

Septic System Maintenance

Is Your Septic System Failing?

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

1. Slowly draining sinks and toilets
2. Gurgling sounds in the plumbing
3. Plumbing backups
4. Sewage odors in the house or yard
5. Ground wet or mushy underfoot
6. Grass growing faster and greener in one particular area of the yard
7. Tests showing the presence of bacteria in 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. For this reason, yearly inspection of your septic system is recommended.

What type of toilet paper is best for septic tanks?

Contrary to popular belief, it is not necessary to sacrifice personal comfort to protect your septic tank. There are many types of toilet paper on the market that are perfectly safe for septic systems. According to the National Sanitation Foundation (NSF), a nonprofit organization that tests products relating to health and the environment, the thickness and color of toilet tissue does not necessarily affect its biodegradability. NSF subjects the toilet papers it certifies to rigorous testing, and the brands that pass carry the NSF mark stating that they are safe for use with septic systems. However, there probably are many brands without the NSF mark that are also safe.

What to Expect When Pumping & Inspecting Your Septic System.

Inspecting Your System

Although a relatively simple inspection can determine whether or not your septic tank needs to be pumped, you should consider calling your local health department or hiring a professional contractor. A professional can do a thorough inspection of the entire system and check for cracked pipes and the condition of the tees or baffles and other parts of the system.

1. Locating the system - Even a professional may have trouble locating your system if the access to your tank is buried. One way to start looking is to go in your basement and determine the direction the sewer pipe goes out through the wall. Then start probing the soil with a thin metal rod 10-15 feet from the foundation. Once your system is found, be sure to keep a map of it on hand to save time on future service visits.

2. Uncovering the Manhole & Inspection Ports - This may entail some digging in your yard if they are buried, try to make access to the ports easier for future inspections. Install risers if necessary.

3. Flushing the Toilets - This is done to determine if the plumbing going to the system is working correctly.

4. Measuring the Scum & Sludge Layers - There are two frequently used methods for measuring the sludge and scum layers inside your tank. The contractor may use a hollow clear plastic tube that is pushed through the different layers to the bottom of the tank. When brought back up, the tube retains a sample showing a cross section of the inside of the tank. The layers can also be measured using a long stick. To measure the scum layer using a stick, a three-inch

piece of wood is attached across the end of the stick to form a “foot,” and the stick is pushed down through the scum to the liquid layer. When the stick is moved up, the foot meets resistance on the bottom of the scum layer, and the contractor marks the stick at the top of the layer to measure the total thickness. As a general guideline, if the scum layer is within three inches of the bottom of the inlet baffle, the tank should be pumped. The sludge layer is measured by wrapping cloth around the bottom of the stick and lowering it to the bottom of the tank. This should be done either through a hole in the scum layer or through the baffle or tee, if possible, to avoid getting scum on the cloth. If the sludge depth is equal to one third or more of the liquid depth, the tank should be pumped.

5. Checking the tank and the drain field - The contractor will check the condition of the baffles or tees, the walls of the tank for cracks, and the drain field for any signs of failure. If your system includes a distribution box, drop box, or pump, the contractor will check these too.

When to Pump

How often your tank needs to be pumped depends on the tank size, the number of people living in your home, and the habits of your particular household. Garbage disposals and high-water-use technologies, such as a hot tub or whirlpool, also affect the pumping frequency. To estimate how often you should have your tank pumped, refer to the table below. When it’s time to pump out your tank, be sure to hire a licensed contractor. He or she will have the appropriate equipment and will dispose of the sludge at an approved treatment site. You can find listings for licensed pampers and haulers in the yellow pages or contact the health department for assistance. It’s a food idea to be present when your tank is being pumped. Make sure the contractor uses the manhole, not the inspection ports, to pump the tank to avoid damaging the baffles or tees. Also make sure all of the material in the tank is removed. It is not necessary to leave anything in the tank to restart the biological processes. It is not necessary to scrub or disinfect the tank.

Household Size (# of people)

Tank size (in gallons)	1	2	3	4	5	6
500	5.8	2.6	1.5	1.0	0.7	0.4
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	8.0	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

Estimated septic tank pumping frequencies in years. These figures assume there is no garbage disposal unit in use. (source: Pennsylvania State University Cooperative Extension Service)