

How to properly operate and maintain your

Septic Tank System

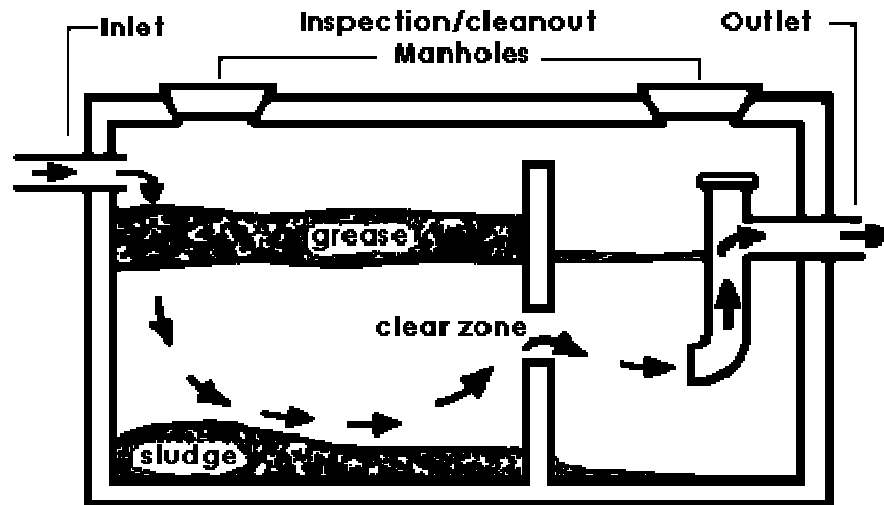
Keep your septic system operating for years so that you can:

- Save thousands of dollars in repairs
- Preserve our groundwater
- Protect the environment

Congratulations - You are now the proud owner/operator of an on-site wastewater treatment system!

As a homeowner with a septic system, you are automatically the operator of your very own wastewater treatment system. Just as you get regular maintenance on your other appliances, you need to give your septic system periodic attention to prevent costly repairs in the future.

The septic tank for a typical three bedroom home is of 900 gallon capacity, usually concrete but may be fiberglass or plastic, about 8 feet long, 4 feet wide, and 5 feet deep. The tank retains, and treats solids and releases liquid effluent into the drainfield.



As wastewater flows from the house into the tank, heavy solids settle to the bottom into a sludge layer while fats, oils & grease float to the top forming a layer of scum. Between these two is a zone of clear water, which is released to the drainfield. Settled solids **MUST** be removed periodically from the septic tank.

All three of these zones have billions of bacteria that live naturally in the tank and perform the first phase of treatment to digest and reduce the volume of sludge and scum. In the process, gasses are produced which are vented from the tank back through the building's wastewater plumbing and out through a vent on the roof of the house. Your septic tank will need to be cleaned out periodically!!

If not cleaned out, accumulated solids will eventually fill the tank, clog the outlet filter and flow out into the drainfield.

If solids do overflow from the septic tank into the drainfield, they will prematurely clog the pores in the soil, causing sewage to back up into the home. When this happens, the solution is to replace the drainfield, which is very expensive and messy.

Have your septic system checked by a licensed septic contractor every two to three years. Be sure the filter is cleaned if one is present in the outlet device of your septic tank. All new septic tanks are required to have a filter at the outlet. A septic tank filter can be cheap insurance against a premature drainfield failure.

Septic tanks are maintained by licensed septic tank cleaning firms permitted by the county health department. This type of work should be done only by experienced professionals who will pump the entire contents of the tank into a tanker truck and dispose of the contents in an approved, sanitary manner that is safe for the environment.

From the septic tank, partially treated effluent flows into the drainfield. This is typically a series of 4 inch diameter perforated plastic pipes set in a rectangular bed of washed crushed stone and located in the front yard. This is where effluent is naturally purified as it percolates down through the soil. For proper effluent purification, the distance between the bottom of the drainfield stone and the wet season water table should be 24 inches. The soil acts as a biological filter, removing harmful substances before the effluent reaches the ground water.

Your drainfield can be severely damaged from compaction by driving or parking vehicles on it. Roots from shrubs and trees can plug drainfield pipes and the septic tank outlet. A good rule is to plant small trees and shrubs at least 5 feet, medium trees at least 15 feet, and large trees at least 25 feet from the edge of the system. The drainfield should be unshaded and seeded or sodded with grass. Grass and sunlight aid in evaporation. 25 to 40% of the water entering the drainbed can be disposed of through this envirotranspiration.

Washing machines are responsible for large volumes of water entering the septic tank at one time. The surge of wash water can create heavy loading on the drainfield. Space washings throughout the week rather than doing many loads on one day.

Cooking oils and grease are trouble makers. The type of bacteria found in septic tanks and drainfields do not survive or function well in solidified grease. Grease and cooking oils should NEVER be washed down the sink drain. Save grease in jars for disposal in the garbage.

Prolonged use of antibiotic medicines by a member of the family can also kill the bacteria in the septic tank.

DO:

- Know the location and the capacity of your septic tank system.
- Have a qualified person inspect the tank and filter every two to three years.
- Have the tank pumped when the combined depth of the sludge and scum equals 1/3 of the tank liquid volume.
- Grow only grass on the system.
- Install water conservation fixtures or devices to reduce the volume of water entering the system.
- Keep plumbing fixtures such as toilets and faucets in good repair to prevent leakage, wasting of water, and saturation of your drainfield.

DON'T:

- Flush paper towels, newspaper, wrapping paper, rags or sticks into the system.
- Allow large, irregular, intermittent or constant volumes of clear water into the system, as from a leaking toilet or faucet.
- Over use ordinary household cleaning chemicals that will be flushed into the system (less than 1oz. of drain cleaner can kill all the bacteria in your septic tank).
- Allow waste from water softeners to enter the system.
- Allow grease or other bulky waste to enter the system.
- Flush toxic materials such as pesticides into the system.
- Plant trees or shrubbery on the drainfield or less than five feet from it.
- Allow vehicles (cars, trucks, trailers) to park or drive on the drainfield. (Protect it from being crushed).
- Use chemical solvents to clean plumbing lines or a septic tank.
- Discharge rainwater onto or into the system.
- Overuse or misuse the garbage disposal unit.