

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

**REGARDING THE CALIFORNIA GREEN BUILDING STANDARDS CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11**

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

**STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:**

(Government Code Section 11346.2(b)(1) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem 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.)

This proposed action by CBSC adopts mandatory and voluntary green building standards for occupancies within its authority, building upon a framework of voluntary measures adopted by CBSC in 2008 and make modifications and clarifications to the 2013 code. The intent of the code continues to (1) reduce greenhouse gas (GHG) emissions from buildings, (2) promote environmentally responsible, cost-effective, healthier places to live and work; and (3) respond to the directives by the Governor in the 2008 to develop a green building code.

CBSC's proposed action will support the implementation of the Governor's Executive Order B-16-2012 to achieve a benchmark for having over 1.5 million zero-emission vehicles on California roadways by 2025. In October 2013 Governor Brown announced an initiative to put 3.3 million zero-emission vehicles on the roadways within a dozen years. This initiative is a memorandum of understanding signed by the governors of California, Connecticut, Maryland, Massachusetts, New York, Oregon, Rhode Island and Vermont. These states comprise nearly 25 percent of the U.S. vehicle market and the initiative demonstrates commitment to support a successful and growing market for electric vehicles, an important influence on climate change, and to support reducing dependence on oil. CBSC's proposed amendments to the 2013 California Green Building Standards (CALGreen) Code will support the executive order memorandum of understanding.

The proposed changes to the building standards with statewide application will lead to substantial environmental benefits through reduction in the use of energy, water, and raw materials; improved public and building occupant health due to improved indoor air quality; and overall reduced detrimental environmental impacts.

**Specific Proposed Regulatory Actions:** CBSC proposes to amend the 2013 CALGreen during the intervening cycle. It is CBSC's intent to provide clarity to the code user in consistent reference nomenclature to other parts of Title, 24. The rationale for each adoption by chapter, division, and section is listed below.

**1. CBSC Proposes to amend Chapter 3, Section 301 General**

**Section 301.3 Nonresidential additions and alterations [BSC].**

**Rationale:** CBSC is proposing to clarify the application of the additions and alterations by fixing the banner to a single [A] to signify that it applies to either an addition and/or an alteration. This change will be consistent with the current [A] banner used in the current CALGreen Code.

**Section 301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:**

**Rationale:** CBSC is proposing to add a new code section to act as a "pointer" to the newly effective Civil Code Section 1101.1, *et seq* provisions. This code change will align with the Department of Housing and Community Development's (HCD) 2013 code change for a similar code provision.

## **2. CBSC Proposes to amend mandatory regulations in Chapter 2 Definitions and Division 5.1, Section 5.106 Site Development as related items**

### **Section 202 Definitions - Electric Vehicle (EV)**

**Rationale:** The purpose for this amendment is to add electric motorcycles to the list of automotive-type vehicles for on-road use.

This proposal would make the definition consistent with the definition “Electric Vehicle” as defined in Article 625 of the 2013 California Electrical Code.

### **Section 5.106.5.3 Electric vehicle (EV) charging. [N]**

**Rationale:** CBSC proposes this section for adoption which clarifies application of mandatory EV charging requirements to new construction; provides a reference to the California Building Code and the California Electric Code.

In the 2013 CALGreen Code, provisions for electric vehicle (EV) charging exist as voluntary elective measures in Section A5.106.5.3. CBSC proposes to adopt the voluntary EV charging provisions, with modifications, as mandatory measures. The new mandatory building standard is proposed to further develop EV regulations for the implementation of Governor Brown’s Executive Order B-16-2012 to achieve a benchmark for having over 1.5 million zero-emission vehicles on California roadways by 2025. In addition, Assembly Bill 1092 (Chapter 410, Statutes of 2013) authored by Assembly Member Levine directs CBSC to develop mandatory EV standards for non-residential development for the next triennial code adoption cycle. In support of the Governor’s Executive Order B-16-2012, CBSC had already begun the transition of the voluntary tier provisions to mandatory. The proposed language will transition current voluntary EV infrastructure requirements to acceptable mandatory requirements.

In addition to supporting the Administration’s directives, CBSC’s goal is to enable future charging capability at non-residential facilities in an effort to reduce the lack of access to EV charging which currently exists. We believe this effort will further encourage the purchase and use of EVs for routine transportation. In addition, this proposal would result in significant cost savings for future installation of EV charging stations at non-residential occupancies.

#### **Section 5.106.5.3.1 Single charging space requirements. [N]**

**Rationale:** CBSC proposes to adopt this section which requires specified criteria to be included in construction plans and specifications to ensure infrastructure will be capable of supporting EV chargers at the 40-amp or greater level.

This proposed language is based on the voluntary tier measure and is amended by incorporating comments received from stakeholders at the two (2) EV workshops. In addition this language has been coordinated to the extent possible with the Department of Housing and Community Development (HCD) for consistency.

This proposed section would require that a raceway be installed at the time of construction, and would include suitable listed equipment. A minimum 1” raceway trade size is required which would allow some flexibility to install future EVSE greater than the minimum 40 amperes. Preplanning for EV charging would minimize future retrofit costs. This language has been coordinated to the extent possible with HCD for consistency.

#### **Section 5.106.5.3.2 Multiple charging spaces requirements. [N]**

**Rationale:** CBSC proposes to adopt this section which requires specified criteria to be included in construction plans and specifications to ensure infrastructure will be capable of supporting EV chargers at 40 amperes or greater and simultaneous charge all EV’s at future charging spaces. This proposed section would require that raceway(s) be installed at the time of construction. This section also requires construction plans to indicate the future location of EVSE’s, and location of the raceway(s) termination point. The proposed language specifies the electrical calculation requirements for plan design. This proposed language was based on the voluntary measure and amended by

incorporating comments received from interested parties at the two (2) EV workshops. In addition this language has been coordinated to the extent possible with HCD for consistency. Preplanning for EV charging would significantly minimize future retrofit costs.

#### **Section 5.106.5.3.3 EV charging calculation. [N] and Table 5.106.5.3.3 [N]**

**Rationale:** This section and table specify the minimum number of required parking spaces to be used to design the electrical infrastructure for future EVSE capability. The minimum numbers are based on industry research, comments received from interested parties and comments received during the two (2) EV workshops conducted by CBSC.

CBSC was unable to obtain documentation to determine the percentage of 100% dependent electric vehicles versus plug-in hybrid electric vehicles. The research available varies as rebate incentives for EV purchases have increased all electric vehicle sales. Hybrids sales have declined, but now that much of the rebate incentives have been depleted, it's difficult to project future sales. Subsequently, CBSC used Section 5.106.5.2 "Designated parking" as a benchmark and created a sliding table similar to the designated parking section.

The intent of this section is to have raceway(s) installed for future EVSE installation at sites having a higher concentration of vehicles. Generally there are longer parking duration times at parking facilities with a greater concentration of vehicles.

Research has also indicated there are specific communities which have a higher amount of EV's and PHEV's. Much of the research is specific to those communities and indicates a need for an increase in the availability of EV charging. However this research doesn't represent California as a whole. In an effort to provide a balanced regulation for all of California, CBSC proposes regulations which would include planning for EV infrastructure in new non-residential construction having 51 or more parking spaces as a minimum. Communities wanting additional EV charging measures can adopt, through the ordinance process, a tier offered in the voluntary measures on any more restrictive EV regulation.

This section provides an exception to allow the local enforcing agency to determine on a case-by-case basis if EV charging and infrastructure is not feasible for a particular project. The exception language incorporates comments received from interested parties at the EV workshops. This language has been coordinated to the extent possible with HCD for consistency.

#### **Section 5.106.5.3.4 [N] Identification.**

**Rationale:** CBSC proposes to adopt this section requiring the identification of the reserved overcurrent protective device space assigned to the EV charging circuit at the service panel or subpanel as "EV CAPABLE." The title of this section has been changed from "Labelling requirement," in the existing voluntary measure, to differentiate it from the formal labelling by organizations or manufacturers. There is minimum cost impact for implementation since the California Electrical Code only requires identification at the circuit directory in panels or subpanels to be durably marked without specificity for method or material. This language has been coordinated with HCD for consistency.

#### **Section 5.106.5.3.5 [N]**

**Rationale:** CBSC proposes to adopt this section clarifying that future EV charging spaces qualify as designated parking for fuel efficient vehicles. Comments received from interested parties at the EV workshops have been incorporated into this section.

#### **Section Notes:**

**Rationale.** CBSC proposes to adopt the "Notes" applicable to Section 5.106.5.3. These "Notes" are located at the end of Section 5.106.5.3.5 and provide resources related to EV charging signage, guidelines, accessibility recommendations, etc. These notes are a list of resources for the code user.

The Governor's Office of Planning and Research developed a Zero-emissions Vehicle Community Readiness Guidebook to further assist local jurisdictions with the planning and installation of EV charging stations. The California Department of Transportation updated their Manual on Uniform

Traffic Control Devices to include signage for EV charging stations. The notes have been coordinated with HCD for consistency.

### **3. CBSC Proposes to amend mandatory regulations in Division 5.3 Water Efficiency and Conservation**

#### **Section 5.303.2 Water Reduction.**

**Rationale:** CBSC is proposing to repeal this section along with the exception for performance calculation method for indoor water use and also repeal the Water Use Baseline Table 5.303.2.2. This code change will align with HCD's 2013 code change for similar "prescriptive only" code provisions. The benefit from the proposed code change will be to add uniformity and consistency between the residential and nonresidential codes and simplify the code by removing code sections and calculation worksheets.

#### **Section 5.303.2.1 Areas of addition or alteration.**

**Rationale:** CBSC is proposing to relocate and renumber this code section to section 5.303.4 with editorial amendments. The relocation will add clarity that this section applies to all "water conserving plumbing fixtures and fittings" under section 5.303.3.

#### **Table 5.303.2.3**

##### **WATER REDUCTION FIXTURE FLOW RATES**

**Rationale:** CBSC is proposing to move all the plumbing fixture types out of Table 5.303.2.3 and into individual code subsections under the main heading Section 5.303.3.4 "Faucets and Fountains" listed below. These subsections will be under the "water conserving plumbing fixtures and fittings" code section 5.303.3. This formatting change will be consistent with HCD's 2013 code change for similar code provisions.

#### **Section 5.303.3.4 Faucets and Fountains.**

**Rationale:** CBSC is proposing to add this new section for faucets and fountains and serve as the main heading for the fixture types that are being moved out of Table 5.303.2.3 and into individual code sections all under the "water conserving plumbing fixtures and fittings" code section.

##### **Section 5.303.3.4.1 Lavatory faucets.**

**Rationale:** Editorial change: This new section for lavatory faucets is being added since lavatory faucets are currently only listed in the Water Use Baseline Table 5.303.2.2 which is being repealed. Once the Water Use Baseline Table is repealed there would be no reference to lavatory faucet flow rates. This new section will be under the "water conserving plumbing fixtures and fittings" code section. This formatting change will be consistent with HCD's 2013 code change for similar code provisions.

##### **Section 5.303.3.4.2 Kitchen faucets.**

**Rationale:** This new section is being added since the kitchen faucets and other fixture types are being moved out of Table 5.303.2.3 and into individual code sections. CBSC is proposing an allowance for a temporarily increase in the flow above the maximum rate for pot filling with a default back to the baseline. This new section will be under the "water conserving plumbing fixtures and fittings" code section. This proposed code change and format change will be consistent with the HCD's 2013 code change for similar code provisions.

##### **Section 5.303.3.4.3 Wash fountains.**

**Rationale:** Editorial change: This new section is being added since the wash fountains and other fixture types are being moved out of Table 5.303.2.3 and into individual code sections. This new section will be under the "water conserving plumbing fixtures and fittings" code section. This formatting change will be consistent with HCD's 2013 code change for similar code provisions.

##### **Section 5.303.3.4.4 Metering faucets.**

**Rationale:** Editorial change: This new section is being added since the metering faucets and other fixture types are being moved out of Table 5.303.2.3 and into individual code sections. This new section will be under the “water conserving plumbing fixtures and fittings” code section. This formatting change will be consistent with HCD’s 2013 code change for similar code provisions.

**Section 5.303.3.4.5 Metering faucets for wash fountains.**

**Rationale:** Editorial change: This new section is being added since the Metering faucets for wash fountains and other fixture types are being moved out of Table 5.303.2.3 and into individual code sections. This new section will be under the “water conserving plumbing fixtures and fittings” code section. This formatting change will be consistent with HCD’s 2013 code change for similar code provisions.

**Note:** Where complying faucets...

**Rationale:** CBSC is proposing to add a note for faucets that allows for aerators or other means to be used where complying faucets are not available. This proposed code change will be consistent with HCD’s 2013 code change for similar code provisions.

**Section 5.303.2.1 Areas of addition or alteration.**

**Rationale:** CBSC is proposing to relocate the existing code section from section 5.303.2.1 and renumber as 5.303.4 with editorial amendments. The relocation will add clarity that this section applies to all water conserving plumbing fixtures and fittings.

**Section 5.303.4 Wastewater reduction. [N]**

**Rationale:** Editorial changes. CBSC is proposing to renumber this code section from section 5.303.4 to 5.303.5 and repeal the reference to Section 5.303.2 in item 1 as that section is being repealed.

**4. CBSC Proposes to amend mandatory regulations in Division 5.4 Material Conservation and Resource Efficiency, Section 5.408 Construction Waste Reduction, Disposal and Recycling**

**Section 5.408 Construction Waste Reduction, Disposal and Recycling.**

**Rationale:** CBSC is proposing to increase the standard from 50% to 65%. This proposed change is moving the current tier 1 voluntary measure of 65% to the mandatory measure. This code provision has gone un-amended for three years and the market has now had an opportunity to implement the requirement and it appears that 65% is an achievable percent for construction waste reduction/disposal/recycling.

**5. CBSC Proposes to amend mandatory regulations in Division 5.4 Material Conservation and Resource Efficiency, Section 5.410 Building Maintenance and Operation**

**Section 5.410.2 Commissioning. The rationale and benefit** of this action is to clarify the language for the commissioning exceptions. CBSC has received several calls from building officials and commissioning agents asking for clarification of the term “dry storage warehouse”. The term “dry storage warehouse” has no specific definition. The intent of the exception is to exempt a warehouse or storage facility from being commissioned when its contents is not required to be conditioned. However, standard California Energy Code requirements still apply. CBSC proposes to replace the term “dry storage warehouse” with “unconditioned warehouse” to better express the intent of the exception. A suggestion was made at the 2013 Green Building Focus Group meeting August 20<sup>th</sup>, 2013, that open parking garages be added to the exception for building commissioning as open parking garages are unconditioned spaces. In an effort to be grammatically consistent, CBSC proposes to replace the word “under” with “less than”.

A non-regulatory reference note is added at the end of this section, providing reference to a document which may be of assistance to the local authority having jurisdiction when determining qualification of persons completing commissioning.

## **6. CBSC Proposes to amend mandatory regulations in Division 5.5 Environmental Quality, Section 5.504 Pollutant Control**

### **Section 5.504.4.4 Carpet systems.**

**Rationale:** Editorial; This code section is being updated to reflect the new naming system for EQ. 2.2. The new name is now EQ. 7.0 and EQ. 7.1.

### **Section 5.504.4.6 Resilient flooring systems.**

**Rationale:** Editorial; The standard, Greenguard Children's & Schools Program, has a modified title and is now "UL GREENGUARD Gold".

## **7. CBSC Proposes to amend Chapter 8 Compliance Forms and Worksheets WS-1, WS-2, WS-3**

### **(WORKSHEET (WS-1)**

#### **BASELINE WATER USE**

**Rationale:** CBSC is proposing to update the HCD reference to sample forms on their behalf. Additionally, the Worksheet (WS-1) is being modified to repeal all references to residential items including related footnotes as HCD did not adopt this form and repealed the performance calculation method during the 2013 code cycle. Additionally, all references to nonresidential verbiage is being repealed because the residential items are being removed from this form and the form will only be for nonresidential applications. Also, the flow rates for kitchen faucets, wash fountains, metering faucets, metering faucets for wash fountains are being modified to align with the mandatory reduced fixture flow rates for those fixture types found in Table 5.303.2.3. Basically, table 5.303.2.3 sets the new water use baseline for those fixtures.

### **(WORKSHEET (WS-2)**

#### **WATER USE REDUCTION**

**Rationale:** CBSC is proposing to repeal Worksheet (WS-2) and footnotes. The worksheet is for a 20-percent reduction in flow rate calculation which will become obsolete once this calculation method option is repealed in Section 5.303.2 Water Reduction and will no longer be referenced in the code. This code change will also coincide with the repeal of Section 5.303.2 Water Reduction and the Water Use Baseline Table which repeals the performance calculation.

### **(WORKSHEET (WS-32)**

#### **WATER USE REDUCTION**

**Rationale:** CBSC is proposing to amend WS-3 as follows:  
Rename WS-3 to WS-2 as WS-2 is being repealed. Repeal all references to residential items including related footnotes as HCD did not adopt this form and repealed the performance calculation method during the 2013 code cycle. Modify the footnote numbers in the form to coordinate the repealed footnotes. Amend the 30 % to 12%, 35% to 20% and 40% to 25%. The reduced percentages for the water reduction calculations is necessary because during the 2013 code adoption cycle, CBSC reduced the fixture flow rates for plumbing fixtures by 20% but did not reduce the Tier 1-30% and Tier 2-35% & 40% to the percentages that correlate with the 20% reduction. Basically, CBSC made the 20% reduction the new water use baseline during the 2013 code cycle and the Tier1 and Tier2 need to be adjusted accordingly. Additionally, all references to nonresidential verbiage is being repealed because the residential items are being removed from this form and the form will only be for nonresidential applications.

## **8. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.106 related to EV Charging**

### **Section A5.106.5.3 Electric Vehicle (EV) Charging.**

**Rationale:** CBSC proposes to amend the above referenced section by providing general requirements and a reference to the California Electrical Code. This language was amended to align with the new mandatory Section 5.106.5.3.

#### **Section A5.106.5.3.1 Single charging space requirements.**

**Rationale:** CBSC proposes to amend the above referenced section by providing specificity to the raceway provisions. This language was amended to point to the mandatory section for consistency.

#### **Exception:**

**Rationale:** The section has been repealed because the Authority Having Jurisdiction already has authority in the California Building Code to approve alternative materials, design and methods of construction and equipment.

#### **Section A5.106.5.3.2 Multiple charging space requirements.**

**Rationale:** CBSC proposes to amend the above referenced section by providing specificity to the raceway provisions. This language was amended to point to the mandatory section for consistency.

#### **Section A5.106.5.3.3 Tier 1.**

**Rationale:** CBSC proposes to increase the Tier 1 provision from 3% to 4% in an effort to further advance the potential for EV preparedness. The Tier 1 provision has been modified to incorporate a sliding scale similar to the mandatory measure, but enhanced. Tier 1 would capture parking facilities have less than 50 stalls which is consistent with the previous Tier 1 language of “not less than one”. This section has been updated to incorporate comments received from interested parties at the EV workshops. There is no fiscal effect since it was a voluntary measure available for adoption by local agencies.

#### **Section A5.106.5.3.4 Tier 2.**

**Rationale:** CBSC proposes to increase the Tier 2 provision from 5% to 6%. The Tier 2 provision has been modified to incorporate a sliding scale similar to the mandatory and Tier 1 measures, but enhanced. Tier 2 would require parking facilities having less than 50 stalls, require 2 spaces which is consistent with the previous Tier 2 language of “not less than two”. This section has been updated to incorporate comments received from interested parties at the EV workshops. There is no fiscal effect since it was a voluntary measure available for adoption by local agencies.

#### **Section A5.106.5.3.5 Identification.**

**Rationale:** CBSC proposes to amend this section to align with the new mandatory identification language. There is no fiscal effect since it was a voluntary measure available for adoption by local agencies.

#### **Section A5.106.5.3.6**

**Rationale:** CBSC proposes to adopt this section clarifying that future EV charging spaces qualify as designated parking for fuel efficient vehicles. This is consistent with the mandatory measure.

#### **Section Notes:**

**Rationale.** CBSC proposes to adopt the “Notes” at the end of Section A5.106.5.3, following Section A5.106.5.3.6, providing resources related to EV charging signage, guidelines, accessibility recommendations, etc. These Notes are a list of resources for the code user. This is consistent with the mandatory measure.

## **9. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.106 related to Cool Roof**

### **A5.106.11.2.3 Solar reflectance index alternative.**

**Rationale:** CBSC is proposing to amend Table A5.106.11.1 for Tier1 and Tier2. As a result of the California Energy Commission's (CEC) Solar Reflectance Index (SRI) value increase, CBSC is proposing to increase the SRI values found on the voluntary measure Table A5.106.11.2.1. The Tier 1 increase will align with CEC's 140.3 (a) 1A (i) and match the CEC's SRI values in their prescriptive calculation. CBSC is also proposing to increase the current Tier 2 SRI values to an appropriate increased value from the new Tier 1. The proposed numbers for Tier 2 will align with the City Los Angeles amended SRI Tier 1 values.

## **10. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.303 related to Indoor Water Use**

### **Section A5.303.2.3.1 Tier 1 – ~~30~~ 12 percent savings. [BSC]**

**Rationale:** CBSC is proposing to amend section A5.303.2.3.1 Tier 1 from 30 % to 12%,the reduced percentages for the water reduction calculations is necessary because during the 2013 code adoption cycle, CBSC reduced the fixture flow rates for plumbing fixtures by 20% but did not reduce the Tier 1-30% to the percentages that correlate with the 20% reduction. Basically, CBSC made the 20% reduction the new water use baseline during the 2013 code cycle and Tier1 needs to be adjusted accordingly. Additionally, Methods 1 and 2 need to be modified accordingly along with an editorial correction to the table references noted in method 1.

### **Section A5.303.2.3.2 Tier 2 – ~~35~~ 20 percent savings.**

**Rationale:** CBSC is proposing to amend section A5.303.2.3.2 Tier 2 from 35 % to 20%,the reduced percentages for the water reduction calculations is necessary because during the 2013 code adoption cycle, CBSC reduced the fixture flow rates for plumbing fixtures by 20% but did not reduce the Tier 2-35% to the percentages that correlate with the 20% reduction. Basically, CBSC made the 20% reduction the new water use baseline during the 2013 code cycle and Tier1 needs to be adjusted accordingly.

### **Section A5.303.2.3.3 – ~~40~~ 25 percent savings.**

**Rationale:** CBSC is proposing to amend section A5.303.2.3.3 from 40% to 25%,the reduced percentages for the water reduction calculations is necessary because during the 2013 code adoption cycle, CBSC reduced the fixture flow rates for plumbing fixtures by 20% but did not reduce the 40% to the percentages that correlate with the 20% reduction. Basically, CBSC made the 20% reduction the new water use baseline during the 2013 code cycle and 40% reduction needs to be adjusted accordingly.

### **A5.303.2.3.4 Nonpotable water systems for indoor use.**

**Rationale:** Editorial; CBSC is proposing to amend section A5.303.2.3.4 water reduction percentages from 20% to 12%, 30% to 20% and 40% to 25% to align with the corresponding reduced percentages for the water reduction calculations in sections A5.303.2.3.1, A5.303.2.3.2, and A5.303.2.3.3.

### **Table A5.303.2.2**

#### **WATER USE BASELINE**

**Rationale:** CBSC is proposing to amend Table A5.303.2.2 All references to nonresidential verbiage is being repealed because the residential items are being removed from this form and the form will only be for nonresidential applications. Also, the flow rates for kitchen faucets, wash fountains, metering faucets, metering faucets for wash fountains are being modified to align with the mandatory reduced fixture flow rates for those fixture types found in Table 5.303.2.3. Basically, table 5.303.2.3 sets the new water use baseline for those fixtures.

### **Table A5.303.2.3.1**

#### **FIXTURE FLOW RATES**

**Rationale:** CBSC is proposing to amend Table A5.303.2.3.1. All references to nonresidential verbiage is being repealed because the residential items are being removed from this form and the form will only be for nonresidential applications. Also, the flow rates for kitchen faucets, wash

fountains, metering faucets, metering faucets for wash fountains are being modified to align with the mandatory reduced fixture flow rates for those fixture types found in Table 5.303.2.3. Basically, table 5.303.2.3 sets the new water use baseline for those fixtures. The urinal flow rate is being modified to show a 12% reduction. Additionally, footnote 2 table reference is being corrected.

## **11. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.408 related to Construction Waste Reduction, Disposal and Recycling**

### **Section A5.408.3.1 Enhanced construction waste reduction – Tier 1 [BSC].**

**Rationale:** CBSC is proposing to increase the voluntary standard for Tier1 from 65% to 80%, This proposed change is basically moving the current tier 2 voluntary measure of 80% to the Tier1 measure. This code provision has gone un-amended for three years and the market has now had an opportunity to implement the requirement.

### **Section A5.408.3.1.1 Enhanced construction waste reduction – Tier 2 [BSC].**

**Rationale:** CBSC is proposing to increase the voluntary standard for Tier2 from 80% to 90%, This proposed change is basically increasing the current tier 2 voluntary measure of 80% to the correlate with the appropriate increase from the proposed Tier1 measure. This code provision has gone un-amended for three years and the market has now had an opportunity to implement the requirement.

## **12. CBSC Proposes to amend voluntary regulations in Division A5.1, Section A5.504 related to Pollutant Control**

### **Section A5.504.4.7 Resilient flooring systems, Tier 1. [BSC]**

**Rationale:** CBSC is proposing to amend item 3 to align with the equivalent mandatory provision item of section 5.504.4.6 which has an editorial name changes. Additionally, CBSC is proposing to amend item 4 as the standard, Greenguard Children's & Schools Program, has a modified title and now is "UL GREENGUARD Gold".

### **Section A5.504.4.7.1 Resilient flooring systems. Tier 2. [BSC]**

**Rationale:** CBSC is proposing to amend item 3 to align with the equivalent mandatory provision item of section 5.504.4.6 which has an editorial name changes. Additionally, CBSC is proposing to amend item 4 as the standard, Greenguard Children's & Schools Program, has a modified title and now is "UL GREENGUARD Gold".

## **13. CBSC Proposes to amend Table A5.601 Green Building Standards Code Proposed Performance Approach**

### **Table A5.601**

**Rationale:** CBSC is proposing to amend Table A5.601 Green Building Standards Code Proposed Performance Approach. The table is being updated to reflect changes made in both the mandatory provisions of Chapter 5 and voluntary provisions of Appendix A5 as they pertain to Electric vehicle charging, cool roofs to reduce heat island effect, indoor water use and construction waste reduction.

## **14. CBSC Proposes to amend Table A5.602 Nonresidential Occupancies Application Checklists**

### **Table A5.602**

**Rationale:** CBSC proposes to amend the above referenced checklist. The Nonresidential Occupancies Application Checklist is being updated to reflect changes made in both the mandatory provisions of Chapter 5 and voluntary provisions of Appendix A5. Additionally, there are editorial updates to the checklist to reflect current supplements and errata items along with coordinating the code language in both the mandatory and voluntary code provisions. The

Nonresidential Occupancies Application Checklist is a reference document and may be modified and used as a template by local enforcing agencies. This checklist reflects mandatory and Tier 1 and Tier 2 prerequisites and is not by itself a regulatory document.

**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).

American Council for Energy-Efficient Economy (ACEEE), *2012 Summer Study on Energy Efficiency in Buildings, Reducing Barriers to Electric Vehicle Adoption through Building Codes*, Jordan Shackelford, Alex Chase and Michael McGaraghan, Energy Solutions; Stuart Tartaglia, Pacific Gas and Electric Company. <<http://www.aceee.org/files/proceedings/2012/start.htm>>

California Plug-in Electric Vehicle Collaborative. *Amping up California workplaces: 20 case studies on plug-in electric vehicle charging at work*, November 2013 <<http://www.evcollaborative.org/workplace-charging>>

Governor's Office of Planning and Research, *Zero-Emission Vehicles in California: Community Readiness Guidebook*, fall 2013 <[http://opr.ca.gov/s\\_zero-emissionvehicles.php](http://opr.ca.gov/s_zero-emissionvehicles.php)>

Luskin Center for Innovation, *South Bay Cities Plug-in Electric Vehicle Deployment Plan*, June 2013 <<http://innovation.luskin.ucla.edu/content/south-bay-cities-plug-electric-vehicle-plan>>

**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.)

California's building standards codes have historically been a mix of performance and prescriptive provisions and reference standards. This code is no different, and wherever possible, a performance options is included to provide flexibility to the code user.

**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 reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

The modifications that CBSC proposes during this intervening cycle are intended to clarify and correct as necessary the provision of the mandatory code being used in California. The amendments are responsive to comments received in the previous and current code adoption cycles and to address concerns raised at various training events held by CBSC across the state. No alternative to this responsive action were considered.

**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.)

No alternatives were identified to lessen the adverse impact on small business, but the most of the modifications to the code are proposed for facilitation of understanding and compliance by the code user. Those proposal that are new to the code or are made more stringent have been thoroughly vetted through stakeholder outreach and have been justified by proposing parties as to cost/benefit.

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

(Government Code Section 11346.2(b)(6)(A) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business)

BSC 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.

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

(Government Code Section 11346.2(b)(6)(B) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.)

- No increased cost of compliance for those regulations that make technical, nonsubstantive or clarifying changes.
- Increased cost of compliance for a few regulations, such as infrastructure for EVSE; however, the benefit of providing the groundwork for new green technology which will preserve natural resources far outweighs the modest cost impact.
- Protection of public health and safety, worker safety and the environment.
- General welfare of California residents.

### **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.)

These regulations do not duplicate nor conflict with federal regulations.