

**CALIFORNIA
ADOPTED THE FOLLOWING:**

FINAL EXPRESS TERMS
FOR STATE AGENCY APPROVED CHANGES
TO
THE 2021 UNIFORM MECHANICAL CODES (UMC)
FOR
THE 2022 CALIFORNIA MECHANICAL CODES (CMC)
CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PARTS 4

- THE CALIFORNIA BUILDING STANDARDS COMMISSION (BSC)
- CALIFORNIA ENERGY COMMISSION (CEC)
- THE DIVISION OF THE STATE ARCHITECT – STRUCTURAL SAFETY (DSA-SS)
- THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)
- THE OFFICE OF STATE WIDE HEALTH PLANNING AND DEVELOPMENT (OSHDP)
- THE OFFICE OF THE STATE FIRE MARSHAL (SFM)

Disclaimer: All Final Express Terms for the above mentioned agencies are available and were obtained from the Building Standards Commission at the following link:

<https://www.dgs.ca.gov/BSC/Rulemaking/2021-Triennial-Code-Adoption-Cycle/Dec-2021-Commission-Mtg>

<https://www.dgs.ca.gov/BSC/Rulemaking/2021-Triennial-Code-Adoption-Cycle/Jan-2022-Commission-Mtg>

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4. THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT	(HCD)
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APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

December 14, 2021

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE CALIFORNIA BUILDING STANDARDS COMMISSION
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4
(BSC 01/21)**

The state agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

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

LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

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- Repealed California amendments appear in ~~*italic and strikeout*~~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

FINAL EXPRESS TERMS

The Building Standards Commission (BSC) proposes to adopt the 2021 edition of the Uniform Mechanical Code (UMC) for codification and effectiveness into the 2022 edition of the California Mechanical Code (CMC) as presented on the following pages, including any necessary amendments. BSC further proposes to:

Repeal the 2018 edition of the UMC and the 2019 CMC;

Repeal amendments to the model code that are no longer necessary, repeal or amend building standards that are not addressed by a model code;

Relocate or codify existing adopted and necessary amendments to the model code into the format of the model code proposed for adoption, the action of which has no regulatory effect.

PROPOSED REPEALS, ADOPTIONS AND NEW AMENDMENTS

ITEM 1

Chapter 1, *Division I*, Section 1.1.0 General

BSC proposes to bring forward existing California amendments in Chapter 1, *Division I* through Chapter 1, *Division II* from the 2019 California Mechanical Code for adoption into the 2022 edition of the California Mechanical Code with additional amendments as follows:

CHAPTER 1, CALIFORNIA ADMINISTRATION, DIVISION I

1.1.0 General

1.1.1 Title. *These regulations shall be known as the California Mechanical Code, may be cited as such and will be referred to herein as “this code.” The California Mechanical Code is Part 4 of thirteen parts of the official compilation and publication of the adoption, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2018 2021 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

1.1.2 Purpose. *[No change to existing California amendment]*

1.1.3 Scope. *[No change to existing California amendment]*

1.1.3.1 Nonstate-Regulated Buildings, Structures, and Applications. *No change to existing California amendment]*

1.1.3.2 State-Regulated Buildings, Structures, and Applications. *No change to existing California amendment]*

Note: ~~See Preface to distinguish the model code provisions from the California provisions~~ “How to Distinguish Between Model Code Language and California Amendments” in the front of the code.

...

1.2.0 BUILDING STANDARDS COMMISSION

1.2.1 BSC *[No change to existing California amendment]*

1.2.2 BSC-CG *[No change to existing California amendment]*

1.2.3 Alternate Materials, Design, and Methods of Construction and Equipment. *[No change to existing California amendment]*

...

Notation:

Authority: Health and Safety Code Sections 18928, 18930.5, 18934.5, 18940.5, 18941.8, and 18949.6.

Reference: Health and Safety Code Section 18928.1, 18934.5, 18940.5, 18941.8, and 18949.6.

ITEM 2

Chapter 1, *Division II* ADMINISTRATION, Section 104 Permits

BSC proposes to adopt only added Section 104.4.3.1 Chapter 1 of the 2021 UMC for use in the 2022 CMC as Administration *Division II*.

104.4.3.1 Expiration. [BSC] On or after January 1, 2019, every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance or if the work authorized on the site by such permit is suspended or abandoned for a period of 12 months after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated. (See Health and Safety Code Section 18938.5 and 18938.6).

...

Notation:

Authority: Health & Safety Code Sections 18931(c) and 18938.5(b)2(B)

Reference(s): Health & Safety Code Sections 18938.5(b)2(B), 18938.6

ITEM 3

Chapter 2, Definitions, Section 209.0

BSC proposes to adopt the entire Chapter 2 of the 2021 UMC, as amended, with amended section (definition) listed below, and carry forward the existing amendment without change.

CHAPTER 2, DEFINITIONS

...

209.0 Galvanized steel [No change to existing California amendment]

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 4

Chapter 3, General regulations

BSC proposes to adopt the entire Chapter 3 of the 2021 UMC, without amendment.

CHAPTER 3, GENERAL REGULATIONS

...

Notation:

BSC TP-105 (Rev. 10/20) Final Express Terms
BSC 02/21 – Part 4 – 2021 Triennial Code Cycle
California Building Standards Commission

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 5

Chapter 4, Ventilation air, Section 402.1 Occupied spaces

BSC proposes to adopt the entire Chapter 4 of the 2021 UMC and carry forward existing amendments with some modification as shown.

CHAPTER 4, VENTILATION AIR

...

401.2 Filters. [BSC-CG] In mechanically ventilated buildings, ... in compliance with Chapter 5, Division 5.5. of the California Green Building Standards Code (CALGreen).

Exception: *[No change to existing California amendment]*

401.2.1 Labeling. *[No change to existing California amendment]*

...

402.1 Occupied spaces. *[Not permitted for OSHPD 1, 2, 3, & 4]* Occupiable spaces listed in Table 402.1 shall be designed to have ventilation (outdoor) air for occupants in accordance with this chapter. ~~Ventilation air supply requirements for occupancies regulated by the California Energy Commission are found in the California Energy Code.~~

402.1.1...

...

Notation:

Authority: Health & Safety Code Sections 18928, 18934.5 and 18940.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 6

Chapters 5 through 14

BSC proposes to adopt Chapters 5 through 14 of the 2021 UMC, without amendment.

CHAPTER 5 – EXHAUST SYSTEMS

CHAPTER 6 – DUCT SYSTEMS

CHAPTER 7 – COMBUSTION AIR

CHAPTER 8 – CHIMNEYS AND VENTS

CHAPTER 9 – INSTALLATION OF SPECIFIC APPLIANCES

CHAPTER 10 – BOILERS AND PRESSURE VESSELS

CHAPTER 11 – REFRIGERATION

CHAPTER 12 – HYDRONICS

CHAPTER 13 – FUEL GAS PIPING

CHAPTER 14 – PROCESS PIPING

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 7

Chapter 15, Solar systems

BSC proposes to NOT adopt Chapter 15 of the 2021 UMC.

CHAPTER 15 - SOLAR SYSTEMS

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 8

Chapters 16 and 17

BSC proposes to adopt Chapters 16 and 17 of the 2021 UMC, without amendment.

CHAPTER 16 – STATIONARY POWER PLANTS

CHAPTER 17 – REFERENCED STANDARDS

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 9

Chapter Appendix A, Residential Plan Examiner Review Form for HVAC System Design

BSC proposes to NOT adopt Appendix Chapter A of the 2021 UMC.

APPENDIX A – Residential Plan Examiner Review Form for HVAC System Design

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 10

Chapter Appendix B and C

BSC proposes to adopt Appendix Chapters B and C of the 2021 UMC, without amendment.

APPENDIX B – Procedures to be Followed to Place Gas Equipment in Operation.

APPENDIX C – Installation and Testing of Oil (Liquid) Fuel-Fired Equipment.

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

ITEM 11

Chapter Appendix D through H

BSC proposes to NOT adopt Appendix Chapters D, E, F, G, and H of the 2021 UMC.

APPENDIX D – Fuel Supply: Manufactured/Mobile Home Parks and Recreational Vehicles

APPENDIX E – Sustainable Practices

APPENDIX F – Geothermal Energy Systems

APPENDIX G – Sizing of Venting Systems and Outdoor Combustion and Ventilation Opening Design

APPENDIX H – Example Calculation of Outdoor Air Rate

...

Notation:

Authority: Health & Safety Code Sections 18928 and 18934.5

Reference(s): Health & Safety Code Sections 18928, 18928.1 and 18934.5

Part 4 – California Mechanical Code

Chapters 1, 3, 6, and 12

Chapter 1, Section 1.1.8

1.1.8 City, County, or City and County Amendments, Additions or Deletions.

[...]

1.1.8.2 Locally Adopted Energy Standards – California Energy Code, Part 6, California Energy Code Requirements for Locally Adopted Energy Standards. In addition to the provisions of Section 1.1.8.1 of this part, ~~the provisions of this section apply to cities, counties, and cities and counties amending adopted energy standards affecting buildings and structures subject to the California Energy Code, Part 6.~~ local jurisdictions that adopt changes to energy conservation or insulation standards (including energy efficiency measures) may not enforce such changes until the California Energy Commission has made the findings required by Public Resources Code Section 25402.1(h)(2), following the process specified in Section 10-106 of the California Administrative Code. Applicable provisions of Public Resources Code Section 25402.1 and applicable provisions of Chapter 10 of the California Administrative Code, Part 1 apply to local amendment of energy standards adopted by the California Energy Commission.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 3, Section 311

311.0 Heating or Cooling Air System.

[...]

311.5 California Energy Code Requirements for Residential Air Filtration. In mechanically ventilated residential buildings, air filters shall be provided to clean outdoor air and return air prior to its delivery to occupied spaces where specified in California Energy Code Sections 150.0(m)12 and 160.2(b). The air filters shall comply with California Energy Code requirements for labeling, ventilation system design and installation, air filter efficacy, and air filter pressure drop.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 4, Section 402.1

402.1 Occupiable Spaces

Occupiable Spaces [...] shall be designed to have ventilation (outdoor) air for occupants in accordance with this chapter. *Ventilation air requirements for occupancies regulated by the California Energy Commission are and found in the California Energy Code supersede those of the California Mechanical Code.*

Chapter 6, Section 601.2

601.2 Sizing Requirements.

[...]

Section 601.2.1. California Energy Code Residential Return Duct Sizing Requirements. California Energy Code Tables 150.0-B and 150.0-C specify return duct sizing requirements for single return and multiple return duct systems, respectively, that are applicable as an alternative to confirming system airflow via field verification and diagnostic testing. See California Energy Code Section 150.0(m)13 for provisions applicable to newly constructed buildings, and Section 150.2(b)1Fii for alterations.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 6, Section 603.9.2

603.9.2 Duct Leakage Tests.

[...]

603.9.2.1 Duct Leakage Tests for Buildings that Meet Air Distribution System Duct Leakage Sealing Criteria in Title 24, Part 6. For duct leakage testing, see California Energy Code Sections 150.0(m)(11) for single family buildings, Section 160.3(b) for multifamily buildings, and Section 120.4(g) for nonresidential and Hotel Motel buildings.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 12, Section 1217.5.2

1217.5.2 Insulation.

[...]

1217.5.2.1 California Energy Code Insulation Requirements for Heated Slab Floors. See California Energy Code Section 110.8(g) for additional insulation requirements for heated slab floors – a

higher level of insulation is required for Climate Zone 16, and more detailed installation requirements apply to all climate zones.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 12, Section 1217.7

1217.7 Wall and Ceiling Panels.

[...]

1217.7.1 California Energy Code Pipe Insulation Requirements. See California Energy Code Sections 150.0(j)2 and 120.3(c) for pipe insulation requirements based on fluid temperature and pipe diameter – where California Energy Code Table 120.3-A specifies insulation greater than R-12, the higher value is required.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

Chapter 12, Section 1220.4.5

1220.4.5 Insulation.

[...]

1220.4.5.1 California Energy Code Insulation Requirements for Heated Slab Floors. See California Energy Code Section 110.8(g) and Table 110.8-A for additional insulation requirements for heated slab floors – a higher level of insulation is required for Climate Zone 16, and more detailed requirements for installing insulation are specified in all climate zones.

Notation:

Authority: Sections 25213, 25218, 25218.5, 25402 and 25402.1, Public Resources Code

Reference(s): Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.8, and 25943, Public Resources Code

APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

December 14, 2021

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE DIVISION OF THE STATE ARCHITECT-STRUCTURAL SAFETY
(DSA-SS AND DSA-SS/CC)
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4
(DSA SS/CC 01/21)**

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

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FINAL EXPRESS TERMS

Item 1

CHAPTER 1, Administration

1.1.1 Title. *These regulations shall be known as the California Mechanical Code, may be cited as such and will be referred to herein as “this code.” The California Mechanical Code is Part 4 of thirteen parts of the official compilation and publication of the adoption, amendment, and repeal of mechanical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2018 2021 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

**DIVISION II
ADMINISTRATION**

101.0 General.

101.1 Title. This document shall be known as the “Uniform Mechanical Code”, may be cited as such, and will be referred to herein as “this code.”

...

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 2

CHAPTER 2, DEFINITIONS

DSA proposes to adopt Chapter 2 of the 2021 Uniform Mechanical Code (UMC) with existing California amendments carried forward into the 2022 edition of the California Mechanical Code (CMC).

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 3

CHAPTER 3, GENERAL REGULATIONS

DSA proposes to adopt Chapter 3 of the 2021 UMC with existing California amendments carried forward into the 2022 edition of the CMC.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 4

CHAPTER 4, Ventilation Air Supply

DSA proposes to adopt Chapter 4 of the 2021 UMC with existing California

amendments carried forward into the 2022 edition of the CMC.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 5

CHAPTER 5, Exhaust Systems

DSA proposes to adopt Chapter 5 of the 2021 UMC with existing California amendments carried forward into the 2022 edition of the CMC.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code § 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 6

CHAPTER 6, Duct Systems

DSA proposes to adopt Chapter 6 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 7

CHAPTER 7, Combustion Air

DSA proposes to adopt Chapter 7 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 8

CHAPTER 8, Chimneys and Vents

DSA proposes to adopt Chapter 8 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 9

CHAPTER 9, Installation of Specific Appliances

DSA proposes to adopt Chapter 9 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 10

CHAPTER 10, Boilers and Pressure Vessels

DSA proposes to adopt Chapter 10 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 11

CHAPTER 11, Refrigeration

DSA proposes to adopt Chapter 11 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 12

CHAPTER 12, Hydronics

DSA proposes to adopt Chapter 12 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 13

CHAPTER 13, Fuel Gas Piping

DSA proposes to adopt Chapter 13 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 14

CHAPTER 14, Process Piping

DSA proposes to adopt Chapter 14 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 15

CHAPTER 15, Solar Energy Systems

DSA proposes to adopt Chapter 15 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 16

CHAPTER 16, Stationary Power Plants

DSA proposes to adopt Chapter 16 of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 17

CHAPTER 17, Referenced Standards.

DSA proposes to adopt Chapter 17 of the 2021 UMC with existing California amendments carried forward into the 2022 edition of the CMC.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 18

APPENDIX A, B, and C

DSA proposes to not adopt appendix A, B, and C of the 2021 UMC into the 2022 edition of the CMC. DSA did not adopt these in the 2019 edition.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 19

APPENDIX D Manufactured Mobile/Mobile Home Parks and Recreational Vehicle Parks

DSA proposes to adopt Appendix D of the 2021 UMC into the 2022 edition of the CMC without amendment.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

Item 20

APPENDIX E, F, and G

DSA proposes to not adopt appendix E, F, and G of the 2021 UMC into the 2022 edition of the CMC. DSA did not adopt these in the 2019 edition.

Notation: DSA-SS

Authority: Education Code Sections 17310 and 81142, and Health and Safety Code Section 16022.

Reference(s): Education Code Sections 17280 through 17317, and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

Notation: DSA-SS/CC

Authority: Education Code Section 81053.

Reference(s): Education Code Sections 81052, 81053, and 81130 through 81147.

APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

December 14, 2021

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE CALIFORNIA DEPARTMENT OF
HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4**

(HCD 01/21)

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation: shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

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

LEGEND for EXPRESS TERMS

- 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*~~
 - Ellipsis (...) indicate existing text remains unchanged
-

FINAL EXPRESS TERMS

Item 1: HCD proposes to bring forward Chapter 1, Division 1, Sections 1.1 and 1.8, from the 2019 California Mechanical Code for adoption into the 2022 California Mechanical Code with modifications as follows:

**CHAPTER 1
ADMINISTRATION
DIVISION I
CALIFORNIA ADMINISTRATION**

1.1.0 General.

1.1.1 Title. *These regulations shall be known as the California Mechanical Code, may be cited as such and will be referred to herein as “this code.” The California Mechanical Code is Part 4 of thirteen parts of the official compilation and publication of the adoption, amendment, and repeal of mechanical regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the ~~2018~~ 2021 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

1.1.2 Purpose. *The purpose ...*

1.1.3 Scope. *The provisions ...*

1.1.3.1 Non-State-Regulated Buildings, Structures, and Applications. *Except as ...*

1.1.3.2 State-Regulated Buildings, Structures, and Applications. *The model ...*

1.1.4 Appendices. *Provisions contained ...*

1.1.5 Referenced Codes. *The codes, ...*

1.1.6 Non-Building Standards, Orders, and Regulations. *Requirements contained ...*

1.1.7 Order of Precedence and Use.

1.1.7.1 Differences. *In the event ...*

1.1.7.2 Specific Provisions. *Where a specific ...*

1.1.7.3 Conflicts. *When the requirements ...*

1.1.7.3.1 Detached One- and Two-Family Dwellings. *Detached ~~one-and~~ one- and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures, shall not be required to comply with the California Residential Code if constructed in accordance with the California Building Code.*

1.1.8 City, County, or City and County Amendments, Additions or Deletions. *The provisions ...*

1.1.8.1 Findings and Filings. *...*

1 and 2 (No change to California amendment.)

3. Findings prepared by fire protection districts shall be ratified by the local city, county, or city and county and filed with the California Department of Housing and Community Development, Division of Codes and Standards, P.O. Box 278180, Sacramento, CA 95827-8180 or 9342 Tech Center Dr. Drive, Suite 500, Sacramento, CA 95826-2582.

1.1.8.2 Locally Adopted Energy Standards – California Energy Code, Part 6. *In addition ...*

1.1.9 Effective Date of this Code. *Only those ...*

Exceptions:

(1) [HCD 1 & HCD] Retroactive permits ...

(2) [HCD 1 & HCD 2] Plans approved by the Department of Housing and Community Development or a Department-approved design approval agency for factory-built housing as defined by Health and Safety Code Section 19971. Approved plans, pursuant to the California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, Article 3, Section ~~3048~~ 3037 remain valid for a period of 36 months from the date of plan approval.

1.1.10 Availability of Codes. At least one ...

1.1.11 Format. This part ...

1.1.12 Validity. If any ...

1.8.0 Department of Housing and Community Development. (HCD)

1.8.1 Purpose. The purpose of ...

1.8.2 Authority and Abbreviations.

1.8.2.1 General. The Department of ...

1.8.2.1.1 Housing Construction.

Application - Hotels, ...

Enforcing Agency - Local building department or the Department of Housing and Community Development.

Authority Cited -- Health and Safety Code Sections 17040, ~~47050~~, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17922.15, 17926, 17927, 17928, 17958.12, ~~18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1 through 18873.5, 18938.3, 18944.11, and 19990~~; and Government Code Section 12955.1.

References -- Business and Professions Code Division 5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941, 19890, 19891, 19892 and Sections 19960 through 19997; Civil Code Sections 832, 1101.4, 1101.5 and, 1954.201, 1954.202 and 5551; and Government Code Sections 8698.4, 12955.1 and 12955.1.1. California Code of Regulations, Title 20, Sections 1605.1, 1605.3 and 1607.

1.8.2.1.2 Housing Accessibility.

Application – Covered multifamily dwellings ...

Enforcing Agency—Local building department or the Department of Housing and Community Development

Authority Cited -- Health and Safety Code Sections 17040, ~~17050~~, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17926, 17927, 17928, 17958.12, ~~18300~~, ~~18552~~, ~~18554~~, ~~18620~~, ~~18630~~, ~~18640~~, ~~18670~~, ~~18690~~, ~~18691~~, ~~18865~~, ~~18871.3~~, ~~18871.4~~, 18873, ~~18873.1 through 18873.5~~, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1 and 12955.1.1.

References -- Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941 and 19960 through 19997; Civil Code Sections 1101.4, 1101.5 and 1954.201, 1954.202; and Government Code Sections 12955.1 and 12955.1.1. California Code of Regulations, Title 20, Sections 1605.1, 1605.3 and 1607.

1.8.2.1.3 Permanent Buildings in Mobilehome Parks and Special Occupancy Parks.

Application - Permanent buildings, ...

Enforcing Agency – The Department of ...

Authority Cited -- Health and Safety Code Sections 17040, ~~17050~~, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17922.15, 17926, 17927, 17928, 17958.12, ~~18300~~, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1 through 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

References -- Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941, 19890, 19891, 19892 and 19960 through 19997; Civil Code Sections 1101.4, 1101.5 and 1954.201; and Government Code Sections 12955.1 and 12955.1.1. California Code of Regulations, Title 20, Sections 1605.1, 1605.3 and 1607; and Title 25, Sections 1042 and 2042.

1.8.3 Local Enforcing Agency.

1.8.3.1 Duties and Powers. The building department ...

1.8.3.2 Laws, Rules, and Regulations. Other than ...

1.8.3.2.1 State Housing Law. Refer to ...

1.8.3.2.2 Mobilehome Parks Act. Refer to ...

Exception: Mobilehome parks ...

1.8.3.2.3 Special Occupancy Parks Act. Refer to ...

Exception: Special occupancy parks ...

1.8.3.2.4 Employee Housing Act. Refer to ...

1.8.3.2.5 Factory-Built Housing Law. Refer to ...

1.8.4 Permits, Fees, Applications, and Inspections.

1.8.4.1 Permits. *A written construction permit ...*

Exceptions:

1 through 3 (No change to California amendments.)

1.8.4.2 Fees. *Subject to ...*

1.8.4.3 Plan Review and Time Limitations. *Subject to ...*

1.8.4.3.1 Retention of Plans. *The building department ...*

Exceptions:

1 through 4 (No change to existing California amendments.)

1.8.4.4 Inspections. *Construction or work ...*

1.8.5 Right of Entry for Enforcement.

1.8.5.1 General. *Subject to ...*

1.8.6 Local Modification by Ordinance or Regulation.

1.8.6.1 General. *Subject to ...*

1.8.6.2 Findings, Filings, and Rejections of Local Modifications. *Prior to ...*

1.8.7 Alternate Materials, Designs, Tests, and Methods of Construction.

1.8.7.1 General. *The provisions ...*

1.8.7.2 Local Building Departments. *The building department ...*

1.8.7.2.1 Approval of Alternates. *The consideration ...*

1.8.7.3 Department of Housing and Community Development. *The Department ...*

1.8.8 Appeals Board.

1.8.8.1 General. *Every city, county, or city and county ...*

1.8.8.2 Definitions. *The following terms shall for the purposes of this section have the meaning shown.*

Housing Appeals Board. *The board or agency ...*

Local Appeals Board. *The board or agency ...*

1.8.8.3 Appeals. *Except as otherwise provided ...*

1.8.9 Unsafe Buildings or Structures.

1.8.9.1 Authority to Enforce. Subject to ...

1.8.9.2 Actions and Proceedings. Subject to ...

1.8.10 Other Building Regulations.

1.8.10.1 Existing Structures. Notwithstanding other ...

1.8.10.2 Moved Structures. Subject to ...

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17921.5, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17922.14, 17926, 17927, 17928, 17958.12, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1 through 18873.5, 18938.3, 18944.11 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.6, 18941, 18941.5, 19890, 19891, 19892 and 19960 through 19997; Civil Code Sections 1101.4, 1101.5, 1954.201, 1954.202 and 5551; and Government Code Sections 8698.4, 12955.1, 12955.1.1 and 65852.2. California Code of Regulations, Title 20, Sections 1605.1, 1605.3 and 1607.

Item 2: HCD proposes to adopt Chapter 1, Division II, Section 104.2 (Items 1-5) only, from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

DIVISION II ADMINISTRATION

104.2 Exempt Work. (No change to model code text.)

A permit shall not be required for the following:

- (1) The stopping of leaks ...
- (2) The clearing of stoppages ...

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

Item 3: HCD proposes to adopt Chapter 2 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code, and to bring forward existing amendments as follows:

**CHAPTER 2
DEFINITIONS**

203.0 -A-

Accessory Dwelling Unit. [HCD 1 & HCD 2] (No change to CA amendment)

Approved.

Exception: [HCD 1 & HCD 2] (No change to CA amendment)

Approved Testing Agency. (No change to CA amendment)

Assembly Building. (No change to CA amendment)

Authority Having Jurisdiction.

[HCD 1 & HCD 2] (No change to CA amendment)

204.0 -B-

Building. (No change to CA amendment)

Building Code. (No change to CA amendment)

206.0 -D-

Department. (No change to CA amendment)

207.0 -E-

Electrical Code. (No change to CA amendment)

Enforcing Agency. (No change to CA amendment)

208.0 -F-

Family. (No change to CA amendment)

214.0 -L-

Labeled. (No change to CA amendment)

Listed (Third Party Certified). (No change to CA amendment)

Listing Agency. (No change to CA amendment)

216.0 -N-

Nuisance. (No change to CA amendment)

217.0 -O-

Occupancy Classification. (No change to CA amendment)

218.0 -P-

Plumbing Code. (No change to CA amendment)

222.0 -T-

Testing Agency. (No change to CA amendment)

223.0 -U-

UMC. (No change to CA amendment)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 4: HCD proposes to adopt Chapter 3 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code, with existing California amendments as follows:

**CHAPTER 3
GENERAL REGULATIONS**

303.7.1 Liquefied Petroleum Gas (LP-Gas) Appliances. (No change to CA amendment)

...

305.2 (formerly 303.13) Pit Location.

Exception: (No change to CA amendment)

...

311.2 Air Filters. Air filters shall be ...

Exceptions:

(1) ...

(2) ...

~~**[HCD 1 & HCD 2] In mechanically ventilated residential buildings, air filters shall be provided to clean outdoor and return air prior to its delivery to occupied spaces. The air filters shall comply with the California Energy Code requirements for labeling, ventilation system design and installation, air filter efficiency, and air filter pressure drop, as applicable.**~~

~~See California Energy Code Subchapters 3, 6, 7, and 9 for requirements related to air filtration for residential occupancies.~~

...

316.2 Installation. Piping or tubing shall be installed ... defined in the ~~building code~~ *California Building Code or California Residential Code*. (No change to CA amendment)

...

316.5 Fire-Resistant Construction. Piping, tubing, and duct system ... the requirements of the ~~building code~~ *California Building Code or California Residential Code*. (No change to CA amendment)

...

316.9 Structural Members. A structural member ... the requirements of the ~~building code~~ *California Building Code or California Residential Code*. (No change to CA amendment)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 5: HCD proposes to adopt Chapter 4 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code with new and existing California amendments as follows:

**CHAPTER 4
VENTILATION AIR**

402.5 Bathroom Exhaust Fans. (No change to CA amendment; moved to Section 405.3)

...

Table 403.7 MINIMUM EXHAUST RATES. (No change to model code table.)

Notes:

...

¹¹ [HCD 1 & HCD 2] *A bathroom is (No change to CA amendment)*

¹² [HCD 1 & HCD 2] *ANSI/ASHRAE 62.2: Tables 5.1 and 5.2. (No change to CA amendment)*

403.7.2.1 Alternative Exhaust Ventilation for Enclosed Parking Garages. (No change to CA amendment)

403.7.2.2 Minimum Exhaust Rate. (No change to CA amendment)

403.7.2.3 Exhaust Inlet Distribution. (No change to CA amendment)

Exception: (No change to CA amendment)

403.7.2.4 Exhaust System Operation. (No change to CA amendment)

...

405.3 Bathroom Exhaust. A mechanical exhaust directly to the outdoors ... provided for intermittent operations. **[HCD 1 & HCD 2] Each bathroom shall also be mechanically ventilated in accordance with Division 4.5 of the California Green Building Standards Code (CALGreen).**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 6: HCD proposes to adopt Chapter 5 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

**CHAPTER 5
EXHAUST SYSTEMS**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 7: HCD proposes to adopt Chapter 6, except Section 603.9.2 (formerly section 603.10.1), from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code with existing California amendments as follows:

**CHAPTER 6
DUCT SYSTEMS**

601.2 Sizing Requirements. Duct systems shall be sized in accordance with applicable standard in Chapter 17 or by other approved methods.

Exception: ~~[HCD 1 & HCD 2] Duct sizing calculations are not required for existing duct systems.~~

...

602.2.1 Electrical. (No change to CA amendment)

...

603.3.1 (formerly 603.3.3) Earthquake Loads. Ducts located in structures that are installed in areas classified as seismic design category C, D, E, or F shall be in accordance with the ~~building code~~ *California Building Code or California Residential Code*. (No change to CA amendment)

...

603.9.2 (formerly 603.10.1) Duct Leakage Tests. [Not adopted by HCD] (No change to text)

...

~~**603.10.1.1 Duct Leakage Tests for Residential Buildings. [HCD 1 & HCD 2] See California Energy Code Section 150.0(m)(11) for low-rise residential; and Section 140.4(l) for duct leakage tests for other residential buildings.**~~

...

606.1 (formerly 605.1) Smoke Dampers. (No change to CA amendment)

...

607.1 (formerly 606.1) General. (No change to CA amendment)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 8: HCD proposes to adopt Chapter 7 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

**CHAPTER 7
COMBUSTION AIR**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 9: HCD proposes to adopt Chapter 8 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

**CHAPTER 8
CHIMNEYS AND VENTS**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 10: HCD proposes to adopt Chapter 9, except Sections 911.2.2, 912.1, 930.0, and 930.1, from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code with new and existing California amendments as follows:

**CHAPTER 9
INSTALLATION OF SPECIFIC APPLIANCES**

~~**911.2.2 In Manufactured Homes.** A decorative appliance for installation in a vented fireplace, where installed in a manufactured home, shall be listed for installation in manufacture homes. [NFPA 54:10.6.2.2] **Reserved.** (No change to CA amendment)~~

...

~~**912.1 Prohibited Installations.** Vented gas fireplaces shall not be installed in bathrooms or bedrooms unless the appliance is listed and the bedroom or bathroom has the required volume in accordance with Section 701.4.~~

~~**Exception:** Direct vent gas fireplaces. **Reserved** (No change to CA amendment)~~

~~**912.2 Installation.** (No change to CA amendment)~~

...

~~**916.2.1 Prohibited Installations.** (No change to CA amendment)~~

~~**916.2.1.1 Unvented Room Heaters.** (No change to CA amendment)~~

...

~~**930.0 Appliances for Installation in Manufactured Housing.** [Not adopted by HCD] (No change to text)~~

...

~~**930.1 General.** [Not adopted by HCD] (No change to text)~~

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 11: HCD proposes to adopt Chapter 10 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code and to bring forward existing California amendments as follows:

**CHAPTER 10
BOILERS AND PRESSURE VESSELS**

1001.2 Boiler Rooms and Enclosures. (No change to California amendment)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 12: HCD proposes to adopt Chapter 11 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code with the following without amendments:

**CHAPTER 11
REFRIGERATION**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 13: HCD proposes to adopt Chapter 12 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code with existing amendments and repealed amendments as follows:

CHAPTER 12

HYDRONICS

1205.2 Pressure Testing. (No change to CA amendment)

...

1211.6 Cross-Linked Polyethylene/Aluminum/Cross-Linked Polyethylene (PEX-AL-PEX) Pipe. (No change to CA amendment)

...

1217.5.2 Insulation. Where a poured concrete radiant floor system is installed in contact with the soil, insulation recommended by the manufacturer for such an application and with a minimum R-value of 5 shall be placed between the soil and the concrete; extend to the outside edges of the concrete; and be placed on all slab edges.

~~*[HCD 1 & HCD 2]. See California Energy Code Section 110.8(g) for insulation requirements for heated slab floors.*~~

...

1217.7 (formerly 1217.5.4) Wall and Ceiling Panels. Where piping is installed in the stud wall cavity or the ceiling joist cavity, the cavity shall be insulated with not less than R-12 material. The insulation shall be installed in such a manner as to prevent heating or cooling loss from the space intended to be controlled.

An air space of not less than 1 inch (25.4 mm) and not more than 3 inches (76 mm) shall be maintained between the insulation and the interior surface of the panel unless a conductive plate is installed.

~~*[HCD 1 & HCD 2]. See California Energy Code Sections 150.0(j)2 and 120.3(c) for pipe insulation requirements based on pipe diameter.*~~

...

1220.4.5 (formerly 1220.2.5) Insulation. Where a poured concrete snow melt system is installed in contact with the soil, insulation recommended by the manufacturer for such application and with a minimum R-value of 5 shall be placed between the concrete and the compacted grade; and be extended as close as practicable to the outside edges of the concrete.

~~*[HCD 1 & HCD 2]. See California Energy Code Section 110.8(g) for insulation requirements for heated slab floors.*~~

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 14: HCD proposes to adopt Chapter 13 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

**CHAPTER 13
FUEL GAS PIPING**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 15: HCD proposes to NOT adopt Chapter 14 from the 2021 Uniform Mechanical Code.

**CHAPTER 14
PROCESS PIPING**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 16: HCD proposes to adopt Chapter 15 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code and bring forward existing California amendments as follows:

**CHAPTER 15
SOLAR ENERGY SYSTEMS**

1502.0 General. (No change to CA amendment)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 17: HCD proposes to adopt Chapter 16 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

CHAPTER 16 STATIONARY POWER PLANTS

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 18: HCD proposes to adopt Chapter 17 from the 2021 Uniform Mechanical Code into the 2022 California Mechanical Code without amendments:

CHAPTER 17 REFERENCED STANDARDS

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 19: HCD proposes to NOT adopt Appendix A from the 2021 Uniform Mechanical Code.

APPENDIX A RESIDENTIAL PLANS EXAMINER REVIEW FORM FOR HVAC SYSTEM DESIGN (Loads, Equipment, Ducts) [ACCA]

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 20: HCD proposes to NOT adopt Appendix B from the 2021 Uniform Mechanical Code.

**APPENDIX B
PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 21: HCD proposes to NOT adopt Appendix C from the 2021 Uniform Mechanical Code.

**APPENDIX C
INSTALLATION AND TESTING OF OIL (LIQUID) FUEL-FIRED EQUIPMENT**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 22: HCD proposes to NOT adopt Appendix D from the 2021 Uniform Mechanical Code:

**APPENDIX D
FUEL SUPPLY: MANUFACTURED/MOBILE HOME PARKS AND RECREATIONAL
VEHICLE PARKS**

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 23: HCD proposes to NOT adopt Appendix E from the 2021 Uniform Mechanical Code.

APPENDIX E SUSTAINABLE PRACTICES

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.

ITEM 24: HCD proposes to NOT adopt Appendix F from the 2021 Uniform Mechanical Code.

APPENDIX F GEOTHERMAL ENERGY SYSTEMS

(The content of this Appendix is based on Annex F and Annex I of NFPA 54)

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.

ITEM 25: HCD proposes to NOT adopt Appendix G from the 2021 Uniform Mechanical Code.

APPENDIX G SIZING OF VENTING SYSTEMS AND OUTDOOR COMBUSTION AND VENTILATION OPENING DESIGN

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

ITEM 26: HCD proposes to NOT adopt Appendix H from the 2021 Uniform Mechanical Code.

APPENDIX H EXAMPLE CALCULATION OF OUTDOOR AIR RATE

Notation:

Authority: Health and Safety Code Sections 17040, 17920.9, 17921, 17922, 17958.12, 18552, 18620, 18690, 18865, 18871.3, 18873, 18873.4, 18938.3 and 19990; and Government Code Sections 12955.1 and 12955.1.1.

Reference(s): Civil Code Sections 714 and 801.5; Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, 18938.3 and 19960 through 19997; and Government Code Sections 65850.5 and 65852.2.

APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION
December 14, 2021

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4
(OSHDP 01/21)**

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

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

LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

- 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 strikethrough~~
- Repealed California amendments appear in ~~*italic and strikethrough*~~
- Ellipsis (...) indicate existing text remains unchanged

FINAL EXPRESS TERMS

Item 1

**CHAPTER 1 ADMINISTRATION
DIVISION I CALIFORNIA ADMINISTRATION
DIVISION II ADMINISTRATION**

Adopt 2021 Uniform Mechanical Code (UMC). Adopt specific sections of Chapter 1 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 2

CHAPTER 2 DEFINITIONS

Adopt 2021 Uniform Mechanical Code (UMC) Chapter 2 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4

and 5 with the following modification:

228.0 – Z –

...

Zone. [OSHPD 1, 2, 3, 4 & 5] *A space or group of spaces within a building for which the heating, or cooling requirements are sufficiently similar that desired conditions can be maintained throughout by a single controlling device.*

...

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 3

CHAPTER 3

Adopt 2021 Uniform Mechanical Code (UMC) Chapter 3 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 4

CHAPTER 4 VENTILATION AIR

Adopt 2021 Uniform Mechanical Code (UMC). Adopt specific sections of Chapter 4 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5 with the following modifications:

Section 407.5 Variable Air Volume.

...

407.5.1.3 *Variable air volume for return or exhaust air shall be accomplished by utilizing Spaces with pressure requirements per Table 4-A shall utilize an automatic modulating damper in the return or exhaust air for each zone space. The damper will modulate from full open to minimum position in conjunction with the supply air VAV terminal boxes equipment.*

...

407.6 Economizers. *Systems with economizers shall include modulating relief and/or return fans to ensure compliance with the pressure requirements of spaces listed in Table 4-A.*

...

420.0 Air Distribution Devices. [OSHPD 1, 2, 3, 4 & 5] *All air distribution devices and supply air outlets shall meet the requirements of ASHRAE 170-2013, Section 6.7.2 and*

Table 6.7.2.

...

TABLE 4-A (continued)
PRESSURE RELATIONSHIP AND VENTILATION REQUIREMENTS FOR GENERAL ACUTE CARE HOSPITALS, SKILLED NURSING FACILITIES, INTERMEDIATE CARE FACILITIES, CORRECTIONAL TREATMENT CENTERS, OUTPATIENT FACILITIES, AND LICENSED CLINICS

Function or Space	Pressure Relationship to Adjacent Areas (f) (n)	Minimum Outdoor ach	Minimum Total ach	Minimum Total ach if 100% O.A. (z)	All Room Air Exhausted Directly to Outdoors (j)	Air Recirculated by Means of Room Units (a)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
...
Gamma Camera	NR	2	6	6	NR	No	NR	NR
...

...

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference: Health and Safety Code, Section 129850

Item 5

CHAPTERS 5 and 6

Adopt 2021 Uniform Mechanical Code (UMC) Chapters 5 and 6 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 6

CHAPTERS 7 and 8

Adopt 2021 Uniform Mechanical Code (UMC) Chapters 7 and 8 for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 7

CHAPTER 9

Adopt 2021 Uniform Mechanical Code (UMC) Chapter 9 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 8

CHAPTER 10

Adopt 2021 Uniform Mechanical Code (UMC) Chapter 10 for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 9

CHAPTERS 11 and 12

Adopt 2021 Uniform Mechanical Code (UMC) Chapters 11 and 12 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 10

CHAPTERS 13 and 14

Adopt 2021 Uniform Mechanical Code (UMC) Chapters 13 and 14 for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 11

CHAPTERS 15 and 16

Entire Chapters 15 and 16 not adopted by OSHPD.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 12

CHAPTER 17

Adopt 2021 Uniform Mechanical Code (UMC) Chapter 17 and carry forward existing amendments of the 2019 California Mechanical Code (CMC) for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 13

APPENDIX A

Entire Appendix A not adopted by OSHPD.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 14

APPENDICES B and C

Adopt 2021 Uniform Mechanical Code (UMC) Appendices B and C for OSHPD 1, 1R, 2, 3, 4 and 5.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

Item 15

APPENDICES D, E, F and G

Entire Appendices D, E, F and G not adopted by OSHPD.

Notation:

Authority: Health and Safety Code, Sections 1275, 18928, 129790, and 129850

Reference(s): Health and Safety Code, Section 129850

APPROVED BY THE CALIFORNIA BUILDING STANDARDS COMMISSION

December 14, 2021

**FINAL EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE STATE FIRE MARSHAL
REGARDING THE 2022 CALIFORNIA MECHANICAL CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4
(SFM 01/21)**

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

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

LEGEND for EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

- 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*~~
- Ellipsis (...) indicate existing text remains unchanged

The Office of the State Fire Marshal (SFM) proposes to adopt the 2021 edition of the Uniform Mechanical Code (UMC) into the 2022 edition of the California Mechanical Code (CMC). SFM further proposes to:

Repeal the adoption by reference of the 2018 Uniform Mechanical Code and incorporate and adopt by reference in its place the 2021 Uniform Mechanical Code for application and effectiveness in the 2022 California Mechanical Code.

Repeal certain amendments to the 2018 Uniform Mechanical Code and/or California Building Standards not addressed by the model code that are no longer necessary.

Adopt new building standards or necessary amendments to the 2021 Uniform Mechanical Code that address inadequacies of the 2021 Uniform Mechanical Code as they pertain to California laws.

Bring forward previously existing California building standards or amendments, which represent no change in their effect from the 2019 California Building Standards Code.

Codify non-substantive editorial and formatting amendments from the format based upon the 2018 Uniform Mechanical Code to the format of the 2021 Uniform Mechanical Code.

FINAL EXPRESS TERMS

CHAPTER 1 ADMINISTRATION DIVISION I CALIFORNIA ADMINISTRATION

Item 1-1

Chapter 1, Administration, Division I, California Administration, Section 1.1.1 Title

1.1.1 Title. *These regulations shall be known as the California Mechanical Code, may be cited as such and will be referred to herein as “this code.” The California Mechanical Code is Part 4 of thirteen parts of the official compilation and publication of the adoption, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the ~~2018~~ 2021 Uniform Mechanical Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.*

Item 1-2

Chapter 1, Administration, Division I, California Administration, Section 1.1.0 General through 1.1.12

[The SFM is proposing to maintain the adoption of those existing California provisions contained Sections 1.1.0 through 1.1.12.]

Item 1-3

Chapter 1, Administration, Division I, California Administration, Section 1.11.1, Institutional, educational or any similar occupancy

[For Items 1-3 through Item 1-8, the SFM is proposing to maintain the adoption of those existing California provisions contained in Sections 1.11.0 through 1.11.11 with modifications as shown below.]

[The SFM is proposing to amended section listed below]

1.11.1 SFM-Office of the State Fire Marshal. Specific scope...

Application:

Institutional, educational or any similar occupancy. Any building or structure used or intended for use as an asylum, jail, prison, mental hospital, hospital, sanitarium,

home for the aged elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.

Authority cited—Health and Safety Code Section 13143.

Reference—Health and Safety Code Section 13143.

Item 1-4

Chapter 1, Administration, Division I, California Administration, Section 1.11.4.4 Fire Clearance Preinspection

[The SFM is proposing to amend the section listed below]

1.11.4.4 Fire Clearance Preinspection. Pursuant to Health and Safety Code Section 13235, Fire Clearance Preinspection, fee, upon receipt of a request from a prospective licensee of a community care facility, as defined in Section 1502, of a residential care facility for the elderly, as defined in Section 1569.2, or of a child day care facility, as defined in Section 1596.750, the local fire enforcing agency, as defined in Section 13244, or State Fire Marshal, whichever has primary jurisdiction, shall conduct a preinspection of the facility prior to the final fire clearance approval. At the time of the preinspection, the primary fire enforcing agency shall price consultation and interpretation of the fire safety regulations and shall notify the prospective licensee of the facility in writing of the specific fire safety regulations which shall be enforced in order to obtain fire clearance approval. A fee equal to, but not exceeding, the actual cost of the of the preinspection services not more than \$50.00 may be charged for the preinspection of a facility, ~~with a capacity to serve 25 or fewer persons. A fee of not more than \$100.00 may be charged for a preinspection of a facility with a capacity to serve 26 or more persons.~~

Item 1-5

Chapter 1, Administration, Division I, California Administration, Section 1.11.4.5 Care Facilities

[The SFM is proposing to amend the section listed below]

1.11.4.5 Care Facilities. The primary fire enforcing agency shall complete the final fire clearance inspection for a community care facility, residential care facility for the elderly, or child day care facility within 30 days of receipt of the request for the final inspection, or as of the date the prospective facility requests the final preclearance inspection by the State Department of Social Services, whichever is later.

Pursuant to Health and Safety Code Section 13235, a preinspection fee equal to, but not exceeding, the actual cost of the of the preinspection services of not more than \$50.00 may be charged for the preinspection of a facility, with a capacity to serve 25 or less clients. ~~A fee of not more than \$100.00 may be charged for a preinspection of a facility with a capacity to serve 26 or more clients.~~

Pursuant to Health and Safety Code Section 13131.5, a reasonable final inspection fee, not to exceed the actual cost of inspection services necessary to complete a final inspection may be charged for occupancies classified as residential-care facilities for the elderly (RCFE).

Pursuant to Health and Safety Code Section 1569.84, neither the State Fire Marshal nor any local public entity shall charge any fee for enforcing fire inspection regulations pursuant to state law or regulation or local ordinance, with respect to residential-care facilities for the elderly (RCFE) which service six or fewer persons.

Item 1-6

**Chapter 1, Administration, Division I, California Administration, Section 1.11.6
Certificate of Occupancy**

[The SFM is proposing to amend the section listed below]

1.11.6 Certificate of Occupancy. *A Certificate of Occupancy shall be issued as specified in Title 24, Part 2, California Building Code, Section 111.*

Exception: Group R, Division 3 and Group U occupancies. Certificates of occupancy are not required for work exempt from permits in accordance with Section 105.2 of the California Building Code.

Item 1-7

**Chapter 1, Administration, Division I, California Administration, Section 1.11.7
Temporary Structures and Uses**

[The SFM is proposing to amend the section listed below]

1.11.7 Temporary Structures and Uses. *See Title 24, Part 2, California Building Code, Section 1078.*

**CHAPTER 1
ADMINISTRATION**

***DIVISION II*
ADMINISTRATION**

Item 1-8

Chapter 1, Administration, Division II, Administration, Section 1.11.7

[The SFM proposes to not adopt Chapter 1, Administration, Division II Administration]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

**CHAPTER 2
DEFINITIONS**

Item 2-1

Chapter 2, Definitions

[The SFM proposes to adopt Chapter 2 and carry forward existing amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

**CHAPTER 3
GENERAL REGULATIONS**

Item 3-1

Chapter 3, General Regulations

[The SFM proposes to adopt Chapter 3 and carry forward existing amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 4 VENTILATION AIR SUPPLY

Item 4-1 Chapter 4, Ventilation Air Supply

[The SFM proposes to adopt Chapter 4 and carry forward existing amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 5 EXHAUST SYSTEMS

Item 5-1 Chapter 5, Exhaust Systems

[The SFM proposes to adopt Chapter 5 and carry forward existing amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 6 DUCT SYSTEMS

Item 6-1 Chapter 6, Duct Systems

[The SFM proposes to adopt Chapter 6 and carry forward existing amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 7 COMBUSTION AIR

Item 7-1

Chapter 7, Combustion Air

[The SFM proposes to adopt Chapter 7 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 8 CHIMNEYS AND VENTS

Item 8-1

Chapter 8, Chimney and Vents

[The SFM proposes to adopt Chapter 8 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources

Code Sections 4201 through 4204

CHAPTER 9 INSTALLATION OF SPECIFIC EQUIPMENT

Item 9-1 Chapter 9, Installation of Specific Equipment

[The SFM proposes to adopt Chapter 9 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 10 BOILERS AND PRESSURE VESSELS

Item 10-1 Chapter 10, Boilers and Pressure Vessels

[The SFM proposes to adopt Chapter 10 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 11 REFRIGERATION

Item 11-1 Chapter 11, Refrigeration

[The SFM proposes to adopt Chapter 11 and carry forward existing amendments.]

Item 11-2

Chapter 11, Refrigeration, Section 1104.6 Applications for Human Comfort and for Nonindustrial Occupancies

1104.0 Requirements for Refrigerant and Refrigeration System Use.

...

1104.6 Applications for Human Comfort and for Nonindustrial Occupancies. In nonindustrial occupancies, Group A2, A2L, A3, B1, B2L, B2, and B3 refrigerants shall not be used in high-probability systems for human comfort.

Exceptions:

(1) Listed equipment, units having a factory-sealed refrigerating system, containing no more than 2.2 lbs. (1kg) of A2L refrigerant installed in accordance with the listing and the manufacturer's installation instructions.

(2) Listed equipment for non-residential applications, having a factory-sealed refrigerating system and containing no more than 4 lbs. (1.8 kg) of A2L refrigerant installed in accordance with the listing and the manufacturer's installation instructions.

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

**CHAPTER 12
HYDRONICS**

Item 12-1

Chapter 12, Hydronics

[The SFM proposes to not adopt Chapter 12.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government

Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 13 FUEL GAS PIPING

Item 13-1 Chapter 13, Fuel Gas Piping

[The SFM proposes to adopt Chapter 13 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 14 PROCESS PIPING

Item 14-1 Chapter 14, Process Piping

[The SFM proposes to adopt Chapter 14 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 15

SOLAR ENERGY SYSTEMS

Item 15-1 Chapter 15, Solar Energy Systems

[The SFM proposes to not adopt Chapter 15.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 16 STATIONARY POWER PLANTS

Item 16-1 Chapter 16, Stationary Power Plants

[The SFM proposes to adopt Chapter 16 without amendments.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

CHAPTER 17 REFERENCED STANDARDS

[The SFM proposes to adopt Chapter 17 with amendments.]

Item 17-1 Chapter 17, NFPA 2 Hydrogen Technologies Code

NFPA 2-201619

Item 17-2
Chapter 17, NFPA 10 Portable Fire Extinguishers

NFPA 10-201821

Item 17-3
Chapter 17, NFPA 13 Installation of Sprinkler Systems

NFPA 13-201922

**See California Fire Code for amendments*

Item 17-4
Chapter 17, NFPA 17 Dry Chemical Extinguishing Systems

NFPA 17-201720

Item 17-5
Chapter 17, NFPA 17A Wet Chemical Extinguishing Systems

NFPA 17A-201720

Item 17-6
Chapter 17, NFPA 30A Motor Fuel Dispensing Facilities and Repair Garages

NFPA 30A-201821

Item 17-7
Chapter 17, NFPA 58 Liquefied Petroleum Gas Code

NFPA 58-201720

Item 17-8
Chapter 17, NFPA 70 National Electrical Code

NFPA 70-201720

**See California Electrical Code for amendments*

Item 17-9
Chapter 17, NFPA 654 Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids

NFPA 654-201720

Item 17-10

Chapter 17, NFPA 853 Installation of Stationary Fuel Cell Power Systems

NFPA 853-204520

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

APPENDICES

Item 18-1

Appendices, Appendix A- H

[The SFM proposes to not adopt Appendix A - H.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204

USEFUL TABLES

Item 19-1

Useful Tables

[The SFM proposes to adopt Useful Tables without amendment.]

Notation:

Authority: Health and Safety Code Sections 1250, 1569.72, 1569.78, 1568.02, 1502, 1597.44, 1597.45, 1597.46, 1597.54, 1597.65, 13108, 13108.5, 13114, 13143, 13143.2, 13143.6, 13146, 13210, 13211, 17921, 18949.2, 25500 through 25545, Government Code Section 51189, Public Education Code 17074.50

Reference(s): Health and Safety Code Sections 13143, 13211, 18949.2, 25500 through 25545, Government Code Sections 51176, 51177, 51178 and 51179, Public Resources Code Sections 4201 through 4204