

# Septic Tanks

**Save money & save the environment – pump out every 3-5 years!!**

**How it works:**

## **The Septic System**

In urban and suburban areas, there are sewers to carry household waste to municipal wastewater treatment plants. But in rural areas, the functions of sewers and treatment plants are fulfilled by each residence's own septic tank system.

All household drainage waste is disposed of through the septic system. The quantity and composition of waste generated in the home varies according to the number of residents, their personal water usage and the water-using appliances in the home.



## **Home Waste Percentages**

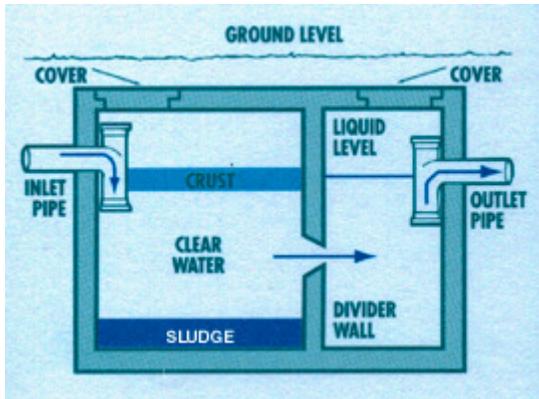
Your septic system is actually a small, on-site sewage treatment and disposal system buried in the ground. The system comprises two parts: The septic tank and the soil absorption area.

## **The Septic Tank**

The modern septic tank is a watertight box divided into two compartments and usually made of pre-cast concrete, concrete blocks or plastic. When household waste drains into the box, several things take place.

- Organic solid material floats to the surface and forms a layer called the "crust". Bacteria in the septic tank biologically convert this material to liquid.
- Inorganic or inert solid materials and the by-products of the bacterial digestion sink to the bottom of the tank and form a layer called "sludge".

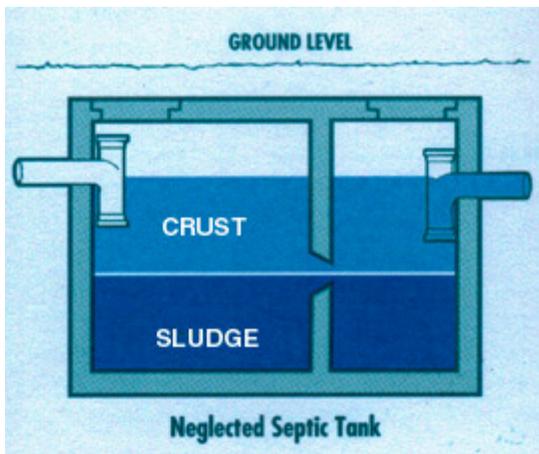
- Only fairly clear water should exist between the crust and sludge layers. This clear water - and only this clear water - should overflow into the second compartment and then out to the soil absorption area.



## Septic Tank Bacteria

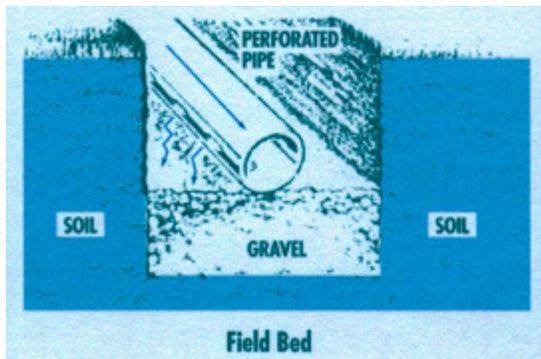
Working Septic Tank Bacteria must be present in the septic tank to digest the organic solids. Normal household waste provides enough bacteria to keep the digestive process working properly. A faulty system is the result of solid material overflowing into the second compartment. It is the solids overflow that clogs soil pores and causes septic systems to fail. Two main factors cause solid material to build up to the point of overflow:

- Bacterial Deficiency
- Lack of Pumping



## Septic System Soil Absorption Area

Septic field beds generally consist of a network of perforated pipes running through layers of sand and crushed stone. They may be constructed above or below ground. If solids are allowed to clog the pipe perforations or the sand, drainage will begin to slow and eventually stop.



## Septic System Maintenance

Septic system maintenance means two simple things. First, sludge that accumulates in the bottom of the tank must be pumped out at regular intervals. How frequently your tank must be pumped depends on the size of the tank, the use it gets and the condition of the system. Every 3 – 5 years is recommended. There is no additive you can put in the tank to get rid of the sludge.

### A Septic System Must Be Pumped Out

If the sludge in your system is not removed, it will eventually overflow into the second compartment. This will clog the system and it will need to be replaced, at enormous expense and inconvenience.

The second part of septic system maintenance involves the bacteria necessary for solids digestion. If bacteria-killing products - such as bleach, disinfectants, drain openers, detergents, etc. - are used in the home, the bacteria must be replenished, in order to avoid the disastrous build-up and overflow of solids.

Your septic tank could be overflowing solid material into the soil right now, and you won't know until it blocks the soil so badly that no more drainage is possible. This blockage takes varying periods of time depending on soil structure. But these are the facts: a neglected system will get blocked; it will overflow; it will have an obnoxious odour; it will contaminate and pollute the surrounding area. It will probably have to be replaced. The first septic system emergency usually marks the beginning of the end.

**Don't Neglect Your Septic System**