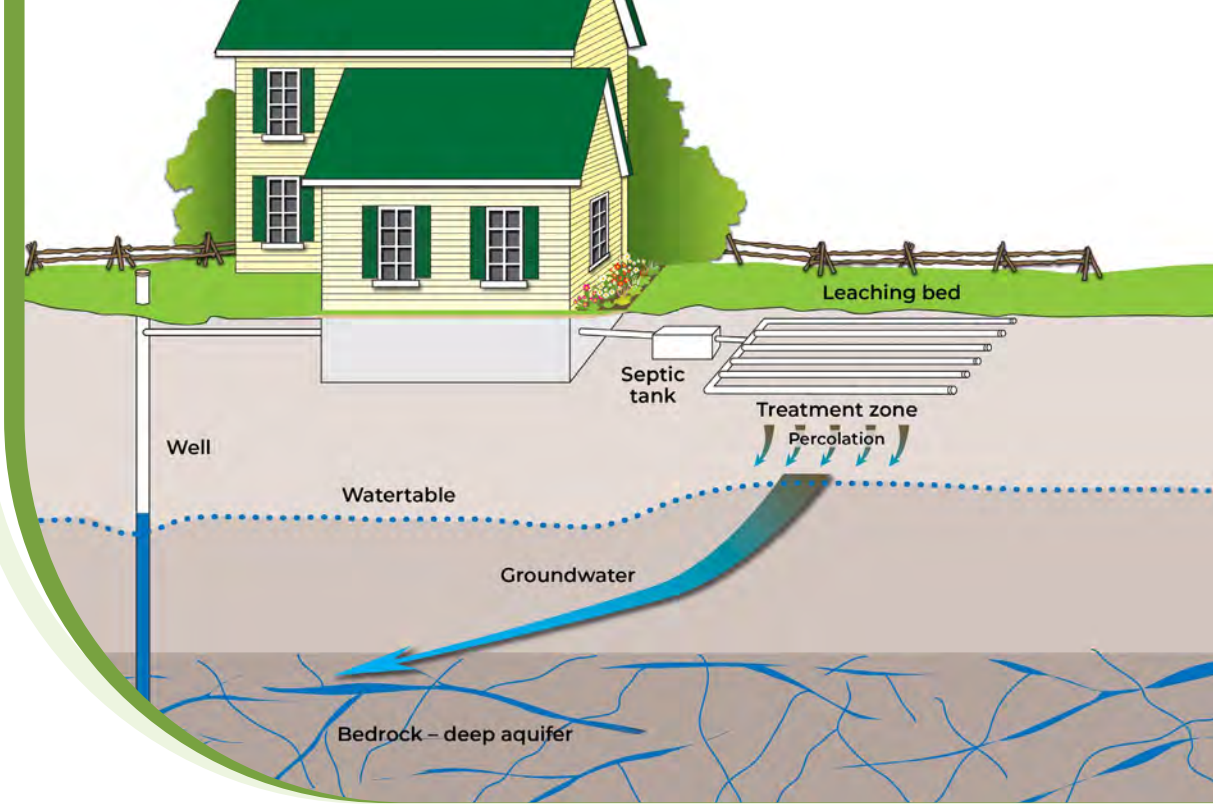
environmental farm plan
sustainably farmed

INFOSHEET #7

TREATMENT OF HOUSEHOLD WASTEWATER



How to address concerns identified in Environmental Farm Plan Worksheet #7

Based on Environmental Farm Plan Workbook, 5th ed. 2025

This infosheet outlines options to address concerns identified in your Environmental Farm Plan (EFP) as they relate to use and treatment of household wastewater.

All options in this infosheet are classed as **Actions, Compensating Factors,** or **Monitoring**.

- **Actions** address the identified concern, and will change the EFP rating to (3) or (4) Best.
- **Compensating Factors** are alternatives that will adequately address the concern, but will not change the rating in the EFP worksheet.
- **Monitoring** is an alternative in special circumstances only. When and how monitoring can be used is explained in the infosheet.

In most cases, you'll need more information before choosing and implementing options. Sources for more information are noted at the end of this infosheet.

For help with technical terms, please see the full glossary in your EFP Workbook.

Sustainable Canadian Agricultural Partnership
OSCIA
Ontario
Canada

LOCATION OF SEWAGE SYSTEM

7-1. Distance from sewage system to nearest surface water

BACKGROUND

Sewage systems must be properly located in relation to surface water to reduce the risk of surface water contamination. Any release of wastewater to the ground surface has the potential to reach surface water. Legislation states the minimum separation distances between the sewage systems and the surface water.

You should consider upgrading or replacing an existing system that was built without approvals.

If you are planning on installing a system that will manage sewage beyond a typically household volume, you may need to obtain an Environmental Compliance Approval prior to installation from the Ministry of the Environment, Conservation and Parks. You may wish to consult with your municipal building official early in the planning process.

Consider the soil type and topography of the location to lessen the potential for surface water contamination.

Sewage systems must be properly located in relation to surface water to reduce the risk of surface water contamination.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Relocate your sewage system the required distance from any surface water:

- obtain or amend a Building Permit or Environmental Compliance Approval if the sewage system is being relocated, upgraded or replaced, and keep the documentation for future reference
- monitor the sewage system regularly for surface releases, odours, ground conditions over the bed, backup of sewage, etc.
- confirm that the new sewage system location changes the final EFP distance rating to a (3) or (4) Best

OPTION 2 – COMPENSATING FACTOR

For existing sewage systems that have a Building Permit or Environmental Compliance Approval and are maintained in good working condition:

- monitor the sewage system regularly for surface releases, odours, ground conditions over the bed, backup of sewage, etc.

OPTION 3 – MONITORING

For existing sewage systems that do not have a Building Permit or Environmental Compliance Approval and are maintained in good working condition:

- monitor the sewage system regularly for surface releases, odours, ground conditions over the bed, backup of sewage, etc.

For more information about sewage septic systems, refer to the Water Management BMP book.

To view the Ontario Building Code visit: https://www.ontario.ca/page/ontarios-building-code

7-2. Distance from sewage system to well

BACKGROUND

Sewage systems must be properly located in relation to water wells to reduce the risk of water well contamination.

Legislation states minimum separation distances between sewage system components and water wells.

This question addresses the level of natural protection provided by the soil around the well and well location relative to the sewage system. Where a high potential for contamination currently exists, more drastic actions may have to be carried out.

Test the well water for indicator bacteria at least three times a year, and once a year for other parameters such as nitrate.

This BMP publication explains well construction, maintenance and troubleshooting to protect your family's drinking water.

Well water quality can change frequently. To protect yourself and your family, well water should be tested often. Contact your local public health unit where applicable, or the Ministry of the Environment, Conservation and Parks (MECP) for more information.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Relocate your sewage system the required distance from your well:

- obtain or amend a Building Permit or Environmental Compliance Approval if the sewage system is being relocated, upgraded or replaced, and keep the documentation for future reference
- monitor the sewage system regularly for surface releases, odours, ground conditions over the bed, backup of sewage, etc.
- confirm that the new sewage system location changes the final EFP distance rating to a (3) or (4) Best

OPTION 2 – ACTION

Relocate the well the required distance away from the sewage system:

- make sure the old well is properly abandoned
- confirm that the new well location changes the final EFP distance rating to a (3) or (4) Best

OPTION 3 – MONITORING

For existing sewage systems that are maintained in good working condition:

- test the well water for indicators of bacteria at least three times a year and once a year for other parameters such as nitrate
- note that monitoring of the well water is not a complete solution – if the water test reveals contamination of the well water, have a plan in place to immediately address the problem, such as shocking the well or installing a water treatment system on your well. Have an alternative source of drinking water available until the problem is resolved and drinking water quality testing is consistently demonstrating safe drinking water levels.
- If you have an EFP rating of (1) contact your local regulatory agency (local health unit and/or Ministry of Environment, Conservation and Parks) to determine whether any additional action is required

Note: You should plan and budget for the future relocation of your sewage system or well to protect your family's drinking water.

7-3. Fixtures and maintenance

BACKGROUND

Water-conserving measures reduce the amount of wastewater.

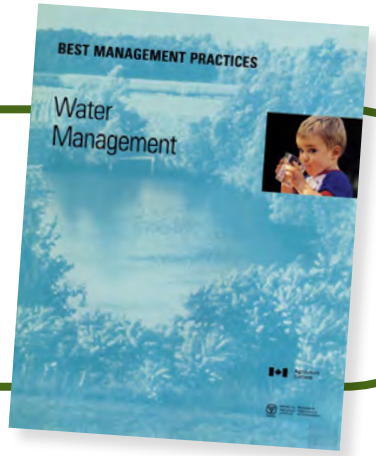
WHAT CAN YOU DO?

OPTION 1 – ACTION

Install water-conserving fixtures and ensure efficient use:

- install a toilet dam or dual flush toilet
- install a water-efficient toilet
- install water-efficient shower heads, low flow faucets/aerators and/or high efficiency appliances
- operate your dishwasher and washing machine with full loads only
- use an on-demand (tankless) water heater
- inspect system regularly and fix leaks as soon as possible

This BMP publication includes water-conserving tips for around the home.



Water conservation will reduce demands on your well and energy costs for pumping.

7–4. Solid waste

BACKGROUND

The addition of solid wastes, particularly through the use of garbage disposal units, results in a large load of solid materials being added to the sewage system.

Larger solid loads could mean more frequent pump-outs of the septic tank, and possibly increased organic loading of the leaching bed. This could cause failure of the leaching bed, with a greater risk of surface water and groundwater contamination.

WHAT CAN YOU DO?

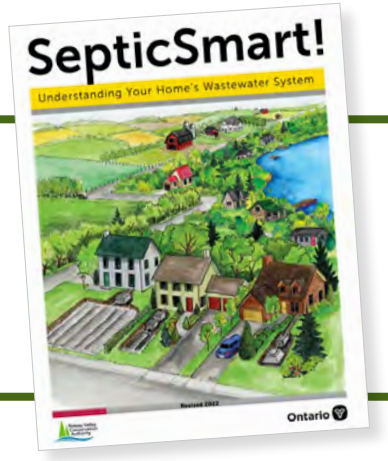
OPTION 1 – ACTION

Do not use a kitchen garbage disposal unit that is connected to your sewage system:

- use a composting system, or municipal green bin program if available, to handle the materials that would otherwise be processed in the garbage disposal unit

Use a household composting system to handle the materials that would be processed in the garbage disposal unit.

Never dispose of solvents in the sewage system.



For help with managing your septic system, read the publication:
SepticSmart! Understanding Your Home's Wastewater System

7–5. Dissolved waste

BACKGROUND

Overusing household detergents and cleaners and disposing of them in the sewage system can not only have negative effects on the performance of the sewage system but can also lead to surface water and groundwater contamination. Household sewage systems do not remove these materials. The bacterial action in the sewage system may be inhibited by the addition of these materials.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Limit the use of household detergents and cleaners, always use as directed.

Do not dispose of household solvents in the sewage system.

Use septic friendly household detergents and cleaners (i.e., biodegradable, non-toxic, and free of phosphates, chlorines, and petrochemicals such as petroleum distillates).

7-6. Water softener discharge

BACKGROUND

Water softeners discharge relatively large volumes of backwash with high salt concentrations. This may have a negative impact on the operation of the sewage system and could result in surface water and groundwater contamination.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Do not use a water softener.

OPTION 2 – ACTION

Direct water softener discharge to a sewage system that is properly designed, maintained and operated to accommodate this discharge water.

Dissolved salt may impact the function of a private sewage system.

Reduce the amount of grease and oils going into the sewage system.

7-7. Grease and oils

BACKGROUND

Grease and oils do not break down easily. They inhibit the bacteria in the septic tank from digesting (breaking down) other waste materials. As a result, the sewage system may have a reduced useful life. The septic tank may have to be pumped more often and the potential for surface water and groundwater contamination increases.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Eliminate or minimize the amount of grease and oils going into the sewage system:

- wipe down the kitchen utensils before washing
- do not dispose of cooking grease and oils in the sewage system

SEWAGE SYSTEM

7-8. Design and construction

BACKGROUND

The sewage system must be designed and installed according to regulatory requirements.

A properly designed and installed system will also result in less maintenance, a reduced pumping interval for the septic tank, and a lower risk of surface water and groundwater contamination.

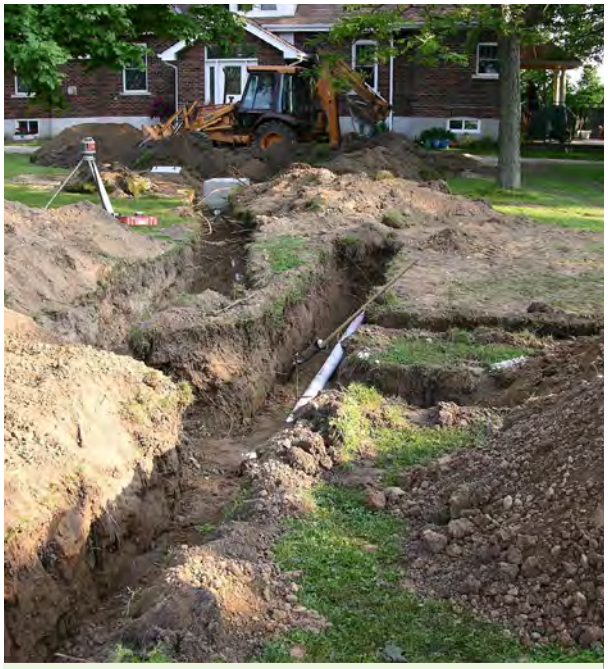
It is illegal to have a sewage system connected to a farm drainage system or manure storage.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Ensure that the sewage system has a Building Permit or Environmental Compliance Approval and that it was adequately sized and installed by a licensed installer.

Keep all documents for future reference.



Ensure that the sewage system has a Building Permit or Certificate of Approval and that it was adequately sized and installed by a licensed installer.

7-9. Knowledge of sewage system

BACKGROUND

Understanding your overall sewage system will help you better diagnose functional problems, maintain and manage the system effectively, make improvements to the system, and protect the system from damage caused by vehicles, tree and shrub roots, livestock, and surface drainage.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Evaluate your existing sewage system:

- know the exact location of the septic tank and leaching bed
- know the size and configuration of the system and how it operates
- keep all documents concerning your sewage system for future reference

Watch OMAFA Septic system videos.

COLLECTION OF WASTEWATER

7-10. Source and amount of wastewater

BACKGROUND

Legislation requires that all household wastewater is collected and treated in the sewage system.

Surface water, rain gutters, storm drains, and sump water should be kept out of a sewage system, as it can overload the system.

Leakage losses through leaky piping or treatment tanks can allow wastewater to infiltrate into the water supply. The result may be a deterioration in surface water and groundwater quality.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Collect and treat all household wastewater in a designated sewage system:

- check for leaks in the sewage system and repair immediately
- divert surface water, rain gutters, storm drains, and sump water away from the sewage system

Eavestroughs, foundation and footing drains should not be connected to the sewage system.

PRETREATMENT SYSTEM

7-11. Cesspool

BACKGROUND

Cesspools are only used for the disposal of contents of a chemical toilet, an incinerating toilet, a recirculating toilet, a self-contained portable toilet, all forms of privy systems, and a composting toilet system.

WHAT CAN YOU DO?

OPTION 1 – ACTION

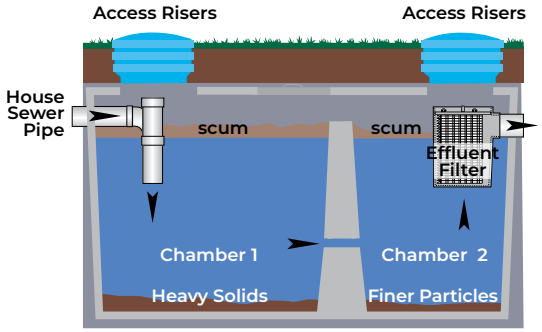
Replace the cesspool with an approved sewage system (septic tank or other treatment unit and a leaching bed).

7-12. Septic tank

BACKGROUND

Failure to pump out a septic tank, when conditions require, can result in sludge or scum being carried to the leaching bed – leading to clogging and failure of the leaching bed and thus the complete system.

A two-compartment septic tank is more effective for retaining sludge and scum that otherwise would move into the leaching bed.



Two compartment tanks retain sludge and scum that otherwise would move into the leaching bed.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Upgrade the septic tank to a two-compartment septic tank with a minimum working capacity of 3,600 L (800 gal):

- obtain all necessary approvals

Ensure that the septic tank is checked for sludge and scum depths every three to five years and pumped as required:

- inspect septic tank regularly for leaks, and maintain as required
- have the contractor who pumps out the tank make sure all baffles and T siphons are in place and functioning properly – NEVER enter the tank
- install a prefabricated effluent filter, which is a requirement under the Ontario Building Code, to help prevent sludge entering the leaching bed
- effluent filters must be inspected and cleaned regularly throughout the year

7-13. Holding tank – no leaching bed connected

BACKGROUND

In some special circumstances, the installation, of a holding tank may be required.

Legislation requires an approval, restricts installation and sets criteria for holding tank design, installation and operation.

A holding tank that has a larger-than-required capacity provides a safety reserve. The tank will not have to be pumped as often and there will be less potential for overflow.

An alarm system must be installed to alert when storage is reaching capacity. Regular checks for leaks will help prevent overflows and safeguard ground and surface water quality.

WHAT CAN YOU DO?

OPTION 1 – ACTION

If you have a building permit under the Building Code or an Environmental Compliance Approval from the Ministry of the Environment, Conservations and Parks, an amendment of your approval may be required if the holding tank is being relocated, upgraded or replaced.

If you do not have an approval, determine which approval applies to your sewage system and either obtain a Building Permit under the Building Code or Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks (Ontario Water Resources Act, Section 53) for the sewage system (e.g., tank), and keep the documentation for future reference.

Monitor the sewage system regularly for surface releases, odours, ground conditions over the tank, backup of sewage, etc.

Ensure the wastewater produced is not more than design capacity, and check the tank regularly for volume and leaks:

- minimize wastewater production
- install and maintain a working alarm system to signal before the tank needs to be pumped
- regularly check that the alarm is functioning properly
- regularly have the tank checked for leaks by a licensed contractor
- maintain a written disposal agreement with a hauled sewage system operator

7-14. Other treatment unit

BACKGROUND

Circumstances may arise where a conventional sewage system will not work satisfactorily.

Other treatment systems are an alternative to a conventional sewage system but must be regularly maintained. Otherwise, the complete sewage system could fail, and surface water and groundwater could become contaminated.

Some of the systems contain mechanical or electrical devices, which also require regular maintenance. Before installing an alternative treatment system, contact the distributor of the system to verify that the installer is licensed to install their product.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Only install an approved alternative treatment system:

- ensure the system meets installation and operational requirements of the Ontario Building Code, your Environmental Compliance Approval (if one is required), and the manufacturer – this is especially important if house additions, bathrooms or hot tubs etc. have been added
- ensure that the operation and maintenance requirements specified in the operator's manual are followed
- ensure the maintenance agreement with a qualified service provider is followed

An alternative treatment system may be required where a conventional system cannot work satisfactorily.

For more information, refer to:

- **SepticSmart! Understanding Your Home's Wastewater System**
- **the operator's manual from the supplier**
- **Ontario Building Code: www.ontario.ca/buildingcode**

7-15. Subsurface distribution of wastewater (from septic tank or other treatment unit)

BACKGROUND

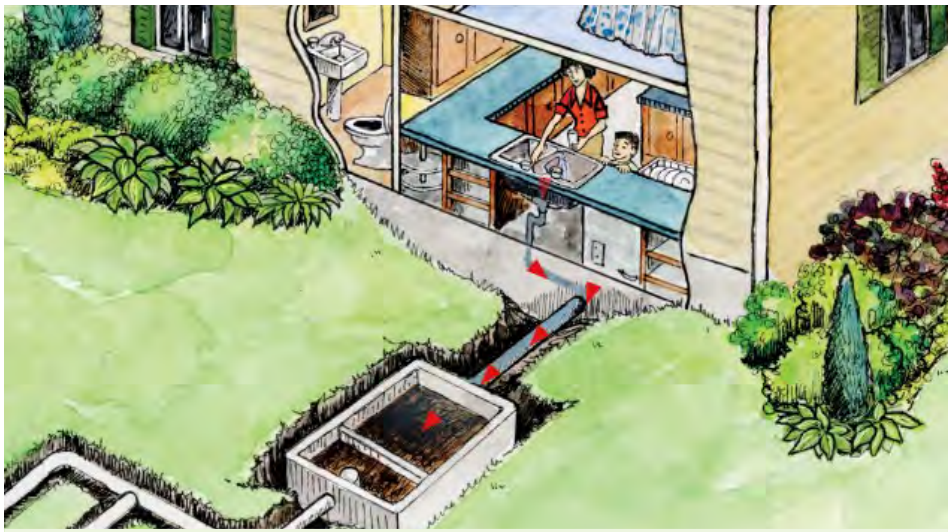
A leaching bed is required to properly treat and distribute the wastewater in the soil. An inadequate system can potentially contaminate surface water and groundwater and affect human health.

The connection of a sewage source to a field drainage system or manure storage is illegal. Wastewater cannot be piped to anywhere but an approved treatment system.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Ensure all pre-treated wastewater (including grey water) goes to a leaching bed, using a pressure or gravity-fed delivery system.



Using a pressure or gravity-fed delivery system, ensure all wastewater, including grey water, goes to a leaching bed.

7-16. Leaching bed location

BACKGROUND

Leaching beds must meet or exceed minimum separation distances from buildings, lot lines, water wells, etc. to meet legal requirements. Soil conditions and site topography must be considered.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Position the leaching bed to meet or exceed the minimum separation distances:

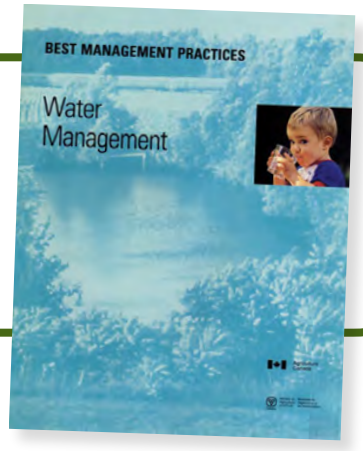
- minimum of 5 m (16.5 ft.) from any building or structure
- minimum of 3 m (10 ft.) from any property line

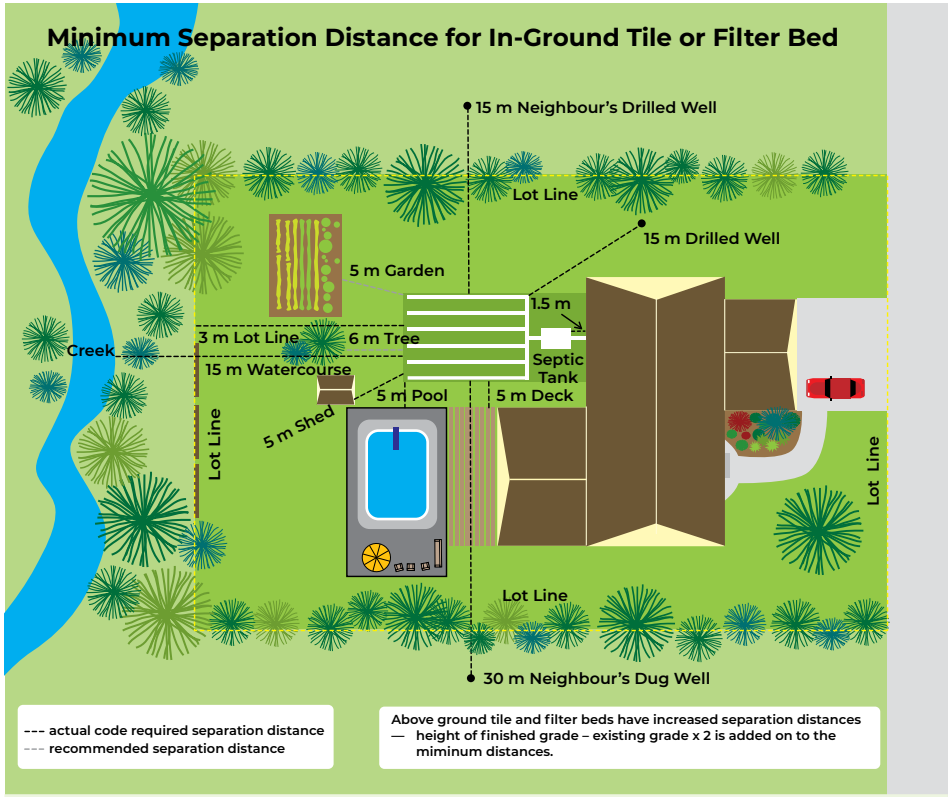
If you have a building permit under the Building Code or an Environmental Compliance Approval from the Ministry of the Environment, Conservations and Parks, amend your approval if the sewage system is being relocated, upgraded or replaced.

If you do not have an approval, determine which approval applies to your sewage system and either obtain a Building Permit under the Building Code or Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks under the Ontario Water Resources Act, Section 53 for the sewage system, and keep the documentation for future reference.

Prevent machinery and livestock traffic from moving over the leaching bed.

For more information, refer to the Water Management BMP book.





Using a pressure or gravity-fed delivery system, ensure all wastewater, including grey water, goes to a leaching bed.

7-17. Leaching bed surface water drainage

BACKGROUND

Surface water should not drain onto the leaching bed area, as it keeps the soil saturated and does not allow the leaching bed to work to capacity. The sewage system may fail as a result.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Divert all surface water away from the leaching bed area.

7-18. Depth to saturated soil or bedrock from trench bottom

BACKGROUND

A leaching bed requires an acceptable type of soil underneath to further break down the pollutants and filter out solids and pathogens.

If saturated soil or bedrock is located too close to the bottom of the leaching bed trenches, groundwater can become contaminated. Adequate unsaturated soil depth beneath the distribution pipes is required to allow for proper wastewater treatment.

A high-water table can cause the system to become flooded and quit functioning. The Ontario Building Code requires a minimum of 0.9 m (3 ft.) of soil depth between the trench bottom and saturated soil or bedrock.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Locate the leaching bed in a location where there is at least 0.9 m (3 ft.) of depth of acceptable soil to the saturated soil or bedrock.

If you have a building permit under the Building Code or an Environmental Compliance Approval from the Ministry of the Environment, Conservations and Parks, amend your approval if the sewage system is being relocated, upgraded or replaced.

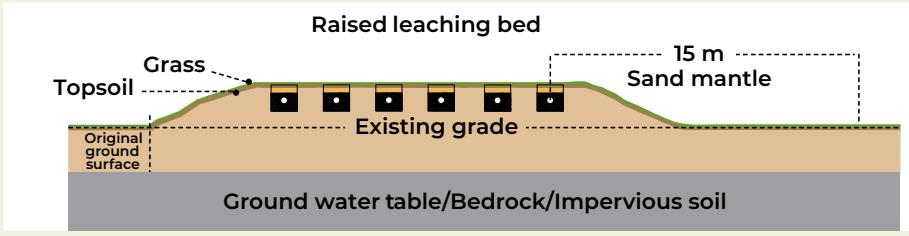
If you do not have an approval, determine which approval applies to your sewage system and either obtain a Building Permit under the Building Code or Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks (Ontario Water Resources Act, Section 53) for the sewage system and keep for future reference.

OPTION 2 – ACTION

Install an approved raised aboveground or partly raised aboveground filter bed (i.e., leaching bed) where insufficient soil depths exist.

If you have a building permit under the Building Code or an Environmental Compliance Approval from the Ministry of the Environment, Conservations and Parks, amend your approval if the sewage system is being relocated, upgraded or replaced.

If you do not have an approval, determine which approval applies to your sewage system and either obtain a Building Permit under the Building Code or Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks (Ontario Water Resources Act, Section 53) for the sewage system, and keep the documentation for future reference.



An approved aboveground leaching bed is appropriate where required depth to saturated soil or bedrock is insufficient.

7–19. Leaching bed loading (visual inspection)

BACKGROUND

If the ground over the leaching bed is always wet and spongy, or if there is a noticeable odour, wastewater may be moving to the surface instead of draining downward in the bed. It could also indicate that there is a blockage in the leaching bed. Taller, greener grass over the leaching bed is usually an indication of a leaching bed that is not functioning properly.

These conditions could indicate poor drainage beneath the bed or a saturated condition. Surface or groundwater contamination could result. It is illegal to have ponding or seepage of wastewater on the surface over the leaching bed.

WHAT CAN YOU DO?

OPTION 1 – ACTION

If the ground is wet or spongy, or odours are detected, check water usage against the design capacity and have the system checked.

If the problem cannot be resolved, consult a licensed installer to discuss:

- a new system on a properly drained site, or,
- a raised aboveground or partly raised aboveground filter bed (i.e., leaching bed)

7–20. Disposal of pumpage from septic tanks, other treatment units and holding tanks

BACKGROUND

Sewage from septic tanks, other treatment units or holding tanks must be disposed of by a licensed hauler at an approved site.

WHAT CAN YOU DO?

OPTION 1 – ACTION

Ensure you are using a licensed hauler that has an approval/permit from the Ministry of the Environment, Conservations and Parks.

Sewage from septic tanks must be disposed of by a licensed hauler at an approved site.

FOR MORE INFORMATION

ONTARIO MINISTRY OF AGRICULTURE, FOOD AND AGRIBUSINESS (OMAFA)

- Agricultural Information Contact Centre (AICC)
  Toll free: 1-877-424-1300 | e-mail: ag.info.omafa@ontario.ca

  Find most of the resources listed below at www.ontario.ca

Publications

- Septic Systems
- SepticSmart! Understanding Your Home's Septic System

Best Management Practices Series

- Water Management
- Water Wells
- Buffer Strips

Videos (YouTube)

- Septic Systems
- Your Septic System
- Septic System Maintenance
- Septic Technologies in Canada

ONTARIO RURAL WASTEWATER CENTRE

Septic System Information

- Your Septic System: Protecting Your Investment and the Environment
- Septic System Basics
- Spotting Septic Problems

OTHER RESOURCES

- Ontario Ministry of Municipal Affairs and Housing
- Ontario Onsite Wastewater Association
- Find a Conservation Authority Office
- Public Health Unit Locations
- Ontario Building Officials

LEGISLATION/ACTS

- Ontario Building Code, Ontario Regulation 350/06
- Ontario's Code and Guide for Sewage Systems, 2024
- Environmental Protection Act, 1990, Part V
- Ontario Water Resources Act, R.S.O. 1990