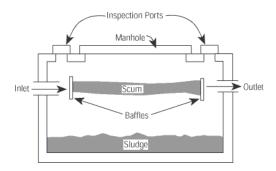


Maintaining Your Septic Tank

The most common wastewater treatment system used in rural areas and residential developments that are not connected to public water in Maryland is the septic tank-soil absorption system, commonly called a septic system. This handout describes how the septic system works, information on when to pump and clean the septic tank, and safety concerns.

How Septic Tanks Work



The Septic Tank separates most of the settleable and floatable solids from household wastewater. A septic tank removes solids by holding wastewater in the tank, allowing solid waste to settle to the bottom, allowing scum (greases, oils and fats) to float to the top, and leaving only the liquid wastewater to exit the tank and continue through the outlet to the drainage field. Baffles and tees prevent water from passing through the system too quickly (less than 24 hours) and prevent scum from exiting the tank. Removing the solids from the wastewater prevents the soil absorption system from clogging and prevents premature failure.

In addition to removing solids, the septic tank permits digestion of up to 50 percent of solid waste retained in the tank by bacterial action and then stores the undigested portion in the bottom of the tank as sludge. Septic tank additives are not necessary for decomposition, and should not be a substitute for tank inspections. After the clarified liquid wastewater leaves

the tank it enters the drainage field where it is then filtered naturally by the soil absorption system.

When to Pump the Tank

As a rule of thumb, septic tanks should be inspected at least once every 3 years and pumped once every 3 to 5 years by licensed pump and haul contractors. It is a good idea to observe the pump out process to be sure that all solid and liquid wastes are removed from the tank. The septic tank should be pumped out through the main manhole, and never the inspection ports near the ends of the tank as improper removal of waste can damage your septic system. It is not necessary to use any type of chemical cleaner as cleaners may harm the bacteria inside the system and also the surrounding environment. Before closing the tank, the pump-out contractor should check the condition of the baffles or tees. If they are missing or deteriorated, they should be replaced as soon as possible. To facilitate future pump outs and inspections, insulated and sealed risers can be installed on the inspection ports and the center manhole.

Septic Tank Safety

It is never necessary for a homeowner to enter a septic tank, as the bacterial processes inside the tank can produce extremely hazardous vapors than can overwhelm and kill a person inside. Any work to repair the tank should be made from a well vented area outside the tank by licensed professionals. Never go into a septic tank to retrieve someone who has fallen in, the best thing to do is immediately call emergency services and place a fan at the top of the tank to blow in and circulate fresh air until emergency services arrive.

A properly designed and normally operating septic system is odor-free and, besides periodic inspection and pumping of the septic tank, should last for decades with minimal maintenance.