# COMMISSION ACTION MATRIX Plumbing, electrical, Mechanical and energy (peme) CODE ADVISORY COMMITTEE – March 15 and 16, 2023

## 2022 California Mechanical code, TITLE 24, PART 4 AGENCY: state fire marshal (SFM 05/22)

### LEGEND:

**CAC Actions:** Approve, Disapprove, Approve as Amended, Further Study Required

**Agency Responses:** Accept, Disagree, Withdraw

**CBSC Actions:** Approve, Disapprove, Approve as Amended, Further Study Required

**Matrix Paper Color** (for commission action only): GREEN = uncontested items, YELLOW = challenged items, SALMON = withdrawn, no action required

If using assistive technology, please adjust your settings to recognize underline, strikeout, italic and ellipsis.

* Model Code language appears upright
* Existing California amendments appear in *italic*
* Amended model code or new California amendments appear *underlined & italic*
* Repealed model code language appears ~~upright and in strikeout~~
* Repealed California amendments appear in *~~italic and strikeout~~*
* Ellipses (...) indicate existing text remains unchanged

### Chapter 1, scope and administration division 1, california administration, section 1.11.1

SFM proposes to amend definition of Specified State-Occupied as listed below.

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| **Item Number 1** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM-05/22-1 | *1.11.1* |  |  |  | Propose to clarify and define Specified State Occupied Occupancies as per Senate Bill 85 |  |

### Chapter 2, Section 202 definitions

SFM proposes to add new definition as listed below.

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| **Item Number 2** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM-05/22-2 | Refrigerant Concentration Limit (RCL) |  |  |  | Propose to adopt new definition for refrigerant concentration limit. |  |

### Chapter 3, general regulations Section 307.3 & 307.4 Labeling

SFM proposes to amend sections listed below.

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| **Item Number 3** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-3-1 | 307.3 |  |  |  | Propose to modify section to require labeling for refrigerant designation on heat pump/cooling appliances. |  |
| SFM 05/22-3-2 | 307.4 |  |  |  | Propose to modify section to require labeling for refrigerant designation on absorption units. |  |

### Chapter 6, duct systems Section 609.1 air-moving systems and smoke detectors

SFM proposes to amend and add new sections as listed below.

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| **Item Number 4** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-4-1 | 609.1 |  |  |  | Propose to modify to add additional guidance regarding the location of smoke detection required for shutdown of supply-air systems. |  |
| SFM 05/22-4-2 | *609.1.1* |  |  |  | Proposes to relocate existing language from the charging paragraph of CMC Section 609.1 to add new Section 609.1.1. |  |
| SFM 05/22-4-3 | *609.2* |  |  |  | Propose to reinstate provisions in the charging paragraph that last appeared in the 1992 California Mechanical Code that require automatic shutoff of return air systems. |  |

### Chapter 11, refrigeration Section 1103, 1104, 1106, 1107, 1112 & 1115

SFM proposes to amend and add new sections as listed below.

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| **Item Number 5** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-5-1 | 1103.1.1 |  |  |  | Propose to modify and provide pointer to new table. |  |
| SFM 05/22-5-2 | *Table 1103.1.1* |  |  |  | Propose to adopt new table with refrigerant safety group classifications. |  |
| SFM 05/22-5-3 | Table 1104.1 |  |  |  | Propose to modify table to add A2L for permissible refrigeration systems. |  |
| SFM 05/22-5-4 | 1104.2 |  |  |  | Propose to modify to add new referenced section number. |  |
| SFM 05/22-5-5 | 1104.5 |  |  |  | Propose to modify section with new text based on flammability requirements in additional sections. |  |
| SFM 05/22-5-6 | *1104.6* |  |  |  | Propose to adopt new section regarding A2L refrigerants for human comfort. |  |
| SFM 05/22-5-7 | *1104.6.1* |  |  |  | Propose to adopt new section on refrigerant concentration limits. |  |
| SFM 05/22-5-8 | *1104.6.2* |  |  |  | Propose to adopt new section for listing and install requirements. |  |
| SFM 05/22-5-9 | *1104.6.2.1* |  |  |  | Propose to adopt new section re: nameplate which requires symbol indicate flammable refrigerant. |  |
| SFM 05/22-5-10 | *1104.6.2.2* |  |  |  | Propose to adopt new section re: labeling indicate flammable refrigerant being used. |  |
| SFM 05/22-5-11 | *1104.6.2.3* |  |  |  | Propose to adopt new section re: refrigerant detectors in accordance with 1104.6.5. |  |
| SFM 05/22-5-12 | *1104.6.2.4* |  |  |  | Propose to adopt new section re: refrigerant concentration maximum value limits. |  |
| SFM 05/22-5-13 | *1104.6.3* |  |  |  | Propose to adopt new section re: ignition sources in ductwork. |  |
| SFM 05/22-5-14 | *1104.6.4* |  |  |  | Propose to adopt new section re: compressors and pressure vessel located indoors. |  |
| SFM 05/22-5-15 | *1104.6.5* |  |  |  | Propose to adopt new section re: refrigerant detectors. |  |
| SFM 05/22-5-16 | *1104.6.6* |  |  |  | Propose to adopt new section re: refrigerant sensors. |  |
| SFM 05/22-5-17 | ~~1104.6~~  *1104.7* |  |  |  | Propose to amend to add a section number to reference A2L and remove existing exceptions. |  |
| SFM 05/22-5-18 | ~~1104.7~~ *1104.8*  *~~1104.7.1~~*  *1104.8.1*  *~~1104.7.2~~*  *1104.8.2*  *~~1104.7.3~~*  *1104.8.3*  *~~1104.7.4~~*  *1104.8.4*  *~~1104.8~~*  *1104.9* |  |  |  | Renumber section |  |
| SFM 05/22-5-19 | 1106.2.2 |  |  |  | Propose to modify referenced section number. |  |
| SFM 05/22-5-20 | ~~1106.6~~ *1106.2.3* |  |  |  | Propose to modify referenced ASHRAE number. |  |
| SFM 05/22-5-21 | ~~1106.11~~ *1106.2.4* |  |  |  | Propose to modify referenced ASHRAE number. |  |
| SFM 05/22-5-22 | ~~1106.2.2.1~~ *1106.2.5* |  |  |  | Propose to modify the referenced section numbers & modify the exception to add referenced section number for A2L and B2l refrigerant detectors. |  |
| SFM 05/22-5-23 | ~~1106.2.2.2~~ *1106.2.6* |  |  |  | Propose to modify referenced section numbers. |  |
| SFM 05/22-5-24 | ~~1106.2.3~~ *1106.2.7*  *~~1106.2.4~~*  *1106.2.8* |  |  |  | Renumber Section |  |
| SFM 05/22-5-25 | ~~1106.2.5~~ *1106.2.9* |  |  |  | Renumber section |  |
| SFM 05/22-5-26 | ~~1106.2.5.1~~ *1106.2.9.1* |  |  |  | Modify Section Title number and remove B2L from list of refrigerants for ventilation. |  |
| SFM 05/22-5-27 | ~~1106.2.5.2~~ |  |  |  | Repeal section “Ventilation – Group A2L Refrigerants.” |  |
| SFM 05/22-5-28 | ~~Table 1106.2.5.2~~ |  |  |  | Repeal Table “Required Airflow for Group A2L Refrigerants.” |  |
| SFM 05/22-5-29 | 1106.4 |  |  |  | Propose to modify existing section with minor modifications. |  |
| SFM 05/22-5-30 | *1106.13* |  |  |  | Propose to adopt new section re: Machinery Room, A2L & B2L. |  |
| SFM 05/22-5-31 | *1106.13.1* |  |  |  | Propose to adopt new section re: Flame-Producing Device. |  |
| SFM 05/22-5-32 | *1106.13.2* |  |  |  | Propose to adopt new section re: Communicating Spaces. |  |
| SFM 05/22-5-33 | *1106.13.3* |  |  |  | Propose to adopt new section re: Noncombustible Construction. |  |
| SFM 05/22-5-34 | *1106.13.4* |  |  |  | Propose to adopt new section re: Exterior Openings. |  |
| SFM 05/22-5-35 | *1106.13.5* |  |  |  | Propose to adopt new section re: Pipe Penetrations. |  |
| SFM 05/22-5-36 | *1106.13.6* |  |  |  | Propose to adopt new section re: Machinery Room Designation. |  |
| SFM 05/22-5-37 | *1106.13.6.1* |  |  |  | Propose to adopt new section re: Mechanical Ventilation. |  |
| SFM 05/22-5-38 | *1106.13.6.2* |  |  |  | Propose to adopt new section re: Detection System. |  |
| SFM 05/22-5-39 | *1106.13.7* |  |  |  | Propose to adopt new section re: Mechanical Equipment Control. |  |
| SFM 05/22-5-40 | *1106.13.8* |  |  |  | Propose to adopt new section re: Refrigerant Detectors. |  |
| SFM 05/22-5-41 | *1106.13.9* |  |  |  | Propose to adopt new section re: Refrigerant Detector Requirements. |  |
| SFM 05/22-5-42 | *1106.13.10* |  |  |  | Propose to adopt new section re: Alarms |  |
| SFM 05/22-5-43 | *1106.13.10.1* |  |  |  | Propose to adopt new section re: Visual and Audio. |  |
| SFM 05/22-5-44 | *1106.13.10.2* |  |  |  | Propose to adopt new section re: Detector Activation. |  |
| SFM 05/22-5-45 | *Table 1106.13.10.2* |  |  |  | Propose to adopt new table re: Refrigerant Detector Set Points, Response Times, Alarms and Ventilation levels. |  |
| SFM 05/22-5-46 | *1106.13.10.3* |  |  |  | Propose to adopt new section re: Alarm Levels |  |
| SFM 05/22-5-47 | *1106.13.10.4* |  |  |  | Propose to adopt new section re: Emergency |  |
| SFM 05/22-5-48 | *1106.13.11* |  |  |  | Propose to adopt new section re: Mechanical Ventilation. |  |
| SFM 05/22-5-49 | *1106.13.11.1* |  |  |  | Propose to adopt new section re: Mechanical Ventilation Requirements. |  |
| SFM 05/22-5-50 | *Table 1106.13.11.2* |  |  |  | Propose to adopt new Table re: Level 1 Ventilation Rate for Class 2L Refrigerants. |  |
| SFM 05/22-5-51 | *1106.13.11.2* |  |  |  | Propose to adopt new section re: Level 1 Ventilation Rate. |  |
| SFM 05/22-5-52 | *1106.13.11.3* |  |  |  | Propose to adopt new section re: Level 2 Ventilation. |  |
| SFM 05/22-5-53 | *1106.13.11.4* |  |  |  | Propose to adopt new section re: Level 2 Ventilation Rate. |  |
| SFM 05/22-5-54 | *Figure 1106.13.11.4(1)* |  |  |  | Propose to adopt new figure for Level 2 Ventilation Rate for Class 2L Refrigerants. |  |
| SFM 05/22-5-55 | *Figure 1106.13.11.4(2)* |  |  |  | Propose to adopt new figure for Level 2 Ventilation Rate for Class 2L Refrigerants (SI) |  |
| SFM 05/22-5-56 | 1107.1.7.1 |  |  |  | Propose to modify referenced section numbers. |  |
| SFM 05/22-5-57 | 1107.1.7.3 |  |  |  | Propose to modify referenced section numbers. |  |
| SFM 05/22-5-58 | 1112.11.1 |  |  |  | Propose to modify to add in A2L & B2L refrigerants. |  |
| SFM 05-22-5-59 | *1115.5* |  |  |  | Propose to adopt new section re: Nameplate. |  |

### Chapter 13, fuel gas piping, Section 1301.1 applicability

SFM proposes to amend section listed below.

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| **Item Number 6** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-6 | 1301.1 |  |  |  | Propose to modify section which identifies that the installation of fuel oil piping systems connected to combustion engines and gas turbines is also a concern. |  |

### Chapter 16 stationary power plants, Section 1602.0, 1602.1, 1602.1.1 & 1602.2

SFM proposes to amend sections as listed below.

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| **Item Number 7** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-7-1 | 1602.0 |  |  |  | Propose to modify section title to add gas turbines. |  |
| SFM 05/22-7-2 | 1602.1 |  |  |  | Propose to modify title and include stationary gas engines. |  |
| SFM 05/22-7-3 | ~~1602.2~~ 1602.*1.1* |  |  |  | Renumber Section |  |
| SFM 05/22-7-4 | *1602.2* |  |  |  | Propose to adopt new section re: Liquid-Fueled Engines and Gas Turbines. |  |

### Chapter 17 reference standards, Section 1701.1

SFM propose to amend sections listed below.

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| **Item Number 8** | **Code Section** | **CAC Action** | **Agency Response** | **Public Comments** | **Annotations** | **CBSC Action** |
| SFM 05/22-8-1 | ASHRAE 15 |  |  |  | Propose to modify ASHRAE 15 to the 2022 Standard. |  |
| SFM 05/22-8-2 | ASHRAE 34 |  |  |  | Propose to modify ASHRAE 34 to the 2022 Standard. |  |
| SFM 05/22-8-3 | NFPA 37-2018 |  |  |  | Propose to modify NFPA 37 Standard to add fuel oil piping systems. |  |
| SFM 05/22-8-4 | NFPA 409 |  |  |  | Propose to modify NFPA 409 to the 2022 Standard. |  |
| SFM 05/22-8-5 | UL 60335-2-40 |  |  |  | Propose to modify to the 2022 4th edition Standard |  |
| SFM 05/22-8-6 | UL 60335-2-89 |  |  |  | Propose to modify to the 2021 Standard |  |