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## Maintaining Your Septic System

Onsite/septic system owners need information on how septic systems work, how to maintain them, and precautions to take to decrease the potential for the septic system to contaminate groundwater or surface water. Operation and maintenance of the system are the owner's responsibility. This fact sheet discusses steps you can take to manage your septic system.

Both the septic tank and the drainfield (also known as a leach field or absorption field) must be properly maintained to protect human health and the environment. A properly maintained system should work correctly for many years. The effectiveness of a septic system depends on how the homeowner uses and operates the system. Managing a household septic system requires that you control the volume and quality of wastewater and maintain the septic tank and drainfield.

## Controlling Volume of Wastewater

Sending wastewater to the tank too fast can cause solid materials to pass into the drainfield without undergoing the gradual anaerobic digestion that occurs in the septic tank. You should conserve water use in the house to ensure:

- slow movement of wastewater into the tank
- reasonably complete digestion of solids, and
- slow trickling of wastewater from the tank to the drainfield.

No more than two loads of laundry (one in the morning and one in the evening) should be done a day. Avoid marathon showers and other excessive uses that may send big surges of wastewater into the system.

The brine solution and excess water from the backwash of a water softener probably will not harm most septic systems, although they could dictate the need for a slightly larger tank and

drainfield. Consider using water-saving devices available for toilets and shower heads.

Do not connect sump pump outlets or roof gutters to the system. Be make sure that any runoff from the roof, driveway, and other impermeable surfaces is directed away from the drainfield. In doing so, you will prevent accumulating water in the drainfield.

## Controlling Quality of Wastewater

The quality of your wastewater — not just its quantity — is also important in ensuring that your septic system functions properly. Fats and grease should never be poured down the drain. They can solidify in the lines and cause failure; they can cause excessive buildup of the floating scum layer in the septic tank; and they can get into the drainfield and surrounding soil and seal the system off altogether.

Limit your use of garbage disposals or don't use them at all. Septic systems are intended to be used for the treatment and disposal of human wastes and wash waters that come from the home. Only household cleansers, disinfectants, and bleaches should be allowed into the septic tank and only in moderation. Anything else does not belong in a septic system. Do not put any toxic or hazardous materials, such as paints, thinners, waste oils, photographic solutions, or poisons into a septic system; they will not be treated sufficiently to prevent contamination of water that returns to your local groundwater and or surface water.

Other materials that cannot be decomposed in a septic system include coffee grounds, dental floss, disposable diapers, cat box litter, cigarette butts, sanitary napkins, tampons, plastics, facial tissue, and paper towels. Such materials merely increase the risk of plugging and necessitate more frequent cleaning. Drains should be equipped with strainers or other filtration devices to reduce the amount of food particles, hair, and lint entering the system.

## Maintaining the Septic Tank

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Slow accumulations of sludge and scum are normal. You should remove these materials through periodic pumping and appropriate disposal. This will protect the adsorption field from materials that will damage its effectiveness.

Annual or biannual inspection of the septic tank is advisable to determine the thickness of the sludge and scum layers. A probe may be put into the tank from one of its access ports to make this determination. If you have any doubts about inspecting the septic tank, a private contractor who specializes in septic system cleaning and pumping can be found in your telephone directory. This service will cost you some money, but it is less expensive than digging up a fouled drainfield.

Additives that are marketed as septic tank cleaners, rejuvenators, or primers are not needed. Most of these additives won't harm your system, but they don't help them either. Some of these additives are strong chemicals that *can* harm a septic system.

## Maintaining the Drainfield

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Activities that help to maintain the septic tank will also maintain the drainfield:

- tank is free of excessive sludge,
- tank is used within its designed capacity, and
- quality of wastewater is proper.

All this assumes that the wet-season water table is at least 2 feet below the bottom of the drainfield and that the soil is adequately permeable.

Additional measures that you can take include:

- keep vehicular traffic off of the drainfield because they can compact the soil and possibly break drain lines
- try to position trees so that their roots will not enter the drainlines and plug them
- keep a healthy grass cover over the system to prevent exposure of the soil and possible erosion around the drain lines.

Properly sited, designed, constructed, and *maintained* septic systems can provide an efficient and economical wastewater treatment alternative to public sewer systems. While septic systems are designed and installed by licensed professionals to meet the needs of individual sites, homeowners are responsible for the system's operation and maintenance. There is more information on household septic systems at The University of Arizona Extension publications web page ([ag.arizona.edu/pubs](http://ag.arizona.edu/pubs)).

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