

**INITIAL STATEMENT OF REASONS  
FOR PROPOSED BUILDING STANDARDS  
OF THE OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
REGARDING THE 2019 CALIFORNIA MECHANICAL CODE  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4**

**(OSHPD 05/19)**

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.

OSHPD's proposal for amending the 2019 California Mechanical Code was presented to the GREEN/Plumbing, Electrical, Mechanical, and Energy (PEME) Ad Hoc Code Advisory Committee (CAC) meeting during its March 4 and 5, 2020 meeting. OSHPD will address each item individually.

**Item 1**

**CHAPTER 1 – ADMINISTRATION  
DIVISION I - CALIFORNIA ADMINISTRATION**

**Section 1.10 OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT**

**1.10.1 OSHPD 1 and OSHPD 1R.**

Add the term "SPC or freestanding". This is done to establish consistency with Title 24, Part 2.

**1.10.4 OSHPD 4.**

Clarify the proper authority having jurisdiction for OSHPD 4 facilities as the Department of Corrections and Rehabilitation.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 1.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item 2**

**CHAPTER 2 - DEFINITIONS**

**Section 203.0 – A –**

**203.0 – A –**

**Authority Having Jurisdiction.** Add “1R” and “5” to the banner for Authority Having Jurisdiction. This is done to establish consistency with Title 24, Part 2.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 2.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

### Item 3

## CHAPTER 3 - GENERAL REGULATIONS

### Section 301.7 OSHPD 1R [OSHPD 1R]

### Section 303.2 Closet or Alcove Installations

### Section 306.2 Building Automation Systems. [OSHPD 1]

### Section 318.2 Services/System and Utilities

### Section 320.3.1 Requirements for Outpatient Facilities and Licensed Clinics. [For OSHPD 3]

### Section 320.4; Telephone and Technology Equipment Centers Data Equipment Rooms. [For OSHPD 1 & 4]; 320.4.4

### Section 321.0 Essential Mechanical Provisions. [OSHPD 1, 1R, 2, 3 (Surgical Clinics only) 4 & 5]; 321.1; 321.2

### Section 323.0 Mechanical Equipment Schedules. [OSHPD 1, 1R, 2, 4 & 5]

#### ***301.7 OSHPD 1R [OSHPD 1R].***

Add this section to act as a pointer to Section 309 of Title 24, Part 2 for general requirements.

#### ***303.2 Closet or Alcove Installations.***

This section not adopted by OSHPD to allow for clarification and the application of more-current NFPA requirements boiler installations in a new section, 1001.2.1.

#### ***306.2 Building Automation Systems. [OSHPD 1]***

Adding this section to require that mechanical equipment will remain operable in the event of a controls network failure.

#### ***318.2 Services/System and Utilities.***

Add appropriate references to Title 24, Part 2 for systems and utilities.

#### ***320.3 Requirements for Outpatient Facilities and Licensed Clinics. [For OSHPD 3]***

***320.3.1 This is a minor adjustment to grammar for clarification.***

#### ***320.4 Telephone and Technology Equipment Centers Data Equipment Rooms. [For OSHPD 1 & 4]***

Change the name of the space “Data Equipment Rooms” to “Technology Equipment Centers” to establish consistency with a recent change in Title 24, Part 2.

**320.4.4** Add requirement for redundant cooling in Technology Equipment Center Room to ensure that if there is an outage, the space has cooling to secure critical patient data. This is done to keep the computer systems operational if there is a loss of primary cooling and to assist in continued patient care.

**321.0 Essential Mechanical Provisions. [OSHPD 1, 1R, 2, 3 (Surgical Clinics only) 4 & 5]**

**321.1** Specify that fans are on essential power so that they remain operable in order to deliver hot air while heating equipment is already required to be on essential power. This applies to areas not categorized as sensitive as per Section 322.0.

**321.2** Specify that fans are on essential power so that they remain operable in order to deliver hot air while heating equipment is already required to be on essential power. This applies to all areas listed in Table 4-A.

**323.0 Mechanical Equipment Schedules. [OSHPD 1, 1R, 2, 4 & 5]**

Require that mechanical equipment schedules in construction documents include essential power requirements and special seismic certifications. This will prompt design professionals to submit complete documentation for review and construction.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 3.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item 4**

**CHAPTER 4 - VENTILATION AIR**

**Section 402.0 Ventilation Air**

**Section 402.1 Occupiable Spaces**

**Section 402.1.3; 402.1.3(1) Ventilation in Health Care Facilities**

**Section 402.2 Natural Ventilation**

**Section 402.3 Mechanical Ventilation**

**Section 403.0 Ventilation Rates**

**Section 407.0 Ventilation System Details. [OSHPD 1, 1R, 2, 3, 4 & 5]; 407.4.1.7**

**Recirculating Room Units**

**Section 408.0 Filters. [OSHPD 1, 1R, 2, 3, 4 & 5]; 408.2 Filters for Hospitals; 408.2.2;**

**Section 408.2.3; 408.2.4**

**Section 408.3 Filters for Skilled Nursing Facilities, Intermediate Care Facilities, and Correctional Treatment Centers; 408.3.3**

**Section 411.0 Kitchen and Dining Areas. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**Section 412.0 Boiler, Mechanical, and Electrical Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**Section 413.0 Odorous Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**Section 414.0 Airborne Infection Isolation Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**Section 415.0 Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**Section 416.0 Alarms – Airborne Infection Isolation Rooms and Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

## **Section 417.0 Testing of Balancing Airborne Infection Isolation Rooms and Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

### **TABLE 4-A**

#### **402.0 Ventilation Air.**

Remove the banner that states that this section is not permitted for OSHPD. This is to correct a clerical error from the 2016 intermittent code cycle.

#### **402.1 Occupiable Spaces.**

Add a banner for OSHPD 1, 1R, 2, 3, 4 & 5 facilities. This directs the reader to apply this section, which includes a reference to ASHRAE 170, "Ventilation of Health Care Facilities", for the calculation of ventilation requirements for OSHPD facilities.

#### **402.1.3 Ventilation in Health Care Facilities.**

Remove the reference to Guidelines for Design and Construction of Hospitals and Outpatient Facilities because OSHPD does not adopt this standard.

#### **402.1.3(1)**

Direct the design professional that if a space is not listed on Table 4-A that the minimum required ventilation shall be calculated as per the method in ASHRAE 62.1. This establishes consistency with ASHRAE 170.

#### **402.2 Natural Ventilation.**

Add banner stipulating that this section does not apply to OSHPD facilities. OSHPD does not allow the inclusion of natural ventilation to be considered as part of the minimum ventilation rates. All air used for minimum ventilation shall be filtered per ASHRAE 170 and natural ventilation is not ventilated.

#### **402.3 Mechanical Ventilation. [Not permitted for OSHPD 1, 2, 3, 4 & 5 spaces listed in Table 4-A]**

Add banner stipulating that this section does not apply to OSHPD facilities. This is because this section ties mechanical system fan operation to occupancy. The related operation of mechanical system fans is already established in OSHPD amendments to the California Mechanical Code for the health care environment and, as such, the operational requirements of fans in healthcare is different than that of standard commercial environments.

#### **403.0 Ventilation Rates.**

Add banner stipulating that this section does not apply to OSHPD spaces listed in Table 4-A. Spaces listed in Table 4-A have requirements of ASHRAE 170 and do not have allowances for air classification as applied to recirculation. ASHRAE 170 and OSHPD Amendments to the California Mechanical Code include specifics on when air can be recirculated and when it must be exhausted from the facility in order to ensure the health of immunocompromised patients.

**407.0 Ventilation System Details. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**407.4.1.7 Recirculating Room Units.**

Adding this section to coordinate requirements for recirculating room units with those in the national standard, ASHRAE 170. This information has long needed to be clarified in this code.

**408.0 Filters. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**408.2 Filters for Hospitals.**

Modifications made to this section to properly coordinate it with national standards for filtration in hospitals, ASHRAE 170. There were contradictions between the standards.

**408.3 Filters for Skilled Nursing Facilities, Intermediate Care Facilities, and Correctional Treatment Centers.**

**408.3.3** Modifications made to this section to properly coordinate it with national standards for filtration in skilled nursing facilities, ASHRAE 170. There were contradictions between the standards.

**411.0 Kitchen and Dining Areas. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**412.0 Boiler, Mechanical, and Electrical Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**413.0 Odorous Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**414.0 Airborne Infection Isolation Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**415.0 Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**416.0 Alarms – Airborne Infection Isolation Rooms and Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

**417.0 Testing of Balancing Airborne Infection Isolation Rooms and Protective Environment Rooms. [OSHPD 1, 1R, 2, 3, 4 & 5]**

Removal of “1R” from the banners so that such OSHPD facilities not be inappropriately included in the scope of these sections. This is done in sections that are based on function vs. seismic classification.

**Table 4-A** – Removal of the 100%-outdoor air column to ensure compliance with the national standard of ASHRAE 170. Compliance with this standard is required for health care providers to receive their Medicare funding. ASHRAE was asked for an official interpretation on reduced air change rates for 100% outdoor air systems in 2017 and responded that they saw no logical connection between % outdoor air ventilation and air change rates in a space, as they relate to infection control – offering no allowance for reduced air change rates with 100% outdoor air systems. Requirements for angiography and cardiac catheterization lab are adjusted to match those as listed in the national standard ASHRAE 170. The intensive care space is removed from footnote f as the pressure requirements for that space have been changed from positive to “no requirement”. Footnote ab is changed as the details on the adoption of ASHRAE 62.1 are moved to code text and air pressure and air change requirements for hazardous compounding segregated areas are added here. There are a few more changes in the footnotes that are clerical in nature.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 4.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item Number 5**

**CHAPTER 5 - EXHAUST SYSTEMS**

**Section 507.7 Pharmaceutical Compounding Exhaust Discharge. [OSHPD 1, 2, 3, 4 & 5]**

**507.7 Pharmaceutical Compounding Exhaust Discharge. [OSHPD 1, 2, 3, 4 & 5]**

Adding requirements to enhance the safety of hazardous compounding exhaust with the inclusion of details for exhaust outlets.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 5.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item Number 6**

**CHAPTER 6 - DUCT SYSTEMS**

**Section 604.2 [OSHPD 1, 1R, 2, 3 (surgical clinics), 4 & 5]**

**604.2 [OSHPD 1, 1R, 2, 3 (surgical clinics), 4 & 5]**

Removing one word to clarify the information.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 6.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item Number 7**

**CHAPTER 10 – BOILERS AND PRESSURE VESSELS**

**Section 1001.2 Boiler Rooms and Enclosures; 1001.2.1**

**1001.2.1 [OSHPD 1, 1R, 2, 3, 4, 5 & 5]** Add this new section to specify boiler room requirements to correlate with current requirements of NFPA 99.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 7.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

**Item Number 8**

**CHAPTER 11 – REFRIGERATION**

**Section 1104.0 Requirements for Refrigerant and Refrigeration System Use; 1104.3 Institutional Occupancies**

**1104.3 Institutional Occupancies.**

Add an exception to this section that will allow for higher refrigerant amounts for use in systems in limited locations of OSHPD 1 facilities. This will make it easier for designers to

specify DX systems where they have been experiencing unnecessary challenges in getting them to comply with existing code.

**CAC Recommendation:** The GREEN-PEME Ad Hoc Code Advisory Committee recommended Approve as Submitted (AS) to Item 8.

**OSHPD Response:** OSHPD accepts the CAC recommendation.

## **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).

*Response: ASHRAE 170, as published in the “Guidelines for Design and Construction of Hospitals and Outpatient Facilities” (2014 edition), published by The Facility Guidelines Institute, was used as the basis for various requirements in this proposal.*

<797> *Pharmaceutical Compounding – Sterile Preparations, USP Compounding Compendium.*

<800> *Hazardous Drugs – Handling in Healthcare Settings, USP Compounding Compendium.*

## **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.

*Response: These regulations do not mandate the use of technology or equipment and do not require any new 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.

*Response: There were no alternatives for consideration by the Office. The 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.

*Response: Small businesses will not be adversely impacted by the proposed amendments.*

### **FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE 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.

*Response: The Office identified a cost to comply with the proposed amendment to Section 320.4.4 – redundant cooling to Technology Equipment Center. The remaining proposed amendments are editorial and minor technical changes that will provide clarification within the code.*

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

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT has assessed whether or not and to what extent this proposal will affect the following:

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

*Response: 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.

*Response: The Office of Statewide Health Planning and Development did not identify any amended regulation that would lead to the creation of new businesses or the elimination of existing businesses within the State.*

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

*Response: The Office of Statewide Health Planning and Development did not identify any amended regulation that would lead to the expansion of businesses currently doing business within the State of California.*

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

*Response: OSHPD 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 associated with the design and construction of health facilities that reflect current construction practices and current practices of medicine. Worker safety and the state's environment will not be affected.*

## **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.

*Response: The Office identified a cost to comply with the proposed amendment to Section 320.4.4 – redundant cooling to Technology Equipment Center. The cost per hospital is estimated to be \$245,000. This will allow the computer systems to remain operation in case of a loss of cooling and to provide continued patient care. The remaining proposed amendments are editorial and minor technical changes that will provide clarification within the code.*

## **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.

*Response: The proposed regulations do not duplicate or conflict with federal regulations.*