INITIAL STATEMENT OF REASONS
FOR
PROPOSED BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

(HCD 04/12)

The Administrative Procedure Act (APA) requires an Initial Statement of Reasons (ISOR) to 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, 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, including the problem the agency intends to address, 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.)

1) The Public Problem, Administrative Requirement, or Other Circumstance Addressed.

Administrative Requirement: Health and Safety Code Section 17921 directs the Department of Housing and Community Development (HCD) to propose adoption, amendment or repeal of building standards for the protection of public health, safety and general welfare.

2) Specific Purpose

The specific purpose of these regulations is to carry forward and amend the 2010 California Green Building Standards Code (CALGreen) into the 2013 California Green Building Standards Commission (CALGreen), Title 24, Part 11, of the California Code of Regulations (CCR) for the following programs:

a) State Housing Law: relative to residential occupancies, buildings or structures accessory thereto and as provided in Health and Safety Code Section 17921.2.

b) Employee Housing Act: relative to any building or structure or outdoors on premises or property in accordance with Health and Safety Code Section 17040.

c) Factory-Built Housing Law: relative to residential buildings, dwellings or portions thereof, or building components, or manufactured assemblies in accordance with Health and Safety Code Section 19990.

3) Rationale for Necessity

The proposed actions continue to adopt, amend or repeal portions of the 2010 CALGreen Code into the 2013 CALGreen Code as part of the 2012 Triennial Code Adoption Cycle established by the California Building Standards Commission (CBSC). The intent of the 2013 triennial version of the CALGreen Code is to: (1) continue to reduce greenhouse gas (GHG) emissions from buildings; (2) result in environmental benefits through reduced use of energy, water, and raw materials; improved public and building occupant health due to improved indoor air quality; and overall reduction in detrimental environmental impacts; and (3) continue the Administration's directive to adopt green building standards for residential, commercial, and public building construction as part of the building code adoption process.

Proposed amendments in this rulemaking also are intended to provide further clarity, specificity and direction to the code user and to implement and make specific existing state laws. Proposed amendments are a result of recommendations developed during the public participation period prior to submittal to the CBSC. The rationale for each proposed amendment by chapter and section is listed below.

Specific Proposed Regulatory Actions:

HCD proposes to continue adoption of the 2010 CALGreen Code with amendments into the 2013 CALGreen Code. The rationale for each regulatory action is listed below.

Note: There is no model code language associated with the CALGreen Code; therefore, all language consists of California text.

1. SECTION: 101.3.1 State-regulated buildings, structures and applications.

Rationale: HCD proposes to amend the above-listed section. In Item 3, the term "Low-rise" has been deleted from the text and replaced with the word "All". The intent of this proposed amendment is to expand the scope of the CALGreen Code to include all residential housing under HCD's authority.

HCD also proposes a nonsubstantive editorial correction that deletes the reference to the Matrix Adoption Table (non-regulatory text) for conformity as directed by the CBSC.

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2. SECTION: 202 DEFINITIONS

A. Amend the following existing defintions:

LOW-RISE RESIDENTIAL BUILDING.
Rationale: HCD proposes to amend the above-listed existing definition. Language has been deleted from the low-rise residential definition for consistency with the newly proposed definition for "High-Rise Residential Building". There is no intended change in regulatory effect.

RESIDENTIAL BUILDING.
Rationale: HCD proposes to amend the above-listed existing definition to include "High-Rise Residential Building". The term is being added for clarity and consistency.

B. Adopt the following new definitions:

ALBEDO.
COMPACT DISHWASHER.
DIRECT-VENT APPLIANCE.
ELECTRIC VEHICLE (EV).
ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).
GRAYWATER.
HEAT ISLAND EFFECT.
HIGH-RISE RESIDENTIAL BUILDING.
IESNA.
MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD]
MOUNTING HEIGHT (MH).
POTABLE WATER. [HCD]
RAINWATER CATCHMENT SYSTEM.
RAINWATER.
RECLAIMED (RECYCLED) WATER.
STANDARD DISHWASHER.
SUBMETER.
Rationale: HCD proposes to adopt the above-listed definitions for added clarity for the code user. These terms are used either in Chapter 4 "Residential Mandatory Measures or Appendix A4 "Residential Voluntary Measures." An [HCD] banner has been added to selected definitions to note that the HCD definition may differ from another agency's adopted definition.

The specific rationale for selected terms is as follows:

- The definitions for "Compact Dishwasher" and "Standard Dishwasher", taken from the Energy Star Program Product Specification for Residential Dishwashers, are included to clearly identify the differences between those appliances.

- The definition for “Direct-Vent Appliance” is consistent with the 2012 International Residential Code and more clearly identifies the functional requirements of a direct-vent appliance.
- The definition for “High-Rise Residential” is necessary to coordinate with the expanded scope of CALGreen above low-residential construction.
- The definition for “Rainwater Catchment System” is consistent with the California Plumbing Code.
- The definition for “Reclaimed (Recycled) Water” in lieu of “Recycled Water” is consistent with the California Plumbing Code.

No costs are associated with the addition of the above definitions. There is no intended change in regulatory effect.

C. Relocate the following existing definitions from Chapter 4 and Appendix A4 into Section 202:

AGRIFIBER PRODUCTS.
ASSEMBLY (ASSEMBLY PRODUCT).
BROWNFIELD SITE.
COMPOSITE WOOD PRODUCTS.
DEVELOPMENT FOOTPRINT.
FRENCH DRAIN.
GREENFIELDS.
GREYFIELD SITE.
INFILL SITE.
MAXIMUM INCREMENTAL REACTIVITY (MIR).
MERV.
MOISTURE CONTENT.
NO ADDED FORMALDEHYDE (NAF) BASED RESINS.
PERMEABLE PAVING.
POSTCONSUMER CONTENT.
PRECONSUMER (OR POSTINDUSTRIAL) CONTENT.
PRODUCT-WEIGHTED MIR (PWMIR).
PROPORTIONAL RECYCLED CONTENT (PRCM).
REACTIVE ORGANIC COMPOUND (ROC).
RECYCLED CONTENT (RC). [HCD]
RECYCLED CONTENT VALUE (RCV). [HCD]
REFERENCE EVAPOTRANSPIRATION (*ETo*) [HCD]
ULTRA-LOW EMITTING FORMALDEHYDE (ULEF) RESINS.
VOC.
WATTLES.

Rationale: HCD proposes to relocate all existing HCD definitions from Chapter 4 “Residential Mandatory Measures” and Appendix A4 “Residential Voluntary Measures” to Chapter 2, Section 202, for consistency with Title 24 California Building Standards Code. Many definitions are shared in common with other state agencies. HCD is working to align those definitions; however, an HCD banner may be necessary for some definitions that are maintained differently.

HCD also proposes to amend the existing definition of “MERV”. The referenced standard for “MERV” is being updated to reflect the most current date of the ASHRAE Standard.

Additionally, HCD proposes to amend the existing definition of “REFERENCE EVAPOTRANSPIRATION (*ETo)”* to provide further clarity. The amended definition is consistent with the terminology used in the Department of Water Resources’ regulations and guides. An [HCD] banner has been added to note that the HCD definition may differ from another agency’s adopted definition.

The above-listed definitions are being relocated for reorganization purposes only. There is no intended change in regulatory effect.

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3. SECTION: 301.1.1 (HCD) Additions and alterations.

Rationale: HCD proposes to adopt the above-listed section. Additions and alterations were not required to comply with the 2010 edition of the CALGreen Code. The proposed amendment expands the scope of the CALGreen Code to include these types of construction activities, which is necessary to achieve the overall goal of reducing our carbon footprint. The proposed language clarifies that the CALGreen Code applies to additions that result in an increase in

conditioned area, size or volume, which would not include areas such as decks, patios, or driveways. Further, a note has been added to help provide clarity and consistency with regard to enforcement of this new CALGreen Code measure.

SECTION: 301.2 (HCD) Low-rise and high-rise residential buildings.

Rationale: HCD proposes to adopt the above-listed section. This newly proposed section clarifies for code users how to understand when a code provision applies to a low-rise residential building, high-rise residential building or both low-rise and high-rise residential buildings by providing new banners for identification. The section adds clarity and consistency in enforcement of the code.

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4. SECTION: 304.1.1 Tiers.

Rationale: HCD proposes to adopt the above-listed section. Section 304.1.1 "Tiers" is existing code language that was previously adopted only by the California Building Standards Commission. Given current housing market conditions and that the CALGreen Code is still in its infancy, many variables still exist in the housing market. This section is a necessary clarification to continue moving the CALGreen Code forward without discouraging local adoption of the tiers and to achieve compliance with the tiers to the greatest extent possible.

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5. SECTIONS: 4.101.1 Scope.
4.102.1 Definitions.
4.106.3 Grading and paving.

Rationale: HCD proposes to amend the above-listed Section 4.101.1. The word "Purpose" is repealed and replaced with the word "Scope" for consistency within the code. There is no intended change in regulatory effect.

HCD proposes to relocate the definitions in the above-listed Section 4.102.1 (FRENCH DRAINS and WATTLES) to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code. There is no intended change in regulatory effect.

HCD proposes to amend the above-listed Section 4.106.3. The amendment provides clarification that additions and alterations which do not alter the drainage path of water are not subject to the requirements of this section. This clarification is also coordinated with the CBSC's proposed amendment of similar Section 5.106.10. There is no intended change in regulatory effect.

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6. SECTION: 4.201.1 Scope.

Rationale: HCD proposes to repeal the above-listed section. Minimum energy efficiency standards are adopted by the California Energy Commission and continue to be published in Title 24, Part 6. During the 2012 Triennial Code Adoption Cycle, the California Energy Commission will adopt voluntary green building standards related to energy usage for Tier 1 and Tier 2. Therefore, language adopted by HCD in this section, and Appendix A4.2, is being repealed since the California Energy Commission will provide language which incorporates their meaning and intent.

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7. SECTIONS: 4.302.1 Definitions.

Rationale: HCD proposes to relocate the definitions in the above-listed Section 4.302.1 to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code. There is no intended change in regulatory effect.

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8. SECTIONS: 4.303.1, 4.303.1 AND 4.303.3
TABLES: 4.303.1, 4.303.2 AND 4.303.3

Rationale: HCD proposes to reorganize Division 4.3 as follows: repeal former Sections 4.303.1 – 4.303.3, Tables 4.303.1 – Table 4.303.3; adopt new Sections 4.303.1, 4.303.1.1 – 4.303.1.3, 4.303.1.3.1, 4.303.1.3.2, 4.303.1.4, 4.303.1.4.1 – 4.303.1.4.4, 4.303.2; and continue adoption of Section 4.304.1 with amendment *(See Rationale under #9 below for more information.)* The proposed new language mandates prescriptive levels (flow rates) for water closets, urinals, showerheads, and faucets, consistent with the Health and Safety Code and the California Plumbing Code. (Specific requirements for fixtures and fittings are discussed in the new proposed sections).
During the initial development of the CALGreen Code, HCD received supporting comments which encouraged both a prescriptive and performance approach to achieve a 20 percent reduction in indoor water use. Generally, most comments preferred the flexibility of the performance method. Currently, Division 4.3 mandates the reduction of indoor water use by 20 percent allowing either method - a prescriptive 20 percent reduction in the flow rate of each fixture from what is currently allowed or a performance method to calculate the proposed water use and compare it to the baseline. However, effective January 1, 2014, water closets sold or installed in California shall be high efficiency with an effective flush volume not to exceed 1.28 gallons per flush (Health and Safety Code Section 17921.3). The same legislation requires urinals installed on or after January 1, 2014, to be high efficiency with an effective flush volume not to exceed 0.5 gallons. In addition, flow rates for showerheads and faucets are proposed at 2.0 gpm and 1.5 gpm, respectively. Given these additional provisions, there is no reason to maintain the associated prescriptive and performance water use tables.

The reorganization of Division 4.3 will affect Appendix Section A4.3. In Appendix A4.3, HCD proposes to adopt an elective measure for a 10 percent reduction of indoor water based on the flow rates mandated in Division 4.3. This new section will provide two methods for water reduction (prescriptive and performance); the language is similar to the current language proposed to be repealed in Division 4.3.

HCD is also aware that the California Energy Commission is concurrently working on proposals for Appliance Efficiency Regulations related to water use of appliances, plumbing fixtures and plumbing fittings. The California Energy Commission is still in the initial development process. HCD will continue to closely monitor and evaluate any California Energy Commission proposal. Division 4.3 and Appendix A4.3 may be revised during the rulemaking process to avoid any conflicts or inconsistencies.

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9. Division 4.3 – WATER EFFICIENCY AND CONSERVATION *(See Rationale under #8 above.)*

SECTION: 4.303.1 Water conserving plumbing fixtures and fittings.

Rationale: HCD proposes to adopt the above-listed section. This new section provides prescriptive levels (flow rates) for water closets, urinals, showerheads, and faucets in compliance with Federal and State law. The current federal standards for plumbing fixtures and fittings were mandated by the Energy Policy Act of 1992. On December 15, 2010, the U.S Department of Energy (DOE) published a final rule waiving Federal preemption for energy conservation standards under 42 U.S.C. 6297 (c) with respect to any State regulation concerning the water use of faucets, showerheads, water closets and urinals. With the preemption waived, the State of California is able to mandate more stringent standards*. (Specific requirements for all plumbing fixtures and fittings are discussed below. See Rationale under #8 for the repeal of former Section 4.303.1.)*

SECTION: 4.303.1.1 Water closets.

Rationale: HCD proposes to adopt the above-listed section. This new section mandates the allowable flush volume for water closets and provides a prescriptive method for compliance. In addition, this section clarifies that the tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type Toilets.

The same measures for water closets are currently in the 2010 CALGreen Code as part of the optional prescriptive method for compliance and are brought forward into this new section with editorial changes for consistency with the new structure of Division 4.3. The allowable flush volume is in compliance with Health and Safety Code Section 17921.3.

SECTION: 4.303.1.2 Urinals.

Rationale: HCD proposes to adopt the above-listed section. This new section mandates the allowable flush volume for residential urinals and provides a prescriptive method for compliance.
The same requirement for urinals is currently in the 2010 CALGreen Code as part of the optional prescriptive method for compliance (the reason for eliminating the performance method is discussed earlier), and is brought forward into this new section with editorial changes for consistency with the new structure of Division 4.3. The allowable flush volume is in compliance with Health and Safety Code Section 17921.3.

SECTION: 4.303.1.3 Showerheads.
SECTION: 4.403.1.3.1 Single showerhead.

Rationale: HCD proposes to adopt the above-listed sections. These new sections mandate the allowable flow rate for showerheads and provide a prescriptive method for compliance. In addition, these sections require showerheads to be certified to the performance criteria of the U.S. EPA WaterSense Specification for showerheads.

HCD proposes to adopt by reference the WaterSense Specification for Showerheads because of its importance. The WaterSense program released its final specification for showerheads on March 4, 2010. The intent of this specification is to help consumers identify those products that have met EPA's criteria for water efficiency and performance. WaterSense incorporates performance requirements for showerheads seeking to earn the WaterSense label. These requirements address flow rates across a range of pressures, spray force, and spray coverage (three key attributes of showerhead performance according to consumer testing). The new requirements are designed to ensure a high level of performance and user satisfaction with high-efficiency showerheads. Over 400 showerheads (25 manufacturers) with a WaterSense label are currently available on the market.

By installing high-efficiency showerheads, the average household could save more than 2,300 gallons per year (data from US EPA WaterSense Program). The corresponding reduced water use can decrease a household's energy demands.

The minimum flow rate of 2.0 gallons per minute is currently in the 2010 CALGreen Code as part of the prescriptive method for compliance (the reason for eliminating the performance method is discussed previously).

SECTION: 4.303.1.3.2 Multiple showerheads serving one shower.

Rationale: HCD proposes to adopt the above-listed section. This section is being brought forward from the 2010 CALGreen Code with nonsubstantive editorial modifications and has been renumbered for consistency with the new structure of Division 4.3. There is no intended change in regulatory effect.

Market research suggests that up to 4 percent of new homes are constructed with multiple showerheads per shower compartment, due in part to the ease of installation and consumer demand for upgraded showers that allow for luxury experiences. These systems can use as much as 10 gpm of water. Limiting showers designed for single individuals to one showerhead minimizes the amount of water used per shower. In the event a shower space is designed to serve multiple users, the code would apply to each individual shower fixture. HCD is aware there are different approaches used in other green building standards regarding the allowable flow rate from all showerheads and/or outlets flowing at a given time shall to not exceed 2.0 gpm per shower compartment. However, the problem with this approach is that there is no consistency for the area of the compartment – it fluctuates from 1800 square inches to 2600 square inches in different green building standards.

It is HCD's intent that shower fixtures not have several water outlets operating at the same time unless the total water output is 2.0 gpm or less.

SECTION: 4.303.1.4 Faucets.
SECTION: 4.303.1.4.1 Residential lavatory faucets.

Rationale: HCD proposes to adopt the above-listed sections. These new sections mandate the maximum and minimum flow rates for residential lavatory faucets. The same requirement, consistent with the US EPA WaterSense specification for lavatory faucets, is currently in the 2010 CALGreen Code (Table 4.303.2) as part of the prescriptive method for achieving 20 percent reduction of water use. This requirement was brought forward into this new section with nonsubstantive editorial changes for consistency with the new structure of Division 4.3.

SECTION: 4.303.1.4.2 Lavatory faucets in common and public use areas.

Rationale: HCD proposes to adopt the above-listed section. This new section mandates the allowable flow rate for lavatory faucets, installed in common use and public use areas outside of dwellings or sleeping units.

Nonresidential type faucets, usually installed in public restrooms, have different uses and performance expectations. Public restroom faucets are used almost exclusively for hand washing. As a consequence, the maximum flow rate for these public nonresidential fixtures can be set significantly lower than the flow rate for private faucets (0.5 gpm vs. 1.5 gpm) without negatively impacting user satisfaction. The flow rate mandated in this section is consistent with the required flow rate for nonresidential buildings.

While not explicitly stated, this amendment precludes the installation and use of nonresidential type faucets in residential dwellings or sleeping units. The allowable maximum flow rate of faucets, designed for installation in common and public use areas is 0.5 gpm at 60 psi, which doesn't comply with the requirement for minimum flow rate (0.8 gpm @ 20 psi) for residential faucets.

SECTION: 4.303.1.4.3 Metering faucets.

Rationale: HCD proposes to adopt the above-listed section. This section mandates the allowable flow volume for metering faucets, installed in residential buildings. Although it is not explicitly stated, this amendment allows the installation and use of metering faucets in residential dwellings or sleeping units if specific conditions are met.

By definition, a metering faucet is a faucet that after actuation dispenses water of a predetermined volume or for a predetermined period of time. (The volume or cycle duration can be fixed or adjustable). The CALGreen Code mandates the maximum flow volume (not flow rate) at 0.25 gallons per cycle. These 0.25 gallons can be spread over 10 seconds at 1.5 gpm, 15 seconds at 1.0 gpm, 60 seconds at 0.25 gpm, or at other intermediate levels, based on the water flow allowed by the aerator used. When the metering faucet can maintain the volume at or below 0.25 gallons per cycle, this metering faucet complies with the requirements of CALGreen regardless of the water flow. Therefore, when a metering faucet discharge 0.25 gallons per cycle at maximum flow rate of 1.5 gpm @ 60 psi (minimum 0.8 gpm @ 20 psi), this metering faucet can be installed in dwellings and sleeping units.

SECTION: 4.303.1.4.4 Kitchen faucets.

Rationale: HCD proposes to adopt the above listed section. This new section mandates the allowable flow rate for kitchen faucets and for the purposes of user satisfaction, provides an option for the kitchen faucets to temporarily increase the water flow above the maximum allowed rate.

Kitchen sink faucets have different user expectations, requiring other considerations to be made. One major performance consideration is the kitchen faucet's ability to effectively rinse dishes. Kitchen faucets also are commonly used for pot or container filling, and significantly increased waiting times (the result of the lower flow rate) might not be acceptable to most users. In order to maintain user satisfaction and ensure a high level of performance, the maximum flow rate is greater than what is suitable for lavatory faucets.

The same requirement for kitchen faucets is currently in the 2010 CALGreen Code (Table 4.303.2), it has been brought forward into this new section with nonsubstantive editorial changes for consistency with the new structure of Division 4.3. There is no intended change in regulatory effect. However, if the California Energy Commission changes the maximum allowed flow rate for kitchen faucets in the Appliance Efficiency Regulations, this section will be subject to revision.

SECTION: 4.303.2 Standards for plumbing fixtures and fittings.

Rationale: HCD proposes to adopt the above listed section. This section clarifies that in addition to the CALGreen Code requirements, plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code (CPC), and shall meet the applicable standards referenced in Table 1401.1 of the CPC.

Currently the referenced standards for plumbing fixtures and fittings are summarized in Table 4.403.3, which HCD proposes to repeal. Table 1401.1 (currently 14-1) of the proposed 2013 CPC will contain the mandatory referenced plumbing standards, including the standards for fixtures and fittings regulated by the CALGreen Code. There is no necessity for those standards to be duplicated in the CALGreen Code.

10. SECTIONS: 4.402.1 Definitions.
4.406.1 Rodent proofing.

Rationale: HCD proposes to relocate the above-listed Section 4.402.1 "Definitions" to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code.

HCD also proposes to amend the above-listed Section 4.406.1 to clarify that it is sole/bottom plates needing protection from passage of rodents.

There is no intended change in regulatory effect.

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11. SECTIONS: 4.408.4.1 Waste stream reduction alternative. [HR 4+]

Rationale: HCD proposes to adopt the above-listed section. This section is proposed to apply specifically to high rise residential construction applications to be included in the 2013 CALGreen Code. This section clarifies that a waste stream reduction method, utilizing a maximum waste disposal rate of 2 pounds per square foot of building area into landfills, is an acceptable method for meeting the 50 percent construction waste reduction requirements in Section 4.408. This amendment proposes an alternative method for achieving the required waste reduction. There is no intended change in regulatory effect.

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12. SECTION: 4.408.5 Documentation.

Rationale: HCD proposes to amend the above listed section. The section currently includes a reference to HCD's "Guide to the California Green Building Standards Code (Low-Rise Residential)" The amendment deletes the reference to "Low-Rise Residential" in the title of the guide. The HCD guide will be renamed during its next publication to omit "Low-Rise Residential because the 2013 CALGreen Code will apply to all residential structures.

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13. SECTION: 4.502.1 Definitions.

Rationale: HCD proposes to continue the adoption of the above-listed section with amendment. The amendment is necessary due to the newly proposed format of the 2013 CALGreen Code. HCD, in coordination with the CBSC and other state agencies, proposes to relocate all definitions to a single location in Chapter 2, Section 202. There is no intended change in regulatory effect.

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14. SECTION: 4.504.4 Resilient flooring systems.

Rationale: HCD proposes to amend the above-listed section. The proposed amendment fulfills the Governor's Executive Order B-18-12, which directs the appropriate state agencies to implement relevant and feasible voluntary measures in CALGreen Divisions A4.5 (residential) and A5.5 (nonresidential) to ensure healthy indoor environments for occupants. Section 4.504.4 is a mandatory provision. The 2010 CALGreen requirement is that 50 percent of installed resilient flooring meet the specified emission limits for volatile organic compounds (VOCs). Division A4.5 is comprised of two voluntary tiers that address environmental quality and provide prerequisites and various elective measures to enhance indoor environmental quality. Voluntary tiers in the 2010 CALGreen Code Section A4.504.2 require a minimum of 80 percent resilient flooring in Tier 1 and 90 percent of resilient flooring in Tier 2. The proposed amendments follow Executive Order B-18-12 by increasing the mandatory and voluntary percentage of resilient flooring in the 2013 CALGreen Code. The 80 percent 2010 Tier 1 level requirement becomes the mandatory requirement in the 2013 CALGreen Code and the 2013 Tier 1 requirement becomes 90 percent, which previously was the 2010 Tier 2 requirement. The 2013 Tier 2 requirement is increased to 100 percent.

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15. TABLE: 4.504.5 FORMALDEHYDE LIMITS

Rationale: HCD proposes to amend the above-listed table. Since the dates for early compliance with VOC limits will have expired when the 2013 CALGreen Code takes effect on January 1, 2014, and the federal VOC limits will be the same as the CALGreen Code, there will be no more *early compliance* with formaldehyde limits in the 2013 CALGreen Code. HCD proposes to eliminate the *early compliance* dates and modify the table to only show the formaldehyde limits that will be current when the 2013 CALGreen Code becomes effective. In addition, HCD has made a correction to the ASME 1333 Reference Standard by adding a standard sizing equivalent to the metric size given. There is no intended change in regulatory effect.

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16. SECTION: 4.507.1 Openings.

Rationale: HCD proposes to repeal the above-listed section. The California Energy Commission is concurrently updating the 2010 California Energy Code with the 2013 California Energy Code. The California Energy Commission is proposing installation of whole house fans as a prescriptive requirement; however, their analysis of cost versus benefit in requiring insulated covers, louvers etc., and correspondingly energy savings did not justify the associated costs. Therefore, the Commission recommended deletion of this measure from CALGreen and its possible inclusion as an elective measure. This proposal is subject to change pending final outcome of the Commission's rulemaking.

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17. CHAPTER 6 REFERENCED ORGANIZATIONS AND STANDARDS
SECTION: 601.1

Rationale: HCD proposes to amend the above-listed section. Amendments to this section correspond with changes being proposed in all sections of the 2013 CALGreen Code, which includes reference to specific standards. For example, if a section referencing a standard is proposed for deletion, the reference and possibly deletion of the standard will be reflected in this section. There is no intended change in regulatory effect since this section is a reflection of adopted and proposed changes to references, which are discussed individually in this document.

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18. APPENDIX A4 RESIDENTIAL VOLUNTARY MEASURES

Division A4.1 – PLANNING AND DESIGN

PREFACE

Rationale: HCD proposes to amend the above-listed "Preface" to provide the user with an additional reference in the informational note. The added reference, Government Code Section 65470, addresses a process for cities and counties to create development patterns utilizing transit priority projects. These provisions were included in Senate Bill 310 (Statutes of 2011, Chapter 446). This modification adds only a reference. There is no intended change in regulatory effect.

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19. SECTIONS: A4.102.1 Definitions.

Rationale: HCD proposes to continue the adoption of the above-listed section with amendment. The amendment is necessary due to the newly proposed format of the 2013 CALGreen Code. HCD, in coordination with the CBSC and other state agencies, proposes to relocate all definitions to a single location in Chapter 2, Section 202. There is no intended change in regulatory effect.

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20. SECTION: A4.103.2 Community connectivity.

Rationale: HCD proposes to adopt the above-listed section. This section provides an elective measure with several choices of facilitating community connectivity available for local agency adoption. If adopted, this measure ensures the reuse of existing sites in developed areas to help minimize the impact of new site development on undeveloped lands, local air and water quality, as well as to minimize the greenhouse gas emissions generated from the development of a new site. This measure would also provide for pedestrian access to basic services anticipated to

be available within a community (examples provided). Other types of services may be considered on a case-by-case basis to lend greater flexibility to the site selection process. This measure also recognizes that local agencies may adopt a similar measure with an increased level of required services. Documentation may include a map of the project site area showing distance to the required services and their proximity to the site for review and approval. HCD has incorporated comments received during and subsequent to a focus group meeting to reduce the originally proposed ½-mile walking distance criteria to ¼-mile true walking distance and provide additional options for areas with less available services. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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21. SECTION: A4.106.1 (Reserved)

Rationale: HCD proposes to amend the above-listed section to delete an elective measure related to building orientation to maximize solar exposure. The 2013 California Energy Code (CEC), Section 110.10, includes mandatory requirements for single-family residences, low-rise multifamily buildings, hotel/motel, and high-rise multi-family buildings to provide solar zones of specified size and orientation (between 110 and 270 degrees of true north). The CEC also provides conditions under which reduced or no solar zone is required and also provides for the solar zones to be planned on accessory structures or covered parking areas associated with the building project. The existing CALGreen requirement focuses on building orientation instead of size and orientation of a rooftop area to maximize solar exposure. In this respect, the CEC mandatory requirements provide more details, exceptions, and alternatives rendering the CALGreen provision as duplicative. This measure is an elective measure in CALGreen and is now addressed on a mandatory basis in the CEC.

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22. SECTION A4.106.5 Cool roof for reduction of heat island effect.
23. SECTION A4.106.5.1 Solar reflectance.
TABLE A4.106.5.1 Values of Soiling Resistance β by Product Type.
24. SECTION A4.106.5.2 Thermal emittance.
25. SECTION A4.106.5.3 Solar reflectance index alternative.
26. TABLE A4.106.5.1 (1) Tier 1 – Low-Rise Residential.
TABLE A4.106.5.1 (2) Tier 2 – Low-Rise Residential.
27. TABLE A4.106.5.1 (3) Tier 1 – High-Rise Residential Buildings, Hotels, and Motels.
TABLE A4.106.5.1 (4) Tier 2 – High-Rise Residential Buildings, Hotels, and Motels.

Rationale: HCD proposes to amend the above-listed sections and Tables A4.106.5.1(1) and A4.106.5.1(2) and add new Tables A4.106.5.1, A4.106.5.1(3) and A4.106.5.1(4). The amendments are intended to include cool roof provisions for high-rise residential, hotel and motel buildings, which were not included in the 2010 CALGreen Code. In addition, related amendments reflect cool roof provisions proposed by the California Energy Commission in Title 24, Part 6, for the 2013 California Energy Code. Due to the concurrent timing of the California Energy Commission rulemaking and the HCD rulemaking, the proposed 2013 CALGreen Code amendments may be subject to change to coordinate with both the California Energy Commission and the California Building Standards Commission, and to avoid conflicts with the California Energy Code's cool roof requirements for low-rise residential, and high-rise residential, hotel and motel buildings. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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28. SECTION: A4.106.6 Vegetated roof.

Rationale: HCD proposes to renumber and relocate former Section A4.106.6 "Electric vehicle (EV) charging" to Section A4.106.8 and adopt the above-listed section. This new section proposes an additional elective green building measure to address stormwater runoff and quality, extension of roof life, and reduction of heating and cooling costs of a building. Additional language provides a pointer to roofing requirements for vegetated roofs in the California Building Code, Chapter 15 (Section 1507.16) and references Chapter 16 (Sections 1607.11.2.2 and 1607.11.3). Costs for implementation can vary significantly ($10 to $15 per square foot) depending on the expanse and continuity of the vegetated roof, depth of soil, plant selection, irrigation type and use, and access features. Although initial costs may be higher than a conventional roof, especially for reroofing, vegetated roofs are less costly on a life cycle basis due to longer lifespan (3-4 times) than a conventional roof, lowered heating and cooling costs of up to 30 percent on larger buildings, and may qualify for energy savings incentives. This is not a mandatory measure, therefore, does not result in state-mandated costs.

SECTIONS: A4.106.6, A4.106.6.1, A4.106.6.1.1, A4.106.6.2, A4.106.6.2.1, A4.106.6.2.2, A4.106.6.2.3

Rationale: HCD proposes to renumber and relocate former Sections A4.106.6 – A4.106.6.2.3 addressing electric vehicles to new Sections A4.106.8. – A4.106.8.2.3 for the purposes of keeping related provisions in a sequential grouping. *(See Rationale under #32 – 38 below.)*

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29. SECTION: A4.106.7 Reduction of heat island effect for nonroof areas.

Rationale: HCD proposes to adopt the above-listed section. This section provides an elective measure for mitigating urban heat island effects through planting of trees, use of reflective and pervious materials and other means to reduce heat build-up around residential structures. Shading of structures and reducing heat surrounding structures will result in lower energy costs for cooling as well as increased comfort outdoors due to lowered temperatures. Additional benefits related to stormwater drainage, water quality and increased air quality are also possible. If adopted at the local level, costs will vary depending on the method used and local conditions at the site. However, this is not a mandatory measure, therefore, does not result in state-mandated costs.

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30. SECTION A4.106.8 Electric vehicle (EV) charging.
31. SECTION A4.106.8.1 One- and two-family dwellings.
32. SECTION A4.106.8.1.1 Labeling requirement.
33. SECTION A4.106.8.2 Multifamily dwellings.
34. SECTION A4.106.8.2.1 Single charge space required.
35. SECTION A4.106.8.2.2 Multiple charging spaces required.
36. SECTION A4.106.8.2.3 Labeling requirement.

Rationale: HCD proposes to renumber and relocate former Sections A4.106.6 – A4.106.6.2.3 to the above-listed sections for purposes of keeping related provisions in a sequential grouping. There is no intended change in regulatory effect.

HCD also proposes additional modifications to newly proposed Section A4.106.8.1, One- and two-family dwellings and Section A4106.8.2.1, Single charge space required (for multifamily dwellings). These sections require installation of a "Trade size 1" raceway to accommodate a circuit for EV charging purposes. HCD chose to use the term trade size (nominal dimension) for consistency with the National Electrical Code, adopted by reference as the California Electrical Code. However, some confusion existed and was expressed regarding what "Trade size 1" means. HCD proposes supplemental language in parenthesis after "Trade size 1" to provide further clarification that a "Trade Size 1" raceway and one-inch raceway are equivalent. The amendments provide added clarity to the code user and have no intended change in regulatory effect.

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37. SECTION: A4.106.9 Bicycle parking.
SECTION: A4.106.9.1 Short-term bicycle parking.
SECTION: A4.106.9.2 Long-term bicycle parking for multifamily buildings.
SECTION: A4.106.9.3 Long-term bicycle parking for hotel and motel buildings.

Rationale: HCD proposes to adopt the above-listed sections. The sections provide an elective measure for bicycle parking for both multifamily residential and hotel/motel occupancies and provide guidance on the number of bicycles to be accommodated per occupancy. Since the location and use of the building and surrounding infrastructure dictate the concentration of use, the proposal provides for a reduction in the number of spaces as approved by the building official. This measure will contribute to reduction in automobile use by providing accommodation and security for alternative transportation. Estimated costs for purchase and installation, per Pedestrian and Bicycle Information Center, are $150 - $300 each for two bicycle racks; $1,000 - $4,000 each for two-bicycle bike lockers; and $2,200 (surface lot) - $12,500 (garage) for 10-12 bikes in a car parking space.

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38. SECTION: A4.106.10 Light pollution reduction (HR 4+).
39. TABLE: A4.106.10 Maximum Allowable Backlight, Uplight and Glare (BUG) Ratings

Rationale: HCD proposes to adopt the above-listed section and table. This proposal is based on the California Building Standards Commission's light pollution provisions for nonresidential structures in the 2010 CALGreen Code effective July 1, 2012. In their proposal, the CBSC referenced the latest 2011 edition of the Illuminating Engineers Society of North America (IESNA) allowable backlight, uplight and glare (BUG) ratings for outdoor lighting. The California Energy Commission is including a reference to Backlight, Uplight and Glare (BUG) requirements for nonresidential (high-rise residential, hotels and motels), which includes a compliance table for uplight and glare (no backlight) based on lumens. This section may be revisited and evaluated for duplication depending on changes in the Commission's rulemaking and whether CALGreen provisions are incorporated into the California Energy Code as recommended at the Commission's rulemaking workshop.

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40. Division A4.2 ENERGY EFFICIENCY (Sections A4.201 – A4.213.1)

Rationale: HCD proposes to repeal the above-listed sections, which effectively repeals Division A4.2 Energy Efficiency. Minimum energy efficiency standards are adopted by the California Energy Commission and continue to be published in Title 24, Part 6. During the 2012 Triennial Code Adoption Cycle, the California Energy Commission will adopt voluntary green building standards related to energy usage for Tier 1 and Tier 2. Therefore, language adopted by HCD in Division 4.2 and Appendix Division A4.2 is being repealed since the California Energy Commission will provide language which incorporates their meaning and intent.

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41. SECTION: A4.302.1 Definitions.

Rationale: HCD proposes to continue the adoption of the above-listed section with amendment. The amendment is necessary due to the newly proposed format of the 2013 CALGreen Code. HCD, in coordination with the CBSC and other state agencies, proposes to relocate all definitions to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code.

The existing definition of LANDSCAPE (PLANT) COEFFICIENT (*KI*) is proposed for repeal because the term is not used in the CALGreen Code so there is no need for an unused term to be defined.

There is no intended change in regulatory effect.

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42. SECTION A4.303.1 Kitchen faucets and dishwashers (Repealed)

Rationale 1: HCD proposes to repeal the above listed Section A4.303.1 "Kitchen faucets and dishwashers", which currently provides a voluntary (prerequisite) measure for kitchen faucets (Tier 1) and dishwashers (Tier 2). HCD proposes to adopt a new Section A4.303.1 (rationale for the new section is provided below), which provides an elective measure for 10 percent indoor potable water use reduction, using two methods for compliance – prescriptive and performance. The kitchen faucet flow rate is part of this new requirement.

Kitchen faucets and dishwashers account for at least 16 percent of the water used in dwelling units. Reducing the allowable kitchen faucet flow rate to 1.5 gpm will decrease the consumption of potable water. At the same time, kitchen sink faucets have different user expectations, requiring other considerations to be made (for instance, ability to effectively rinse dishes). Kitchen faucets also are commonly used for pot or container filling, and significantly increased waiting times (the result of the lower flow rate) might not be acceptable to most users.

Replacing the Tier 1 prerequisite for the kitchen faucets with an elective performance method provides an option for achieving 10 percent reduction of indoor potable water use without reducing the kitchen faucet flow rate to a level unsuitable for owner's satisfaction.

Generally, under the provisions of the federal Energy Policy and Conservation Act (EPCA), where an energy efficiency standard is effective for a "covered product," a State regulation concerning the energy efficiency, energy use or water use of that product is preempted and is not effective. (42 U.S.C 6295 (c)) Residential dishwasher is a covered product; state regulations concerning water use of residential dishwashers are preempted by the Federal standards.

ENERGY STAR is a joint voluntary program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, originally designed to identify and promote energy-efficient products and practices. In regards to energy and/or water use, the requirements for Energy Star products are more restrictive than the federal standards. However, based on the federal law, a state cannot mandate the Energy Star requirements. To avoid a conflict with the federal law, HCD proposes to eliminate the Tier 2 prerequisite for dishwashers and replace it with an elective measure (see Section A4.303.3). This is not a mandatory measure, therefore, does not result in state-mandated costs.

SECTION A4.303.1 Ten percent savings. (Adopted)

Rationale 2: HCD proposes to adopt the above-listed Section A4.303.1 "Ten percent savings" This is an elective voluntary measure, which provides two methods - prescriptive and performance, for 10 percent indoor water use reduction, based on the proposed flow rates mandated in Division 4.3. The proposed 10 percent reduction is equivalent to the currently mandated 30 percent reduction with baseline flow rate from 2010 Appliance Efficiency Regulations in Appendix A.5.3. The 30 percent savings is a prerequisite (Tier 1) in A5.3.

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43. SECTION: A4.303.1.1 Multiple showerheads serving one shower.

Rationale: HCD proposes to adopt the above-listed section. This section provides clarity to the code user, indicating that the flow rates apply to individual shower valves regardless of the number of showerheads connected to that valve. Additionally, this section clarifies that using the performance calculation method to show at least a 10 percent reduction in indoor water use, a showerhead may have a maximum flow rate of 2.0 gpm @ 80 psi. This is not a mandatory measure, therefore, does not result in state-mandated costs.

SECTION: A4.303.1.2 Alternate water sources for nonpotable applications.

Rationale: HCD proposes to adopt the above-listed section. This section clarifies that alternate water sources for nonpotable applications (nonpotable water), complying with Chapter 16, Chapter 16A or Chapter 17 of the California Plumbing Code, may be included in the calculations demonstrating 10 percent reduction. The terms used in this section are consistent with the California Plumbing Code. Additional information and sample calculations demonstrating 10 percent reduction if nonpotable water is used is intended to be included in HCD's next edition of a "Guide to the California Green Building Standards Code." This is not a mandatory measure, therefore, does not result in state-mandated costs.

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44. TABLE A4.303.1 WATER USE BASELINE
TABLE A4.303.2 FIXTURE FLOW RATES

Rationale: HCD proposes to adopt the above-listed tables.

New Tables A4.303.1 and A4.303.2, and the applicable footnotes, provide clarity for users to identify and/or calculate the appropriate baseline or maximum flow rate for fixtures and fittings used in residential applications. Similar tables are currently in Division 4.3; the baseline flow rate and the percentage (10 percent vs. 20 percent) reduction are changed to match the new HCD proposal. The baseline in the existing Table 4.303.1 (2010 CALGreen Code) is based on the maximum allowable water use per plumbing fixtures and fittings as required by the 2010 Appliance Efficiency Regulations. The baseline in Table A4.303.1 (proposed for the 2013 CALGreen Code) is based on the maximum allowable water use per plumbing fixtures and fittings as required by California Building Standards Code.

The exception added to Section A4.303.1 clarifies that lavatory faucets and metering faucets, installed in common and public use areas, are not required to comply with the requirements for 10 percent reduction.

During the rulemaking process, HCD received comments from stakeholders, including from the plumbing industry, expressing concerns about the flow rate for nonresidential type faucets being too low. Most of the comments addressed the plumbing fittings installed in nonresidential buildings. However, after additional research and discussion, HCD decided to exclude the lavatory faucets installed in common use and public use areas in residential buildings from the 10 percent reduction requirement.

HCD believes that if those types of faucets are used in residential buildings, the 20 percent water flow reduction is already achieved (0.5 gpm is over 80% reduction from 2.2 gpm) and no further water conservation should be required. If further reduction is required, there may be insufficient water flow to remove the waste to the sewer,

and/or the water flow may negatively impact the user satisfaction. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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45. SECTION: A4.303.2 Appliances.

Rationale: HCD proposes to renumber former Section A4.303.2 "Nonwater supplied urinals and waterless toilets" to Section A4.303.3 and adopt the above-listed new section, providing an elective measure for appliances used in residential buildings. HCD originally proposed Tier 1 (for dishwashers) and Tier 2 (dishwashers and clothes washers) prerequisites for residential appliances; however, to avoid conflict with the federal law, this section was revised. *(See Rationale for the repeal of Section A4.303.1.)* This is not a mandatory measure, therefore, does not result in state-mandated costs.

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46. SECTION: A4.303.3 Nonwater supplied urinals and waterless toilets.

Rationale: HCD proposes to renumber former Section A4.303.2 to the above-listed section. The section number is changed for consistency with the new format of this division. There is no intended change in regulatory effect. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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47. SECTION: A4.304.2 Rainwater catchment systems.

Rationale: HCD proposes to continue the adoption of the above-listed section with amendment. The existing section provides an elective measure for rainwater use for outdoor applications. The proposed amendment, if approved, will make this section consistent with the terminology used in Chapters 16 and 17 of the California Plumbing Code. There is no intended change in regulatory effect.

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48. SECTION: A4.304.4.1 Verification.

Rationale: HCD proposes to repeal the above-listed section. Requirements for verification and/or documentation of conformance for applicable green building measures are covered by CALGreen Sections 102 and 703. In some instances, it may be necessary to have special inspections or additional verifications; however, in most cases local enforcing agencies are the best entity to determine those needs. There is no necessity for this section to remain in the code. There is no intended change in regulatory effect. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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49. SECTION: A4.304.6 Irrigation metering device.

Rationale: HCD proposes to adopt the above-listed section. The new section provides an elective measure for installation of separate submeters or metering devices (for outdoor potable water use) for landscaped irrigated areas more than 2500 square feet. This section is in compliance with the California Water Code and the Model Water Efficient Landscape Ordinance (MWELO).

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50. SECTIONS: A4.305.1 Graywater.
A4.305.2 Recycled water piping.

Rationale: HCD proposes to continue the adoption of the above-listed Section A4.305.1 with amendment. The existing language provides a reference to Chapter 16A, which currently addresses the graywater systems installation in California. During this rulemaking, HCD proposes to adopt Uniform Plumbing Code Chapter 16, merge the California amendments from Chapter 16A into California Plumbing Code Chapter 16, and repeal the HCD amendments in Chapter 16A. The proposed amendment provides a correct reference to the California Plumbing Code and is consistent with other sections of the CALGreen Code referencing the California Plumbing Code instead of specific sections and chapters.

HCD proposes to continue the adoption of the above-listed Section A4.305.2 with amendment. This amendment

clarifies that the measures for installation, construction, alteration, and repair of recycled water systems intended to supply water closets, urinals, for floor drains and other allowed uses are contained in the California Plumbing Code. The amendment is consistent with other sections of the CALGreen Code which provide a reference to the California Plumbing Code. There is no intended change in regulatory effect.

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51. SECTION: A4.402.1 Definitions.

Rationale: HCD proposes to continue the adoption of the above-listed section with amendment. The amendment is necessary due to the newly proposed format of the 2013 CALGreen Code. HCD, in coordination with the CBSC and other state agencies, proposes to relocate all definitions to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code. There is no intended change in regulatory effect.

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52. SECTION: A4.502 DEFINITIONS
A4.502.1 Definitions.

Rationale: HCD proposes to continue the adoption of the above-listed Section A4.502 with amendment. The amendment, which adds Section A4.502.1, is necessary due to the newly proposed format of the 2013 CALGreen Code. HCD, in coordination with the CBSC and other state agencies, proposes to relocate all definitions to a single location in Chapter 2, Section 202. The format is consistent with other parts of Title 24 California Building Standards Code. There is no intended change in regulatory effect.

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53. SECTIONS: A4.504.1 Compliance with formaldehyde limits.
A4.504.2 Resilient flooring systems.

Rationale: HCD proposes to amend the above-listed Section A4.504.1. As of January 1, 2014, when the 2013 CALGreen Code becomes mandatory statewide, there will be no more 'early compliance' with formaldehyde limits. The early compliance dates will end as of January 1, 2012, and July 1, 2012, when the federal formaldehyde limits will match those set forth in the CALGreen Code. The section as written will no longer be necessary. Therefore, HCD proposes to repeal language that will become obsolete. HCD proposes to retain some existing text in this section, which provided an alternative for use of composite wood products made with no-added formaldehyde (NAF) resins or ultra low emitting formaldehyde (ULEF) resins. Due to the expiration of the first option (early compliance), HCD recognizes that this remaining elective will result in a more restrictive choice of materials. This is not a mandatory measure, therefore, does not result in state-mandated costs.

HCD also proposes to amend the above-listed Section A4.504.2. The proposed amendment fulfills the Governor's Executive Order B-18-12, which directs the appropriate state agencies to implement relevant and feasible voluntary measures in CALGreen Divisions A4.5 (residential) and A5.5 (nonresidential) to ensure healthy indoor environments for occupants. Section 4.504.4 is a mandatory provision. The 2010 CALGreen requirement is that 50 percent of installed resilient flooring meet the specified emission limits for volatile organic compounds (VOCs). Division A4.5 is comprised of two voluntary tiers that address environmental quality and provide prerequisites and various elective measures to enhance indoor environmental quality. Voluntary tiers in the 2010 CALGreen Code Section A4.504.2 require a minimum of 80 percent resilient flooring in Tier 1 and 90 percent of resilient flooring in Tier 2. The proposed amendments follow Executive Order B-18-12 by increasing the mandatory and voluntary percentage of resilient flooring in the 2013 CALGreen Code. The 80 percent 2010 Tier 1 level requirement becomes the mandatory requirement in the 2013 CALGreen Code and the 2013 Tier 1 requirement becomes 90 percent, which previously was the 2010 Tier 2 requirement. The 2013 Tier 2 requirement is increased to 100 percent.

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54. SECTION: A4.506.1 Filters.

Rationale: HCD proposes to amend the above-listed section. HCD proposes to amend the section to clearly indicate that a return air filter rated higher than MERV 6 is permitted. HCD also proposes to change the term "central air or ventilation systems" to "HVAC systems", as this is a more commonly accepted term. Additionally, HCD proposes to add a zero (0) before the decimal fraction ".1" to be consistent with other parts of Title 24 California Building Standards Code. These amendments have no intended change in regulatory effect. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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55. SECTION: A4.506.2 Construction filter [HR 4+].

Rationale: HCD proposes to renumber and amend former Section A4.506.2 "Direct-vent appliances" to Section A4.506.3 and adopt the above-listed section. HCD proposes to add the requirement to provide filters equal to or greater than MERV 6 on return air openings during construction, in new residential buildings above 3 stories. This requirement is intended to help ensure that the installed HVAC equipment and ductwork remains clean, and to minimize the accumulation of construction dust and contaminants from within these components. This is not a mandatory measure, therefore, does not result in state-mandated costs.

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56. SECTION: A4.506.3 Direct-vent appliances.

Rationale: HCD proposes to renumber and amend former Section A4.506.2 to the above-listed section. There is no intended change in regulatory effect. This is not a mandatory measure; therefore, it does not result in state-mandated costs.

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57. SECTION: A4.601.4.2 Prerequisiste and elective measures for Tier 1.
58. SECTION: A4.601.5.2 Prerequisiste and elective measures for Tier 2.

Rationale: HCD proposes to amend the above listed sections. These amendments will change the requirements for achieving Tier 1 and Tier 2 status. Currently, in addition to the mandatory measures for water efficiency and conservation, compliance with three prerequisites and one elective measure are required for residential buildings to achieve Tier 1 status. For achieving Tier 2 status, residential buildings shall comply with four prerequisites and two electives. HCD proposes to delete Section A4.303.1, currently providing prerequisites for kitchen faucets (Tier 1) and dishwashers (Tier 2). This deletion will reduce the requirements for Tier 1 and Tier 2 compliance, which is not the intent of HCD. Due to the deletion of the prerequisites and to provide more opportunities for jurisdictions, builders, and/or owners to choose the green measures they want to enforce and/or implement, HCD proposes to include one additional elective measure as a requirement for Tier 1 and Tier 2 compliance. *(See the Rationale for deletion of Section A4.303.1 for additional information.)* HCD proposes to amend Tier 1 and Tier 2 requirements in Division A4.5, Item 5.1, to reflect the changes proposed for Sections 4.504.5 and A4.504.2.

HCD also proposes to repeal references to Division A4.2 addressing energy efficiency to correspond to proposed changes in Division A4.2 text.

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59. APPENDIX A4, SECTION A4.602 RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST

Rationale: HCD proposes to amend the above-listed section. The Residential Occupancies Application Checklist is being updated to reflect changes made in both the mandatory provisions of Chapter 4 and voluntary provisions of Appendix A4. Updates being made to the Residential Occupancies Application Checklist have no other intended change in regulatory effect from the rationale of the changes previously described in the Initial Statement of Reasons for corresponding sections.

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60. APPENDIX A4, DIVISION A4.7 RESIDENTIAL MODEL ORDINANCE

Rationale: HCD proposes to amend the sample resolution for adoption of Tier 1 or Tier 2 provisions. The amendments proposed to the sample resolution reflect proposed changes to the scope of the 2013 CALGreen Code. Specifically, the sample resolution proposes to now include all residential buildings, alterations and additions to residential buildings. In the 2010 CALGreen Code, only newly constructed low-rise residential buildings were included in the scope.

BENEFITS ANTICIPATED FROM THE PROPOSED REGULATORY ACTION
(Government Code Section 11346.2(b)(1) requires an enumeration of the benefits anticipated from the proposed regulatory action, including the benefits or goals provided in the authorizing statute.)

- Continue to reduce greenhouse gas (GHG) emissions from buildings.
- Continue the Administration's directive to adopt green building standards for residential, commercial, and public building construction as part of the building code adoption process.
- Protection of public health and safety, and worker safety.
- Environmental benefits through reduced use of energy, water, and raw materials; improved public and building occupant health due to improved indoor air quality; and overall reduction in detrimental environmental impacts.
- General welfare of California residents.

ECONOMIC IMPACT ASSESSMENT REPORT RELIED UPON
(Government Code Section 11346.3(b) requires preparation of an Economic Impact Assessment upon which the agency relies in proposing the regulation (s).)

- Economic Impact Assessment for Amendment of the 2010 edition of the California Green Building Standards Code (CALGreen) into the 2013 California Green Building Standards Code (CALGreen).

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).)

None.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS
(Government Code Section 11346.2(b)(4) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.)

HCD is statutorily required to adopt by reference model building codes, which contain prescriptive standards. Prescriptive standards provide the following: explicit guidance for certain mandated requirements; consistent application and enforcement of building standards while also establishing clear design parameters; and ensure compliance with minimum health, safety and welfare standards for owners, occupants and guests.

Performance standards are permitted by state law; however, they must be demonstrated to the satisfaction of the proper enforcing agency.

CONSIDERATION OF REASONABLE ALTERNATIVES
(Government Code Section 11346.2(b)(5)(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, however, there are no model codes addressing green building standards specific to California.

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

(Government Code Section 11346.2(b)(5)(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)(6) 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)(7) 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.