



Calaveras County Environmental Management Agency Onsite Wastewater Department

Onsite Wastewater Treatment Systems for Homeowners

What is a Onsite Wastewater Treatment System?

A wastewater treatment system is an underground system, composed of a septic tank and a leaching field that is used for the disposal of wastewater from structures that do not have access to a public sewer. The septic tank is a watertight two compartment container that is typically constructed of concrete or polyethylene. The leaching bed is comprised of a network of rows of perforated pipe, set on a rock layer or leaching chambers.



How do Onsite Wastewater Treatment Systems Work?

The septic tank and leach field work together to dispose of household wastewater. Household wastewater includes: human body waste; toilet or other bathroom waste, waste from showers and baths, kitchen waste, or laundry waste. Household wastewater exits the home through a pipe and enters the larger, first chamber of the septic tank where the solid portion of the waste settles to the bottom, forming a sludge layer, while fats and grease rise to the top forming a scum layer. Bacteria and other micro-organisms begin the purification process by breaking down the solids and turning them into liquid. Increasing liquid levels flow into the second compartment where more separation and decomposition occurs. As the liquid continues to separate, the wastewater exits the tank to enter the perforated pipes of the leach field where the treated wastewater is pushed along the drain field every time new wastewater enters the tank. Lastly, the wastewater percolates into the soil which provides the final treatment of removing harmful bacteria, viruses, and nutrients.

Why Should I Maintain my Wastewater System?

Protect the investment of your home

An unusable wastewater system or one in disrepair will lower your property value

Replacing wastewater system components damages lawns and landscaping

Failing wastewater systems are expensive to repair or replace

Prevent spread of infection and disease

Protect your environment

How Do I Maintain My Wastewater System?

Pump your tank at least every 3 – 5 years

Use water efficiently: Choose low flow toilets and showerheads

Repair leaky plumbing fixtures: water conservation ensures that your system will not get overloaded and reduces the risk of failure.

Do not introduce chemicals, such as gasoline, pesticides, antifreeze, solvents, paint, or wood stains into the septic system. These products should be taken to a local hazardous waste collection center for proper disposal.

Never flush cotton swabs, dental floss, feminine hygiene products, condoms, baby wipes or diapers. These products may clog and damage the system components if they get trapped.

Do not confine hooved animals (livestock) in the leach field area. Do not park or drive vehicles on any part of the septic system. Doing so causes compaction of the soils and may damage the system and components.

Plant only grass and shallow rooting plants over and near your septic system. Roots from trees or shrubs may clog and damage the system.