

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

**REGARDING ADOPTION OF THE 2012 UNIFORM PLUMBING CODE (UPC),
CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 5**

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:

Building Standards Law provides that state agencies adopt the latest editions of model codes, national standards or specifications in order to address public safety and welfare related to the built environment. A recent amendment to the law mandated that CBSC adopt building standards for graywater system for nonresidential occupancies in the 2012 Code Adoption Cycle, which it intends to accomplish by adoption of Chapter 16 with necessary amendments. In addition, CBSC proposes to adopt and amend rainwater capture standards in Chapter 17, their importance to water conservation in California having been demonstrated by recent efforts to enact rainwater legislation.

This proposed action by the CBSC adopts the most current edition of the UPC of the International Association of Plumbing and Mechanical Officials, (IAPMO) with existing amendments (not shown) and new amendments shown below. These proposed regulations will make effective the latest edition of the Uniform Plumbing Code (UPC) in the next triennial edition of the California Plumbing Code (CPC).

CHAPTER 1, ADMINISTRATION, *Division 1, Section 1.1.3.2 State-Regulated Buildings, Structures, and Applications, Section 1.1.11 Format;* and *Division II, SCOPE AND ADMINISTRATION,* introductory statement.

Purpose:

To delete references in the regulatory language of the codes to the Matrix Adoption Tables located at the beginning of each chapter and replace where needed with non-regulatory notes.

Problem, Rationale and Benefit:

In the past, some code users have interpreted content of the Matrix Adoption Tables as a regulatory part of the codes, and some agencies have used tables as explanatory tools accompanying code change proposals. The agency tables and the published ones are intended to be illustrative only and are superseded by any language in agency proposals and published codes. In addition, both agency and published versions often contain erroneous entries, such as "Xs" in wrong boxes or sections numbered incorrectly.

To clarify the non-regulatory nature of the Matrix Adoption Tables and lead code users to understand them as roadmaps only for the codes, references in code language to the tables should be deleted. References imply incorporation into the code, which is not the intent of the otherwise useful tables.

Deleting these references from the codes will clarify the effective use of the codes for users and should mitigate any future challenges by those code users who find errors in the tables.

CHAPTER 2, DEFINITIONS, to add the following definitions, previously proposed by the Department of Housing and Community Development (HCD) and approved in 2010 CPC Chapter 16A for graywater standards and in Chapter 17. The intent is to provide clarity for the code user what the meanings are as used in Chapters 16 and 17.

205.0 – Complex System

206.0 – Disposal Field

207.0 – Enforcing Agency

209.0 – Gray Water, Gray Water System

211.0 – Irrigation Field

215.0 – Mulch Basin

217.0 – On-Site Treated Nonpotable Water

220.0 – Rainwater, Rainwater Catchment System, Receiving Landscape, Reclaimed (Recycled) Water

221.0 – Simple System

220.0 – Treated Gray Water

CHAPTER 4, PLUMBING FIXTURES AND FIXTURE FITTINGS

The **specific purpose** of this proposed action by the CBSC proposes to repeal 2010 CPC Chapter 4 and adopt 2012 UPC Chapter 4, carrying forward existing amendments relocating as necessary to match the 2012 UPC format.

Section 422 & Table 422.1 is proposed for amendment to refer to Table A, Occupancy Load Factor for the purpose of calculation plumbing fixture requirement

NOTE: See Part II at the end of this document for existing California Amendments proposed to be carried forward from the 2010 CPC for adoption into 2013 CPC.

Specific purpose: of this proposed action by the CBSC adopts the most current edition of the UPC of the International Association of Plumbing and Mechanical Officials, (IAPMO). The adoption of the 2009 UPC will make applicable the most recent edition for use by individuals, businesses and state agencies as mandated by the Health & Safety Code (H&SC), Section 18928.

The proposal to add Table A, Occupancy Load Factor, was made because the International Association of Plumbing and Mechanical Officials (IAPMO) removed this table from the 2012 edition of the plumbing code. The BSC felt this table was necessary and important in assisting the citizens of California to accurately estimate the appropriate number of plumbing fixtures for all occupancies based on the occupant load factor instead of the existing requirements currently specified for installation in the 2009 plumbing code.

Rationale and Benefit: Table A is carried forward because the model code reference can in some cases require too many fixtures.

CHAPTER 14 – TABLE 14-1 REFERENCED STANDARDS

Table 1401.1 Referenced Standards

Specific Purpose:

CBSC proposes to amend the referenced standards listed in Table 1401.1, by adding Standard NSF/ANSI 350-2011 Onsite Residential and Commercial Water Reuse Treatment Systems and to make an editorial clarification to cite the California Electrical Code in lieu of NFPA 70, the National Electrical Code, which is adopted by reference into the California version.

Rationale and Benefit:

This standard is adopted by reference and may be used to meet the minimum water quality requirements for onsite treated nonpotable gray water systems as outlined in Chapter 16. Adoption provides a consistent standard across the state, allowing for innovative technologies while ensuring health and safety.

CHAPTER 16 – ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

The provisions in Chapter 16 of the 2012 Uniform Plumbing Code apply to the construction, alteration, and repair of alternate water source systems for nonpotable applications. In coordination with HCD, which is proposing repeal of 2010 CPC Chapter 16A while maintaining consistency with its provisions, CBSC proposes adopting Chapter 16 with amendments justified below. The benefits generally are to follow the mandate to adopt model codes and to retain provisions of Chapter 16A which were widely accepted by stakeholders during its development by HCD.

1601.1 Applicability.

Specific Purpose: CBSC proposes to amend this section by adding the words “discharge” and “use” from the applicability Section 1601A.0 (A).

Rationale and Benefit: This section states the application of graywater system building standards consistent with 1601A.0 (A).

1601.1.1 Allowable Use of Alternate Water.

Specific Purpose: CBSC proposes to adopt this section as amended to limit on-site treated nonpotable water to graywater. The chapter identifies only graywater as the nonpotable water available to treat for which CBSC has authority. Other sources are at the discretion of the local authority having jurisdiction.

Rationale and Benefit: This action provides clarity to the code user as to the respective authorities granted by law to state and local agencies.

1601.2 System Design.

Specific Purpose: CBSC proposes to adapt language from Section 501.2 of the 2012 Green Plumbing and Mechanical Code Supplement, which shares similar language with Section 1603A.1.3 of the 2010 CPC.

Rationale and Benefit: Chapter 16 of the 2012 UPC requires a person registered or licensed to perform plumbing design work for all systems with specific exceptions. This is more restrictive than the requirements of Chapter 16A of the 2010 CPC. This proposal retains provisions of Chapter 16A accepted by stakeholders during its development by HCD

1601.3 Permit.

Specific Purpose: CBSC proposes amendment of this section in coordination with HCD and to accommodate the location of rainwater regulation in its own Chapter 17.

Rationale and Benefit: Consistent with Chapter 16A of the 2010 CPC, this amendment makes reference to the water code for the role of the local public health department as a consultant to a city or county prior to issuing permits for indoor graywater systems. It also repeals the exceptions for rainwater catchment systems and moves them to Chapter 17. These amendments provide consistency with law, Chapter 16A, and the format of the 2012 UPC.

1601.5 Maintenance and Inspection.

Specific Purpose: CBSC proposes to adopt the above referenced section as amended in coordination with HCD. Maintenance and inspection shall be as required by the manufacturer's recommendations, as required by the local enforcement agency, or, where both may not exist, as recommended in Table 1601.5.

Rationale and Benefit: This amendment gives the local enforcing agency and/or the manufacturer or installer of the particular components or system the ability to determine the required maintenance and inspection requirements. It provides flexibility for a rapidly-developing technology, where manufacturers are at the forefront of safe and reliable treatment systems or where local authorities may be lacking expertise.

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

Specific Purpose: CBSC proposes adoption and amendment of this Table for nonresidential applications.

Rationale and Benefit: While post-occupancy testing, inspection and maintenance is typically beyond the purview of building codes, it may be within the authority of local authorities, and the table is intended as an option for them. It provides flexibility where manufacturers' recommendations do not exist or where local authorities may be lacking expertise.

1601.5.1 Frequency and 1601.5.2 Maintenance Log.

Specific Purpose: CBSC proposes to repeal these sections from the 2012 UPC.

Rationale and Benefit:

This action is coordinated with that of HCD, recognizing the limitation of state building codes prior to occupancy by owner. The repeals are consistent with less restrictive and widely accepted provisions of 2010 CPC Chapter 16A.

1601.6 Operation and Maintenance Manual.

Specific Purpose: CBSC proposes to adopt and amend this section from the 2012 UPC for adoption into the 2013 CPC in coordination with HCD. CBSC is adding the word "installer" in the first sentence and amending the list of requirements for a manual.

Rationale and Benefit: This intends 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. The list of requirements is modified for consistency with Section 1605A.0 (A) of the 2010 CPC.

1601.7 Minimum Water Quality Requirements.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies propose to adopt by reference NSF/ANSI 350 "Onsite Residential and Commercial Water Reuse Treatment Systems" (for graywater) to replace the citation to EPA standard (EPA/625/R-04/108). Exception 1 and 3 are proposed to be repealed and Exception 2 is amended to remove the number and to state that water treatment is not required for graywater used in a disposal field or for subsurface or subsoil irrigation.

Rationale and Benefit: NSF/ANSI 350 is a new standard that provides an alternative for treated graywater that the California Department of Public Health has agreed could be applied to systems and uses supervised by a building owner. The first exceptions are repealed to be relocated to Chapter 17 for rainwater; the third exception is consistent with provisions of Chapter 16A of the 2010 CPC.

1602.0 Gray Water Systems.

1602.1 General.

Specific Purpose: CBSC proposes to adopt this section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The amendment to this section brings forward items (A) through (I) from Chapter 16A of the 2010 CPC for continuity. "Reduced-pressure principle backflow preventer" has been added for consistency with other sections with provisions for connections between systems and potential backflow.

Rationale and Benefit: Chapter 16 of the 2012 UPC does not address all of the provisions of Section 1601A.0 "Graywater Systems – General" items (A) thru (I) of the 2010 CPC which HCD proposed and were widely accepted by stakeholders in 2009.

1602.1.2 Simple System.

Specific Purpose: CBSC proposes to adopt the above referenced section into the 2013 CPC in coordination with HCD for graywater systems that are small and generally do not require engineering.

Rationale and Benefit: The provisions in Chapter 16 of the 2012 UPC do not address a simple system and the 3 design criteria provided in Section 1603A.1.2 of the 2010 CPC developed by HCD with its stakeholders in 2009. Adding this language will provide consistency with Chapter 16A, Section 1603A.1.2 of the 2010 CPC.

1602.1.3 Complex System.

Specific Purpose: CBSC proposes to adopt the above referenced section into the 2013 CPC in coordination with HCD for graywater systems that discharge a large volume over 250 gallons a day. These may include engineering, a design professional, or drawings from an individual competent to design such systems.

Rationale and Benefit: The provisions in Chapter 16 of the 2012 UPC do not address a complex system and the 3 design criteria provided in Section 1603A.1.3 of the 2010 CPC; adding this language will provide consistency with accepted provisions of the 2010 CPC.

1602.2.1 Discharge.

Specific Purpose:

CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: For consistency with 2010 CPC Chapter 16A the section is amended to include disposal field as a location where gray water may be discharged. CBSC also accepts HCD's amendment to its authority for all residential occupancies to clarify applications for both agencies.

Rationale and Benefit: These amendments will make this section consistent with Chapter 16A of the 2010 CPC.

1602.2.2 Surge Capacity.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: For consistency with accepted provisions of 2010 CPC Chapter 16A the section is amended to include 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 to the building sewer is allowed.

1602.2.3 Diversion.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies recognized that there is no commercially available valve identified as an "approved gray water diverter valve" and proposes to amend the term to remove the words "gray water".

Rationale and Benefit: For consistency with this code, a 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. There is no intended change in regulatory effect.

1602.2.4 Backwater Valves.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment identifies 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.

1602.3 Connections to Potable and Recycled Water Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Amendments include changing the term "direct" to "unprotected" and including the word "rainwater" in the last sentence. Additionally "reduced-pressure principle backflow preventer, or other physical device which prevents backflow" is added.

Rationale and Benefit: The amendments serve to identify that direct connections may be allowed provided they are protected by either an airgap or other approved device which prevents backflow into the water system. They also permit rainwater to be used for makeup water (along with potable, on-site treated or recycled water) for storage tanks when the connection to the tank is protected by a backflow method or device. Lastly, they clarify that other means besides an airgap may be used to prevent backflow.

1602.4 Location.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. An exception is added, which may allow discharge of gray water from one lot onto an adjacent lot provided certain requirements are met.

Rationale and Benefit: This change is consistent with the accepted exception in Chapter 16A, Section 1601A.0 (C) of the 2010 CPC.

TABLE 1602.4 LOCATION OF GRAY WATER SYSTEM.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. A column is added to the table for Disposal Fields, two minimum distances from a graywater system are modified and footnotes are amended and added.

Rationale and Benefit: The amendments briefly summarized above provide consistency between the UPC table and footnotes and Table 16A-1 (and footnotes) of the 2010 CPC.

1602.6 Prohibited Location.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD to eliminate some items.

Rationale and Benefit: Some items are already covered in Section 1602.2. The term “geologically sensitive area” as determined by the Authority Having Jurisdiction, is proposed to be 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.

1602.7 Drawings and Specifications.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Amendments primarily recognize the authority of the local jurisdiction for permit issuance and for knowledge of local conditions. The words “shall require” have been changed to “may require” with regard to the information required on the plans, “disposal” is added to location areas, and exceptions are clarified and added.

Rationale and Benefit: The requirements in the model code are more restrictive than the requirements of Section 1604A of the 2010 CPC which has the acceptance of user groups. These amendments and exceptions are included to maintain consistency with Chapter 16A. Also, Exception (1) is amended to make an editorial correction, as IAPMO’s reference to Table 1602.4 should read Table 1602.10.

1602.8 Procedure for Estimating Gray Water Discharge.

Specific Purpose: CBSC proposes to adopt this section from the 2012 UPC. An exception is added, in coordination with HCD, to explain that it is not the intent to require that all gray water is handled by an irrigation field or disposal field. The exception is to state that it is acceptable for excess gray water to be diverted to the building sewer.

Rationale and Benefit: This exception is consistent with the note located in Chapter 16A, Section 1601A.0 (B) of the 2010 CPC.

1602.8.2 Commercial, Industrial, and Institutional Occupancies.

Specific Purpose: CBSC modified this section of the 2012 UPC to describe how the daily discharge can be calculated for lavatories, showers and commercial clothes washers, which would commonly be found in nonresidential buildings.

Rationale and Benefit: The methods for calculating daily discharge are intended to offer code users options for various fixtures that may occur in nonresidential buildings, and to allow the Authority Having Jurisdiction to accept other means of documentation.

1602.8.3 Daily Discharge.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2010 CPC in coordination with HCD.

Rationale and Benefit: Adding a statement intended to minimize the amount of time gray water is held in the tank and sizing the system to distribute the total amount of estimated gray water on a daily basis provides continuity between Section 1602.8 of the 2013 CPC and Section 1606A.0 (B) of the 2010 CPC accepted by stakeholders.

1602.9.1 Surge Tanks.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The amendment removes the requirement for the tank to be protected from direct sunlight and constructed of UV resistant materials and modifies some of the itemized requirements for surge tanks.

Rationale and Benefit: The first amendment aligns with less restrictive language in Chapter 16A of the 2010 CPC, and the itemized list is consistent with Section 1609A.0.

1602.9.2 Gray Water Pipe and Fitting Materials.

Specific Purpose: In coordination with HCD, CBSC proposes to repeal the above referenced section from the 2012 UPC and not adopt into the 2013 CPC.

Rationale and Benefit: Materials requirements for gray water piping systems are prescribed in other sections of the CPC.

1602.9.2. Animals and Insects.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. In response to a comment, the amendment blends language from the 2012 International Green Construction Code and the 2012 Green Plumbing and Mechanical Code Supplement.

Rationale and Benefit: This amendment is intended to prevent the entry of Mosquitoes, other insects, and vermin

into surge tanks.

1602.9.3 Subsoil Irrigation Field and Disposal Field Materials.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The language from Chapter 16A of the 2010 CPC regarding materials is proposed for adoption in Section 1602.11. Accepted by stakeholders in HCD's 2009 proposals for graywater were separate requirements for irrigation fields and disposal fields, which are being proposed for continuation into the 2013 CPC.

1602.9.3 Freeze Protection.

Specific Purpose: CBSC proposes to adopt this section into Chapter 16 the 2013 CPC from Section 1702.9.9 of the 2012 UPC, in coordination with HCD.

Rationale and Benefit: Freeze protection is proposed to be carried into this section to provide protection to gray water systems installed in areas subject to freezing, not limiting the requirement to rainwater catchment systems.

1602.9.4 Subsurface Irrigation Field and Mulch Basin Supply Line Materials.

Specific Purpose: In coordination with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The requirements for materials used for irrigation fields and mulch basins are proposed to be adopted in Section 1602.11 of this code.

1602.9.5 Valves.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The requirement for valves to be in an accessible location is proposed in Section 1602.2.3.

1602.9.6 Trap.

Specific Purpose: CBSC proposes repealing this referenced section from Chapter 16 of the 2012 UPC in coordination with HCD.

Rationale and Benefit: The requirement 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 the UPC.

1602.9.7 Backwater Valve.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The requirements for a backwater valve to be installed are located in 1602.2.4.

1602.10.2 Determination of Maximum Absorption Capacity.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD, adding an exception for a waiver of the requirement for percolation tests based on knowledge of local conditions.

Rationale and Benefit: The exception is consistent with Section 1608A.0 of the 2010 CPC.

1602.10.3 Groundwater Level.

Specific Purpose: In coordination with HCD, CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC with an explanatory note.

Rationale and Benefit: The note is consistent with Section 1607A.0 of the 2010 CPC.

1602.11 Subsurface and Subsoil Irrigation Field, and Mulch Basin Design and Construction through

1602.11.3.3 Subsoil Irrigation Field Construction.

Specific Purpose: In concert with HCD, CBSC proposes repealing Section 1602.11 and subsections from the 2012 UPC.

Rationale and Benefit: CBSC proposes in a separate action to adopt sections from Chapter 16A of the 2010 CPC which address measures contained in the above referenced sections, coordinating with HCD.

1602.11 Irrigation, Disposal Field and Mulch Basin Construction.

Specific Purpose: In coordination with HCD, CBSC proposes to adopt this section from Chapter 16A Part I of the 2010 CPC into the 2013 CPC.

Rationale and Benefit: Chapter 16A Part I of the 2010 CPC contains separate and specific sections for each of the different types of fields which more clearly identify the design and construction requirements for each unique application.

1602.11.2 Irrigation Field.

Specific Purpose: In coordination with HCD, CBSC proposes to adopt this section from Chapter 16A Part I of the 2010 CPC into the 2013 CPC.

Rationale and Benefit: Chapter 16A Part I of the 2010 CPC contains separate and specific sections for each of the different types of fields which more clearly identify the design and construction requirements for each unique application.

TABLE 1602.11 SUBSURFACE IRRIGATION DESIGN CRITERIA FOR SIX TYPICAL SOILS

Specific Purpose: In coordination with HCD, CBSC proposes to adopt this section from Chapter 16A Part I of the 2010 CPC into the 2013 CPC.

Rationale and Benefit: Chapter 16A Part I of the 2010 CPC contains separate and specific sections for each of the different types of fields which more clearly identify the design and construction requirements for each unique application. This Table replaces Table 16A-3 from the 2010 CPC, providing irrigation design criteria for six typical soils.

1602.11.3 Disposal Field.

Specific Purpose: In coordination with HCD, CBSC proposes to adopt this section from Chapter 16A Part I of the 2010 CPC into the 2013 CPC.

Rationale and Benefit: Chapter 16A Part I of the 2010 CPC contains separate and specific sections for each of the different types of fields which more clearly identify the design and construction requirements for each unique application.

TABLE 1602.11.3 SUBSOIL IRRIGATION FIELD CONSTRUCTION

Specific Purpose: CBSC proposes to adopt this table from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Amendments are proposed from the chart following 1611A.3 (C) of the 2010 CPC, including a footnote regarding leaching chambers.

Rationale and Benefit: This table reprises the chart in Section 1611A.3 of the 2010 CPC and provides the construction requirements for disposal fields and subsurface irrigation fields.

1602.12 Gray Water System Color and Marking Information.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The marking interval and identification requirements for graywater piping are proposed for adoption from Chapter 16A of the 2010 CPC.

1602.13.1 Other Collection and Distribution Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: Section 301.2 as referenced already contains language regarding the authority of the Authority Having Jurisdiction.

1602.13.1. Higher Requirements.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The powers and authority of the Authority Having Jurisdiction are sufficiently addressed elsewhere in this code. There is no intended change in regulatory effect.

1602.13.2 Future Connections.

Specific Purpose: CBSC proposes to adopt this section with a new title from Section 1612A.0 (C) in the 2010 CPC in coordination with HCD into the 2013 CPC.

Rationale and Benefit: The identification requirement has been modified for consistency with other sections.

1602.15 Maintenance.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The model code references Table 1601.5; however, CBSC proposes to reference Section 1601.5, of which the table is a part.

Rationale and Benefit: The table offers alternate recommended means for maintenance including recommendations from the manufacturer and/or as specified by the local enforcing agency, and, if there are none, suggested intervals for maintenance of system components.

1603.0 Reserved.

Specific Purpose: In concert with HCD, CBSC proposes repealing Section 1603 and its subsections concerning recycled water from the 2012 UPC and renaming it "Reserved".

Rationale and Benefit: HCD and CBSC do not have authority for recycled water. Currently, the recycled water standards of Department of Water Resources (DWR) are found in Chapter 16A Part II of the CPC. It is possible that this reserved section could be used for DWR's recycled water updates or for another purpose in the future.

1604.0 On-Site Treated Nonpotable Gray Water Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: Modification of the section title to limit on-site treated water systems to on-site treated nonpotable Gray Water is consistent with the scope of Section 1604.

1604.1 General.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”. A paragraph has been added identifying other potential sources of water for reuse on as requested by stakeholders.

1604.2 Plumbing Plan Submission.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.3 System Changes.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.4 Connections to Potable, Recycled, or Rainwater Water Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Amendments include the addition of the word “unprotected” and reference to reduced-pressure principle backflow preventer or other physical devices which prevent backflow.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section. The additional amendments allow other approved devices or methods to be used to protect water systems from cross contamination.

1604.6 On-Site Treated Nonpotable Gray Water System Materials.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.7 On-Site Treated Nonpotable Gray Water Devices and Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.8 On-Site Treated Nonpotable Gray Water System Color and Marking Information.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10 Design and Installation.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10.1 Listing Terms and Installation Instructions.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10.2 Minimum Water Quality.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies also propose to add language as a pointer to water quality requirements for on-site treated nonpotable gray water.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section. The pointer is intended for reference when there are no requirements specified by the local public health authority.

1604.10.3 Deactivation and Drainage.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10.4 Near Underground Potable Water Pipe.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10.5 Required Filters.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.10.6 Disinfection.

Specific Purpose: CBSC proposes to adopt language in this section from the 2012 International Green Construction Code (IgCC) into the 2013 CPC in coordination with HCD.

Rationale and Benefit: This proposal provides additional guidance when disinfection and/or treatment of on-site treated nonpotable water are required.

1604.11 Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment clarifies for the code user that signs shall also comply with the applicable requirements of the California Building Code.

1604.11.1 Commercial, Industrial, Institutional, and Residential Restroom Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Residential common use area restrooms have been included by HCD in this section, and the lettering requirements have been removed.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section. Signage lettering requirements are already covered in the California Building Code.

1604.11.2 Equipment Room Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.12 Inspection and Testing.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. This section states that “on-site treated nonpotable water systems shall be inspected and tested in accordance with Sections 1604.12.1 and 1604.12.2.” The agencies propose to add the phrase “or as required by the Authority Having Jurisdiction”.

Rationale and Benefit: The amendment is intended to clarify that the local enforcing agency may require different inspection requirements from those specified in this section or may require inspections additional to those specified.

604.12.1 Supply System Inspection and Test.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.12.2 Cross-Connection Inspection and Testing.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies propose to repeal the requirement for annual inspection and testing and require initial cross connection testing and inspection only.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section. In addition, the repeal of an annual inspection requirement is consistent with the scope of building codes that generally do not apply after occupancy by the owner.

1604.12.2.2 Cross-Connection Test.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.12.2.3 Discovery of Cross-Connection.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

1604.12.2.4 Annual Inspection.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The repeal of an annual inspection requirement is consistent with the scope of building codes that generally do not apply after occupancy by the owner.

1604.13 Sizing.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The term “on-site treated nonpotable water” has been changed to “on-site treated nonpotable gray water”, consistent with the scope of this section.

CHAPTER 17 NONPOTABLE RAINWATER CATCHMENT SYSTEMS

CBSC proposes to adopt this Chapter from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

1701.1 Applicability.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment clarifies for the code user that there are additional requirements in Chapter 16 which may apply to nonpotable rainwater catchment systems, as they are also Alternate Water Source Systems.

1702.2.1 Permit.

Specific Purpose: CBSC proposes to adopt this section into the 2013 CPC in coordination with HCD.

Rationale and Benefit: The intent is to identify the requirements for permits and clarify when exceptions may apply which allow some rainwater catchment systems to be installed without a permit.

1702.4 Connections to Potable or Reclaimed (Recycled) Water Systems.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD, replacing the word “direct” to “unprotected”.

Rationale and Benefit: The amendment means to clarify that connections are permitted provided they are protected with an approved backflow device.

1702.7.4 Collections Surfaces.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The requirements for collection surfaces are identified in Section 1702.9.3 as a California amendment.

1702.8 Rainwater Catchment Water System Color and Marking Information.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The amendment changes “nonpotable rainwater water” to “nonpotable water”.

Rationale and Benefit: The intent is to remove a redundancy in the word “water”.

1702.9.3 Collection Surfaces.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies propose to repeal the model code language from the 2012 UPC and adopt provisions from the 2012 Green Plumbing and Mechanical Code Supplement and the 2012 IgCC.

Rationale and Benefit: The amendments offer means of expanding rainwater collection surfaces to include parking and pedestrian surfaces and other manmade impervious surfaces and clarify that water collected from parking surfaces or below grade surfaces shall meet water quality requirements for on-site treated nonpotable graywater.

1702.9.4 Minimum Water Quality.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. In the absence of local water quality requirements for harvested rainwater, Table 1702.9.4 is added. In addition, the exception for systems less than 5000 gallons which use non sprinkled surface irrigation has been relocated from the body of the text to the exception, and additional information has been added to allow systems with storage tanks less than 5000 gallons to be installed when the tank is supported on grade and the height to diameter ratio does not exceed 2 to 1.

Rationale and Benefit: The table intends to provide minimum treatment and water quality requirements for rainwater, and the exception is added to clarify when treatment is not required. The tank provisions are consistent with those of the building code with regard to tanks exempt from permit.

1702.9.4.1 Disinfection.

Specific Purpose: CBSC proposes to adopt language in this section from the 2012 IgCC into the 2013 CPC in coordination with HCD.

Rationale and Benefit: This proposal provides additional guidance when disinfection and/or treatment of on-site treated nonpotable water are required, consistent with Chapter 16 for graywater.

TABLE 1702.9.4 Minimum Treatment and Water Quality for Rainwater.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 IAPMO Green Plumbing and Mechanical Code Supplement into the 2013 CPC as amended in coordination with HCD. The word "Surface" has been added to the second row of the Application Column and the word "Disinfection" was removed from the third row of the Minimum Treatment Column.

Rationale and Benefit: The first amendment indicates that surface irrigation may be permitted. The second clarifies that no treatment is required for irrigation from systems where the storage volume is less than 360 gallons.

1702.9.5 Rainwater Storage Tanks.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD, changing the referenced Section 1702.9.5.7 to Section 1702.9.5.8.

Rationale and Benefit: The requirements for marking are being added in a separate action.

1702.9.5.4 Below Grade.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment provides a minimum size requirement for manholes and service ports for all below grade tanks.

1702.9.5.5 Drainage and Overflow.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment clarifies 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.

1702.9.5.6(A) Animals and Insects.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. In response to a comment, the amendment blends language from the 2012 International Green Construction Code and the 2012 Green Plumbing and Mechanical Code Supplement.

Rationale and Benefit: This amendment is intended to prevent the entry of Mosquitoes, other insects, and vermin into rainwater tanks.

1702.9.5.6(B) Human Access.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The amendment specifies that there shall be at least one access opening in rainwater storage tanks for inspection and cleaning, and that the access must be lockable.

Rationale and Benefit: The intent of this section and amendment is to allow access but to prevent unauthorized access into the tank.

1702.9.5.7 Venting.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. This amendment is based on Section 707.11.7.6 of the 2012 IgCC.

Rationale and Benefit: The amendment is to assure that rainwater tanks shall be adequately vented in accordance with the CPC.

1702.9.5.8 Marking.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. This amendment renumbers the section and modifies the marking requirements of the model code, only requiring the marking to indicate that the water is nonpotable.

Rationale and Benefit: This action is consistent with other sections of this chapter.

1702.9.11 Required Filters.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The amendment makes a grammatical correction and adds an "s" to the end of the word "system".

Rationale and Benefit: The intent to clarify that filters shall be provided on any installed rainwater supplied drip irrigation system(s).

1702.10 Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD.

Rationale and Benefit: The amendment informs the code user that signs shall also comply with the applicable requirements of the California Building Code.

1702.10.1 Commercial, Industrial, and Institutional, and Residential Restroom Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. Residential common use area restrooms have been included by HCD in this section, and the lettering requirements have been removed.

Rationale and Benefit: This is to inform the occupants of the use of nonpotable rainwater for flushing of water closets and urinals. Signage lettering requirements are already covered in the California Building Code.

1702.10.2 Equipment Room Signs.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. This amendment modifies the marking requirements of the model code, only requiring the marking to indicate that the water is nonpotable.

Rationale and Benefit: This action is consistent with other sections of this chapter.

1702.11.2. Cross-Connection Inspection and Testing.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. The agencies propose to repeal the requirement for annual inspection and testing and require initial cross connection testing and inspection only.

Rationale and Benefit: The repeal of an annual inspection requirement is consistent with the scope of building codes that generally do not apply after occupancy by the owner.

1702.11.2.3 Discovery of Cross-Connection.

Specific Purpose: CBSC proposes to adopt the above referenced section from the 2012 UPC into the 2013 CPC as amended in coordination with HCD. This amendment clarifies step 1 to indicate that the water shall be shut off at the source(s).

Rationale and Benefit: This assures that proper procedures for correcting a cross-connection can be met regardless if there is a meter or not.

1702.11.2.4 Annual Inspection.

Specific Purpose: In concert with HCD, CBSC proposes repealing the above referenced section from the 2012 UPC.

Rationale and Benefit: The repeal of an annual inspection requirement is consistent with the scope of building codes that generally do not apply after occupancy by the owner.

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

There were no formal studies or reports used as the bases for the proposed adoption of the Uniform Plumbing Code. The Health & Safety Code, Section 18928, mandates this proposed action to adopt the model code by reference.

STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS

The Health & Safety Code, Section 18928, mandates this proposed action to adopt the Uniform Plumbing code by reference. Model codes contain prescriptive standards that provide clarity to code users and also performance standards, the compliance with which must be justified to the enforcing authority.

CONSIDERATION OF REASONABLE ALTERNATIVES

There are no reasonable alternatives identified by the agency. The Health & Safety Code, Section 18928, mandates this proposed action to adopt the model plumbing code, and Section 18941.8 directs the CBSC to adopt graywater standards for nonresidential applications.

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

No alternatives were identified to lessen the adverse impact on small businesses. The Health & Safety Code, Section 18928, mandates this proposed action.

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

No facts, evidence, documents, testimony, or other evidence of any significant adverse economic impact on business have been identified. The Health & Safety Code mandates this proposed action.

DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS

There are no federal regulations related to this proposed action.