

**INTERPRETATIONS & APPLICATIONS**  
**OF BUILDING CODES & REGULATIONS 09-1**

CODE SECTION : IRC Appendix O - Gray Water Recycling Systems

4/16/09

Rev. 4/29/09



**SUBJECT: GRAY WATER IRRIGATION IN SINGLE FAMILY DWELLINGS**

The 2006 International Residential Code (IRC), Appendix O “Gray Water Recycling Systems” requires a permit for the design and installation of a whole house gray water system. A percolation test and collection reservoir is a part of these requirements.

Exception: The percolation test and collection reservoir requirement may be waived where a gray water system is installed in a home with a maximum discharge rate of 160 gallons per day (as determined by the code based on the number of occupants and connected fixtures). A permit will not be required for a single discharge line from a clothes washer to outdoor irrigation<sup>1</sup>.

All gray water systems must adhere to the following rules from the AZ Dept. of Environmental Quality<sup>2</sup>:

- Gray water must be used on the site where it is generated.
- Avoid human contact with gray water, or soil irrigated with gray water.
- You may use gray water for household gardening, composting, and lawn and landscape irrigation, but use it in a way that it does not run off your own property.
- Do not surface irrigate any plants that produce food, except for citrus and nut trees.
- Use only flood or drip irrigation to water lawns and landscaping. Spraying gray water is prohibited.
- When determining the location for your gray water irrigation, remember that it cannot be in a wash or drainage way.
- Gray water may only be used in locations where groundwater is at least five feet below the surface.
- Gray water cannot contain hazardous chemicals such as antifreeze, mothballs and solvents. Do not include wash water from greasy or oily rags in your gray water.
- Gray water from washing diapers or other infectious garments must be discharged to a residential sewer or other wastewater facility.
- Surface accumulation of gray water must be kept to a minimum.
- Should a backup occur, gray water must be disposed into your normal wastewater drain system.
- If you have a septic or other on-site wastewater disposal system, your gray water use does not change that system’s design requirements for capacity and reserve areas.

<sup>1</sup> See Graywater Guidelines from Water CASA – [www.watercasa.org/graywaterguidelines.php](http://www.watercasa.org/graywaterguidelines.php)

<sup>2</sup> ADEQ Guide to Using Gray Water at Home – [www.azdeg.gov/environ/water/permits/download/graybro.pdf](http://www.azdeg.gov/environ/water/permits/download/graybro.pdf)

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