SEPTIC TANK AND LEACH FIELD

This type of system consists of two basic parts, a septic tank and an absorption field. The septic tank is the first level of treatment. The tank provides the needed time for solids to settle to the bottom, and fats, oils and greases to float to the top. This settling time allows partially treated waste water to then be discharged into the leach field.

Tanks that have been installed in the last twenty years or so will most likely have an effluent filter on the outlet of the tank. This filter will catch any solids bigger than 1/16 inch from exiting the tank and getting into your leach field. The filter should be removed once a year (or more often if needed) and sprayed off with a garden hose over the outlet opening of the tank.

Before the liquid waste discharges to the soil, it may first enter a distribution box or a series of drop boxes. These items are used to distribute the waste water to the leach field. A distribution box allows for half of the leach field to be shut off at one time, always allowing half of the system to be at rest. The diversion device in a distribution box should be switched about every six months. Drop boxes provide access to each individual leach line, allowing for one line at a time to be at rest. These shut off devices (which are as simple as a cap that slides over the 4" pipe carrying the fluid to the leach trench) should also be switched from line to line about every six months. Depending on the age of your system you may have one of these devices.

The absorption field is a system of trenches and distribution pipe where the wastewater is biologically treated by the soil. The leach field may consist of a 4" pipe surrounded by washed stone, or a gravelless product approved for use in Ohio.

AERATOR (PRETREATMENT) SYSTEMS

This type of system may have been required to be installed on your property due to wet soil conditions or lack of space available on your property. An aerator tank also allows for settling like a septic tank, but it also requires a mechanical motor that further treats the waste water. The motor pulls air into the tank that is utilized by aerobic bacteria. This aerobic bacteria is what works to break down the wastewater into odorless liquid and gases. It is very important to remember that the motor in the aerator MUST be functioning at all times for your system to work properly. Some aeration motors are required to run continuously, and some are on a timer. All systems should run at least 30 minutes every hour.

After the treatment has taken place, the liquid may discharge into an absorption field just like it does after a septic tank. Some aerators, however, have been approved to discharge into a stream, ditch or tile located on the homeowner's property. Currently, there are more than 400 aerators in Violet Township that are discharging systems. These systems are being monitored under the MS4 (Municipal Separate Storm Sewer System) program.

Any aerator installed after January 1, 2007, is required to have a service contract with a registered service provider for the life of the system. If your aerator was installed after this date and it was approved for discharge, you have a NPDES permit from Ohio EPA. These aerators are not only required to have a service contract, but are also required to have yearly testing of the effluent as part of the NPDES permit.