

SEPTIC SYSTEM USE & MAINTENANCE

The effective treatment and disposal of domestic sewage requires maintenance of the entire septic system. With appropriate use and proper maintenance, a system that has been properly sited and installed can work effectively for many years. While a conventional septic system has no moving parts and normally does not require weekly or monthly maintenance, attention must be paid to some general principles of maintenance. Important maintenance practices include the following:

1. Minimize water usage
2. Pump septic tank regularly
3. Inspect septic system at each pumping
4. Provide adequate site drainage
5. Use proper landscaping in system area
6. Use sound waste disposal practices

Minimize Water Usage

Septic systems are designed and permitted based on a maximum daily wastewater flow. It is important that the design flow of any septic system is not exceeded. One of the simplest and most important things that homeowners can do to prolong the life of their septic system is to reduce the amount of wastewater that goes into the system. Here are a few ideas for reducing the amount of wastewater you generate:

- Repair leaky faucets and toilets promptly.
- Keep showers short and reduce the amount of water used for baths.
- Reduce the amount of water used for flushing toilets. By placing an object in the water closet for the toilet you reduce the amount of water required to fill the tank.
- Operate dishwashers and washing machines only with full loads.
- Distribute laundry washing throughout the week to avoid overloading the drainfield.
- Turn water off while shaving, brushing teeth, washing dishes, etc.
- Install low-flow faucets and water-saving showerheads.
- When replacing appliances, select models with water saving features.
- Prevent backwash from water treatment devices, water softeners, and HVAC condensate lines from entering the septic system.
- Educate family members, especially children, about water saving practices.

Pump Septic Tank Regularly

The primary function of a septic tank is to settle the solids out of the incoming wastewater. Over time these solids will accumulate in the bottom of the tank (sludge). If the solids are not removed on a regular basis they will continue to accumulate inside the septic tank. The accumulation of these solids decreases the retention time for wastewater entering the tank and also increases the probability that solids may exit the tank. If solids exit the septic tank they may cause blockages inside the distribution box or in the distribution lines themselves, reducing the entire systems ability to function properly. Failure to have the septic tank pumped out regularly is one of the most frequent causes of damage to the system. Pumping costs are relatively minor (usually less than \$300) compared to the costs associated with adding additional drainfield to repair your septic system. By periodically pumping out the tank, the major expense of installing new drainfield can be avoided or delayed.

It is recommend that most septic tanks be pumped out every **3 to 5** years by a reputable septic tank service contractor, who is required to have a state permit to handle and dispose of the material removed from the tank (septage). Businesses that pump septic tanks are listed in the telephone directory. Our office can also provide information about companies that provide this service in the area. It is recommended that several pumping cost estimates be obtained before

contracting the work. Please reference the table below to determine the minimum recommended pumping frequency for your system:

Recommended Minimum Pumping Frequency in Years for Septic Tanks					
Tank Size(gallons)	Number of persons using the septic system				
	1	2	4	6	8
1000	12	6	3	2	1
1500	19	9	4	3	2

Inspect System at Each Pumping

Since the septic tank must be opened for pumping, this is an opportune time to perform a visual inspection of your entire septic system. The septic tank should be checked for cracks, leaks, or any other signs of visible damage. The plumbing lines should be inspected for watertight seals and blockages. The effluent filter (installed on systems after 1999) should be removed and cleaned each time the tank is pumped. Failure to clean the effluent filter could lead to a blockage, causing sewage to back up into the house. The distribution box should also be checked for shifting or other signs of damage. If necessary the distribution box should be cleaned and leveled. A visual observation should also be made of the drainfield area. If any problems are detected they should be addressed immediately.

Provide Adequate Site Drainage

Proper drainage of the drainfield is important so that the ground can absorb wastewater. After the septic system is installed, the drainfield area should be graded to remove any low spots or depressions to allow proper drainage of surface water. Site drainage can be improved by directing gutters and downspouts away from the septic tank and drainfield. Often times drainage improvements are required to protect the drainfield area. Some of these improvements may include the installation of french drains, interceptor drains, swales, and berms. Do not drive over the drainfield, compacted soil and loss of vegetation also reduce the soil's ability to accept and treat wastewater.

Use Proper Landscaping

A healthy grass cover should be maintained over the drainfield to prevent soil erosion. Trees and shrubs should not be planted too close to the drainfield to prevent roots from obstructing or damaging the drainlines. The installation of an irrigation system in the septic drainfield area is strongly discouraged. Irrigation systems increase the amount of water delivered to the drainfield and could potentially lead to a system failure. No structures, sheds, pools, patios, or paved surfaces should be constructed over the septic tank or drainfield area. If you have plans to perform work that may impact your septic system please contact our office prior to beginning this work.

Use Sound Waste Disposal Practices

Septic systems are designed for the disposal of human bodily wastes and the water used for laundry, dishwashing, and bathing. Use of a garbage disposal in the kitchen sink should also be avoided if the septic system was not originally designed to accommodate one. Disposal through household plumbing of items that are not readily degradable fills the septic tank more rapidly, increasing the chances that the drainfield will receive solids and possibly fail. Appropriate precautions should be taken in everyday use of the septic system. Please remember, ***everything that goes down the drain or is flushed down the toilet enters the septic***

system. The following substances should NOT be disposed of through the household plumbing system:

- Coffee grounds
- Dental floss
- Disposable diapers
- Cat litter
- Sanitary napkins
- Tampons
- Cigarette butts
- Plastics
- Facial tissues
- Paper towels
- Bulky wastes
- Fat, grease, or oil
- Household hazardous wastes

***Septic Systems with Effluent Pumps**

Depending on the type of septic system installed and/or the topography at your site an effluent pump may be used to deliver wastewater to the drainfield. If your system has a pump you should be aware that:

- The effluent pump is installed in a separate pump tank. The pump system will include a control panel or junction box and an audible alarm. These components may be mounted adjacent to the pump tank, inside the dwelling, or in the crawl space area.
- The pump is automatically controlled through float devices that turn the pump on and off. No manual operation of the pump is required.
- The pump should have an audible high water alarm that will sound should there be a problem with the pump. Once you hear the alarm you can manually turn it off. This will **NOT** correct the problem. There is a limited storage volume in the pump tank so you should use water sparingly and contact a septic service contractor immediately to diagnose and correct the problem. Failure to correct this problem may result in sewage backing up into the house or surfacing on the ground around the pump tank.
- North Carolina law requires that certain types of septic systems with effluent pumps have a maintenance contract between the system owner and a licensed management entity. The local health department is also responsible for performing periodic inspections of systems with effluent pumps. There is a fee associated with each of these services. The health department maintains files on septic systems that have been permitted. Some of the information contained in these files includes: septic tank size, size of drainfield, location of system components, and information about repairs or alterations that have been made to the initial system. If you have specific questions about your septic system please contact our office at (828) 632-1000.