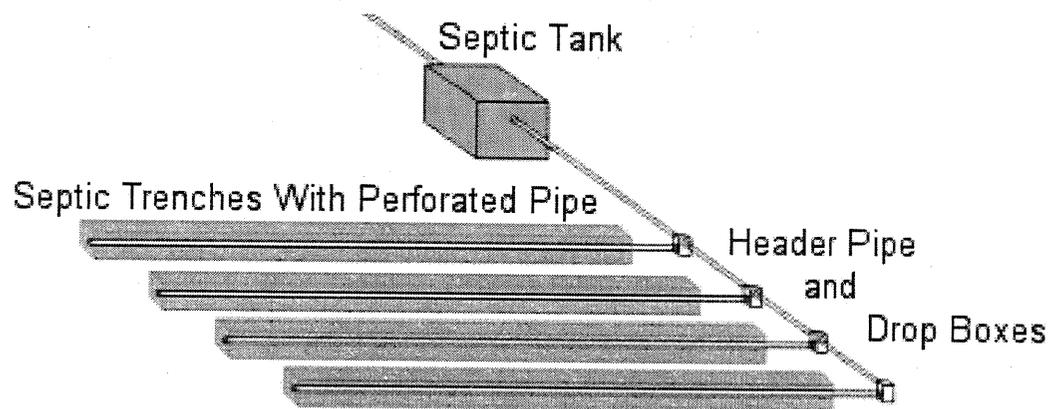


Caring for Your Septic System

Those of us living in rural communities such as Boxborough rely on septic systems to dispose of human waste and household wastewater instead of sewer connections going to a central treatment facility. Protecting the watershed resources of our town from pollution is one of the main responsibilities of the Conservation Commission. One of the sources of pollution to our water is an improperly maintained septic system. By taking proper care of your septic system, you will help protect the town's water resources as well as your own well. Caring for a septic system does not have to be difficult as long as a few common sense do's and don'ts are respected. Modern-day septic systems are designed to give many years of trouble free service when planned correctly and maintained.

The Septic System

A typical septic system consists of a large concrete tank followed by a series of gravel trenches. Inside these trenches perforated pipe is used to distribute household wastewater into the ground. There are a number of variations of the septic system design, but all work basically the same way. The figure below illustrates these basic components and configuration of a septic system.



Septic Tanks

The septic tank is typically a large (500 - 1500 gallon) concrete underground tank located between the house and the drain field. The purpose of the tank is to separate the waste into its solid and liquid components. The bacteria living inside the tank eat the solids and reduce their volumes. Solids are prevented from exiting the tank by devices called baffles, which are located near both the inlet and outlet of the septic tank.

Drain Fields

Wastewater from the septic tank flows into a buried system of trenches called the drain field or leach field. Septic trenches are typically two to three feet deep and contain a foot of gravel with a perforated pipe running through the middle. Wastewater from the septic tank is distributed to the septic trench through these pipes. Once in the septic trenches, the wastewater is absorbed by the surrounding soil.

Site Planning

Do Not put additional soil on top of your drain field.

Do Not construct driveways or walkways on top of your drain field, nor for that matter, any structures such as decks, storage buildings, or above ground swimming pools.

Do Not drive over your drain field or allow construction equipment to drive over your drain field.

Do plant grass on top of your septic system drain field.

Do divert all rain gutters and downspouts away from your drain field. A soggy drain field will not absorb liquid waste.

Do keep trees with aggressive roots, especially willows, far from your drain field. Plant nothing but grass over the drain field.

Daily Use and Maintenance

Do Not use the toilet for disposal of cigarette butts, facial tissues, sanitary napkins and tampons, paper towels, disposable diapers, or cat litter. These items can clog your septic system in a very short time.

Do Not pour grease down the drain. Grease can clog the drain field, making it impossible for the soil to absorb liquids.

Do Not pour hazardous chemicals such as varnish, paint thinners, motor oils, gasoline, or any other solvents down the drain. If you have a clogged drain, the use of commercial drain cleaners is all right so long as they are not used excessively.

Do use the toilet for human waste only and **do** use plain white toilet tissue without ink-based design schemes.

Do check your faucets and toilets for leaks.

Do use aerators on faucets and showers to reduce water consumption and to limit the amount of water your drain field has to absorb.

Do use environment-friendly laundry and dish detergents and reduce water levels for small loads of laundry. Do wait until the dishwasher is full to use it.

If you have a garbage disposal unit, **Do** use it wisely. Heavy use of garbage disposers can quickly fill your septic tank with solids. In fact, Title 5 compliance may prohibit the use of garbage disposers with your septic system. The Nashoba Board of Health can give you further clarification on this issue.

Do be wary of commercial septic system additives. Some yeast-based additives can cause the production of methane gas in your septic tank, causing sludge particles to rise and flow into the drain field, clogging the soil.

Routine Maintenance

Do have your Septic Tank pumped every 2 to 3 years. If you have a household of more than four people, have it pumped every two years. Biomat forms where the septic trench gravel and soil contact each other. A small amount of biomat is normal; however, if the wastewater contains solids, then the organisms in the biomat will feed on the increased amount of nutrients and the layer will thicken. As the biomat thickens, the flow of water out of the trench is slowed. The trench will fill and eventually the wastewater will surface to the ground. When that happens you will likely have to relocate your drain field and replace all the hardware, a very costly repair.

Reputable septic service providers will make a visual inspection of your tank at the time of pumping to alert you to any potential problems.

Where to Get Help

Yellow Pages under Septic Tanks and Systems
Nashoba Board of Health (978) 772-3335