Managing Your Septic System

How Your System Works

How the Septic Tank Functions

Maintenance

The Drainfield

Recommendations

"Cleaning is our bzzzness"

SCOTT'S EXCAVATING

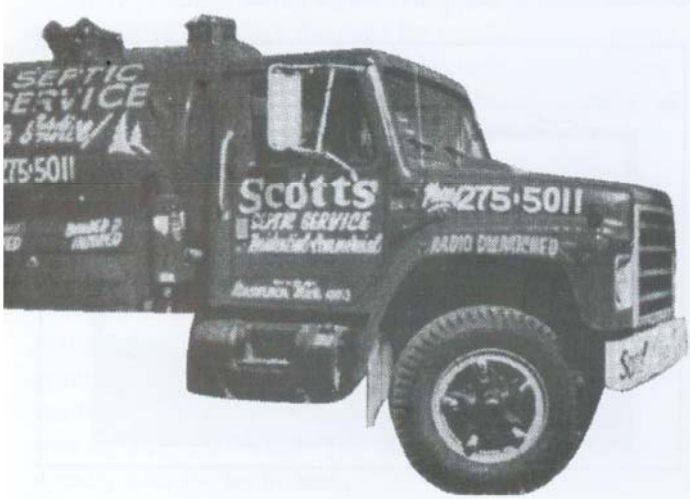
989-275-5011

Recommendations

- To prolong the life of your septic system
- To minimize maintenance costs

Do

1. Inspect for scum and sludge depth once each year and never allow sludge or scum to escape from the septic tank into the drainfield.
2. Clean tank at proper intervals (usually every two to five years).
3. Limit water entering your tank:
   - use water-saving fixtures (faucets, showers, toilets)
   - prevent basement sump pump connection to tank
   - drain appliances one at a time
   - spread clothes-washing over the entire week and avoid half-loads.
   - prevent roof, foundation, driveway and basement drainage from entering tank or drainfield area
   - minimize amount of water used for bathing and dishwashing
   - fix all faucet and toilet float valve leaks.
4. Keep soil over your system slightly mounded to help surface water run off.
5. Landscape your system properly. Dense grass cover and other shallow-rooted plants are beneficial over a drainfield.
6. Keep automobiles, all heavy vehicles and livestock off the drainfield.



7. Mark the boundaries of your drainfield as a reminder.
8. If your system is equipped with a diverter valve between the septic tank and soil absorption field, allow one side of your system to "rest" at one-year intervals.
9. If your system is quipped with a dosing chamber, be sure the submersible pump is operating and properly maintained for uniform discharge of effluent into the absorption field, followed by drainage between doses.

Don't

1. Use chemicals to clean or "sweeten" your system except on the advice of your local health department.
2. Don't overuse a kitchen garbage disposal unit. Heavy use adds large quantities of solids and shortens the time between cleanings.
3. Put harmful materials in the tank. Avoid fats, solvents, oils, disinfectants, paints, chemicals, pesticides, poisons, coffee grounds, paper towels, disposable diapers, sanitary napkins and tampons.
4. Place impermeable materials over your drainfield. Materials such as concrete or plastic reduce evaporation and the supply of oxygen to the soil for proper effluent treatment. They can also hinder access to the system for cleaning, inspection, or repair.
5. Fertilize the soil above the drainfield.
6. Stockpile snow or soil on your drainfield.
7. Allow downspouts to drain onto or into your drainfield.
8. Enter a dosing chamber or septic tank. Poisonous gases or the lack of oxygen can be fatal. Any work on the tank must be done from the outside.
9. Never build or pave over a drainfield.

"A Royal Flush
Beats
a Full House"

Households that are not served by public sewers usually depend on septic systems to treat and dispose of wastewater.

When a Septic System Is:

- correctly located
- adequately designed
- carefully installed
- properly managed

You will have a waste disposal system that is:

- simple
- economical
- effective
- safe
- long-lasting

A failing system may result in:

- property damage
- surface, and possibly groundwater, pollution
- disease potential
- costly repairs or replacement

How Your System Works

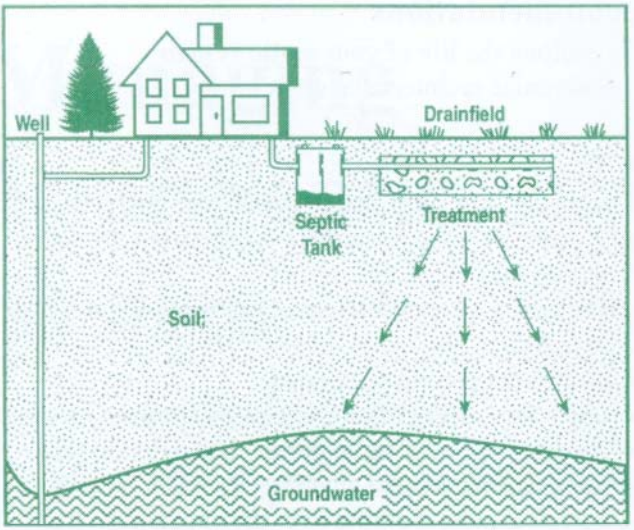
A septic system has two basic parts: a septic tank and a soil absorption field or drainfield. Wastes flow from the house into the septic tank.

Management is the key to a lasting wastewater disposal system. Just as changing your vehicle's oil at regular intervals is important to engine life, cleaning your septic tank at regular intervals can extend your drainfield life.

Most solids are separated to the bottom and are partially decomposed by bacteria to form sludge. Some solids float and form a scum mat on top of the water.

The liquid effluent from the septic tank, carrying disease-causing organisms and liquid waste products, is discharged into the soil absorption field.

There the water is further purified by filtration and decomposition by microorganisms in the soil. The semi-purified wastewater then percolates to the groundwater system.

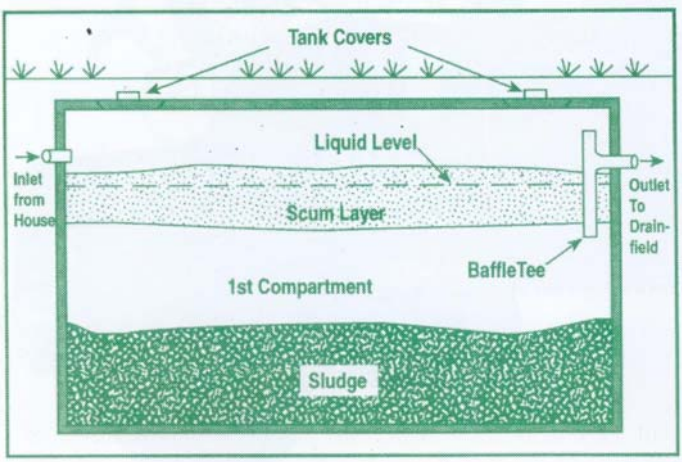


SEPTIC SYSTEM MANAGEMENT

How The Septic Tank Functions

The typical septic tank is a large, buried, rectangular, or cylindrical container made of concrete, fiberglass, or polyethylene. Wastewater from your toilet, bath, kitchen, laundry, etc. flows into the tank. Heavy solids settle to the bottom where bacterial action partially decomposes
them to digested sludge and gases. Most of the lighter solids, such as fats and grease, rise to the top and form a scum layer.

Tees or baffles are provided at the tank's outlet pipe. The outlet tee keeps the solids or scum in the tank. All tanks should have accessible covers for checking the condition of the baffle and for pumping.



Solids that are not decomposed remain in the septic tank. If not removed by periodic cleaning, solids will accumulate until they eventually overflow into the drainfield, leading to costly repairs or replacement. Remember that retention time, or the time available for solids to settle out of wastewater, decreases as the sludge layer increases in your septic tank.

Maintenance

Most septic tanks must be cleaned once every two to five years, depending on the tank size, number of persons in the household, and whether or not occupants are minimizing release of unnecessary solids into the wastewater.

How do I determine when to clean?

Many homeowners prefer to give this responsibility to a reputable septic tank cleaning firm. They can suggest a cleaning schedule designed for your specific situation. Some homeowners may wish to measure sludge depth and scum thickness themselves, using a homemade probe. Guidelines for performing this messy operation may be obtained from your local sanitarian in the county health office. The tank requires cleaning if: a) the top of the sludge deposit is within 12 inches of the outlet baffle; b) the bottom of the floating scum mat is within three inches of the bottom of the outlet baffle; c) the top of the floating scum mat is within one inch of the top of the outlet baffle or; d) the floating scum mat is more than 10-12 inches thick.

Should I use any special products to enhance the operation of my septic tank?

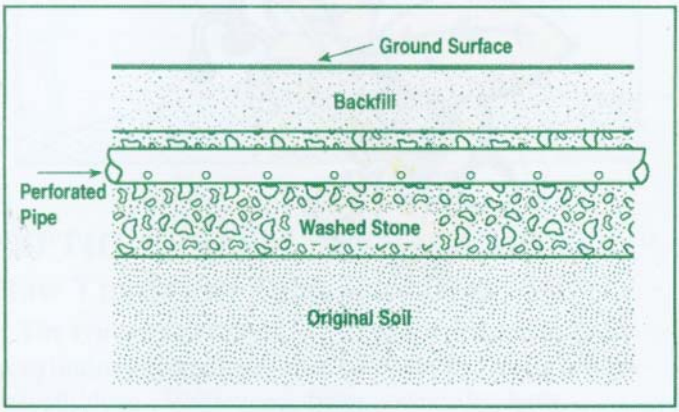
Many products which claim to improve septic tank performance or reduce the need for routine cleaning are available. These solvents, yeasts, bacteria, and enzymes have not been found to make a significant difference. Some can even cause solids to be carried into the drainfield, causing early clogging and repair. Some products contain organic solvents *which contribute to groundwater pollution.*

Where is my tank located?

If you do not know where your septic tank is located, you can find it by gently tapping a steel rod into the ground starting about 10 feet from the point where the sanitary drain leaves the house. Another method is to wait for a light snowfall. The snow is likely to melt first directly over the septic tank.

The Drainfield

The drainfield receives septic tank effluent. It has a network of perforated pipes laid in washed stone filled trenches (two-three foot wide), or beds (over three feet wide) in the soil. Wastewater trickles out of the pipes, through the washed stone layer, and into the soil. The size and type of drainfield depends upon estimated daily wastewater flow and soil conditions. Your local health department district establishes the requirements for size, location and any special situations for these.



The soil below the drainfield provides the final treatment and disposal of the septic tank effluent. After the effluent has passed into the soil, most of it percolates downward and outward, eventually entering the groundwater. A small percentage is taken up by plants through their roots, or evaporates from the soil.

The soil filters effluent as it passes through the pore spaces. Physical and biological processes treat the effluent before it reaches groundwater, or a restrictive layer, such as hardpan, bedrock, or clay soils. These processes work best where the soil is somewhat dry, permeable, and contains plenty of oxygen for several feet below the drainfield.

Warning Signs of a Failure

- Odors, surfacing sewage, wet spots or lush vegetation in the drainfield 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 system, contact your local health agency for assistance.

"If you can pass it,
we can pump it"

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