



Know Your Septic System



Conventional and Aeration Systems:

How do they work?

How do you maintain them?

How do you prevent your system from failing?



Public Health
Prevent. Promote. Protect.

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IMPORTANT!

PUMP OFTEN:

- Have your regular waste tank pumped and system inspected by a licensed septic contractor every 3 to 5 years depending on use.

THINK BEFORE YOU FLUSH:

- Feminine hygiene products, dental floss, cotton swabs, cigarette filters, paper towels, coffee grounds, condoms, diapers and other items that do not degrade can clog and damage septic system components.
- Chemicals such as liquid fabric softeners, water softeners, Quaternary ammonia compounds (QACs), floor strippers (Zinc), disinfectants, sanitizers, acid/caustic materials, medications/antibiotics, oil, gasoline, pesticides, antifreeze and paint can inhibit the biological treatment and cause the system to fail or even contaminate groundwater.

CONSERVE WATER:

- Repair dripping faucets and leaking toilets.
- Spread out wash loads throughout the week to avoid overloading the system.
- Install aerators on faucets in the kitchen and bathroom.



Does Your Tank Need Pumped?

Measuring the scum layer:

1. Attach a flat board to a long stick.
2. Lower the bottom of the board to the top of the stick and mark the top of the scum layer at ground level as point A.
3. Force the board through the scum layer and gently pull up until you feel the bottom of the scum layer. Mark this point at ground level as B.

Measuring the depth of the liquid and sludge:

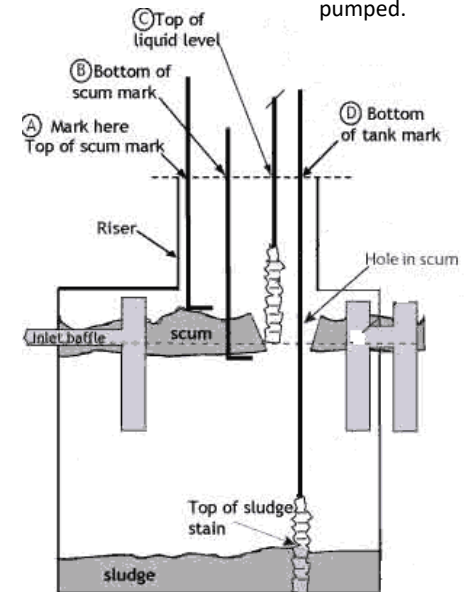
1. Wrap a long stick with a white towel.
2. Push the stick to the bottom of the tank and allow it to stand for 2 or 3 minutes.
3. The particles of the sludge will cling to the towel and the liquid and sludge levels can be measured directly on the stick.

Add the scum and the sludge measurements together. If this figure is more than one-third of the liquid depth, the tank is in need of pumping.

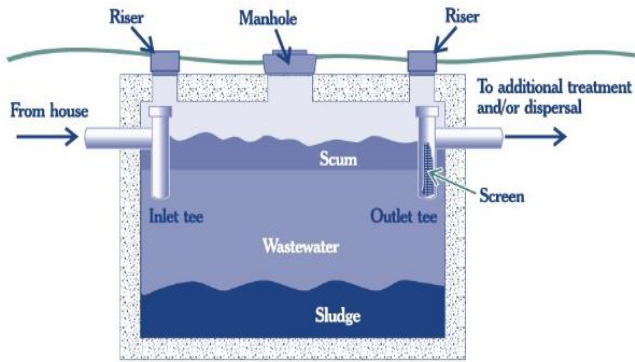
Example with 60 inches of liquid depth:

Scum layer- 12 inches
 Sludge layer- 20 inches
 Total- 32 inches

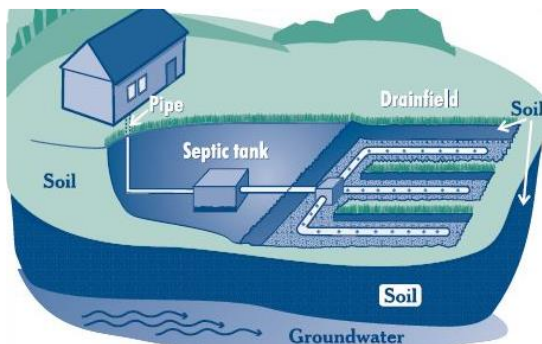
1/3 of 60 inches is 20 inches. Tank needs pumped.



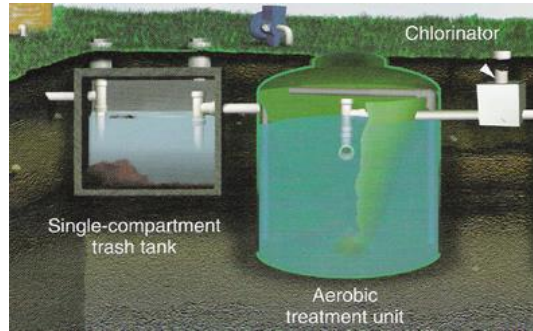
How a Conventional Septic System Functions:



- The pipe from the home carries household wastewater into the septic tank.
- The sealed septic tank, typically concrete or fiberglass, holds the wastewater long enough for solids to settle and oil to separate.
- Natural bacteria allows the solids to partially decompose.
- The tee-shaped outlet prevents the scum and sludge from leaving the tank and allows just the wastewater to flow.
- The wastewater is discharged into the drain field where it is treated by the soil.



How a Typical Aeration System Functions:



- The pipe from the home carries household wastewater into the single-compartment trash tank.
- In this pre-treatment tank, solids will settle and oil will separate in a similar way as with a regular septic tank.
- Air is continually pumped into the aerobic treatment tank. The air stimulates a biological process where microbes from human wastes digest the solids in the water.
- Any undigested solids are reintroduced into the aeration process to aid in continued treatment.
- Treated water flows into the chlorinator where any remaining disease-causing microorganisms are removed. The homeowner will need to monitor the chlorine dosage according to the system maintenance requirement.
- Once treated in the chlorination process, the clean water then flows into the effluent reduction trench.
- An alarm is typically located in the basement to alert the homeowner of a system malfunction.

How to Maintain Your Aeration System:

- Have your system inspected and the trash tank pumped by a licensed septic contractor every 3 to 5 years depending on use.
- Maintain a detailed record of cleanings, repairs, inspections and any other type of maintenance to the system.
- Most aerobic treatment tanks require no maintenance from the homeowner. The units are fully serviced by the licensed installer through a contract spanning over a set timespan.
- Learn the specific requirements of the solution needed and dosing frequency in the chlorinator. The chlorination process is maintained by the homeowner.
- It is very important to know how to maintain the chlorinator in your system to ensure that the water flowing into your drain field is free of harmful viruses and bacteria.