

**INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
CALIFORNIA BUILDING STANDARDS COMMISSION (BSC)**

**REGARDING THE 2019 CALIFORNIA MECHANICAL CODE (CMC),
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4**

(BSC 03/18)

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)):

This proposed action by the California Building Standards Commission (BSC) adopts the most current edition of the Uniform Mechanical Code (UMC) of the International Association of Plumbing and Mechanical Officials (IAPMO) with existing amendments to be moved forward without modification (not shown) and new amendments shown below. Each triennial edition of the California Code of Regulations (CCR) becomes effective 180 days after its publication and is effective at the time an application for a building permit is submitted. The adoption of the 2018 UMC will make applicable the most recent edition for use by individuals, businesses and state agencies as mandated by the Health & Safety Code (H&SC), Section 18928.

ITEM 1. – CHAPTER 1, CALIFORNIA ADMINISTRATION, DIVISION I

Specific Purpose, Agency Statement, Rationale, and Benefit:

BSC proposes, per statute, to update the model mechanical code edition being proposed for adoption in the 2018 Triennial Code Adoption Cycle for use in California for all occupancies; to adopt the model code chapter; carry forward existing amendments, including amendments that reference the California Green Building Standards Code (*CALGreen*), as well as make editorial amendments in Sections 1.1.1, 1.1.3.2, 1.1.8.2, 1.2.1.1-1.2.1.4, 1.2.2 and 1.2.3. This action provides accurate, general construction provisions for mechanical systems used throughout the state and provides references to CalGreen provisions which will aid the code user.

Section 1.1.3.2 State-Regulated Buildings, Structures, and Applications
Agency Statement, Purpose, Rationale, and Benefit:

BSC proposes to make the word “Section” plural as a grammatical correction. This editorial code change will benefit the code user by ensuring consistency, accuracy, and clarity within the code. There is no intended change in regulatory effect.

Section 1.1.8.2 Locally Adopted Energy Standards – California Energy Code, Part 6

Agency Statement, Purpose, Rationale, and Benefit

BSC proposes to replace the referenced section number “89.101.8.1” with “1.1.8.1” and change the word “Part” from capitalized to lower-case as a grammatical correction. Additional grammatical edits to this section include changing the word “applies” to “apply,” “city” to “cities,” and “county” to “counties.” These editorial code changes will benefit the code user by ensuring consistency, accuracy, and clarity within the code. There is no intended change in regulatory effect.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 2. – CHAPTER 1, ADMINISTRATION, DIVISION II

Specific Purpose, Agency Statement, Rationale, and Benefit:

BSC proposes, per statute, to not adopt Chapter 1, *Division II*, which is reserved for local jurisdiction use only. However, updating the edition of the model code referenced is required to meet Building Standards Law regarding the adoption of the most recent edition of model code within one year of the model code publication. This action provides general construction provisions for mechanical systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 3. – CHAPTER 2 – DEFINITIONS

Specific Purpose, Agency Statement, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapter for use in California for all occupancies; to carry forward the BSC amendment to Section 209.0 without change; to provide reference to the appropriate ASTM standards for zinc coatings, Alloy coatings and the hot dip process. This action provides general construction provisions for mechanical systems used throughout the state and the appropriate references to standards for coatings of steel products.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 4. CHAPTER 3 – GENERAL REGULATIONS

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapter without amendment, for use in California for all occupancies. This action provides general construction provisions for mechanical systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 5. CHAPTER 4 – VENTILATION AIR

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapter for use in California for all occupancies; carry forward existing amendments; to relocate text regarding filters from Chapter 5, Exhaust Air, Sections **503.3** and **503.3.1** to Chapter 4, Ventilation Air, and create new section numbers **401.2** and **401.2.1** to contain the relocated text. Additionally, BSC proposes to amend MERV requirements in Section **401.2** from 8 to 13 and repeal **Exception 1** to align with the same amendments made to the CALGreen Code Chapter 5, Division 5.5.

The CALGreen Code MERV ratings increase was done to align with the recently approved 2019 Energy Efficiency Standards found in Part 6 *California Energy Code* promulgated by the California Energy Commission which increased the MERV rating from a MERV 6 to a MERV 13. both BSC's Part 4 herein and Part 11 need to align with the CEC's MERV increase to avoid conflicts pursuant to HSC 18930.

Furthermore, BSC proposes a new amendment to Section **402.1** in an effort to align with the California Energy Commission's (CEC) ventilation air requirements by striking the word "supply."

These actions provide general construction provisions for mechanical systems used throughout the state, places provisions regarding filters in a more appropriate location, updates provisions proposed for amendment in CalGreen, and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation. Additionally, post CAC, BSC proposes to repeal exception 1 and renumber exception 2 to exception 1 based on CEC recommendations. BSC Coordinated with DSA on this co-adopted language.

ITEM 6. CHAPTER 5 – EXHAUST SYSTEMS

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapter for use in California for all occupancies, carry forward existing amendments to Sections **503.3** and **503.3.1** without change, repeal Section numbers **503.3** and **503.3.1**, and relocate the section text to a more appropriate location, Chapter 4, Ventilation Systems, Section **401.2** and subsection **401.2.1**. This action provides general construction provisions for mechanical systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 7. CHAPTER 6 – DUCT SYSTEMS

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapter without amendment for use in California for all occupancies. This action provides general construction provisions for mechanical systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 8. CHAPTER 7 – COMBUSTION AIR, CHAPTER 8 – CHIMNEY AND VENTS, CHAPTER 9 – INSTALLATION OF SPECIFIC APPLIANCES and CHAPTER 10 – BOILERS AND PRESSURE VESSELS, CHAPTER 11 – REFRIGERATION, CHAPTER 12 – HYDRONICS, CHAPTER 13 – FUEL GAS PIPING, CHAPTER 14 – PROCESS PIPING

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapters without amendment for use in California for all occupancies. This action provides general construction provisions for mechanical systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 9. CHAPTER 15 – SOLAR SYSTEMS

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapters without amendment for use in California for all occupancies. This action provides general construction provisions for solar systems used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 10. CHAPTER 16 – STATIONARY POWER PLANTS and CHAPTER 17 – REFERENCED STANDARDS

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapters without amendment for use in California for all occupancies. This action provides general construction provisions for stationary power plants standards and referenced standards used throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 11. APPENDIX CHAPTER A – Residential Plan Examiner Review Form for HVAC System Design

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to not adopt the model code chapter in order to avoid conflicts with the Department of Housing and Community Development's (HCD) authority for housing occupancies.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 12. APPENDIX CHAPTER B – Procedures to be Followed to Place Gas Equipment in Operation, and APPENDIX CHAPTER C - Installation and Testing of Oil (Liquid) Fuel-Fired Equipment.

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes, per statute, to adopt the model code chapters without amendment for use in California for all occupancies. This action provides general construction provisions for placing gas equipment in operation throughout the state and will aid the code user.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

ITEM 13. APPENDIX CHAPTER D – Fuel Supply: Manufactured/Mobile Home Parks and Recreational Vehicle Parks, APPENDIX CHAPTER E – Sustainable Practices, APPENDIX CHAPTER F - Sizing of Venting Systems and Outdoor Combustion and Ventilation Opening Design, and APPENDIX CHAPTER G - Example Calculation of Outdoor Air Rate.

Agency Statement, Specific Purpose, Rationale, and Benefit:

BSC proposes to not adopt model code appendix chapters, but to provide these appendices for adoption by the authority having jurisdiction. This action provides access to model code appendix chapters for various locally regulated conditions for use throughout the state.

CAC Recommendation: The PEME Code Advisory Committee recommended Approve as Submitted (AS).

CBSC Response: The CBSC agreed with the CAC recommendation.

TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS (Government Code Section 11346.2(b)(3)):

There were no formal studies or reports used as the bases for the proposed adoption of the Uniform Mechanical Code. The Health & Safety Code, Section 18928, mandates this proposed action.

For proposed MERV filter ratings increases refer to Item 5 in this document for supporting documentation and the following links:

[California Energy Commission Initial Statement of Reasons](#)

[California Energy Commission Form 399](#)

[California Energy Commission Form 399, Attachment](#)

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS (Government Code Section 11346.2(b)(4)(A)):

There are no mandates for specific technologies or equipment or prescriptive standards that are required.

CONSIDERATION OF REASONABLE ALTERNATIVES (Government Code Section 11346.2(b)(4)(A)):

There are no reasonable alternatives identified by the agency. The Health & Safety Code, Section 18928, mandates this proposed action.

REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS (Government Code Section 11346.2(b)(4)(B)):

No alternatives were identified to lessen the adverse impact on small businesses. The Health & Safety Code, Section 18928, mandates this proposed action.

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS (Government Code Section 11346.2(b)(5)(A)):

No facts, evidence, documents, testimony, or other evidence of any significant adverse economic impact on business have been identified. The Health & Safety Code, Section 18928, mandates this proposed action.

ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION (Government Code Section 11346.2(b)(5)(B)(i)):

The California Building Standards Commission has assessed whether or not and to what extent this proposal will affect the following:

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

These regulations will not affect the creation of or elimination of jobs within the State of California.

The creation of new businesses or the elimination of existing businesses within the State of California.

These regulations will not affect the creation of or the elimination of existing businesses within the State of California.

The expansion of businesses currently doing business with the State of California.

These regulations will not affect the expansion of businesses currently doing business within the State of California

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

These regulations will benefit the health and welfare of California residents, worker safety, and the environment of the state of California by employing the latest model code provisions and related technology.

ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS - (Government Code Section 11346.2(b)(5)(B)(i))

For proposed MERV filter ratings increases refer to Item 5 of this document and for estimated cost of compliance herein.

The California Energy Commission (CEC) made a change in air filtration requirements to improve indoor air quality for the better health of building occupants. The effect on Nonresidential occupancies will be an increase in air filter/grill costs of \$0.0071 per square feet for new construction. The cost per square foot increase was provided to BSC by the Energy Commission; refer to BSC's Attachment A and B of the Form 399.

The amendments provide clarity and regulatory consistency for the code user and promote healthier indoor environments.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS - (Government Code Section 11346.2(b)(6))

There are no federal regulations concerning state agency adoption and amendment of model codes. Those provisions are found in H&SC §§18928 and 18929.1.