



**A typical system consists of three main components.**

- Waste exits the house and enters the septic tank where solids settle out and grease and scum floats to the top. This is the first stage of treatment.
- The solids that settle to the bottom of the tank slowly partially decompose. Gas bubbles given off during this process rise to the top of the tank, carrying with them fats, oils, and greases. The tank outlet is located between these two layers, where the clearest liquid is found. *(NOTE: Some septic tanks have a second compartment for additional effluent clarification.)*
- Next, liquid effluent flows through the distribution box. A hydraulic pump is sometimes needed if the absorption site is higher than the septic tank, or if an elevated mound is used.
- Finally, the effluent arrives at the absorption field where it is evenly distributed to the soil for treatment. Under ideal conditions microorganisms on the surface of the soil particles consume the organic pollutants in the effluent.

The absorption field (sometimes called a leach or drainage field) consists of several lateral pipes that allow the effluent to slowly flow out through holes positioned along the length of the pipe.

The distribution of pipe laterals are located inside soil absorption trenches. The trenches provide the surface area needed for the effluent to be in maximum contact with the soil. Gravel normally supports the pipe and forms an envelope around the pipe, to protect it from roots and varmints.

The effluent flows through the gravel and enters the soil both below and to the side of the trench.

Effluent moves downward with the force of gravity in a process called percolation. As it percolates through the soil, minute solids, bacteria, and nutrients are removed from the effluent.