

The effectiveness of a septic system in treating sewage depends on how the homeowner uses and operates the system. Water-use habits, fixtures and appliances, product selection, and septic additives/cleaners all affect how well a septic system works. The septic system operates each time wastewater enters the system.

**STARTERS**: A starter is not needed for bacterial action to begin in a septic tank. Many naturally-occurring bacteria are present in the wastewater and will thrive under the growth conditions present.

**FEEDERS**: It is not necessary to "feed" the system additional bacteria, yeast preparations, or other home remedies. There are millions of bacteria entering the system in normal sewage. If the bacterial activity level is low, figure out what is killing them (e.g. cleaners) and correct it. Activity will return after correction.

<u>CLEANERS</u>: Additives effective in removing solids from the septic tank will probably damage the soil treatment system. Additives should not be used, since they are of no benefit and some may do great harm. Additives that cause the accumulated sludge in the tank bottom to increase volume will result in the sludge being flushed out into the drain field, clogging the pipes and soil pores (which will lead to partial/complete failure of the system).

<u>OTHER ADDITIVES</u>: Additives, particularly degreasers, may be carcinogens (cancer-causing) or suspected carcinogens that will flow directly into the ground water, along with the treated sewage, and affect our drinking water supply.

## THERE IS NO SUCH THING AS A SAFE AND EFFECTIVE SEPTIC SYSTEM ADDITIVE!

**Bathroom**: Install a new low-flow toilet that gives a complete flush with 1 ½ gallons per flush. Routinely check the toilet float valve to be sure it is not sticking and water is not running continuously. Be sure the toilet is not flushed unnecessarily and "other" wastes such as cigarette butts, unwanted prescription, over-the-counter medications, coffee grounds, cooking fats, paper towels, disposable diapers, personal hygiene products, facial tissues, and similar non-decomposable materials are not flushed down the toilet. <u>Repair leaky faucets and toilets immediately</u>! Do not use "every flush" toilet bowl disinfectants that are placed in the tank or bowl. Use a good quality white tissue paper that breaks up easily when wet (some dyes used for toilet paper are difficult for bacteria to break down). To determine suitable quality toilet tissue, place a portion in a jar half full of water. Shake the jar, and if the tissue breaks up easily, the product is suitable. Take showers instead of tub baths, and take <u>shorter</u> showers. Showers use less water than tub baths. Install low-flow shower heads, hand-held showers with pause control, and temperature balance valve

controls. Reduce use of drain cleaners by minimizing the amount of hair that goes down the drain. Shut off water while shaving and brushing teeth (saves up to 5 gallons per minute).

<u>Kitchen</u>: Keep a pitcher of drinking water in the refrigerator instead of running the tap every time to get cool water. Hand wash dishes in the basin instead of under running water. Wash only full loads in the dishwasher. Install a low-water-use dishwasher; use liquid detergent in the dishwasher. Use low-phosphate (0 to 5%) dishwasher soaps. Use the minimum amount of soap necessary to do the job. This is often less than suggested by manufacturers. Do not use a garbage disposal or dispose of vegetables, meat, fat, oil, coffee grounds, and other undigested food products in the septic system, if at all possible. Reduce the use of drain cleaners by minimizing the amount of grease and food particles that go down the drain. Keep a separate container for waste grease and throw it out with the trash.

**Laundry**: Wash only full loads, or adjust load level settings for small loads to save on water. Frontloading washers and suds savers typically use less water than top-loading machines. Distribute wash loads evenly throughout the week to avoid overloading the system with large volumes of water. Install a filter on the washer to remove lint. Use no-phosphate laundry detergents (Be wary of inexpensive washing products, which may contain excessive quantities of filler, some of which can be extremely detrimental to the sewage system. The best solution is to use liquid laundry detergents, to avoid the fine particles from the powdered soaps from adding to the sludge accumulation. But if you do use a powdered detergent, select one that is highly biodegradable). Use the minimum amount of detergent or bleach necessary to do the job. (This is often less than suggested by manufacturers).

**Basement and Utility rooms**: Recharge the water softener as infrequently as possible to reduce water use. Re-route water softener recharge water to the ground surface (since it contains no pathogens, it does not need to be treated). Re-route chlorine-treated water from swimming pools and hot tubs to a ditch or separate dry well (outside the septic system). Route roof drains and basement drainage tile water (sump pumps) outside the septic system and away from the drain field. Dispose of all solvents, paints, anti-freeze, and chemicals through local recycling and hazardous waste channels. These materials kill valuable bacteria in the system and may pass deep into the ground to contaminate drinking water. (Consult local solid waste officials for proper methods of disposal). Never rinse latex paint from brushes/rollers down the drain and into the septic system.

## WHAT DOES AN ON-SITE SEWAGE TREATMENT SYSTEM DO?

An on-site sewage treatment system completely "treats" sewage on the property where the sewage has originated. This system has two parts: sewage tank and soil filter. The sewage tank separates out the large solids, and the soil filter removes the fine solids and destroys accompanying bacteria. The only maintenance required by a properly operating system is the occasional removal of accumulated solids from the sewage tank.

Have the sludge and scum removed (by a professional) by having the tank pumped every 1 to 3 years for a 1,000-gallon tank serving a 3-bedroom home having 4 occupants (and with no garbage disposal). If you have a garbage disposal, you will need to remove septic tank solids every year or more often. Ground garbage frequently will find its way out of the septic tank and clog the soil treatment system.

The cleaning must be done through the manhole. Cleaning a tank through the inspection pipes will often leave solids in the tank and possibly damage baffles. DO NOT EVER ENTER THE SEPTIC TANK! The tank contains very little oxygen, and has high levels of hydrogen sulfide, methane, carbon dioxide, and other life-threatening gases.

If there is a smell of sewer gases in your home, **<u>immediately</u>** call a plumber, health department, or another qualified person to identify the source and correct it. If the gas smell is very strong, **<u>evacuate the building</u>** until the problem is corrected and the gases are removed.

Information compiled by: **Lake Region District Health Unit** Environmental Health Program 524 4<sup>th</sup> Ave NE, Unit 9 Devils Lake, ND 58301 (701) 662-7035



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