

**NOTICE OF POST-HEARING MODIFICATIONS TO TEXT OF
PROPOSED EMERGENCY REGULATIONS
TO
BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING THE 2007 CALIFORNIA PLUMBING CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5, CHAPTER 16A, PART I
(HCD EF 01/09)**

The California Building Standards Commission (CBSC) on behalf of the Department of Housing and Community Development (HCD) is providing notice of the changes made to proposed regulations, Sections 1601A.0, 1602A.0, 1603A.0, 1603A.1.1, 1603A.1.2, 1603A.1.3, 1612A.1 and Table 1603A.1.4, which were the subject of a public comment period that ended on October 19, 2009. These changes are in response to comments received during the initial 45-day public comment period that began on September 4, 2009, and ended on October 19, 2009.

The CBSC will accept written comments for at least 15 days between November 25, 2009, and December 9, 2009. All written comments must be submitted to the CBSC no later than 5:00 p.m. on December 9, 2009, and addressed to:

**California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833
Attention: Dave Walls, Executive Director**

Written comments may also be faxed to (916) 263-0959 or e-mailed to CBSC@dgs.ca.gov until 5:00 p.m. on December 9, 2009.

All written comments received by December 9, 2009, which pertain to the indicated changes, will be reviewed and responded to by HCD's staff as part of the compilation of the rulemaking file. Please limit comments to the modifications to the text only.

The proposed modifications to the text and a comment form may be found on the CBSC's website at the following link: http://www.bsc.ca.gov/prpsd_chngs/pc_09_comment.htm.

REVISED EXPRESS TERMS
FOR
PROPOSED EMERGENCY BUILDING STANDARDS
OF THE
DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT
REGARDING CHANGES TO THE 2007 CALIFORNIA PLUMBING CODE (CPC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 5, CHAPTER 16A, PART I
(HCD EF 01/09)

The Department of Housing and Community Development (HCD) proposes to revise the 2007 edition of the California Plumbing Code (CPC) as presented on the following pages. HCD further proposes to:

- Repeal amendments to the model codes that are no longer necessary, repeal or amend building standards that are not addressed by a model code;
 - Relocate or codify existing adopted and necessary amendments to the model code, the action of which has no regulatory effect; adopt new necessary amendments to the model code proposed for adoption; and/or
 - Adopt new building standards that are not addressed by the model code.
-

LEGEND FOR EXPRESS TERMS:

1. **Existing California amendments or code language being modified:** *All such language shown in italics, modified language is underlined or shown in ~~strikeout~~.*
 2. **UPC language with new California amendments:** UPC language shown in normal Arial 9 point; California amendments to UPC text shown underlined and in italics.
 3. **Repealed text:** All language shown in ~~strikeout~~.
 4. **Amended, adopted or repealed language after public hearing:** Amended, adopted, or repealed language will appear in double underline and ~~double strikeout~~.
 5. **Notation:** Authority and Reference citations are provided at the end of each section.
-

1. Amend Section 1601A.0 as follows:

1601A.0 Graywater Systems – General.

(A) No change in text

(B) ~~(The system, except as otherwise approved, shall consist of a holding tank or tanks that discharge into subsurface irrigation/disposal fields. The type of system shall be determined by the location, discharge capacity, soil type, and ground water level. The system shall be designed to handle graywater discharged from the building and may include tank(s) and other appurtenances necessary to ensure proper function of the system.~~

Note: It is not the intent of this section to require that all graywater must be handled by an irrigation field or disposal field. It is acceptable for excess graywater to be diverted to the building sewer through the overflow required pursuant to Section 1609A.0 (E).

(C) No change in text

(D) No construction permit for any graywater system shall be issued until a plot plan with appropriate data satisfactory to the ~~Authority Having Jurisdiction~~ Enforcing Agency has been submitted and approved. When there is insufficient lot area or inappropriate soil conditions ~~for adequate absorption to prevent the ponding or runoff of the graywater, as determined by the Authority Having Jurisdiction~~ Enforcing Agency, no graywater system shall be permitted allowed.

~~Exception: A construction permit shall not be required for a graywater system supplied by a clothes washer system and/or a single fixture system which does not require cutting of the existing plumbing piping provided it is in compliance with the requirements of Section 1603A.1.1.~~

... (No change to remainder of section)

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17921.3, 17921.4, 17922, 18300, 18865, 18944.11 and 19990; and Government Code Sections 12955.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Rationale for change:

HCD proposes to add a clarifying note to this section in order to make the intent clear for the code user. It has been HCD's intent that the overflow required in Section 1609A.O (E) be used as part of the design of the system and not be viewed as only a safeguard in a system failure. In development of these regulations, HCD anticipated that the overflow may be used on a regular basis. This note will clarify that the irrigation field or disposal field design may also use the required overflow to handle the graywater discharged from the building.

HCD proposes to amend the construction permit exemption for a "single fixture system" based on comments received during the 45-day comment period. Stakeholders expressed concern about modifications to plumbing systems and the elimination of oversight due to the exemption from permit. Most expressed concern that property owners with limited knowledge would be authorized to cut and re-pipe the building's existing drain, waste and vent (DWV) system with no mechanism in place to ensure compliance with some of the basic protections of the plumbing code. HCD agrees that a DWV system must be installed and maintained in compliance with the code requirements in order to function properly. In previous comments HCD has expressed the opinion that some of these modifications may be minimal, require very limited modification and pose very limited risk to occupants making the additional cost and burden of obtaining a permit unreasonable and of limited benefit. Some stakeholders have indicated that a streamlined permit system may reduce this burden to an acceptable level.

After consideration, HCD is proposing to remove the exemption from permit when the existing plumbing system is cut or reconfigured. However, HCD is proposing to maintain the permit exemption for a clothes washer system which does not require cutting of the existing drain, waste and vent system. HCD believes that this modification may provide enforcing agencies with reassurances necessary for them to actively promote the use of graywater instead of taking steps to modify the code at the local level to make it more restrictive.

2. Amend Section 1602A.0 as follows:

1602A.0 Definitions.

~~**Simple System.** A graywater system serving a one- or two-family dwelling with a discharge of 250 gallons (947 L) per day or less. Simple systems exceed a clothes washer system and/or a single fixture system.~~

~~**Single Fixture System.** A graywater system collecting graywater from one plumbing fixture or a single drain which collects graywater from more than one fixture in a one- or two family dwelling.~~

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17921.3, 17921.4, 17922, 18300, 18865, 18944.11 and 19990; and Government Code Sections 12955.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Rationale for change:

HCD proposes to amend the construction permit exemption for a “single fixture system” based on comments received during the 45-day comment period. Stakeholders expressed concern about modifications to plumbing systems and the elimination of oversight due to the exemption from permit. Most expressed concern that property owners with limited knowledge would be authorized to cut and re-pipe the building’s existing drain, waste and vent (DWV) system with no mechanism in place to ensure compliance with some of the basic protections of the plumbing code. HCD agrees that a DWV system must be installed and maintained in compliance with the code requirements in order to function properly. In previous comments HCD has expressed the opinion that some of these modifications may be minimal, require very limited modification and pose very limited risk to occupants making the additional cost and burden of obtaining a permit unreasonable and of limited benefit. Some stakeholders have indicated that a streamlined permit system may reduce this burden to an acceptable level.

After consideration, HCD is proposing to remove the exemption from permit when the existing plumbing system is cut or reconfigured. However, HCD is proposing to maintain the permit exemption for a clothes washer system which does not require cutting of the existing drain, waste and vent system. HCD believes that this modification may provide enforcing agencies with reassurances necessary for them to actively promote the use of graywater instead of taking steps to modify the code at the local level to make it more restrictive.

3. Amend Section 1603A.0 as follows:

1603A.0 Permit.

~~It shall be unlawful for any person to construct, install, or alter, or cause to be constructed, installed, or altered any gray water system in a building or on a premises without first obtaining a permit to do such work from the Authority Having Jurisdiction. A written construction permit shall be obtained from the Enforcing Agency prior to the erection, construction, reconstruction, installation, relocation or alteration of any graywater system that requires a permit.~~

Exception: A construction permit shall not be required for a graywater system supplied only by a clothes washer system and/or a single fixture system which does not require cutting of the existing plumbing piping provided it is in compliance with the requirements of Section 1603A.1.1.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17921.3, 17921.4, 17922, 18300, 18865, 18944.11 and 19990; and Government Code Sections 12955.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Rationale for change:

HCD proposes to amend the construction permit exemption for a “single fixture system” based on comments received during the 45-day comment period. Stakeholders expressed concern about modifications to plumbing systems and the elimination of oversight due to the exemption from permit. Most expressed concern that property owners with limited knowledge would be authorized to cut and re-pipe the building’s existing drain, waste and vent (DWV) system with no mechanism in place to ensure compliance with some of the basic protections of the plumbing code. HCD agrees that a DWV system must be installed and maintained in compliance with the code requirements in order to function properly. In previous comments HCD has expressed the opinion that some of these modifications may be minimal, require very limited modification and pose very limited risk to occupants making the additional cost and burden of obtaining a permit unreasonable and of limited benefit. Some stakeholders have indicated that a streamlined permit system may reduce this burden to an acceptable level.

After consideration, HCD is proposing to remove the exemption from permit when the existing plumbing system is cut or reconfigured. However, HCD is proposing to maintain the permit exemption for a clothes washer system which does not require cutting of the existing drain, waste and vent system. HCD believes that this modification may provide enforcing agencies with reassurances necessary for them to actively promote the use of graywater instead of taking steps to modify the code at the local level to make it more restrictive.

4. Amend Sections 1603A.1.1, 1603A.1.2, 1603A.1.3 and Table 1603A.1.4 as follows:

1603A.1 System Requirements.

1603A.1.1 Clothes Washer System and/or Single Fixture System. ~~A clothes washer system and/or a single fixture system~~ in compliance with all of the following is exempt from the construction permit specified in Section 108.4.1 and may be installed or altered without a construction permit:

1. If required, notification has been provided to the Enforcing Agency regarding the proposed location and installation of a graywater irrigation or disposal system.

Note: A city, county, or city and county or other local government may, after a public hearing and enactment of an ordinance or resolution, further restrict or prohibit the use of graywater systems. For additional information, see Health and Safety Code Section 18941.7.

2. The design shall allow the user to direct the flow to the irrigation or disposal field or the building sewer. The direction control of the graywater shall be clearly labeled and readily accessible to the user.
3. The installation, change, alteration or repair of the system does not include a potable water connection or a pump, and does not affect other building, plumbing, electrical or mechanical components including structural features, egress, fire-life safety, sanitation, potable water supply piping or accessibility.

Note: The pump in a clothes washer shall not be considered part of the graywater system.

4. The graywater shall be contained on the site where it is generated.
5. Graywater shall be directed to and contained within an irrigation or disposal field.
6. Ponding or runoff is prohibited and shall be considered a nuisance.
7. Graywater may be released above the ground surface provided at least two (2) inches (51 mm) of mulch, rock, or soil, or a solid shield covers the release point. Other methods which provide equivalent separation are also acceptable.
8. Graywater systems shall be designed to minimize contact with humans and domestic pets.
9. Water used to wash diapers or similarly soiled or infectious garments shall not be used and shall be diverted to the building sewer.
10. Graywater shall not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, or disposing of waste solutions from home photo labs or similar hobbyist or home occupational activities.
11. Exemption from construction permit requirements of this code shall not be deemed to grant authorization for any graywater system to be installed in a manner that violates other provisions of this code or any other laws or ordinances of the Enforcing Agency.
12. An operation and maintenance manual shall be provided. Directions shall indicate the manual is to remain with the building throughout the life of the system and indicate that upon change of ownership or occupancy, the new owner or tenant shall be notified the structure contains a graywater system.

1603A.1.2 Simple System. ~~Simple systems exceed a clothes washer system and/or a single fixture system and shall comply with the following:~~

1. The discharge capacity of a graywater system shall be determined by Section 1606A.0. Simple systems have a discharge capacity of 250 gallons (947 L) per day or less.

2. Simple systems shall require a construction permit, unless exempted from a construction permit by the Enforcing Agency. The Enforcing Agency shall consult with any public water system (as defined in Health and Safety Code, Section 116275) providing drinking water to the dwelling before allowing and exemption from a construction permit.

3. The design of simple systems shall be acceptable to the Enforcing Agency and shall meet generally accepted graywater system design criteria.

1603A.1.3 Complex System. Any graywater system that is not a clothes washer system, ~~single fixture system~~ or simple system shall comply with the following:

1. The discharge capacity of a graywater system shall be determined by Section 1606A.0. Complex systems have a discharge capacity over 250 gallons (947 L) per day.

2. Complex systems shall require a construction permit, unless exempted from a construction permit by the Enforcing Agency. The Enforcing Agency shall consult with any public water system (as defined in Health and Safety Code, Section 116275) providing drinking water to the dwelling before allowing ~~and~~ exemption from a construction permit.

3. A complex system shall be designed by a person who can demonstrate competence to the satisfaction of the Enforcing Agency.

Table 1603A.1.4 – Construction Permit Requirements

<u>Type of System</u>	<u>Permit Requirements</u>
<u>Clothes Washer System and/or a Single Fixture System</u>	<u>No construction permit required if conditions in Section 1603A.1.1 are met.</u>
<u>Simple System</u>	<u>Permit and plans required unless exempted by Enforcing Agency.</u>
<u>Complex System</u>	<u>Permit and plans required unless exempted by Enforcing Agency.</u>
<u>Treated Graywater</u>	<u>Permit and plans required unless exempted by Enforcing Agency.</u>

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17921.3, 17921.4, 17922, 18300, 18865, 18944.11 and 19990; and Government Code Sections 12955.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Rationale for change:

HCD is proposing amendments based to this section based on comments received. It was not HCD's intent for a pump on a clothes washer to be considered part of the graywater system. The intent is to allow a clothes washer system to be installed without a construction permit, while being more restrictive on systems utilizing a separate pump to move graywater. The language could be misinterpreted causing incorrect enforcement of this section. There is no intended change in regulatory effect for this amendment. In addition, HCD has proposed changes to this section to be consistent with the rationale and proposed amendment contained in Item #1.

5. Amend Section 1612A.1 as follows:

1612A.1 Indoor Use of Treated Graywater.

Graywater shall not be allowed for indoor use, such as flushing toilets and urinals, unless treated by an on-site water treatment system approved by the Enforcing Agency. For the purposes of this section, graywater treated by an on-site water treatment system shall be considered "Treated Graywater". Treated graywater and treated graywater systems shall comply with the provisions of this code except as otherwise provided in this chapter and shall comply with Part II of this chapter and all of the following:

(1) The treated graywater shall have a separate tank sized to minimize the length of time it is retained.

(2) A maintenance and operation manual for the treatment system shall be kept at the location of the system.

(3) Treated graywater intended for use indoors shall meet the California Department of Public Health statewide uniform criteria for disinfected tertiary recycled water as provided in: California Code of Regulations Title 22 Section 60301.230.

(4) The treated graywater system shall be installed, inspected and tested as specified for reclaimed water systems in Sections 1618.0 and 1620.0.

NOTE:

Authority Cited: Health and Safety Code Sections 17040, 17921, 17921.3, 17921.4, 17922, 18300, 18865, 18944.11 and 19990; and Government Code Sections 12955.1.

Reference: Health and Safety Code Sections 17000 through 17060, 17910 through 17995.5, 18630, 18640, 18690, 18873.1, 18873.2, 18873.4 and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

Rationale for change:

HCD is proposing modifications to Section 1612A.1 relating to indoor use of treated graywater. Two extra criteria have been added to clarify the original intent of the repealed language. The proposed regulation requires that treated graywater meet or exceed tertiary water quality standards and dual plumbing standards required for reclaimed water. The word "treated" has been added to the title of this section indicating this is a separate type of graywater, only treated graywater is suitable for indoor reuse. A reminder has been added to make clear all other provisions of the code must be complied with in regards to graywater. In review, HCD determined the original language was not a complete enough description of the required water quality, installation standards and inspection standards and has proposed to add addition guidance for the code user. There is no intended change in regulatory effect.
