



County of Santa Cruz Environmental Health Services
 701 OCEAN STREET, ROOM 312, SANTA CRUZ, CA 95060-4073
 Main: (831) 454-2022 Direct: (831) 454-3133 FAX: (831) 454-3128
<http://scceh.com/Home/Programs/WaterResources.aspx>

**ENVIRONMENTAL HEALTH CLEARANCE TO APPLY FOR BUILDING PERMIT FOR A
 RESIDENTIAL GREYWATER IRRIGATION SYSTEM**

***THIS IS NOT A PERMIT**

TO BE COMPLETED BY APPLICANT:

Date Assessor's Parcel Number Construction Site Location

Owner's Name Owner's Phone Number

Owner's Mailing Address Owner's Email Address

Applicant's Name Phone Number

System Designer System Installer

PROPOSED PROJECT

___ Simple Greywater Irrigation System (under 250GPD) ___ Treated Greywater System
 ___ Complex Greywater Irrigation System (over 250GPD) ___ Laundry Only- System (no permit)
 List fixtures to be plumbed to Greywater System: _____

GIS Information (Found at <http://gis.co.santa-cruz.ca.us/PublicGISWeb/>)

Mapped Slope: Red / Green (circle one) Mapped Soil Type: Red /Yellow/ Green (circle one)
 Mapped Soil Hydrologic Class: _____
 Cross Check with Soil Survey of Santa Cruz County: <http://www.ca.nrcs.usda.gov/mlra02/stacruz/index.html>

Groundwater Depth:

Test hole to check for Groundwater (3.5 ft)? Y or N
 Groundwater Depth Minimum: _____ FT. Date _____ Method: _____

Please note any observations regarding seasonal groundwater level:

Verify Setbacks listed on Table 1602.4:

Estimated Greywater Discharge

of Bedrooms: _____ Winter Water Use Records (optional): _____ Date: _____
 # of Occupants: _____ Laundry on-site: Y or N Estimated Greywater Discharge (gal): _____
 Note: Showers/tubs/lavatories = 25GPD/Person; Laundry = 15GPD/Person

Irrigation Field Area

Minimum Required Irrigation Leaching Area: Greywater GPD/Soil absorption table 1602.10: _____ ft²
 Total proposed basin area (ft²) _____;
 Note: Area of a circle = πr^2 ; Area of a rectangle = Length X Height

Number of zones _____; Total ft² per zone _____; Depth (inches) _____; Number of outlets _____;

Total Mulch Basin Surge Capacity: _____ gal

Note: Total Mulch basin surge capacity: (sum ft³ of all basins)(0.8 capacity with mulch) (7.48gal/ft³)=gallons

Note: Volume ft³ (Square): Length X Width X Height = ft³ (Cylinder) $V = \pi r^2 h$ ($\pi = 3.14$)

Applicant's Signature _____ Date _____

TO BE COMPLETED BY ENVIRONMENTAL HEALTH STAFF:

Verify Setbacks and occupancy including Septic System Plans on Fortis:

File check additional notes: _____

- _____ Site conditions Suitable for Graywater Irrigation System
- _____ Site Conditions not Suitable for Graywater Irrigation System
- _____ Site Conditions Marginal, special conditions required
- _____ High winter groundwater and/or poor soil present: graywater use must not occur during wet season.

Additional comments or remarks _____

By _____ Date _____
 Environmental Health Staff

Reference Tables from California Plumbing Code Chapter 16:

Table 1602.4 Location of Greywater System			
Minimum Horizontal Distance in clear Required From:	Surge Tank	Subsurface and subsoil Irrigation Field and Mulch Basin	Disposal Field
	Feet	Feet	Feet
Building Structures(1)	5 (*2,3,9)	2 (*3,8)	5
Property Line adjoining private property	5	5 (*8)	5
Water supply wells(4)	50	100	100
Streams and lakes(4)	50	100 (*5,10)	100 (*5)
Sewage pits or cesspools	5	5	5
Sewage disposal field (10)	5	4 (*6)	4(*6)
Septic tank	0	5	5
Onsite domestic water service line	5	0	0
Pressurized public water main (7)	10	10	10(*7)

*

- (1) Building structures do not include porches and steps, whether covered or uncovered, breezeways, roofed carports, roofed porte cocheres, roofed patios, carports, covered walks, covered driveways, and similar structures or appurtenances.
- (2) The distance shall be permitted to be reduced to 0 feet for aboveground tanks where first approved by the County
- (3) Underground tanks shall not be located within a 45 degree angle from the bottom of the foundation, or they shall be designed to address the surcharge imposed by the structure. The distance may be reduced to 6 inches for aboveground tanks when first approved by the County.
- (4) Where special hazards are involved, the distance required shall be increased as directed by the County
- (5) These minimum clear horizontal distances shall apply between the irrigation of disposal field and the ocean mean higher high tide line.
- (6) Add 2 feet for each additional foot of depth in excess of 1 foot below the bottom of the drain line.
- (7) For parallel construction or for crossings, approval by the County shall be required
- (8) The distance shall be permitted to be reduced to 1 1/2 feet for drip and mulch basin irrigation systems.
- (9) The distance shall be permitted to be reduced to 0 feet for surge tanks of 75 gallons or less.
- (10) The minimum horizontal distance may be reduced to 50 feet for irrigation or disposal fields utilizing greywater which has been filtered prior to entering the distribution piping.

Table 1602.10 Design of Six Typical Soils

Type of Soil	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

Table 1602.11 Surface Irrigation Design Criteria for Six Typical Soils

Type of Soil	Maximum emitter discharge GPD	Minimum number of emitters per GPD of graywater discharge
Sand	1.8	0.6
Sandy loam	1.4	0.7
Loam	1.2	0.9
Clay loam	0.9	1.1
Silty clay	0.6	1.6
Clay	0.5	2

Completed forms should be sent to Environmental Health Services for review and approval.

Mail forms to: Santa Cruz County Environmental Health

Water Conservation Program

701 Ocean St Rm. 312

Santa Cruz, CA 95060

Or FAX signed forms to: (831) 454-3128

Or e-mail signed forms to Env.Hlth@SantaCruzCounty.us