

## Frequently Asked Questions About Septic Tank Systems

### 1. **WHAT IS A SEPTIC TANK?**

It's a water-tight container, frequently made of concrete, that's buried somewhere in your yard and accepts all the sewage water from your house. "Sewage" includes not only the commode wastes but shower, sink, kitchen, and sometimes washing machine wastewater as well. The tank has no moving parts and is just the first part of your wastewater disposal system. Your home or business is thus served by a septic system called, by those in the industry, an "On-site Wastewater System."

### 2. **HOW DOES IT WORK?**

Bacteria. That's it. All warm-blooded animals (like humans) have a type of bacteria in their intestines that "eats up" the solids in sewage water and which causes it to be (almost) all liquefied. As long as these bacteria, called anaerobic bacteria (living without air), have the time and temperatures that they need, they can eat up these solids so as to have nothing but liquids left to "dispose" of. The purpose of a septic tank is to give them the time and place to "do their business" so that what comes out of the tank is mainly liquid.

### 3. **WHY DO YOU CALL IT A "MEMBER OF THE FAMILY"?**

Because among marriage and family counselors runs a theory called the "Family Systems" approach. This principle contends that each member of the family, like a portion of an extremely fragile and sensitive spider web, is intensely connected to all of the other members. Each directly and automatically influences and affects all the other members. The household septic tank is usually low on the priority list of the everyday lives of rural homeowners. Low, that is, until it stops working. when that happens, this "dysfunctional family member" quickly moves into the limelight of family concern!

### 4. **HOW CAN I AVOID PROBLEMS WITH MY SEPTIC SYSTEM?**

Marriage counselors simply advise, "Be yea kind." Acknowledge the value and importance of every member of the family. both the quantity and quality of the sewage water entering the tank affects its proper functioning. However, by far the most significant thing you can do to be sure your system works right is to CONSERVE WATER, that is, go easy on the amount of sewage water you put into it.

Acknowledge that every member of the family has limits and boundaries on what can be expected of them. Every septic system has a maximum limit on the quality and quantity of sewage water, called “raw sewage”, which it can accept. This “influent” must never exceed the “effluent” (outgoing) capacity of the entire system. The system's size and percolation rate/absorption rate/surface application rate determines the maximum “loading” that it can handle. If you exceed either the quantity or quality maximums of your system, problems are certain to appear!

**5. IF I'M NOT HAVING ANY PROBLEMS WITH MY SEPTIC TANK, DO I HAVE TO HAVE IT PUMPED OUT ANYWAY?**

Absolutely! All septic tanks should be pumped out before you detect a problem otherwise you could ruin your drainfield system.

**6. HOW OFTEN SHOULD I HAVE MY SEPTIC TANK PUMPED? BY WHOM?**

There are many variables that determine when your tank needs pumping. Rule of thumb - Look up a pumper in the yellow pages under “septic” and have them pump the tank every 3-5 years.

**7. WHEN THE PUMPER ARRIVES, SHOULD I STAY INSIDE AND HIDE OR WHAT?**

No way! Find out and write down in your permanent MAINTENANCE RECORD BOOK, the following:

- A. Where tank is located; show diagram with location measurements.
- B. How deep tank is in the ground (If the tank is more than 12” in the ground, have them install an access pipe, called a “riser”, so that the tank will be more easily accessed in the future.)
- C. Volume of tank in gallons. (usually 500, 750, 1000, 1250 gal.)
- D. Condition of tank - ask the pumper if the tank is cracked or if the baffles (inside parts) are fallen down.
- E. Is there any water running from the house into the tank when there's not supposed to be? (could indicate problem-causing water leaks in the house that you didn't know about).
- F. Is there any backflow from the drainfield into the tank? (could indicate that your drainfield is already saturated; this is

the last stage of a system failure before it backs up into your HOUSE!)

- G. Is the tank cracked or otherwise no longer water-tight?
- H. Are the baffles in place and in good condition?
- I. Is there any sign of system failure anywhere in the drainfield? any leaching or standing water? Any unusually green grass areas?
- J. Mark the tank lid for easy location next time.

#### **8. WHAT ARE TO “DO'S” FOR MY SEPTIC TANK SYSTEM?**

Do treat each member with the respect that you want and deserve. The most common cause of septic problems is too much water use in the house. Recently required water-conservation plumbing fixtures have helped. but in today's self-gratifying and affluent society the need for voluntary water conservation, though unpopular, is becoming more and more necessary. Have the tank pumped out by a qualified pumper at least every 5 years. If you can, avoid running your washing machine wastewater into the system.

#### **9. WHAT ARE THE “DON'TS” FOR MY SEPTIC TANK SYSTEM?**

DON'T violate any member's dignity. The main thing is to not overload your septic system with more wastewater than it was designed (if it WAS properly engineered and designed) to accept. Also, the organic, bacterial life in a septic tank can easily be hampered by the introduction of different types of inorganics, like paint products, petroleum products and bactericides like bleaches, disinfectants, etc.. So don't pour these types of products down the sink or commode! Simple rule of thumb: Picture a sign over you commode that says, “Don't put anything in here that you haven't eaten first!”

#### **10. WHY SHOULD I BE CONCERNED AS LONG AS MY SEPTIC TANK SYSTEM IS WORKING OK?**

There are many environmental LAWS governing these systems and YOU (as the property owner) ARE LIABLE! These laws govern the design, installation, use and maintenance of these systems. Also, you should never have an “out-of-sight-out-of-mind” attitude about the system because it's actually an APPLIANCE that needs proper operation and periodic maintenance. PREVENTION, then, is a key. When a septic system is not properly maintained and pumped, the few solids that do not get eaten up by the bacteria build up in the tank and then start overflowing into the drainfield. This can destroy the drainfield

requiring immediate, expensive, and inconvenient attention from YOU!

**11. WHAT IS “TREATMENT AND DISPOSAL” WHEN ALL I CARE ABOUT IS, “FLUSH AND IT'S GONE FOREVER!”?**

Do you recall from school a thing called the “Hydrologic Cycle”? It has to do with water that is eventually and always recycled in the natural plan of the earth. Your wastewater IS WATER and becomes a part of that cycle which means it NEVER just goes away - it goes SOMEWHERE and it does SOMETHING!! On-site wastewater scientists now know the realities of well and aquifer contamination, river and lake pollution, and other avenues of disease transfer through YOUR SEPTIC SYSTEM WASTEWATER.

**12. WHAT CAN I DO IF MY SEPTIC TANK SYSTEM DEVELOPS PROBLEMS?**

First thing - hire a septic pumper (See Ques. 5 above). If having the tank pumped out only solves the problem for a little while, you'd best have a professional look at it. Your local county health department is the best place to get referrals for an inspector or private company to do an analysis on your system and come up with recommendations. Get ready -- you might have to spend some big bucks and have your yard torn up in order to get it working again or replaced!