Septic System Explained

Septic systems are individual waste treatment systems that use the soil to treat small wastewater flows, usually from individual homes. They are typically used in rural or large lot settings where centralized wastewater treatment is impractical. There are many types of septic systems that are in use today. While most are individually designed, most are based on the same principles.

A septic system consists of a septic tank, distribution boxes and a drain field, all connected by pipes called conveyance lines.

Your septic system treats your household waste by temporarily holding it in the septic tank. Heavy solids and lighter scum will separate from the wastewater. This separation process is referred to as primary treatment.

The solids will later be decomposed by bacteria and later removed, along with the lighter scum, by a septic tank pumper.

After the partially treated water leaves the tank, it enters the distribution boxes. The distribution boxes separate the flow evenly into a network of drain field trenches. Most consist of plastic chambers that the effluent to seep into the soil where it is further treated and purified. This is referred to as secondary treatment.

A properly functioning septic system does not the pollute the groundwater.
Caring for your Septic System

The accumulated solids in the bottom of the septic tank should be pumped out every 3 to 5 years. This prolongs the life of your system. Septic systems must be maintained in order to work properly and to keep them from failing. Septic tanks equipped with effluent filters should be cleaned once a year. Resting lines or bull run valves should also be charged at this time.

Tips to Avoid Trouble

Have your tank pumped out and system inspected every 3 to 5 years by a licensed septic contractor.

Keep record of all services and inspections.

Practice water conservation.

Keep a sketch of the location of your septic system and drain field.

Divert roof drains and surface water away from the septic system.

Take leftover hazardous household chemicals to your approved hazardous waste collection center for disposal.

Risks of a Failing System

- May cause a serious health threat to your family & neighbors.
- Can degrade the environment, especially lakes, streams, and ground water.
- Reduces the property value.
- Very expensive to repair.
- Put users at risk if you live in a public watershed and fail to maintain your system.

Warning signs of a failing system:

- Sewage surfacing over the drain field.
- Sewage backups in the house.
- Lush green growth over the drain field.
- Slow draining toilets or drains.
- Sewage odors.

Examples include:
- Baby/Flushable wipes, feminine hygiene products, diapers, etc.
- Household hazardous waste, grease, gasoline, oil, paint, paint thinner, pesticides, antifreeze, etc.