When cared for properly, an onsite wastewater treatment system (onsite system) can effectively and safely recycle household wastewater back into the environment. Onsite systems need millions of naturally occurring bacteria throughout the system to treat household wastewater. For example, anaerobic bacteria (bacteria that live in the absence of oxygen) in the septic tank decompose organic materials in the wastewater and aerobic bacteria (bacteria that live in the presence of oxygen) in the soil destroy disease-causing pathogens. Homeowners add many of these good bacteria through normal daily activities that send wastewater down the drain. However, some daily activities, like using toxic cleaners, can send harmful substances down the drain that can kill the beneficial bacteria. That is why it is important to understand what should and should not go down the drain and into your onsite system.

Household Cleaners
Modern household cleaners often contain toxic materials that can pose health or environmental hazards if used or disposed of improperly. Items labeled “antibacterial” or “disinfectant” can be used safely in moderation but high levels of these products in the onsite system can cause major or even total destruction of the population of necessary bacteria. Always follow instructions on product labels and be cautious when using multiple “antibacterial” or “disinfectant” household cleaning products, such as hand soaps, tile and shower cleaners, toilet bowl cleaners, and laundry detergents, because the accumulation of these products in the onsite system can produce high levels of toxins.
Alternative Cleaners

Safer alternatives exist to toxic household cleaners. As an added benefit, these are often less expensive. Here is a sampling of some basic alternative cleaners:

**Drain openers/cleaners:** Pour boiling water down your drain twice weekly to prevent clogs. Use a metal snake or plunger to clear a clogged drain.

**Scouring powders:** mix 1/2 cup baking soda with 1/4 cup borax, Bon Ami cleanser, or salt.

**Tub and tile cleaner:** Borax and water. For blackened grout: white vinegar applied with a toothbrush. For rust stains: apply a paste of equal parts hydrogen peroxide and cream of tartar, let sit 15 minutes and rinse. Minimize scum buildup by using a squeegee on the shower stall walls after bathing.

**Bleach:** Borax or washing soda.

**Window cleaner:** 2 tsp. vinegar to 1 quart water.

**Chrome polish:** Use baking soda or vinegar or lemon juice and a soft cloth. Try removing scum with baby oil.

**Copper polish:** Use lemon juice and salt.

**Silver polish:** 1 tablespoon salt, 1 tablespoon baking soda, a few sheets of aluminum foil. Fill a pan big enough to hold the silver with water. Add the silver, baking soda, salt and aluminum foil. Let the mixture sit for an hour or so. (You may notice a slightly rotten egg smell.) Rinse the silver in hot water and polish dry with a soft cloth. For small pieces, use white toothpaste and your fingertips.

**All purpose floor cleaner:** Mix together 1/8 cup vegetable-oil-based liquid soap, 1/2 cup vinegar, 2 gallons warm water and wash as usual.

**Air fresheners:** Ventilate. Set vinegar out in an open dish. Use opened box of baking soda in small enclosed areas. Add cloves and cinnamon to boiling water and let simmer.

**Microwave cleaner:** Boil a bowl of water in the microwave and let the steam loosen the grime. Wipe clean. Or make a paste with baking soda and water and use a sponge to wash the interior and around the door. Rinse thoroughly.

**Wood furniture dusting and cleaning cloth:** Mix 1/2 teaspoon olive oil, 1/4 cup vinegar or lemon juice in a bowl. Dampen a soft rag with the solution and dust or polish wooden furniture. This rag can be reused several times.

This sampling of recipes came from “Clean & Green: The Complete Guide to Nontoxic and Environmentally Safe Housekeeping,” by Annie Berthold-Bond and the brochure, “Hazardous Household Products Equal Hazardous Waste,” produced by the City of Boston

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Onsite System Additives

Today’s lifestyles often leave people with less and less time to take care of the mundane details of life – like maintaining their onsite wastewater treatment system. It is not surprising that many homeowners buy into claims that the use of septic tank additives is a cure-all for whatever ails their onsite system. Manufacturers of septic tank additives promise that their products will cure a variety of onsite systems woes, including: fix failed drainfields, clear pipe deposits, reduce odor, reduce or eliminate the need to pump your septic tank, and counteract the effects of household chemicals. There are no standard tests of these products to ensure they are effective, safe, or live up to these claims.

Septic tank additives come in two basic types: chemically or biologically based. Chemical additives are usually comprised of strong oxidizing agents and organic chemicals. Biological additives are designed to enhance the biological activity in the septic tank by increasing its level of bacteria and enzymes. Solid biological additives tend to be composed primarily of cereal grain or a similar filler; liquid biological additives tend to be composed of almost 100 percent water.

The Environmental Protection Agency (EPA) considers most septic system additives to be ineffective and some to be actually harmful to onsite systems. Studies have found that one of the only times septic systems may need additives is when the house occupant is taking a long course of antibiotics or other drugs that may kill the naturally occurring bacteria in the tank.