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Septic System Maintenance

fact sheet

Overview

Proper maintenance is perhaps the most important aspect of septic system ownership. Proper maintenance will ensure your septic system is adequately treating wastewater and protecting your family’s health. Maintenance is also a money saver – the old adage “an ounce of prevention is worth a pound of cure” applies in this case. The cost of regular inspection and pumping is far less than that of system repair or even replacement.

Septic tanks must be periodically pumped to remove excess scum and sludge that has accumulated through use. How often your system needs to be pumped depends on the size of the tank, the number of people in the household, the amount of wastewater generated, and the volume of solids in the wastewater. The U.S.

Environmental Protection Agency recommends having your system inspected at least every three years, and pumped as recommended by the inspector, or every three to five years. The chart to the right from the Pennsylvania State University Cooperative Extension Service gives some general guidelines.

The drainfield itself also needs maintenance and protection. It can easily become clogged by overloading it with water and solids. It is also susceptible to compaction, caused by too much weight placed on the drainfield, which depends on uncompacted and unsaturated soil to treat waste.

The ideal situation for a system to operate in is to have wastewater enter the system as evenly as possible throughout the day and week. For example, try to spread your laundry out over the week and do just one to two loads each day. Putting large amounts of water into the system at one time, such as doing several loads of laundry in one day, can flush solids out of the septic tank before they have had the chance to separate out, which can clog the drainfield and impair its ability to treat sewage.

Septic Tank Pumping Frequency Based on Tank and Household Size

		Household Size (number of people)						
		1	2	3	4	5	6	
Tank Size (gallons)	500	5.8	2.6	1.5	1.0	.7	.4	Number of Years
	750	9.1	4.2	2.6	1.8	1.3	1.0	
	900	11.0	5.2	3.3	2.3	1.7	1.3	
	1000	12.4	5.9	3.7	2.6	2.0	1.5	
	1250	15.6	7.5	4.8	3.4	2.6	2.0	
	1500	18.9	9.1	5.9	4.2	3.3	2.6	
	1750	22.1	10.7	6.9	5.0	3.9	3.1	
	2000	25.4	12.4	8.1	5.9	4.5	3.7	
	2250	28.6	14.0	9.1	6.7	5.2	4.2	
2500	31.9	15.6	10.2	7.5	5.9	4.8		

**Pumping frequencies are estimated in years. The figures assume there is no garbage disposal in use – if one is in use, it may increase pumping frequency up to 50 percent.*

Did You Know?

- The drainfield is very delicate in the winter. Weight from just one vehicle can push the frost layer deep into the soil and prevent effective wastewater treatment.
- Good vegetative cover, such as grass, is important for drainfield maintenance. This cover helps the system remove nutrients like phosphorus and nitrogen by using them for plant growth. Grass should be mowed regularly to encourage growth without using fertilizers.
- There is no substitute for regular maintenance. The U.S. Environmental Protection Agency recommends not using septic system additives, as there is no scientific evidence that additives aid or accelerate decomposition in septic tanks.

GET PUMPED!

A SEPTIC SYSTEM EDUCATION KIT FOR LAKE HOMEOWNERS

- Commercial starters, feeders, cleaners, and other additives are not necessary and can interrupt the natural processes that make the system effective, potentially causing groundwater contamination. The University of Minnesota Extension Service gives the following cautions about additives:
 - *Starters:* These are not necessary to start bacterial action in the septic tank – there are millions of naturally-occurring bacteria in wastewater.
 - *Feeders:* No additional bacteria is needed to “feed” the system. Additional bacteria, yeast reparations, or other home remedies are not recommended.
 - *Cleaners:* These additives may be effective in removing solids from the tank, but may cause damage to the drainfield. They work to suspend the solids that normally float to the top or settle to the bottom of the tank, allowing them to be flushed into the soil treatment system where they can clog pipes and soil pores.
 - *Other additives:* Other additives, such as degreasers, may contain chemicals that kill the organisms present in the tank and soil that treat the wastewater. In addition, some can contain carcinogens that may flow directly into the groundwater, along with the treated wastewater.
- The National Small Flows Clearinghouse recommends homeowners avoid putting the following items into the septic system: hair, coffee grounds, dental floss, disposable diapers, kitty litter, feminine hygiene products, cigarette butts, condoms, bandages, fat, grease, oil, or paper towels. They recommend that these items NEVER be put in the system: paints, varnishes, paint thinners, waste oils, pesticides, and other chemicals.

DO have your tank inspected and pumped regularly by a certified professional.

DO control water use to avoid overloading the system.

DO divert surface water runoff from roofs, driveways, downspouts, etc. away from the drainfield.

DON'T use harsh cleaners, bleach, soaps, or detergents which may interfere with the bacterial processes.

DON'T dispose of paints, medications, or chemicals through your septic system.

DON'T attempt to pump the tank on your own – always use a certified professional.

For More Information

United States Environmental Protection Agency
<http://cfpub.epa.gov/owm/septic/home.cfm>

National On-site Wastewater Recycling Association
<http://www.nowra.org/>

National Environmental Service Center
<http://www.nesc.wvu.edu>

National Small Flows Clearinghouse
http://www.nsfcc.wvu.edu/nsfc/nsfc_index.htm

University of Nebraska-Lincoln Extension On-site Wastewater Center
<http://wastewater.unl.edu/>

University of Minnesota Onsite Sewage Treatment Program
<http://septic.umn.edu/>