

## How Do Septic Tanks Work?

Ever wonder just what happens to the water in your sink, shower, or dishwasher after it disappears down the drain? If you're a homeowner, you're probably aware that you have something called a septic tank that takes care of this, but many people never stop to consider how the process works.

### The parts of a septic system

You can think of a standard septic system as having three basic components:

- A sewer line, bringing wastewater from the home into the septic tank
- A septic tank, storing wastewater underground and treating it
- A leaching, or draining, system, filtering treated wastewater into the soil

The purpose of this setup is to collect solid waste in a single location, out of sight and mind, while safely redistributing water back into the ecosystem.

### What goes on inside the tank?

As wastewater enters the tank, the separation of material begins immediately. Solids will settle to the bottom, while a layer of grease and particles known as "scum" floats along the top. As some solids decompose, they'll begin to float and add to the scum. Water, now mostly clear, is drained into a secondary chamber through holes in the dividing wall, and is ready to enter the leaching field. The solids and scum remain in the first chamber, where they will sit until pumped out by a maintenance technician.

### The septic leach field

The leach, or drainage, fields generally consist of a series of trenches through which the separated water flows, and a porous material – often gravel. These are under a layer of soil, to keep odors at bay and animals out of the system. Filtering through the gravel removes additional impurities from the water, which is now clean enough to be reintroduced into the water table.

Occasionally, large and/or inorganic materials can make their way into the leach field, which can cause blockage issues and prevent water from draining easily. Be attentive to what makes its way into your sewage system, and try to keep from overloading your tank with excessive amounts of water in short periods of time.

In a nutshell, septic systems treat home waste and return the water back into the environment. Smaller particles usually end up flushing into the soil along with the treated water. Large waste items settle into the septic tank, which will eventually

need to be pumped clear by a septic technician. Most homeowners should plan to have their tank pumped around once every year or two.