How Does an Onsite Wastewater Treatment System Work?

A simplified overview:

1. Most water runs out of your house from one main drainage pipe into a septic tank.

2. The septic tank is a buried, water-tight container usually made of concrete, fiberglass, or polyethylene. Its job is to hold the wastewater long enough to allow solids to settle down to the bottom (forming sludge), while the oil and grease float to the top (as scum). Baffles prevent the sludge and scum from leaving the tank and traveling into the seepage field area.

3. Liquid wastewater then exits the tank into the seepage field. Finally, the wastewater percolates into the soil, naturally removing harmful bacteria, viruses, and nutrients. If the seepage field is overloaded with too much liquid, it will flood, causing sewage to flow to the ground surface or create backups in toilets and sinks in your house.

How Do I Find My System?

- Look on the “as built” drawing for your home.
- Check in your yard for lids or manhole covers.
- Use an inspector/pumper, who can also help you find exactly where the system is located.
- Contact your local Health Department for records of the home.

Proper Care and Maintenance of Onsite Wastewater Treatment Systems

- How an Onsite Wastewater Treatment System works (often referred to as a “septic” system).
- How to locate and maintain your Onsite Wastewater Treatment System.
- How to recognize signs of trouble.
What Can I Do To Help Maintain My System?

Protect it and inspect it.
A typical septic system should be inspected at least every 3 years by a licensed contractor and your tank pumped as recommended by the contractor (generally every 3 to 5 years depending on use). Annually self-inspect your system. Replace chlorination tablets in surface discharging systems as often as recommended by the manufacturer.

Use “septic safe” to save your tank.
Use toilet paper brands that are marked as safe for septic systems or “septic safe.” This type of toilet paper is designed to dissolve quickly and generally contains less bleach or chlorine than rolls that are not labeled as such. Another option is biodegradable toilet paper, which requires less water to break down.

Shield your field.
It is equally important to protect your seepage field.
• Do not park or drive on your seepage field.
• Plant trees the appropriate distance from the seepage field to keep roots from growing into the system.
• Keep roof drains, sump pumps and other rain water drainage systems away from the area. Excess water slows down or stops the treatment process.

Don’t overload the commode.
• A variety of household products can clog and potentially damage septic system components.
  AVOID flushing these items: coffee grinds, dental floss, disposable diapers, “flushable” wipes, feminine hygiene products, cigarette butts, condoms, food scraps, prescription drugs.
  Basically, only human wastes and septic safe toilet paper should be flushed!

Think at the sink.
• Your septic system contains a living collection of organisms that digest and treat waste. Pouring toxins down your drain can kill these organisms and harm your septic system.
  AVOID putting these into your drain:
  Oil-based paints, solvents, toxic cleaners, pesticides, anti-freeze, chemical drain openers, latex paint, cooking oil, grease, bleach-based products.
• Eliminating the use of a garbage disposal can reduce the amounts of oils, fats, grease, and solids entering the septic tank and potentially clogging the seepage field.

Don’t strain your drain.
It’s simple. The less water you use, the less water that enters the septic tank, which decreases its workload.
Here are a few easy ways to save water:
• Run dishwasher and washing machine only when full.
• Repair leaky toilets, pipes and faucets.
• Use high-efficiency toilets and faucets.

Items of Special Consideration:

Garbage Disposals
Check with the Health Department before installing a garbage disposal to ensure that your septic system can accommodate the additional waste.

Water Softeners
Backwash water from a water softener must be discharged to a separate subsurface seepage system or a separate building drain that will discharge to a subsurface seepage system that is designed to accommodate the flow from this device on a daily basis. A septic tank is not required in front of a seepage field receiving flow from this device.

Signs of Trouble:
• Gurgling sounds in the pipes when water is used or the toilet is flushed.
• Slow running or backing up drains may indicate a clog in the house pipes, the sewer pipe leading to the septic tank, the tank itself, the seepage field or roof vent.
• Sewer-type odors in the house or yard.
• The ground over the seepage field is mushy when you walk on it.
• The grass over the seepage field is greener, more lush and/or growing more quickly than the grass around the seepage field.
• Frequent intestinal illness of family members.
  A failed septic system can contaminate well water if they are in close proximity to each other.
• Excessive weed growth or algae blooms in nearby ponds or drainage ditches may be the result of increased phosphorus or nitrogen from a failed septic getting into surface water.