

**INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2010 CALIFORNIA MECHANICAL CODE (CMC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 4
(HCD 2/09)**

The Administrative Procedure Act requires an Initial Statement of Reasons to be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

STATEMENT OF SPECIFIC PURPOSE AND RATIONALE:

(Government Code Section 11346.2 requires a statement of specific purpose of **EACH** adoption, amendment or repeal and the rationale of the determination by the agency that EACH adoption, amendment or repeal is reasonably necessary to carry out the purpose for which it is proposed.

- When repealing adopted California original standards, summarize the effect of the standards and explain why the standard is no longer necessary
- When amending a standard, explain the standard proposed to be modified, explain the effect of the proposed modification, explain the inadequacy of the standards being modified, and explain why the proposed amendment is necessary)

Specific Proposed Regulatory Actions:

HCD proposes to adopt by reference the 2009 edition of the Uniform Mechanical Code with amendments into the 2010 California Mechanical Code. These proposed amendments are intended to provide clarity, specificity and direction to the code user and to implement and make specific existing state laws. These proposed amendments are a result of recommendations developed during the public participation period prior to submittal to the California Building Standards Commission (CBSC). The rationale for each amendment by chapter and section is listed below.

CHAPTER 1 CALIFORNIA ADMINISTRATION

DIVISION I

HCD proposes to bring forward and adopt the existing California amendments from the 2007 California Mechanical Code (CMC). As a result of guidance received from the California Building Standards Commission, Coordinating Council Ad Hoc Committee, HCD in coordination with its state agency partners also proposes to redesignate Chapter 1 to include two administrative divisions.

SPECIAL NOTE: In order to differentiate "*California Chapter 1*" from "Chapter 1, Administration", former "*California Chapter 1, General Code Provisions* (Sections 101.0–108.10.2) is renumbered to "Chapter 1, Administration, *Division I* (Sections 1.1.0–1.8.10.2). For example, former Section 101 is renumbered to Section 1.1, and former Section 108 is renumbered to Section 1.8. Since this change consistently affects all sections in Chapter 1, including subsections, each renumbering will not be addressed separately.

However, all other amendments to the chapter are described below and also identified on the Matrix Adoption Table.

SECTION 1.1.0 (formerly 101.0) – GENERAL

SECTION: 1.1.1 (formerly 101.1) Title.

HCD proposes to continue adoption of this California amendment with modifications to update the Uniform Mechanical Code (UMC) reference from 2006 to 2009 and to make other nonsubstantive editorial corrections in pluralization and capitalization.

SECTION: 1.1.2 (formerly 101.2) Purpose.

HCD proposes to continue adoption of the above referenced California amendment with modifications to reword the term "to preserve life" to "safety to life" to provide consistency with other building codes. The modifications have no intended change in regulatory effect.

SECTION: 1.1.3.1 (formerly 101.3.1) Non-State Regulated Buildings, Structures, and Applications

HCD proposes to continue adoption of the above referenced California amendment with modifications. The modifications involve rephrasing to provide consistency with the CBC and to provide reference to all parts of the California Building Standards Code. The modifications have no intended change in regulatory effect.

SECTION: 1.1.3.2 (formerly 101.3.2) (3), (6), (7), (8), (11), (13) and (14) State-Regulated Buildings, Structures, and Applications.

HCD proposes to continue adoption of the above referenced California amendment with modifications. The changes include correcting the range of state agencies referenced and deleting a redundant term; correcting the list of HCD applications and referenced terms; a correction in a state agency reference (11); and editorial corrections. The modifications have no intended change in regulatory effect.

SECTION: 1.1.4 (formerly 101.4) Appendices.

HCD proposes to continue adoption of the above referenced California amendment with modifications. These changes include addition of a reference to Health and Safety Code Section 18938.3 added by Senate Bill 1473 (Chapter 719, Statutes of 2008) providing clarity on adoption of model building codes by the California Building Standards Commission. HCD also proposes pluralizing "section" to accommodate the addition.

SECTION: 1.1.6 (formerly 101.6) Non-Building Standards, Orders and Regulations.

HCD proposes to continue adoption of the above referenced California amendment with modifications making a nonsubstantive code reference correction for consistency within the code. The modifications have no intended change in regulatory effect.

SECTION: 1.1.7.2 (formerly 101.7.2) Specific Provision.

HCD proposes to continue adoption of the above referenced California amendment with modification making a correction in pluralization. The modification has no intended change in regulatory effect.

SECTION: 1.1.8 (formerly 101.8) City, County or City and County Amendments, Additions or Deletions.

HCD proposes to continue adoption of the above referenced California amendment with modifications to refer to jurisdictions in the singular for consistency with other sections in the code and to indicate action "by" the jurisdiction. The modifications have no intended change in regulatory effect.

HCD proposes to add language referencing statutory provisions related to local modifications of building code. This will provide consistency with other building codes. The addition has no intended change in regulatory effect.

SECTION: 1.1.8.1 (formerly 101.8.1) Findings and Filings.

HCD proposes to continue adoption of the above referenced California amendment with modifications to include a reference to HCD's post office box for purposes of receiving copies of referenced findings via mailing. The modifications have no intended change in regulatory effect.

SECTION: 1.1.10 (formerly 101.1.10) Availability of Codes.

HCD proposes to continue adoption of the above referenced California amendment with modifications to replace the ampersand symbol with the word "and" in regulatory text and to make other nonsubstantive editorial and clarifying changes. The modifications have no intended change in regulatory effect.

SECTION 1.8.0 (formerly 108.0) – DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT (HCD)

SECTION: 1.8.1 (formerly 108.1) Purpose.

HCD proposes to continue adoption of the above referenced California amendment with modifications. These changes include replacing the word "standards" with "requirements necessary," adding the word "reconstruction," and making other punctuation changes to provide consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION 1.8.2 (formerly 108.2) – AUTHORITY AND ABBREVIATIONS

SECTION: 1.8.2.1.1 (formerly 108.2.1.1) Housing Construction.

HCD proposes to continue adoption of the above referenced California amendment with modifications to provide a complete list of statutory authority and reference citations for clarification purposes. The modifications have no intended change in regulatory effect.

SECTION: 1.8.2.1.2 (formerly 108.2.1.2) Housing Accessibility.

HCD proposes to continue adoption of the above referenced California amendment with modifications to delete "units" and add "s" to "covered multifamily dwellings" so the reference is consistent with the definition in Chapter 11A of the CBC, remove the hyphen from "time-shares" and "Common-use" and hyphenate the acronyms for HCD 1-AC and DSA-AC. The modifications have no intended change in regulatory effect.

HCD proposes to correct the term "persons with disabilities" by deleting reference to "physical" disabilities. HCD proposes to capitalize this term and other referenced defined terms and include the terms in quotes for purpose of consistency. The modifications have no intended change in regulatory effect.

During the 2007 annual adoption cycle, HCD removed many references to the Group R occupancy classification in CBC's Chapter 11A because occupancy classifications are located in CBC Chapter 3 and are not relevant to determine accessibility standards for covered multifamily dwelling units. HCD proposes a similar change to provide clarity and consistency for the code user. The modifications have no intended change in regulatory effect.

HCD proposes to delete references to Chapters 11A and 11B for the term "publicly funded" since this term is not defined in the referenced chapters. The modifications have no intended change in regulatory effect.

HCD amended the CBC, Section 1101A.1, during the 2007 annual update to clarify a HCD 1-AC application. HCD proposes a similar amendment to applications listed in the CMC, Chapter 1, Administration, Division I, to provide consistency and clarity on HCD 1-AC applications. The rationale submitted for the amendment to the 2007 CBC, Section 1101A.1, is noted below:

"The change is for consistency with the Federal Fair Housing Amendments Act (FHAA), page 11, and to clarify that a new building, when constructed as multifamily dwelling units behind an existing façade, is covered. The change provides clarity for the code user."

HCD proposes to provide a complete list of statutory authority and reference citations for clarification purposes. The modifications have no intended change in regulatory effect.

SECTION: 1.8.2.1.3 (formerly 108.2.1.3) Permanent Buildings in Mobilehome Parks and Special Occupancy Parks.

HCD proposes to continue adoption of the above referenced California amendment with modifications to provide punctuation corrections in referenced statutes and to provide a complete list of statutory authority and reference citations for clarification purposes. The modifications have no intended change in regulatory effect.

SECTION 1.8.3 (formerly 108.3) – LOCAL ENFORCING AGENCY

SECTION: 1.8.3.1 (formerly 108.3.1) Duties and Powers.

HCD proposes to continue adoption of the above referenced California amendment with modifications to correct information on the Title 25 reference addressing use and occupancy of existing buildings. The modifications have no intended change in regulatory effect.

SECTION: 1.8.3.2.1 (formerly 108.3.2.1) State Housing Law.

HCD proposes to continue adoption of the above referenced California amendment with modifications to provide punctuation corrections in referenced statutes and to clarify a reference to a statutory citation by identifying the initial section number instead of the article number. The modifications have no intended change in regulatory effect.

SECTION: 1.8.3.2.2 (formerly 108.3.2.2) Mobilehome Parks Act.

HCD proposes to continue adoption of the above referenced California amendment with modification to clarify a reference to a statutory citation by identifying the initial section number instead of the article number. The modification has no intended change in regulatory effect.

SECTION: 1.8.3.2.3 (formerly 108.3.2.3) Special Occupancy Parks Act.

HCD proposes to continue to adopt the above referenced California amendment with modification to clarify a reference to a statutory citation by identifying the initial section number instead of the article number. The modification has no intended change in regulatory effect.

SECTION: 1.8.3.2.4 (formerly 108.3.2.4) Employee Housing Act.

HCD proposes to continue to adopt the above referenced California amendment with modification to clarify a reference to a statutory citation by identifying the initial section number instead of the article number. The modification has no intended change in regulatory effect.

SECTION: 1.8.3.2.5 (formerly 108.3.2.5) Factory-Built Housing.

HCD proposes to continue adoption of the above referenced California amendment with modifications to correct the name of the law and to clarify a reference to a statutory citation by identifying the initial section number instead of the article number. The modifications have no intended change in regulatory effect.

SECTION 1.8.4 (formerly 108.4) – PERMITS, FEES, APPLICATIONS AND INSPECTIONS

SECTION: 1.8.4.1 (formerly 108.4.1) Permits.

HCD proposes to continue adoption of the above referenced California amendment with modification to reference the new title for the former Appendix Chapter 1 as Chapter 1, Administration, Division II. The modification has no intended change in regulatory effect.

SECTION: 1.8.4.3 (formerly 108.4.3) Plan Review and Time Limitations

HCD proposes to continue adoption of the above referenced California amendment with modification for a grammatical correction for consistency with the CBC. The modification has no intended change in regulatory effect.

SECTION: 1.8.4.3.1 (formerly 108.4.3.1) Retention of Plans.

HCD proposes to continue adoption of the above referenced California amendment with modifications to correct references to exceptions and to include a reference to a metric equivalent. The modifications have no intended change in regulatory effect.

SECTION 1.8.5 (formerly 108.5) – RIGHT OF ENTRY FOR ENFORCEMENT

SECTION: 1.8.5.1 (formerly 108.5.1) (1) through (5) General.

HCD proposes to continue adoption of this California amendment with modifications to add more specificity and consistency to citations for referenced statutes and make grammatical and punctuation corrections. The modifications have no intended change in regulatory effect.

SECTION 1.8.6 (formerly 108.6) – LOCAL MODIFICATION BY ORDINANCE OR REGULATION

SECTION: 1.8.6.1 (formerly 108.6.1) General.

HCD proposes to continue adoption of the above referenced California amendment with modification to add Health and Safety Code, Section 17958.5, which provides authority for developing local amendments to building codes, to the list of references addressing local amendments. The modification has no intended change in regulatory effect.

SECTION: 1.8.6.2 (formerly 108.6.2) Findings, Filings, and Rejections of Local Modifications.

HCD proposes to continue adoption of the above referenced California amendment with modifications in language to provide consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION 1.8.7 (formerly 108.7) – ALTERNATE MATERIALS, DESIGNS, TESTS AND METHODS OF CONSTRUCTION

SECTION: 1.8.7.2 (formerly 108.7.2) Local Building Departments.

HCD proposes to continue adoption of the above referenced California amendment with modifications to substitute the word "structure" as related to accessory buildings and make additional grammatical and punctuation corrections. These changes will provide consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION: 1.8.7.2.1 (formerly 108.7.2.1) (2) (4) Approval of Alternates.

HCD proposes to continue adoption of the above referenced California amendment with modifications. These changes include deletion of extraneous words and other editorial changes to provide consistency with the CBC and to correct reference to defined terms by capitalizing the terms and including the terms in quotes. The modifications have no intended change in regulatory effect.

SECTION: 1.8.7.3 (formerly 108.7.3) Department of Housing and Community Development.

HCD proposes to continue adoption of the above referenced California amendment with modification to make nonsubstantive punctuation and capitalization corrections for consistency with the CBC. The modification has no intended change in regulatory effect.

SECTION: 1.8.8.2 (formerly 108.8.2) Definitions.

HCD proposes to continue adoption of the above referenced California amendment with modifications capitalizing "Housing Appeals Board" and "Local Appeals Board" for consistency. The modifications have no intended change in regulatory effect.

SECTION 1.8.9 (formerly 108.9) – UNSAFE BUILDINGS OR STRUCTURES

SECTION: 1.8.9.1 (formerly 108.9.1) (1) through (5) Authority to Enforce.

HCD proposes to continue adoption of the above referenced California amendment with modifications to "unbold" the word "subject" and add more specificity and consistency to citations for referenced statutes and to make related punctuation corrections. The modifications have no intended change in regulatory effect.

SECTION: 1.8.9.2 (formerly 108.9.2) (1) through (5) Actions and Proceedings.

HCD proposes to continue adoption of the above referenced California amendment with modifications to add more specificity and consistency to citations for referenced statutes and make related punctuation corrections. The modifications have no intended change in regulatory effect.

ADMINISTRATION

DIVISION II

HCD proposes redesignating this chapter as Division II of Chapter 1, deleting the former designation and location as an appendix chapter, and keeping it in the front section of the CMC. This action, in coordination with HCD's state agency partners, resulted from guidance received from the California Building Standards Commission, Coordinating Council Ad Hoc Committee.

HCD proposes a note to alert users of the relocation of the chapter.

HCD proposes adoption of this chapter as shown on the attached Matrix Adoption Table.

The modifications have no intended change in regulatory effect.

CHAPTER 2 DEFINITIONS

HCD proposes the adoption of the 2009 UMC, Chapter 2, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTION: 203.0 "Approved"

HCD proposes to continue adoption of the above referenced California amendment with modification. Reference sections have been revised to align with changes made to section numbers in Chapter 1, Administration, Division I. The revision provides clarity and consistency to the code user. There is no intended change in regulatory effect.

SECTION: 203.0 "Approved Testing Agency"

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 203.0 "Assembly Building"

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 203.0 "Authority Having Jurisdiction"

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 204.0 "Building"

HCD proposes to continue adoption of the above referenced California amendment with modification for nonsubstantive editorial changes including correcting the term "multi-unit manufactured housing" to "multifamily manufactured home". The modifications have no intended change in regulatory effect.

SECTION: 204.0 "Building Code"

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 206.0 “Department”

HCD proposes to continue adoption of the above referenced California amendment with modification to show consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION: 207.0 “Electrical Code”

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 207.0 “Enforcing Agency”

HCD proposes to continue adoption of the above referenced California amendment with modification for grammatical and capitalization correction. The modifications have no intended change in regulatory effect.

SECTION: 208.0 “Family”

HCD proposes to continue adoption of the above referenced California amendment with modification to show consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION: 209.0 “Galvanized Steel”

HCD proposes to adopt the above referenced California amendment to correspond with the deletion of Appendix A and to provide a current reference standard. The modifications have no intended change in regulatory effect.

**SECTIONS: 214.0 “Labeled”
214.0 “Listed (Third Party Certified)”
214.0 “Listing Agency”**

HCD proposes to continue adoption of the above referenced California amendments. These California amendments have been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 216.0 “Nuisance”

HCD proposes to continue adoption of the above referenced California amendment with modification for renumbering and nonsubstantive changes. Reference sections have been revised to align with changes made to section numbers in Chapter 1, Administration, Division I. The revision provides clarity and consistency to the code user. There is no intended change in regulatory effect.

SECTION: 217.0 “Occupancy Classification”

HCD proposes to continue adoption of the above referenced California amendment with modification to show consistency with the CBC. The modifications have no intended change in regulatory effect.

SECTION: 218.0 “Plumbing Code”

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 222.0 “Testing Agency”

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 223.0 “UMC”

HCD proposes to continue adoption of the above referenced California amendment. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

SECTION: 223.0 “UMC STANDARDS”

HCD proposes to continue adoption of the above referenced California amendment with modification for grammatical correction. The modifications have no intended change in regulatory effect.

CHAPTER 3 GENERAL REQUIREMENTS

HCD proposes to adopt the 2009 UMC, Chapter 3, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTION: 303.7 Liquefied Petroleum Gas Appliances

HCD proposes to continue adoption of the above referenced California amendment with modification to reflect the renumbering of Section 304 to Section 303 in the model code. This California amendment has been brought forward from the 2007 CBC with no intended change in regulatory effect.

CHAPTER 4 VENTILATION AIR SUPPLY

HCD proposes to adopt the 2009 UMC, Chapter 4, with California amendments, as indicated on the attached Matrix Adoption Table. HCD and the SFM are jointly proposing new California regulations for enclosed parking garage exhaust ventilation. These proposed regulations are necessary due to the adoption of UMC paired with the IBC rather than the IMC (2009 IMC, Section 404) which harmonizes with the IBC. The prior 2001 California Building Code regulated parking garage ventilation (Section 1202.2.7) and the 2001 California Mechanical Code relied on the building code to handle this issues.

SECTION: 403.8 Exhaust Ventilation for Enclosed Parking Garages

HCD proposes to adopt the above referenced new California amendment. Section 403.8 is proposed to make specific provisions for enclosed parking garages exhaust ventilation from the base model code provisions for exhaust ventilation. This new section maintains the base model code provisions referencing Table 4-4 and makeup air provisions with no change in regulatory effect. Additionally, this new section specifies that enclosed parking garage exhaust ventilation shall also comply with this section and Sections 403.8.1 – 403.8.2.2 (see following for rationale.)

SECTION: 403.8.1 Exhaust Inlet Distribution

HCD proposes to adopt the above referenced new California amendment. Section 403.8.1 is necessary to resolve an omission in the California Mechanical Code and ASHRAE, the referenced standard on ventilation and exhaust, to set a spacing standard for exhaust inlets. This proposal sets a minimum for inlets whereas without, there is no guidance or other standard to reference. Also proposed is an exception to the prescriptive provisions of Section 403.8.1 for performance based engineered designs.

SECTIONS: 403.8.2 Alternative Exhaust Ventilation for Enclosed Parking Garages

403.8.2 .1 Minimum Exhaust Rate

403.8.2.2 Automatic Carbon Monoxide Sensing Devices

HCD proposes to adopt the above referenced new California amendments. Sections 403.8.2 through 403.8.2.2 are necessary to resolve an omission in the California Mechanical Code and ASHRAE, the referenced standard on ventilation and exhaust, to allow intermittent ventilation of parking garages as has been local practice for over 20 years. The code change also requires that sensors be listed and sets the activation concentration based on the 2003 ASHRAE Application Handbook.

CHAPTER 5 EXHAUST SYSTEMS

HCD proposes to adopt the 2009 UMC, Chapter 5, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTION: 506.2 Construction

HCD proposes to adopt the above referenced model code section with amendment. This amendment is in response to integrating proposed California amendments from the California Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) as well as other changes to provide consistency with the proposed changes. The verbatim rationale provided by SMACNA for the initial code changes follows:

"The 2009 UMC refers to an outdated SMACNA duct construction standard (1995 version), and includes tables, and an Appendix extracted from this now outdated standard. SMACNA updated this standard in 2006, and it is now ANSI approved, entitled "SMACNA/ANSI 006-2006 HVAC Duct Construction Standards - Metal and Flexible." However, the updated standard was published after the deadline for submitting code proposals for the 2009 UMC, resulting in its omission. IAPMO is in the process of updating this reference, but will not complete this process prior to the adoption of the 2010 California Mechanical Code.

The outdated reference, out of date tables and Appendix create conflict between code enforcement agencies, contractors and design engineering firms. HVAC contractors and design firms are currently using the 2006 version of SMACNA in their system duct design. Moreover, the 1995 version is no longer published or available.

In addition, the 2009 UMC, Chapter 17, Standards Table 17-1 only lists the updated 2006 SMACNA standard and does not list the outdated 1995 version referenced in the text of the code. This creates both confusion and a potential for conflict. The data within the SMACNA standard has been tested and promulgated through a consensus based process and should only be used in whole. Continued use of outdated partial extracts in the UMC will create confusion and inconsistency.

Finally, the SMACNA/ANSI 006-2006 HVAC Duct Construction Standards - Metal and Flexible are already referenced in the other major industry HVAC documents, including:

- ASHRAE Standard 62.1
- ASHRAE Fundamentals Handbook
- National Fire Protection Association 90A, 90B, 96
- US Army Corp of Engineers
- International Mechanical Code
- International Energy Conservation Code

By adopting the 2006 SMACNA HVAC Duct Construction Standards into the 2010 California Mechanical Code, the State will ensure consistency with these other industry documents. In addition, much of the Federal stimulus money for energy efficiency requires the use of the most updated energy efficiency standards. The use of the outdated 1995 SMACNA HVAC Duct Construction Standards could potentially conflict with some of these requirements.

The proposal does the following:

- Moves the definition for the scope of this section that was contained in Appendix A (A6.201) to the body of the code in Section 601.0
- Amends Section 602.1 to replace the references to the outdated extracts of the 1995 SMACNA HVAC Duct Construction Standards with a reference to the 2006 SMACNA HVAC Duct Construction Standards.
- Updates the Standards listed in Chapter 17. 2009 UMC incorrectly identifies the 2006 SMACNA HVAC Duct Construction Standards as a "2005" standard.
- Eliminates Tables 6.1-6.10, which contain outdated extracts from the 1995 SMACNA HVAC Duct Construction Standards.
- Eliminates Appendix A, which contains simplified and outdated extracts from the 1995 SMACNA HVAC Duct Construction Standards. (Except for Section 6.201 - Scope, which will be moved to the body of the code in Section 601.0).

By simply referencing the 2006 SMACNA HVAC Duct Construction Standards and not replacing the deleted tables and Appendix A, the Code will be simplified and will eliminate confusion and conflict. The new standards are more complex and involved than the 1995 standards. As a result, including selected or simplified extracts within the code may lead to inaccuracies and misapplication of the standard."

CHAPTER 6 DUCT SYSTEMS

HCD proposes to adopt the 2009 UMC, Chapter 6, with California amendments, as indicated below and on the attached Matrix Adoption Table. Additionally, HCD proposes to delete Tables 6-1 through 6-10 from the 2009 UMC.

SECTION: 601.2 Sizing Requirements "Exception"

HCD proposes to continue adoption of the above referenced California amendment with modification to correct the HCD applications. The modifications have no intended change in regulatory effect.

SECTION: 601.3

HCD proposes to adopt the above referenced California amendment which moves language addressing the scope of Appendix A Uniform Mechanical Code Standard No. 6-2 to the section addressing scope for this chapter.

- SECTIONS:**
- 601.3**
 - 602.1 General**
 - 602.3 Factory-Made Air Ducts**
 - 602.4 Joints and Seams of Ducts**
 - 602.5 Metal**
 - 602.6 Tin**
 - 603.0 Quality of Material**
 - 604.2 Metal Ducts**
 - 604.5 Support of Ducts**
 - 605.0 Insulation of Ducts**

DELETE TABLES 6-1, 6-2, 6-3, 6-4, 6-5, 6-6A, 6-6B, 6-7, 6-8, 6-9 and 6-10.

CHAPTER 7 COMBUSTION AIR

HCD proposes to adopt the 2009 UMC, Chapter 7, without California amendments, as indicated on the attached Matrix Adoption Table.

CHAPTER 8 CHIMNEYS AND VENTS

HCD proposes to adopt the 2009 UMC, Chapter 8, without California amendments, as indicated on the attached Matrix Adoption Table.

CHAPTER 9 INSTALLATION OF SPECIFIC APPLIANCES

HCD proposes to adopt the 2009 UMC, Chapter 9, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTIONS: 924.1 Prohibited installations 924.1.1

HCD proposes to continue adoption of the above referenced California amendments with modifications to add HCD 2 to the banner for clarification. The modifications have no intended change in regulatory effect.

SECTIONS: 932.0 Warm-Air Furnaces Located in Under-Floor Spaces 932.1 932.2 932.3 932.4 932.5

HCD proposes to repeal the existing California amendments listed above. These provisions have been incorporated into Chapters 3 and 9 of the 2009 UMC; therefore, the California amendments are no longer necessary.

CHAPTER 10 STEAM AND HOT WATER BOILERS

HCD proposes to adopt the 2009 UMC, Chapter 10, without California amendments, as indicated on the attached Matrix Adoption Table.

CHAPTER 11 REFRIGERATION

HCD proposes to adopt the 2009 UMC, Chapter 11, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTION: 1106.3.1 Refrigerant Ports

HCD proposes to add this new amendment to the California Mechanical Code. The existing model code does not address the issue of accessibility to potentially dangerous chemical Chlorofluorocarbons (CFCs/Freon) by untrained and unlicensed individuals. Because Freon is easily accessible, "huffing", which refers to the inhalation of Freon and other chemicals, has been on the rise over the past few years not only among pre-teens and teenagers, but among adults as well.

The National Institute on Drug Abuse reports that one in five American teens has used inhalants to get high. According to Stephen J. Pasierb, President and CEO of "The Partnership for Drug-Free America", 22% of 6th and 8th graders admitted abusing inhalants and yet only 3% of parents think their child has ever abused inhalants. An analysis of 144 Texas death certificates by the Texas Commission on Alcohol and Drug Abuse involving misuse of inhalants found that the most frequently mentioned inhalant (35%) was Freon (51 deaths). Of the Freon deaths, 42% were students or youth with an average age of 16.4 years. 55% of deaths linked to inhalant abuse are caused by "Sudden Sniffing Death Syndrome." SSDS can occur as a result of any use, including the first one.

This amendment will have a positive impact on the safety and health of our citizens, especially our youth. It will reduce the number of deaths associated with inhalant abuse and the number of injuries associated with Freon accidents or leaks.

CHAPTER 12 HYDRONICS

HCD proposes to adopt the 2009 UMC, Chapter 12, without California amendments, as indicated on the attached Matrix Adoption Table.

CHAPTER 13 FUEL GAS PIPING

HCD proposes to adopt the 2009 UMC, Chapter 13, without California amendments, as indicated on the attached Matrix Adoption Table. This adoption is in coordination with the Building Standards Commission, State Fire Marshal, Division of the State Architect, and Office of Statewide Health Planning and Development.

CHAPTER 14 PROCESS PIPING

HCD proposes to **not** adopt Chapter 14 of the 2009 UMC, as indicated on the attached Matrix Adoption Table.

CHAPTER 15 SOLAR SYSTEMS

HCD proposes to adopt Chapter 15, Section 1500.0 only, of the 2009 UMC, with California amendments, as indicated below and on the attached Matrix Adoption Table.

SECTION: 1500.0

HCD proposes to continue adoption of the above referenced California amendment with modification. Reference sections have been revised to align with changes made to section numbers in Chapter 1, Administration, Division I. The revisions provide clarity and consistency to the code user. There is no intended change in regulatory effect.

CHAPTER 16 STATIONARY POWER PLANTS

HCD proposes to adopt the 2009 UMC, Chapter 16, without California amendments, as indicated on the attached Matrix Adoption Table.

CHAPTER 17 STANDARDS

HCD proposes to adopt the 2009 UMC, Chapter 17, with California amendments, as indicated on the attached Matrix Adoption Table. HCD proposes to delete "Part I – Standards Adopted as Part of This Code". UMC Standard 2-2, UMC Standard 6-2 and UMC Standard 6-5 are located in Appendix A of the CMC and HCD proposes to **not** adopt Appendix A. See Appendix A rationale below.

HCD proposes to include a reference to the most recent edition of a SMACNA standard, the SMACNA/ANSI 006-2006 HVAC Duct Construction Standards – Metal and Flexible.

APPENDIX A

UNIFORM MECHANICAL CODE STANDARDS 2-2 THROUGH 6-5

HCD proposes to **not** adopt the 2009 UMC, Appendix A, as indicated on the attached Matrix Adoption Table.

HCD proposes to **not** adopt Appendix A, and remove UMC Standards 2-2 through 6-5 from the CMC, in response to proposed California amendments from the California Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) as well as other changes to provide consistency with the proposed changes. The verbatim rationale provided by SMACNA for the initial code changes follows:

"The 2009 UMC refers to an outdated SMACNA duct construction standard (1995 version), and includes tables, and an Appendix extracted from this now outdated standard. SMACNA updated this standard in 2006, and it is now ANSI approved, entitled "SMACNA/ANSI 006-2006 HVAC Duct Construction Standards - Metal and Flexible." However, the updated standard was published after the deadline for submitting code proposals for the 2009 UMC, resulting in its omission. IAPMO is in the process of updating this reference, but will not complete this process prior to the adoption of the 2010 California Mechanical Code.

The outdated reference, out of date tables and Appendix create conflict between code enforcement agencies, contractors and design engineering firms. HVAC contractors and design firms are currently using the 2006 version of SMACNA in their system duct design. Moreover, the 1995 version is no longer published or available.

In addition, the 2009 UMC, Chapter 17, Standards Table 17-1 only lists the updated 2006 SMACNA standard and does not list the outdated 1995 version referenced in the text of the code. This creates both confusion and a

potential for conflict. The data within the SMACNA standard has been tested and promulgated through a consensus based process and should only be used in whole. Continued use of outdated partial extracts in the UMC will create confusion and inconsistency.

Finally, the SMACNA/ANSI 006-2006 HVAC Duct Construction Standards - Metal and Flexible are already referenced in the other major industry HVAC documents, including:

- ASHRAE Standard 62.1
- ASHRAE Fundamentals Handbook
- National Fire Protection Association 90A, 90B, 96
- US Army Corp of Engineers
- International Mechanical Code
- International Energy Conservation Code

By adopting the 2006 SMACNA HVAC Duct Construction Standards into the 2010 California Mechanical Code, the State will ensure consistency with these other industry documents. In addition, much of the Federal stimulus money for energy efficiency requires the use of the most updated energy efficiency standards. The use of the outdated 1995 SMACNA HVAC Duct Construction Standards could potentially conflict with some of these requirements.

The proposal does the following:

- Moves the definition for the scope of this section that was contained in Appendix A (A6.201) to the body of the code in Section 601.0
- Amends Section 602.1 to replace the references to the outdated extracts of the 1995 SMACNA HVAC Duct Construction Standards with a reference to the 2006 SMACNA HVAC Duct Construction Standards.
- Updates the Standards listed in Chapter 17. 2009 UMC incorrectly identifies the 2006 SMACNA HVAC Duct Construction Standards as a "2005" standard.
- Eliminates Tables 6.1-6.10, which contain outdated extracts from the 1995 SMACNA HVAC Duct Construction Standards.
- Eliminates Appendix A, which contains simplified and outdated extracts from the 1995 SMACNA HVAC Duct Construction Standards. (Except for Section 6.201 - Scope, which will be moved to the body of the code in Section 601.0).

By simply referencing the 2006 SMACNA HVAC Duct Construction Standards and not replacing the deleted tables and Appendix A, the Code will be simplified and will eliminate confusion and conflict. The new standards are more complex and involved than the 1995 standards. As a result, including selected or simplified extracts within the code may lead to inaccuracies and misapplication of the standard."

APPENDIX B

PROCEDURES TO BE FOLLOWED TO PLACE GAS EQUIPMENT IN OPERATION

HCD proposes to **not** adopt Appendix B of the 2009 UMC, as indicated on the attached Matrix Adoption Table.

APPENDIX C

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

HCD proposes to **not** adopt Appendix C of the 2009 UMC, as indicated on the attached Matrix Adoption Table.

APPENDIX D

UNIT CONVERSION TABLES

HCD proposes to adopt the 2009 UMC, Appendix D, without California amendments, as indicated on the attached Matrix Adoption Table.

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

(Government Code Section 11346.2(b)(2) 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).)

None.

CONSIDERATION OF REASONABLE ALTERNATIVES

(Government Code Section 11346.2(b)(3)(A) requires a description of reasonable alternatives to the regulation and the agency's reason for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternative.)

None. There were no alternatives available to HCD. HCD is required by statute to adopt model codes by reference.

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

(Government Code Section 11346.2(b)(3)(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. Include facts, evidence, documents, testimony, or other evidence upon which the agency relies to support an initial determination that the action will not have a significant adverse impact on business.)

HCD has determined that this regulatory action would have no significant adverse economic impact on California business enterprises and individuals, including the ability of California businesses to compete with businesses in other states.

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

(Government Code Section 11346.2(b)(4) 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.)

None.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

(Government Code Section 11346.2(b)(5) 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. It is not the intent of this paragraph to require the agency to artificially construct alternatives or to justify why it has not identified alternatives.)

These regulations neither duplicate nor conflict with federal regulations.