



Summit County Public Health

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Operation and Maintenance Management

Critical to the longevity of a sewage treatment system (STS) is the proper operation and maintenance of the system, just as you would change the oil in your car, filters in your furnace, or maintain any other valuable item, a STS must be maintained in order to provide reliable service.

Operation and Maintenance Program for Septic Systems

In November 2003, the Health District notified known home septic system owners of a proposed program to promote proper operation and maintenance of septic systems. Presentations were made to twenty-four local government bodies, three focus groups, and six public forums to introduce the proposal and solicit comments. Based on the community response, significant modifications have been made to the proposal. The Board of Health voted on June 10, 2004 on the adoption of code changes to implement the operation inspection program.

The modified program is limited to the inspection of septic systems that drain wastewater into an open or closed ditch, field tile, storm sewer, creek, stream or other body of water. Although present Health District records identify approximately 2400 discharging systems, the total number of discharging systems is unknown at this time. After an inspection has occurred, the property owner will receive a copy of the inspection report and an invoice for the inspection fee. The inspection fee will not be levied more frequently than once within a two year period.

The following pages provide information on how to maintain your home sewage treatment system

HOW TO MAINTAIN YOUR HOME SEWAGE TREATMENT SYSTEM

The following information was obtained from a series of articles appearing in "Pipeline" (Fall, 1995 issue), a newsletter funded by the United States Environmental Protection Agency. The newsletter is designed to address small community waste water issues.

MAINTAINING YOUR SEPTIC SYSTEM: A GUIDE FOR HOMEOWNERS

"Out of sight and out of mind" - does this describe your relationship with your septic system? If you are like most homeowners, you probably never give much thought to what goes down your drain. But if you rely on a septic system to treat and dispose of your household wastewater, what you don't know can hurt you. Proper operation and maintenance of your septic system can have a significant impact on how well it works and how long it lasts. Septic system maintenance is the responsibility of the homeowner.

THREE IMPORTANT REASONS TO MAINTAIN YOUR SYSTEM

- The first reason is money. Failing septic systems are expensive to repair or replace, and poor maintenance is a common cause of early system failures. The minimal amount of preventative maintenance that septic systems require costs very little in comparison. For example, it typically costs from \$3,000 to \$10,000 to replace a failing septic system with a new one. Compare that to approximately \$100 to \$200 to have a septic system inspected and pumped.
- The second reason to maintain your septic system is to protect the economic health of your community. Failed septic systems can cause property values to decline. Sometimes building permits cannot be issued or real estate sales can be delayed for these properties until systems are repaired or replaced. Also, failed septic systems can contribute to the pollution of local rivers, lakes and shorelines that your community uses for commercial or recreational activities.
- Finally, the most important reason to maintain your system is to protect the health of your family, your community, and the environment. When septic systems fail, inadequately treated household wastewater is released into the environment. Any contact with untreated human waste can pose significant health risks, and untreated wastewater from failing septic systems can contaminate nearby wells, groundwater, and drinking water sources. Chemicals improperly released through a septic system also can pollute local water sources and can contribute to failure of your septic system. For this reason it is important for homeowners to educate themselves about what should and should not be disposed of through a septic system.

SIGNS OF A FAILING SEPTIC SYSTEM

Septic system owners should be alert to the following warning signs of a failing system:

- Slow draining sinks and toilets
- Gurgling sounds in the plumbing
- Plumbing backups
- Sewage odors in the house or yard
- Ground wet or mushy under foot in the area of the system if grey or black and odorous
- Grass growing faster and greener in areas of the yard where your system is located
- Tests showing the presence of certain bacteria in your well water

None of these warning signs can be considered a sure indication that a system has failed, but the appearance of one or more of them should prompt homeowners to have their systems inspected. Septic system failures also can occur without any of these warning signals.

MAINTAINING YOUR SEPTIC SYSTEM: A GUIDE FOR HOMEOWNERS

Septic system maintenance is often compared to automobile maintenance because only a little effort on a regular basis can save a lot of money and significantly prolong the life of the 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 at least once every three years.

By educating everyone in your household about what is and what isn't good for septic systems, they can begin to develop good maintenance habits.

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 that 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 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 25 percent.

It is also important to avoid overtaxing your system by using a lot of water in a short 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 ability to do its job. 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. Your system is not designed to be a garbage disposal. When excess materials are disposed of down the drain, solids build up in the septic tank and eventually need to be pumped out.

In the kitchen, avoid washing food scraps, coffee grinds, 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 commonsense approach used in the kitchen should be used in the bathroom. Don't dispose of plastics, paper towels, feminine hygiene products, disposable diapers, contraceptives, 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 paints, 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. Some septic system additives that claim to help or clean your system also contain hazardous chemicals and should be avoided. Household cleaners, such as bleach, disinfectants, and drain and toilet bowl cleaners should be used in moderation and only in accordance with product labels. Overuse of these products can harm your system. It makes sense to try to keep all toxic and hazardous chemicals out of your septic system when possible.

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. Summit County Board of Health Regulation 898.01 adopted pursuant to Ohio Revised Code, Section 3709.21, states that household disposal systems must be pumped every three (3) years. If you are in need of a pumper, refer to the yellow pages of the telephone book under "Septic Tanks & Systems Cleaning" for a complete list.

When contracting for the job, be sure to ask if the pumper is registered with the county and verify that he reports pumping locations to the Health District on a regular basis. As a courtesy, the Summit County Public Health mails a reminder card to the address where the septic system is located about having the system cleaned approximately 2-1/2 years after it was installed or last pumped.

PROTECT YOUR SYSTEM

Finally, it is important to protect your system from potential damage. Don't plant anything but grass near your septic system. Roots from some shrubs and trees can cause damage. Don't allow anyone to drive or operate heavy machinery over any part of the system. Never build or install an above-ground swimming pool over the drain field. Grass is the most appropriate cover.

QUESTIONS?

Summit County Public Health staff have in-depth experience in the design and construction features of septic systems. The general information given in the preceding articles should be of significant value to you in understanding the operation of your system. Should questions of a specific nature arise, feel free to contact the Summit County Public Health Office of Water Quality at (330) 861-7164 for assistance. Inspectors are normally in their offices between the hours of 8:00 a.m. and 9:30 a.m., Monday through Friday, and are happy to discuss questions or problems that you might be experiencing.