Property Services information sheet - number 1 –

Septic tanks

October 2007 – rev 1

A number of parsonage houses have septic tanks and we have been requested by their occupants for guidance on what this means and how should they look after their septic tank drainage?

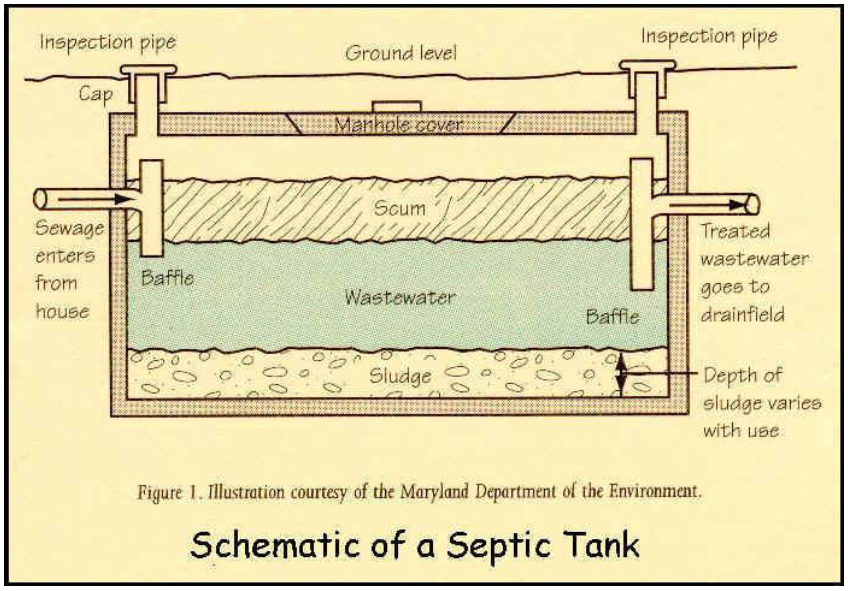
This guidance note does not apply to anyone with mains drainage. It also does not apply to anyone with a cess pit (a sealed pit collecting waste water-but I hope we don't have any of those!) You can normally tell if you are on mains drainage by your water bill – that will show a charge for waste water; and you can probably follow a line of manholes on your property out onto the road where there is another line of manholes.

Proper maintenance of your septic system will maximize your system's life. It will prevent failures that can be unsightly, foul-smelling, and threatening to your family's health, and may save costly repairs or system replacement.

How does your Septic tank system work?

A septic system has two major components: a septic tank and a drainfield or land drain system.

Waste water flows from the house toilets, kitchen sink and other foul drainage to the septic tank. The tank should not normally receive large quantities of rainwater / surface water drainage which should be carried to a suitable soakaway. The tank is designed to retain waste water and allow heavy solids to settle to the bottom. These solids are partially decomposed by bacteria to form **sludge**. Grease and light particles float, forming a layer of **scum** on top of the waste water. Baffles installed at the inlet and outlet of the tank to help prevent scum and solids from escaping. Newer septic tanks can have a partial concrete or plastic dividing wall in the center, thus making two compartments. This helps ensure the sludge does not get forced out of the baffle into the drainfield / land drain system. Newer tanks can also have two manhole covers, one above each baffle.



Treated waste water is discharged to a drainfield / land drain system / soakaway. The land drain system is normally a system of perforated pipes buried under the ground allowing the waste water to seep gradually into the soil.

Where is my septic tank?

Locating the components of your system can be difficult. The Diocese does not often have accurate plans describing the details of the system. In most circumstances your drain pipe leaving the house will point you in the direction of the septic tank. A search in this area may reveal the septic tank manhole covers or vents and shallow depressions marking the trenches. Tanks are not usually marked. In winter months, the septic tank is usually the last place frost forms. If you can identify the location of the tank and any access points (manholes) this will be very useful in its future maintenance and your assistance would be appreciated in identifying your tanks location and keeping covers clear of vegitation.

How do I look after my tank?

- Over loading systems is the primary cause of system failure. Spreading water use will improve the systems function e.g. early morning and bedtime are peak water use times in the bathroom and using dishwashers and washing machines at other times of the day or spreading washing machine use over the week allows the land drain system to gradually spread the waste water. **The less wastewater you produce, the less the soil will have to absorb. Water conservation is the cheapest and easiest way to protect your septic system, not to mention being very environmentally friendly.**
- Do not dump coffee grounds, scraps of food or other solid waste in the sink. Increasing the load of solids into the tank decreases the capacity.
- Do not pour fats and oils down the drain. They can build up and clog the septic tank pipes.

- Put paper towels, tissue, cigarette butts, disposable nappies, wet wipes, sanitary towels, tampons, tissue paper (Kleenex), cat litter (especially bad!), paper towels and other material in a bin, not the toilet. There are not many toilet papers on the market, if any, that can't safely be used in a septic system. Toilet paper breaks down very easily and quickly, however, other materials listed do NOT break down easily, and should never be flushed down a toilet.
- Normal amounts of detergents, bleaches, drain cleaners, household cleaners and other products should not affect your system. Avoid dumping solvents like paint, dry cleaning fluid, pesticides, poisons, medicine, chemicals, paint thinner, oils or car cleaning products down the drain. Selecting biodegradable washing products will help your system as will using products that will not effect the natural bactria in your tank.
- Dense grass cover and other shallow rooted plants are beneficial over a septic field. However, do not plant trees because large plant roots can clog or break the pipes.

What are the signs of trouble?

- A wet area or standing water above the land drain system could indicate that water use in the house regularly exceeds the design capacity, or that the system is failing. Indications of problems include toilets running slowly, backing up or odors. If the system is operating properly, there should be little or no odor.

Does the tank need emptying?

- Septic tanks do need emptying from time to time (from once every year to once every 30+ years) to remove crusts of scum and sludge in the system. The frequency of emptying depends on the number of people using the tank and the size and type of tank installed. The Diocesan Surveyor will assess the condition of the tank at quinquennial inspections and instruct emptying of the tank where required.

Tank size	Household Size (number of people)					
(Gals)	**1**	**2**	**3**	**4**	**5**	**6**
500	5.8	2.6	1.3	1.0	0.7	0.4
750	9.1	4.2	2.6	1.8	1.3	1.0
900	11.0	5.2	3.3	2.3	1.7	1.3
1000	12.4	5.9	3.7	2.6	2.0	1.3
1250	15.6	7.5	4.8	3.4	2.6	2.0
1500	18.9	9.1	5.9	4.2	3.3	2.6
1750	22.1	10.7	6.9	5.0	3.9	3.1
2000	25.4	12.4	8.0	5.9	4.5	3.7
2250	28.6	14.0	9.1	6.7	5.2	4.2
2500	31.9	15.6	10.2	7.5	5.9	4.8