

GREYWATER FACT SHEET

What is Greywater?

Greywater is untreated wastewater from bathtubs, showers, bathroom washbasins, and clothes washing machines. It does not include any toilet discharge, unhealthy bodily wastes, or manufacturing wastes.

How Can I Use Greywater?

Greywater can be used to irrigate landscaping and plants but not on root crops or edible parts of food crops. Be aware that some soaps and detergents can contain a variety of chemicals that may be harmful to your plants. Please contact a reputable landscape specialist for more information.

California Greywater Law

California law does not allow graywater use from kitchen sinks or dishwashers. In January 2010, the California Building Standards Commission adopted greywater guidelines into the California Plumbing Code. The [California Plumbing Code: Chapter 15](#) facilitates water conservation, relieves stress on private septic systems, makes legal compliance easily achievable, and provides guidelines for avoiding potentially unhealthy conditions.

Do I Need a Permit?

The California Plumbing Code requires a construction permit for any greywater system that makes changes to a home's drain/waste plumbing connected to clothes washers, showers, bathtubs, and bathroom sinks. The code allows residential greywater landscape irrigation from washing machines without a construction permit if the system meets all performance guidelines in the code.

How Do I Design a Greywater System?

The most reliable, economical, and low maintenance greywater system designs require no pumps, filters, or storage tanks. Greywater is piped directly to the landscape and distributed into mulch basins. The mulch basin and surrounding soil is the treatment system that digests organic debris, soap, and any potential pathogens. The most common

greywater systems are called Laundry-To-Landscape. This system uses the clothes washer's internal pump to distribute greywater to mulch basins. Greywater from bathroom sinks, showers, tubs, and interior laundry rooms rely on gravity to send greywater to the landscape through a branched drain irrigation system. Landscapes that are flat or uphill from the greywater source may require an effluent pump system. San Francisco Public Utilities Commission (SFPUC) has a thorough [Greywater Design Manual](#).

What are the Requirements for a Greywater System?

- ◆ Any greywater system that includes a connection to potable or municipal water supply must have an approved, backflow prevention device.
- ◆ The greywater system design must include an accessible, three-way valve that diverts the greywater back to the building sewer.
- ◆ The greywater must not leave the property where it came from or come within 100 feet of any creek, wetland, or waterway.
- ◆ The groundwater table must be lower than 3 feet from the lowest greywater irrigation or disposal point.
- ◆ Each release point of the greywater irrigation system must be covered with at least 2 inches of mulch, rock, soil, or a soil shield. Sprinkler irrigation of greywater is not allowed.
- ◆ Water used to wash diapers or other infection garments must be diverted to the building sewer.
- ◆ Greywater may not contain hazardous chemicals. Greywater may not be used to irrigate root crops or other edible crops that touch the soil.
- ◆ An operations and maintenance manual for the greywater system must be provided by the installer and must be transferred to the new tenant or owner for the life of the greywater system.

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- ◆ Greywater irrigation systems must be located a minimum horizontal distance from the following landscape features:

LANDSCAPE FEATURE	MINIMUM HORIZONTAL DISTANCE FROM SYSTEM
Building Structures	2 FT
Property Line Adjoining Private Property	1.5 FT
Water Supply Wells	100 FT
Streams, Rivers, Lakes, Wetlands, & High Tide Line	100 FT
Sewage Pits or Cesspools	5 FT
Sewage Disposal Field	4 FT
Septic Tank	5 FT
Onsite Domestic Water Service Line	8 IN
Pressurized Public Water Main	10 FT

San Mateo County: When Is a Plan Review from Environmental Health Required?

Always check with your local building department as permit requirements may vary. Plan submission to the Environmental Health Division is required for any residential project proposing to use the following:

- ◆ Any alternative water used inside a home or business.
- ◆ Treated greywater or treated foundation drainage water used for surface drip and/or spray irrigation.
- ◆ Treated rainwater or well water for non-potable applications inside the home such as toilet flushing and clothes washing
- ◆ Untreated greywater used for subsurface distribution (if scope is beyond simple clothes washer/Laundry-To-Landscape diversion as defined in the 2016 Plumbing code).

When is a Plan Review from Environmental Health NOT required?

- ◆ When installing a typical Laundry-To-Landscape system. These types of systems must meet all requirements specified in the Uniform Plumbing Code but do not require a review from Environmental Health.

- ◆ Similarly, standalone rainwater barrels that are not connected to the home's internal plumbing supply do not require plan submission or a permit from Environmental Health.

Any Other Requirements?

- ◆ All equipment including treatment components must meet [NSF/ANSI Standard 350](#).
- ◆ Alternative sources should not intermingle and must be separate water treatment and/or delivery systems.
- ◆ You may be required to install backflow protection at each water service meter serving your residence or facility. Please contact your water provider for more information or visit the [San Mateo County Cross Connection Control Program](#) web page.

Additional Resources

[Central Coast Greywater Alliance](#)

[Santa Clara Valley WD Greywater Resources](#)

[Laundry To Landscape System Example](#)

[Greywater Landscape Design Rebates](#)