 1290oF (700oC).

### ITEM 5-48

#### Section 1106.11.10.4 Emergency

Propose to adopt new section re: Mechanical Ventilation.

In Item 5-48 Section 1106.11.10.4 - (page 23 of 32) the title and the Section number are incorrect. Section 1106.11.10.4 Emergency is addressed in Item 5-47 on page 22 of 32. This Item 5-48 should note Section 1106.11.11 Mechanical Ventilation.

## Agency Response:

The State Fire Marshal appreciates the support from Robert S. Glass. The SFM will be utilizing a workgroup in the pre-rulemaking activities for the next triennial adoption. During the workgroup activities the proposed amendments will be vetted through a consensus propocess. SFM fixed the Title in the Express Terms as recommended for Item 5-48.

## ITEM 5-18

### Sections 1104.8, 1104.8.1, 1104.8.2, 1104.8.3, 1104.8.4, 1104.9, 1105.12.1

Propose to renumber sections and amend in accordance with the published 2024 Uniform Mechanical Code.

#### 3. Commenter(s) and Recommendation:

Ronald L. Shughart, Heat Transfer Products Group (HTPG)

Heat Transfer Products Group (HTPG) supports the proposals in SFM 05/22 because they help align the California Mechanical Code with 2024 national model codes, including the 2024 UMC, with respect to equipment using lower GWP refrigerants, many of which are Safety Class A2L. As proposed, the mechanical code is silent on commercial refrigeration using A2L refrigerants. Adding a new Section 1104.10, as proposed below, provides additional clarity regarding situations where A2L refrigerants can be employed for high probability, direct refrigeration systems.

**1104.10 Applications for Commercial Refrigeration.** *High-probability commercial refrigeration systems using Group A2L refrigerants shall comply with the equipment listing and ASHRAE 15.*

#### Agency Response:

The State Fire Marshal appreciates the support from Carrier Global Corporation, Florida. The SFM will consider the proposed recommendation and the subject will be vetted through a census process utilizing an SFM workgroup in the pre-rulemaking activities for the next triennial adoption.

#### 4. Commenter(s) and Recommendation:

Samantha M. Slater, Air-conditioning, Heating, & Refrigeration Institute (AHRI)

AHRI supports the proposals in SFM 05/22 because they help align the California Mechanical Code with 2024 national model codes, including the 2024 UMC, with respect to equipment using lower GWP refrigerants, many of which are Safety Class A2L. As proposed, the mechanical code is silent on commercial refrigeration using A2L refrigerants. Adding a new Section 1104.10, as proposed below, provides additional clarity regarding situations where A2L refrigerants can be employed for high probability, direct refrigeration systems.

**1104.10 Applications for Commercial Refrigeration.** *High-probability commercial refrigeration systems using Group A2L refrigerants shall comply with the equipment listing and ASHRAE 15.*

#### Agency Response:

The State Fire Marshal appreciates the support from Carrier Global Corporation, Florida. The SFM will consider the proposed recommendation and the subject will be vetted through a census process utilizing an SFM workgroup in the pre-rulemaking activities for the next triennial adoption.

## 5. Commenter(s) and Recommendation:

Dominique Taudin, Carrier Global Corporation, Florida

Carrier supports the proposals in SFM 05/22 because they help align the California Mechanical Code with 2024 national model codes, including the 2024 UMC, with respect to equipment using lower GWP refrigerants, most of which are Safety Class A2L. As proposed, the mechanical code is silent on commercial refrigeration using A2L refrigerants. Adding a new Section 1104.10, as proposed below, provides additional clarity regarding situations where A2L refrigerants can be employed for high probability, direct refrigeration systems.

**1104.10 Applications for Commercial Refrigeration.** *High-probability commercial refrigeration systems using Group A2L refrigerants shall comply with the equipment listing and ASHRAE 15.*

### Agency Response:

The State Fire Marshal appreciates the support from Carrier Global Corporation, Florida. The SFM will consider the proposed recommendation and the subject will be vetted through a census process utilizing an SFM workgroup in the pre-rulemaking activities for the next triennial adoption.

## DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS

Government Code Section 11346.9(a)(4) requires a determination with supporting information that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, or would be as effective and less burdensome to affected private persons than the adopted regulation, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law.

The SFM has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective as and less burdensome to affected private persons than the proposed amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption and amendment of this code.

## REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:

Government Code Section 11346.9(a)(5) requires an explanation setting forth the reasons for rejecting any proposed alternatives that would lessen the adverse economic impact on small businesses, including the benefits of the proposed regulation per 11346.5(a)(3).

n/a