

**INTERPRETATIONS & APPLICATIONS**  
**OF BUILDING CODES & REGULATIONS 13-5**

CODE SECTION: P3009 Gray Water Recycling Systems 2012 IRC

4/16/09 Old 09-1R

REV 2/5/2013



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

**P3009.14.7 Percolation tests.**

The permeability of the soil in the proposed absorption system shall be determined by percolation tests or permeability evaluation.

**P3009.14.7.1 Percolation tests and procedures.**

At least three percolation tests in each system area shall be conducted. The holes shall be spaced uniformly in relation to the bottom depth of the proposed absorption system. More percolation tests shall be made where necessary, depending on system design.

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.azdeq.gov/environ/water/permits/download/graybro.pdf](http://www.azdeq.gov/environ/water/permits/download/graybro.pdf)