

## Septic Tank Maintenance

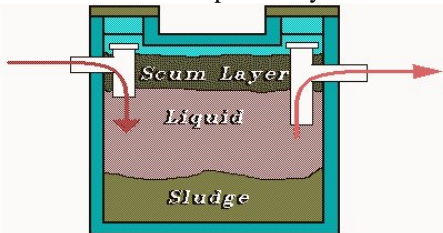
### Background

For homes and businesses outside areas served by area-wide sewer systems, sewage is treated and dispersed into the soil by onsite or septic systems. The primary components are a septic tank and a soil absorption area (often a drainfield).

### How does a septic tank work?

Sewage contains materials that can shorten the life of a drainfield and cause sewage to back up into a structure or discharge to the ground surface or surface water. Greases & oils, found in kitchen wastewater and household products like fabric softeners, float in the tank. Solids, laundry lint, garbage disposal waste, and other items sent down the drain, make up the sludge layer at the bottom of the tank.

The septic tank accumulates solids from sewage passing through the tank, which allows the solids to settle and scum (grease & oil) to rise to the top above where the baffles in the tank draw the sewage. These solids accumulate and to some extent break down in the septic tank. Detergents cause oils to stay in suspension and time in the septic tank can break them down and allow the oils to float to the top and stay in the tank.



From Brown Township, OH

Allowing too much to accumulate in the tank will shorten the time that incoming sewage is in the septic tank where solids would settle that clog the drainfield.

The drainfield may not fail immediately when a tank full of solids is not pumped. Continued neglect will result in failure of the drainfield, and will need to be replaced. Sewage surfacing exposes humans and animals to disease-causing organisms.

### Cleaning the tank

Pumping frequency depends on factors like tank volume, number of people using the system, and nature of sewage (using a garbage disposal, for example) going down the drain. Properly sized septic tanks typically have enough capacity for

three to eight years use before pumping is needed. DEQ recommends pumping a septic tank when sludge and scum take up more than 35 percent of the tank volume. Consult your septic tanks manual for how to check sludge volume.

In Oregon, a 1,000 gallon septic tank is required for homes with up to four bedrooms. If four people live in a 4-bedroom house with a 1,000 gallon septic tank, the pumping frequency is on the order of every three years. If the same system serves two people, the frequency would be on the order of every six years. Septic tanks installed before 1979 could be smaller and require a higher pumping frequency. The pumping frequency suggested here is based on Oregon State University Extension Service Circular # 1343, April 2000.

Septic tank pumpers must have a DEQ sewage disposal service license. It is advisable to verify that license and bond are current and check references with prior clients prior to hiring a pumper.

To get all of the solids from the tank the scum layer must be broken up and the sludge layers stirred up into the liquid portion of the tank. The sludge is stirred up by pumping liquid back and forth between the pumper truck and the tank. Once the sludge is stirred, the tank is emptied.

A quality professional will inspect the condition of the tank and the tees or baffles. If repairs to the tank or pipes are needed, the pumper will inform the owner. Repairs may require a permit through the local DEQ office or county.

Many counties administer the septic system program for DEQ. For further information on who to contact in a specific county or on DEQ's program, visit our website at [www.oregon.gov/DEQ](http://www.oregon.gov/DEQ). Click on "Projects and Programs" then select "Onsite Sewage Disposal." You may also contact the nearest DEQ office or call toll free in Oregon 1-800-452-4011.

### Alternative Formats

*Alternative formats of this document can be made available. Contact DEQ's Office of Communications & Outreach for more information at (503) 229-5696.*



State of Oregon  
Department of  
Environmental  
Quality

**Water Quality  
Onsite Program**  
165 East 7<sup>th</sup> Avenue  
Eugene, OR 97401  
Phone: (541) 687-7338  
(800) 844-8467  
Fax: (541) 686-7551  
Contact: Randy Trox  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)