

Don't forget about septic tank maintenance



Tom Higginbotham
Environmental Health Manager
Highlands County Health Department



Tampa Tribune file photo

The Florida Legislature passed a law this year that will require an inspection and septic tank pump-out every five years, which goes into effect 2011.

tank will clog the drain field and result in a sewage back up or sewage emerging to the top of the ground. Drain field repairs cost thousands of dollars.

Leaky, old or damaged septic tanks short-circuit the drain field and allow untreated sewage to drain straight into the soil.

Untreated sewage introduces large amounts of harmful viral and bacterial pathogens and nutrients (such as nitrogen and phosphorus) into shallow groundwater that eventually contaminate creeks, rivers, lakes, and aquifers.

To protect Florida's fragile environment and the health of citizens, the Florida Legislature passed a law this year that will require an inspection and septic tank pump-out every five years.

This requirement will extend the life of your septic system, promote good public health, and protect Florida's fragile and vulnerable ground and surface waters.

The new septic tank law does not go into effect until 2011. For more information, visit <http://www.doh.state.fl.us/environment/ostds/New.htm>.

Tom Higginbotham is the environmental health manager at the Highlands County Health Department.

According to the U.S. Environmental Protection Agency, a properly designed septic system can operate indefinitely without repair if properly maintained.

However, because most systems are not well maintained, the life of a standard septic system is typically 20 years or less.

With proper maintenance, septic systems provide a considerably inexpensive and efficient treatment of sewage.

However, since they are underground and out of sight, septic systems are easily forgotten and proper maintenance is not performed. Another assumption is septic systems don't need attention until sewage is standing in the yard or the toilets are backing up.

To understand the importance of maintaining a septic system, it is necessary to understand how they work.

The primary treatment device of a septic system is the tank. The tank must be a large watertight container (at

least 900 gallons) that collects raw sewage from the home or business it serves.

Water moves slowly through the tank allowing solids to sink to the bottom and floatable solids such as grease and oil to float to the top. Baffles and deflector devices inside the tank also help keep solids inside the tank.

Anaerobic bacteria, which are bacteria that can live without oxygen, live in the septic tank and break down up to 50 percent of the solids in the tank.

Solids that cannot be broken down accumulate as sludge inside the tank, allowing only clarified water to flow out of the tank and into the second most important component of the system, the underground septic drain field.

As the water flows into the drain field, a bacteria film

develops on the infiltration surface between the drain field material and the soil that covers it.

This further treats the water as it percolates into the soil.

The soil must be unsaturated or above the seasonal high water table for adequate treatment of the sewage water. With enough unsaturated soil in place, up to 99 percent of viral and bacterial pathogens are filtered from the wastewater, helping to keep our vulnerable lakes and groundwater free of potentially harmful pathogens.

Excess sludge and solids reduces the treatment ability of the septic tank and must be removed every few years.

If not removed, the solid material will eventually flow out of the tank into drain field. This begins the slow failure of the septic system because solids leaving the