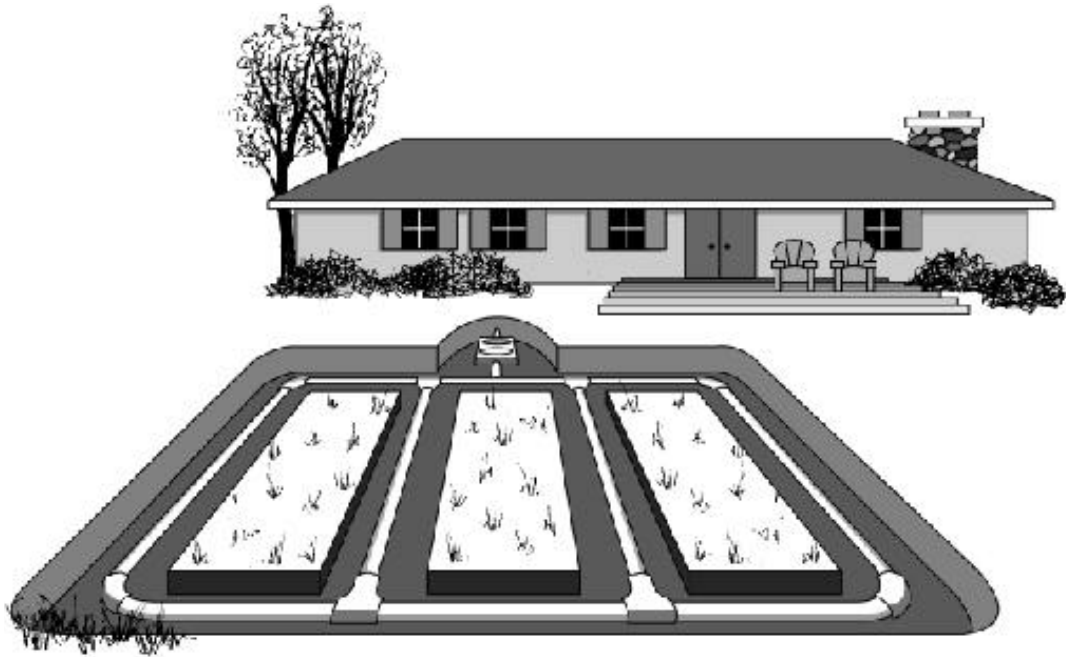
a New Homeowner's Guide to Septic Systems



ONTARIO NEW HOME WARRANTY PROGRAM

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Welcome to the Country

People who live in towns and cities don't often think about what happens to household waste water after they run their washing machines, flush their toilets or pull the plugs in their sinks. Once it has entered the sanitary sewer in the street, waste water is the municipality's problem.

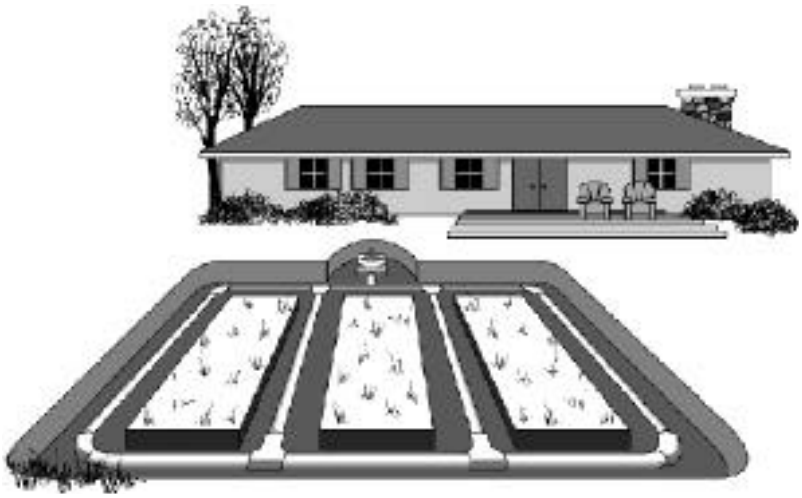
But in more rural areas, many homeowners are not connected to municipal services.They provide their own waste water treatment services right on their own lots, using a septic system.

The septic system depends on nature's own waste treatment processes: gravity separates solids and liquids; soils filter the waste water by absorbing contaminants; bacteria break down biodegradable materials.Grass roots also play a role by taking up liquid, using nutrients and giving off water. In fact, a septic system is like a small underground ecosystem.

Like any ecosystem, it has limits. If it gets drowned with too much water -- or if it gets clogged up because of misuse or poor maintenance -- or if it is poisoned with contaminants it is not designed to handle -- a septic system can present a serious health threat to homeowners and their neighbours. Waste, including nitrates, bacteria and phosphates can contaminate the underground water used for household wells or municipal water supplies. It can enter lakes and streams, or bubble up on the ground surface. But a properly designed, operated and maintained system can function very effectively for a long time.

Technical Terms

This Guide has tried to avoid scientific jargon wherever possible, but if you're discussing septic systems you may hear a lot - or find that common words have slightly different meanings in their scientific use. On pages 18 to 19, you will find a glossary explaining technical terms associated with septic systems.



People Do The Darndest Things

Here are a few examples of how homeowners have caused problems for their septic systems. None is covered by the warranty.

"That large, flat piece of land was just sitting there, so we ...

... built a driveway (patio, deck, tennis court) over it."

Just covering the grass over the leaching bed will stop evapotranspiration and keep out the oxygen the system requires. Any weight can crush the pipes, and make the leaching bed useless.

... used it for our above-ground pool."

The weight of an above-ground pool will almost certainly crush the leaching bed.

... used it for our in-ground pool."

Don't laugh. It really happened. They got the whole thing excavated, and then somebody flushed the toilet.

... flooded it so the kids could have a skating rink."

Leaching beds are carefully built to accept water -- even if it comes from a hose sprayed in the middle of winter. This family managed to freeze their entire leaching bed solid, and ended up with water backing up into the house.

... rototilled it for a vegetable garden."

Pipes can be as little as 375 mm below the ground surface. They can easily get damaged. Besides, vegetables don't protect the soil from erosion like grass does.

... made it look pretty with trees and nice landscaping."

Perforated pipes don't stand a chance against roots from trees and shrubs. They get clogged or crushed. Either way, the septic system doesn't work properly.

"That huge mound was really ugly, so we …

… brought the rest of the ground up to match."

Often, the reason the builder installed a raised bed is because the site is clay. If owners fill in around the bed with more of that clay soil, they end up making a sort of large, almost impervious bathtub. Sooner or later, it will fill up. If they also put a layer of clay soil over top, it can fail within months.The only material that should be used to level the grade is good sand.

… cut it off and built a nice-looking retaining wall."

This family didn't understand that the whole mantle area is used for filtering waste water. When they cut it off, the liquid (which wasn't completely filtered yet) seeped out through that pretty wall instead.

"Nobody ever told me I couldn't …

… drain the downspouts, sump pump, etc. down the septic system."

This is a common problem,which can make the actual water flow through the system many times the estimated design flow. It will drown the bed.

… water the lawn over the leaching bed area."

There have even been cases where people installed automatic lawn sprinklers over the leaching bed area,and refused to turn them off.Again, this will drown the bed.

… start a daycare centre, add an apartment in the basement, etc."

Anything that increases the house water use - and both of these certainly did - can overload the septic system.

… fill in those ugly ditches."

"Swales" are used to direct rain water and melting snow away from the leaching bed. Filling them in changes all that carefully-thought-out drainage pattern.

If you're planning an addition that adds more than 15 per cent to your home's floor area, increases the number of bedrooms, or increases the number of plumbing fixtures, you may need to enlarge your septic system.Always call your municipal building department and your builder before you do any renovations, additions, changes in use or major landscaping. Ask whether your plans will affect your septic system.

Ontario New Home Warranty Program and Septic Systems

What's covered?

The Ontario New Home Warranty Program (ONHWP) covers septic systems when they are provided by a builder as part of a new home capable of year-round use. Coverage includes repairs due to workmanship and materials for a period of one year, and repairs due to major structural defects for a period of seven years, to a maximum of $25,000. However, there are several major limitations.

What's NOT covered?

Inadequate maintenance

Understanding the proper operation and maintenance of your new home's septic system is very important. To be protected under Ontario's New Home Warranty plan, homeowners must maintain their homes and systems properly; problems arising from homeowner negligence, misuse or inadequate maintenance are not covered.

Cotta ges

Seasonal homes and the septic systems connected to them are not covered under the warranty plan.

Homeowners' own systems

Where the homeowner or buyer contracts directly with an installer to provide the septic system for a new home, that system is not covered under the warranty plan. Neither the home builder nor the Ontario New Home Warranty Program take any responsibility for it.

Communal Systems

In some areas, a number of homes share a single large septic system which is built by the developer and then owned by the municipality. The builder and warranty program provide coverage to the homeowner only for those portions of the system actually located on the homeowner's lot, and not on the facilities owned by the municipality.

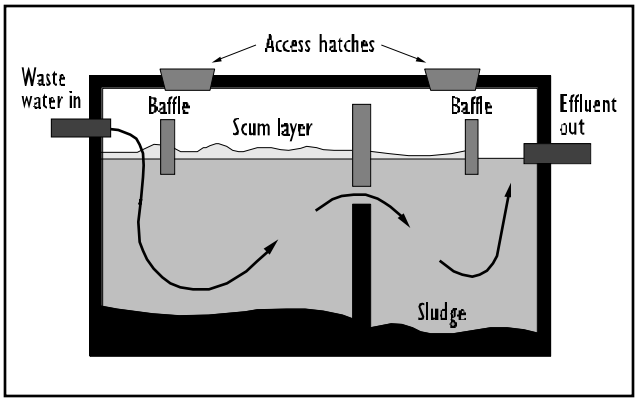
How Does a Septic System Work?

A traditional septic system has three main components:

Septic tank:

- a large concrete, fibreglass, heavy plastic or coated steel tank divided into two compartments, with access ports at the top for inspection and service
- uses time and gravity to separate wastes into three layers:
  i) heavy materials, which settle to the bottom where they are broken down into sludge by naturally occurring bacteria
  ii) light soaps, greases, fats and similar materials, which rise to the top as a layer of scum, and
  iii) liquids with some suspended solids

Septic tank



- whenever waste water from sinks, appliances and toilets comes out of the house into the first compartment, it pushes an equal amount of liquid from that first compartment into the second one -- which then forces the same amount of liquid out of the second chamber and into the pipes leading to the leaching bed
- if the tank is properly operated and pumped out regularly, only the liquid component leaves the tank as "effluent"
  i) the sludge should remain well below the outlets
  ii) baffle walls or pipes stop the scum from going out into the bed
  iii) some installations include filters at the outlet pipe (recommended)

Distribution system:

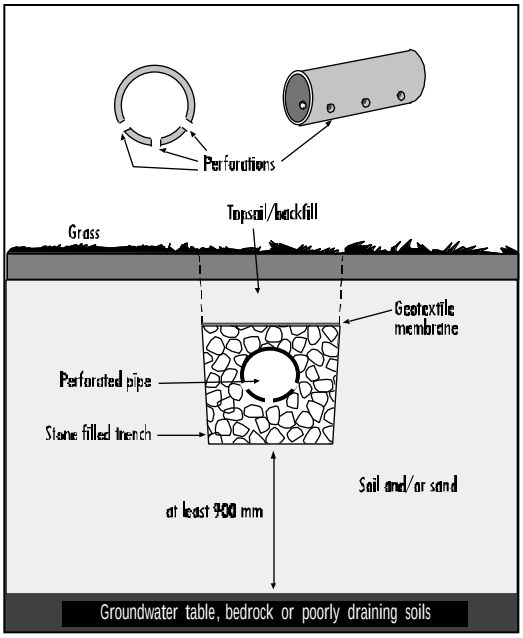
- a system of pipes leading from the septic tank to the leaching bed
- may include a distribution chamber to direct waste water evenly to different parts of the leaching bed
- traditional systems use gravity, but some sites use pumps to move water uphill from the septic tank
- larger systems use pumps to distribute the waste water over the leaching bed area

How Does a Septic System Work?

Leaching bed

- typical bed is an arrangement of connected pipes with holes along the sides and bottom, surrounded by stone/gravel and properly draining soil or other filtering material
- liquid leaving the septic tank travels down the pipe, seeping through holes into the gravel and soil filtering materials
- in the stone layer, oxygen-using bacteria break down “waste particles”
- below the stone, natural organisms form a "biomat"
- in the soil filter - an extremely important component of the septic system - chemical, physical and bacteriological reactions remove remaining solids and bacteria before the fully treated water meets the underground water table
- soil filtering materials must allow the waste water to drain away slowly enough that contaminants are filtered out, but also quickly enough that the bed doesn’t fill up in most instances

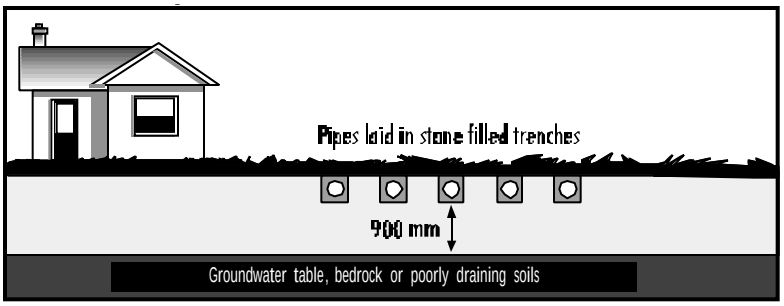
Cross section of typical trench in conventional leaching bed



- some waste water in the soil gets taken up by grass roots - nutrients are used and water is released through a process known as evapotranspiration

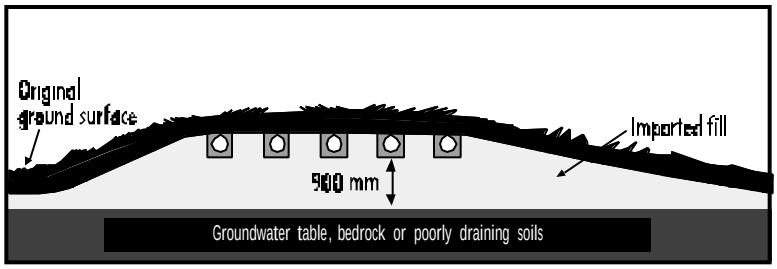
Types of leaching beds include:

Conventional bed



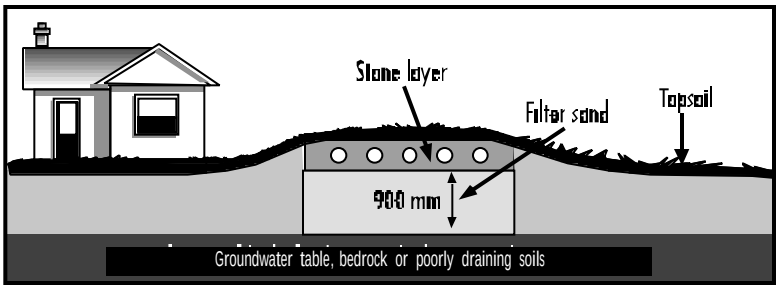
- most common type
- used where the natural soils are suitable filter materials and the ground is well drained
- leaching bed pipes are laid in stone-filled trenches below normal ground level

Raised bed:



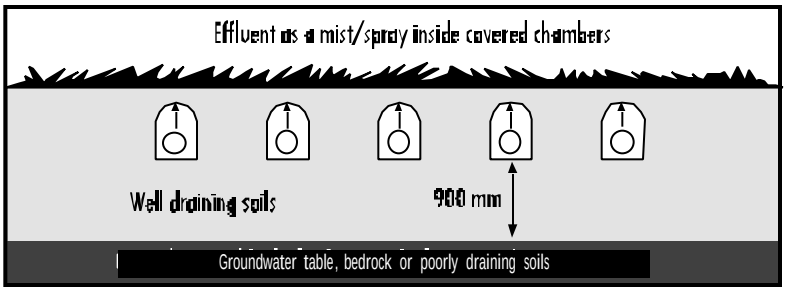
- second most common type
- used where natural soils are not suitable filter materials, or the site has a high water table, or bedrock is close to the surface
- appropriate soil is brought in to the site to create a leaching bed that is high enough above the underground water table or bedrock
- pipes are laid in stone filled trenches in the imported soils
- requires a large extra area of appropriate soils "downstream" from the bed (in the direction the waste water will flow as it seeps through the soil);called the "mantle", this is an important part of the soil filter

Filter bed:



- used where a smaller bed area is required due to site conditions or lot size
- instead of trenches, the whole bed area is excavated and filled with a layer of "filter" sand which must meet specific requirements for grain size
- a layer of stone is placed on top of the sand, and pipes are laid into it
- pipes can be laid closer together
- can be installed in-ground, partially raised or fully raised
- may also use a mantle.

Shallow buried trenches:



- used where a smaller bed area is required
- currently allowed only in Lambton and Essex counties and in Chatham-Kent County
- can only be used with a “tertiary treatment” unit, which provides more treatment than a traditional septic tank
- filtered waste water is pumped under pressure through perforated pipes; it gets sprayed into specially designed pipe chambers,to spread the waste water evenly over the trenches
- requires additional maintenance, plus annual inspection and testing

Alternative Systems

Other types of treatment units are available. Some are designed to take the place of traditional septic tanks. Some provide an additional treatment step between the septic tank and the leaching bed. They are designed to greatly reduce the need for large leaching beds.

Some alternative systems use compressors or motors to bubble air through the waste water. Others use highly efficient filtering materials (peat moss and synthetic foam are the basis of two of the newer systems).Lots of individuals and companies are working on other improvements. A call to the local Building Department or the provincial Buildings Branch (416) 585-6666 can identify what systems can be accepted for use in Ontario. Or, you can check the Branch web site at www.obc.mmah.gov.on.ca

If one of these alternative systems is used, the manufacturer must provide a complete description and instructions for operation, servicing and maintenance.

Communal Systems

This booklet focusses on individual,on-site septic systems designed for use with a single family house. Some projects are built with shared systems, where waste water from each house is piped to a larger central treatment unit.These shared or “communal”septic systems operate on similar principles to individual systems. Recommendations for daily use in this booklet will apply. In addition, homeowners should receive instructions on the use and maintenance of their portion of the communal system when they take possession of their new homes.

Licensing, Approvals and Inspection

Authorities:

- The Ontario Building Code (OBC) regulates design, construction, operation and maintenance of on-site septic systems for most single family homes;the Ontario Ministry of the Environment regulates larger systems, and those where waste water is treated off site, such as communal systems.
- In most areas, the local municipality's Building Department examines plans,issues permits and does inspections for systems regulated under the OBC. In some areas, this approval responsibility has been delegated to regional Conservation Authorities or local Health Units. The municipal Building Department will be able to redirect inquiries.
- In a few locations, the Ontario New Home Warranty Program (ONHWP) requires septic systems to be designed, reviewed and certified by a qualified professional. Details are available from any ONHWP office.

Permits:

- Systems under the OBC need a building permit.
- The permit must be issued for the proposed septic system before its construction is started.(The system is typically constructed after the main work on the house, so it doesn't get crushed by heavy equipment.)
- Site evaluation reports and maps,design calculations and drawings usually accompany the permit application.
- A copy of the permit and drawings should be on site to verify that the system is installed properly.

Inspections:

- Most local authorities inspect septic systems at three stages:
  i) before construction begins
  ii) before the finished leaching bed is covered over with backfill
  iii)on completion
- A final inspection report must be issued and the septic system must be fully operational if people will move in before the house is fully completed.
- Some Building Departments issue a "Readiness for Occupancy"certificate for the house, which will include the septic system.

Operation and maintenance:

- The OBC states that systems must be operated in accordance with the original design standards and manufacturers'specifications, including regular pumping of the septic tank.
- Some systems require additional servicing and testing.
- No breakout to the ground surface or leaching to underground or surface water is allowed.Inspectors can order malfunctioning systems closed or repaired.

Installers:

- Anyone in the business of installing, repairing, emptying, cleaning or servicing septic systems must be licensed by the Ontario Ministry of Municipal Affairs and Housing. Licensed installers must have qualified personnel supervising all projects.Supervisors must pass exams to become qualified.
- Pumpers are licensed by the Ministry of the Environment.

Homeowners should make sure they receive copies of the site evaluation, sewage system permit (including map showing location of the septic tank and leaching bed on their lot), final inspection and approval for use reports.

Who Checks Out the Site?

Before applying for a sewage system building permit, the property owner is responsible for getting an evaluation of the site conditions. (For a new home project, the property owner is often the builder.) The site evaluation is used to identify any problems with regard to lot size and/or layout of the septic system, and whether a standard leaching bed can be installed.This includes:

- Digging a test pit in the proposed leaching bed site to find out:
  i) how high the underground water table reaches (usually highest in the spring)
  ii) the location of impermeable materials such as dense soil or bedrock
  iii)qualities of local soils, and whether they are suitable filter material; this may include additional tests

- Preparing a scaled map, showing:
  i) property lines, easements, utility corridors, etc.
  ii) location of existing and proposed buildings,driveways, wells,swimming pools, lakes, streams, trees, etc.
  iii) location and elevation of house and elements of proposed septic system
  iv)areas where the soil is disturbed or unsuitable
  v) access route for tank maintenance

- Identifying how the site functions
  i) assessing the impact of land slopes, rock outcroppings,drainage and potential for flooding

The site evaluation and system design should be done by a qualified professional - either a certified septic system contractor or a qualified third party designer.

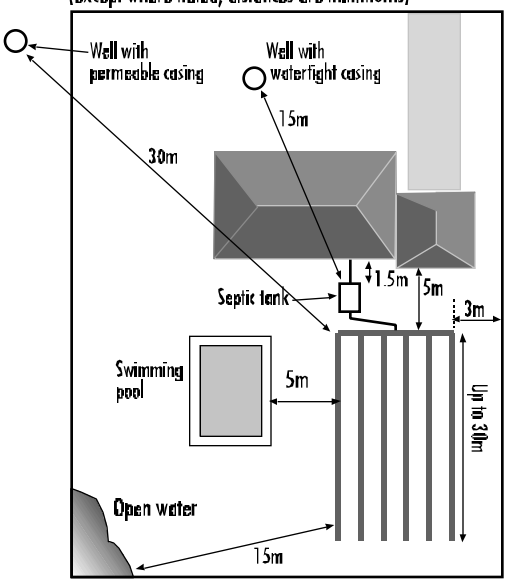
Choosing the Right Design

System design includes:

- Deciding what kind of system is required (conventional, raised bed, etc.) and whether any special conditions must be met.
- Calculating how large the septic tank must be and how many metres of perforated piping are required in the leaching bed
  i) the septic tank must be capable of handling twice the home's estimated daily sanitary sewage flow, or 3,600 litres,whichever is larger
  ii) design flow calculations are based on house size, number of bedrooms and number of sinks, tubs, toilets, dish/clothes washing machines and other water-using appliances
  iii) calculations also reflect the ability of the soil to absorb and filter waste water
- Locating the septic system according to the OBC's rules on minimum distances to the house, other structures,lots lines, wells and surface water.

Although it's not required by the OBC, some designers like to make sure there would be enough room on the lot for a new leaching bed if the first system should fail.Some municipalities also require this through their land use plans and zoning bylaws.

Site design
(except where nated, distances are minimums)



Doing Your Part

The septic system is designed to handle a reasonable volume of normal household waste water; it probably won't be able to handle the laundry, cooking, showering and a party of 40 guests in one day. Sending too much water through the system means everything moves too rapidly to get separated and broken down properly. If the leaching bed is already full of water, waste liquids may bubble up to its surface, or back up into the house.

No plastic, cardboard, grease or similar solids should go down the drains, as they can quickly clog the system. Chemicals and fuels should be totally avoided. The system does not remove them properly. In fact, they can kill the bacteria which break down contaminants, and if they reach local water supplies, they can become a serious health hazard.

The leaching bed only functions if pipes are not crushed or clogged. It needs protection against heavy weights and roots.

Daily Operation

Dispose of solids appropriately

- Never put cooking grease down the drains; in the septic system it can solidify and clog pipes. Grease should be put out with the regular garbage. In addition, a grease interceptor between the kitchen sink and the septic tank is often recommended.
- Do not put cigarette butts, paper towels, sanitary tampons, condoms, disposable diapers, anything plastic or similar non-biodegradables into a septic tank system. Dispose of them in the regular garbage.
- Avoid using a garburator to dispose of kitchen wastes. In-sink garbage disposal units can increase sludge accumulation by 40 per cent.

Conserve water

- Septic systems need time to work properly. It's best not to send unnecessary water through the system.
- Install water-saving toilets: units are available which use less than one third as much water as conventional toilets.
- Install water-saving shower heads and taps.
- Reduce water waste: run washing machines and dish washers only with full loads; don't let taps flow unnecessarily.
- Fix all leaking faucets immediately.

Spread water loading

- Instead of washing four loads of laundry in one day, do one or two loads a day.
- Don't use your washing machine and your dish washer at the same time.
- If you're expecting a large crowd,reduce water use for a few days before the guests arrive.

Divert other wastes

- Make sure roof drains are directed away from the leaching bed.
- Keep the lot graded so rainwater runs away from the leaching bed.
- If you plan to add a water softener, make sure your system can handle the extra water flow and brine from its backwash cycle.

Dispose of chemicals and fuels at appr oved waste sites

- Oil, gasoline, paint thinners, solvents, photographic chemicals, weed or insect killers, as well as some drugs, can poison your septic system and possibly threaten water supplies for your whole neighbourhood -- never put them down your drains.

Use environmentally friendly cleaning products

- Avoid caustic drain openers and cleaners.
- Avoid detergents that are high in phosphorus.

Protect the leaching bed

- Don't allow vehicles to drive over the leaching bed area or park on it.
- Don't plant any trees or shrubs on or near the bed; their roots can clog pipes.
- Keep the area grassed to promote evapotranspiration and avoid erosion.
- Don't build on the bed, or cover it with a hard surface such as asphalt, brick or patio stones.
- Don't install automatic lawn sprinklers in the area.

Maintain the right draina ge

- Don't fill in or cut off drainage ditches.
- Watch for settlement that might direct water onto the leaching bed.

Regular Maintenance

All septic tanks need to be inspected and pumped out regularly. Don't neglect this or put it off. If the septic tank is not pumped out, so much sludge and scum can accumulate that there is very little room for waste water. That means it will not get adequate time to settle before being sent out (heavy materials, scum and all) into the distribution pipes. The longer this continues, the more material will pass right through the septic tank, clogging connections and filling up the leaching bed. Eventually, sewage could ooze to the surface of the leaching bed in black, oily pools, or back up into the house. If this occurred, you would probably need to replace the whole system. And if contaminants were to get into ground water, lakes or streams, immediate action would be necessary.

Inspect regularly

- Every one to two years, the septic tank should be inspected to:
  i) find out how much sludge and scum have accumulated
  ii) make sure baffles are functioning properly, and
  iii) check for leaks
- Homeowners should hire a licensed septic system contractor to do this inspection.

Pump out when necessary

- The building code requires septic tanks to be pumped out when sludge and scum occupy one third of the working capacity of the tank. How long it takes to reach these levels will depend on how the system is used. Discuss this with your pumping contractor at the first inspection.
- On average, you can expect to have to pump out the tank every two to four years.
- It's best to pump in the summer or fall, before cold weather.
- Pumping contractors are listed in the Yellow Pages, usually under "Septic Tanks -- Cleaning". Make sure the contractor you hire has a current license issued by the Ontario Ministry of the Environment.
- The bacteria needed by a septic system occur naturally. No commercial starters, bacterial feeds or cleaners are required after pumping; some of them can actually harm the system.

Test waste water for shallow buried trench systems and submit results annually

- If you have a shallow buried trench system, you must have a qualified person analyze samples of the waste water flowing out of the tertiary treatment unit every year. Test results must be sent to the local municipality's chief building official, or the delegated authority.

The septic system location map provided by the builder should show where the inspection ports are found. It's a good idea to mark them on the lawn (some people use a flat paving stone) so they can be located easily. Some manufacturers build septic tanks with raised access ports.

NEVER allow anyone other than a properly equipped, trained and licensed contractor to enter a septic tank for any reason whatsoever. The tank contains deadly gasses.

Signs of Trouble

There are several signs of trouble with a septic system. Here are some of the major ones, with possible causes:

Symptom and Possible Causes	Action
Toilets and sinks start to drain slowly: • Septic tank may be too full and need to be pumped out. • System may be partially blocked. • Plumbing vents may not be properly connected	Probably maintenance. Have licensed pumping contractor check septic tank
Extra plant growth over leaching bed area: • Too many suspended solids/nutrients may be entering the leaching bed, either because septic tank is too full or because waste water flows from the house are too high,so solids are not getting a chance to settle in the septic tank	Probably maintenance. Have licensed contractor inspect septic tank. Check water flows
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).	Have builder/licensed contractor check problems
Foul odours inside: • Plumbing traps may not be properly installed. • Electrical conduits for septic system pump chamber may not be properly sealed. • Pipe leading from house to septic tank may be broken,allowing waste water to leak around foundations. • Waste water may be backing up into the home.	Have builder/licensed contractor check problems
Waste water backing up into home: • Pipe leading to septic tank may be blocked. • Pipe beyond septic tank, or in distribution system may be blocked. • Leaching bed may be damaged or full.	Have builder/licensed contractor inspect problems
Effluent 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.	Have builder/licensed contractor inspect problems.Inform local authority

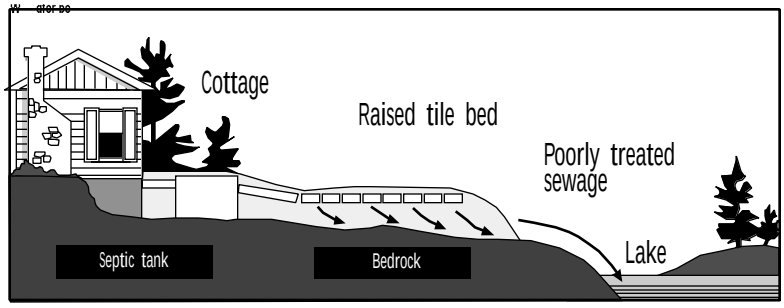
Nitrates and bacteria in nearby wells,lakes, rivers and or streams • Soils in leaching bed may be draining too quickly. • High water table may be too close to the bottom of the trenches. • Waste water may be directed to open water.	Have builder/licensed contractor inspect problems.Inform local authority

If you have problems within the first two years of operation, contact your builder immediately. Notify the Ontario New Home Warranty Program if complaints are not settled to your satisfaction. For years three to seven, ONHWP covers major structural defects.Any additional builder warranties will be included in your contract.

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

If you have a well -- particularly if it does not have a water tight casing -- it is recommended that you test water quality on a regular basis.

Water pollution from problem systems



Owners of Older Homes or Cottages

Septic systems do not last forever. If you find that your septic system is no longer functioning, you may need to consider an alternative -- or part or all of it may have to be dug up and replaced.However, under certain circumstances, the OBC may relax some requirements for repairs to existing systems, and there are new technologies which may help you deal with waste water in a smaller space. Contact your local building department (they will refer you to the health unit or conservation authority, if necessary) and a licensed septic system contractor for more information.

Glossary

Bacteria	A single cell organism. Some bacteria are able to consume organic matter, which is important for wastewater treatment in septic systems. Some, like e-coli bacteria, can be harmful to humans if taken into the digestive system.
Baffle	A device that slows or redirects flowing fluid;used in a septic tank to stop floating materials and scum from entering the outlet pipe.
Biomat	A layer of organic material which forms under the stone layer in a leaching bed. If it becomes too thick, it can stop proper drainage.
Distribution box	A device that sends effluent from a septic tank or treatment unit equally to each line of distribution pipe in a leaching bed.
Downstream	Further along, in the direction that a liquid (in this case waste waster or effluent) is flowing.
Drainage	The routes followed by waters on a site as they flow off, pond on, or drain into the ground surface.
Effluent	Liquid which flows out of a septic tank. Waste water which has passed through a treatment unit.
Evapotranspiration	The removal of liquid from the ground surface through take-up by plants and evaporation into the atmosphere.
Greywater pit	An underground chamber designed to allow water from showers,laundry, kitchen sinks, and some water-using appliances -- but not toilets -- to drain slowly into a stone and soil filter area; sometimes called a leaching pit.
Groundwater table or high water table	The highest level reached by underground water, especially during spring; below this level, spaces between soil particles are sometimes or always filled with water.
Leaching bed	The system of perforated pipes, stone and soils, which is used to filter and treat waste water from a septic tank or sewage treatment unit.
Mantle	A sloped area of soils used with a raised leaching bed to create an additional filtering area downstream from the perforated pipes.

Percolation test	An analysis used to calculate the average time that is required for water level to drop 1 cm within soil; used to determine whether existing soils are suitable filtering materials for a leaching bed.
Scum	Oils, greases, soaps and other material that will float to the top of household sewage/waste water in a septic tank.
Septic Tank	A two-compartment watertight vault or box intended to hold sewage/waste water while its main elements separate -- i.e.,scum rises to the surface and solids settle to the bottom, and the remaining liquids can be siphoned off as effluent.The tank may be constructed of concrete, heavy plastic, coated steel or fibreglass.
Sludg e	The settled solids from a septic tank, usually partially decomposed by naturally occurring bacteria.
Swale	A ditch cut into the soil,intended to collect and divert rainwater, snow melt, etc.; used with septic systems to direct water away from the leaching bed.
Tertiary treatment	Any type of treatment which removes most of the organic and other elements from sewage/waste water, so that the liquid leaving the unit meets fairly stringent criteria established in the OBC.
Treatment unit	A septic tank or other unit designed to remove solids and other elements from sewage/waste water. Septic tanks work primarily through settlement.Other units can be classified as providing "secondary" treatment or "tertiary" treatment,if their effluent meets criteria established in the OBC.
Waste water	Water, suspended solids, chemicals and sewage leaving the house from sinks, tubs, toilets,water-using appliances, etc.

System Information

When you take possession of your new home, your builder will probably give you a package of information that covers the following items. You may want to fill in this form so you have all the major contact names in one place. If you are missing any details, contact your builder.

Home address/location: _____

Type of system:
_____ Conventional
_____ Raised Bed
_____ Sand Filter
_____ Shallow Buried Trench
_____ Other (give details) _____
_____

Home Builder:
Name: _____
Address: _____
Phone No: _____

System Designer:
Name: _____
Address: _____
Phone No: _____

System Installer (same as above, or):
Name: _____
Address: _____
Phone No: _____

Local Inspector (usually Municipal Building Department; may be Health Unit or Conservation Authority):
Name: _____
Address: _____
Phone No: _____

Documents Received:
_____ Copy of Site Evaluation
_____ Copy of Sewage System Permit, including drawings
_____ Copy of Final Inspection and Use Report
_____ Copy of ONHWP certificate of professional field review and compliance (only required in a few locations)
_____ Manufacturers' Instructions and Warranties, where applicable
_____ Sketch map showing location of septic system and house on lot

Pumping Contractors: See Yellow Pages under "Septic Tanks: Cleaning"

_____
_____
_____

Make sure anyone you deal with is a licensed septic system contractor

Maintenance Record

Every time you have your septic system inspected or pumped out, ask the contractor to fill in this form. Keep this booklet with your important house documents, and pass it on to the new buyers if you sell your home.

Date Inspected	Results				Contractor Name/Initials
	OK	Pumped Out	Repairs Needed	Other	

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