

**INITIAL STATEMENT OF REASONS
FOR PROPOSED BUILDING STANDARDS
OF THE OFFICE OF THE STATE FIRE MARSHAL
REGARDING THE 2025 CALIFORNIA FIRE CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 9
(SFM 03/25)**

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.

The purpose of this proposal is to amend and coordinate provisions of the California Fire Code related to definitions, occupancy classifications, fire and smoke protection, including carbon monoxide detection, means of egress, energy storage systems, hazardous materials, and referenced standards. These amendments are intended to improve clarity, consistency, and alignment with California-specific fire and life-safety objectives, while supporting effective enforcement by fire code officials.

PROBLEM

Certain provisions of the current California Fire Code contain inconsistent terminology, and unclear requirements. These issues can result in inconsistent interpretation and enforcement, particularly in child-care centers, hazardous materials classification, and in emerging technology such as energy storage systems and low-GWP refrigerants. In addition, existing language does not always clearly reflect exposure-based fire and life safety risks, including carbon monoxide hazards, which may lead to either over-application or under-application of requirements.

RATIONALE

The proposed amendments clarify definitions and occupancy classifications, improve coordination of fire and smoke protection provisions, including carbon monoxide detection. Updates to the California Fire Code regarding energy storage systems and hazardous materials align with current technologies and operational practices. Revisions to referenced standards ensure consistency, technical accuracy, and continued relevance.

BENEFITS

Adoption of these amendments will enhance fire and life safety by improving the clarity, consistency, and enforceability of the California Fire Code. Anticipated benefits include more uniform interpretation by enforcing agencies, improved integration of fire protection and life safety systems, clearer application of requirements for emerging hazards such as energy storage systems, and reduced compliance uncertainty for designers, operators, and owners. These improvements support effective risk management while maintaining California's established fire and life safety objectives.

ITEM 1

Chapter 2 Definitions, Section 202 General definitions

SUB-ITEM 1-1 CARBON MONOXIDE SOURCE

The SFM proposes to amend the definition of “Carbon Monoxide Source” to improve clarity. The model language from the 2024 International Fire Code (IFC) and International Building Code (IBC) significantly expanded carbon monoxide (CO) detection requirements to include nearly all occupancies with a CO source. However, the resulting language has proven to be overly complex, unclear, and difficult to enforce. This has led to confusion among code officials and stakeholders, excessive or misapplied requirements, and a lack of clear guidance—particularly in large or complex facilities such as big-box retail stores. The absence of a clear and functional definition further compounded these issues, undermining the intent of the code. The revised language simplifies and clarifies the requirements, introduces a much-needed definition, and differentiates between direct and indirect CO sources. The purpose of this proposal is to improve existing provisions, resolve current enforcement challenges, enhance life safety, and support consistent application across all occupancy types. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-2

Child-Care; Child Care Center; Day-Care; Child-Care Home, Family; Child-Care Home, Large Family; Child-Care Home, Small Family; Day-Care

These proposals are the result of the AB 176 Child Care Center Work Group.

Although the Health and Safety Code (HSC) frequently refers to “day care” or “daycare”, Title 22 California Code of Regulations (22 CCR) established a preference to refer to the care of children as “child care.” To create cohesiveness between Title 22 and Title 24 regulations, “family day care homes” should be referred to as “family child care homes.” Furthermore, by making a clear differentiation, when possible, between the use of “day care” and “child care,” it will help reduce any confusion that may have been caused by using “day care” to describe other types of care, such as adult day care.

CHILD-CARE HOME, LARGE FAMILY:

A proposed change to delete the term “persons” and change it to “children” as family child care homes only provide care for children, and the licensee and/or assistant(s) should not be included in the census. The proposal also includes a reference to Section 455 as a source of additional fire and life safety provisions. A reference to the Health and Safety Code (HSC) Section 1597.465 is proposed to be added, which provides details on the number of children and the corresponding age range that can be

accommodated.

HSC 1597.465.

A large family day care home may provide care for more than 12 children and up to and including 14 children, if all of the following conditions are met:

- (a) At least one child is enrolled in and attending kindergarten or elementary school and a second child is at least six years of age.*
- (b) No more than three infants are cared for during any time when more than 12 children are being cared for.*
- (c) The licensee notifies a parent that the facility is caring for two additional school-age children and that there may be up to 13 or 14 children in the home at one time.*
- (d) The licensee obtains the written consent of the property owner when the family day care home is operated on property that is leased or rented.*

(Amended by Stats. 2003, Ch. 744, Sec. 2. Effective January 1, 2004.)

CHILD-CARE HOME, SMALL FAMILY:

The proposal deletes the incorrect reference to HSC 13143 (b), which is specific to foster family homes. The addition of “R-2 occupancy” is in alignment with the amended statute HSC 1596.78 (*Amended by Stats. 2019, Ch. 244, Sec. 9. (SB 234) Effective January 1, 2020*). SB 234 expanded the ability for small and large child care to be allowed in multifamily dwellings (R-2). These are minor revisions to the verbiage used in the definition to maintain consistency in both definitions of small and large family child care homes.

The purpose of this proposal is editorial and aligns with the law. This amendment clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-3

COMBUSTIBLE LIQUID; FLAMMABLE LIQUID

The SFM proposes an amendment to the existing definition to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions.

The definitions of flammable and combustible liquids are nearly identical between CFC/CBC and GHS, with the exception of Category 3. Category 3 spans both

Flammable Liquids, Class IC, and Combustible Liquids, Class II. Users will need to verify the flashpoints to differentiate Category 3 liquids. No significant changes to the application of the code are anticipated by using the proposed definitions. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-4

COMPRESSED GAS; COMPRESSED GAS, DISSOLVED; COMPRESSED GAS, GASEOUS; COMPRESSED GAS, LIQUEFIED

The SFM proposes an amendment to the existing definitions and adds sub definitions for compressed gas to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions it aligns the classifications with GHS. No significant changes to the application of the code are anticipated by using the proposed definitions for compressed gas. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-5

CORROSIVE

The SFM proposes an amendment to the existing definition of corrosive to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of corrosive materials. This amendment removes conflicts in the code, clarifies the applicable

requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-6

CRYOGENIC FLUID; CRYOGENIC FLUID, INERT; CRYOGENIC FLUID, FLAMMABLE; CRYOGENIC FLUID, OXIDIZING; FLAMMABLE CRYOGENIC FLUID; OXIDIZING CRYOGENIC FLUID

The SFM proposes an amendment to the existing definitions and add sub definitions for cryogenic fluids to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definitions for cryogenic fluids. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-7

EXPLOSIVE

The SFM proposes an amendment to the existing definition of explosive to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of explosive materials. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-8

FLAMMABLE GAS

The SFM proposes an amendment to the existing definition of flammable gas to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of flammable gas. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-9

FLAMMABLE SOLID

The SFM proposes an amendment to the existing definition of flammable solid to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of flammable solid. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-10

HIGHLY TOXIC; TOXIC

The SFM proposes an amendment to the existing definitions of highly toxic and toxic to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. The GHS system does not explicitly address fumes as a separate classification, but it considers all forms of inhalation exposure. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definitions of highly toxic and toxic materials. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-11

INFANT

The State Fire Marshal (SFM) proposes amendments to existing regulations to align the provisions of Title 24 with those of Title 22. These proposed amendments are based on the recommendations of the AB 176 Child Care Center Work Group. The proposal includes the removal of the first sentence of the current definition of "infant." Because infants achieve developmental milestones at varying rates, and many acquire the ability to walk before reaching two years of age, it is not appropriate for the definition to state that infants are unable to walk solely due to their age. In addition, the basis for incorporating evacuation-related specifications within the definition of "infant" is unclear.

The proposed amendment revises the definition to state affirmatively that an infant is a child under two years of age, rather than defining an infant by exclusion. This revision aligns the definition of "infant" with that contained in Title 22, California Code of Regulations, Sections 101152(i)(1) and 102352(i).

The definition of "nonambulatory persons" set forth in Health and Safety Code Section 13131 was last updated in 1983. Prior to that update, language carried over from the Uniform Building Code resulted in infants being classified as "nonambulatory persons." Under current law, the determination of whether persons with developmental disabilities are ambulatory or nonambulatory shall be made by the Director of Social Services, or his or her designated representative, in consultation with the Director of Developmental

Services, or his or her designated representative. This distinction is important because, since at least 1979, infants have been considered nonambulatory, and in some situations, it is not a true representation of the person.

The purpose of this proposal is to improve existing provisions, resolve current enforcement challenges, enhance life safety, and support consistent application across all occupancy types. This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-12
NONPATIENT-CARE SUITE

In coordination with OSHPD, the SFM proposes an editorial change to the definition to align the intent and ensure consistency of enforcement, thereby avoiding misunderstandings. There is no regulatory change. The proposal includes the removal and addition of hyphens for consistency with Part 2.

This definition is also relied upon when interpreting 407.4.5 Group I-2 nonpatient-care suites. These amendments will not impact the cost of compliance or introduce new regulatory obligations. The proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-13
ORGANIC PEROXIDE

The SFM proposes an amendment to the existing definition and add sub definitions for organic peroxide to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definitions for organic peroxides. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-14

OXIDIZER

The SFM proposes an amendment to the existing definition of oxidizer to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of oxidizer. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-15

OXIDIZING GAS

The SFM proposes an amendment to the existing definition of oxidizing gas to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of oxidizing gas. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-16

PYROPHORIC

The SFM proposes an amendment to the existing definition of pyrophoric to align with

the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of pyrophoric. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-17
UNSTABLE (REACTIVE) MATERIAL

The SFM proposes an amendment to the existing definition of unstable (reactive) material to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of unstable (reactive) material. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 1-18
WATER-REACTIVE MATERIAL

The SFM proposes an amendment to the existing definition of water reactive to align with the federal Occupational Safety and Health Administration (OSHA) hazardous materials regulations. Chemical manufacturers are required to provide hazard information in a format following the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Aligning and coordinating with this system provides clarity for code users in properly identifying hazardous materials. It does not materially alter the substance or intent of the existing code provisions. No significant changes to the application of the code are anticipated by using the proposed definition of water-reactive material. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 2

Chapter 2 Definitions, Section 203 Occupancy Classification and Use

SFM proposes to modify existing amendments to align Title 24 and Title 22, and correlate Title 24 Part 9 Section 203 with Part 2 Chapter 3.

SUB-ITEM 2-1

Section 203.4.2 Group E, child-care facilities and subsections

The SFM proposes to modify existing amendments to align Title 24 and Title 22. These proposals are the result of the AB 176 Child Care Center Work Group. Key improvements include correlating defined terms, clarifying exception language, and standardizing numerical thresholds (e.g., aligning references to “six or fewer” persons to match the “more than six” standard). These changes enhance readability and usability for both code officials and stakeholders. These updates collectively support better alignment between Title 22 and Title 24, remove conflict in the codes, clarify the applicable requirements, are editorial in nature, have no regulatory or cost impact, and comply with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 2-2

Section 203.7.4 Institutional Group I-4, day care and child care facilities and subsections

In coordination with the Department of Social Services, the SFM proposes to revise the existing amendments to align with statutes and clarify the application of the code when the number of care recipients is limited, thereby reducing hazard levels.

203.7.4.2 Places of worship are typically classified as Group A and have robust fire safety regulations to ensure the occupants have protection from fire and panic incidents.

203.7.4.4 Is typically built under the Residential Code provisions and will not be able to meet the high construction standards of a Group I-4.

These updates collectively support better alignment, remove conflicts in the codes, clarify applicable requirements, are editorial in nature, have no regulatory or cost impact, and comply with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 3

Chapter 9 Fire Protection and Life Safety Systems, Section 907 Fire Alarm and Detection Systems

SUB-ITEM 3-1

Sections 907.2.5.1, 907.2.6.3.4, 907.2.28.1 and 907.6.4

The SFM proposes deleting and relocating outdated and duplicative amendments in Section 907.6.4. for fire alarm zoning. These proposals comply with criteria (A) of HSC 18942(a)(2).

These changes are based on recommendations from the SFM Fire Alarm Work Group. California added its own amendments to CFC Section 907.6.4 in 2006 during the transition from the Uniform Fire Code (UFC) to the International Fire Code (IFC). However, these amendments are now unnecessary because current model codes and NFPA 72 already include the same or improved requirements. As a result, the California-specific language no longer serves a purpose. In addition, Section 907.6.4 is frequently misunderstood. Many users interpret it as covering annunciation and notification, but it was originally intended only to address conventional fire alarm zone wiring.

The proposal removes the outdated and duplicative language in CBC/CFC 907.6.4 to bring California's code up to date. It clarifies that zoning requirements are addressed in NFPA 72 and that annunciation and notification are handled in other, more appropriate sections of the code. The editorial clean-up also acknowledges that modern addressable fire alarm systems have largely replaced the need for traditional zone wiring requirements. Removing these amendments will simplify the code, reduce confusion, and improve consistency with national standards. This cleanup eliminates redundancy, makes the code easier to use, and supports enforcement.

The proposal also relocates requirements from Section 907.6.4 #5 and #6 specific to Groups H, I-3, and L to the sections of the code where they naturally belong.

This amendment does not increase compliance costs or add new regulatory requirements. It simply modernizes and streamlines the code by removing outdated California amendments.

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 4

Chapter 9 Fire Protection and Life Safety Systems, Section 915 Carbon Monoxide (CO) Detection

Section 915 failed to clearly convey the requirements for CO detection. The current language seems to require a level of protection for some occupancies that is excessive and for other occupancies insufficient. This rewrite is intended to add clarity and was filtered by a reasonable interpretation of the existing provisions. The modified code proposal addresses gaps, excessive provisions, and recommendations from a task group that assisted in developing this proposal.

1. The current code treats most buildings/occupancies in an equivalent fashion. It seems reasonable to provide a higher level of protection for occupancies with greater occupant exposure (other than F, H, S, or U), so detection in adjacent spaces with communicating openings to a space with a CO source has been added.
2. The current code recognizes battery-powered CO alarms in existing buildings but does not allow plug-in detectors in such cases. It seems reasonable to allow a plug-in detector if a battery-powered detector is allowed.
3. The allowance of expanded use of CO alarms in 915.4.1 was suggested to protect occupants where they are most vulnerable, particularly during sleep. CO is odorless and life-threatening; locating the detectors near sleeping areas, especially when there is an attached garage or fuel-burning equipment, helps to alert occupants before dangerous exposure occurs.
4. The current code generally results in detectors being installed at the ceiling, which may not be effective in large-volume or high-ceiling spaces, particularly when the carbon monoxide source is small or lacks sufficient heat to drive buoyant movement. Section 915.3 is intended to shift the focus from prescriptive mounting height to effective placement by requiring detectors to be located where carbon monoxide is likely to accumulate, while allowing the designer flexibility to avoid dead air, turbulence, and other conditions that could delay detection.
5. The revised language restructures “where CO is required” to improve clarity. The reorganization separates exposure-based requirements from building-type requirements. Instead of triggering CO based on the presence of a CO source, the cleaned-up language precisely requires CO detection in interior spaces where there is actually a CO source.
6. Detection device location guidance in 915.3 is making it clear that the installation must be placed where the detectors will actually sense the accumulation of CO.
7. The allowance of detectors with sounder bases in lieu of alarm system notification was agreed to by the task group to allow for flexibility. CO alarms can provide equivalent life safety performance in dwelling and sleeping units. Also, standalone alarms are a proven solution in approved locations when they are suitable for the environment, and their signals can clearly be heard by the occupants, ensuring timely awareness without unnecessary system complexity.
8. Section 915.4.1.1 exceptions that are currently in 1103.9 are proposed to be incorporated into this section for simplification and to avoid conflict/overlap. Exceptions in Section 1103.9 are proposed to be repealed and reference to Section

915 be added in ITEM 6 of this proposal.

This amendment removes conflicts in the code, clarifies the applicable requirements, does not impact the cost of compliance or have a regulatory effect, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 5

Chapter 10 Means of Egress

SUB-ITEM 5-1

Section 1010.2.12 Delayed egress

The SFM proposes to delete “or heat” to prevent duplicative provisions. These proposals are the result of our Fire Alarm Work Group. California’s current requirement for delayed egress systems mandates both sprinkler protection and either smoke or heat detection, exceeding the model code (IFC), which allows for either a sprinkler system or smoke/heat detection. This creates redundancy, as sprinkler systems already function as heat detection systems per Section 903.3.1.1. Requiring additional heat detectors offers no added benefit and introduces unnecessary complexity.

This proposal seeks to delete the phrase “or heat” from CFC Section 1010.2.12 to eliminate the redundant requirement for heat detection in buildings already protected by a sprinkler system. The intent is to align California’s code more closely with the model code while preserving the life safety benefit of early smoke detection.

Removing “or heat” ensures that only smoke detection is required in addition to sprinkler protection, providing faster fire detection and response. This change simplifies compliance, eliminates unnecessary system components, and maintains a high level of life safety. It also aligns with the functional intent of the code without increasing costs or regulatory burden. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 6

Chapter 11 Construction Requirements for Existing Buildings

SUB-ITEM 6-1

Section 1103.9 Carbon monoxide detection

The proposal is to coordinate with the Section 915 Carbon Monoxide rewrite.

Exceptions that were in 1103.9 were incorporated into 915.4.1.1 for simplification and to avoid conflicts or overlaps. This simplifies compliance, eliminates unnecessary system

components, and maintains a high level of life safety. It also aligns with the code's functional intent without regulatory burden. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 7

Chapter 12 Energy Systems

SUB-ITEM 7-1

Section 1207 Electrical Energy Storage Systems (ESS)

SFM proposes to delete all parentheses references to NFPA 855 2023 Edition to coordinate with the reference standards. The SFM proposes to adopt the most recently published edition of NFPA 855, Standard for the Installation of Stationary Energy Storage Systems. NFPA Standard 855 provides insight into mitigating risks and helping to ensure all installations are performed appropriately, taking into account vital life safety considerations. The standard offers comprehensive criteria for the fire protection of energy storage system (ESS) installations based on the technology used, the setting where the technology is being installed, the size and separation of ESS installations, and the fire suppression and control systems in place. While NFPA 855 is a standard and not a code, its provisions are enforced by the California Fire Code, in Section 1207, which are largely harmonized with those in NFPA 855. The revision process for the 2026 edition of NFPA 855 is completed and available for use, with 26 NFPA Sub Task Groups addressing specific topics. The Task Groups comprise fire safety professionals, industry experts, and other interested parties, and they engage in robust debate of public inputs aimed at improving the standard. With the advancement of these technologies and lessons learned from recent incidents, the adoption of the most recently published standard is essential for the continued fire and life safety of California residents.

SB 283, Laird. Energy storage systems (2025-2026) require the Office of the State Fire Marshal (OSFM), before the next triennial edition of the California Building Standards Code adopted after January 1, 2025, to propose to the CBSC updates to the fire standards relating to requirements for lithium-based battery systems.

This amendment clarifies code requirements without incurring additional costs or regulatory impact and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 8

Chapter 50 Hazardous Materials-General Provisions, Section 5003-General Requirements

SUB-ITEM 8-1

Section 5001.1 Scope

SFM proposes the amendment to Section 5001.1 adds the term “or storage occupancies” to the exception for alcoholic beverages in retail or wholesale sales occupancies, so that the text reads:

“Alcoholic beverages in retail or wholesale sales **or storage occupancies**, provided that the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).”

This change is purely editorial and intended to maintain consistency and correlation with the identical provision in Chapter 57, Section 5701.2, which currently reads:

“Quantities of alcoholic beverages in retail or wholesale sales or storage occupancies, provided that the liquids are packaged in individual containers not exceeding 1.3 gallons (5 L).”

No technical requirements or fire safety standards are being altered; this amendment corrects the language to ensure alignment between chapters and reduce potential confusion. This amendment clarifies code requirements without incurring additional costs or regulatory impact and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 8-2

Section 5003.1.1 Maximum allowable quantity per control area

The SFM, in collaboration with OSHPD, proposes amendments to clarify language that individual medical gas tanks of certain sizes and utilized for immediate use in patient care areas are not considered to be storage. This also clarifies that the exception does not apply to all medical gas tanks in patient areas. The proposed amendment aligns with the language used in NFPA 99 Section 11.3.10.

The reference to NFPA 99, Chapter 5 Piped gas and vacuum systems, is repealed because Chapter 5 is not applicable to these types of systems. These amendments are necessary to clarify how to correctly compute maximum allowable quantities for medical gas.

The amendment improves clarity, supports consistent enforcement, and enhances life safety by ensuring provisions are applied appropriately. It removes internal code conflicts and provides clearer guidance for stakeholders without increasing compliance costs or introducing new regulatory burdens. This proposal complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

ITEM 9

Chapter 80 Referenced Standards

SUB-ITEM 9-1

**NFPA 72-25 National Fire Alarm Signaling Code,
Section 12.4.2 Pathway Survivability Level 1.**

The SFM proposes this amendment to clarify requirements for “Pathway Survivability Level 1”. These proposals are recommendations of the SFM Fire Alarm Work Group.

This proposal will help designers of Fire Alarm and Two-Way Communication systems to implement Level 1 survivability in buildings protected by NFPA 13R systems.

Some low-rise residential buildings with NFPA 13R systems could potentially employ partial evacuation or relocation of occupants. Buildings with an Emergency Communication System (ECS) must have survivable pathways with Level 1 pathways installed in metallic raceways or armored cables, while the building is protected by an NFPA 13R system. The ECS pathways should only be installed in sprinklered protected areas and should not be installed in non-sprinklered attics or other spaces. This will have an equivalent protection to an NFPA 13 system. According to this proposal, Level 1 pathways will be permitted to be installed inside walls, outside the attic area.

Additionally, many other low-rise residential buildings protected by NFPA 13R and featuring less than 2-HR fire-rated construction typically employ total building evacuation upon fire alarm initiation. They are not required to have protected pathways for the fire alarm system (Level 0 survivability). However, pathway survivability is required for the Two-Way Emergency Communications Systems installed in these buildings, such as the elevator-landing communications system, the Emergency Responder Radio Communications Enhancement System (ERCES), and other ECS systems included in NFPA 72 Section 24.10. For these ECS systems, when Level 1 pathway survivability is required, it should be permitted to have the pathways installed in metallic raceways or provided with armored cables in an NFPA 13R protected building.

This level of sprinkler protection (NFPA 13 and NFPA 13R) is also in accordance with the CBC and CFC, allowing provisions for both these types of sprinkler systems to be used as an acceptable protection level for life safety purposes.

This amendment aligns with the intent of the CBC and CFC, which recognize both NFPA 13 and 13R systems as acceptable for life safety purposes. It simplifies system design and improves enforceability without compromising safety. This amendment clarifies code requirements without incurring additional costs or regulatory impact and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 9-2

NFPA 72-25 National Fire Alarm Signaling Code, Section 26.2.11.3

The SFM proposes to delete Section 26.2.11.3 from NFPA 72-25 as an amendment in 2025 CFC.

Section 26.2.11.3 of the 2025 edition of NFPA 72 is currently unenforceable because the construction and performance requirements for an ASP have not yet been established in UL 827, Central-Station Alarm Services, or other product listing standards. Consequently, an ASP cannot be listed by a Nationally Recognized Test Laboratory (NRTL) to comply with the requirements identified in 26.2.11.3 of the 2025 edition of NFPA 72.

The other sections in 26.2.11, except 26.2.11.3, are enforceable and can be used to improve the reliability of communication between a fire alarm system and the supervising station.

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 9-3

NFPA 855

The SFM proposes to adopt the most recently published edition of NFPA 855, Standard for the Installation of Stationary Energy Storage Systems. NFPA Standard 855 provides insight into mitigating risks and helping to ensure all installations are performed appropriately, taking into account vital life safety considerations. The standard offers comprehensive criteria for the fire protection of energy storage system (ESS) installations based on the technology used, the setting where the technology is being installed, the size and separation of ESS installations, and the fire suppression and control systems in place. While NFPA 855 is a standard and not a code, its provisions are enforced by the California Fire Code, in Section 1207, which are largely harmonized with those in NFPA 855. The revision process for the 2026 edition of NFPA 855 is completed and available for use, with 26 NFPA Sub Task Groups addressing specific topics. The Task Groups comprise fire safety professionals, industry experts, and other interested parties, and they engage in robust debate of public inputs aimed at improving the standard. With the advancement of these technologies and lessons learned from recent incidents, the adoption of the most recently published standard is essential for the continued fire and life safety of California residents.

SB 283, Laird. Energy storage systems (2025-2026) require the Office of the State Fire Marshal (OSFM), before the next triennial edition of the California Building Standards Code adopted after January 1, 2025, to propose to the CBSC updates to the fire

standards relating to requirements for lithium-based battery systems.

This amendment clarifies code requirements without incurring additional costs or regulatory impact, and complies with criteria (A) of HSC 18942(a)(2).

CAC Recommendation:

N/A

Agency Response:

N/A

SUB-ITEM 9-4

ASHRAE 15

The State Fire Marshal (SFM) proposes to adopt 2024 edition of ASHRAE 15 “Safety Standard for Refrigeration Systems” including Addendum A. This proposal resulted from a petition, SFM received on November 3, 2025. SFM currently adopts 2022 edition of ASHRAE 15 as referenced in 2025 California Mechanical Code (CMC). 2022 and 2024 editions of ASHRAE 15 require flammable refrigerant piping to be installed within enclosed, fire-rated, ventilated shafts. Addendum A update to 2024 edition created an exception that eliminates the shaft requirement when refrigerant piping meets rigorous testing protocols outlined in Section 9.13.

To reduce greenhouse gas (GHG) emissions, regulatory agencies at the state and national levels have focused significant attention on how refrigerant gases contribute to the climate change crisis. As a result, these agencies have adopted regulations, guidelines, and policy goals aimed at the rapid transition from refrigerants with a high Global Warming Potential (GWP) to those classified as low or ultra-low GWP in new and existing buildings.

Some of these low-GWP refrigerant gases (A2Ls) are mildly flammable, prompting safety standards development entities, such as the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), to address the flammability safety issues associated with their use. ASHRAE regularly updates these safety requirements in its publication, ASHRAE Standard 15 – Safety Standard for Refrigeration Systems.

ASHRAE did update its long-standing safety standard, ASHRAE 15, on May 30, 2025, to address emerging flammability concerns. California relies heavily on this standard, incorporating its provisions extensively into the California Mechanical Code.

The most recent edition of ASHRAE 15 (2022 and 2024) requires flammable refrigerant piping to be installed within enclosed, fire-rated, ventilated shafts. This creates substantial cost and design burdens for new buildings, making retrofits in existing buildings extremely difficult or financially unrealistic. These constraints pose a major obstacle to California’s climate goals, which depend on the rapid adoption of low-GWP refrigerants across both new and existing building stock.

The ASHRAE 15, with Addendum A update, created an exception that eliminates the shaft requirement when refrigerant piping meets rigorous testing protocols outlined in Section 9.13. This amendment provides design flexibility for the safe installation of A2L refrigerants, particularly in existing buildings where shaft construction is often a challenge.

Substantiation

California Governor Gavin Newsom has declared a “climate crisis” in numerous Executive Orders and directives to state agencies over the past five years. A search on the Governor’s website for matters related to the “climate crisis” finds over 900 results.

The California Air Resources Board’s (CARB) Final 2022 Scoping Plan references the Building Standard Commission’s critical need for the BSC to “adopt the latest safety standards for refrigerant-containing equipment into the California building codes.”

As cited in the highlighted passage, CARB’s Scoping Plan also refers to AB 209, legislation passed in 2022. This legislation included a statutory mandate explicitly directing the California Building Standards Commission to adopt the most recent versions of ASHRAE Standard 15 as an essential component in California’s transition from high-GWP refrigerants to low—and ultra-low refrigerants. Health and Safety Code Section 18944.21 is reprinted below:

Health & Safety Code Section 18944.21 (AB 209)

18944.21. (a) Not later than July 1, 2023, the commission shall consider whether to adopt the most recent versions of the following consensus safety standards, to be codified and published in the California Building Standards Code: American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 15-2019; ASHRAE Standard 34-2019; Underwriters Laboratories (UL) 60335-2-89 2nd edition; and UL 60335-2-40 3rd edition.

(b) If the commission does not adopt all of the consensus safety standards listed in subdivision (a), then effective July 1, 2024, no state or local building code provision shall prohibit the use of a refrigerant listed as acceptable under Section 7671k of the federal Clean Air Act (42 U.S.C. Sec. 7401 et seq.), provided each use is installed in accordance with the most recent version of ASHRAE Standard 15 and the applicable listing standard, such as UL 60335-2-89 or UL 60335-2-40.

CAC Recommendation:

N/A

Agency Response:

N/A

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

The SFM proposals have prescriptive regulations that recognize national testing standards. Alternatives were considered and included where necessary to maintain the required level of safety.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION

Government Code Sections 11346.2(b)(2) and 11346.3(b)(1)

The SFM has assessed whether and to what extent this proposal will affect the following:

- A. The creation or elimination of jobs within the State of California.**
These regulations will not affect the creation or cause the elimination of jobs within the State of California.
- B. The creation of new businesses or the elimination of existing businesses within the State of California.**
These regulations will not affect the creation of new businesses or cause the elimination of existing businesses within the State of California.
- C. The expansion of businesses currently doing business within the State of California.**
These regulations will not affect the expansion of businesses currently doing business within the State of California.
- D. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.**
These regulations will update and improve minimum existing building standards and improve hazardous materials management, which will provide increased protection of public health and safety, worker safety, and the environment.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS

Government Code Section 11346.2(b)(3) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

The SFM did not rely on any technical, theoretical, or empirical study, report, or similar documents outside of those contained and referenced in this rulemaking in proposing amendments for the California Building Standards Codes.

CONSIDERATION OF REASONABLE ALTERNATIVES

Government Code Section 11346.2(b)(4)(A) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternative. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.

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 and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS

Government Code Section 11346.2(b)(4)(B) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.

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 and less burdensome to affected small businesses than the SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business.

The SFM has determined that this proposed action will not have a significant adverse economic impact on businesses. This determination was made following a comprehensive review process that included the establishment of SFM workgroups to evaluate the potential economic and operational effects of the proposal. The workgroups engaged in a consensus-based decision-making process and considered testimony, data, and recommendations provided by subject matter experts representing relevant technical, regulatory, and industry perspectives. Based on this collaborative analysis and expert input, the SFM concluded that the proposed action would not result in a significant adverse economic impact on businesses.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS

Government Code Section 11346.2(b)(5)(B)(i) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.

The SFM does not anticipate any costs associated with compliance with the proposed building standards. The proposed changes clarify, conform, and coordinate existing code provisions without altering their substance or intent. The benefits of these regulations are to have clear, concise, complete, and updated text of the regulations and standards.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

The SFM has determined that this proposed rulemaking action does not unnecessarily duplicate or conflict with federal regulations contained in the Code of Federal Regulations that address the same issues as this proposed rulemaking. The proposed changes are intended to align and conform with other federal regulations for Hazardous Materials classification. (29 CFR 1910.1200 (OSHA) and 49 CFR 173.127 (DOT))