

# Homeowner's Onsite System Guide and Record Keeping Folder

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We recommend using this folder to keep all of the information on your septic system including your permit, site drawings, descriptions of maintenance and repairs performed, and other important documents. This folder also provides you with essential information and guidelines for operation and maintenance of your system. By carefully reading and following these guidelines, you will have many years of trouble-free service, while at the same time help protect our environment.

## System Permit:

Issued to: \_\_\_\_\_ Date Issued: \_\_\_\_\_

Address: \_\_\_\_\_

Legal Description: \_\_\_\_\_

## System Description:

Septic Tank Size (gallons): \_\_\_\_\_ Number of Compartments: \_\_\_\_\_

Pump Tank or Compartment Size (gallons): \_\_\_\_\_

Advanced Treatment Device:  Yes  No Brand: \_\_\_\_\_

System Accessories:  Outlet Filter  Pump  Siphon  
 Diversion Valve  Diversion Box  Alarm Panel  
 Other \_\_\_\_\_

Dispersal Method:  Trenches  Chambers  Bed  
 Drip Irrigation  Spray Irrigation  Mound  
 Lagoon  Discharge to lake/river  
 Other \_\_\_\_\_

Dispersal Field Dimensions: \_\_\_\_\_

## Installation Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

## Service Provider: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Service Contract:  Yes  No

## Pumper: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Service Contract:  Yes  No

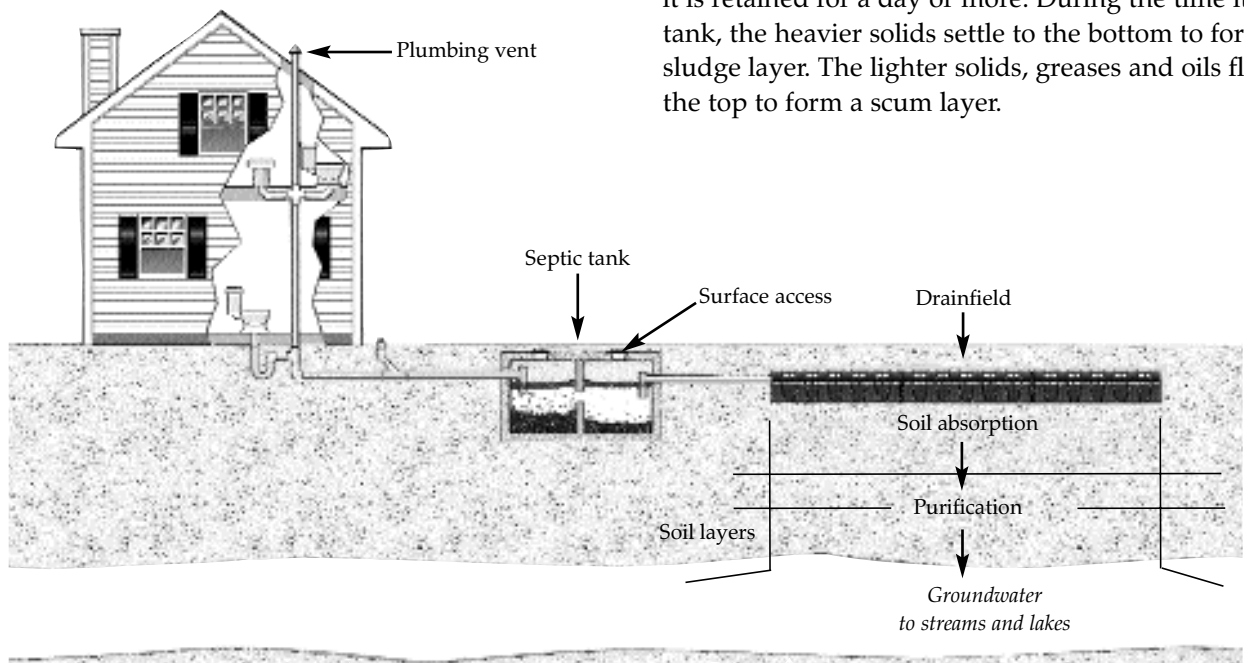
# Your Onsite Wastewater Treatment System

## A Guide to Your Septic System

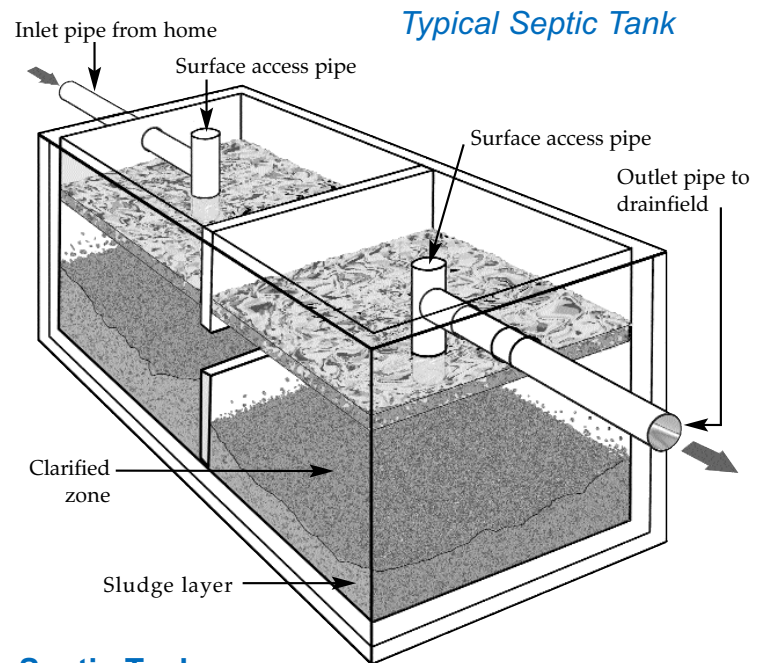
*You are the owner (and operator!) of an onsite wastewater treatment system that is designed to be environmentally safe and to protect public health. A properly installed and operated system treats wastewater from your home and returns it to the groundwater to enhance and protect our groundwater resources. Successfully used for over 100 years, nearly one-third 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 drainfield or leachfield that recycles the treated materials. The system accepts both "blackwater" (toilet wastes) and "greywater" (wastes from the kitchen sink, bath and showers, laundry, etc). Water that should not be discharged to the system includes water from foundation or footing drains, roof gutters and other "clear" water.



*Typical Septic System*

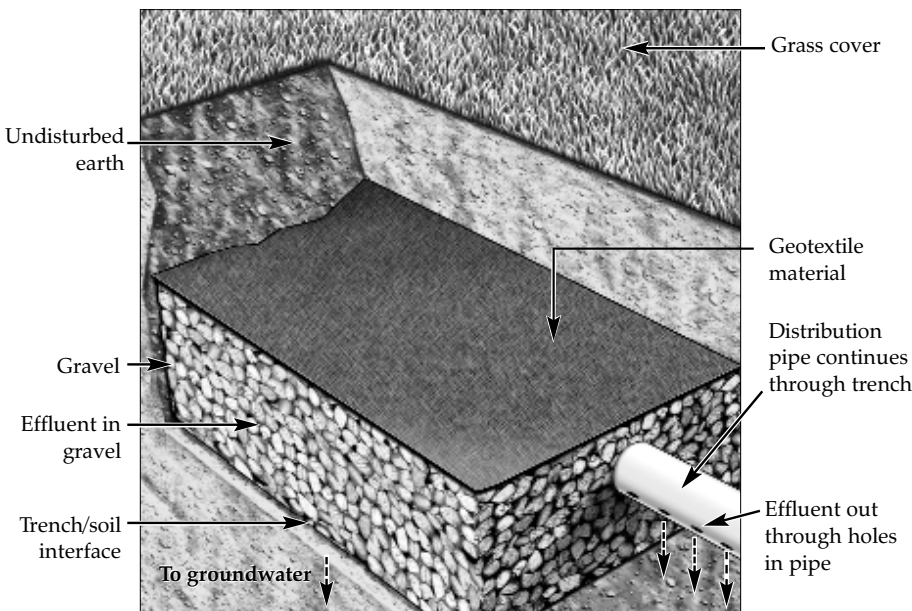


## The Septic Tank

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

### Typical Stone and Pipe Drainfield

### The Drainfield



The drainfield provides final treatment of the wastewater and releases the treated water into the groundwater recharge. The drainfield is typically built as a series of trenches or as one larger bed, and is usually one to three feet below ground level. The drainfield must be constructed in permeable soils, have a level bottom, and be two or more feet above the groundwater table. While there are many types of drainfield systems such as aerobic, lagoon, sand filters or gravelless chamber technology, we will describe here a typical gravel and pipe system.

The excavated trench or bed is filled with six to twelve inches of gravel. The gravel exposes a soil infiltrative surface and provides storage for the wastewater. A perforated pipe is laid over the gravel to distribute the partially treated liquid, called effluent, from the septic tank over the bottom of the drainfield. The gravel and pipe are covered with synthetic fabric to help keep soil particles out of the system and the area is backfilled with soil to cover the system.

The septic tank effluent is allowed to flow to the drainfield 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 nearly all harmful substances including disease-causing bacteria and viruses, toxic organics and other undesirable wastewater constituents remaining in the septic tank effluent.

In addition to acting as a sedimentation chamber and providing storage for the sludge and scum, 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 must be vented from the tank through the plumbing vent on the roof.

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 done, the tank will fill with sludge and the solids will be washed out into the drainfield where they will quickly clog the soil.

***In need of assistance?  
Have a question?  
Go to [www.SepticLocator.com](http://www.SepticLocator.com)!***



*Drainfields other than those described above can be used including at-grades, mounds and drip distribution. There are also substitute medias that can be used in place of the gravel. If you have any of these, check with your local installer or contact NOWRA for more informaion.*

