

YOUR SEPTIC SYSTEM

WHAT IS IT WORTH?

IT IS

PRICELESS!



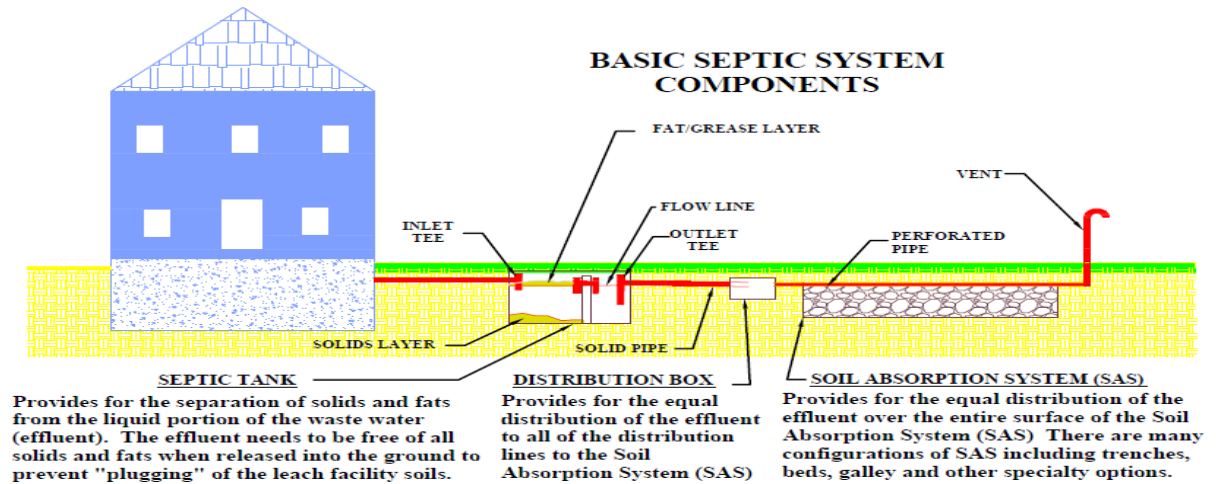
Your septic system is designed to take the waste water from your home and process it so that only clean water ends up going into the water table.

There are three parts to your septic system:

(1) Septic Tank: Waste water from your home is piped to the septic tank. This water stays in the tank for 3-5 days - enough time for fats and solids to separate out. Fats rise to the top, solids sink to the bottom, and clarified water lies between them. Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the Soil Absorption System (SAS) area. Some homes have a [cesspool](#) which is an open jointed structure that receives un-separated waste. This type of system adds more nutrients to the ground water.

(2) Distribution Box: Clarified waste water from the septic tank is piped to a distribution box. This box evenly distributes the flow of water out to the next part of your system which is the SAS.

(3) Soil Absorption System: Waste water from the distribution box is spread across an underground leaching field or trench system. The wastewater



percolates into the soil, naturally removing harmful coliform bacteria, viruses, and nutrients. Some septic systems have pumps or other treatment components.

How do I know it is working?



A foul odor isn't always the first sign of a malfunctioning septic system. Call a septic professional or the Board of Health if you notice any of the following:

- Wastewater backing up into household drains.
- Bright green, spongy grass on the drain field, even during dry weather.
- Pooling water or muddy soil around your septic system or in your basement.
- A strong odor around the septic tank or soil absorption system drain.

Mind the signs of a failing system. Not all problems with a septic system mean the entire system is in failure but a small problem could create an entire system failure so **FIX it FAST!**



How do I take care of my septic system?

Have your septic tank pumped once every 2-3 years. Pump yearly if you have children or a garbage grinder!

Pumping requires that the scum layer on top and solids or sludge at bottom of the tank be removed. You should inspect the septic tank immediately after pumping while your service person is still present to ensure all scum and sludge has been removed.

The Board of Health is available to provide you with information regarding the location of your septic system components and discuss the care and maintenance of your system.

Don't flush fats/oils, kitty litter, paper towels, baby wipes, feminine products, medicines, paints, latex products or other chemicals down your toilet. Fix leaking toilets and faucets quickly because the excess water will inundate your SAS with more than 5x's the design criteria, causing premature failure.

Know where all of your septic components are located and avoid locating structures like play sets or sheds over any of the systems structures.



What do I do if it breaks?

If you have noticed something that indicates there may be a problem with your system you will need to determine which professional service can help you.

Call the Board of Health to obtain a current list of licensed pumping companies and septic installers.

(1) Septic Pumping Company

Typically a pumping company is your first call if you notice a backup of water in a sink or tub on the lowest level of your home or water is collecting over one of the septic system components. There are many reasons this might be happening including a clogged line, a broken pipe or a clogged drain field.

A septic pumping company will locate your septic tank, pump it to clean out the solids and scum layer and determine if a clogged line or broken pipe is present.

Most pumping companies can do small repairs such as replace a broken pipe or distribution box but they must be licensed by the Board of Health and obtain a permit to do the work. At the completion of the repair the Board of Health will perform an inspection to ensure compliance with Title 5 Regulations then issue a Certificate of Compliance.

(2) Sanitarian/Engineer/ Soil Evaluator

If it is determined that the soil absorption system is clogged then you will need to engage a Professional Engineer or Registered Sanitarian to perform the necessary work. There are several steps involved in this process which will be described here. Your project may include some or all of these steps.

A. Soil Testing Your Engineer or Sanitarian will determine the possible locations for siting a septic system on your property, apply for a soil test date with the Board of Health and schedule an excavator to be on site for the soil tests. On the day of testing the Engineer or Sanitarian will prepare at least two deep test holes and two percolation test holes. These soil tests are done to determine if ledge is present, the depth to ground water and the porosity of the soil which determines how many square feet of leaching area must be provided.

- **Deep Test Holes** are dug more like a large long trench about two feet wide and to a minimum depth of 10 feet (unless

ledge is present). Two vital pieces of information are obtained during this test.

- The first is to establish the depth from the surface of the ground down to the highest point ground water can reach.
- The second is to make sure there is at least 4 feet of existing pervious soil to properly treat the effluent.
- **Percolation Test Holes** are holes that are 1 foot in diameter and 1.5 feet in depth. These test holes must be dug in the "parent soil" layer which typically starts at a depth of 2 to 3 feet. Water is poured into this hole and timed to determine the percolation rate of the soil.
- **Title 5 310 CMR 15.000** the State Regulations for Onsite Waste Management assigns an application coefficient for the percolation rate. The highest is for percolation rates up to 5 min./in. which is 0.74 gallons /sf of leach area, the lowest is 60 min./in which has a coefficient of 0.2gal./sf of leach area.

B. Septic System Design - Your Engineer or Sanitarian will design a plan that meets the requirements of Title 5 and submit this design to the Board of Health for review and approval.

C. Approval Letter - The Board of Health will review the plan for compliance with Title 5 and issue an approval letter to the owner.

D. Permit to Construct the Septic System - Once the plan has received Board of Health approval you may choose a licensed septic installer. Permits to construct a septic system are only issued to Licensed Septic Installers.

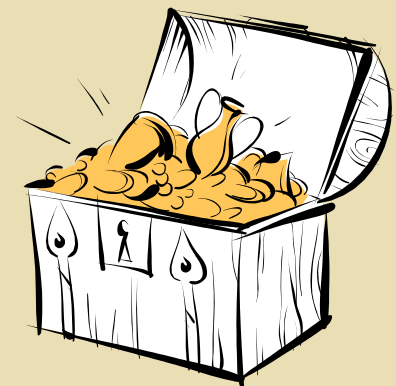
E. Construction of the Septic System - Typically the septic system is installed over a one to two week period. The Board of Health and Design Engineer/Sanitarian will conduct installation inspections during this time to ensure compliance with Title 5. The Design person will also locate all the components of the septic system to prepare an "As Built" plan.

F. Certificate of Compliance - When the installation of the system is complete the Installer must submit a certification statement and materials documentation and the Designer must submit an "As Built" to the Board of Health. When all meet Title 5 requirements the Board of Health will issue a Certificate of Compliance.

The Board of Health recommends that home owners get two or three bids on any repair work that may be necessary

YOU MAY HAVE \$50,000 BURIED IN YOUR BACK YARD!

TO FIND OUT WHERE IT IS,
CONTACT THE
WESTON BOARD OF HEALTH!



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