System Maintenance

Why Maintain Your System? There are three important health reasons for maintaining your septic tank system.

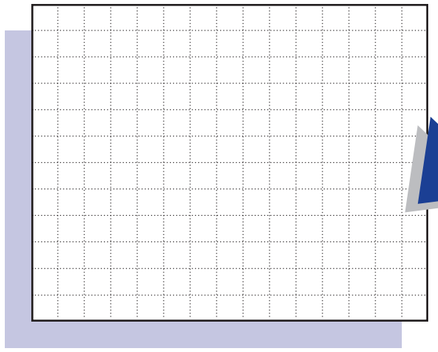
- ✔ The first reason is the *health of your pocket book*. Poor maintenance results in failed systems requiring repairs at a minimum and sometimes system replacement. Repairs or replacement costs can be thousands of dollars, whereas a periodic inspection and pumping costs about $150 - $250.

- ✔ The second reason is the *health of your family, your community and the environment*. Untreated sewage water contains disease-causing bacteria and viruses, as well as unhealthy amounts of nitrate and other chemicals. Failed septic tank systems can allow untreated sewage to seep into wells, groundwater, and surface water bodies, where people get their drinking water and recreate.

- ✔ The third reason is the *health of your economy*. Contamination of water bodies by failed septic tank systems pollutes water supplies, closes shellfish beds and recreational areas, and creates offensive odors. Quality of life, recreational opportunities, and tourism decline, and with them home property values, and economic vitality of the area.

How Do You Maintain Your System?

Proper care of your system requires day-to-day management as well as periodic maintenance. It also requires that you know where your system is. The more you know about how your system operates and how it should be maintained, the better able you will be to protect your investment in your home and property, protect your family's health, and protect your environment.



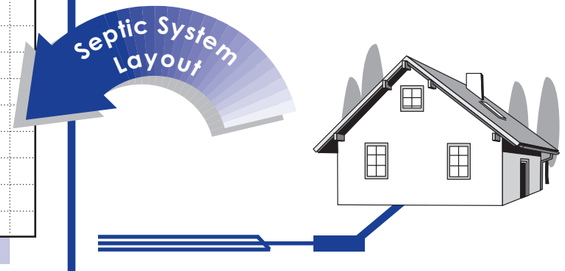
Where Is Your Septic Tank System Located?

In order to maintain your system, the tank needs to be accessible for pumping and the drain field should be protected. Locating your system is not always an easy task. If you do not already have one, contact your county health department for a copy of your septic tank system ***permit***, which will indicate the approximate location of the system and the size of the tank. The completed permit (also called The Approval for Use) will have a diagram of the actual system installation and include other information about your system. ***Keep your permit in this file folder for future reference and to pass on to the next homeowners.***

- ✔ Make a sketch on the grid provided below locating your septic tank and drain field (the trenches) in relation to surrounding reference points. Begin by sketching your house, driveway, water well, and other landscape features, such as trees or fences.

- ✔ A good starting point for finding the exact location of the tank is to look in the crawl space to see the direction in which the house sewer pipe enters the soil. Then, gently push a thin (3/8 to 1/2 inch diameter) steel rod into the soil about 5-10 feet away from the house to feel for the tank. Of course, you should first call local utility companies to make sure there are not any underground utilities (such as buried electrical cables) in the area.

- ✔ When you have your septic tank pumped, measure and record the distance from the house to the access port on the tank. You may want to have a watertight access riser and secure lid extended up to ground level. This will help you find it again and may reduce your pumping fee.



Taking Care of Your Septic Tank System

An Ounce Of Prevention Is Worth A Ton Of Cure! Committing a little attention to the care of your system can help to avoid the nightmare of a failing system. Assuming that your septic tank system was properly located, designed, and installed according to state codes, you are now in the driver's seat for the care of your system. By following the recommendations below, you can help your system to work properly for years to come.

Do's

- ✔ Conserve water to reduce the amount of wastewater that must be treated and disposed of by your system. Doing laundry over several days will put less stress on your system.

- ✔ Repair any leaking faucets or toilets. To detect toilet leaks, add several drops of food dye to the toilet tank and see if dye ends up in the bowl.

- ✔ Divert roof drainage, down spouts and other surface water away from your drain field. Excessive water keeps the soil from adequately cleansing the wastewater.

- ✔ Install an effluent filter in your tank the next time it is pumped.

- ✔ Have your septic tank inspected yearly and pumped regularly by a licensed septic tank contractor.* *See the chart below for suggested pumping frequencies.*

- ✔ Keep your septic tank cover accessible for inspections and pumpings by installing watertight risers to ground level with secure lids.

- ✔ Call your county health department or a **licensed septic tank contractor** whenever you experience problems with your system, or there are any signs of system failure.

- ✔ Keep a detailed record of repairs, pumpings, inspections, and other maintenance activities. Pass these on to the next homeowner.

Don'ts

- ✖ Don't drive over your drain field or compact the soil in any way.

- ✖ Don't dig in your drain field or build anything over it, and don't cover it with a hard surface such as concrete or asphalt and don't install underground utilities or sprinkler systems nearby.

- ✖ Don't plant anything over or near the drain field except grass. Roots from nearby trees and shrubs may clog and damage the drain lines.

- ✖ Don't install a swimming pool near your system.

- ✖ Don't use a garbage disposal, or at least limit its usage. Disposals increase solids in your tank by about 50%, so you have to pump your tank more often than normally suggested.

- ✖ Don't use your toilet as a trash can or poison your system and the groundwater by pouring harmful chemicals and cleansers down the drain. Harsh chemicals can kill the bacteria that help purify your wastewater. *See the list below for examples.*

- ✖ Don't waste money on septic tank additives. The bacteria needed to treat wastewater are naturally present in sewage. Additives can resuspend solids causing your drain field to clog. Additives do not eliminate the need for routine pumping of your tank.

- ✖ Don't allow backwash from home water softeners to enter the septic tank system.

- ✖ Never enter a septic tank. Toxic gases from the tank can kill. If your system develops problems, get advice from your county health department or a licensed septic tank contractor.

Pump System Regularly

Suggested Pumping Frequency (Years)

Tank Size (gallons)	Number of People Using the System				
	1	2	4	6	8
1000	12	6	3	2	1
1250	16	8	3	2	1
1500	19	9	4	3	2

Source: Adapted from "Estimated Septic Tank Pumping Frequency" by Karen Manci, 1984 *Journal of Environmental Engineering,* Volume 110.

****Pumping your septic tank is probably the single most important thing you can do to protect your system. If the buildup of solids in the tank becomes too high and solids move to the drainfield, this could clog and strain the system to the point where a new drainfield will be needed.***



DO NOT FLUSH...

Coffee grinds	Dental floss
Disposable diapers	Kitty litter
Sanitary napkins	Tampons
Cigarette butts	Condoms
Fats, grease or oil	Paper towels
Paints	Varnishes
Thinners	Waste oils
Kitchen scraps	Pesticides

Maintenance Record

Use the Following Spaces to record information about your own septic tank system. Some of this can be copied From your **Approval for Use**, which can be obtained from your county health department. Having good maintenance records can be a positive selling point for your home when the time comes *(wouldn't you rather buy a car that has a proven maintenance record?)*

Permit Number: _____ ***Date Issued:*** _____

Issued to: _____ ***Date Installed:*** _____

Address: _____

System Description: _____

Drain field Type:

- ❑ Conventional Trenches
- ❑ Shallow Trenches
- ❑ Mound / Controlled Fill
- ❑ Bed
- ❑ Drip Irrigation
- ❑ Other
- ❑ Gravel
- ❑ Chamber
- ❑ Gravelless pipe
- ❑ Styrofoam
- ❑ Tire Chips

Septic Tank Size (gallons) _____
Pump Tank Size (gallons) _____
Drain field Dimensions: _____
Number of Trenches: _____
Trench Length: _____

Septic Tank System Installer:

Name: _____

Address: _____

Telephone: _____

AOWB License Number* : _____

Septic Tank System Pumper:

Name: _____

Address: _____

Telephone: _____

AOWB License Number* : _____

* State law requires septic tank installers and pumpers to be licensed by the Alabama Onsite Wastewater Board.

System Maintenance Record

Date	Work Description	Firm	Cost

This project was funded or partially funded by the Alabama Department of Environmental Management through a Clean Water Act, Section 319 (h) non-point source Grant provided by the U.S. Environmental Protection Agency, Region IV. For additional information call your local Health Department.

SEPTIC TANK SYSTEM

Homeowner's Guide & Record Keeping Folder

Did you know....

... that a properly designed and installed septic tank system can be the safest, most economical way to treat your wastewater as long as it is properly maintained? If you are like most homeowners, you probably never give much thought to what goes down your drain. But if you own a car and understand how important it is to do preventative maintenance (like changing your oil), then you can understand how maintaining your septic tank system can save you money and headaches down the road. This owner's guide can help you be sure that your septic tank system is used and maintained properly. This folder also provides a place to record and keep important information such as your permit, a sketch of your system, maintenance records, and other fact sheets. Read and use this folder to learn:

- ***How a septic tank system works***
- ***Why and how to maintain your septic tank system***
- ***How to keep your own maintenance record***

- **Alabama Department of Public Health**
- **Alabama Department of Environmental Management**
- **Tennessee Valley RC&D Council, Inc.**
- **Alabama Onsite Wastewater Association**

Graphics & design courtesy of South Carolina Department of Health & Environmental Control

How Do Septic Tank Systems Work?

System Description. A septic tank system uses natural processes to treat and dispose of the wastewater generated in your home. It typically consists of a septic tank with an effluent filter and a drain field, or a soil absorption field. The septic tank provides the first step in treatment. As wastewater flows into the tank, the heavier solids settle to the bottom to form a sludge layer, and the lighter solids, greases, and oils float to the top to form a scum layer. The liquid wastewater (effluent) from the filtered tank flows into gravel-filled trenches in the drain field where it spread out via perforated pipes, and is treated by the natural soil system. The diagram below shows the components of a typical septic tank system.

System Operation. The septic tank provides some biological treatment of the sludge and scum layers that accumulate there. The majority of treatment occurs in the drain field where the effluent enters the soil and is treated as it percolates to the groundwater. The soil acts as a biological and physical filter to remove harmful substances including disease-causing bacteria and viruses, toxic organics and other undesirable wastewater constituents remaining in the effluent.

A baffle and filtered outlet tee located in the tank are designed to prevent the sludge and scum from flowing into the drain field. If the tank is not pumped regularly to remove the accumulated solids, the tank will fill with sludge and the solids will be washed out into the drain field. There they will quickly clog the soil and eventually cause the system to fail.

Basic Septic Tank System Components

