



Homeowner Septic System Operation and Maintenance Guide

The proper operation and maintenance of a sewage treatment system (STS) is critical to its longevity. 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.

The operation and maintenance program is a mandated required of the Ohio Department of Health statewide sewage rules that became effective January 1, 2015. These rules also mandate that each homeowner with a septic system must obtain an operational permit through the Wood County Health Department. The cost of the permit is \$150.00 and is valid for five years. Homeowners can obtain their permit at the health department, and pay the associated fee to begin the process. National pollutant discharge elimination system (NPDES) and mechanical systems must be inspected and sampled annually, which has been a requirement in Wood County since 2007. Homeowners may choose to hire a registered service provider to conduct an inspection in lieu of a health department sanitarian. The health department has a list of registered service providers available. Although present health department records identify approximately 14,000 septic systems, the exact total numbers and location systems is unknown at this time.

Maintaining Your Septic System:

Out of site out of mind may 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. However, if you rely on a septic system to treat and dispose of your household wastewater, what you do not know can hurt you. Proper operation and maintenance of your septic system will have a significant impact on how well it works and how long it lasts. Proper maintenance can save you a significant amount of money in the end. Septic system maintenance is the responsibility of the homeowner.

Three Important Reasons to Maintain Your System:

- **Money:** septic systems are a major investment for a major investment for your property. Failing septic systems are expensive to repair to replace, and poor maintenance is a common cause of early systems failures. In comparison, the cost of preventative maintenance that septic systems require is minimal. For example, it typically costs from \$6,000-\$20,000 to replace a failing system with a new one. Compare that approximately \$200-\$300 to have a septic system inspected and pumped.
- **To protect the economic health of your community:** Failed septic systems will cause values to decline. Sometimes building permits and real estate sales are delayed or declined until repairs to the system are made or the whole system is replaced. In addition, failed septic systems can contribute to the pollution of local rivers, lakes and shorelines that your community uses for commercial or recreational activities.
- **Protect the health of your family, your community, and the environment:** when septic systems fail, inadequately treated household wastewater releases into the environment. Raw sewage contains deadly bacteria, parasites, and viruses. Any contact with untreated human waste can pose significant health risks. 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 can be disposed of through a septic system.

Signs of a Failing Septic 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 odorous
- Grass growing faster and greener in areas of the yard where your system is located
- Tests showing the presence of certain bacteria in well water

Septic system failures can occur without any of these warnings, but the appearance of one or more of them should prompt homeowners to have their systems inspected.

Maintaining Your Septic System:

- Maintenance of a septic system and automobile are comparable, 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 through the system
 - Annual inspections on the system
 - Pumping of the septic tank once every three years
- By educating everyone in the household about what is good for the septic system, they can begin to develop good maintenance habits

Use Water Wisely:

- Water conservation is very important for septic systems because continual saturation of the soils in the drain field can affect the quality of the soil and its ability to remove parasites, bacteria, viruses, and other pollutants naturally from the wastewater. The most effective way to conserve water around the house is to take stock of how it is going to waste. 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 in the bathroom. Examples of little things to conserve water:
 - Avoid letting water run while washing hands and brushing teeth.
 - Avoid taking long showers and install water-saving features in faucets and showers heads. These devices can reduce water use up to 50 percent. Low flush toilets use one to two gallons per flush compared to three to five gallons used by conventional toilets. Using a toilet dam or putting a container filled with rocks in the toilet tank can reduce water use by 25 percent.
 - 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.
 - Space out activities requiring heavy water use (like laundry) over several days.
 - Divert roof drains, surface water and sump pumps away from the drain field.

Know What Not to Flush:

- What you put in 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 you can easily put in the trash. Your system is not a garbage disposal, when excess materials go down the drain; solids build up in the septic tank and need pumped out.
- In the kitchen, avoid putting the following down the drain:
 - Food scraps and items
 - Coffee grinds
 - Grease and cooking oils contribute to the layer of scum in the tank

Garbage disposals are not recommended and can increase the amount of solids in the tank up to 50 percent

- In the bathroom, avoid the following being flushed down the toilet:
 - Plastics
 - Paper towels
 - Feminine hygiene products
 - Disposable diapers
 - Contraceptives
 - Kitty litter

Wastewater and toilet paper are the only things that should be flushed down the toilet

Avoid Hazardous Chemicals:

- To avoid disrupting or permanently damaging your septic system, do not use or dispose of the following hazardous household chemicals:
 - Paints
 - Varnishes
 - Thinners
 - Waste oil
 - Photographic solutions
 - Pesticides
 - Other organic chemicals

These chemicals can destroy helpful bacteria and the biological digestion-taking place within your system, and can 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 from the tank to the drain field, this could clog and strain the system to the point where a new drain field will be to be installed
- When contracting for the job, be sure to ask if the pumper has registered with the Wood County Health Department, and verify that the company reports pumping locations to the health department on a regular basis. A list of registered septic haulers can be obtained from the health department.

Septic Tank Pumping Frequency In Years										
Household Size - Number of Occupants										
	1	2	3	4	5	6	7	8	9	10
Septic Tank Size (Gallons)	Septic Tank Pumping Frequency in Years									
500	5.8	2.6	1.5	1	0.7	0.4	0.3	0.2	0.1	-
750	9.1	4.2	2.6	1.8	1.3	1	0.7	0.6	0.4	0.3
900	11	5.2	3.3	2.3	1.7	1.3	1	0.8	0.7	0.5
1000	12.4	5.9	3.7	2.6	2	1.5	1.2	1	0.8	0.7
1250	15.6	7.5	4.8	3.4	2.6	2	1.7	1.4	1.2	1
1500	18.9	9.1	5.9	4.2	3.3	2.6	2.1	1.8	1.5	1.3
1750	22.1	10.7	6.9	5	3.9	3.1	2.6	2.2	1.9	1.6
2000	25.4	12.4	8	5.9	4.5	3.7	3.1	2.6	2.2	2
2250	28.6	14	9.1	6.7	5.2	4.2	3.5	3	2.6	2.3
2500	30.9	15.6	10.2	7.5	5.9	4.8	4	3.5	3	2.6

Protect Your System:

It is important to protect your system form potential damage:

- Do not plant anything but grass over or near your septic system. Roots from some shrubs and trees can cause damage by plugging or even rupturing the drainage pipe.
- Do not allow anyone to drive or operate heavy machinery over any part of the system.
- Never build a structure over or install an aboveground swimming pool over the drain field.

Questions?

Wood County Health Department staff has in-depth experience with the operation and maintenance of septic systems. Staff will also be able to guide you in making the necessary repairs if problems arise, or if specific questions need answered. Please feel free to contact the **Environmental Health Division at (419) 354-2702.**