MANAGING YOUR SEPTIC SYSTEM

SIGNS OF TROUBLE AND POSSIBLE CAUSES

Grass over the tile bed is unusually green or spongy to walk on.

■ Too many suspended solids / nutrients may be entering the leaching bed either because the septic tank is too full or because waste water flows from the home / cottage are too high; so solids are not getting a chance to settle in the septic tank.

Action: Probably maintenance. Have a licensed contractor inspect septic tank. Check water flows.

Toilets and sinks start to drain slowly.

- Septic tank may be too full and needs to be pumped out.
- System may be partially blocked.
- Plumbing vents may not be properly connected.

Action: Probably maintenance. Have a licensed plumbing contractor check septic tank.

Foul odours outside.

- Plumbing vents may not be properly connected.
- Cover of septic tank may not be properly sealed or covered with earth.
- Waste waters may be breaking out to the surface (see below).

Action: Have a builder / licensed contractor check problems.

Foul odours inside.

- Plumbing traps may not be properly connected.
- Electrical conduits for septic system pump chamber may not be properly sealed.
- Pipe leading from the home / cottage may be broken, allowing waste water to leak around the foundation.
- Waste water may be backing up into the home.

Action: Have a builder / licensed contractor check problems.

Waste water is backing up into home/cottage.

- Pipe leading to the septic tank may be blocked.
- Pipe beyond the septic tank, or, in distribution system may be blocked.
- Leaching bed may be damaged or full.

Action: Have builder / licensed contractor inspect problems.

Grey or black liquids (effluent) are breaking out to ground surface.

- Soil cover over pipes may not be deep enough.
- Pipes may not be sloped properly.
- Part of the leaching bed or distribution system may have settled or been lifted by frost heave so gravity cannot drain pipes properly.
- Distribution system may be damaged.
- Pipes and / or soils in leaching bed may be full and not able to drain properly.

Action: Have a builder / licensed contractor inspect problems. Inform the local authority.

Nitrates and bacteria in nearby wells, lakes, rivers and / or streams.

- Soils in leaching bed may be draining too quickly.
- High water table may be too close to the bottom of the trenches.
- Waste water may be directed to open water.

Action: Have a builder / licensed contractor inspect problems. Inform the local authority.

If it's been more than two or three years since you have had the septic tank pumped, your first step should be to have a licensed contractor check out the septic tank.

SEPTIC SYSTEM CARE - DO THIS!

- know where the tank is located and keep a maintenance record. Take time to be aware of your system owners have to play a role in the management and maintenance of their system. Create a map of your lot showing the location of the on-site sewage system and leave it for the next owners. If you enlarge your home or cottage, you must upgrade your sewage system accordingly. Many older cottages were not built to handle the volume of sewage we create today.
- make sure you hire a licensed septic tank servicing company for regular inspections and that they take care not to damage the inlet or outlet baffles, or tees during pumping. Never inspect or pump out a septic tank yourself. There is no oxygen in the tank for you to breathe and the tank contains deadly gases which can kill you in only a few seconds that's one of the reasons why the tanks are kept sealed. When it is time to clean or inspect your tank, call only a firm that specializes in this type of work.
- get the tank pumped to remove the accumulated scum and sludge. Pumping intervals should be based on regular inspections (including measurement of scum and sludge levels in your tank). Generally every 2-4 years should be sufficient. Most septic tanks will last 30 years if well maintained. Regular pumping is cheaper than having to re-build a drain field.
- plant grass over the leaching field; it will help prevent erosion and absorb excess water.
- **DO** divert surface run-off water from roofs, patios, driveways, and other areas, away from the leaching field.
- conserve water to avoid overloading the system. Only run appliances such as washing machines and dishwashers when they are full and try to distribute loads over several days. Use low-flow showerheads and toilets. Put the plug in the drain when you start drawing your bath, not just after the water turns hot. Turn off the water while shaving or washing, and turn off your tap while brushing your teeth. Also restrict the amount of water you put into your system on rainy days, when the soil may already be saturated.

SEPTIC SYSTEM CARE - DON'T!

- **DON'T** use your toilet as a trash can. If you didn't eat it, don't flush it down. Also don't pour grease or fat down the drain.
- **DON'T** use more soap or detergents than needed. Reduce or eliminate the use of phosphate-based detergents, soaps and cleaners. The phosphorus in detergents doesn't break down in a septic system. When the phosphorous leaches into the ground and into nearby bodies of water, it can promote algae growth and can impair water quality and fish habitat.

Today's Anti-Bacterial soaps and cleaners are hard to digest and can kill the bacteria that are needed. Every time you shower, wash clothes or dishes, you send high concentrations of detergents into your septic or grey water system. Disinfectants, deodorant soaps, toilet bowl cleaners and even mouthwash kill the beneficial bacteria. Compounds such as detergents, hydrocarbons, sulphur and phenols are toxic to ordinary bacteria.

One of the most common pollutants of ground water is nitrate or NTA (nitrilotriacetic acid), the common alternative to phosphates in cleaning products and laundry soaps, and also found in fertilizers, animal excrement and human sewage. Nitrate is a fast-moving chemical with no taste, odour or colour. It can stop infants from breathing and is suspected of causing stomach cancer. It is referred to by experts as "the sleeping giant" of ground water pollution. Nitrate not only poisons the ground water but destroys the sewage-digesting bacteria in septic systems.

A wise choice is to convert your home or cottage to environmentally friendly household products.

- **DON'T** use garburators this will reduce the amount of solids and grease you put into the system.
- **DON'T** poison your septic system and the groundwater by pouring harmful chemicals and cleaners, such as chlorine bleach, toilet bowl cleaners, borax and drain openers, down the drain. Consider replacing them with eco-friendly products.
- **DON'T** drive over or park cars, trucks, or heavy equipment on the tile bed. This compresses the soil and restricts its absorption capabilities. The extra weight may also crush the pipes.
- **DON'T** plant trees or shrubbery in or near the tile bed because the roots will grow into the lines and plug them. Planting a vegetable garden over a septic bed is both unwise and unhealthy. Much of the raw sewage still has not finished bio-degrading and your lettuce may soak it up. Guess what's coming to dinner?
- **DON'T** pave the tile bed with concrete or asphalt.
- **DON'T** drain your water softener backwashes into the septic tank. Use a class-2 leaching pit (dry well) or the sump hole in your basement.
- **DON'T** add "starters" or 'conditioners"; some will interfere with normal operations; others (particularly degreasers) contain cancer-causing substances that could contaminate the groundwater.
- **DON'T** overload your septic system when holding large parties or family gatherings. Consider renting a "go-hut" for this type of occasion. If each person uses the facilities 3+ times during the party well, you do the math!!!

SEPTIC SYSTEM CARE - NEVER!

NEVER flush these items into the tank (they cannot be broken down by bacteria or will destroy the bacterial action):

- loose hair
- cigarette butts
- coffee grounds
- fat, grease, or oil
- dental floss
- paper towels
- kleenex
- disposable diapers
- sanitary napkins, tampons or condoms
- kitty litter
- gauze bandages

NEVER flush chemicals into the tank (they could contaminate surface and groundwater):

- paints
- varnishes
- thinners
- waste oils
- photographic solutions
- pesticides or herbicides

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