

APPENDIX C

GRAY WATER RECYCLING SYSTEMS

The provisions contained in this appendix are adopted as part of this code.

Note: Section 301.3 of this code requires all plumbing fixtures that receive water or waste to discharge to the sanitary drainage system of the structure. In order to allow for the utilization of a gray water recycling system, Section 301.3 should be revised to read as follows:

301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems provided for in Chapter 8.

Exception: Bathtubs, showers, lavatories, clothes washers and laundry sinks shall not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water recycling system

C101 GRAY WATER RECYCLING SYSTEMS

C101.1 General. Gray water recycling systems shall receive the waste discharge only of bathtubs, showers, lavatories, clothes washers and laundry sinks. Recycled gray water shall be utilized only for flushing water closets and urinals that are located in the same building as the gray water recycling system. Such systems shall comply with Sections C101.2 through C101.12.

Exception: Gray water systems shall be permitted to be used for irrigation when specific approval is given by the authority having jurisdiction. Such systems shall be designed as required by Section 105.

C101.2 Definition. The following term shall have the meaning shown herein.

GRAY WATER. Waste water discharged from lavatories, bathtubs, showers, clothes washers and laundry sinks.

C101.3 Installation. All drain, waste and vent piping associated with gray water recycling systems shall be installed in full compliance with this code.

C101.4 Reservoir. Gray water shall be collected in an approved reservoir constructed of durable, nonabsorbent and corrosion-resistant materials. The reservoir shall be a closed and gas-tight vessel. Access openings shall be provided to allow inspection and cleaning of the reservoir interior. The holding capacity of the reservoir shall be a minimum of twice the volume of water required to meet the daily flushing requirements of the fixtures supplied with gray water, but not less than 50 gallons (189 L). The reservoir shall be sized to limit the retention time of gray water to 72 hours maximum.

C101.5 Filtration. Gray water entering the reservoir shall pass through an approved filter such as a media, sand or diatomaceous earth filter.

C101.6 Disinfection. Gray water shall be disinfected by an approved method that employs one or more disinfectants such as chlorine, iodine or ozone.

C101.7 Makeup water. Potable water shall be supplied as a source of makeup water for the gray water system. The potable water supply shall be protected against backflow in accordance with Section 608. There shall be a full-open valve on the makeup water supply line to the reservoir.

C101.8 Overflow. The collection reservoir shall be equipped with an overflow pipe of the same diameter as the influent pipe for the gray water. The overflow shall be directly connected to the sanitary drainage system.

C101.9 Drain. A drain shall be located at the lowest point of the collection reservoir and shall be directly connected to the sanitary drainage system. The drain shall be the same diameter as the overflow pipe required by Section C101.8 and shall be provided with a full-open valve.

C101.10 Vent required. The reservoir shall be provided with a vent sized in accordance with Chapter 9 based on the size of the reservoir influent pipe.

C101.11 Coloring. The gray water shall be dyed blue or green with a food grade vegetable dye before such water is supplied to the fixtures.

C101.12 Identification. All gray water distribution piping and reservoirs shall be identified as containing nonpotable water. Piping identification shall be in accordance with Section 608.8.

