Alaska REAL ESTATE

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How To Maintain Your Septic System

Septic systems are a very simple way to treat household wastewater and are easy to operate and maintain. Although homeowners must take a more active role in maintaining septic systems, once they learn how their systems work it is easy for them to appreciate the importance of a few sound operations and maintenance practices.

How Septic Systems Work: There are two main parts to the basic septic system: the septic tank and the drain field. Household wastewater first flows into the septic tank where it should stay for at least a day. In the tank, heavy solids in the wastewater settle to the bottom, forming a layer of sludge, and grease and light solids float to the top forming a layer of scum. The sludge and scum remain in the tank where naturally occurring bacteria work to break them down. The bacteria cannot completely break down all of the sludge and scum, however, and this is why septic tanks need to be pumped periodically.

The separated wastewater in the middle layer of the tank is pushed out into the drain field as more wastewater enters the septic tank from the house. If too much water is flushed into the septic tank in a short period of time, the wastewater flows out of the tank before it has had time to separate. This can happen on days when water use is unusually high (laundry day, for example), or more often if the septic tank is too small for the needs of the household.

When wastewater leaves a septic tank too soon, solids can be carried with it to the drain field. Drain fields provide additional treatment for the wastewater by allowing it to trickle from a series of perforated pipes though a layer of gravel and down through the soil. The soil acts as a natural filter and contains organisms that help treat the waste. Solids damage the drain field by clogging the small holes in the drain field pipes and the surrounding gravel, and excess water strains the system unnecessarily.

How to Care for Your System: Sound septic system operation and maintenance practices include conserving water, being careful that nothing harmful is disposed of through the system, and having the system inspected annually and pumped regularly.

Use Water Wisely: Water conservation is very important for septic systems because continual saturation of the soil in the drain field can affect the quality of the soil and its ability to naturally remove toxins, bacteria, viruses, and other pollutants from the wastewater.

The most effective way to conserve water around the house is to first take stock of how it is being wasted. Immediately repair any leaking faucets or running toilets, and use washing machines and dishwashers only when full. In a typical household, most of the water used indoors is used in the bathroom, and there are a lot of little things than can be done to conserve water there. For example, try to avoid letting water run while washing hands and brushing teeth. Avoid taking long showers and install water-saving features in faucets and shower heads. These devices can reduce water use by up to 50 percent. Low-flush toilets use one to two gallons per flush compared to the three to five gallons used by conventional toilets. Even using a toilet dam or putting a container filled with rocks in the toilet tank can reduce water use by 20 percent.

It is also important to avoid overtaxing your system by using a lot of water in a short time period, or by allowing too much outside water to reach the drain field. Try to space out activities requiring heavy water use (like laundry) over several days. Also, divert roof drains, surface water, and sump pumps away from the drain field.

Know What Not to Flush: What you put into your septic system greatly affects its operation. As a general rule of thumb, do not dispose of anything in your septic system that can just as easily be put in the trash. Remember that your system is not designed to be a garbage disposal, and that solids build up in the septic tank and eventually need to be pumped out.

In the kitchen, avoid washing food scraps, coffee grounds and other food items down the drain. Grease and cooking oils contribute to the layer of scum in the tank and also should not be put down the drain. Garbage disposals can increase the amount of solids in the tank up to 50 percent and are not recommended for use with septic systems.

The same common-sense approach used in the kitchen should be used in the bathroom. Don't use the toilet to dispose of plastics, paper towels, tampons, disposable diapers, condoms, kitty litter, etc. The only things that should be flushed down the toilet are wastewater and toilet paper.

Avoid Hazardous Chemicals: To avoid disrupting or permanently damaging your septic system, do not use it to dispose of hazardous household chemicals. Even small amounts of paint, varnishes, thinners, waste oil, photographic solutions, pesticides and other organic chemicals can destroy helpful bacteria and the biological digestion taking place within your system. These chemicals also pollute the groundwater.

Pump Your Tank Regularly: Pumping your septic tank is probably the single most important thing you can do to protect your system. If the buildup of solids in the tank becomes too high and solids move to the drain field, this could clog and strain the system to the point where a new drain field will be needed. Pumping at least once per year is recommended.

Inspect Your System Annually: Inspecting your septic system annually is a good way to monitor your system's health. Inspections can reveal problems before they become serious and, by checking the levels of sludge and scum in your tank, you can get a more accurate idea of how often it should be pumped.

(DISCLOSURE: This material has been accumulated over a period of time and may not all be original.)

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