

**FINAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
CALIFORNIA BUILDING STANDARDS COMMISSION (BSC)**

**REGARDING ADOPTION OF THE 2012 UNIFORM PLUMBING CODE (UPC),  
CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 5  
2013 CALIFORNIA PLUMBING CODE**

The Administrative Procedure Act requires that every agency shall maintain a file of each rulemaking that shall be deemed to be the record for that rulemaking proceeding. The rulemaking file shall include a final statement of reasons. The Final Statement of Reasons shall be available to the public upon request when rulemaking action is being undertaken. The following are the reasons for proposing this particular rulemaking action:

**UPDATES TO THE INITIAL STATEMENT OF REASONS:**

The BSC finds that no revisions have been made which would warrant a change to the initial statement of reasons for changes to format consistent with other state agencies.

**MANDATE ON LOCAL AGENCIES OR SCHOOL DISTRICTS**

The California Building Standards Commission has determined that the proposed regulatory action would impose a mandate on local agencies or school districts. However, the mandate does not require reimbursement pursuant to Part 7 (commencing with section 17500) of Division 4, Government Code. H&SC section 18928 requires the BSC to adopt the most current edition of the model codes. H&SC 18938(b) makes applicable the most current edition of the model electrical code to all occupancies throughout the State of California as prescribed.

**OBJECTIONS OR RECOMMENDATIONS MADE REGARDING THE PROPOSED REGULATION(S).**

**45 DAY COMMENTS**

**COMMENTER:** Rachel Kraai, San Francisco Public Utilities Commission (SFPUC)

**Section 220.0** The commenter recommends amendments to the Rainwater, Stormwater, and Rainwater Catchment System definitions.

**Section 1601.1** The commenter recommends adding a pointer to Chapter 17.

**Section 1601.7** The commenter recommends the use of NFS/ANSI 350 for gray water systems.

**Section 1602.0** The commenter recommends title clarification of gray water systems.

**Section 1702.8** The commenter recommends removing double use of "Water"

**Section 1702.9.3** The commenter recommends distinguishing between rainwater and stormwater.

**Section 1702.9.4** The commenter recommends changes to the exception for water treatment.

The other comment per this section is to edit the table for minimum water treatment and water quality.

**RESPONSE:**

**Section 220.0** BSC declines to accept the recommendation to modify "Rainwater" and add "Stormwater". BSC does agree with Ms. Kraai's recommendation to edit "Rainwater Catchment System" and has made changes to align with HCD.

**Section 1601.1** BSC declines to accept the recommendation at this time. BSC feels "Applicability" is clear and chooses not to add a pointer to Chapter 17.

**Section 1601.7** BSC language was mentioned for reference only.

**Section 1602.0** BSC declines to accept the recommendation at this time.  
**Section 1702.8** BSC agrees with the commenter; however model code will be corrected in the next code cycle, therefore BSC is adopting model code un-amended.  
**Section 1702.9.3** BSC declines to accept the recommendation at this time.  
**Section 1702.9.4** BSC declines to accept both comments on the basis the proposed change being substantive and would require full vetting.

**COMMENTER:** Tracy Quinn, Natural Resources Defense Council (NRDC)

**Section 418.0 of 2010 CPC moved to 408.3 of the 2012 UPC** The commenter recommends amendments to Shower and Tub-Shower Combination Control Valves.  
**Section 1601.7** The commenter recommends an amendment to the Minimum Water Quality for Simple Systems  
**Section 1702.9.4** The commenter supports the minimum treatment and water quality language for rainwater.

**RESPONSE:**

**Section 418.0 2010 CPC/408.3 2012 UPC** BSC declines to accept this recommendation as it is a substantive change requiring full vetting. Additionally BSC is not proposing to amend this model code section therefore this recommendation is outside the purview of this rulemaking cycle.  
**Section 1601.7** BSC declines to accept this recommendation as it is a substantive change requiring full vetting.  
**Section 1702.9.4** BSC thanks NRDS for their support.

**COMMENTER:** Laura Allen, Greywater Action, on **Sections 209.0, 1602.2.1, 1602.9.2, 1602.11**

**Section 1602.2.1** The commenter recommends the allowed use of gray water discharge to a mulch basin in a non-residential application similar to residential.  
**Section 1602.9.2** The commenter recommends removing reference to screens on inlets and overflow pipes on gray water pipe.  
**Section 1602.11** The commenter recommends updating soil types in Table 1602.10 to the same soil types in Table 1602.11.

**RESPONSE:**

**Section 1602.2.1** BSC declines to accept the recommendation at this time. This is a substantive change which would additional require stakeholder input. BSC will further review this recommendation in the upcoming intervening code cycle.  
**Section 1602.9.2** BSC declines to accept the recommendation at this time. This is a substantive change which would require additional stakeholder input.  
**Table 1602.11** BSC declines to accept the recommendation at this time. BSC is adopting model code un-amended.

**COMMENTER:** Roy Nordblom III, Sustainable Construction Consultant, on **Section 1601.2, Section 1601.4, Section 1601.5, 1602.2.1, 1602.2.3, 1602.3, 1602.8.1, 1602.8.3 (HCD & BSC)**

**Section 1601.2** The commenter asked for clarification of "licensed design professional".  
**Section 1601.4** The commenter asked for clarification of "properly identify".  
**Section 1601.5** The commenter concurs with the removal of "minimum alternate water source testing."  
**Section 1602.2.1** The commenter recommended alternative language.  
**Section 1602.2.3** The commenter recommends removing Section 1602.2.3 Diversion.  
**Section 1602.3** The commenter concurs with the Section language.  
**Section 1602.8.1** The commenter disagrees with the language proposed.  
**Section 1602.8.3** The commenter recommends removing Section 1602.2.3.

**RESPONSE:**

**Section 1601.2** BSC commenter asked for clarification of "licensed design professional". BSC agrees with HCD's rationale that Qualification requirements for a "licensed design

professional” referenced in Section 1601.2 were based on the 2012 IAPMO Green Plumbing and Mechanical Code Supplement language in Section 501.2 and are similar to the language in Section 1603A.1.3 of the 2010 CPC.

**Section 1601.4** BSC commenter asked for clarification of “properly identify”. BSC agrees with HCD’s rationale that Identification of system components is a general requirement contained in Chapter 3 of the 2013 CPC and requires any pipe, fitting, device, or material used in plumbing systems to be marked with the manufacturers’ name etc. Section 1601.2 of the 2012 UPC contained a requirement for alternate water source system components, piping, and fittings to be listed. It was adopted into the 2013 CPC with further amendment. The requirement for plumbing materials to be listed and of approved materials has been a code requirement for decades.

**Section 1601.5** BSC would like to thank Mr. Nordblom for his support.

**Section 1602.2.1** BSC acknowledges the recommendation however BSC is bringing forth model code language with amendments to use “residential occupancies” consistent with California language. Additionally, revisions to Section 1602.2.1 were not discussed or considered during the rulemaking process.

**Section 1602.2.3** BSC commenter recommends removing Section 1602.2.3 Diversion. BSC agrees with HCD’s rationale that proposed amendment to Section 1602.2.3 carries forward provisions from Section 1601A.0 (E) of the 2010 CPC. This is a general requirement for gray water systems. BSC Section 1602.1.1(2) contains specific requirements for a “Clothes Washer System.” Pursuant to Chapter 1 criteria, where there is a difference between a general and a specific requirement, the specific requirement shall prevail.

A clothes washer is defined as a “plumbing fixture” by Chapter 2 of the 2013 CPC. Section 1001.1 requires all plumbing fixtures to be separately trapped, regardless of whether they discharge to a sanitary drainage system or a gray water irrigation or disposal field.

**Section 1602.3** BSC would like to thank Mr. Nordblom for his support.

**Section 1602.8.1** The commenter disagrees with the language proposed. This comment is directed to HCD so refer to HCD’s FSOR for response.

**Section 1602.8.3** The commenter recommends removing Section 1602.2.3. See response to section 1602.2.3 above for similar response.

**COMMENTER:** Christina Berteau, Union Trained plumbing contractor, Greywater Action

**Section 220.0** The commenter recommends modifications to definitions **Reclaimed (Recycled) Water**

**Section 1601.1** The commenter recommends modifications to the applicability section.

**Section 1601.1.1** The commenter is unclear on the applicability of Chapter 16 and 17.

**Section 1601.2** The commenter asks for clarity on who “lists” approved materials.

**Section 1601.7** The commenter asks for clarity on minimum water quality requirements for rainwater.

**Section 1702.9.4** The commenter recommends alternate language for minimum water quality requirements.

## **RESPONSE:**

**Section 220.0** BSC declines to accept the recommendation. HCD proposed to continue of the above California amendment and relocated it into Chapter 2.

**Section 1601.1** BSC declines to accept the recommendation at this time. BSC believes "Applicability" is sufficiently clear.

**Section 1601.1.1** Certain sections of Chapter 16 do apply to Chapter 17 rainwater. Section 1602 specifically applies only to graywater. Disposal fields are addressed in Section 1602 for graywater systems and defined in Chapter 2 as only applying to graywater.

**Section 1601.2** A "listed" material meets a reference standard as defined in Chapter 35 of the CBC.

**Section 1601.** The rainwater exceptions are repealed and relocated to Chapter 17 Table 1702.9.4.

**Section 1702.9.4** BSC declines to accept the recommendation at this time. This is a substantive change which would require additional stakeholder input.

**COMMENTER:** Jesse Froehlich, BlueBarrel Rainwater Collection Systems

**Section 1601.1-1601.1.9** The commenter recommends renaming Chapter 16 to suggest it apply to gray water systems for semantic consistency.

**System Design** The commenter recommends clarity for definition and its reference to complex systems; a term which only applies to gray water.

**Section 1701.1 Applicability:** The commenter says if the above suggestion is incorporated then remove the language in this section which refers the reader back to chapter 16.

**Table 1702.9.4 Car washing:** The commenter recommends clarification for minimum treatment for "car washing".

**Chapter 17 General:** The commenter recommends clarity for pipe color.

**RESPONSE:**

**Section 1601.1-1601.9** BSC received other comments with similar concern to these sections. BSC is adopting model code language and does not agree that Chapter 16 should be renamed.

**System Design** Provisions contained in Section 1601.0 apply to Gray Water and also Recycled (Reclaimed) Water, Rainwater, and Onsite Treated Nonpotable Gray Water.

**Section 1701.1** The model code provides adequate reference in Section 1702.8 directing code users to the appropriate provisions in Chapter 6 where pipe color, marking and identification requirements are identified.

**Section 1702.9.4** BSC declines to accept the recommendation at this time. This is a substantive change which would require additional stakeholder input.

**Section 1702.9.5.5** BSC agrees with HCD's determination that an oversight had occurred during the development of Section 1702.9.5.5 and has made the editorial correction to remove the extraneous word(s) in this section.

**Chapter 17** BSC does not propose to amend model code to state the color of piping materials for Rainwater Catchment Systems.

**COMMENTER:** Tom Enslow, California State Pipe Trades Council

**Section 1602.9.2** The commenter recommends keeping model code language and requirements for pipe, valve and fittings.

**RESPONSE:**

**Section 1602.9.2** BSC agrees with the comments and proposes to adopt model code language. This concurs with HCD's

**COMMENTER:** Jeffrey Hatcher, Senior Plumbing/Mechanical Inspector City of Oakland Building Services

**Section 408.5** The commenter recommends further study for this model code section regarding curbless showers.

**RESPONSE:**

**Section 408.5** BSC declines to accept the recommendation at this time. This is a substantive change which would require stakeholder input. BSC is adopting this model code section un-amended.

**COMMENTER:** Richard LeWarne, Monterey County Health Department, Environmental Health Bureau

**Section 1602.4** The commenter recommends adding subsection which addresses high production graywater systems and the operational and design requirements.

**RESPONSE:**

**Section 1602.4** BSC declines to accept the recommendation at this time. This is a substantive change which would require additional stakeholder input. Additionally, BSC believes the comment to propose additional operational and design requirements to Section 1604.10 falls outside the scope of this rulemaking and aligns with HCD's rationale.

**COMMENTER:** Bob Adler, City of San Jose

**Section 204.0, 206.0, 224.0, 908.2, 908.2.1, 908.2.1.1, 908.2.2, 908.2.1.3, 908.2.1.4, 908.2.1.5**

The commenter recommends amending the proposed 2012 UPC to include the Tentative Interim Amendment (TIA) UPC-001-12 which clarifies the intent of wet vent systems.

**RESPONSE:**

BSC declines the comment at this time. The TIA was added after the BSC normal rulemaking cycle. The next edition of the CPC will include any TIA incorporated into model code. Local jurisdictions can adopt the TIA language via the local ordinance process.

**COMMENTER:** Joyce Dillard, *and attachment from LACDPH (Chapters 2, 14, 16 and 17)* The commenter has concerns about who is the "Authority having Jurisdiction" and earthquake safety for underground grey water storage tanks. The commenter also expressed general concern for public health in L.A. due to jurisdictional confusion, lack of understanding of who the lead agency is, concern about the ecosystems, hazardous chemicals in storm water runoff and the potential for birds and animals to become contaminated or diseased, and stated that gray water is complex.

**RESPONSE:**

This Comment was submitted as an attachment only. The commenter provided BSC with comment during the 45-day public comment period. The comments were not focused on any specific section of the 2013 CPC and did not suggest any specific changes. It appears that the comments were directed at a specific project or projects within the City of Los Angeles. BSC declines the comment at this time.

**COMMENTER:** Steve Bilson, ReWater Systems (*HCD & BSC*)

**Section 1611A.2 (7)** The commenter recommends rewording the section to remove contradictory language.

**RESPONSE:**

**Section 1611A.2 (7)** This section is renumbered as 1602.11.2.7 in the 2013CPC. BSC concurs with these proposed changes and has modified language to align with HCD's proposed 15 Day code change.

**COMMENTS:** Kenneth L. Bayless. Greater Los Angeles County Vector Control District  
**Section 1602.9.2 and Section 1702.9.5.6(A)**

The above listed commenter expressed support for proposed Sections 1602.9.2 and 1702.9.5.6(A) citing the need for properly installed and maintained screens on gray water and rainwater storage tank openings to prevent mosquito breeding and reduce the risk of West Nile Virus and mosquito-borne diseases.

**RESPONSE:**

BSC appreciates the comments in support of the proposed amendments.

**15 DAY COMMENTS**

**COMMENTS:** Alf Brandt. Assembly Select Committee on Regional Approaches to Addressing the State's Water Crisis.

The commenter is commenting on our 15 day proposed code change to sections CPC 220 and 1702.9.3 related to the definitions of rainwater and rainwater collection surfaces. The commenter clarifies that the intent of the legislation for the Rainwater Capture bill AB1750 is to promote-not limit-rainwater capture in California.

**RESPONSE:**

BSC agrees with Mr. Brandt's comments and thanks him for his involvement in the rulemaking process. BSC has commented on its own 15 day proposed code change and will withdraw the proposed 15-day language for sections CPC 220 and 1702.9.3. BSC will retain the original 45-day proposed code changes for those sections.

Basically, BSC had proposed changes to Chapter 2, Section 220, the definition for "Rainwater Catchment Systems" and Chapter 17, Section 1702.9.3, "Collection Surfaces" in 15 day. As discussed in the rationale submitted with the proposed 15 day revisions, our understanding was that these revisions were necessary to remain consistent with recent legislation which amended the Water Code. After further review we have determined the language BSC proposed for these sections during the 45 day comment period is accurate and does not require modification

**COMMENTS:** Enrique Rodriguez. CALIFORNIA BUILDING STANDARDS COMMISSION (BSC)

**Section CPC 220 & 1702.9.3** the BSC is commenting on our own 15 day proposed code change to sections CPC 220 and 1702.9.3 related to the definitions of rainwater. We are proposing to withdraw our 15-day language and retain the original 45 day proposed code changes for those sections.

**RESPONSE:**

**Section CPC 220 & 1702.9.3** BSC concurs with their own proposed code change and will withdraw the 15 day language and retain the original 45 day proposed code changes. Basically, BSC had proposed changes to Chapter 2, Section 220, the definition for "Rainwater Catchment Systems" and Chapter 17, Section 1702.9.3, "Collection Surfaces" in 15 day. As discussed in the rationale submitted with the proposed 15 day revisions, our understanding was that these revisions were necessary to remain consistent with recent legislation which amended the Water Code. After further review we have determined the language BSC proposed for these sections during the 45 day comment period is accurate and does not require modification.

**COMMENTS:** Tracy Quinn. Natural Resources defense Fund.

**Section CPC 1702.9.3** the commenter is commenting on our 15 day proposed code change to section CPC1702.9.3 related to rainwater collection surfaces. The commenter clarifies that the intent of the legislation for the Rainwater Capture bill AB1750 is to promote-not limit-rainwater capture in California.

**RESPONSE:**

BSC agrees with Ms. Quinn comments and thanks her for her involvement in the rulemaking process. BSC has commented on its own 15 day proposed code change and will withdraw the proposed 15-day language for sections CPC 202 and 1702.9.3. BSC will retain the original 45-day proposed code changes for those sections.

Basically, BSC had proposed changes to Chapter 2, Section 220, the definition for "Rainwater Catchment Systems" and Chapter 17, Section 1702.9.3, "Collection Surfaces" in 15 day. As discussed in the rationale submitted with the proposed 15 day revisions, our understanding was that these revisions were necessary to remain consistent with recent legislation which amended the Water Code. After further review we have determined the language BSC proposed for these sections during the 45 day comment period is accurate and does not require modification

**COMMENTS RECEIVED OUTSIDE THE PUBLIC COMMENT PERIOD**

**COMMENTER:** David W. Smith, PhD. WaterReuse California

**Section CPC 601.2** the commenter is commenting on BSC's proposed 45 day code change package for the 2013 CPC as it pertains to the use of purple colored pipe in alternate water sources besides recycled water. The commenter is recommending that the "...Commission not approve the use of purple pipe to convey "alternate" water sources and continue the current color identification for non-potable water-yellow background with black lettering..."

**RESPONSE:**

BSC declines to accept the recommendation at this time as the comment was submitted outside the public comment period and the code section in question was not a proposed code change during this code adoption cycle. BSC simply adopted Section 601.2 from the 2012 Uniform Plumbing Code, model code, without amendments. BSC may consider addressing this issue in future rulemaking.

**COMMENTER:** Mark Tetterer, Irvine Ranch Water District, commented on chapter 16 & 17 (HCD). Comments apply to BSC's proposed code changes so we are responding to the same comment.

**RESPONSE:**

BSC declines to accept the recommendation at this time as the comment was submitted outside the public comment period. BSC may consider addressing this issue in future rulemaking.

**DETERMINATION OF ALTERNATIVES CONSIDERED AND EFFECT ON PRIVATE PERSONS**

The BSC has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the adopted regulations.

**REJECTED PROPOSED ALTERNATIVE THAT WOULD LESSEN THE ADVERSE ECONOMIC IMPACT ON SMALL BUSINESSES:**

There were no proposed alternatives. The BSC has determined that the proposed regulations will have no adverse impact on small businesses.