

Graywater Fact Sheet prepared for Bay Area Water Conservation Coordinators

August 4, 2009

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The California Building Standards Commission (BSC) on July 30, 2009 adopted new code language for residential graywater reuse that takes effect today, August 4, 2009. This rulemaking modifies the California Plumbing Code, Title 24, Part 5, Chapter 16A, Part I.

Background

In 2008, the California Legislature passed AB 1258 (Lowenthal) which directed the Department of Housing and Community Development (HCD) to develop new graywater standards for residential properties for approval by the BSC and adoption on January 1, 2011 as part of the regular triennial code adoption cycle. All other properties would still be subject to the standards created by the Department of Water Resources in 1997 known as Appendix G.

In February, 2009 HCD proposed changes to Chapter 16 of the Uniform Plumbing Code. During the Spring of 2009 HCD held two stakeholder's meetings in Sacramento to discuss those changes and made alterations based on their findings. Interested parties from across the state attended.

In June, 2009 HCD finalized their submittal for the BSC, and proposed an additional emergency rulemaking that would modify the *current* plumbing code. The emergency rulemaking relied on the Governor's State of Emergency declaration. On July 30th both proposals went to the BSC. They passed overwhelmingly after strong testimony both for and against. The State Department of Public Health supported these changes to the code. Most resistance came from local building department and plumber industry representatives who wanted to retain mandatory permit requirements for all or most graywater systems. Overall, the new code is more "performance based" rather than prescriptive, and allows for much less expensive systems to be created by residents of the State.

General Rules

- ❖ These changes affect residential buildings only.
- ❖ Kitchen sink and diaper soiled water are not included in the definition of graywater.
- ❖ No ponding, spray, or runoff to the stormsewer system of graywater, ever.
- ❖ All systems must have an air-gap or suitable backflow prevention to protect the potable water supply.
- ❖ Not for root crops or edible portions of food crops.

PERMITS

Two types of Graywater Systems DO NOT Require local building permits

Clotheswasher and one single-fixture systems (or fixtures to a common drain).

Applies to single and two-family dwellings only.

Twelve conditions apply to these two types of systems.

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.
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.

These Graywater Systems DO Require Permits

1. Simple System. Up to 250 gpd of discharge, not including a clotheswasher and single fixture system. Local authority can exempt these from permits. Design is acceptable to the local authority. All other aspects of the code apply.
2. Complex System. Over 250 gpd of discharge. Local authority can exempt these from permits too. Designer must be by someone acceptable to the local authority. All other aspects of the code apply.

REQUIREMENTS FOR ALL GRAYWATER SYSTEMS

Discharge of Graywater to Landscapes

This is an area of the code that is becoming much less onerous.

Mulch basins are an acceptable type of disposal field.

Disposal through drip irrigation has to be under a minimum of 2" of soil or mulch (was 9").

Indoor Graywater Reuse

Treatment is required. Currently, there are no treatment standards, so it is left up to the local enforcing agency.

Adoption of Local Standards

Cities or counties can adopt more restrictive standards. For example, we expect some cities to adopt a requirement that clothes washer and simple systems be *registered or even require permits*. For example, the registration might include a checklist of the twelve conditions above. Another example might be a required training class before installing a graywater system. Or they can prohibit systems entirely.