

**INITIAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
REGARDING THE AMENDMENT OF THE  
2013 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11  
(HCD 05/13)**

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The Administrative Procedure Act (APA) requires an Initial Statement of Reasons 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 amend the 2013 California Green Building Standards Code (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 2013 California Green Building Standards Code (CALGreen) becomes effective on January 1, 2014. HCD has developed amendments to the 2013 CALGreen Code to incorporate updates and corrections to regulations, which will benefit the health, safety and general welfare of California residents by continuing to reduce greenhouse gas emissions, promote a reduction in detrimental environmental impacts, and 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 with an emphasis on zero-emission vehicles and supporting infrastructure.

The proposed changes to the 2013 CALGreen Code are necessary to provide clarity and consistency for enforcement and application with regard to statewide needs and to address conditions unique to California.

## **Specific Proposed Regulatory Actions:**

HCD proposes to amend the 2013 CALGreen Code. The rationale for each amendment is listed below.

### **1. CHAPTER 1 ADMINISTRATION**

#### **SECTION: 104.1 Scope.**

**Rationale:** HCD proposes to amend the above referenced section by deleting an outdated reference to the Matrix Adoption Table. This proposal is consistent with prior proposals related to deletion of references to the Matrix Adoption Tables in the Building Standards Codes. There is no intended change in regulatory effect.

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### **2. CHAPTER 2 DEFINITIONS**

#### **SECTION: 202 Definitions.**

**Rationale:** HCD proposes to amend the definition of "ELECTRIC VEHICLE (EV)" by adding electric motorcycles to the list of automotive-type vehicles for on-road use. This proposal would provide consistency between the 2013 CALGreen Code and the 2013 California Electrical Code.

HCD also proposes to adopt a definition for "SMALL SOLAR PHOTOVOLTAIC (PV) SYSTEM", which is referenced in the proposed new Section A4.107.2. The definition informs the code user as to the maximum electrical output capacity in kW of the PV system referenced in the proposed new section.

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### **3. CHAPTER 4 RESIDENTIAL MANDATORY MEASURES**

#### **SECTION: 4.106.4 Electric vehicle (EV) charging for new construction.**

**Rationale:** Currently, provisions for electric vehicle (EV) charging exist as voluntary elective measures in Section A4.106.8. HCD proposes to adopt the voluntary EV charging provisions, with modifications, as mandatory measures to support 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 and the Governor's October 2013 announcement of an initiative to put 3.3 million zero-emission vehicles on the roadways within a dozen years. (The 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.) In addition, the Governor's Interagency Working Group on Zero-Emission Vehicles, "2013 ZEV Action Plan," designates HCD as the lead agency for considering amendments to the California Building Standards Code to ensure new residential buildings are ZEV-ready and requiring multi-unit buildings to dedicate a portion of their parking lots for EV charging.

HCD's proposal, in addition to supporting the Administration's directives, facilitates charging capability at residences to further encourage purchase and use of EVs for routine transportation purposes and assists in reducing impediments such as lack of access to EV charging. This proposal would result in significant cost savings for homeowners who choose to use EVs for transportation, however, need to retroactively install higher capacity electrical wiring and supply equipment for charging EVs and for building owners who need to accommodate tenants with electrical vehicle charging needs. The proposal also provides a cost savings for state agencies that may need to offer incentive funding, such as the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program for accommodating user needs for electrical upgrades for purposes of electrical vehicle charging.

Research on California's readiness for EV charging was conducted with funding from the California Energy Commission's Alternative and Renewable Fuel and Vehicle Technology Program. This funding enabled HCD to hire a subcontractor, ConSol, to conduct research, compile and evaluate data, and develop conclusions on EV charging technology, code requirements, costs for various levels of installations, and identify conditions which may not support EV charging. This information is included in a report called the "Electric Vehicle Readiness Study" (as prepared for HCD). This report has been submitted to the California Energy Commission, however, as of February 2014, has not yet been formally released to the public. Cost information used for this ISOR will be derived from the study, when available, unless otherwise indicated.

HCD proposes adoption of Section 4.106.4, which clarifies application of mandatory EV charging requirements to new construction; provides a reference to the California Electrical Code, specifically Article 625 addressing EV charging; and provides exceptions to the EV charging requirements for conditions in which EV charging may not be feasible or practical, as specified.

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#### **4. CHAPTER 4 RESIDENTIAL MANDATORY MEASURES**

##### **SECTION: 4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages.**

**Rationale:** HCD proposes to adopt the above referenced section bringing forward provisions from Section A4.106.8.1 (voluntary elective) as a mandatory measure with some revisions. Proposed Section 4.106.4.1 has been revised from its current voluntary format to clarify application to new construction and also include townhouses with attached private garages, which are considered single-family dwellings; specifies the voltage of the future branch circuit as 208/240-volt; and specifies that the service panel or subpanel shall have sufficient space and capacity to accommodate a 40-ampere minimum dedicated branch circuit, including an overcurrent protective device (breaker).

The proposed EV charging requirement for one- and two-family dwellings and townhouses with attached private garages is only for a raceway (no wiring) with a specified minimum size. The minimum size ensures that conductors (wiring) of up to 80 amps may be accommodated if desired by the EV user or for EV vehicles capable of faster recharge rates. This raceway-only requirement is being proposed to accommodate situations in which a resident adopts EV use several years after the structure is built. Although comments have been received that the size of EV batteries may not change considerably during the effective period of the 2013 CALGreen, the buildings are intended to last much longer. The raceway option literally provides a conduit for supporting appropriately sized conductors when EV charging becomes a need for the resident. In addition, the conduit also facilitates easy replacement of any conductors that have been installed if the conductors are damaged or need to be upgraded. A raceway-only installation only abates concerns for live unused wires or wasted copper wiring. The service panel or subpanel requirements ensure that the panel or subpanel will have sufficient space for the overcurrent protective devices and amperage to support future EV charging at least at a 40-ampere minimum level.

**Cost analysis:** The raceway-only option has minimal cost although there will still be additional costs upon installation of the actual conductors, receptacles and overcurrent protection devices. However, these costs would still be less than costs for retroactively installing conductors without a raceway.

The proposed installation of conduit and panel sizing has the potential to result in significant cost savings compared to future costs of installation of this infrastructure for EV charging. As a separate option for new homes, some builders have offered EV charging capability for \$250.00. The typical cost to facilitate EV charging (Level 2; 40 amperes) after construction of the home has been estimated at approximately \$3,500.00; however, the cost could be higher depending on the need to increase levels of service to the dwelling, panel upgrades, distances from the panel to the vehicular area, need for removing materials and pulling wiring through enclosed spaces, possible trenching, possible costs related to inadequate utility infrastructure, etc.

**5. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.1.1 Identification.**

**Rationale:** HCD proposes to adopt the above referenced section. This section requires identification of the proposed or reserved overcurrent protective device (breaker) space(s) assigned to the EV charging circuit at the service panel or subpanel as “EV CAPABLE.” Identification is also required at the termination point. The title of this section has been changed from “Labeling requirement,” in the existing voluntary measure to differentiate it from the formal “labeling” by organizations or manufacturers. There is minimum cost impact for implementation due to existing requirements in the California Electrical Code, Sections 110.22 and 408.4, which, in part, requires identification at the circuit directory in panels or subpanels to be durably marked without specificity for method or material. A similar method of identification could also be used at the raceway termination point.

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**6. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2 New multifamily dwellings.**

**Rationale:** HCD proposes to adopt the above referenced section bringing forward provisions from Section A4.106.8.2 (voluntary elective) as a mandatory measure with some revisions. Section 4.106.4.2 has been revised to clarify application to only projects with more than 16 multifamily dwelling units. This section requires the number of spaces capable of EV charging to be based on 3 percent of the total number of all parking spaces in all types of parking spaces. This section also specifies five requirements which apply to this section requiring single (only one) EV charging spaces to be located in common use areas, determining number of EV charging spaces based on either unassigned (common use) or assigned parking spaces, exclusion of parking spaces/areas already required to have EV charging capability per Section 4.106.4.1 (townhouses with private attached garages) and clarification that construction plans indicate the location of proposed EV charging spaces although EV chargers are not installed at original construction. It is understood that the code cannot address every possible parking lot design so some situations may need a case-by-case application.

This section also provides for an EV charging space available for universal use as further specified in Section 4.106.4.2.1. For purposes of this code, this universal charging space would be available for all users. This space would also provide the length, width, slope and access aisle similar to the dimensions of an accessible parking space meeting the California Building Code, Chapter 11A, and would also be on an accessible route. The proposed ratios for universal use EV charging spaces vs. “standard” EV charging spaces were recommendations from ECOTality North America’s 2011 document “EV Project: Accessibility at Public EV Charging Locations”, which considered design requirements from the 2010 Americans with Disabilities Act.

In addition to the background information discussed for Section 4.106.4, Assembly Bill 1092 (Chapter 410/Statutes of 2013) directed HCD to propose mandatory building standards for installation of future EV charging infrastructure for parking spaces in multifamily dwellings. The statute also directed HCD to use existing measures in CALGreen (Section A4.106.8 as corrected) as a “starting point” for the proposed standards. The proposed building standards would be available for adoption in the next triennial edition (2016 version effective January 1, 2017) of the building standards code; therefore, HCD’s current proposal is in advance of the statutory directive.

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**7. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2.1 Dimensions and slope of EV charging spaces.**

**Rationale:** HCD proposes to adopt the above referenced new section, which clarifies minimum dimensions for EV charging spaces. HCD proposes an EV charging space length of 18 feet to provide adequate distance in front of the vehicle for working space in front of the vehicle and the charging equipment.

The minimum width of 9 feet (wider than standard smaller parking space size) is proposed to provide EV users more room to detach the EV connector from the charger, attach/detach it to and from the vehicle, and reattach it to the charger unit. Depending on the EV being charged, the charge ports may be located on either side,

towards the front or rear, or directly on the front of the vehicle. This uncertainty is compounded by the unknown width of the EV being charged, which may as wide as 6 feet 10 inches. Therefore, the 9-foot width is a bare minimum.

HCD also proposes that one in every 25 charging spaces, but not less than once space, be a wider space than the “standard” EV charging space capable of being used by all users. For this space, an adjacent 5-foot aisle (total space/aisle width would be 14 feet wide) is proposed. In addition, HCD proposes that both the EV charging space and aisle have a slope of 2.03 percent which is capable of being used by all users.

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**8. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2.2 Installed EV chargers for multifamily dwellings.**

**Rationale:** HCD proposes to adopt the above referenced new section, which clarifies that when EV chargers (off-board) are installed in common use areas, at least one EV charging space is required to be located adjacent to an accessible parking space, which would facilitate use of the charger from the accessible parking space. The accessible parking space is specified as meeting the requirements of the California Building Code, Chapter 11A. An exception for an alternate location is also proposed if an EV charging space usable by all users, pursuant to Section 4.106.4.2.1, is provided with an accessible route.

This section does not mandate that the charger be installed, but only provides requirements if and when the charger is installed.

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**9. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2.3 Single charging space required.**

**Rationale:** HCD proposes to adopt the above referenced section, which requires only a raceway, as specified, for future EV charging purposes when only a single charging location is required. This section clarifies that approved construction plans would indicate the location of the termination of the raceway. The service panel or subpanel requirements ensure that the panel or subpanel will have sufficient space for the overcurrent protective device(s) and amperage to support future EV charging at a 40-ampere minimum level.

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**10. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2.4 Multiple charging spaces required.**

**Rationale:** HCD proposes to adopt the above referenced section which requires specified criteria to be included in construction plans to ensure infrastructure will be capable of supporting future EV chargers and simultaneous EV charging at full amperage at all charging spaces. This section requires plan design to be based on a 40-ampere minimum branch circuit and that construction plans indicate the location of the termination of the raceway. This section also requires that only underground raceways and related underground components are required to be installed at the time of construction to avoid future retrofit costs, e.g., trenching in surfaced areas.

**11. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.106.4.2.5 Identification, including “Notes”.**

**Rationale:** HCD proposes to adopt the above referenced section. The section requires identification of the proposed or reserved overcurrent protective device (breaker) space(s) assigned to the EV charging circuit at the service panel or subpanel as “EV CAPABLE.” The title of this section has been changed from “Labeling requirement,” in the existing voluntary measure, to differentiate it from the formal “labeling” by organizations or manufacturers. There is minimum cost impact for implementation due to existing requirements in the California Electrical Code, Sections 110.22 and 408.4, which, in part, requires identification at the circuit directory in panels or subpanels to be durably marked without specificity for method or material.

HCD also proposes to adopt the above reference “Notes” at the end of Section 4.106.4, directly following Section 4.106.4.2.5, providing resources related to EV charging signage, guidelines, accessibility recommendations, etc. These Notes are a listing of resources only. There is no cost for implementation.

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**12. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**TABLE 4.504.3 VOC Content Limits for Architectural Coatings**

**Rationale:** HCD proposes to amend the above referenced Table 4.504.3 by deleting the column with an outdated effective date of January 1, 2012, deleting references to effective dates, and changing the VOC content limits for “rust preventative coatings” and “specialty primers, sealers, and undercoaters” to reflect current requirements. There is no fiscal impact since proposed changes are editorial and standards are currently in effect.

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**13. CHAPTER 4  
RESIDENTIAL MANDATORY MEASURES**

**SECTION: 4.504.4 Resilient flooring systems.**

**Rationale:** HCD proposes to amend the above referenced section to clarify the criteria used by the Collaborative for High Performance Schools (CHPS) as the California Department of Public Health’s “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers”, Version 1.1, February 2010 (also known as Specification 01350). There is no intended change in regulatory effect or fiscal impact.

The changes also reflect a name change from GREENGUARD Children & Schools program to UL GREENGUARD Gold. This is a name change only that occurred in early 2013; however, the standards on which certification is based remain the same. (The GREENGUARD Gold Certified products also must comply with the California Department of Public Health’s “Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers”, Version 1.1, February 2010 (also known as Specification 01350). According to UL, manufacturers have three years to comply with the change. There is no intended change in regulatory effect. There is no fiscal impact due to the proposed regulation although there may be cost related to UL’s requirement for manufacturers to use the new designation.

**14. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8 Electric vehicle (EV) charging for new construction.**

**Rationale:** HCD proposes to amend the above referenced section by clarifying application to new construction and providing general requirements and a reference to the California Electrical Code, specifically Article 625, addressing EV charging. Additional revisions reflect changes related to installation of conductors in lieu of the current raceway-only requirement.

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**15. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.1 One- and two-family dwellings and townhouses with attached private garages.**

**Rationale:** HCD proposes to repeal existing Section A4.106.8.1 addressing raceway-only installation for future EV charging purposes in one- and two-family dwellings. This repeal is related to the new proposed mandatory residential provisions for EV charging in the proposed new Section 4.106.4.1. This repeal has no fiscal effect since it was a voluntary measure available for adoption by local agencies.

HCD proposes a new Section A4.106.8.1, which provides a Tier 1 prerequisite measure for EV charging for one- and two-family dwellings and townhouses with attached private garages. This Tier 1 measure, if adopted by a local enforcing agency, will require a 208/240-volt dedicated branch circuit of 40-ampere minimum and associated overcurrent protective device. Panel sizing will be pursuant to the California Electrical Code to accommodate the required dedicated branch circuit and overcurrent protective device. This section also clarifies that other related electrical components to EV charger use be installed in accordance with the California Electrical Code.

This is a voluntary measure available for adoption by local agencies. (See Section 4.106.4 for additional history.)

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**16. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.1.1 Identification.**

**Rationale:** HCD proposes to amend the above referenced section requiring the identification of the overcurrent protective device for the branch circuit at the service panel or subpanel as “EV READY” and also at the receptacle or blank cover. The title of this section has been changed from “Labeling requirement,” in the existing voluntary measure, to differentiate it from the formal “labeling” by organizations or manufacturers. There is minimum cost impact for implementation due to existing requirements in the California Electrical Code, Sections 110.22 and 408.4, which, in part, requires identification at the circuit directory in panels or subpanels to be durably marked without specificity for method or material. A similar method could also be used for identification at the receptacle or blank cover, whichever is used.

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**17. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.2 Multifamily dwellings and “Notes”.**

**Rationale:** HCD proposes to amend the above referenced section addressing EV charging for multifamily dwellings, which includes a requirement for 3 percent of parking spaces, but not less than one, to be capable of supporting EV charging equipment. HCD proposes to identify this section as a Tier 1 measure and to increase the required percentage of EV charging spaces to 5 percent of total parking spaces. This section would reference the similar mandatory Section A4.106.4.2 for additional requirements. This amendment has no mandated fiscal effect since it was a voluntary measure available for adoption by local agencies.

HCD also proposes to adopt the above referenced “Notes” at the very end of Section A4.106.8 providing resources related to EV charging signage, guidelines, accessibility recommendations, etc. These Notes are a listing of resources only. There is no cost for implementation.

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**18. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.2.1 Single charge space required.**

**Rationale:** HCD proposes to repeal existing Section A4.106.8.2.1 addressing a single charge space. This repeal is related to the new proposed mandatory residential provisions for EV charging in proposed new Section 4.106.4.2.3. This repeal has no fiscal effect since it was a voluntary measure available for adoption by local enforcing agencies.

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**19. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.2.2 Multiple charging spaces required.**

**Rationale:** HCD proposes to repeal existing Section A4.106.8.2.2 addressing multiple charging spaces. This repeal is related to the new proposed mandatory residential provisions for EV charging in proposed new Section 4.106.4.2.4. This repeal has no fiscal effect since it was a voluntary measure available for adoption by local enforcing agencies.

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**20. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.106.8.2.3 Labeling requirement.**

**Rationale:** HCD proposes to repeal the above referenced section. This repeal is related to the mandatory residential provisions for EV charging in proposed new Section 4.106.4.2.5. There is no fiscal effect since it was a voluntary measure available for adoption by local agencies.

**21. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.107 SOLAR PHOTOVOLTAIC (PV) SYSTEMS**  
**SECTION: A4.107.1 General.**  
**SECTION: A4.107.2 Small solar photovoltaic (PV) system streamlined permitting process.**

**Rationale:** HCD proposes to renumber existing Section A4.107 to Section A4.108 and adopt new Sections A4.107, A4.107.1 and A4.107.2 which introduce Tier 1 and Tier 2 requirements for a streamlined permitting and inspection process for Small Solar Photovoltaic (PV) Systems as defined in Chapter 2. Certain provisions are based upon the recommendations in the *California Solar Permitting Guidebook*, published June 2012, which was developed by the Governor's Office of Planning and Research, Solar Permitting Work Group.

Jurisdictions that adopt Tier 1 have a choice of either developing their own local streamlined permitting process which contains some of the elements in the *California Solar Permitting Guidebook*, or they may choose to adopt the streamlined permitting process and forms contained in the *California Solar Permitting Guidebook*. Adoption of Tier 1 will require jurisdictions to implement 3 basic elements of permit streamlining, which include: a standard checklist identifying the required documentation to be submitted with the permit application; a standard plan for describing the proposed solar PV system; and an inspection checklist identifying all elements of the solar PV system to be inspected before final approval.

Jurisdictions that adopt Tier 2 will have an additional requirement to implement a web-based permit application and issuance system and a streamlined inspection process of their own design, or based upon the *California Solar Permitting Guidebook*.

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**22. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.108 INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS**  
**SECTION: A4.108.1 Innovative concepts and local environmental conditions.**

**Rationale:** HCD proposes to renumber existing Sections A4.107 and A4.107.1 to new Sections A4.108 and A4.108.1 to accommodate the adoption of new Section A4.107 "Solar Photovoltaic (PV) Systems", which contains provisions for photovoltaic systems and is more appropriately located after Section A4.106 "Site Development". This is an editorial change of renumbering only.

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**23. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.504.2 Resilient flooring systems.**

**Rationale:** HCD proposes to amend the above referenced section to clarify the criteria used by the Collaborative for High Performance Schools (CHPS) as the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).

The changes also reflect a name change from GREENGUARD Children & Schools program to UL GREENGUARD Gold. This is a name change only that occurred in early 2013; however, the standards on which certification is based remain the same. (The GREENGUARD Gold Certified products also must comply with the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350). According to UL, manufacturers have three years to comply with the change. There is no intended change in regulatory effect. There is no fiscal impact due to the proposed regulation although there may be cost related to UL's requirement for manufacturers to use the new designation.

**24. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.504.3 Thermal insulation.**

**Rationale:** HCD proposes to amend the above referenced section to clarify the criteria used by the Collaborative for High Performance Schools (CHPS) as the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).

The changes also reflect a name change from GREENGUARD Children & Schools program to UL GREEN-GUARD Gold. This is a name change only that occurred in early 2013; however, the standards on which certification is based remain the same. (The GREENGUARD Gold Certified products also must comply with the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers", Version 1.1, February 2010 (also known as Specification 01350).

According to UL, manufacturers have three years to comply with the change. There is no intended change in regulatory effect. There is no fiscal impact due to the proposed regulation although there may be cost related to UL's requirement for manufacturers to use the new designation.

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**25. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.601.4.2 Prerequisite and elective measures for Tier 1.**

**Rationale:** HCD proposes to amend the above referenced section to reflect proposed changes for Tier 1 measures for EV charging in Section A4.106.8 and solar photovoltaic streamlined permitting in Section A4.106.7.2. Section A4.601.4.2 provides a listing of Tier 1 requirements as specified in Appendix A4.

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**26. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.601.5.2 Prerequisite and elective measures for Tier 2.**

**Rationale:** HCD proposes to amend the above referenced section to reflect proposed changes for a Tier 2 measure for solar photovoltaic streamlined permitting in Section A4.106.7.2. This section provides a listing of Tier 2 requirements as specified in Appendix A4.

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**27. APPENDIX A4  
RESIDENTIAL VOLUNTARY MEASURES**

**SECTION: A4.602 RESIDENTIAL OCCUPANCIES APPLICATION CHECKLIST**

**Rationale:** HCD proposes to amend the above referenced checklist. 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. The Residential 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).)

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 an alternative. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

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

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

(Government Code Section 11346.2(b)(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.)

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

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

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.

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

(Government Code Section 11346.2(b)(6)(B) states if a proposed regulation that is a building standard impacts housing, 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.
- Cost savings benefit to homeowners who choose to use EVs for transportation, an important influence on climate change, and supports reducing dependence on oil.
- 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.