Items to Avoid in an Onsite Sewage System

The following guidance is a collaborative effort of wastewater professionals within the National Onsite Wastewater Recycling Association (NOWRA). The purpose is to identify common issues that can cause problems with the operations of newer onsite treatment and traditional septic systems. Many operational problems exist today because owners are either unaware of the results of daily practices to these systems. NOWRA’s goal is to ensure that owners are educated and informed about the safe practices for their treatment systems, in order to avoid costly repairs and to protect groundwater quality. The items listed below are known to have caused failures of onsite treatment systems and must be considered if waste generated by/from a particular site will contain them in excessive quantities. Since excessive is a subjective word, it is highly recommended by NOWRA that you share concerns with your Wastewater Professional to come up with a treatment strategy for your particular needs.

Inert Materials:

Plastic, Rubber, Scouring Pads, Dental Floss, Kitty Litter, Cigarette Filters, Bandages, Hair, Mop Strings, Lint, Rags, Cloth and Towels do not degrade in an on-site treatment system.

Inert Materials will build up solids, and lead to system malfunction, clogging or increased pump out frequency.

Paper Products:

Disposable Diapers, Paper Towels, Baby Wipes, Facial Tissues, Baby Wipes, Lotions, Scented or Quilted Toilet tissue, Moist Toilet Paper, do not dissolve readily in an onsite treatment system. Excessive Amounts of toilet tissue will also not decompose. All can lead to system malfunction, back-up or increased pump out frequency.

Food Wastes:

Do not put Animal Fats & Bones, Grease, Coffee Grounds, Citrus & Melon Rinds, Corn Cobs, Egg Shells, down the sink. Garbage disposal use should be limited to waste that cannot be scooped out and thrown in the trash. Spoiled Dairy Products and Yeasts from home Brewery or Baking may cause excessive growth of microbes that do not degrade sewage.

Household Products:

Do not flush Baby Wipes, Lotions, Scented or Quilted Toilet tissue, Female Sanitary Products, Cotton Balls or Swabs, or Condoms. Anti-microbial Soaps and Automatic Disinfection Tablets (blue, clear or otherwise) may kill the organisms needed to consume waste.

Medications/Aliments:

Normal use of over the counter medications do not affect the performance of onsite systems. Do not flush expired Medicines/Antibiotics into an onsite treatment system. Some prescription medications are known to cause biological disrupt. Among these diseases or conditions are those suffering from bulimia, severe infections (including AIDS), chronic diarrhea, intestinal/colon by-pass, or other gastrointestinal conditions and cancer. Oral or intravenous chemotherapy is known to cause serve disruption to the treatment process and will require more frequent pump out intervals or the use of biologically based additives.
Commercial Additives:
Both the U.S. Environmental Protection Agency and the Small Flows Clearing House have reported that there is no evidence to support the use of additives with normally functioning Onsite Treatment Systems. Some Septic Tank additives have been shown to do more harm than good. A normally functioning system should not require additives.

Chemicals & Toxins:
These materials kill the microbes necessary for the biological treatment to occur. Paint, Paint Thinner, Solvents, Volatile Substances, Drain Cleaners, Automotive Fluids, Fuels, Pesticides, Herbicides, Fertilizers, Metals, Disinfectants, Sanitizers, Bleach, Mop Water, Floor Stripping Wastes, Excessive use of Household chemicals, and Backwash from Water Softener regeneration.

Laundry Practices:
On-site systems must process the water as it enters the system. Laundry should be spread out over the week, not all run at one time. Excessive use of Detergents, especially those containing bleach, can affect system performance. Liquid detergents are recommended over powders. Fabric Softener sheets are recommended over liquid softeners. Bleach should be used sparingly and at half the rate indicated on the container.

Clear Water Waste:
From A/C Discharge lines, Floor Drains, Gutters, Whole House Water Treatment Systems and Sump Pumps can increase the flow to your treatment system. These flows can at least disrupt, if not destroy your treatment process.