

Home Sewage Disposal



What a Homeowner Must Know About Septic Tank Systems

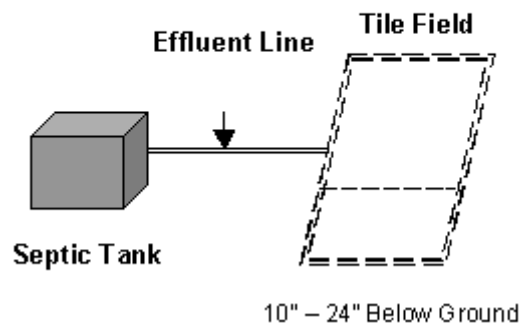
What is a Septic Tank System?

A septic tank system is an underground private sewage disposal system. It is the best method of sewage disposal in areas where community sewage disposal facilities (sanitary sewers) are not available and where soil drainage is acceptable.

A septic tank system usually consists of two parts:

1. **Septic Tank** - A water tight (concrete) container that receives untreated household waste. Solids are retained here.
2. **Tile Field** - a series of perforated pipes which distribute the liquid from the septic tank to the surrounding below ground soil.

SEPTIC SYSTEM



How does a Septic System Work?

Waste material from the house enters the septic tank slowly so that solids and greases can:

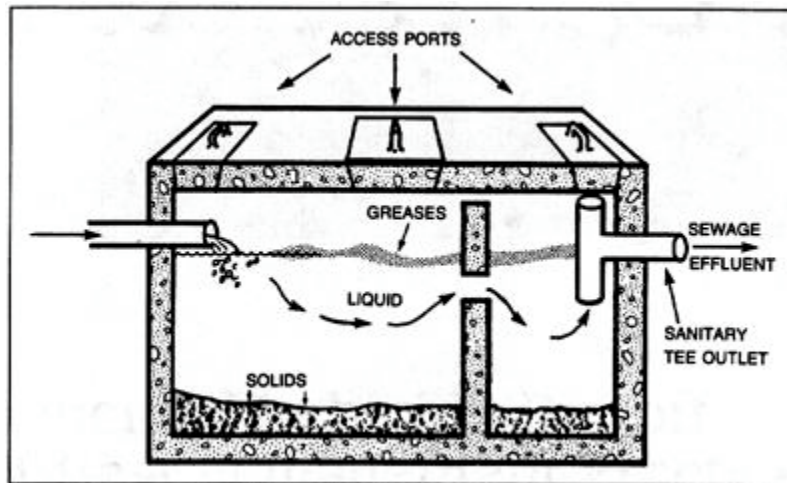
- Settle to the bottom and form a sludge layer
- Rise to the top and form a scum layer

In between the sludge and scum layers is a layer of liquid waste, known as effluent.

When waste enters the tank, bacteria begin to break down the solid materials. This process

is called "decomposition". As a result of decomposition, solids are reduced, leaving a residue behind in the tank. As time passes, the remaining residue builds up and must be removed via pumping to prevent it from entering the tile field and clogging the system.

The center liquid layer flows slowly from the tank into the tile field. Pipes in the tile field are perforated. This allows the liquid to be distributed equally in specially prepared gravel filled trenches. Once the liquid reaches the trenches, it soaks into the soil. The soil then acts as the final filter in the treatment of waste received by the septic system.



Why is it important to maintain my Septic System?

- A failing septic system can be very costly. Often times failing systems are impossible to repair and must be replaced. Even when the system can be repaired, the expense is much greater than that of a simple cleaning. A failing septic system can also cause your property value to go down. In other words, "an ounce of prevention is worth a pound of cure."
- A failing septic system is a real health hazard. Sewage may contain harmful disease causing bacteria and viruses. When a system fails, sewage may back up into the house and may also rise to the ground surface over the tile field. Therefore, people and pets may be exposed to these harmful bacteria and viruses.
- A failing septic system is a real nuisance. When a system fails, there is the possibility that it will cause damage to your property. Offensive odors in the house and outside area are also results of a failing system.
- A failing septic system may also result in the discharge of sewage into nearby lakes or streams, resulting in impaired water quality and beach closings

Septic System Checklist - Do's and Don'ts

- **DO** have the septic tank pumped out by a licensed operator every 2-3 years, depending on use.
- **DO** know where it is located and have a way to reach it to be sure it can be pumped easily.
- **DO** limit the amount of kitchen waste you put into the system through a garbage disposal
- **DO** make normal use of bleaches, detergents, soaps, bowl cleaners or drain cleaners.

- **DO NOT** allow heavy vehicles to drive over the tile field; the drain tiles will be damaged.
- **DO NOT** allow trees and shrubs to grow over the septic field.
- **DO NOT** allow large amounts of water to be drained into the septic tank at the same time.
- **DO NOT** connect downspouts, sump pumps or water softener backwash to the septic system.
- **DO NOT** put harmful materials down your drains, such as fats, oils, septic additives, solvents or solids like plastic, paper towels, feminine hygiene products or disposable diapers.

Warning Signs of A Septic System Failure

- Odors, surfacing sewage, wet spots or lush vegetation in the drain field area.
- Plumbing or septic tank backups.
- Slow-draining fixture, not due to local clogging.
- Gurgling sounds in the plumbing system.

If you notice any of these signs or if you suspect problems with your septic tank system, contact the Health Department for assistance.

Septic System Diagram and Maintenance Record

This Department recommends that homeowners keep a diagram identifying the location of their septic tank and tile field, for future reference. It is also recommended that you keep a log sheet to record system maintenance information including the date, work done, contractor and expense.

For additional information, please contact the Macomb County Health Department Environmental Health Services Division at (586) 469-5236.