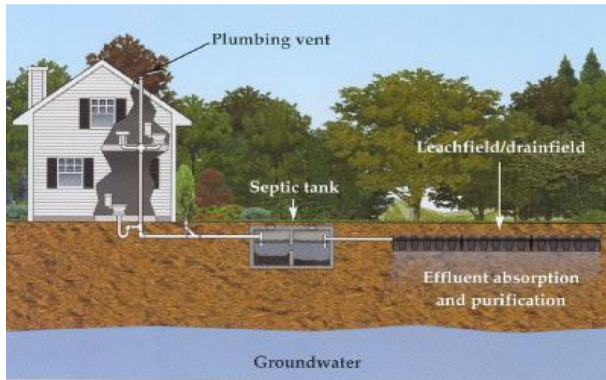


## Your septic system



You, like many other people living in rural areas of Ontario, are the owner and caretaker of an important wastewater treatment system. A septic system takes household waste from the bathroom, kitchen, and laundry room and breaks down the waste before discharging clarified water back to the groundwater. However, a neglected system can have serious consequences for the environment and public health. Aside from the environmental and health issues that arise from a troubled septic system, repairs or a full replacement can be costly.

### Common septic system problems

- Toilets and drains are backed-up or run more slowly than usual
- Sewage odours in the house or outside
- Sogginess or sewage ponding in the ground around the septic tank or leaching bed
- Unusually green or thick grass growing in or around the leaching bed area
- High levels of bacteria, nitrates or other contaminants in well water

***If you think you have a problem with your septic system, act quickly!***

Contact a licensed contractor from the yellow pages for a visit.

If the problems are persistent, contact the Grey Bruce Health Unit at 1-800-263-3456 before any repairs are started. Quickly repairing a septic system can reduce the risk of environmental contamination and risks to public health.



***Never attempt to inspect the tank yourself! Tanks contain deadly gases so leave it to a professional.***

## Make it legal

Under the Ontario Building Code, a septic system is considered a 'structure'. It's important that you obtain a sewage system permit from the local health unit for the following situations:

- When installing a new septic system.
- When altering or putting additions on an existing building (for example, adding more bedrooms)
- When corrective work or repairs are needed for an existing system.
- When updating an existing system.



### For more information

The Grey Bruce Health Unit (1-800-263-3456) is the local authority responsible for septic system inspections and approvals. Information on septic systems can be found on the Health Unit website: [www.publichealthgreybruce.on.ca/sewage](http://www.publichealthgreybruce.on.ca/sewage)

#### Other Septic System Information Sources:

- Ontario Ministry of Municipal Affairs and Housing
- Ontario Ministry of the Environment
- Ontario Ministry of Agriculture, Food and Rural Affairs
- Ontario Rural Wastewater Centre
- Canadian Mortgage and Housing Corporation
- Ontario Onsite Wastewater Association
- Ontario Association of Sewage Industry Services

For more information on the  
Township of Huron-Kinloss  
Community Septic Inspection (HK-CSI) program  
contact the Township office 519-395-3735

Monday – Friday  
8:30 am – 4:30 pm

Email: [cbo@huronkinloss.com](mailto:cbo@huronkinloss.com)  
Website: [www.huronkinloss.com](http://www.huronkinloss.com)



# Septic Systems

**Love the tank you're with.**

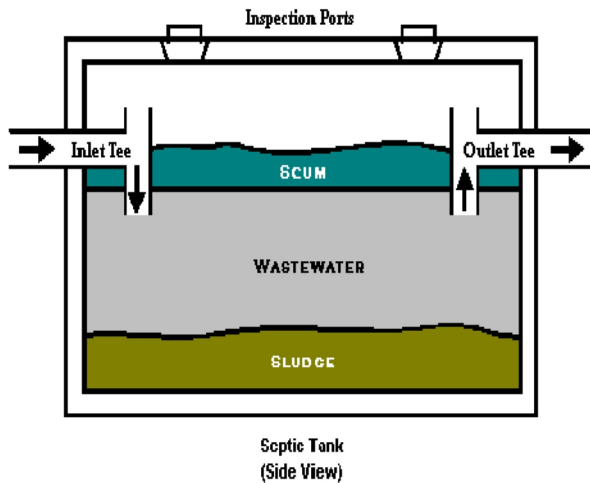


## Just what is a septic system?

A typical septic system consists of two main components buried underground. They are the septic tank and the leaching bed (also known as a drain field or weeping bed) which work together to breakdown household wastewater.

### How your septic system works for you.

Household wastewater enters the septic tank through an 'inlet tee'. The septic tank holds household waste long enough for the liquid and solids to separate. The solids settle to the bottom of the tank, forming the 'sludge layer' while grease and oils float to the top forming the 'scum layer'. Baffles inside the tank keep the scum layer from escaping the tank and flowing out into the leaching bed.



The middle layer is the partly clarified wastewater. An 'outlet tee' allows only the partially treated wastewater out of the septic tank. The sludge and scum that remain in the tank are acted upon by naturally occurring bacteria. These bacteria work in the oxygen-poor (anaerobic) conditions of the tank and slowly decompose the solid waste. While bacteria does reduce the volume of solid waste in the tank, they cannot break down all the sludge, hence the need for pumping the tank. The built up scum and sludge layers are removed when the tank is pumped.

The partially clarified water from the septic tank enters the next component of the septic system: the leaching bed, which is made up of a network of perforated drain pipes. The final stages of waste-water treatment occur in the leaching bed.

Pushed by gravity, the wastewater enters the perforated pipes. Slowly, the wastewater percolates down from the pipes and into the soil. The wastewater is filtered by both the organisms that live in the soil and the soil itself. The soil particles can adsorb nutrients, metals and even organisms to their surfaces. Organisms in the soil also filter out toxins, bacteria and other substances from the wastewater. As the wastewater continues to move down through the soil, pollutants are removed from the water, until the water is treated to an acceptable level. Eventually, the treated water returns to the groundwater system.



## Maintaining a septic system

Improper maintenance can cause failure of the septic system which can be very costly to repair or replace. **A failed septic system can contaminate wells, groundwater and other drinking water sources.**

### Practice water conservation

- Install low-flow toilets or fill a plastic bottle with water and put it in the tank. 45% of the water used by one person in a day is from toilet flushing.
- Install high efficiency shower heads and faucet aerators to reduce water use.
- Only run the dishwasher and washing machine when full.



### Septic Tank

- Additives are not needed to aid or accelerate the decomposition of septic tank water. Currently, there is no evidence which supports the effectiveness of enzymes or any chemical treatment which rejuvenates a failing leaching bed or eliminates the need to pump the tank.
- Septic tanks require pumping when a third of the tank is full of scum and sludge.
- Hire a licensed contractor to pump out your septic tank every 3-5 years, depending on your level of use.

### Leaching bed

- Make sure the leaching bed area is covered with grass.
- Ensure roof drains and surface water drain away from the tank and leaching bed areas.
- Don't plant deep rooted vegetation on or around the tank or leaching bed.
- Reduce watering grass over the leaching bed.
- Don't drive vehicles (including ATVs and snowmobiles) over the tank or leaching bed.

## New Septic System Technologies

More and more companies are developing innovative ways to improve septic systems and to extend their life span. Some of these technologies include:

- Adding parts, such as filters, to stop grease and solids from entering the leaching bed.
- Risers to make tank access easier.



Tank Filter



Tank Riser

*Images courtesy Polylok*

## Separation Distances

The following diagram illustrates the required provincial minimum separation distances for septic systems:

