

# So Now ... You Own a Septic Tank



New Brunswick  
CANADA  
Health and Wellness

## How It Works

One of the major differences between owning an urban or suburban home and owning a rural home is that in a rural home you must become more self-sufficient and self-reliant. Waste disposal - trash, sewage, and wastewater - is one of the primary concerns of a rural home owner.

The most common way to dispose of sewage and wastewater in rural homes is through the use of a septic tank.

A septic tank system contains two major components, the septic tank and the disposal field (see Figure 1). The septic tank is usually made of concrete, fiberglass or plastic. Therefore it is resistant to corrosion and decay.

While typically designed to hold 2,275 litres (500 gallons) of liquid, the size of the tank varies depending upon the number of bedrooms in the home. The purpose of the septic tank is to separate the solids from the liquids. The solids, which settle as sludge on the bottom of the tank, and the scum, which floats to the top, remain in the tank and must be pumped out periodically (see figure 2).

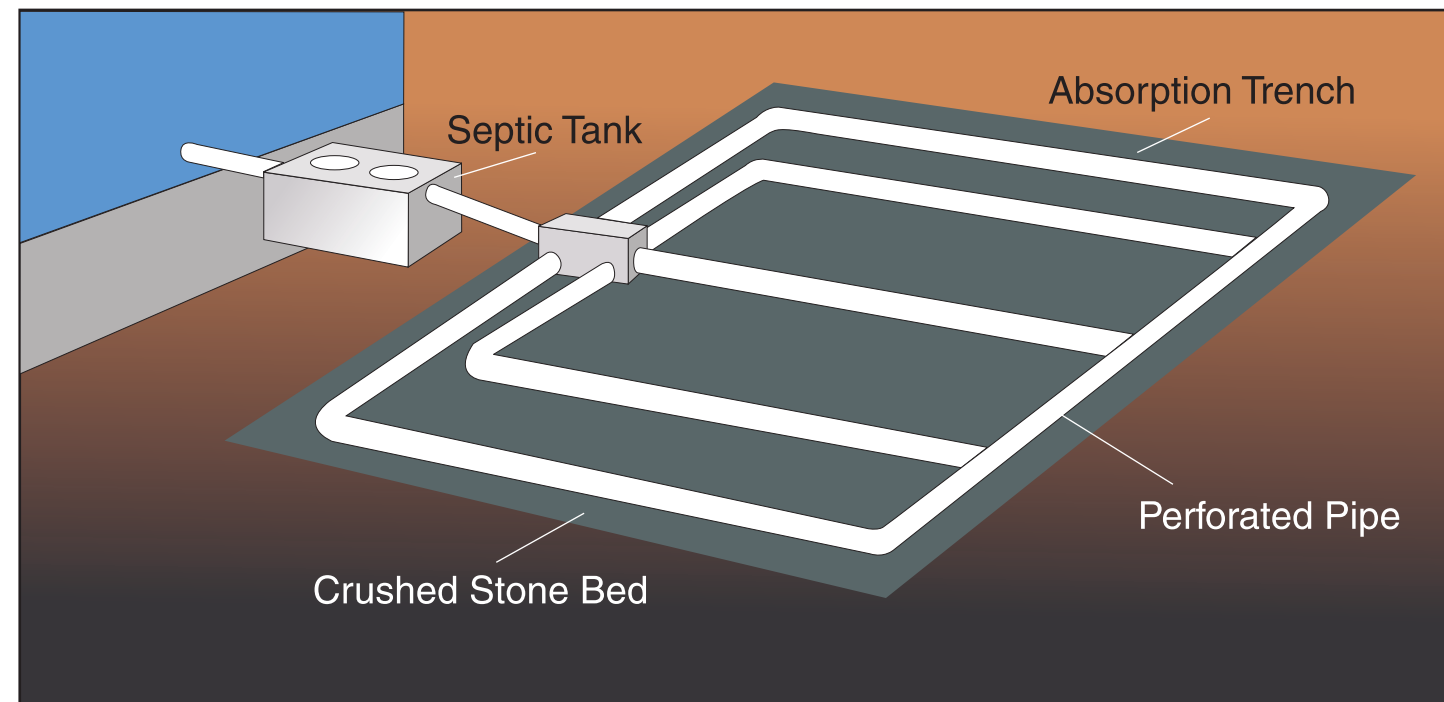


Figure 1

The wastewater is passed on to the disposal field through a connecting pipe. The disposal field is a series of underground perforated pipes which may have tied ends as indicated in Figure 1.

The perforated pipes ensure that the wastewater can reach the entire disposal field. The disposal field treats the wastewater through an aerobic digestion process and filters out the remaining impurities (germs and chemicals) before the wastewater returns to the groundwater system (see Figure 3).

Sewage effluent coming out of the septic tank is a cloudy liquid that still contains many disease-causing germs and pollutants. When this water flows into the perforated pipe in the disposal field, the sewage effluent exits through the holes in the pipe and trickles through the gravel where it is stored until it is absorbed by the soil. In some systems, subsurface chambers store the effluent. As the effluent enters and flows through the unsaturated soil, many of the bacteria that can cause diseases are filtered out. Some of the other smaller germs, such as viruses, are trapped and held by the soil molecules (absorbed) until they die. The soil can also retain certain nutrients such as phosphorus and some forms of nitrogen.

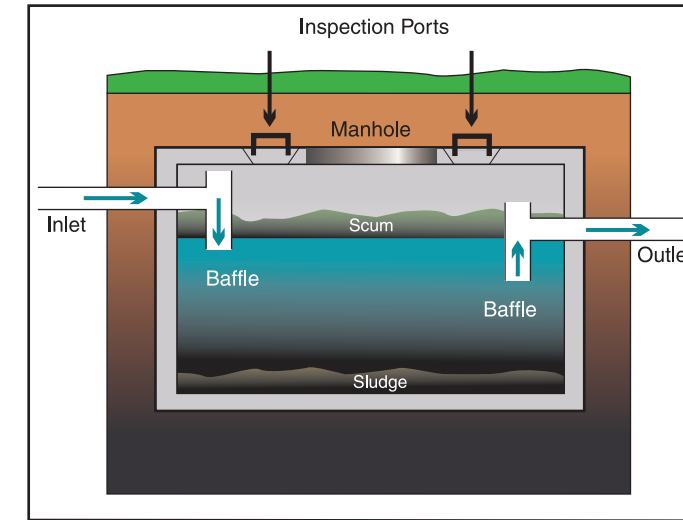


Figure 2

## What To Put In - What To Keep Out

Put all of the wastewaters from the home into the septic tank. This includes all sinks, bath, shower, washing machine and dishwasher wastewaters, in addition to the toilet flushings. Any of these waters can contain disease-causing germs or environmental pollutants. Direct roof drains, basement sump pump drains and other rain water or surface water drainage systems away from the disposal field. Flooding of the disposal field with excessive water will keep the soil from naturally cleansing the wastewater, leading to groundwater pollution.

Do not use caustic drain openers for a clogged drain. Instead use boiling water or a drain snake to free up clogs. Clean your toilet, sinks, shower and tubs with a mild detergent or baking soda rather than the stronger and potentially system-damaging commercial bathroom cleaners.

Never use your septic tank system as a trash can. Be especially sure to avoid putting disposable diapers, anything plastic, latex paint, pesticides, solvents, oven cleaners, degreasers, hazardous chemicals or excessive amounts of grease into your system.

## Summary

In summary, care should be taken not to dispose of items into the system that will destroy the natural digestion process, or over-tax the drain field with excessive water. Regularly pump out (every 2-3 years) the sludge in the septic tank. If you adhere to these few simple rules, then your septic tank system will prove to be a safe and economical on-site method for disposing of your rural home wastewater.

For further information please contact your local Public Health Inspection office.

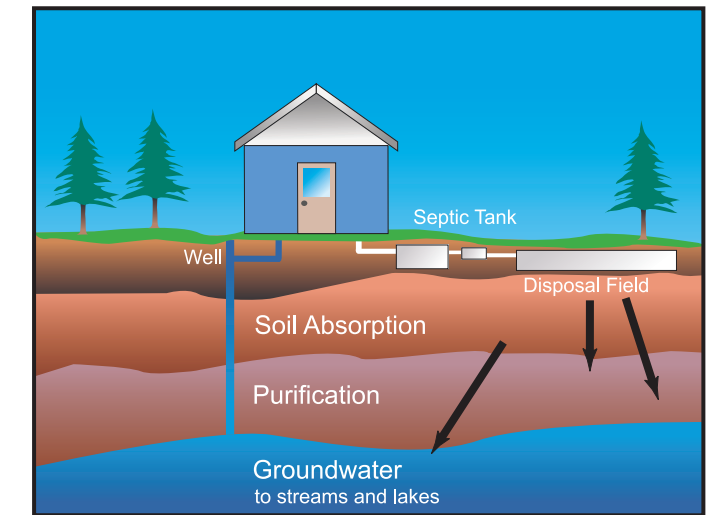


Figure 3

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