Department of Planning & Community Development
Inspection Services Division
809 Center Street, Room 206, Santa Cruz, CA 95060
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REQUIREMENTS FOR THE INSTALLATION OF GRAYWATER IRRIGATION SYSTEMS FOR ONE AND TWO FAMILY DWELLINGS

Graywater includes waste water from bathtubs, showers, washbasins, clothes washers and laundry tubs, but does not include wastewater from kitchen sinks, dishwashers, toilets or bidets (CPC 1602A.0).

Step 1: Determine if your lot is suitable for a simple graywater irrigation system:

- Prior to starting the application process it is highly recommended that you contact the City Planning Department at 809 Center St., Room 206, (831) 420-5416 and have Planning staff perform a preliminary review of your proposed project to assure the site is suitable for the installation of a graywater system. Items that can impact the ability to install a graywater irrigation system include the following: steep slopes, archeological site and proximity to streams or water ways. If the lot is determined preliminarily suitable, you may proceed to the next step. City Building Inspection staff is also available to provide information or answer questions and can be reached at (831) 420-5417.

Step 2: Determine if a permit is required for your project:

- Clothes washer systems connected to subterranean landscape irrigation do not require a permit for installation (must comply with CPC 1603A.1.1). Clothes washers that are used to launder diapers shall not be connected to graywater irrigation systems and shall be diverted to the building sewer (CPC 1601A.0.F & 1603A.0). **All clothes washer irrigation systems regardless of permitting requirements must be registered with the City of Santa Cruz Department of Public Works (831)420-5160. They must have a valve that will allow them to be diverted to the sewer during the rainy season, typically October 1 through April 1.**
- All other residential graywater systems require a permit to install. These systems are defined as Simple – less than 250 gallons of graywater a day or Complex – more than 250 gallons of graywater per day (CPC 1603A.1.2 & CPC 1603A.1.3.)

When a permit is required all of the following steps shall be followed:

Step 3: Prepare Construction Plans: See Information required on plans and documents (pg 3).

Note: Construction plans are required to obtain a building permit for a residential graywater irrigation system (CPC 1604.A.0). Only applications that include complete construction drawings (3 sets) and other required documents will be accepted for review, incomplete or partial sets will not be accepted. Your plans will be reviewed by County Environmental Heath, City Building Inspections and City Planning.

Step 4: Submit your plans and make application with Santa Cruz County Environmental Health:

- The County Environmental Health Services Department is open from 8:00 am to 9:30 am weekdays only, and is located at 701 Ocean St., 3rd Floor, Room 312, or contact by phone at (831) 454-2022.
- Environmental Health will review your plans and site for feasibility and all system components located outside the house. The soils type, lot slope, water table, mulch basin size and location will all be considered as factors that may or may not allow the installation of a graywater irrigation system. *A Clearance fee of $115 will be charged for this review.*
- Once clearance has been obtained, an application to the City Building Inspections and Planning Department shall be made. (see step 5)

<u>Step 5:</u> Submit plans and make application with City Building Inspection Services:

- A complete submittal must include the following:
    - 3 sets of plans and support documents. 2 plans must be stamped/cleared by Environmental Health Services.
    - A completed permit application form.
    - A fee of $176.51 will be due at the time of submittal.

- Upon receipt by Building Services the plans will be reviewed for plumbing code compliance for the components of the system located within the house and also for final approval by Planning. When approved a permit can be issued. You will be informed when the permit is ready for pick up and will receive one set of approved project plans and the building permit.

<u>Step 6:</u> Installation and Inspection: Inspections will be preformed by two agencies:

- The *City Building Inspection Services* will inspect inside and under house for all plumbing piping systems and piping installations. Call (831) 420-5110, 24-hours in advance to schedule <u>house</u> rough plumbing, final and/or re-inspections.
    - Rough plumbing inspection is required after the graywater house piping has been installed and prior to covering or concealing. Systems shall be tested in the presence of the inspector for water tightness (CPC 712.0) and proper installation (CPC 310.0). Rough Inspections must be passed prior to calling for a final inspection (1605A.0).

- The *County Environmental Health Services Department* will inspect outside of the house for all pipes, tanks, pumps, mulch basins and irrigation fields. Call (831) 454-2022, 24-hours in advance to schedule inspections for rough <u>yard</u> piping, mulch basin and disposal field installations, final inspection and or re inspection.
    - Rough plumbing inspection is required after the graywater plumbing and irrigation system has been installed but not buried or covered. Systems shall be tested in the presence of the inspector for water tightness (CPC 712.0) and proper installation (CPC 310.0). Rough inspection must be passed prior to calling for final inspection (1605A.0).

- The graywater system must first pass final inspection by County Environmental Health Services, followed then by Building Inspections. Upon successfully passing final inspection the graywater system will be considered complete and operational.

Information Required on Plans and Documents:

- **COVER PAGE:**
  - ❑ Detailed vicinity map with streets, cross streets, bridges, geographic features such as streams, creeks, ocean, etc.
  - ❑ Project information to include the project address, Assessors Parcel Number, project description and occupancy group.
  - ❑ List names of owner, designer, architect and/or engineer.
  - ❑ List current and applicable California Codes and City Ordinances.
  - ❑ Include key for abbreviations & symbols.
  - ❑ Include sheet index.

- **SITE PLAN (may be combined with cover page):**
  - ❑ Assessor's Parcel Number.
  - ❑ Small vicinity map.
  - ❑ Scale 1" = 10 feet, 1" = 20 feet, 1/16" = 1 foot or other appropriate scale.
  - ❑ North arrow.
  - ❑ Entire property shown with dimensions of boundaries.
  - ❑ Show existing and proposed structures with uses noted, topographic contours within 10' vicinity of improvements (buildings, swimming pools, driveways, domestic irrigation systems).
  - ❑ Slopes to include contour intervals of 2 feet. Call out any slopes greater than 30 percent* in the area of the irrigation field. If parcel is flat, label "parcel is flat". Topographic contour plan may be required to be prepared by a licensed land surveyor.
  - ❑ Streams and drainage courses, water bodies, water supplies and the distance to the proposed irrigation system drain field.
  - ❑ Indicate soils type. Soils information to design the graywater irrigation may be obtained through the County's GIS system at http://gis.co.santa-cruz.ca.us/ . The parcel number of the subject property will be necessary to acquire the information.
  - ❑ Show all recorded easements.
  - ❑ Show existing or proposed cuts or embankments with slopes greater than 30%.
  - ❑ Indicate minimum and maximum groundwater depth and date of measurement. In areas with documented seasonal high groundwater levels, graywater systems may be prohibited or required to suspend use (diverted to sanitary sewer) during the rainy season, **also see Department of Public Works Winter Diversion Requirements.**

- **FLOOR PLAN (one for each floor with plumbing fixtures, including basement as applicable):**
  - ❑ Scale 1/4" = 1 foot. North arrow.
  - ❑ Show the use of each room (Bedroom, Bathroom, Laundry, etc.).
  - ❑ Indicate type and number of plumbing fixtures to be draining to Graywater System.

- **PLUMBING PLAN:**
  - ❑ A plumbing schematic is required and must be one line schematic or isometric.
  - ❑ Show location, size, type and routing of all waste piping and fittings within the residence to be used to divert graywater to the irrigation field.
  - ❑ Show the location and type of all valves and diverters that will be used in combination with waste piping for graywater diversion, including product approvals and listings.

- **DETAILS:**
  - ❑ Scale 1/2" = 1 foot or 1" = 1 foot.
  - ❑ Indicate size of proposed pipes, tubes, emitters, etc. for irrigation field.
  - ❑ Provide total area (sq.ft.) of proposed irrigation field (CPC 1608A.0).
  - ❑ Detail connections and indicate size at tanks (gal), pumps, valves, splitters, clean-outs, backflow prevention, airgap separation, etc.
  - ❑ Detail proposed method of irrigation (mulch basins, emitters, etc.).
  - ❑ Provide list of products for the specified use, such as valves and pumps.
  - ❑ Provide calculations of estimated graywater discharge (CPC 1606A.0).
  - ❑ Provide maximum absorption capacity (CPC 1608A.0).