

California Building Standards Commission,  
2525 Natomas Park Drive, Suite 130  
Sacramento, California 95833  
Attention: Jim McGowan, Executive Director  
e-mailed to [CBSC@dgs.ca.gov](mailto:CBSC@dgs.ca.gov).

October 8th, 2012

Dear Jim McGowan,

Thank you for your work on CPC's chapter 16. As a greywater installer and educator, I also think that HCD and BSC have greatly improved Chapter 16 from its original version in the UPC. That said, I would like to echo the comments already submitted by Laura Allen of Greywater Action. Please find my additional comments below.

Kind regards,  
Christina Berteau  
Union trained plumbing contractor  
Greywater Action

**Please find my comments in red following the referenced section of code in black, with the particular phrasing in question highlighted in green.**

**220.0**

**-R-**

[DELETE:**Reclaimed (Recycled) Water**. Nonpotable water **provided by a water/wastewater utility** that, as a result of **tertiary treatment of domestic wastewater**, meets requirements of the public health Authority Having Jurisdiction for its intended uses.]

[ADD:**Reclaimed (Recycled) Water (HCD 1)**. *Nonpotable water that meets California Department of Public Health statewide uniform criteria for disinfected tertiary recycled water. Reclaimed (recycled) water is also known as "recycled water" or "reclaimed water".*]

**comment: Are you intending to change the definition of "reclaimed (recycled) water" to not necessarily originate at wastewater treatment plants?**

**1601.1 Applicability.** [ADD:*Except as otherwise provided for in this chapter, the provisions of this code shall be applicable to alternate water source system installation.*] **The provisions of this chapter shall apply to the construction, alteration, [ADD:discharge, use] and repair of alternate water source systems for nonpotable applications.**

**1601.1.1 Allowable Use of Alternate Water.** Where approved or required by the Authority Having Jurisdiction, alternate water sources (reclaimed (recycled) water, **rainwater**, gray water and on-site treated nonpotable **gray water**) shall be permitted to be used in lieu of potable water for the applications identified in this chapter.

**comment: It appears that this chapter applies to rainwater as well as greywater. It is a little confusing that many of the provisions relating specifically to rainwater have been**

deleted. I wonder if the disposal field/irrigation requirements in this Chapter 16 might be mistakenly interpreted to apply to rainwater use as well?  
Perhaps when the code is reduced down to its' final text it will be easier to sort out.

[ADD:**1601.2 System Design.** *Alternate water source systems complying with this chapter shall be designed by a person who demonstrates competency to design the alternate water source system as required by the Enforcing Agency. The Enforcing Agency may also require plans and specifications to be prepared by a licensed design professional for Complex systems.*

*Components, piping, and fittings used in any alternate water source system shall be listed.]*

comment: Listed by whom? IAPMO? That is an expensive and slow process and may inhibit the development of much needed new technologies and materials for greywater and rainwater re-use.

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#### 1601.7 Minimum Water Quality Requirements

[DELETE: (1) Water treatment is not required for rainwater catchment systems used for aboveground irrigation with a maximum storage capacity of 360 gallons (1363 L).]

[DELETE: (2)] Water treatment is not required for gray water used [ADD:*in a disposal field or*] for subsurface [ADD:*or subsoil*] irrigation.

[DELETE: (3) Water treatment is not required for rainwater catchment systems used for subsurface or drip irrigation.]

comment: why are the rainwater exceptions being dropped here when chapter 1601.0 to 1601.9 also applies to rain water :

**1701.1 Applicability.** The provisions of this chapter shall apply to the installation, construction, alteration, and repair of nonpotable rainwater catchment systems. [ADD:In addition, *applicable provisions in Chapter 16, Sections 1601.0 through 1601.9 for “Alternate Water Sources for Nonpotable Applications” shall apply to rainwater catchment systems.*]

#### 1702.9.4

*for Surface, subsurface and drip irrigation*

*Minimum Treatment: Debris excluder or other approved means in compliance with Section 1702.9.10*

*100 Micron (100  $\mu$ m) in compliance with Section 1702.9.11 for drip irrigation*  
N/A

comment: Irrigay drip irrigation tubing designed by Netafim for reclaimed water and used widely for greywater and rainwater irrigation, requires only 40 micron filtration. This requirement for 100 micron filtration would be unreasonable in view of that manufacturer's recommendations. Some provision should be made for abiding by manufacturer's recommendations in lieu of the chart.