



*In our business, a flush beats a full house.*

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## Septic System Care

Source: *'Care and Feeding' of Your Septic Tank*

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Since the septic tank is such an essential part of a sewage system, here are some points to remember about the "care and feeding" of that part of the onsite sewage treatment system.

- ◆ A "starter" is not needed for bacterial action to begin in a septic tank. Many bacteria are present in the materials deposited into the tank and will thrive under the growth conditions present.
- ◆ If you feel that an additive is needed, be aware that some may do great harm. Additives that advertise to "eliminate" tank cleaning may cause the sludge layer to fluff up and be washed out into the drain field, plugging soil pores. Some additives, particularly degreasers, may contain carcinogens (cancer causing agents) or suspected carcinogens that will flow into the ground water along with the water from the soil treatment unit.
- ◆ Send all wastewater (toilets, sinks, tubs, laundry) into the septic tank. Don't run laundry wastes directly into the drain field, since soap or detergent scum will plug the soil pores, causing failure.
- ◆ Normal amounts of household detergents, bleaches, drain cleaners, and other household chemicals can be used and won't stop the bacterial action in the septic tank, but don't use excessive amounts of any household chemicals. Do not dump cleaning water for latex paint brushes and cans into the house sewer.
- ◆ Don't deposit coffee grounds, cooking fats, wet-strength towels, disposable diapers, facial tissues, cigarette butts, and other non-decomposable materials into the house sewer. These materials won't decompose and will fill the septic tank and plug the system. To use a 5-gallon toilet flush to get rid of a cigarette butt is also very wasteful of water. Keep an ashtray in the bathroom, if necessary.
- ◆ Avoid dumping grease down the drain. It may plug sewer pipes or build up in the septic tank and plug the inlet. Keep a separate container for waste grease and throw it out with the garbage.

- ◆ If you must use a garbage disposal, you will likely need to remove septic tank solids every year or more often. Ground garbage will likely find its way out of the septic tank and plug up the drain field. It is better to compost, incinerate, or deposit the materials in the garbage that will be hauled away. As one ad says, "You can pay me now, or pay me later."
  - ◆ Use a good quality toilet tissue that breaks up easily when wet. One way to find out is to put a hand full of toilet tissue in a fruit jar half full of water. Shake the jar and if the tissue breaks up easily, the product is suitable for the septic tank. High wet-strength tissues are not suitable. As long as the tissue breaks up easily, color has no effect on the septic tank. Many scented toilet tissues have high wet strength.
  - ◆ Clean your septic tanks every 3 to 5 years. How often depends on the size of the tank or tanks, how many solids go into it, and how many people are using the system.
  - ◆ ***Never go down into a septic tank. The gases present may kill you. Only trained professionals should enter a septic tank or any other confined space.***
  - ◆ To properly clean a septic tank, the manhole cover or the tank cover must be removed. This is the only way to be sure that all the solids have been pumped out. A septic tank cannot be cleaned adequately by pumping out liquids through a 4-inch inspection pipe. Doing so often results in some of the scum layer plugging the outlet baffle when the tank refills with sewage. Be sure that the tank is opened when it is cleaned. At this time the baffles should be inspected and replaced if necessary.
  - ◆ Recharge wastes from a properly operating water softener will not harm septic tank action, but the additional water must be treated and disposed of by the drain field. If the softener recharge overloads the sewage system, this wastewater can be discharged to the ground surface since it contains no pathogens, but it must be discharged in a location where it will not be a nuisance or damage valuable grass or plants.
- Note: There are conflicting reports on the effects a water softener can have on a septic system. The Washtenaw County Environmental Health Department recommends that water softeners discharge to a dry-well or low area to prevent overloading of the septic system.*
- ◆ Using too much soap or detergent can cause problems with the septic system. It is difficult to estimate how dirty a load of laundry is, and most people use far more cleaning power than is needed. If there are lots of suds in your laundry tub when the washer discharges, cut back on the amount of detergent for the next similar load. It's generally best not to use

inexpensive detergents that may contain excessive amounts of filler or carrier. Some of these fillers are montmorillonite clay, which is used to seal soils! The best solution may be to use liquid laundry detergent, since it is less likely to have carriers or fillers that may harm the septic system.

Each septic system has a certain capacity. When this capacity is reached or exceeded, there will likely be problems because the system won't take as much sewage as you want to discharge into it. When the onsite sewage treatment system reaches its daily capacity, be conservative with your use of water. Each gallon of water that flows into the drain must go through the septic tank and into the soil absorption unit. Following are some ways to conserve water that should cause little hardship in anyone's standard of living:

- ◆ Be sure that there are no leaking faucets or other plumbing fixtures. Routinely check the float valve on all toilets to be sure it isn't sticking and the water isn't running continuously. It doesn't take long for the water from a leaking toilet or a faucet to add up. A cup of water leaking out of a toilet every minute doesn't seem like much, but that's 90 gallons a day! So be sure that there is no water flowing into the sewer when all water-using appliances are supposed to be off.
- ◆ Installing a water meter is a sure way to know how much water you are using and how much the water use will be reduced by taking certain steps. A water meter for a home should cost from \$50 to \$100 plus installation.
- ◆ The most effective way to reduce the sewage flow from a house is to reduce the toilet wastes, which usually account for about 40 percent of the sewage flow. Many toilets use 5 to 6 gallons per flush. Some of the so-called low water use toilets are advertised to use only 3.5 gallons per flush. Usually the design of the bowl hasn't been changed, however, and often two flushes are needed to remove all solids. That's 7 gallons! Toilets are available which have been redesigned and will do a good job with one gallon or less per flush. Using a 1-gallon toilet rather than a 5-gallon toilet will reduce sewage flows from a home by about a third. This reduction may be more than enough to make the sewage system function again. While prices may vary, 1-gallon toilets can usually be purchased in the \$70.00 to \$200 range, far less than the cost of a new sewage treatment system.
- ◆ With a water meter you can determine how much water your automatic washer uses per cycle. Many washers now have settings to reduce the

amount of water used for small loads. Front loading washers and suds savers use less water than top loading machines. If your sewage treatment system is reaching its maximum capacity, try to spread the washing out during the week to avoid overloading the sewage system on a single day.

- ◆ Baths and showers can use lots of water. "Setting up camp" in the shower with a shower head flow of 5 gallons per minute will require 100 gallons in 20 minutes. Showerheads that limit the flow to 1.5 or 2 gallons per minute are available and should be used. Filling the tub not quite so full and limiting the length of showers will result in appreciable water savings.
- ◆ Is the water from the faucet cold enough to drink? How long do you let it run to cool down? Keep a container of drinking water in the refrigerator, then it won't be necessary to run water from your faucets in order to get a cool drink.
- ◆ There may be other ways to conserve water in your home that you can think of. The main idea is to consider water as a valuable resource and not to waste it.

Following a few simple rules like not using too much water and not depositing materials in the septic tank that bacteria can't decompose should help to make a septic system trouble-free for many years. But don't forget the septic tank does need to be cleaned out when too many solids build up. Septic tanks need tender, loving care, too!