Do Your Part, Be SepticSmart:

The Do's and Don'ts of Your Septic System

Learn these simple steps to protect your home, health, environment and property value:

septicsmart
U.S. Environmental Protection Agency

Protect It and Inspect It:

Do:

- Have your system inspected (in general) every three years by a licensed contractor and have the tank pumped, when necessary, generally every three to five years.

Think at the Sink:

Don't:

- Pour cooking grease or oil down the sink or toilet.
- Rinse coffee grounds into the sink.
- Pour household chemicals down the sink or flush them.

Do:

- Eliminate or limit the use of a garbage disposal.
- Properly dispose of coffee grounds & food.
- Put grease in a container to harden before discarding in the trash.

Don't Overload the Commode:

Don't:

- Flush non-degradable products or chemicals, such as feminine hygiene products, condoms, dental floss, diapers, cigarette butts, cat litter, paper towels, pharmaceuticals.

Do:

- Dispose of these items in the trash can!

Shield Your Field:

Don't:

- Park or drive on your drainfield. The weight can damage the drain lines.
- Plant trees or shrubs too close to your drainfield, roots can grow into your system and clog it.

Do:

- Consult a septic service professional to advise you of the proper distance for planting trees and shrubs, depending on your septic tank location.

Don't Strain Your Drain:

Don't

- Concentrate your water use by using your dishwasher, shower, washing machine, and toilet at the same time. All that extra water can really strain your septic system.

Do:

- Stagger the use of water-generating appliances. This can be helpful especially if your system has not been pumped in a long time.
- Become more water efficient by fixing plumbing leaks and consider installing bathroom and kitchen faucet aerators and water-efficient products.

It's Septic Smart Week

September 22-26

For more SepticSmart tips, visit: **www.epa.gov/septicsmart**

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YOUR ONSITE WASTEWA

You are the owner (and operator!) of an onsite wastewater treatment system that is designed to be environmentally safe and to protect public health. A properly installed and operated system treats wastewater from your home and returns it to the groundwater. Successfully used for over 100 years, nearly one-fourth of the United States population uses this method of wastewater treatment.

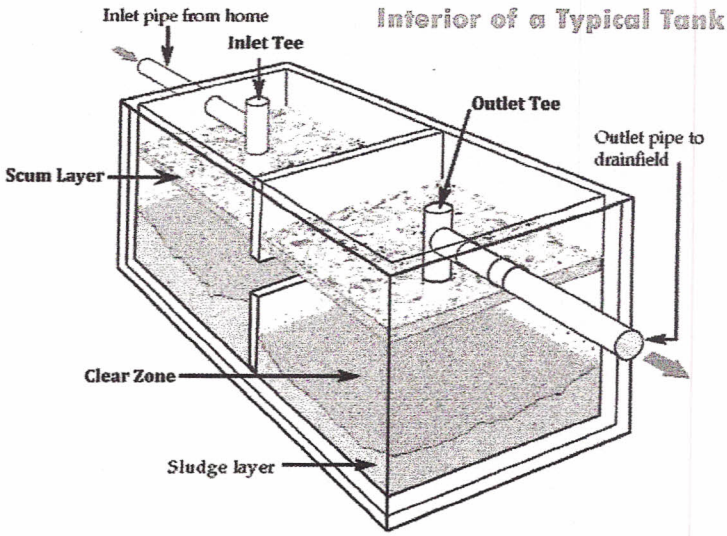
SYSTEM DESCRIPTION

The first component in the system is a septic tank that uses natural processes to treat the wastewater generated in your home. The second component is a soil treatment area (also called a drainfield) where the wastewater is dispersed back into the groundwater after it is treated. The system accepts both "blackwater" (toilet wastes) and "graywater" (wastes from the kitchen sink, bath and showers, laundry, etc.).

Note that wastes from food preparation and laundry do contain harmful bacteria and other pollutants that still require treatment. Water from foundation or footing drains, roof gutters, and condensate from air conditioners or ice machines (so-called "clear" water should never be discharged to the system.

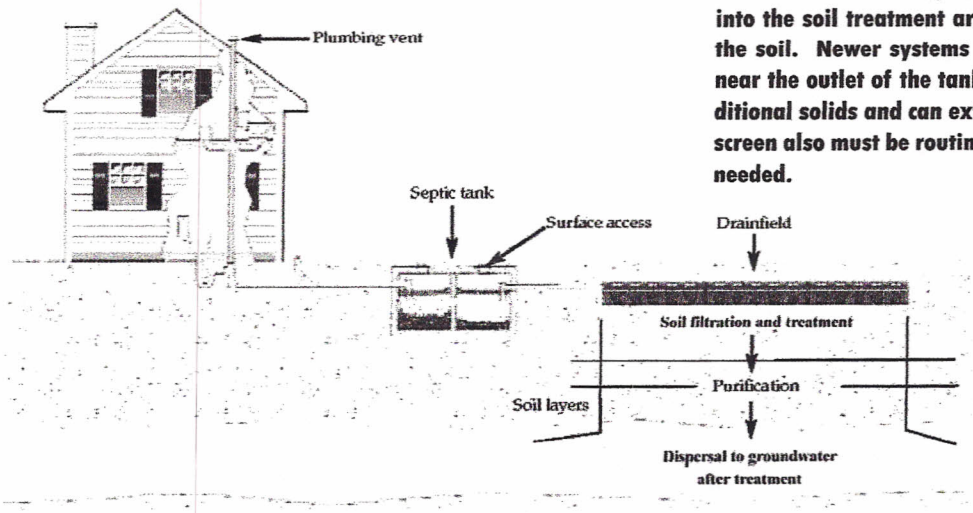
THE SEPTIC TANK

The septic tank provides the first step in treatment by removing solids. Its primary purpose is to protect the soil treatment area or other system components from becoming clogged by solids that are suspended in the wastewater. The wastewater discharged from the home goes into



the tank where it is retained for a day or more. During the time it is in the tank, the heavier solids settle to the bottom to form a sludge layer. The lighter solids, greases and oils float to the top to form a scum layer.

In addition to acting as a sedimentation chamber and providing storage for the sludge and scum, bacteria in the septic tank also digests or breaks down the waste solids. Micro-organisms that thrive without oxygen feed on the solids to reduce the volume of sludge and scum. In the process, carbon dioxide, hydrogen sulfide and other gases are produced which are vented from the tank through the plumbing vent on the roof of the building that the tank services. Only about 40% of the sludge and scum volume can be reduced in this manner, so the tank must be pumped regularly to remove the accumulated solids. If not inspected periodically and pumped when needed, the tank will fill with sludge and the solids will be washed out into the soil treatment area where they will quickly clog the soil. Newer systems may include an effluent screen near the outlet of the tank. The screen helps remove additional solids and can extend the life of the system. The screen also must be routinely inspected and cleaned when needed.



ER TREATMENT SYSTEM

THE SOIL TREATMENT AREA

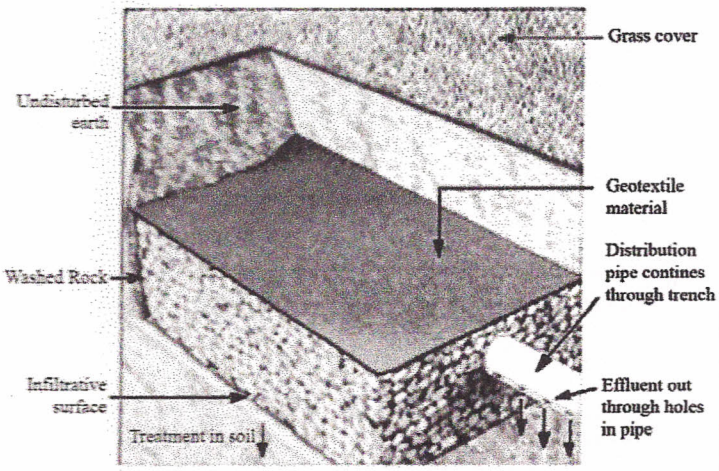
The soil treatment area, often called a drainfield, provides final treatment of the wastewater and returns the treated water to the groundwater. The total area required for adequate soil treatment is determined by the expected peak flow of wastewater from the home and the characteristics of the soil in the treatment area. The soil treatment area is typically built as a series of trenches or as one larger bed, and is typically kept at a shallow depth. The soil treatment area must be constructed in permeable soils and be two or more feet above the seasonal high groundwater table. While there are many types of soil treatment area systems the following describes a typical washed rock trench system.

The treatment area is excavated to a depth that maintains the required distance above the seasonal high water table or a restrictive zone of soil. The excavated trench or bed is filled with six to twelve inches of washed rock. A perforated pipe is installed within the gravel to distribute the partially treated liquid (effluent) from the septic tank. The washed rock and pipe is covered with synthetic fabric or other permeable barrier material to help keep soil particles out of the system. The area is backfilled with soil that will support a vegetative cover. The vegetation helps to stabilize the surface and also takes up some of the moisture and nutrients from the effluent.

The septic tank effluent either flows to the soil treatment area by gravity or is dosed by pump or siphon. The effluent enters the soil and is treated as it percolates to the groundwater. The soil acts as biological filter to remove any remaining harmful substances including disease-causing bacteria and other undesirable wastewater constituents in the septic tank effluent.

Soil treatment areas other than those described above, can be used. This includes at-grades, mounds or drip distribution. There are also other trench media that can be used in place of the washed rock. If you have any of these alternatives contact your local service provider or NOWRA for more information.

Typical Washed Rock Trench



TAKING CARE OF YOUR ONSITE SYSTEM

Your onsite treatment system represents a significant investment which you will want to protect. "An ounce of prevention is worth a pound of cure" was never truer than it is with onsite system care. With proper operation and regular maintenance, your system will function better and last longer.

Have your septic tank inspected every 3 to 4 years and pump it if the sludge fills the bottom third of your tank or if you see the scum layer near the top of the outlet baffle. The frequency of pumping depends on a number if factors and can vary substantially between homes from once or more a year to 10 years or more.

Use this folder to keep records of each tank pumping including the date and estimated sludge depth and scum thickness. Over time, these records will help you anticipate when tank pumping might be necessary. Committing a little attention to the care of your system is the best way to avoid the problem of a failing system.

System Maintenance Record

Date	Description