

YOU AND YOUR SEPTIC SYSTEM

A Homeowner's Guide to Septic System Maintenance

YOUR SEPTIC SYSTEM ...

- Is a highly efficient biological system, which can effectively digest and disperse your household sewage and other organic wastes.
- Properly designed, installed and maintained, it should give you many years of trouble-free service, **but only if it is properly maintained.**
- The key to the life and service of any septic system is proper maintenance.

HOW DOES IT WORK?

A septic system is designed to condition untreated liquid household waste (sewage) so that it can be readily dispersed and percolated into the subsoil. Percolation through the soil accomplishes much of the final purification of the effluent, including the destruction of disease-producing bacteria.

Your septic tank is the first step in the process of sewage conditioning. Without it, the untreated sewage would quickly clog the receiving soil and prevent the purification process of leaching and soil percolation.

Septic tanks serve three functions:

1. *Removal of solids.* As sewage enters the septic tank, its rate of flow is reduced so that the larger solids sink to the bottom or rise to the surface. These solids are retained in the tank, and the clarified effluent with suspended and dissolved solids is discharged.
2. *Bacterial action.* The solids and the liquids in the tank are partially decomposed by bacteria and other natural processes. These bacteria are called anaerobic because they thrive in the absence of free oxygen. This decomposition of sewage under anaerobic conditions is termed "septic," hence the name of the system (and the cause of the odor).
3. *Sludge and scum storage.* Sludge is the accumulation of solids at the bottom of the tank, while scum is a partially submerged mat of floating solids that may form at or near the surface. Space must be provided in the tank to store the residues during the intervals between cleaning. Otherwise, the sludge and scum will eventually be scoured from the tank and will clog the leach field and receiving soil. **PERIOD CLEANING OF YOUR TANK IS ESSENTIAL TO ITS PROPER FUNCTION.**

Finally, the treated effluent from the septic tank is discharged to the leach field where it percolates through suitable gravel and finally into the subsoil for further purification.

A properly maintained septic system will adequately treat your sewage.

A septic system failure is an unhealthy, illegal and a nuisance.

ADDITIONAL SUGGESTIONS

- Minimize or eliminate use of sink "disposal" units that grind up food wastes and place a burden on your septic tank.
- Don't stack firewood or place storage sheds or other structures over your system.

- Don't use colored toilet paper; it does not break down in the tank as rapidly as white paper.

REMINDER

Replacing an existing system can be costly! Estimates over \$2,000 are now common. The life of the system can be prolonged by proper maintenance and frequent pump-outs—a small price to pay in comparison!

WHAT CAN I DO TO PROPERLY MAINTAIN MY SEPTIC SYSTEM?

- First and foremost, inspect your septic tank every year. If the sludge and surface scum combined are as thick as 1/3 the liquid depth of your tank, have the tank pumped out by a licensed pumper.
- Your tank should be pumped out at least every two to three years.
- Do not flush bulky waste or grease into the system. It can plug the sewer and/or distribution lines.
- Do not flush toxic materials into the system. Paint thinner, gasoline, pesticides, chlorine, drain cleaners and other caustic or toxic substances can kill the naturally-occurring bacteria in the tank and impair its function. If in doubt, don't flush it.
- Conserve water. Too much water can overload your system and adversely affect its function. Using five gallons of water to flush a bug down the toilet is ridiculous.
- Don't allow vehicles or livestock on your leach field. The weight can compact the soil and/or break pipes.
- Don't bother adding enzymes or commercial additives to your system. The trillions of bacteria already present provide all the digestion needed. You are literally throwing money down the drain by using additives.
- Any soggy areas around the system, or disagreeable odors, indicate system failure. Have it checked. Even if you don't notice these, it might be time to have your tank pumped out.

SEPTIC SYSTEM DO'S AND DON'TS

DO:

- ___ Know the location of your septic tank.
- ___ Have your tank pumped out at least every 2 or 3 years.
- ___ Check your leach field for system failure.
- ___ Conserve water.

DON'T:

- ___ Flush bulky waste or grease into your system.
- ___ Flush toxic materials into the system.
- ___ Allow vehicles or livestock on the leach field.
- ___ Add commercial additives to your system.

This publication is excerpted from a management guide for resident owned communities with permission from the NH department of environmental services.