

Septic System Maintenance

The majority of properties in Birmingham Township are serviced by “on-lot” septic systems which treat and dispose of household sewage through natural biological processes. This sewage is a combination of human waste from toilets and “grey-water” from showers, tubs, sinks, washing machines, dishwashers, water softeners and, finally, discharge from garbage disposals.

Septic system operation and maintenance is the responsibility of the homeowner. Understanding the basic processes and the “dos & don’ts” for your system can help you avoid costly system repairs, replacement or the installation of alternative disposal systems.

The septic tank is designed to remove solids from the wastewater by retaining materials in the tank for at least 24 hours. This retention allows solids to settle while scum and grease rise to the top. Up to 50% of the solids retained in the tank will decompose, with the remainder accumulating in the bottom of the tank.

Biological or chemical additives are not needed to aid or accelerate the decomposition of this material.

As the septic system is used, the solids (sludge) will accumulate on the bottom of the septic tank. Properly designed tanks have enough space for up to three years accumulation of sludge. Heavy sludge accumulation beyond design, however, results in less settling time before liquids leave the tank and solids will begin to escape through the outlet pipe into the absorption area. Eventually no settling occurs, and solids will be able to directly enter the absorption field. These solids will clog the distribution lines and cause serious and expensive repair problems for the homeowner. To prevent this, the tank must be pumped out every two to three years. The frequency of pumping depends on several factors:

- 1) capacity of the septic tank;
- 2) amount of wastewater generated; and
- 3) volume of solids in the wastewater (more solids are generated if a garbage disposal is used). The more people in the household, the more frequently the tank will have to be pumped. Pumping your tank at least every two (2) years is the best way to extend the life of your soil absorption field.

NOTE: Your septic tank does not have the ability to treat raw food solids from a garbage disposal. Septic tanks only remove about 50% of the organics from the fecal solids which have already been through the human digestive system. The removal of raw food solids is even worse. At ground temperature - 55°F - in an anaerobic tank (no oxygen) there is not enough biological energy available to adequately break down raw fibrous vegetable and fruit materials. This food will fill the septic tank with solids reducing the available volume of the tank for treatment. Also, ground food from a disposal is generally not soft material

that breaks apart easily and it may clog systems when it doesn't settle quickly. Additionally, some food solids are lighter and may float possibly carrying over in the effluent.