

Model Gray Water Ordinance for Tier One Simple Residential Gray water Systems

May 9th, 2008 Oasis Design

This document is inspired largely by the Arizona and New Mexico state gray water codes— See <http://oasisdesign.net/greywater/law/>. This ordinance provides for a single statewide permit allowing all gray water systems that meet the requirements below. No inspection or fees are required. Tier 2 systems—ones that don't meet all the requirements below—must be individually permitted and inspected. Tier 3 regulation is for high flow systems, which are subjected to intensive engineering and environmental review.

Definitions

“Gray water” means wastewater that originates from residential clothes washers, bathtubs, showers, and sinks, but does not include wastewater from toilets.

A. A Tier 1 Reclaimed Water General Permit allows private residential direct reuse of gray water for a flow of less than 400 gallons per day if all the following conditions are met:

1. Human contact with gray water and soil irrigated by gray water is avoided;
2. Gray water originating from the residence is used and contained within the property boundary for household gardening, composting, lawn watering, or landscape irrigation;
3. Surface application of gray water is not used for irrigation of food plants that have an edible portion that comes in direct contact with gray water;
4. The gray water does not contain hazardous chemicals derived from activities such as cleaning car parts, washing greasy or oily rags, or disposing of waste solutions from home photo labs or similar hobbyist or home occupational activities;
5. The application of gray water is managed to minimize standing water on the surface, for example, by splitting the flow, moderate application rates, and generous mulching;
6. The gray water system is constructed so that if blockage, plugging, or backup of the system occurs, gray water can be directed into the sewage collection system or onsite wastewater treatment and disposal system, as applicable (except as provided for under 10, below). The gray water system may include a means of filtration to reduce plugging and extend system lifetime;
7. Any gray water storage tank is covered to restrict access and to eliminate habitat for mosquitoes or other vectors. Untreated gray water should be stored as short a time as possible—in any case, less than 24 hours;
8. The gray water system is sited outside of a floodway;
9. The gray water system is operated to maintain a minimum vertical separation distance of at least five feet from the point of gray water application to the top of the seasonally high groundwater table (excepting that gray water systems are allowed where they would be relieving loading on a septic system in a high groundwater area).
10. For residences using an onsite wastewater treatment facility for black water treatment and disposal, A) the use of a gray water system does not change the design, capacity, or reserve area requirements for the onsite wastewater treatment facility at the residence, and ensures that the facility can handle the combined black water and gray water flow if the gray water system fails or is not fully used. Alternatively, B) the gray water system shall be designed with two valved zones, each of which can accommodate the full, expected gray water volume. Providing the gray water system passes a flow test in each zone, the capacity of the

on-site system may be reduced, or in the instance that an approved composting toilet system is present, eliminated;

11. Any pressure piping used in a gray water system that may be susceptible to cross connection with a potable water system clearly indicates that the piping does not carry potable water;
12. Gray water applied by surface irrigation does not contain water used to wash diapers or similarly soiled or infectious garments unless the gray water is disinfected before irrigation; and
13. Surface irrigation by gray water is only by flood or drip irrigation. Spray irrigation is not allowed. Containment within horticultural basins or swales is encouraged for flood irrigation;
14. It is required that kitchen sink water be applied subsoil in chambers of sufficient volume, or contained within a rat-proof outlet shield;
15. Gray water diverter valves should be downstream from traps and vents in plumbing that leads to septic or sewer.

B. Towns, cities, or counties may further limit the use of gray water described in this Section by rule or ordinance.