INITIAL STATEMENT OF REASONS FOR PROPOSED BUILDING STANDARDS OF THE OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT REGARDING THE 2025 CALIFORNIA MECHANICAL CODE CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4 (OSHPD 01/24)

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

STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS

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

GENERAL INITIAL STATEMENT OF REASONS

The California Department of Health Care Access and Information (HCAI), Office of Statewide Hospital Planning and Development (OSHPD) proposes to repeal the 2021 Uniform Mechanical Code, adopt the 2024 Uniform Mechanical Code, and carry forward existing amendments from the 2022 California Mechanical Code, Part 4 of Title 24 California Code of Regulations. Specific repeal, adoption and amendments are listed below.

OSHPD was recast and transitioned to the Department of Health Care Access and Information (HCAI) in 2021. The Divisions within HCAI were changed to Offices and OSHPD was able to retain the acronym which will not change the Title 24 banners.

ITEM 1

CHAPTER 1 ADMINISTRATION
DIVISION I CALIFORNIA ADMINISTRATION

Sections 1.1.0 General, 1.10 Office of Statewide Hospital Planning and Development

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 1 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 1 for OSHPD 1, 1R, 2, 3, 4, and 5.

1.1.3.2(13), 1.10.0, 1.10.1, 1.10.2, 1.10.3, 1.10.4, 1.10.5

HCAI proposes to revise the word "Health" to "Hospital" throughout this article to align with the name change of our office to Office of Statewide Hospital Planning and Development.

1.10.6 OSHPD 6

HCAI proposes to add this new section to align with the new OSHPD banner and application "Section 1229 [OSHPD 6] Chemical Dependency Recovery Hospitals". This

new section was added to the California Building Code during the 2022 Intervening Code Cycle in response to Assembly Bill (AB) 2096 (Chapter 233, Statutes 2022). The statute permits Chemical Dependency Recovery Hospital services to be provided in a freestanding facility, within a hospital building that only provides chemical recovery services, or within a distinct part of a hospital, as defined. It also authorizes chemical dependency recovery services to be provided within a hospital building that has been removed from general acute care use. This amendment provides consistency throughout all Parts of Title 24. The Code Advisory Committee approved Item 1-2, however it was found that language was included in Section 1.10.6.2 that identified the adopted sections for Part 2 of the California Building Code. The language referring to Part 2, CBC has been removed to keep Section 1.10.6.2 consistent with the other sections in Part 4.

CAC Recommendation:

Approve

Agency Response:

Accept Item 1-1 (Section 1.10.6). Disagree Item 1-2. It was found language was included in Section 1.10.6.2 that is intended for Part 2, California Building Code. This language has been removed to align with Sections 1.10.1.2 and similar sections.

ITEM 2 CHAPTER 2 DEFINITIONS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 2 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 2 for OSHPD 1, 1R, 2, 3, 4, and 5.

203.0 - A -

Air, Relief.

HCAI proposes to remove OSHPD 1R from definition.

Air Terminal Device

HCAI proposes to add a new definition for air terminal device based on CAC recommendation to add clarity for the new requirements in Item 6-3, Section 408.1.7 and Item 9-1, Table 4-B. The 2021 edition of ASHRAE 170 requires HEPA filtration for operating rooms and protective environment rooms to locate the HEPA filtration in the terminal device outlet. The ASHRAE glossary of terms defines the air terminal device outlet as the register, grille or diffuser. This definition will provide clarity to define the correct location as air terminal device can be confused with an air terminal unit which is the unit controlling airflow and or temperature to the space and is located in the duct work upstream of the registers, grilles or diffusers.

Authority Having Jurisdiction

HCAI proposes to add the OSHPD 4 and 6 banners to the definition.

204.0 - B -

Building Code.

HCAI proposes to add the OSHPD 6 banner to the definition.

207.0 - E -

Enforcing Agency

HCAI proposes to add the OSHPD 6 banner to the definition.

210.0 - H -

Health Facilities

HCAI proposes to revise the word "Health" to "Hospital" throughout this article to align with the name change of our office to Office of Statewide Hospital Planning and Development. The OSHPD 6 banner will also be added to the definition.

223.0 - U -

UMC

HCAI proposes to add the OSHPD 6 banner to the definition.

CAC Recommendation:

Approve

Agency Response:

Accept. New definition added for Air Terminal Device based on CAC comment for Section 408.1.7 (Item 6-3).

ITEM 3

CHAPTER 3 GENERAL REGULATIONS

Sections 318.0 Scope, 321.0 Essential Mechanical Provisions, 322.0 Sensitive Areas or Rooms

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 3 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 3 for OSHPD 1, 1R, 2, 3, 4, and 5.

318.1

Removing language that refers to the matrix adoption tables for application of OSHPD amendments. The OSHPD banners identify which amendments are applicable to the OSHPD designations 1, 1R, 2, 3, 4, 5 and 6. The matrix adoption tables are non-regulatory and are only intended as an aid to the code user.

321.0

The OSHPD 1R designation was removed from the OSHPD banner in Section 321.0. OSHPD 1R buildings have all acute care removed. Essential power provisions found in Section 321.0 are for health care facilities with OSHPD 1, 2, 3, 4 and 5 designations.

321.3

HCAI proposes to add cooling equipment to the essential mechanical provisions that require essential power. Acute care hospitals are required to provide the equipment necessary to remain operational for 72 hours of continued operation for newly constructed buildings and all hospitals by January 1, 2030. The Code of Federal Regulations found in Title 42, Chapter IV, Subchapter G, Part 482, Section 482.15 requires hospitals to have provisions for alternate sources of energy to maintain temperatures to protect patient health and safety and the safe and sanitary storage of provisions. This new section will require the cooling equipment to maintain temperature and humidity for a minimum of one operating room and other spaces outlined in the hospital risk assessment. This requirement is to protect patient health and safety during a power outage. NFPA 99 risk assessment analysis is referred to in the HCAI

amendment. Under the federal requirements, a health care facility must comply with NFPA 99. The HCAI amendment will specify that an operating room must be categorized as a category 1 risk for cooling and ensure cooling is provided for a minimum of one operating room. The California Department of Public Health enforces operational requirements for hospitals. Maintaining the minimum code requirements for temperature and humidity for operating rooms has been deemed necessary during a power outage.

321.4, 321.5, 321.6, 321.7

Sections are renumbered to accommodate new language in 321.3 pertaining to cooling. Section 321.6 will specifically identify fire and smoke dampers as equipment needing essential power. The essential power language currently requires necessary equipment to remain operating during a power outage. This includes equipment to provide heating and ventilation for pressurization. Where fire and smoke dampers require power to remain open, essential power is needed so that the HVAC systems maintain operation. This revision will add clarity to the existing requirement to maintain HVAC operation during a power loss.

322.0

The list of sensitive rooms is being revised due to changes to HCAI amendments in the California Building Code. Also, function designations found in the 2021 edition of ASHRAE 170 have been revised since the 2013 edition adopted under the previous California Mechanical Code. Section 322.0 specifically addresses the room types that include specific temperature and humidity requirements. Class 3 imaging was added to the California Building Code in the 2022 Triennial Code Adoption Cycle and is being added to the 322.0 list since it is the equivalent to an Operating Room. Class 2 imaging and Procedure Rooms are added to the list as these rooms also have humidity control requirements. The protective environment room is being added to the list as this space also includes humidity requirements. The list is being revised to assign one room type per item number for clarity. The current amendment includes more than one room type per item number for items 1 and 5. Rooms added to the list and items with multiple room types are shown as underlined to identify the change. New list numbers are also shown as underlined. The list has been reorganized to group similar function types together. The order does not match the amendment from the 2022 California Mechanical Code as printed. The list will need to be printed as shown in the 2025 proof.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 4

CHAPTER 4 VENTILATION AIR

Sections 401.0 General, 402.0 Ventilation Air, 406.0 Evaporative Cooling Systems for Health Care Facilities

Adopt 2024 Uniform Mechanical Code (UMC). Adopt Chapter 4 for OSHPD 1, 1R, 2, 3, 4 and 5 except sections 402.2 and 402.3. Adopt entire chapter for OSHPD 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 4

for OSHPD 1, 1R, 2, 3, 4, and 5 and as amended below.

401.1 Applicability

HCAI amendment revised to identify amendments 406.0 through 419.0, previous amendment listed 404.0 through 418.0. Revising due to section number changes in model code.

402.1 Occupiable Spaces

Removing OSHPD 1R from the HCAI amendment since OSHPD 1R buildings do not specify a health care related function. OSHPD 1R is a designation for buildings with the removal of acute care services. When health care related functions are located in an OSHPD 1R building, the functions will fall under an OSHPD 2, 3 or 5 banner. The HCAI amendment referring to Table 4-A is being relocated from the model code sentence to a separate paragraph at the end of the section to isolate the HCAI amendment. A portion of the HCAI amendment in Section 402.1.2 is being relocated into this section, 402.1. The change combines the HCAI amendments into one paragraph as they both relate to the same ventilation requirements for healthcare buildings.

402.1.2 Ventilation in Health Care Facilities

Removing HCAI amendment pertaining to the 2013 edition of ASHRAE 170. The model code adopts the 2021 edition of ASHRAE 170 and the amendment is no longer required. The previous amendment included the adoption of addenda to the 2013 edition of ASHREA 170. Adding a new sentence to identify the ventilation Table 4-A as provided in Section 402.1. The model code language only refers to ASHRAE 170 for ventilation. The added sentence clarifies the requirement in 402.1. The language that is shown stricken from 402.1.2 has been relocated to Section 402.1 to keep similar requirements together. HCAI is proposing to add an additional sentence to reaffirm the requirements for conflicts between the code and the standard found in Section 1.1.7.

The modifications to ASHRAE 170 have been revised for the adoption of the 2021 edition of the standard. HCAI proposes to add references to OSHPD amendments found in the California Mechanical Code for similar requirements to ASHRAE 170. As an example, section 6.1.2.1 of ASHRAE 170 outlines the requirements for heating and cooling systems. Similar requirements are found in Section 319.0 of the California Mechanical Code. Section 6.3.1.2 of the 2013 edition of ASHRAE 170 is 6.3.1.3 in the 2021 edition. The OSHPD amendment for relief air is revised to only apply the distances for other than air classified as other than class to align with the information note in the 2021 edition of ASHRAE 170. The modifications for items 6, 10, 12, 13 and 14 clarify that the ventilation requirements for OSHPD categories is Table 4-A in the California Mechanical Code.

406.0 Evaporative Cooling System for Health Care

Food preparation areas is being repealed from this Section. This section is intended for cooling of rooms in nonpatient areas that do not include specific requirements in CMC Table 4-A. Food preparation areas is a room type that is included in CMC Table 4A for ventilation requirements, where the other spaces listed in Section 406.0 default to ASHRAE 62.1.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 5 CHAPTER 4 VENTILATION AIR Section 407.0 Ventilation System Details

407.0 Ventilation System Details

The requirements found in Section 407.1.1 Exception 2 for unoccupied mode are being relocated to new Section 407.7. A column to identify which spaces are permitted to use unoccupied turndown is being added to CMC Table 4-A as it was incorporated in ASHRAE 170 2021 edition. The HCAI amendment is being revised to coordinate with the national standard.

407.2.2.1 Hazardous Exhaust Outlets

New Section 407.2.2.1 is added for hazardous exhaust. The national standard includes a 30 foot separation distance for specified rooms that are equivalent to a class 4 air. The minimum separation distance from all exhaust outlets per the HCAI amendment was 25 feet. This new section increases the separation distance by 5 feet for rooms deemed hazardous. This requirement aligns with ASHRAE 170 requirement adopted by the model code. The purpose of the exhaust requirements found in Section 407.2 is for additional requirements above Chapter 5 for protection of the health care facility.

407.3.1 Air Balance

Clarifying language is being added to Section 407.3.1. The air balance standards allow for the value measured at each air flow device to be within a specific tolerance. The range of tolerance acceptable to the air balance standards can allow for spaces to be non-compliant with the code requirement for pressurization. The new sentence will clarify the pressurization requirement is to be met. This item was recommended for further study by the code advisory committee. The second sentence is being removed as the tolerance was not applicable to all conditions.

407.4 Air Circulation

This section is being revised to renumber and reorganize the section.

407.4.1.1

The previous language from 407.4.1.1 is being split into multiple subsections and relocated to Sections 407.4.1.3, 407.4.1.5 and 407.4.1.6 so the subject matter is appropriately grouped. Section 420.0 is being relocated to 407.4.1.1. The language from Section 420.0 is general language for air circulation in all healthcare areas.

407.4.1.2

The language from the existing HCAI amendment 407.4.1.6 is being relocated to 407.4.1.2. The requirement is related to the revised Section and is being relocated to group the similar requirements together. The existing amendment from 407.4.1.2 is being relocated to Section 407.4.1.7.

407.4.1.3

A portion of the language from 407.4.1.1 is being relocated to 407.4.1.3. This section will include the supply air requirements for operating rooms and similar spaces. Additional language is being provided to direct the user to the primary supply diffuser array requirements found in ASHRAE 170, 7.4.1 for these spaces. The cystoscopy

room is being updated to surgical cystoscopy to match the room name in Section 322.0 and Table 4-A.

407.4.1.4

New Section 407.4.1.4 is proposed to provide a requirement for the location of supply registers and return/exhaust inlets in procedure and Class 2 imaging rooms. The general requirement in 407.4.1 requires air to be delivered from clean to less clean areas. This language will ensure the distribution of air meets this requirement for infection control.

407.4.1.5

This new subsection will include the return air requirements for operating rooms and similar spaces that was previously included in 407.4.1.1. The Section is rewritten to arrange the rooms in the same order as 407.4.1.3 and to revise the wording to stand alone in a separate subsection. The wording included low level inlet requirements for operating rooms and morgue/autopsy rooms. This subsection will only include the operating room requirement. The morgue and autopsy requirements are being relocated into a separate subsection 407.4.1.6.

407.4.1.6

This new subsection includes the morgue and autopsy room exhaust requirement from 407.4.1.1.

407.4.1.7

The HCAI amendment from 407.4.1.2 is being relocated to Section 407.4.1.7.

407.4.2

407.4.1.3 is renumbered to 407.4.2. The code language revised to match the California Building Code Section 1020.6 for air movement in corridors. The California Building Code (CBC) air movement provision applies to rated and non-rated corridors, the existing HCAI amendment was written for rated corridors. The HCAI amendment is being revised to align with the CBC. Exception 1 is being revised to match Exception 1 in Section 1020.6 of the CBC. Exception 1 to 407.4.2 (formerly 407.4.1.3) is an HCAI amendment carried forward from the 2001 California Mechanical Code. The CBC has included multiple iterations of changes to the corridor rule for conveying airflow. This revision is to coordinate with current CBC and Office of the State Fire Marshal (SFM) amendments. SFM amendment for Section 1020.6, exception 5 refers to the CMC for facilities under OSHPD jurisdiction. Sentence added to ensure corridor air balance will not have infiltration or exfiltration to other spaces.

407.4.3

This section is being renumbered to accommodate changes to 407.4.1. Section changing from 407.4.1.4 to 407.4.3.

407.4.4

This section is being renumbered to accommodate changes to 407.4.1. Section changing from 407.4.1.5 to 407.4.4.

407.4.1.6 (relocate to 407.4.1.2)

Section 407.4.1.6 is being relocated to 407.4.1.2.

407.4.5

Section 407.4.1.7 is being renumbered to accommodate changes to 407.4.1. Section

number is changing from 407.4.1.7 to 407.4.5. The amendment is revised to be similar to the new amendment in Section 407.7, unoccupied turndown. Section 407.4.5 and 407.7 both include a column in Table 4A to identify the specific functions the requirements apply to. Language also revised to condense the length of the section. Item (3) is being revised to call out a MERV 8 minimum filtration where the previous language referred to Sections 408.2 and 408.3. OSHPD 2 spaces consist of skilled nursing and intermediate facilities and are permitted by ASHRAE 170-2021 Section 9.1 to use a filter as recommended by the manufacturer of the equipment. This revision also allows some of the HCAI amendments in Section 408 to be repealed. Requirement (4) also added for dry-air cooling coils to ensure the coil is not below the dew point which will cause condensation and contamination.

407.4.5.1

The proposed new section applies to unoccupied spaces in the healthcare building. The increased filter requirements are intended to apply to patient care areas or other areas deemed necessary by Table 4-A. Language added in Section 407.4.5.1 addresses specific non-health care spaces in a hospital building. The requirement follows the national standards.

407.5.1.3

Additional language added to clarify the modulating dampers are provided to maintain space pressurization as required by CMC Table 4-A.

407.5.1.4

Sensitive spaces are not permitted to subject a patient to fluctuating air movement per Section 407.5.1. HCAI proposes to add language to indicate the modulating damper is required for the supply air to the room and the return or exhaust air from the room. Where modulating dampers are not provided on the return or exhaust to the space and the return air is variable, it will subject the patient to fluctuating air flows.

407.5.1.5

The proposed new section indicates group allowances for spaces that do not require space pressurization. Areas of similar building loads will have similar airflow rates and do not require control of the relief air system to maintain building pressurization.

407.6

The language for 407.6 is being relocated to a new subsection 407.6.1 to match the format of the other sections.

407.7

HCAI proposes a new section for unoccupied turndown. The revised Table 4-A includes a column for unoccupied turndown to indicate when spaces may or may not allow unoccupied turndown. A column for unoccupied turndown was included in the ASHRAE 170 ventilation tables and is also being added to the OSHPD Table 4-A. The existing HCAI amendments from 407.1.1, Exception 2 are relocated into this new section. The Exception 2 paragraph has been split into the 4 separate items now listed into 407.7.1 to identify the specific requirements more easily.

407.8

HCAI proposes the new section building pressurization. This aligns with the AHSRAE 170 requirement adopted the 2024 Uniform Mechanical Code. This requirement is to ensure the building does not fall under negative pressure causing nonfiltered air to be

brought into the building. The air handling systems need to have outside air intake airflow quantities equal or exceed the amount of air exhausted from the building to ensure air is exfiltrated from the building and not infiltrated into the building. The requirement is being brought in as an amendment to coordinate with Sections 407.5 and 407.7 since HCAI amendments are in addition to the national standard.

CAC Recommendation:

Approve all items except section 407.3.1. Section 407.3.1 is further study. Based on criteria 1 and 6, the CAC suggests revision to the balance tolerance based on airflow and pressure. The 2nd proposed sentence needs revision. CAC approved Section 407.2.2.1, but provided a comment to evaluate exhaust distance to property lines.

Agency Response:

Accept. Section 407.2.2.1 (Item 5-2) provides specific requirements for exhaust in addition to the Chapter 5 requirements for protection of the health care facility. Section 407.3.1 (Item 5-3) has been revised. The proposed language has been revised to remove the 2nd sentence.

ITEM 6 CHAPTER 4 VENTILATION AIR Section 408.0 Filters

408.1.5

The 2021 edition of ASHRAE 170 includes a more restrictive requirement than the 2013 edition of the standard currently adopted under the 2022 California Mechanical Code. The HCAI amendments are being revised to align with the minimum requirement in the national standard. The HCAI amendments have required HEPA filtration to be provided in filter bank number 3 in the air handler. The national standard requires the HEPA filtration to be located in the air terminal device for operating rooms with high risk such as orthopedic or transplants and for protective environment rooms. Table 4-B is being revised to align with this requirement for the HEPA filtration to be provide at the air terminal device. The HCAI amendment required HEPA filter banks to be located at the air handler. The HCAI amendment requiring the HEPA filter to be placed in the third filter bank of the HVAC unit is being repealed as it conflicts with the requirement to provide the filtration at the terminal device outlet. Repealing the filter bank language will not prevent a design from voluntarily installing additional filtration in the air handler. Such as instances when the facility desires to increase the filtration for other spaces.

408.1.6

HCAI is repealing the language referring to filter bank number 3 similar to Section 408.1.5. The requirement for the filter bank number 2 to have sealing surfaces is being brought into the OSHPD amendment from the national standard for clarity.

408.1.7

HCAI proposes new section specific to HEPA filtration to note the requirement in Table 4-B for the HEPA filtration to be installed at the terminal device outlet. Based on CAC comments, a new definition for air terminal devices is being added to the definitions in Chapter 2. The express terms have been revised. The wording of air 'terminal device outlet' has been revised to 'air terminal device'.

408.2.2, 408.2.3, 408.2.4

HCAI proposes to repeal these sections since the requirements have been fully incorporated into Section 407.4.5, Recirculating Room Units. When the recirculating room units' section was brought into the CMC as an HCAI amendment, the Section pointed to 408.2 and 408.3 for the minimum filtration requirement. HCAI proposes to locate the filter requirement for recirculating room units in Section 407.4.5 and condense down the state amendments. The multiple amendments in Section 408 are now able to be removed.

408.3.1

HCAI proposes to revise wording for Section 408.3.1 due to the amendments repealed from the section. Sentence revised to comply with Table 4-C, other requirements are no longer incorporated in Section 408.3.

408.3.2, 408.3.3, 408.3.4

HCAI proposes to repeal sections 408.3.2 and 408.3.3 since the requirements have been fully incorporated into Section 407.4.5 Recirculating Room Units. When the recirculating room units' section was brought into the CMC as an HCAI amendment, Section 407.4.1.7 pointed to Section 408.2 and 408.3 for the minimum filtration requirement. HCAI proposes to locate the filter requirement for recirculating room units in Section 407.4.5. The HCAI amendments can be condensed down to one location and the multiple amendments in Section 408 are now able to be repealed. Section 408.3.4 is being renumbered to 408.3.2.

408.4.1

HCAI proposes to revise wording for Section 408.4.1 due to the amendments repealed from the section. Sentence revised to comply with Table 4-B, other requirements are no longer incorporated in Section 408.4.

408.4.2

The HCAI amendment is being repealed. The filtration requirement for recirculating room units has been moved to Section 407.4.5. The HCAI amendment for 408.4.2 is now able to be repealed.

408.5

HCAI proposes a new section to callout Section 407.4.5 for filtration of recirculating room units. Additional language is added to confirm that the full filtration required per Table 4-B is needed when Table 4-A is marked no for recirculating room units.

CAC Recommendation:

Approve. CAC: 408.1.7 - Recommend to define air terminal device.

Agency Response:

Accept items 6-1, 6-2, 6-4 – 6-11. Disagree item 6-3. Based on CAC comment HCAI will add a definition for air terminal device in Chapter 2, definitions. Section 408.1.7 (Item 6-3) will revise proposed language from air terminal device outlet to air terminal device to coordinate with the new definition.

ITEM 7

CHAPTER 4 VENTILATION AIR

Sections 409.0 Ducts, 414.0 Airborne Infection Isolation Rooms, 417.0 Testing and

Balancing Airborne Infection Isolation Rooms and Protective Environment Rooms, 420.0 Air Distribution Devices

409.3, 409.4

HCAI proposes to repeal the amendment. Insulation of ducts is covered in Section 605 and the 409.3 amendment is a duplicate of the HCAI amendment in 605.1. Section 409.4 will be renumbered to 409.3.

414.1.1

HCAI proposes to amend the 7 feet discharge height for airborne infection isolation exhaust to 10 feet. The national standard requires a minimum 10 feet exhaust height. The HCAI amendment is being revised to match the national standard.

417.0

Clarifying language is being added to this section to ensure the proper pressure testing is provided to meet the pressure requirement in Section 416.1 for airborne infection isolation rooms and protective environment rooms.

420.0

The HCAI amendment in Section 420.0 is being relocated to 407.4.1.1. The requirement is being grouped with similar requirements for air circulation.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 8 CHAPTER 4 VENTILATION AIR TABLE 4-A

An OSHPD banner is being added to the title of *TABLE 4-A*. The title of the table indicates the specific use types for which it applies. The OSHPD banner is being added to clarify which OSHPD categories the table applies to. General acute care hospitals fall under OSHPD 1, skilled nursing and intermediate care facilities fall under an OSHPD 2 designation, outpatient facilities and licensed clinics fall under OSHPD 3, correctional treatment centers fall under an OSHPD 4 designation, acute psychiatric hospitals fall under OSHPD 5. During the 2022 intervening code cycle the California Building Standards Commission's Plumbing, Electrical, Mechanical and Energy Code Advisory Committee requested the banner be added for clarity. The order of the OSHPD categories in the title have been rearranged to match the OSHPD category numbers 1-5.

HCAI proposes to repeal the 2022 version of Table 4-A and footnotes, and adopt the ASHRAE 170-2021 (170-2021) Tables 7-1, with amendment. HCAI proposes to carry forward the existing amendments from Table 4-A and footnotes into the new table. HCAI also proposes to incorporate functions listed in ASHRAE 170-2021 Tables 8-1, 8-2 and 9-1 into Table 4-A. The ventilation tables in ASHRAE 170 2021 edition are adopted by the 2024 Uniform Mechanical Code. HCAI adds a single ventilation table to the code to identify all function types found in the referenced standard and state amended room types from the California Building Code in one table. HCAI has received

expressed written permission to use the ASHRAE 170-2021 ventilation tables from ASHRAE. Table 4-A is based on Table 7-1, 8-1, 8-2 and 9-1 in ASHRAE 170-2021, "Ventilation of Healthcare Facilities". HCAI has express written consent from ASHRAE to use the material, and any of the HCAI amendments are not endorsed by ASHRAE. Table 4-A has historically added additional function types to coordinate with the HCAI amendments found in the California Building Code Sections 1224, 1225, 1226, 1227 and 1228 are added by amendment to Table 4-A. Table 4-A as printed in the 2022 California Mechanical Code is based on the 2013 edition of ASHRAE 170. ASHRAE 170-2013 included one Ventilation table in the standard. The 2021 edition of the ASHRAE standard includes separate ventilation tables to cover hospitals, outpatient, and residential facilities. The ASHRAE tables also include many revisions between the 2013 and 2021 editions. HCAI is using the new Table 7-1 as a base document and carrying forward the existing HCAI amendments. All text in Table 4-A from ASHRAE 170-2021 will be printed in standard upright font. All HCAI revisions and amendments will be shown in italic font and underlined. Where a function of space from the 170 standard does not match the function as defined in the California Building Code, the function name has been revised to match the California Building Code. Specific functions under HCAI authority for OSHPD 2, 3, 4 and 5 that are included in ASHRAE Tables 8-1, 8-2 and 9-1 for Outpatient and Residential Facilities have been included in Table 4-A. Functions that are not under the code authority of HCAI or functions that conflict with the California Building Code or Title 22 from Table 8-1, 8-2 or 9-1 have not been included in Table 4-A. The filter column from ASHRAE 170-2021 Table 7-1 is not used in the HCAI Table 4-A and is not shown. HCAI Table 4-B and 4-C address filtration requirements and are not proposed to be removed under this code cycle. Also, the Non-HD anteroom is revised from 30 air changes per hour to 20 air changes per hour to match USP 797 - Pharmaceutical Compounding - Sterile Preparations. Sterilizing equipment room is added as an HCAI amendment to Table 4-A. Room function was left out of the 2021 edition of ASHRAE 170 and is in process of being added back to standard through an addendum.

HCAI proposes to add the table footnotes from ASHRAE 170-2021 Table 7-1 into Table 4-A. HCAI has received express written permission from ASHRAE to use the ASHRAE 170-2021 ventilation tables. Table 4-A is based on Table 7-1, 8-1, 8-2 and 9-1 in ASHRAE 170-2021, "Ventilation of Healthcare Facilities". HCAI has express written consent from ASHRAE to use the material, and any of the HCAI amendments are not endorsed by ASHRAE. HCAI amendments from the 2022 California Mechanical Code are being carried forward into Table 4-A. HCAI amendment for footnote 'f' has been relocated to footnote 'd' to coordinate with 170-2021 Table 7-1 revision. Footnote 'e' has been revised to use the California Mechanical Code Sections applicable under the State of California code adoption. 170 Table 7-1 footnote aa is relocated to unused footnote 'g' to allow carried forward HCAI amendment 'aa' to use the same letters. 170-2201 Table 7-1, footnote 'i' was unused. HCAI proposes to add language similar to 2022 California Mechanical Code Table 4-A, footnote 'i' with modification to identify relevant California Mechanical Code sections related to kitchen hood make up air requirements found in Chapter 5. Footnote 'j' is revised to clarify the exhausted room requirements and relate to the recirculation requirements in the table. Footnote 't' and 'u' will carry forward the previous amendment. Footnotes from 170-2021 Table 7-1 relating to filtration have been removed from the table as HCAI includes filtration requirements in

Table 4-B and 4-C. Existing HCAI amendments for footnote 'ab', 'ac' and 'ad' have been incorporated into footnotes 'cc', 'dd' and 'ee' to match the 170-2021 footnote lettering.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 9 CHAPTER 4 VENTILATION AIR TABLE 4-B

HCAI proposes to add an OSHPD banner to the title of Table 4-B. The title of the table also identifies the specific use types for which it applies to. The OSHPD banner is being added to clarify which OSHPD categories the amendments apply to. General acute care hospitals fall under OSHPD 1, outpatient facilities and licensed clinics fall under OSHPD 3 and acute psychiatric hospitals fall under OSHPD 5. During the 2022 intervening code cycle the California Building Standards Commission's Plumbing, Electrical, Mechanical and Energy Code Advisory Committee requested the banner be added for clarity. The column for filter bank number 3 includes a HEPA filter requirement. The table includes a MERV 17 rating and HEPA filtration for row number three. The MERV 17 filter does not meet the same level of filtration as a HEPA filter as noted by the national standard adopted by the 2024 Uniform Mechanical Code. HCAI proposes to remove the MERV 17 rating from the number three column which will leave the HEPA filter rating as the sole requirement. A new footnote 3 is being added for a definition for HEPA to coordinate with the national standard. The footnotes to Table 4-B are being reordered to coordinate this change. Footnotes 3 and 4 are being renumbered to footnotes 4 and 5. HCAI proposes to revise footnotes 4 and 5 to coordinate with the HEPA filter location requirement in the national standard adopted in the 2024 Uniform Mechanical Code. The HEPA filter is required to be located in the air terminal device. This change has also been addressed in Section 408 with new proposed Section 408.1.7.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 10 CHAPTER 4 VENTILATION AIR TABLE 4-C

HCAI proposes to add an OSHPD banner to the title of Table 4-C. The OSHPD banner is being added to clarify which OSHPD categories the amendment applies to. Skilled Nursing and intermediate care facilities fall under an OSHPD 2 designation and correctional treatment centers fall under an OSHPD 4 designation. This was requested by the Code Advisory Committee during the intervening code cycle. HCAI concurs that all amendments to the code need to include a banner to indicate specific regulatory authority. The footnote number two is also being revised to coordinate with the code

revision to Section 406.0. HCAI proposes to revise the language to remove food preparation areas from the amendment relating to evaporative cooling.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 11

CHAPTER 5 EXHAUST SYSTEMS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 5 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 5 for OSHPD 1, 1R, 2, 4, and 5.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 12

CHAPTER 6, DUCT SYSTEMS

Sections 603.0 Installation of Ducts, 605.0 Insulation of Ducts

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 6 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 6 for OSHPD 1, 1R, 2, 3, 4, and 5.

603.4.1

HCAI proposes to remove 1R from the banner. OSHPD 1R buildings are existing structural buildings that can no longer house acute care services. The 1R building is to follow model code unless a OSHPD 2, 3 or 5 is located in the OSHPD 1R building. The amendment would be applicable where a OSHPD 2, 3 or 5 is located in the 1R building.

603.4.1.1

HCAI proposes to amend Section 603.4.1.1 to match the maximum length limitation of the model code provision in 603.4.1 for terminal boxes. A sentence is being added to clarify that flexible duct is not permitted when fire and/or smoke dampers are omitted in corridor construction per CBC Section 717.5.4. The CBC exception also requires the duct work to be constructed of steel of not less than a 0.019-inch thickness. The HCAI amendment is being revised to ensure installations using the exceptions in CBC Section 717.5.4 are installed in conformance with the building code.

605.2

HCAI proposes to add room names Class 3 imaging, hybrid operating rooms and protective environment rooms to coordinate with Section 322.0. These room types are considered sensitive areas and are not permitted to have acoustical lining materials.

605.3

HCAI proposes to amend this section to the MERV 17 filter rating. The MERV 17 filter

rating is not equivalent to a HEPA filter. This coordinates with the change in Table 4-B. Table 4-B defines the minimum requirements for a HEPA filter.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 13

CHAPTER 7 COMBUSTION AIR CHAPTER 8 CHIMNEYS AND VENTS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 7 and 8 for OSHPD 1, 1R, 2, 3, 4, 5 and 6.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 14

CHAPTER 9 INSTALLATION OF SPECIFIC APPLIANCES CHAPTER 10 BOILERS AND PRESSURE VESSELS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 9 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 9 for OSHPD 1, 1R, 2, 3, 4, and 5 and as amended below.

911.0

The model code revised Section 911.0. The 2024 model code added new language into Section 911.1 to identify the listing. The Section titled "Prohibited Installations" was relocated from Section 911.1 to 911.2. The HCAI amendment is included in the 'Prohibited Installations" section and will need to also be relocated to Section 911.2 to follow the model code change.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 15

CHAPTER 11 REFRIGERATION, TABLE 1104.1

Adopt 2024 Uniform Mechanical Code (UMC) Chapter1 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 11 for OSHPD 1, 1R, 2, 3, 4, and 5.

TABLE 1104.1

HCAI proposes to repeal the amendment in Table 1104.1 for the I-2.1 occupancy. The

occupancy group I-2.1 was repealed from the California Building Code during the 2022 Intervening Code Cycle by the State Fire Marshal.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 16

CHAPTER 12 HYDRONICS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 12 for OSHPD 1, 1R, 2, 3, 4, 5 and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 12 for OSHPD 1, 1R, 2, 4, and 5.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 17

CHAPTER 13 FUEL GAS PIPING CHAPTER 14 PROCESS PIPING

Adopt 2024 Uniform Mechanical Code (UMC) Chapters 13 and 14 for OSHPD 1, 1R, 2, 3, 4, 5 and 6.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 18

CHAPTER 15 SOLAR ENERGY SYSTEMS CHAPTER 16 STATIONARY POWER PLANTS CHAPTER 17 GEOTHERMAL

Entire Chapters 15, 16 and 17 not adopted by OSHPD.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 19

CHAPTER 18 REFERENCED STANDARDS

Adopt 2024 Uniform Mechanical Code (UMC) Chapter 18 for OSHPD 1, 1R, 2, 3, 4, 5

and 6. Carry forward existing amendments of the 2022 California Mechanical Code (CMC) Chapter 17 for OSHPD 1, 1R, 2, 3, 4, and 5 and as amended below. The 2024 Uniform Model Code revised Chapter 17 Referenced Standards to Chapter 18.

Table 1801.1

Table 4B added a standard to define a HEPA filter. Footnote 3 of Table 4-B was revised to include an IEST standard used to define the minimum requirements for a HEPA filter. The IEST standard is used by the national standard to define the minimum HEPA filter requirements and is defined in the national standard. Since the IEST standard is included in the HCAI amendment, the standard is also added to Table 1801.1.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 20

APPENDIX A RESIDENTIAL PLAN EXAMINER REVIEW FORM FOR HVAC SYSTEM DESIGN

Entire Appendix A not adopted by OSHPD.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 21

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

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

Adopt 2024 Uniform Mechanical Code (UMC) Appendices B and C for OSHPD 1, 1R, 2, 3, 4, 5 and 6.

CAC Recommendation:

Approve

Agency Response:

Accept

ITEM 22

APPENDICES D, E, F, G, H, I and J

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

CAC Recommendation:

Approve

Agency Response:

Accept

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

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

ASHRAE Standard 170-2021, "Ventilation of Healthcare Facilities" as adopted by the 2024 Uniform Mechanical Code.

Code of Federal Regulations Title 42, Chapter IV, Subchapter G, Part 482, Section 482.15.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

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

The proposed changes do not mandate any specific technologies or equipment and do not require any prescriptive standards.

CONSIDERATION OF REASONABLE ALTERNATIVES

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

There were no alternatives for consideration by HCAI. Proposed amendments will provide clarification and consistency within the code and are in alignment with national standards.

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

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

Small businesses will not be adversely impacted by the proposed adoption, amendments, or repeal of code requirements.

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

Government Code Section 11346.2(b)(5)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial

determination that the action will not have a significant adverse economic impact on business.

HCAI has identified that there will be no adverse economic impact on businesses on the basis that the provisions proposed are optional and are being proposed to allow facilities to provide services that better match their needs.

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

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

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

- A. The creation or elimination of jobs within the State of California.

 The proposed regulations will not create or eliminate jobs within the State of California.
- B. The creation of new businesses or the elimination of existing businesses within the State of California.

The proposed regulations will not create new businesses or eliminate existing businesses within the State of California.

C. The expansion of businesses currently doing business within the State of California.

The proposed regulations will not cause expansion of businesses currently doing business with the State of California.

D. The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.

HCAI promulgates building standards regarding the design and construction of licensed health facilities to ensure the protection of the public's health and safety in the facilities. The proposed regulations are necessary for the continued preservation of the health, safety, and welfare of California residents through updated amendments. The regulations will not affect worker safety, or the state's environment.

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

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

HCAI finds that the proposed building standards will result in no cost.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

Government Code Section 11346.2(b)(6) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may

adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.

The proposed regulations do not duplicate or conflict with Federal regulations.