

## GENERAL OPERATIONAL TIPS FOR ON-SITE WASTEWATER SEPTIC SYSTEMS

Presented by Dallas County Environmental Health

All of rural Dallas County, as well as some of the outlying areas of the municipalities located in Dallas County are served by individual on-site wastewater treatment and disposal septic systems. You, as home owners have your own wastewater treatment plant located in your yard. As home owners, you have a certain responsibility to keep these systems functioning, or failure will occur. To assist you in keeping those systems functioning, the following tips are provided below:

1. Your septic tank should be pumped once every three (3) to five (5) years. Failure to pump your septic tanks could result in solids moving into your secondary treatment system and plugging will occur.
2. All septic systems installed in Dallas County since 1998 were required to have in-line or effluent filters. The purpose of the filters was to catch suspended solids (those that float on the top) from entering your secondary treatment system. The effluent filter should be removed every 6 months, hosed off and placed back into the septic tank. **All of todays detergents float grease. The filter was designed to catch that grease.**
3. Avoid septic tank additives. Yeasts, enzymes, bacteria or chemicals are often sold with the claim that they help make a septic system work better. In some cases, cleaners can re-suspend solids and clog the drainage lines and soil absorption system. Biological additives are not needed because normal household waste contains active microorganisms that promote decomposition.
4. **Detergents:** Low sudsing liquid detergents should be used. Powdered detergents do not always completely dissolve allowing them to start building up in your pipes. This will result in backups into your house. ***If powdered detergents are used, only the concentrated forms are recommended.*** Some suggested detergents are listed below:

Ultra Cheer with advanced color guard  
Liquid Tide with bleach alternative  
Ultra ERA liquid

NEVER USE MORE THAN THE MANUFACTURERS  
RECOMMENDED AMOUNT OF DETERGENT.

5. **Bleach:** Chlorine bleach is not recommended. Oxygen bleaches are recommended. Oxygen bleaches can be used in any form; liquid, powder or pellets. Most laundry detergents contain sodium perborate or bleach which releases boron as it breaks down. Boron has a bactericidal effect which in excessive quantities could damage your system or generate more solids. So, it is wise to seep your bleach levels to a minimum.

6. **Drain Cleaners:** Non-caustic biodegradable drain and toilet bowl cleaners are recommended, when available. **DO NOT USE THE NEW DISPOSABLE FLUSH TYPE TOILET BOWL CLEANERS. THEY FLOAT, THUS PLUGGING THE OUTLET FROM YOUR SEPTIC TANK TO THE SECONDARY PORTION OF YOUR SEPTIC SYSTEM. THIS WILL RESULT IN THE SYSTEM OVERFLOWING OR BACKING INTO YOUR HOUSE.**

7. **Garbage Disposal:** Care should be taken to avoid the disposal of grease and fat in the disposal. Greasy food scraps should be disposed in the general trash and not flushed down the disposal. Remember, what your system cannot digest (like nuts and corn) the disposal cannot breakdown fine enough to be reduced to a liquid state. The more use of your disposal, the more frequent you will have to have your system pumped.

8. **Disposable Wipes:** There are many new products on the market, which appear to make house cleaning easier, however, they do not enhance your septic system. These disposable wipes are a high strength paper, which do not dissolve in your septic tanks. More often, they float and plug your effluent filters and filter socks (some mechanical aerobic septic systems). It is strongly recommended that these items be disposed in the general trash.

9. **NEVER flush paper towels, newspapers, wrapping paper, feminine articles, condoms, plastic wrap, or rags into your system.**

10. **AVOID large volumes of water to continue to flow into your system (such as a leaking toilet or faucet). If your system was not sized for a water softener or it is a mechanical aerobic system, the water softener discharge should be rerouted through a separate drainage treatment trench. Contact our office for recommendations. Large irregular volumes of water entering your system could cause system overload for your individual system design. Overloading can cause your system to either back into your house or if a lateral system, to surface and fail due to the soils inability to accept additional water.**

11. **Cooking Oils and Grease:** These items are troublemakers for all types of septic systems. The grease will solidify in the inlet and outlet pipes of your septic tank and plug your effluent filter. Those that manage to float past the septic tank will move into the secondary treatment system and it will fail. Once the secondary portion of your system is plugged, there is no known repair. You will merely have to install a new portion of your system. **There are some new products on the market, indicating that all you need to do is spray your greasy pans and wash down the drain. AVOID THESE PRODUCTS IF YOU WANT TO SAVE THE LIFE OF YOUR SEPTIC SYSTEM.** Scrap off as much of the grease into an empty can with a lid and when  $\frac{3}{4}$  full, dispose in your general trash. There are other oils and grease that you already generate, such as frosting, chicken and beef fat from cooking stews, soups and other items, that will be washed away as you do dishes. Don't add additional oils and grease to your septic system. Minimize your use of fabric softeners in your laundry and opt for dryer sheets. Fabric softeners contain types of oils. Large usage of oils and grease will kill the bacteria

needed to treat your waste. When the bacteria dies in your septic tanks or mechanical aerobic units it will float in large black clumps, requiring your system to be pumped and cleaned.

**12. Other Warnings:** Never place motor oil or other car products, garden chemicals, paints, paint thinners or other solvents into your septic system. Medications are also bad, as they are designed to kill certain types of bacteria. Latex paint brushes, when washed into your septic system will result in large rubber-like floating masses, clogging your system.

**13. Washing Machines:** Washing machines are responsible for large quantities of water entering your system all at once. The surge of water can hydraulically overload the septic system effecting the efficient treatment of your waste. Space your wash loads throughout the weeks rather than doing all your wash on one day. Remember that your septic was designed based on the number of bedrooms at 150 gallons per bedroom or 75 gallons per person per day. If you are using more water than your system design, it may result in problems or failure of your septic system. The following information was obtained from O'Callahan's Appliance Store in Des Moines on washing machine and dishwasher water usage. This should assist you in determining how to space your water use and effectively extend the life of your septic system.

- ⦿ The average top-loading washer uses 40-45 gallons per load
- ⦿ The average front-loading washer uses 17-22 gallons per load
- ⦿ The average "Energy Star" (water and energy conserving) dishwasher uses 6-9 gallons per load
- ⦿ Normal dishwashers use 9-15 gallons per load

**14. Maintenance Contract:** Dallas County Environmental Health, Chapter 31, requires maintenance contracts for all discharging septic systems or for any systems having an alarm system or pumping station. Failure to obtain a maintenance contract will result in a Notice of Violation and Corrective Action. If corrective action is not met by the required deadline, than a Civil Citation and Court Date will be set. **Please make sure that if you have a septic system that requires maintenance that you keep your contract current.**

We hope the tips provided will assist you in better understanding your septic system and how it functions. Should you have any questions, please contact our office at 993-5803.