



MARIN COUNTY ENVIRONMENTAL HEALTH SERVICES
 3501 CIVIC CENTER DRIVE, ROOM 236, SAN RAFAEL, CA 94903
 (415) 499-6907 FAX: (415) 507-4120

SIMPLE GRAYWATER SYSTEM NOTIFICATION

Owner Name:		Date
Property Street Address	Owner Mailing Address	Property AP Number
City, State, Zip	City, State, Zip	Email
Contact Name	Phone	Reviewed by & Date

This completed form by the property owner notifies Marin County Environmental Health that the undersigned has/will construct a Simple Graywater System on their parcel. A Simple Graywater System serves a one- or two-family dwelling(s) with a discharge of 250 gallons (947L) per day or less. The system is/will be constructed to meet the regulations as defined in the California Plumbing Code, Chapter 16A.

A notification of the construction of this Graywater System will be forwarded to the municipal water supplier in your area. This is a requirement by the water suppliers to ensure the public water systems are protected from contamination.

Design Requirements

- The entire graywater system must be located on this parcel. No section shall be located on another parcel.
- There must be sufficient area and appropriate soil conditions on this parcel to prevent the ponding or runoff of the graywater.
- The graywater system will not be connected to any potable water system without an air gap or other physical device which prevents backflow. A backflow device will protect potable water from contamination.
- Excess graywater from the irrigation/disposal field must flow to the building sewer through a diversion valve.
- Graywater systems with a tank shall have an overflow drain from the tank. The overflow drain shall have a permanent connection to the building sewer, or if applicable, upstream of the septic tank. The overflow drain shall not be equipped with a shutoff valve.
- The overflow system must be designed so that the tank overflow will gravity drain to the existing sewer or septic tank. The tank shall be protected against sewage backflow by a backwater valve.
- Graywater systems using tanks shall be designed to minimize the amount of time graywater is held in the tank and sized to distribute the estimated amount of graywater produced on a daily basis.
- _____ feet of pipe and/or tubing will be installed in _____ type of soil for irrigation or disposal. The system is designed to handle graywater discharged from the building and may include tank(s) and other appurtenances necessary to ensure proper function of the system.
- Graywater discharge from irrigation or disposal field systems must be at least two (2) inches deep to minimize the possibility of human contact.
- The closest discharge point of the irrigation or disposal field is/will be _____ feet from the property line. (See minimum setbacks in Table 16A-1.)
- All valves and means of changing the direction of the graywater must be easily accessible and clearly labeled.
- Graywater pipe, valves and fittings must meet the requirements of the Uniform Plumbing Code Sections 1610A.1, 2, 3.
- Graywater distribution piping upstream of any connection to an irrigation/disposal field or a distribution valve must be labeled with the words "CAUTION: NONPOTABLE WATER, DO NOT DRINK". Markings must be at intervals not to exceed 5 feet.
- An operation and maintenance manual must be provided and maintained. The manual must remain with the building throughout the life of the system and upon change of ownership or occupancy, the new owner or tenant must be notified the structure is connected to a graywater system and provided a copy of the manual.
- Should a complaint regarding the graywater system operation be received by EHS and it is deemed valid, you will be required to correct the situation and may be required to obtain a graywater system permit. Payment for complaint cost recovery and/or a permit fee may be required.

General Requirements

- Graywater will not be utilized for indoor use. Graywater use indoors is prohibited.
- Graywater will not be used to irrigate root crops or edible parts of food crops that touch the soil.
- Graywater will not be used for spray irrigation.
- Graywater will not be allowed to pond or runoff.
- Graywater will not be discharged directly into any storm sewer system or any surface body of water.
- Water used to wash diapers or similarly soiled or infectious garments will not be used in the graywater system.
- Water used to wash oily rags or to dispose of hazardous waste solutions such as from home photo labs will not be used in the graywater system.

Signing below certifies you have read and agreed to adhere to the Design Requirements and General Requirements listed above and Chapter 16A of the California Plumbing Code.

OWNER ACKNOWLEDGES THE ABOVE: _____ DATE: _____

The Residential Graywater Systems Regulations are found in Chapter 16A of the California Plumbing Code.

Definitions from Chapter 16A

Clothes Washer System. A graywater system utilizing only a single domestic clothes washing machine in a one- or two-family dwelling.

Complex System. Graywater systems that discharge over 250 gallons (947 L) per day.

Graywater. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes but is not limited to wastewater from bathtubs, showers, bathroom washbasin, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers.

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

Procedure for Estimating Graywater Discharge

The Graywater discharge shall be calculated by estimates of graywater use based on water use records, calculations of local daily per person interior water use, or the following procedure.

1. The number of occupants of each dwelling unit shall be calculated as follows:

First Bedroom	2 occupants
Each additional bedroom	1 occupant
2. The estimated graywater flows of each occupant shall be calculated as follows:

Showers, bathtubs & wash basins	25 GPD (95 LPD)/occupant
Laundry	15 GPD (57 LPD)/occupant
3. The total number of occupants shall be multiplied by the applicable estimated graywater discharge as provided above and the type of fixtures connected to the graywater system.

Table 16A-1 Location of Graywater System

Minimum Horizontal Distance Required in feet from:	Tank	Irrigation Field	Disposal Field
Building Structures	5	2	5
Property Line adjoining private property	5	1.5	5
Water supply wells ³	50	100	100
Streams and lakes ³	50	100 ⁴	100 ⁴
Sewage pits or cesspools	5	5	5
Sewage disposal field	5	4 ⁶	4 ⁶
Septic tank	0	5	5
Onsite domestic water service line	5	0	0
Pressurized public water main	10	10	10

³ Where special hazards are involved, the distance required shall be increased as directed by the Enforcing Agency.

⁴ These minimum clear horizontal distances shall apply between the irrigation or disposal field and the ocean mean higher high tide line.

⁶ Plus two (2) feet for each additional foot of depth in excess of one (1) foot below the bottom of the drain line.

Table 16A-2 Design Criteria of Six Typical Soils

Type of Soil	Square Feet	Gallons
	Minimum square feet of irrigation/leaching area per 100 gallons of estimated graywater discharge per day	Maximum absorption capacity in gallons per square foot of irrigation/leaching area for a 24 hour period
Coarse sand or gravel	20	5
Fine sand	25	4
Sandy loam	40	2.5
Sandy clay	60	1.7
Clay with considerable sand or gravel	90	1.1
Clay with small amounts of sand or gravel	120	0.8

*From Chapter 16A

Permit Requirements by Marin County Environmental Health Services

<i>Clothes Washer System</i>	Exempt from Permit*
<i>Simple System</i>	Notification Form Required*
<i>Complex System</i>	Permit Required

* NOTE: Building permits may be required for clothes washer systems and simple systems that include a pump or affect building, plumbing, electrical, or mechanical components.