

**45 DAY STATEMENT OF REASONS  
FOR PROPOSED BUILDING STANDARDS OF THE  
CALIFORNIA DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT  
REGARDING THE 2022 CALIFORNIA PLUMBING CODE  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5**

**(HCD 02/21)**

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 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.

**Specific Purpose**

The California Building Standards Commission (CBSC) selected the 2021 Uniform Plumbing Code (UPC), published by the International Association of Plumbing and Mechanical Officials (IAPMO), as the model code to be referenced in the California Code of Regulations (CCR), title 24, part 5, for the 2021 Triennial Code Adoption Cycle.

The specific purpose of these regulations is to adopt by reference the 2021 UPC, with California amendments, into the 2022 California Plumbing Code (CPC), CCR, title 24, part 5, for the following programs:

- a) **State Housing Law:** relative to residential occupancies, buildings or structures accessory thereto.
- b) **Employee Housing Act:** relative to the use of plumbing equipment and systems in or on any building or structure or outdoors on premises or property in accordance with Health and Safety Code (HSC) section 17040.
- c) **Mobilehome Parks and Special Occupancy Parks:** relative to the use of plumbing equipment and systems in or on any permanent buildings, accessory buildings, and structures under the ownership and control of the park operator, within the park, in accordance with HSC section 18300 for mobilehome parks, and HSC section 18865 for special occupancy parks.
- d) **Factory-Built Housing Law:** relative to residential buildings, dwellings or portions thereof, or building components, or manufactured assemblies in accordance with HSC section 19990.

**The Public Problem, Administrative Requirement, or Other Circumstance Addressed**

**Administrative Requirement:** HSC sections 17922 and 19990 direct the Department of Housing and Community Development (HCD) to adopt the most recent edition of the model code, which, in this case, is the 2021 UPC published by IAPMO as selected by CBSC, into the 2022 CPC, part 5 of title 24, of the CCR.

### **Rationale for Necessity**

The 2021 UPC was published by IAPMO and will automatically become adopted in its entirety, pursuant to HSC section 17922(b), one year from its date of publication if not amended and proposed by HCD to the CBSC for adoption.

If the 2021 UPC becomes adopted in its entirety without being proposed for adoption with amendments by HCD to the CBSC, such automatic adoption would cause considerable confusion because California amendments, also known as State amendments, are necessary modifications to the model code language to ensure that the 2022 CPC is consistent with state law and unique California conditions.

It is necessary to propose the adoption of some sections of the 2021 UPC, with amendments to the model code language, to incorporate state and federal laws and regulations, and to benefit the health, safety, and general welfare of California residents.

It is necessary to not propose the adoption of some sections of the 2021 UPC, as they would conflict with certain existing state and federal laws, and would not benefit the health, safety, and general welfare of California residents.

It is necessary to propose the removal of some California amendments previously proposed and adopted in the 2019 CPC that are duplicated or replaced by similar new model code language, or incorporated state and federal laws, and are no longer necessary.

It is necessary to propose to bring forward previously existing California amendments. Some existing amendments will be brought forward without any changes and will represent no change in their effect from the 2019 CPC. Other previously existing California amendments will be changed as explained below.

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## **SPECIFIC PROPOSED REGULATORY ACTIONS**

HCD proposes to adopt by reference the 2021 edition of the UPC with amendments into the 2022 CPC. The proposed amendments are intended to provide clarity, specificity and direction to the code user and to implement and make specific existing state laws. The proposed amendments are a result of recommendations developed during the public participation period prior to submittal to the CBSC. The rationale for each amendment by chapter and section is listed below. In addition, most proposed changes include a reference to regulatory approval criteria identified in HSC section 18930(a) (Nine-Point Criteria).

### **Item 1**

#### **CHAPTER 1, ADMINISTRATION DIVISION 1 CALIFORNIA ADMINISTRATION**

HCD proposes to bring forward existing California amendments in Chapter 1, Division I, California Administration, from the 2019 CPC for adoption into the 2022 CPC with modifications as follows:

##### **1.1.0 General.**

### **1.1.1 Title.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with modification. The proposed modification updates the reference to the UPC from the 2018 UPC to the 2021 UPC. This change is in compliance with Nine-Point Criteria (7) to incorporate by reference by applicable model code.

### **1.1.2 Purpose.**

### **1.1.3 Scope.**

#### **1.1.3.1 Non-State-Regulated Buildings, Structures, and Applications.**

#### **1.1.3.2 State-Regulated Buildings, Structures, and Applications.**

### **1.1.4 Appendices.**

### **1.1.5 Referenced Codes.**

### **1.1.6 Non-Building Standards, Orders and Regulations.**

### **1.1.7 Order of Precedence and Use.**

#### **1.1.7.1 Differences.**

#### **1.1.7.2 Specific Provisions.**

#### **1.1.7.3 Conflicts.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

#### **1.1.7.3.1 Detached One- and Two-Family Dwellings.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with editorial modifications. The proposed modifications provide clarity and consistency with all parts of title 24. There is no intended change in regulatory effect.

### **1.1.8 City, County, or City and County Amendments, Additions or Deletions.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

#### **1.1.8.1 Findings and Filings.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with nonsubstantive editorial modification to HCD's address. The proposed modification provides clarity and consistency with all parts of title 24. There is no intended change in regulatory effect.

#### **1.1.8.2 Locally Adopted Energy Standards – California Energy Code, Part 6.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

### **1.1.9 Effective Date of this Code.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment with modification. The proposal modifies reference to the CCR, title 25, section 3048 which is scheduled to be renumbered as section 3037 in a pending rulemaking. This would correct an incorrect reference in the published code and maintain consistency between codes.

HCD also modified section 1.1.9 of the 2019 CPC to add an exception for retroactive permits reflecting provisions of Senate Bill 1226 (Chapter 1010, Statutes of 2018).

### **1.1.10 Availability of Codes.**

#### **1.1.11 Format.**

#### **1.1.12 Validity.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

## **1.8.0 Department of Housing and Community Development (HCD).**

### **1.8.1 Purpose.**

### **1.8.2 Authority and Abbreviations.**

#### **1.8.2.1 General.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

#### **1.8.2.1.1 Housing Construction.**

#### **1.8.2.1.2 Housing Accessibility.**

#### **1.8.2.1.3 Permanent Buildings in Mobilehome Parks and Special Occupancy Parks.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with new modifications. The proposed modifications provide clarity and consistency with all parts of title 24 and update authority and references used for HCD 1, HCD 2, and HCD 1-AC. There is no intended change in regulatory effect. This change is in compliance with Nine-Point Criteria (2) to identify statutory authority for HCD to adopt regulations.

### **1.8.3 Local Enforcing Agency.**

#### **1.8.3.1 Duties and Powers.**

#### **1.8.3.2 Laws, Rules, and Regulations.**

##### **1.8.3.2.1 State Housing Law.**

##### **1.8.3.2.2 Mobilehome Parks Act.**

##### **1.8.3.2.3 Special Occupancy Parks Act.**

##### **1.8.3.2.4 Employee Housing Act.**

### **1.8.3.2.5 Factory-Built Housing Law.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

## **1.8.4 Permits, Fees, Applications and Inspections.**

### **1.8.4.1 Permits.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

HCD modified section 1.8.4.1 in the 2019 Intervening Code Adoption Cycle to clarify that retroactive permits may be obtained although the building has already been constructed.

### **1.8.4.2 Fees.**

### **1.8.4.3 Plan Review and Time Limitations.**

#### **1.8.4.3.1 Retention of Plans.**

### **1.8.4.4 Inspections.**

## **1.8.5 Right of Entry for Enforcement.**

### **1.8.5.1 General.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification.

## **1.8.6 Local Modification by Ordinance or Regulation.**

### **1.8.6.1 General.**

### **1.8.6.2 Findings, Filings, and Rejections of Local Modifications.**

## **1.8.7 Alternate Materials, Designs, Tests and Methods of Construction.**

### **1.8.7.1 General.**

### **1.8.7.2 Local Building Departments.**

#### **1.8.7.2.1 Approval of Alternates.**

### **1.8.7.3 Department of Housing and Community Development.**

## **1.8.8 Appeals Board.**

### **1.8.8.1 General.**

### **1.8.8.2 Definitions.**

### **1.8.8.3 Appeals.**

## **1.8.9 Unsafe Buildings or Structures.**

### **1.8.9.1 Authority to Enforce.**

### **1.8.9.2 Actions and Proceedings.**

## **1.8.10 Other Building Regulations.**

### **1.8.10.1 Existing Structures.**

### **1.8.10.2 Moved Structures.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments. These existing amendments are brought forward from the 2019 CPC into the 2022 CPC without modification. HCD amended section 1.8.9.1 subsection 1 during the 2019 Intervening Code Adoption Cycle to provide reference to provisions for delayed correction of violations for existing accessory dwelling units (ADU). Senate Bill 13 (Chapter 653, Statutes of 2019), operative until January 1, 2035, added HSC section 17980.12 to the State Housing Law requiring enforcement agencies issuing “notices to correct” to also provide notification that the owner of the substandard ADU may request a delay.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 2**

**CHAPTER 1, DIVISION II ADMINISTRATION**

**104.2 Exempt Work. (Items 1 and 2 only)**

**Rationale:** HCD proposes to adopt the above referenced section (Items 1 and 2 only) from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 3**

**CHAPTER 2, DEFINITIONS**

HCD proposes to adopt Chapter 2 from the 2021 UPC into the 2022 CPC, with new and existing amendments as follows:

**203.0**

**-A-**

***Accessory Dwelling Unit.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within CPC sections 1.8.9.1 and 311.1. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

### **Alternate Water Source.**

**Rationale:** HCD proposes to adopt the model code definition of “Alternate water source” with new California amendments. The amendments modify the model code definition to be identical to the 2019 CPC definition therefore there is no intended change in regulatory effect. The California amendment will be repealed to avoid duplication in the 2022 CPC in compliance with Nine-Point Criteria (1) for duplication.

**Approved. Exception.**

### **Approved Testing Agency.**

### **Authority Having Jurisdiction.**

**Rationale:** HCD proposes to adopt the above referenced terms with existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**204.0**

**-B-**

### **Building. (Exceptions 1-5)**

**Rationale:** HCD proposes to adopt the above referenced term with existing California amendments (exceptions) which provide a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**205.0**

**-C-**

### ***Clothes Washer System.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provide definitions for the terms as used within the CPC. The existing amendments has been editorially modified for punctuation and has been brought forward from the 2019 CPC into the 2022 CPC with no intended change in regulatory effect.

### ***Complex System.***

### ***Covered Multifamily Dwellings.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**206.0**

**-D-**

### ***Department.***

### **Department Having Jurisdiction.**

### ***Disposal Field.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendments and model code definition with existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**207.0**

**-E-**

***Enforcing Agency.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**209.0**

**-G-**

***Graywater***

**Rationale:** HCD proposes to continue to not adopt the model code definition of “Gray Water” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

***Gray Water Diverter Valve.***

**Rationale:** HCD proposes to continue to not adopt the model code definition of “Gray Water Diverter Valve” from the 2021 UPC.

***Gray Water System.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**211.0**

**-I-**

***Irrigation Field.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**214.0**

**-L-**

***Labeled.***

***Lavatory.***

***Limited-Density Owner-Built Rural Dwelling.***

***Listed.***

***Listing Agency.***

***Low VOC Cement.***

***Low VOC One-Step Cement.***



***Low VOC Primer.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendments and model code definitions with existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**215.0**

**-M-**

***Meter.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within CPC sections 601.2.1 through 601.2.2. The term “meter” was also adopted to assist with the identification of “submeter.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

***Mulch Basin.***

**Rationale:** HCD proposes to not adopt the model code definition for “Mulch Basin” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**216.0**

**-N-**

***Nonwater Supplied Urinal.***

***Nuisance.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendments and model code definition with existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**217.0**

**-O-**

***On-Site Treated Nonpotable Water.***

**Rationale:** HCD proposes to not adopt the model code definition of “On-Site Treated Nonpotable Water” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which was modified from code language found in the Green Plumbing and Mechanical Code Supplement and identifies what on-site treated potable water is, and also what some of the sources of on-site treated nonpotable water may be. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**220.0**

**-R-**

***Rainwater.***

**Rationale:** HCD proposes to continue to not adopt the model code definition of “Rainwater” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which was included in Assembly Bill 1750 (Chapter 537, Statutes of 2012), The Rainwater Capture Act of 2012, and identifies the collection surfaces which are suitable for collection of rainwater for use. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

***Rainwater Catchment System.***

**Rationale:** HCD proposes to continue to not adopt the model code definition of “Rainwater Catchment System” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which was based on a definition contained in AB 1750, The Rainwater Capture Act of 2012, which also defined other commonly used terms. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

***Receiving Landscape***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

***Reclaimed (Recycled) Water.***

**Rationale:** HCD proposes to continue to not adopt the model code definition of “Reclaimed Water” from the 2021 UPC. HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**221.0**

**-S-**

***Simple System.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment nor intended change in regulatory effect.

***Single-Family Dwelling.***

**Rationale:** HCD proposes to not adopt the above referenced definition from the 2021 UPC. This definition conflicts with HCD’s definition of “Detached Single-Family Dwelling” contained in the California Building Code (CBC).

***Submeter.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment which provides a definition for the term as used within CPC sections 601.2.1 through 601.2.2. The definition is consistent with Senate Bill 7 (Chapter 623, Statutes of 2016) which required submetering 59-8in rental multiunit and mixed-use structures. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC with clarification to apply to “HCD 1.” There is no intended change in regulatory effect.

**222.0**

**-T-**

***Testing Agency.***

***Treated Gray Water.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendments which provide definitions for the terms as used within the CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**223.0**

**-U-**

***UPC.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

**225.0**

**-W-**

***Water Closet.***

**Rationale:** HCD proposes to adopt the above referenced existing California amendment which provides a definition for the term as used within the CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment nor intended change in regulatory effect.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 4**

**CHAPTER 3, GENERAL REGULATIONS**

HCD proposes to adopt Chapter 3 (except sections 301.3.1, 301.3.1.1 and 301.3.1.2), from the 2021 UPC into the 2022 CPC, with new existing amendments as follows:

**301.0 General.**

### **301.3 Alternate Materials and Methods of Construction Equivalency.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment references section 1.8.7 for additional information regarding alternate materials, designs, tests, and methods of construction. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

### **301.4.1 Coastal High Hazard Areas.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment changes the term “building code” to “California Building Code or California Residential Code” to provide consistency and clarity to the code user. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without amendment.

### **301.6 One- and Two-Family Dwellings.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment with modification. The existing amendment provides the code user information regarding alternate facilities (as approved by the local health authority) for one- and two-family dwellings. The proposed editorial (punctuation) correction has no intended change in regulatory effect.

### **303.0 Disposal of Liquid Waste.**

#### **303.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment is an exception for limited-density owner built rural dwellings and alternative methods for disposal for gray water as approved by the health authority. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

### **304.0 Connections to Plumbing System Required.**

#### **304.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (exception). The existing amendment is an exception for limited-density owner built rural dwellings and alternative materials and methods that comply with the intent of the code. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment or intended change in regulatory effect.

### **311.0 Independent Systems.**

#### **Section 311.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (Note). The note directs the code reader to Government Code (GC) section 65852.2 which addresses installations of new or separate utility connections directly between the accessory dwelling unit (ADU) and the utility, i.e., drainage water and gas services. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without modification.

## **312.0 Protection of Piping, Materials, and Structures.**

### **312.2 Installation.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment changes the reference from the term “building code” to “California Building Code or California Residential Code” to provide consistency and clarity to the code user. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without modification.

### **312.7 Fire-Resistant Construction.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment repeals the reference to Chapter 14 Firestop Protection since HCD does not adopt Chapter 14. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment nor intended change in regulatory effect.

### **312.11 Structural Members.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment changes the reference from the term “building code” to “California Building Code or California Residential Code” to provide consistency and clarity to the code user. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without modification.

#### **CAC Recommendation:**

Approved as submitted

#### **Agency Response**

Accept

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## **Item 5**

### **CHAPTER 4, Plumbing Fixtures and Fixture Fittings**

HCD proposes to adopt Chapter 4, (except sections 422.2, 422.4, and 422.5) from the 2021 UPC into the 2022 CPC, with new and existing California amendments as follows:

#### **401.0 General.**

##### ***401.3 Water-Conserving Fixtures and Fittings.***

**Rationale:** HCD proposes to continue adoption of the above referenced existing California amendment. The amendment requires all noncompliant plumbing fixtures to be replaced with water conserving plumbing fixtures. The above section references Senate Bill 407 (Chapter 587, Statutes of 2009) which initially required the replacement of all noncompliant plumbing fixtures with water conserving plumbing fixtures during alterations and improvements. The statute now requires replacement of all noncompliant plumbing fixtures in all existing multifamily residential and commercial property on or before January 1, 2019; and requires replacement of all noncompliant plumbing fixtures in any single-family residential property on or before January 1, 2017. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.”

## **403.0 Accessible Plumbing Facilities.**

### **403.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment provides the code user with the correct reference to Chapter 11A of the CBC, which contains specific requirements for accessibility. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **403.2 Fixtures and Fixture Fittings for Persons with Disabilities.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment changes the reference from International Code Council (ICC) A117.1 which does not contain the correct accessibility standards for use in California and provides the code user with the correct reference to Chapter 11A of the CBC, which contains specific requirements for accessibility. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **403.3 Exposed Pipes and Surfaces**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment removes the text which refers to ASME and ASTM Standards that point to the ICC 117.1 standard that does not contain correct accessibility standards for use in California and provides the code user with the correct reference to Chapter 11A of the CBC, which contains specific requirements for accessibility. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **407.0 Lavatories.**

### **407.2 Water Consumption.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment provides the complete range of subsections in section 407.2 for lavatory water flow rates. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **407.2.1 Public Lavatory Faucets.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment retitles the section from “Maximum Flow Rate” and repeals model code flow rates for private lavatory faucets. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **407.2.2 Residential Lavatory Faucets.**

**Rationale:** HCD proposes to adopt the above referenced section which is an existing California amendment. The amendment provides the code user flow rates for residential lavatory faucets in California and aligns with the CCR, title 20, Appliance Efficiency Regulations, adopted by the California Energy Commission (CEC). The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **407.2.3 Lavatory Faucets in Common and Public Use Areas.**

**Rationale:** HCD proposes to adopt the above referenced section which is an existing California amendment. The amendment provides the code user flow rates for lavatory faucets in common and public use areas in California and aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **407.2.4 Metering Faucets.**

**Rationale:** HCD proposes to adopt the above referenced section which is an existing California amendment. The amendment renumbers the model code section and provides the code user flow rates for metering faucets in California and aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **408.0 Showers.**

##### **408.2 Water Consumption.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the flow rate from 2.5 gallons per minute (gpm) for showerheads and brings forward the existing amendment of 1.8 gpm, which also aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **408.5 Finished Curb or Threshold.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment changes the reference from the term “building code” to “California Building”, “California Residential” and “California Electrical Codes” to provide consistency and clarity to the code user. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **408.6 Shower Compartments.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments in Exception 1. The amendment changes the reference from ICC A117.1, which does not contain the correct accessibility standards for use in California, and provides the code user with the correct reference to Chapter 11A of the CBC, which contains specific requirements for accessibility in California. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **411.0 Water Closets.**

## **411.2 Water Consumption.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires water closets to not exceed 1.28 gallons per flush (gpf) and aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **411.2.2 Flushometer Valve Activated Water Closets.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment modifies the model code flow rate from 1.6 gpf to 1.28 gpf which is consistent with the requirements in the 2022 California Green Building Standards (CALGreen) Code and CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. Currently the flow rates for flushometer valve-activated water closets applicable in California are contained in section 411.2.3. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **411.2.3 Performance.**

**Rationale:** HCD proposes to bring forward the above referenced existing California amendment. The existing amendment provides the code user with information that all water closets shall meet or exceed minimum performance criteria from the WaterSense program. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **412.0 Urinals.**

### **412.1 Application.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment repeals model code requirements for 1 gallon per flush and carries forward existing amendments for flush volumes for urinals in California and aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **412.1.3 Nonwater Urinals.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment refers the code user to HSC section 17921.4 for additional information regarding nonwater urinals. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **412.1.4 Nonwater Urinals with Drain Cleansing Action.**

**Rationale:** HCD proposes to adopt the above referenced new model code section with renumbering to accommodate California amendments inserted before this section.

## **415.0 Drinking Fountains.**



### **415.1 Application.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment provides requirements for the regulated jet of water height and availability and orifice location. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **420.0 Sinks.**

#### **420.2.2. Kitchen Faucets.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. HCD proposes to bring forward the above referenced existing California amendment. The existing amendment provides the code user the flow rates for kitchen faucets in California and aligns with CCR, title 20, Appliance Efficiency Regulations, adopted by CEC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **Section 420.3.1 Pre-Rinse Spray Valves.**

#### **Table H-2. Standards for Commercial Pre-rinse Spray Valves Manufactured On or After January 28, 2019.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendments, including Table H-2. These amendments were adopted in coordination with the Division of the State Architect (DSA), CEC, and CBSC. This section aligns with the Appliance Efficiency Regulations adopted by CEC in CCR, title 20. On January 28, 2019, the amended energy conservation federal standards (Code of Federal Regulations (CFR), title 10, part 431, subpart O) for all commercial pre-rinse spray valves went into effect. These federal standards for flow rate of commercial pre-rinse spray valves manufactured on or after January 28, 2019, shall be equal to or less than the values shown in Table H-2. Table H-2 can be found in CCR, title 20, section 1605.1(h)(4). In addition, per CCR, title 20, section 1605.3(h)(4)(A), commercial pre-rinse spray valves manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf) (113 grams-force (gf)). This code change also reflects the same provisions adopted by HCD in CALGreen section 4.303.1.4.5

Consistency among federal regulations and state regulations will benefit the code user. The intent is to align the federal and state regulations, set forth in CCR, title 20 (Appliance Efficiency Regulations). The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **TABLE 422.1 MINIMUM PLUMBING FACILITIES**

**Rationale:** HCD proposes to adopt the above referenced Table with existing California amendments. The text above the Table provides the code user with a reference to Chapter 11A of the CBC which contains specific requirements for persons with disabilities with two existing Exceptions. HCD also proposes to bring forward existing amendment number 7 in the Notes below the table. This note clarifies that the Authority Having Jurisdiction (AHJ) may approve alternative design criteria for determining the minimum number of fixtures. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **422.2 Separate Facilities.**

### **422.2.1 Single Use Toilet Facilities.**

### **422.2.2. Family or Assisted-Use Toilet Facilities**

## **422.4 Toilet Facilities Serving Employees and Customers.**

### **422.4.1 Access to Toilet Facilities.**

## **422.5 Toilet Facilities for Workers**

**Rationale:** HCD proposes to continue to not adopt the above referenced sections from the 2021 UPC. These sections are not adopted since they do not apply to HCD applications. There is no intended change in regulatory effect.

### **CAC Recommendation:**

Approved as submitted

### **Agency Response**

Accept

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## **Item 6**

### **CHAPTER 5, WATER HEATERS**

HCD proposes to adopt Chapter 5 from the 2021 UPC into the 2022 CPC with existing amendments as follows:

## **507.0 Appliance and Equipment Installation Requirements.**

### **507.2 Seismic Provisions.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (Note). The existing amendment provides references to the HSC section 19211(a) requiring strapping of water heaters for seismic safety purposes. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **CAC Recommendation:**

Approved as submitted

### **Agency Response**

Accept

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## **Item 7**

### **CHAPTER 6, Water Supply and Distribution Sections verified against ET.**

HCD proposes to adopt Chapter 6 (except section 609.10) from the 2021 UPC into the 2022 CPC, with new and existing amendments as follows:

## **601.0 General.**

## **601.2 Water Supply and Flushing.** (Exceptions 3, and 4)

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The existing amendment in Exception 3 (as renumbered) refers to limited-density owner-built rural dwellings shall have potable water available; Exception 4 (as renumbered) clarifies that alternate water sources may be allowed as specified in Chapter 15 of this code. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment except for renumbering due to reformatting of the model code; and with no intended change in regulatory effect.

### **601.2.1 Submeters.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. This amendment implements SB 7 which added HSC section 17922.14, directing HCD to develop building standards requiring the installation of individual water meters or submeters in newly constructed rental multiunit residential structures and for individual residential dwelling units in newly constructed rental mixed-use residential/commercial structures for water conservation purposes. SB 7 added Water Code section 537.1 which required each water purveyor providing water services to a newly constructed multiunit rental residential structure or individual dwelling units within a mixed-use rental residential/commercial structure for which an application for a water connection (or connections) is submitted after January 1, 2018, to require measurement of the water supplied to each individual dwelling unit that is rented. Therefore, the requirement for installation of water submeters in these types of buildings has been in effect since January 1, 2018.

SB 7 also included provisions in Water Code section 537.1, subdivision (e), which provides that the section would only be operative until the date on which the CBSC includes building standards conforming with Water Code, article 5, commencing with section 537. Per Water Code section 537.1 the provisions would become inoperative upon the effective date of the 2019 CPC supplement (July 1, 2021).

The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment except for renumbering due to reformatting of the model code; and with no intended change in regulatory effect.

#### **Section 601.2.1.1 Approved Submeters.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. This amendment provides a reference for the approval of submeters (or meters) to be installed in accordance with Business and Professions Code (BPC), division 5. Approval of submeters is specifically addressed in BPC section 12500.5. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **Section 601.2.1.2 Submeter Testing.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment as renumbered to accommodate model code numbering. The amendment provides references for testing and retesting of submeters (or meters) installed for rental multifamily dwellings. Submeter or meter testing standards are listed in the following: CCR, title 4, division 9, chapter 3, article 1, section 4070 (device inspection and testing); Civil Code section 1954.203, subdivision (a)(1) (submeters for water service); and BPC sections 12107 and 12212 (submeter testing). The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment except for renumbering and with no intended change in regulatory effect.

### **601.2.2 Hot and Cold Water Required.**

**Rationale:** HCD proposes to adopt the above referenced section with renumbering to accommodate reformatting in the model code and subsequent existing California amendments. There is no change to the model code section except for renumbering and there is no intended change in regulatory effect.

### **601.3.2 Color and Information.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment requires a graphic (international symbol) symbol to prohibit drinking of water from nonpotable water systems. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **FIGURE 601 INTERNATIONAL SYMBOL**

**Rationale:** HCD proposes to bring forward the above referenced figure with an existing California amendment (graphic). The existing amendment identifies an international symbol for nonpotable water systems. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **601.3.3 Alternate Water Sources.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. This amendment clarifies that the marking requirements in this section apply to outdoor applications. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **603.0 Cross-Connection Control.**

#### **603.5.11 Nonpotable Water Piping.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the nonpotable water outlet to have a graphic (international symbol) prohibiting drinking as identified in Figure 601. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **604.0 Materials.**

### **TABLE 604.1 MATERIALS FOR BUILDING SUPPLY AND WATER DISTRIBUTION WATER PIPING AND FITTINGS**

**Rationale:** HCD proposes to adopt the above referenced Table Notes with existing California amendments. The amendments (footnotes) provide sleeving requirements when cross-linked polyethylene (PEX) is placed in soil and used for potable water systems supplying drinking water to fixtures or appliances. HCD proposes to add the [HCD 1 & HCD 2] banner to Footnote 5 to clarify the non-adoption of polyethylene-aluminum-cross-linked polyethylene (PEX-AL-PEX) use for residential purposes. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment except for the banner addition and with no intended change in regulatory effect.

#### ***604.1.1 Local Authority to Approve CPVC Pipe Within Residential Buildings Under Specified Conditions.***

**Rationale:** HCD proposes to bring forward the above referenced existing California amendment. This amendment provides “installation standards” for using and handling chlorinated polyvinyl chloride (CPVC) pipe. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### ***604.1.2 PEX.***

**Rationale:** HCD proposes to bring forward the above referenced existing California amendment. This amendment provides “installation standards” for using and handling PEX pipe. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **604.13 Water Heater Connectors.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment clarifies that use of cross-linked PEX-AL-PEX is not adopted for use in potable water supply and distribution systems. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **Joints and Connections.**

#### **605.2.2 Solvent Cement Joints.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of low Volatile Organic Compounds (VOC) One Step Cement that does not require use of primer for CPVC pipe and fittings. A similar requirement is in CALGreen. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **605.10 PEX-AL-PEX Plastic Tubing and Joints.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment clarifies that use of PEX-AL-PEX is not adopted for use in potable water supply and distribution systems. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **605.12.2 Solvent Cement Joints.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of low VOC primer, when required, and Low VOC solvent cements for joining plastic pipe and fittings. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **605.15 Dielectric Unions.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of dielectric unions at connections of dissimilar metals. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **609.0 Installation, Testing, Unions, and Location.**

#### **609.11 Water Hammer.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. This non-adoption is due to lack of a definition for “quick acting valve” in the UPC. The lack of definition creates confusion in enforcement which leads to inconsistencies among jurisdictions. There is no intended change in regulatory effect.

### **610.0 Size of Potable Water Piping.**

#### **TABLE 610.3 WATER SUPPLY FIXTURE UNITS (WSFU) AND MINIMUM FIXTURE BRANCH PIPE SIZES<sup>3</sup>.**

**Rationale:** HCD proposes to adopt the above referenced table with existing California amendments. The amendments provide a lower fixture unit for private mobilehomes or manufactured homes within the table. HCD is also carrying forward an existing amendment in the notes which refers the code user to title 25 for water fixture units within Mobilehome Parks and Special Occupancy Parks. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **CAC Recommendation:**

Approved as submitted

#### **Agency Response**

Accept

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## **Item 8**

### **CHAPTER 7, Sanitary Drainage**

HCD proposes to adopt Chapter 7 from the 2021 UPC into the 2022 CPC with new and existing amendments as follows:

#### **Part I – Drainage Systems.**

##### **701.0 General.**

##### **701.2 Drainage Piping.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment HCD deletes model code text referencing Chapter 14 Firestop Protection since HCD does not adopt Chapter 14 and adds a reference to the CBC for the installation of acrylonitrile-butadiene-styrene (ABS) and PVC. HCD also proposes continued adoption of an existing amendment restricting the use of ABS and PVC piping in residential structures, as specified. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **702.0 Fixture Unit Equivalentents.**

##### **TABLE 702.1 DRAINAGE FIXTURE UNIT VALUES (DFU)**

**Rationale:** HCD proposes to adopt the above referenced Table with an existing California amendment. The amendment provides the code user with reduced drainage fixture unit values for mobilehomes or manufactured homes. HCD also proposes to continue to carry forward the amendment in the footnotes, footnote 10 (renumbered from 9), to reference title 25 regarding mobilehome parks and special occupancy parks. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **705.0 Joints and Connections.**

##### **705.1.2 Solvent Cement Joints.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of low VOC primers when a primer is required and low VOC cements for joining ABS and ABS co-extruded plastic pipe and fittings. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **705.6.2 Solvent Cement Joints.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of low VOC primers when a primer is required and low VOC cements for joining PVC and PVC co-extruded plastic pipe and fittings. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **705.9.4 Transition Joint.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the use of low VOC primers when a primer is required and low VOC cements for ABS and PVC solvent cement transition joints. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **TABLE 707.2 CLEANOUT MATERIALS FOR DRAIN, WASTE, AND VENT**

**Rationale:** HCD proposes to adopt the above referenced new model code table with a new California amendment (footnote). The proposed amendment mirrors the amendment for drainage piping in section 701.2 regarding installations of ABS and PVC and their limitations for residential occupancies. There is no change in regulatory effect and change in cost since the restriction on the use of ABS and PVC for drainage piping materials was adopted in the 2019 CPC and prior versions of the CPC.

#### **710.0 Drainage of Fixtures Located Below the Next Upstream Manhole or Below the Main Sewer Level.**

#### **710.3 Sewage and Ejector Pumps.**

**Rationale:** The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **Part II – Building Sewers**

#### **713.0 Sewer Required.**

#### **713.4 Public Sewer Availability.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment clarifies that the AHJ may determine when a sewer is not considered available. Sewer unavailability may be due to geographic diversity and cost; and local conditions could present challenges so that a set distance would not be appropriate or cost effective. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **CAC Recommendation:**

Approved as submitted

#### **Agency Response**

Accept

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### **Item 9**

#### **CHAPTER 8, INDIRECT WASTES**

HCD proposes to adopt Chapter 8 from the 2021 UPC into the 2022 CPC without amendment.

#### **CAC Recommendation:**

Approved as submitted



## Agency Response

Accept

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### Item 10

#### CHAPTER 9, VENTS

HCD proposes to adopt Chapter 9 from the 2021 UPC into the 2022 CPC with existing amendments as follows:

##### **903.0 Materials.**

##### **903.1 Applicable Standards.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment HCD deletes model code text referencing Chapter 14 Firestop Protection since HCD does not adopt Chapter 14 and adds a reference to the CBC for the installation of ABS and PVC for vent purposes. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **903.1.1. [HCD 1 & HCD 2]**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment restricts the use of ABS and PVC piping in residential structures, as specified. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **903.1.2. [HCD 1]**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment which requires that all malleable iron vents be galvanized. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **CAC Recommendation:**

Approved as submitted

## Agency Response

Accept

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### Item 11

#### CHAPTER 10, TRAPS AND INTERCEPTORS

HCD proposes to adopt Chapter 10 from the 2021 UPC into the 2022 CPC with existing amendments as follows:

##### **1003.0 Traps – Described.**

### **1003.1 General Requirements.** (Exception 1 and 2)

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment provides the code user a standard to reference for non-water supplied urinals. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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### **Item 12**

#### **CHAPTER 11, Storm Drainage**

HCD proposes to adopt Chapter 11 from the 2021 UPC into the 2022 CPC with existing amendments as follows:

#### **1101.0 General.**

#### **1101.4 Material Uses.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments delete model code text referencing Chapter 14 Firestop Protection since HCD does not adopt Chapter 14 and restricts the use of ABS and PVC piping in residential structures, as specified. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1101.4.2.1** (Subsection to 1101.4.2 Conductors.)

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment which limits the use of ABS or PVC installations in structures higher than two stories with residential uses. This existing amendment has been brought forward from the 2019 CPC for adoption into the 2022 CPC without modification.

#### **1101.6 Subsoil Drains. (Exception)**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (Exception). The amendment clarifies that subsoil drains are only required when required by the AHJ due to geological conditions. This existing amendment has been in the CPC since 2001 and proposed to be carried forward from the 2019 CPC for adoption into the 2022 CPC without modification or change in regulatory effect.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 13**

**CHAPTER 12, FUEL GAS PIPING.**

HCD proposes to adopt Chapter 12 from the 2021 UPC into the 2022 CPC without amendment.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 14**

**CHAPTER 13, HEALTH CARE FACILITIES AND MEDICAL GAS AND MEDICAL VACUUM SYSTEMS**

HCD proposes to not adopt Chapter 13 from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**Item 15**

**CHAPTER 14, FIRESTOP PROTECTION**

HCD proposes to not adopt Chapter 14 from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 16**

**CHAPTER 15, ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS**

HCD proposes to adopt Chapter 15 from the 2021 UPC into the 2022 CPC, with new and existing amendments as follows. HCD proposes to not adopt sections 1501.5.2, 1502.3.4, 1503.9.3 – 1503.9.7; 1505; and Table 1501.5.

**1501.0 General.**

**1501.1 Applicability.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The existing amendment adds in the words “discharge” and “use” to this section. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1501.1.1 Allowable Use of Alternate Water.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. This existing amendment adds in the word “gray” to define one of the types of nonpotable water. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1501.2 System Design.**

**Rationale:** HCD proposes to adopt the above referenced section with new California amendments. The amendments modify the section to reflect the provisions in the 2019 CPC and permit alternate water source systems to be designed by a registered design professional or licensed person who demonstrates competency to design the system as required by the AHJ. Therefore, there is no intended change in regulatory effect from the 2019 CPC.

HCD also proposes to amend model code Exceptions (1) and (2) to also reference a licensed person demonstrating competency as not required to design systems of specified maximum capacities. These amendments provide clarify for the exceptions which are vague as written (Nine-Point Criteria #6).

HCD proposes to continue to adopt an existing California amendment providing a reference to the irrigation plan requirements in the Model Water Efficient Landscape Ordinance (MWELo) in CCR, title 23.

### **1501.3 Permit.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment clarifies that any changes and/or connections to alternate water system or potable water systems within a site with an alternate water system must be approved by the AHJ. HCD also proposes to continue adoption of an existing amendment (Exception) clarifying that clothes washer systems meeting specified requirements in section 1503.1.1 do not require a permit. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **TABLE 1501.5 MINIMUM ALTERNATE WATER SOURCE TESTING, INSPECTION, AND MAINTENANCE FREQUENCY.**

**Rationale:** HCD proposes to continue to not adopt the above referenced Table from the 2021 UPC. As a result of the proposed actions concerning sections 1501.5, 1501.5.1 and 1501.5.2, the Table is no longer necessary and may conflict with the manufacturer’s recommendations or local requirements. There is no intended change in regulatory effect from the 2019 CPC.

### **1501.5 Maintenance and Inspection.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment deletes model code text referencing “sections 1501.5.1 through 1501.5.3” which requires that alternate water sources systems be inspected and maintained in accordance with manufacturer’s recommendations and/or as required by the AHJ. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1501.5.1 Frequency.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. There is no intended change in regulatory effect.

### **1501.5.2 Maintenance Log.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. There is no intended change in regulatory effect.

### **1501.5.1 Maintenance Responsibility.**

**Rationale:** HCD proposes to adopt the above referenced section from the 2019 CPC into the 2022 CPC without modification except renumbering. HCD proposes to renumber model code section 1501.5.3 to 1501.5.1 to accommodate the deletion of model code sections 1501.5.1 and 1501.5.2. There is no intended change in regulatory effect.

### **1501.6 Operation and Maintenance Manual.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments clarify the requirement for the manual to apply to on-site treated nonpotable water, and recycled water supply systems with permits. Other amendments include directions requiring the manual to remain with the building and other amendments related to instructions and details for startup, shutdown and installer contact information. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1501.7 Minimum Water Quality Requirements.**

**Rationale:** HCD proposes to adopt the above referenced section with existing and new California amendments. The amendments delete reference to the EPA water reuse guidelines; and references water quality requirements in section 1506.9.2 for on-site treated nonpotable graywater, however, retain the use of NSF 350 in the absence of local water quality requirements. This amendment has been coordinated between CBSC and the Department of Water Resources (DWR) and HCD and provides consistency between sections in compliance with Nine-Point Criteria #1. A new California amendment clarifies that water quality requirements would comply with section 1501.7 as well as Section 1506.9.2.

### **1501.9 Signage**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment requires signage to comply with sections 1501.9.1 and 1501.9.2. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1501.9.1 Commercial, Industrial, Institutional, and Residential Restroom Signs.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments add application to residential common use restroom signs; clarify application to on-site treated nonpotable gray water; add a reference to the CBC for applicable sign requirements; and amends required signage text to reference “on-site treated nonpotable graywater.” The amendment also renumbers the section due to the addition of California amendment section 1501.9. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1501.9.2 Equipment Room Signs.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment clarifies application to on-site treated nonpotable gray water; and amends required signage text to reference “on-site treated nonpotable graywater.” which was adopted during the 2016 Intervening Code Adoption Cycle. HCD also proposes to renumber the section due to the addition of California amendment section 1501.9. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1502.0 Inspection and Testing.**

#### **1502.1 General**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires that alternate water source systems be inspected and tested in accordance with specified sections and/or as required by the AHJ. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1502.3 Cross-Connection Inspection and Testing.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments delete the model code requirement for annual inspections and testing, and instead require an initial visual inspection and initial cross connection test only before the initial operation of the alternate water source system. The amendments also clarify that the potable and alternate water source systems be isolated from each during initial or a subsequent cross connection test. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **1502.3.2 Cross-Connection Test.**

**Rationale:** HCD proposes to adopt the above referenced section with existing amendments. The amendments clarify that the cross-connection test itself (versus procedure) is required to be performed in the presence of the AHJ or other authorities. The amendment in Item 5 requires a temporary connection to the potable water supply when an alternate water source is not available for the initial test. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **1502.3.3 Discovery of Cross-Connection.**

**Rationale:** HCD proposes to adopt the above referenced section with existing amendments. The amendments, adopted during the 2016 Intervening Code Adoption Cycle, delete the requirement for the AHJ to be present during procedures to be followed upon discovery of cross-connection. The amendment, however, requires that AHJ to be notified and renumbers following model code provisions. The amendments further apply the procedures to the building and its premises. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

##### **1502.3.4 Annual Inspection.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC.

## **1503.0 Gray Water Systems.**

### **1503.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. HCD proposes to adopt the above referenced section and bring forward existing California amendments clarifying that local jurisdiction may adopt more restrictive provisions related to gray water. The amendments further require diverter valves to the building sewer when irrigation is not needed nor disposal to a disposal field is not suitable or poses a health and safety risk. Additional amendments address health and safety concerns related to source and use of gray water and require an operation and maintenance manual. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

These provisions implement Senate Bill 1258 (Chapter 172, Statutes of 2008) and HSC section 17922.12. The “reduced-pressure principle backflow preventer” was previously added for consistency with other sections with provisions for connections between systems and potential backflow.

#### ***1503.1.1 Clothes Washer System.***

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. This amendment, originally adopted in 2009, address requirements for a clothes washer gray water system which may be exempt from permits if meeting specified conditions. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

There are three types of graywater systems. HCD has specifically designated the Clothes Washer System and Single Fixture System to be allowed without a construction permit when certain criteria have been met. The subsections included in this section are minimum safeguards and guidance for users to install and use these systems in a way that minimizes any threat to health and safety.

#### ***1503.1.2 Simple System.***

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. This amendment, originally adopted in 2009, addresses requirements for a simple gray water system with a discharge capacity of 250 gallons or less per day. These systems may be exempt from construction permits if exempted by the enforcing agency in consultation with the water purveyors for a public water system. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

This is the second of the three types of systems. The simple system is specifically designed to accommodate the average home up to five bedrooms. HCD established a 250-gallon per day (gpd) maximum for these systems. The 250 gpd mark is also used by New Mexico and has been determined to be a point where engineering could be required above this mark; below 250 gpd the design will be the industry standard and performance based.

### **1503.1.3 Complex System.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment addresses requirements for complex systems which are neither the clothes washer system nor a simple system. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

This is the third and largest of the three types of graywater systems. These systems discharge a large volume of over 250 gpd and are more complicated in design than the other two types of graywater systems. The design criteria for these systems will satisfy the enforcing agency and could include engineering, design professional or drawings from any person competent to design such systems. The application for these systems will be very large homes, multi-family dwellings or other similar occupancies.

### **1503.2 System Requirements.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment includes a disposal field as a location where gray water may be discharged and replaces “single family and multi-family dwellings” with “residential occupancies” as HCD’s authority covers all residential occupancies. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1503.2.1 Surge Capacity.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment includes a disposal field as a location where gray water may be discharged, as well as an exception to state that diversion of gray water by a diverter valve or overflow drain to the building sewer is allowed. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1503.2.2 Diversion.**

**Rationale:** HCD proposes to adopt the above referenced section with new and existing California amendments. For consistency with this code, the reference to a “gray water” diverter valve is deleted and amendments are inserted that an approved diverter valve shall be in a readily accessible location, and must not require removal of any panel, door, or similar obstruction to access the valve to allow diversion of gray water to the subsurface irrigation field, subsoil irrigation field, disposal field, mulch basin, or the building sewer. Previously, HCD recognized that there is no commercially available valve identified as an “approved gray water diverter valve” and proposes to continue to amend the term to remove the words “gray water,” however, stakeholders have expressed concerns that other diverter valves may perform the in same function without being a gray water valves complying specially to the IAPMO PS 59 standard. Therefore, reference to the IAPMO standard is also deleted. These amendments are substantially similar to the 2019 CPC provisions, therefore, there is no intended change in the regulatory effect. An existing amendment also provided an exception for clothes washer systems from the diversion requirement will also continue to be adopted for the 2022 CPC.



### 1503.2.3 Backwater Valves.

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires that when a gray water system drains into a building sewer system it shall be protected at the point of connection by a backwater valve. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### 1503.3 Connections to Potable and Reclaimed (Recycled) Water Systems.

**Rationale:** HCD proposes to adopt the above referenced section and bring forward existing California amendments. The amendments clarify that gray water systems have no direct connection to a potable water supply, on-site treated nonpotable graywater supply, or reclaimed (recycled) water supply systems. The amendment is consistent with CCR, title 17. Additional amendments (Exceptions) clarify that rainwater may be used as makeup water and that potable water may be temporarily used for the initial cross-connection test of the untreated graywater system. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC with amendment to clarify application to nonpotable “gray” water and with no intended change in regulatory effect.

### 1503.4 Location.

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment (Exception), adopted during the 2009 code cycle, adds an exception which may allow discharge of gray water from one lot onto an adjacent lot provided certain requirements are met. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### TABLE 1503.4 LOCATION OF GRAY WATER SYSTEM

**Rationale:** HCD proposes to adopt the above referenced Table with existing California amendments. Table 1503.4 establishes the minimum horizontal distance required from gray water systems to various elements such as structures and property lines. The table was amended to add a column for “Disposal Field,” and the minimum horizontal distance from streams or lakes was amended from 50 feet to 100 feet. The distance required between an on-site domestic water service line is amended from 5 feet to 0 feet.

Footnote (1) was amended to clarify what building structures are not included. “Roofed porte cocheres” was added to the list of structures not included as buildings.

Footnote (3) was amended to provide further detail on location of underground tanks.

Footnote (10) was amended to delete model code text and to address the allowable minimum horizontal distance to be reduced to 50 feet (15,240 mm) for irrigation or disposal fields utilizing graywater which has been filtered prior to entering the distribution piping.

The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.5 Plot Plan Submission. (Exception)**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (Exception). The amendment provides an exception allowing a clothes washer system in compliance with section 1503.1.1 to be installed without a construction permit. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.6 Prohibited Location.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment eliminates duplicative items already addressed in section 1503.0. The term “geologically sensitive area” as determined by the AHJ, was deleted because it is not a defined term that can be universally applied statewide. Site conditions vary statewide and it is more appropriate for the local enforcing agencies to determine where gray water systems shall not be installed. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.7 Drawings and Specifications.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. Since each Enforcing Agency or AHJ has its own requirements for permit issuance “shall require” has been changed to “may require” with regard to the information required on the plans.

Item 2 was amended to delete redundant reference to the AHJ.

Item 4 was amended to include disposal area as a location of a gray water system which may include a disposal field.

Item 4, Exception (2) was added providing that the enforcing agency may waive the requirement for identification of groundwater level and/or soil absorption qualities based on knowledge of local conditions.

Item 4, Exception (3) was added to bring forward language regarding absence of groundwater in test holes. This section was added in order to prevent costly and unnecessary verification of groundwater depth. The required groundwater separation is set at three-foot minimum from graywater system to groundwater. It is not necessary to locate groundwater if the separation distance has been met, so this added section prevents expensive drilling to locate the groundwater depth by allowing an inexpensive test hole to prove adequate separation and protect the groundwater.

The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.8 Procedure for Estimating Gray Water Discharge. (*Exception*)**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The model code requires gray water systems to be designed to distribute the total amount of gray water on a daily basis. The amendment (*Exception*) clarifies that it is not the intent of the section to require that all gray water be handled by an irrigation field or disposal field and it is acceptable for excess gray water to be diverted to the building sewer. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1503.8.1 Residential Occupancies.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendment changes the section title from “Single Family Dwelling and Multi-Family Dwelling” to “Residential Occupancies” which encompasses all of HCD’s residential occupancies including hotels and motels. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1503.8.3 Daily Discharge.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment requires gray water systems using tanks to be designed to minimize the amount of time gray water is held in the tank and to be sized to distribute the total amount of estimated gray water on a daily basis. An exception is provided for approved on-site treated nonpotable gray water systems. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.9 Gray Water System Components.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment specifies that gray water systems are required to comply with Chapter 15 and corrects numbers for referenced sections. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1503.9.1 Surge Tanks.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments as follows:

Item (1) was amended to include language from the 2012 International Green Construction Code (IGCC) section 708.12.6.2 with modification to replace the “and” with an “or” to clarify that the tank does not need to be protected from direct sunlight *and* be constructed of Ultraviolet (UV) resistant materials.

Item (4) was amended to state “GRAY WATER SYSTEM, CAUTION UNSAFE WATER”.

Item (9) was amended to clarify that other approved methods may be permitted.

Item (11) was added to clarify that an overflow drain and backwater valve is not required on a clothes washer system.

At the time of first amendment, the amendments summarized above made this section consistent with section 1609A.0 of the 2010 CPC. The existing amendments have now been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.9.3 Subsoil Irrigation Field Materials.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC.

### **1503.9.3 Animals and Insects.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment is a combination of text from the 2012 IGCC and the 2012 Green Plumbing and Mechanical Code Supplement. The amendment was intended to prevent the entry of mosquitoes, other insects, and vermin into surge tanks. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.9.4 Subsurface Irrigation Field and Mulch Basin Supply Line Materials.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. The requirements for materials used for irrigation fields and mulch basins are proposed to be adopted in section 1503.9.2 of this code.

### **1503.9.4 Freeze Protection.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment originally from the 2013 CPC requires freeze protection for gray water tanks and piping installed in areas subject to freezing. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1503.9.5 Valves.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. The requirements for valves to be in an accessible location is proposed in section 1503.2.3.

### **1503.9.6 Trap.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. The requirements for traps to be installed for every fixture which may be a source of sewer gas into the building is already required by Chapter 10 of this code.

### **1503.9.7 Backwater Valve.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. The requirements for a backwater valve to be installed are located in section 1503.2.3.

### **1504.0 Subsurface Irrigation System Zones.**

## **TABLE 1504.2 DESIGN OF SIX TYPICAL SOILS**

**Rationale:** HCD proposes to adopt the above referenced Table with an existing California amendment. The amendment adds “Leaching” to the table column addressing minimum square feet of area per 100 gallons of estimated gray water daily discharge. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.3 Determination of Maximum Absorption Capacity. (Exceptions)**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments (Exceptions). The amendments provide exceptions to the model code requirements for determining groundwater level or maximum absorption capacity of the irrigation field or mulch basin soil if waived by the enforcing agency; or for percolation tests for specified irrigation fields utilizing only drip emitters. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.4 Groundwater Level. (Note)**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment (Note). The amendment clarifies that absence of groundwater in a test hole three feet below the deepest irrigation or disposal point is sufficient compliance with the requirement for evidence of groundwater depth. This section was originally added in order to prevent costly and unnecessary verification of groundwater depth. The required groundwater separation is set at three-foot minimum from graywater system to groundwater. It is not necessary to locate groundwater if the separation distance has been met, so this note helps avoid expensive drilling to locate the groundwater depth by allowing an inexpensive test hole to prove adequate separation and protect the groundwater. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.5 Subsurface and Subsoil Irrigation Field, and Mulch Basin Design and Construction.**

#### **1504.5.1 Subsurface Irrigation Field.**

#### **1504.5.2 Minimum Depth.**

#### **1504.5.3 Filter.**

#### **1504.5.4 Emitter Size.**

#### **1504.5.5 Number of Emitters.**

#### **1504.5.6 Controls.**

#### **1504.5.7 Maximum Pressure.**

### **1504.6 Mulch Basin.**

#### **1504.6.1 Single Family and Multi-Family Dwellings.**

#### **1504.6.2 Size.**

#### **1504.6.3 Minimum Depth.**

#### **1504.6.4 Maintenance.**

### **1504.7 Subsoil Irrigation Field.**

### **1504.7.1 Minimum Pipe Size.**

### **1504.7.2 Filter Material and Backfill.**

### **1504.7.3 Subsoil Irrigation Field Construction.**

**Rationale:** HCD proposes to continue to not adopt the above referenced sections from the 2021 UPC into the 2022 CPC. HCD proposes in a separate action to bring forward sections from the 2019 CPC (derived from Chapter 16A of the 2010 CPC) which address measures contained in the above referenced sections.

### **1504.5 Irrigation, Disposal Field and Mulch Basin Construction.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment provides guidance on the proper construction of irrigation fields, disposal fields and mulch basins. The amendment also clarifies intent to not prohibit or restrict technologies not specifically covered by this code and references the CALGreen, chapter 4, division 4.3 which refers the code user to the CCR, title 23, MWELO, which addresses irrigation design plans. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1504.5.1 Mulch Basin.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment clarifies that a mulch basin may be used as an irrigation or disposal field. The amendment also clarifies that mulch basins require periodic maintenance and must be sized to accept the rapid flow of water from a clothes washer or bathtub or other fixture which is connected to the graywater system without ponding or runoff. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1504.5.2 Irrigation Field.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment with modification. The amendment clarifies acceptable methods for design of gray water irrigation fields. The amendment addresses requirements for filters, emitters, irrigation zones and distribution of water among irrigation zones, materials used for supply and drip feeder lines, pressure control, and back siphonage control. Inclusion of this section also provides a distinction between graywater use for irrigation purposes versus the model code's apparent focus on disposal methods for both irrigation and disposal. HCD proposes to repeal the reference to the informational publication "Irrigation Performance Report, Drip Emitters and Micro-Sprinklers" since this publication has not been updated for years according to the Center for Irrigation Technology. HCD also proposes to renumber the reference to Table 1504.5 to accommodate renumbering in the model code. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment, except for the repeal of the reference to the outdated publication; and renumbering of a referenced table; and with no intended change in regulatory effect.

### **1504.5.3 Disposal Field.**

**Rationale:** HCD proposes to continue adoption of the above referenced California amendment. The amendment as originally proposed provided specific requirements for disposal fields in comparison to Chapter 16 of the 2009 UPC, which addressed these systems in one section. The amendment also provided for use of properly installed manufactured infiltration systems in disposal systems and provided reference to Table 1504.5.3 for acceptable dimensions for bottom width of trenches and depth of earth cover over lines. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **TABLE 1504.5.3 SUBSOIL IRRIGATION FIELD CONSTRUCTION**

**Rationale:** HCD proposes to continue adoption of the above referenced table with an existing California amendment. The amendment renumbers the table as Table 1504.5.3 and amends the bottom width of the trench to 24 inches maximum from 18 inches. A footnote was added requiring leaching chambers to be installed in compliance with the manufacturer's installation instructions for consistency with Chapter 16 of the 2010 CPC. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.8 Gray Water System Color and Marking Information.**

**Rationale:** HCD proposes to adopt the above referenced section and bring forward an existing California amendment. The amendment requires cautionary labeling requirements for gray water distribution piping upstream from the gray water irrigation or disposal field. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.9 Other Collection and Distribution Systems.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment references section 301.3 which already references authority of the AHJ for alternate materials and methods. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1504.9.1. Higher Requirements.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC. The authority of the AHJ is adequately addressed in other parts of this code.

#### **1504.9.1 Future Connections.**

**Rationale:** HCD proposes to bring forward the above referenced existing California amendment. The amendment originated from section 1612A.0 (C) in the 2010 CPC with the gray water stub-out identification requirement modified for consistency with other sections. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1504.11 Maintenance.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The model code references Table 1501.5 which is not adopted by HCD. Therefore, HCD has amended this section to provide other means of maintenance including recommendations from the manufacturer and/or as specified by the local enforcing agency. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1505.0 Reclaimed (Recycled) Water Systems**

**Rationale:** HCD proposes to continue to not adopt the above referenced section and following subsections from the 2021 UPC section 1505 addressing reclaimed (recycled) water systems is under the jurisdiction of DWR.

#### **1505.1 General.**

#### **1505.2 Permit.**

##### **1505.2.1 Plumbing Plan Submission.**

#### **1505.3 System Changes.**

#### **1505.4 Connections to Potable or Reclaimed (Recycled) Water Systems.**

#### **1505.5 Initial Cross-Connection Test.**

#### **1505.6 Reclaimed (Recycled) Water System Materials.**

#### **1505.7 Reclaimed (Recycled) Water System Color and Marking Information.**

#### **1505.8 Valves.**

#### **1505.9 Hose Bibbs.**

#### **Figure 1505.9**

#### **1505.10 Required Appurtenances**

#### **1505.11 Same Trench as Potable Water Pipes**

#### **1505.12 Signs.**

#### **1505.13 Inspection and Testing**

### **1506.0 On-Site Treated Nonpotable *Gray* Water Systems.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment modifies the section title to limit the on-site treated water systems to on-site treated nonpotable gray water systems which is consistent with the scope of section 1503). The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.



### **1506.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California. The amendment changes the model code term “on-site treated nonpotable water” to “on-site treated nonpotable gray water,” and adds a paragraph identifying other potential sources of water for reuse. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.2 Plumbing Plan Submission.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendment clarifies application to on-site treated nonpotable gray water systems and included a California amendment adopted for the 2016 CPC which requires local enforcing agencies to consult with other specified parties. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.3 System Changes.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments change the term “on-site treated nonpotable water system” to “on-site treated nonpotable gray water system.” The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.4 Connections to Potable or Reclaimed (Recycled) Water Systems.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments originally adopted for the 2016 CPC, prohibits direct connections to a potable water supply, on-site treated nonpotable graywater supply, or reclaimed (recycled) water supply systems. This amendment was consistent with CCR, title 17. Amendments to exceptions include protection for the water supply inlet of storage tanks and allowing temporary connection to a potable water supply for initial testing of the system. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.6 On-Site Treated Nonpotable Gray Water System Materials.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the term “on-site treated nonpotable water supply” to “on-site treated nonpotable gray water supply.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.7 On-Site Treated Nonpotable Gray Water Devices and Systems.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the term “on-site treated nonpotable water” to “on-site treated nonpotable gray water.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.8 On-Site Treated Nonpotable Gray Water System Color and Marking Information.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments change the title reference from “on-site treated nonpotable water system” to “on-site treated nonpotable gray water system” and clarified application to on-site treated nonpotable gray water systems. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.9 Design and Installation.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments change the term “on-site treated nonpotable water systems” to “on-site treated nonpotable gray water systems” and changed the range of model code section numbers referenced to accommodate the addition of California amendment section 1506.9.6. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1506.9.1 Listing Terms and Installation Instructions.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the term “on-site treated nonpotable water systems” to “on-site treated nonpotable gray water systems.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1506.9.2 Minimum Water Quality.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments change the terms “on-site treated nonpotable water” to “on-site treated nonpotable gray water” and similarly for on-site treated nonpotable gray water systems. The amendments also require the use of National Sanitation Foundation International (NSF)/American National Standards Institute (ANSI) 350 standards when local water quality requirements are not present. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1506.9.3 Deactivation and Drainage.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the term “on-site treated nonpotable water system” to “on-site treated nonpotable gray water system.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1506.9.4 Near Underground Potable Water Pipe.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment changes the term “on-site treated nonpotable water” to “on-site treated nonpotable gray water.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.9.5 Required Filters.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment and new modification. The amendment changes the term “on-site treated nonpotable water” to “on-site treated nonpotable gray water.” HCD also proposes an editorial correction to pluralize “drip irrigation system.” The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect; the new amendment is editorial and also has no change in regulatory effect.

### **1506.9.6 Disinfection.**

**Rationale:** HCD proposes to bring forward the above referenced existing California amendment. The initial amendment was derived from the 2012 IGCC and provided additional guidance when disinfection and/or treatment of on-site treated nonpotable water is required. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.11 Signs.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments correct referenced sections to include section 1501.9.2 which was renumbered; and requires signs to comply with applicable sections of the CBC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1506.12 Inspection and Testing.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendment changes the term “on-site treated nonpotable water systems” to “on-site treated nonpotable gray water systems.” The amendment also provides for inspection and testing requirements by the AHJ. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **CAC Recommendation:**

Approved as submitted

### **Agency Response**

Accept

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## **ITEM 17**

### **CHAPTER 16, NONPOTABLE RAINWATER CATCHMENT SYSTEMS**

HCD proposes to adopt Chapter 16 from the 2021 UPC into the 2022 CPC, with new and existing amendments as follows:

### **1601.0 General.**

### **1601.2 System Design.**

**Rationale:** HCD proposes to adopt the above referenced section with new California amendments. The amendments modify the section to reflect the provisions in the 2019 CPC and permit rainwater catchment systems to be designed by a person registered or licensed to perform plumbing design work or who demonstrates competency to design the rainwater catchment system as required by the AHJ. Therefore, there is no intended change in regulatory effect from the 2019 CPC.

HCD also proposes to continue adoption of an existing California amendment providing a reference to the irrigation plan requirements in the MWELO in CCR, title 23.

### **1601.3 Permit.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments (Exceptions). The amendments delete model code exceptions and add more specific exceptions which clarify when permits are not required based on rainwater catchment tank capacity; and for catchments systems used for spray irrigation based on storage capacity. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1601.5 Maintenance and Inspection.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment modifies model code requirements and requires that maintenance and inspection of rainwater catchment systems and components comply with the manufacturer's recommendations or as required by the enforcing agency. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC with an editorial amendment and with no intended change in regulatory effect.

#### **1601.5.1 Frequency.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC since referenced Table 1601.5 is also not adopted. (See model code 1601.5.3 as renumbered to section 1601.5.1 "Maintenance Responsibility.")

#### **1601.5.2 Maintenance Log.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC since referenced Table 1601.5 is also not adopted. (See model code 1601.5.3 as renumbered to section 1601.5.1 "Maintenance Responsibility.")

#### **1601.5.1 Maintenance Responsibility.**

**Rationale:** HCD proposes to adopt the above referenced section from the 2021 UPC with modification which includes renumbering to section 1601.5.1 due to the deletion of prior model code sections. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **TABLE 1601.5 MINIMUM ALTERNATE WATER SOURCE TESTING, INSPECTION, AND MAINTENANCE FREQUENCY.**

**Rationale:** HCD proposes to continue to not adopt the above referenced table from the 2021 UPC. Due to adopted amendments in sections 1601.5 and 1601.5.1, the model code table is no longer necessary and may conflict with the manufacturer's recommendations or local requirements.

### **1601.6 Operation and Maintenance Manual.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments which are consistent with Chapter 15, section 1501.6 Operation and Maintenance Manual. The amendments add the word "installer" to identify who else may be required to provide the manual in the absence of a system designer or when the installer is the building owner; amendments to Item 1 remove "detailed" and add "s" to diagrams; amendments to Item 3 specify instructions for maintaining water quality; and amendments in Item 5 remove reference to Table 1601.5 and instead reference the section since the table is not adopted. Item 7 was added to require instructions that the manual remain with the building. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1601.7 Minimum Water Quality Requirements.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments and further modification. The existing amendment refers the code user to Table 1602.9.6 (as renumbered to 1603.5) in the absence of water quality requirements. HCD also added the term "surface" in Exception 2 to match Table 1603.5. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1602.4 Connections to Potable or Reclaimed (Recycled) Water Systems.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with new California amendments in coordination with CBSC and DWR. These amendments provide consistency with provisions in Chapter 15 related to connections to potable or reclaimed (recycled) water systems in compliance with Nine-Point Criteria (1) to address conflict.

### **1603.0 (Formerly 1602.9) Design and Installation.**

#### **1603.4.1 (Formerly 1602.9.3 and 1602.9.4) Other Surfaces.**

**Rationale:** HCD proposes to adopt the above referenced reformatted model code sections and restore existing California amendments. Existing amendments specified application to other types of impervious collection surfaces; changed the model code term "stormwater" to "water quality" which was consistent with section 1602.9.3 in the 2016 CPC related to water quality for surface water runoff vehicular parking surfaces or manmade surfaces; and added an exception for rainwater or storm water used for subsurface landscape irrigation. The term "gray" for on-site treated nonpotable water systems was added to match section 1504.0 in the 2016 CPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1603.5.1 Treatment.**

### **1603.5.2 (Formerly 1602.9.6.1) Disinfection.**

**Rationale:** HCD proposes to adopt the above referenced existing California amendment with modification. The amendment addresses rainwater quality and residual chlorine levels when chlorine is used for disinfection. HCD proposes a grammatical modification to remove capitalization of “enforcing agency.” The existing amendment as editorially modified has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **TABLE 1603.5 (Formerly 1602.9.6) MINIMUM WATER QUALITY.**

**Rationale:** HCD proposes to adopt the above referenced table with existing California amendments. The amendments add surface irrigation as a type of irrigation being recognized for water treatment and quality purposes and add parenthetical values for microns. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1603.8 (Formerly 1603.4) Above Grade.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with existing California amendments and further modification. The existing amendment changes the model code term “building code” to “California Building Code” and added an exception for tanks to be installed directly on grade if in accordance with a specified section. The proposed amendment adds the word “Section” prior to the referenced section number. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and the editorial change has no intended change in regulatory effect.

### **1603.9 (Formerly 1603.5) Below Grade.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment provides a minimum size requirement for manholes and service ports for all below grade tanks. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1603.10 (Formerly 1603.6) Drainage and Overflow.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendment requires that the tank drain must also be protected from backflow of the storm drainage system by a backflow preventer and that the backflow device shall be accessible for service and repair. The existing amendment has been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1603.11 (Formerly 1603.7) Opening and Access Protection.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendment deletes the second sentence referencing tank access openings since it is duplicative of the existing California amendment in section (B) which provides more specificity as to the requirement for access openings. An additional amendment requires specific opening sizes for installed screens. The California amendment text was model code language in the 2012 UPC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1603.13 (Formerly 1603.9) Storage Tank Venting.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with existing California amendments and further modification. The original amendments were based on section 707.11.7.6 of the 2012 IGCC and specified that rainwater tanks be adequately vented in accordance with the California Plumbing Code. The amendment also changed the size of mesh screen to 1/16 to be consistent with section 1603.11. HCD proposes to correct metric equivalent to 1/16-inch. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and the modification has no intended change in regulatory effect.

### **1603.19 (Formerly 1603.15) Required Filters.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment makes a grammatical correction and adds an “s” to the end of the word “system” to clarify that filters shall be provided on any installed rainwater supplied drip irrigation system(s). The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

## **1604.0 Signs.**

### **1604.1 General.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires the code user that signs also comply with the applicable requirements of the CBC. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1604.2 Commercial, Industrial, Institutional, and Residential Restroom Signs.**

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments. The amendments incorporate a reference to the CBC to inform code users that the accessibility requirements for signs are located in the CBC. This amendment is consistent with the sign requirements in Chapter 15. The amendment also clarifies that “residential common use areas” are required to be provided with signage to inform the occupants of the use of nonpotable rainwater for flushing of water closets and urinals. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1604.3 Equipment Room Signs.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment modifies the model code reference to “nonpotable rainwater” on cautionary signs and instead uses the term “nonpotable water” which is consistent with other sections of this chapter. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

### **1605.3 Cross-Connection Inspection and Testing.**

**Rationale:** HCD proposes to continue adoption of the above referenced section with an existing California amendment. HCD, in coordination with CBSC, adopted changes distinguishing steps taken during initial visual inspections and cross-connection tests (i.e., those conducted before initial operation of a rainwater catchment system) from those taken during subsequent inspections and tests. The existing amendment also removes the requirement for annual cross connection testing and also removes the reference to 1605.3.4 which HCD does not adopt. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1605.3.2 Cross-Connection Test**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendment. The amendment requires that the cross-connection test be performed in the presence of the AHJ or other authority with jurisdiction. In addition, HCD, in coordination with CBSC, added language distinguishing steps during an initial cross-connection test for rainwater catchment systems from those taken during subsequent cross-connection tests. Item 6, as amended also requires a temporary connection to potable water when alternate water source is not available for the initial test. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1605.3.3 Discovery of Cross-Connection.**

**Rationale:** HCD proposes to adopt the above referenced section with an existing California amendments. The amendments remove the requirement for the presence of the AHJ when procedures to alleviate cross connections are being conducted since it is not necessary that the AHJ be present when a cross-connection is discovered. The amendments also modify procedure step 1 to require that rainwater water piping be shut down at the supply source whether is a meter or not. The existing amendments have been brought forward from the 2019 CPC into the 2022 CPC without amendment and with no intended change in regulatory effect.

#### **1605.3.4 Annual Inspection.**

**Rationale:** HCD proposes to continue to not adopt the above referenced section from the 2021 UPC which removes the requirement for annual inspection of the rainwater catchment system.

#### **CAC Recommendation:**

Approved as submitted



## Agency Response

Accept

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### ITEM 18 CHAPTER 17, REFERENCED STANDARDS

HCD proposes to adopt Chapter 17 from the 2021 UPC into the 2022 CPC, with existing and new amendments as follows:

#### 1701.0 General.

#### TABLE 1701.1 Referenced Standards

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments and further modification to accommodate renumbered section references and to delete references not mandated in this code. The table modification has no intended change in regulatory effect.

#### TABLE 1701.2 Standards, Publications, Practices, and Guides

**Rationale:** HCD proposes to adopt the above referenced section with existing California amendments and further modification to accommodate references removed from Table 1701.1 as voluntary references. The table modification has no intended change in regulatory effect

#### CAC Recommendation:

Approved as submitted

#### Agency Response

Accept

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### ITEM 19 APPENDIX A, RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

HCD proposes to adopt Appendix A from the 2021 UPC into the 2022 CPC without amendments.

#### CAC Recommendation:

Approved as submitted

#### Agency Response

Accept

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### ITEM 20 APPENDIX B, EXPLANATORY NOTES ON COMBINATION WASTE AND VENT SYSTEMS

HCD proposes to not adopt Appendix B from the 2021 UPC.

#### CAC Recommendation:

Approved as submitted

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**Agency Response**

Accept

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**ITEM 21**  
**APPENDIX C, ALTERNATE PLUMBING SYSTEMS**

HCD proposes to not adopt Appendix C from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 22**  
**APPENDIX D, SIZING STORMWATER DRAINAGE SYSTEMS**

HCD proposes to adopt Appendix D from the 2021 UPC into the 2022 CPC without amendment.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 23**  
**APPENDIX E, MANUFACTURED/MOBILE HOME PARKS AND RECREATIONAL VEHICLE PARKS**

HCD proposes to not adopt Appendix E from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 24**  
**APPENDIX F, FIREFIGHTER BREATHING AIR REPLENISHMENT SYSTEMS**

HCD proposes to not adopt Appendix F from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 25**  
**APPENDIX G, SIZING OF VENTING SYSTEMS**

HCD proposes to not adopt Appendix G from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 26**  
**APPENDIX H, PRIVATE SEWAGE DISPOSAL SYSTEMS**

HCD proposes to adopt Appendix H from the 2021 UPC into the 2022 CPC without amendment.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 27**  
**APPENDIX I, INSTALLATION STANDARD FOR PEX TUBING SYSTEMS FOR HOT AND COLD-WATER DISTRIBUTION**

**Rationale:** HCD proposes to adopt Appendix I, IAPMO IS 31-2014 (Installation Standard for PEX Tubing Systems for Hot- and Cold-Water Distribution) only, from the 2021 UPC into the 2022 CPC without amendment. This adoption has no change from the 2019 CPC also adopted Appendix I which included the same standard.

Note: The 2021 UPC Appendix I includes three additional standards from the 2019 UPC:

- IAPMO IS 26-2019<sup>e2</sup> Trenchless Insertion of Polyethylene (PE) Pipe for Sewer Laterals
- IAPMO IS 33-2019<sup>e1</sup> Thrust Blocking for Rubber Gasketed and Solvent Cement Joints
- Tile Council of North America (TCNA) Handbook-2018 For Ceramic, Glass, and Stone Tile Installation

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 28**  
**APPENDIX J, COMBINATION OF INDOOR AND OUTDOOR COMBUSTION AND VENTILATION OPENING DESIGN**

HCD proposes to not adopt Appendix J from the 2021 UPC.

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**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 29**

**APPENDIX K, POTABLE RAINWATER CATCHMENT SYSTEMS**

HCD proposes to not adopt Appendix K from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 30**

**APPENDIX L, SUSTAINABLE PRACTICES**

HCD proposes to not adopt Appendix L from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 31**

**APPENDIX M, PEAK WATER DEMAND CALCULATOR**

HCD proposes to not adopt Appendix M from the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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**ITEM 32**

**APPENDIX N, IMPACT OF WATER TEMPERATURE ON THE POTENTIAL FOR SCALDING AND LEGIONELLA GROWTH**

HCD proposes to not adopt Appendix N from the 2021 UPC.

Note: Appendix N is a new appendix in the 2021 UPC.

**CAC Recommendation:**

Approved as submitted

**Agency Response**

Accept

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## **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).

- 2021 UPC. IAPMO/ANSI UPC 1 -2021. Published by IAPMO.
- 10 Code of Federal Regulations part 431 (O) (2019) which provides standards for all commercial pre-rinse spray valves.
- CCR, title 20, sections 1605.1(h)(4), 1605.3(h)(4), and 1607(d)(7) which highlight the federal standards for flow rate of commercial pre-rinse spray valves manufactured on or after January 28, 2019.
- SB 1258 required HCD to adopt and submit for approval building standards for the construction, installation, and alteration of graywater systems for indoor and outdoor uses, but also provided authority to the enforcing agency (city, county or other local agency) to further restrict graywater systems.
- AB 1750 identifies the collection surfaces which are suitable for collection of rainwater for use.
- SB 7 which required HCD to develop building standards requiring the installation of water submeters in newly constructed multiunit residential structures; and for residential units in newly constructed mixed-use residential/commercial structures.
- SB 1226 operative January 1, 2019, which added HSC section 17958.12 to the State Housing Law.
- SB 13 operative until January 1, 2035, added HSC section 17980.12 to the State Housing Law.

## **STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS**

Government Code Section 11346.2(b)(1) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.

HSC section 17922 requires HCD to adopt by reference model building codes, e.g., UPC, which contains 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)(4)(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.

None. There were no alternatives available to HCD. HCD is required by statute to adopt this model code by reference. The proposed amendments are the only reasonable alternative for clarifying the 2022 CPC.

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

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

HCD is required by statute to adopt this model code by reference, however, HCD also has authority to propose additions and deletions to the model code per HSC section 17922. HCD convened a pre-rulemaking stakeholder meeting on December 11, 2020, to solicit comment on new requirements in the 2021 UPC and has proposed amendments to reduce adverse impacts specifically for businesses related to gray water. As such, the proposed amendments should have no negative impact on small business.

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

Government Code Section 11346.2(b)(5)(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. HCD convened a stakeholder meeting December 11, 2020, to provide an opportunity for stakeholders to comment on major issues of concern related to adoption of the 2021 UPC.

## **ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION**

Government Code Sections 11346.3(b)(1) and 11346.5(a)(10)

HCD has assessed whether or not and to what extent this proposal will affect the following:

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

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

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

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

- C.** The expansion of businesses currently doing business within the State of California.

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

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

The adoption of the 2021 UPC by reference with California amendments will provide stakeholders with safe and sanitary plumbing systems while allowing for innovation, new technologies, and accommodation of specialized requirements for the State of California. These regulations will also update and improve minimum existing building standards, which will provide increased protection of public health and safety, worker safety and the environment.

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

Government Code Section 11346.2(b)(5)(B)(i) 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 only technical and nonsubstantive changes.
- GC section 11346.2(b)(5)(B)(ii) provides that the model codes adopted pursuant to HSC section 18928 shall be exempt from the requirements of section 11346.2(b)(5)(B) unless upon request as specified. The purpose of this rulemaking is to adopt the 2021 UPC which is a model code setting forth requirements for plumbing systems in structures.
- The potential benefits provide recognition and appropriate use of new technologies and materials, clarity for the code users and local enforcement agencies, and may increase business due to the adoption of new building standards.
- As noted in section D ("benefits of the regulation") protection of public health and safety, worker safety and the environment.

## **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

Government Code Section 11346.2(b)(6) 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.

The regulations do not duplicate nor conflict with federal regulations. The State of California has preemptive authority to adopt more restrictive mandatory standards for the construction methods and materials addressed in these regulations. The provisions for the commercial pre-rinse valves provide consistency with federal requirements and include additional California requirements.