

Septic Tank Maintenance

A septic tank is an underground sewage-collection system. The tank itself is a watertight container constructed of a sound, durable material resistant to corrosion or decay. With proper care and maintenance, a septic system will provide many years of trouble free service.

As the septic system is used, there is an accumulation of solids in the tank, which is sometimes referred to as sludge. The septic tank removes solids by holding wastewater in the tank for at least 24 hours, allowing the solids to settle and scum to rise to the top. This is accomplished by a series of baffles inside the tank. Up to 50 percent of the solids retained in the tank will decompose over time. Treated effluent water discharges from the tank to perforated drain pipes. From there, it drains to a constructed absorption or leach field. The effluent eventually percolates through the subsoil to groundwater.



As you use your septic system, sludge will accumulate in the tank. Properly designed tanks have enough space for up to three years of safe accumulation. Once the sludge has reached this level, the separation of solids and scum no longer takes place, and sewage may overflow into the absorption area. This can be prevented by periodically pumping the accumulated sludge.

Volume of wastewater flow is determined by the type and frequency of common household activities. Water conservation practices in the home will help to limit the flow into the system. Use of an in-sink garbage disposal will increase the volume of solids. Care should be given to the type and amount of solids disposed of through a garbage disposal. Please note that biological and chemical septic tank additives are not necessary and do not eliminate the need for pumping.

Do not put substances such as motor oil, gasoline, paints, thinners, and pesticides in drains. These materials may pollute the groundwater and are toxic to the microorganisms that maintain an active septic system. Moderate use of household cleaners, disinfectants, detergents, or bleaches will do little harm to the system, but remember that where there is a high density of septic systems there may be a cumulative impact on groundwater from household cleaners. Fats, grease, coffee grounds, paper towels, sanitary napkins, disposable diapers, and other such items will clog your septic system.

Learn how to recognize problems with septic systems. For example, unusually lush and green grass over your drain field may indicate trouble. Also, pay attention to slow-draining toilets or drains, sewage odors, or sewage backing up into the house or over the drain field.

Checklist for Good Septic Tank Maintenance

- Check your system annually for leaks and sludge.
- Have your septic tank pumped by a licensed pumping contractor.
- Practice water conservation. Repair leaky faucets and toilets. Spread clothes washing over the entire week, and operate only with a full load of laundry.
- Learn the location of your septic systems. Make a map and keep it handy.
- Keep a maintenance record.

This article adapted from Cooperative State Research, Education and Extension Service, USDA. Please contact the Farm Advisor's office at cdcalaveras@ucdavis.edu or 754-6477 with your agricultural questions. Talk to a certified Master Gardener every Wednesday, 10:00-12:00, 754-2880. To speak with a Master Gardener in Tuolumne County, please call 209 533-5696.