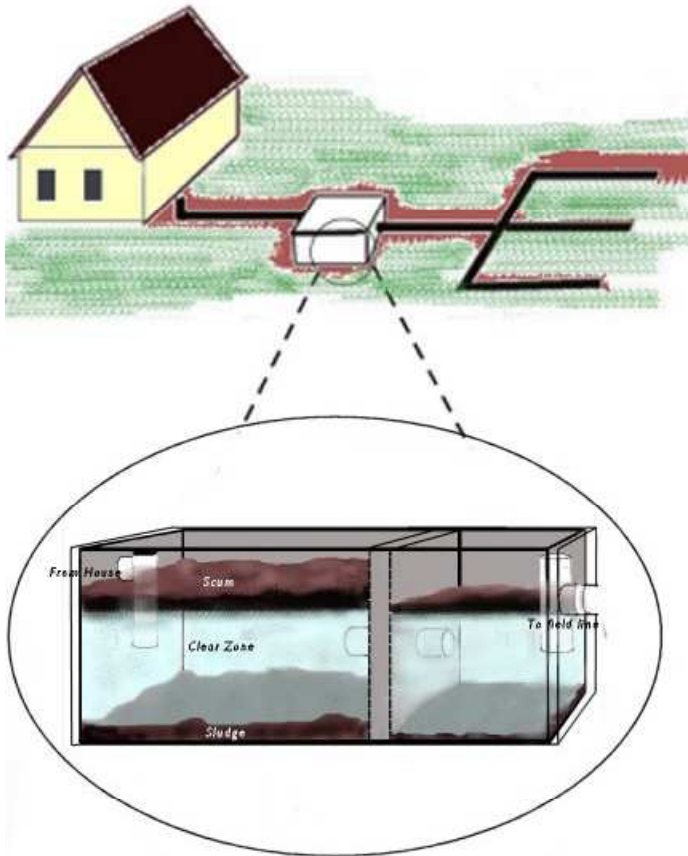


Wastewater exits your home by way of a four-inch pipe that goes to the septic tank. The tank is made of concrete, fiberglass or polyethylene and is buried just beneath the surface of the ground in the typical plan. Some newer tanks have risers with lids to allow for easier locating, inspection and pumping. When the wastewater enters the tank, it is held there long enough to allow the elements to separate. The inside of a healthy tank is composed of three layers. The top layer is called "scum" and is made of grease, oils and other organic solids that float. The bottom layer, called "sludge" is composed of the solids that won't break down.



Between those two layers is a clear zone. A healthy system is full of bacteria or "bugs" that biologically work in the clear zone to break down the solids. Without the bacteria this natural process won't happen and the scum will escape into the field lines. The only thing that should go out into the field lines is the clear zone liquid. The clear liquid will leave the tank by way of the field lines or absorption lines at the outlet side of the tank. The field lines are a trench system that is composed of perforated pipe surrounded by gravel or other approved materials. These materials serve as an additional filtration medium. When liquids enter the field line, they will "leech" slowly into the ground. There you have it: a healthy system. It's silent and effective and works wonderfully well just using the tools that nature has provided to take care of it.

However, over a period of time, the level of the accumulating sludge starts to build and the scum starts to increase. They grow to meet in the center, crowding out the bacteria and leaving no room for them to work.

The scum and sludge will reach a level where they can escape into the field lines and cause damage to the filtration system. If left unchecked, solids will clog the perforations in the pipe and pack between the pores of the filtration medium, completely cutting off the flow. There is no way to clean a clogged field line. The only solution is to replace them or add more field line. The expense and inconvenience are substantial.

According to the U.S. Government Department of Health, Education, and Welfare Public Health Service, "A septic system will serve a home satisfactorily only if it is properly designed, installed, and adequately maintained. Even a good system which does not have proper care and attention may become a nuisance, and a burdensome expense."

Newer systems, those installed since 1997, have a two-compartment tank. The second compartment helps to clean the water more thoroughly before it flows to the field lines. When a septic tank is pumped, the homeowner should insist that the pumping service remove all of the solids from the tank and not just the water. The newer two compartment tanks should have both

compartments pumped. The pumping service company is required to provide the homeowner and the health department with a copy the tank inspection that is mandated by the state for each pump out.

Another feature of the post 1997 systems is a filter in the outlet tee of the tank. The filter is another component that helps keep solids out of the field lines. The filter, should it become clogged, will create problems with the flow to the field lines. It is a good practice to clean or to have the filter cleaned, once a year to help prevent flow problems.

Maintenance of a septic tank system is not in the least daunting. It's very simple. The Dougherty County Department of Environmental Health recommends that you have your system inspected at least every three years to ward off any unseen problems and the system should be pumped every three to five years, depending on how many people live in the house and on the size of the system.

Avoid using anything that might be harmful to the bacteria in the tank system. Never dispose of hazardous waste in your toilet or sinks. Read the labels of common household cleansers. If the label says, "Could be harmful or fatal if swallowed", it will kill the bacteria in your tank. Use products that are biodegradable, but if you have to use harmful detergents or bleaches, purchase a product that will replenish the bacteria in your system. Don't flush anything that doesn't easily break down like female hygiene products, excessive tissue, paper towels, cigarette filters, diapers, cotton balls, etc. These items slow the production of new bacteria in the tank since the enzymes surrounding the cells cannot easily break down cellulose products and cell division cant happen without the energy supplied to the cells by the waste they consume.

Never drive over the area where your absorption trenches are installed. This will compact the soil and could also crush the perforated pipe.

There are other ways that you can extend the life and viability of your system. Your local health department has all the information you need for properly maintaining a system in good working order and they are always glad to be of service. You can also call Roto-Rooter of Albany for help and answers.