

INFORMATION TO SUBMIT WITH YOUR PERMIT APPLICATION CONTINUED...

4. A soil sample of the most limiting condition affecting the design shall be collected and analyzed at a laboratory using a recognized grain or particle size analysis method to determine the texture of the soil.
5. Work sheets showing calculations for treatment components are required along with system design documents. Examples and templates for these design documents and work sheets can be viewed at:
www.municipalaffairs.alberta.ca/CP_PSDS_DesignToolsAndForms.cfm
6. Provide the depth to any water table from the ground surface where the effluent disposal system will be placed. Refer to the current Alberta Private Sewage Systems Standard of Practice handbook.
7. The septic tank size shall be determined from the expected daily volume of effluent.
8. Disposal fields and treatment mounds are to be sized by the number of completed bedrooms in a residence or expected volume of effluent as well as the soil percolation rating (determined by soil percolation tests or soil classification percolation rates from soil analysis tests).
9. Sewage holding tanks require the same setback distances as septic tanks. The capacity of sewage holding tanks shall not be less than 1,800 litres (400 gallons) or the expected volume of sewage per day (whichever is greater).

SAFETY CODES COMPLIANCE

It is always recommended to hire a certified installer to conduct your private sewage system installation. If you, the homeowner, choose to install your own system, you will need a copy of the Alberta Private Sewage Systems Standard of Practice handbook and the Handbook Supplement to access more detailed information regarding installation practices. Our Safety Codes Officer will not grant permit approval unless all required information has been provided.

Inspections must be done prior to concealment of any installed system. The Safety Codes Officer requires a minimum of 48 hours notice in order to conduct an inspection. If concealment happens prior to inspection, pictures of the installation and squirt height test will need to be sent to the MD or the Inspector.

MAINTAINING YOUR SYSTEM

Once your sewage treatment system is installed, routine maintenance and proper use will prevent most operational problems from occurring. Here are some key points to remember:

- Ensure your contractor provides you with a copy of all inspection reports and the Operation and Maintenance Manual. The Operation and Maintenance Manual will include details and information on the system design and equipment and is required by the Alberta Private Sewage Standard of Practice.
- Have your septic tank checked annually for sludge and scum accumulations that can reduce your tank's efficiency. As solids build up, particles that should settle in the tank are passed to the discharge field and could plug your system. You may need to have your tank pumped by a professional sewage hauler every couple of years to ensure proper operation.

MAINTAINING YOUR SYSTEM CONTINUED...

- Never enter your septic tank. During the treatment process, sewage gives off dangerous gases. Always hire a professional for tank maintenance tasks.
- Do not allow livestock, vehicles or any type of pathway to cross over your disposal field at any time. This practice will help prevent pipe breakage, soil compaction and excessive freezing due to compaction during the winter months.
- Keep your treatment system area well-maintained. Trim grasses and other vegetation short.
- Try to direct all surface runoff away from your sewage system area.
- If you have a water treatment system (such as a water softener) it may affect the operations of your sewage treatment system. Contact a local contractor or the M.D.'s safety codes officer for design assistance.
- Your sewage system is designed to accommodate a certain volume of wastewater. Too much can overload your system. Ensure all plumbing fixtures are operating efficiently and pay attention to your daily consumption - giving your system time to process large volumes of wastewater.

A list of certified installers can be found on Alberta Municipal Affairs website:
http://www.municipalaffairs.alberta.ca/CP_PrivateSewageContractorList

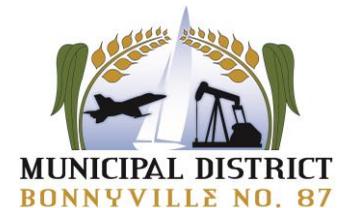
To get a copy of the Alberta Private Sewage Systems Standard of Practice, contact Alberta Municipal Affairs:
Phone: 1-866-421-6929
Email: safety.services@gov.ab.ca
Website Link:

http://www.municipalaffairs.alberta.ca/cp_private_sewage_codes_standards

PLANNING & DEVELOPMENT



Tips on Private Sewage Systems



**MUNICIPAL DISTRICT
BONNYVILLE NO. 87**

Updated January 2018

DO I NEED A PRIVATE SEWAGE SYSTEM?

If your home is not connected to a municipal sewer system, you must have a private sewage disposal system. The system must be correctly installed and regularly maintained to ensure safe operation. Faulty systems create health hazards and contaminate our environment.

Effective and safe sewage treatment is a complex process. Sound decisions about the design and installation of your sewage treatment system can help avoid the inconveniences and hazards of a system failure.

GETTING STARTED

An M.D. permit is required before installation can begin. A certified contractor is recommended to be used to design and install your sewer system. When you hire a certified contractor, make sure they do the following as a minimum while investigating your property to prepare you with a quote:

- Estimate the volume of sewage per day from your household
- Determine the size of septic tank you require and the best location for your septic system
- Explore all suitable Private Sewage Disposal Systems for your property
- Identify any signs of seasonal saturation or high water tables that may affect your system design
- Confirm all distances from water sources, water courses, property lines, dwellings and any other buildings

* Keep in mind when designing your system that it should be designed for maximum occupancy of the home. Designing the system to accommodate only a portion of the home may require you to upgrade your system if more bedrooms are developed in the future. An undersized system may result in a system failure, which can involve costly repairs or complete system replacement. **For example** - Your home has 2 bedrooms on the main floor with an unfinished basement. The sewer system has only been designed and installed to accommodate these 2 bedrooms. A year later you decide to finish your basement with 2 bedrooms. Now the current system is too small to accommodate the new basement bedrooms and will need to be upgraded. **A permit is required for the sewer system upgrade.**

YOUR SEWAGE SYSTEM'S LOCATION

Following are the required setback distances that your sewage treatment system must respect:

Water-tight septic tanks or sewage holding tanks must be no less than:

- 1 metre (3.25 ft.) from any property line
- 1 metre (3.25 ft.) from any building
- 10 metres (33 ft.) from any water source or water course

Packaged Sewage Treatment Plants must be no less than:

- 6 metres (20 ft.) from any property line
- 1 metre (3.25 ft.) from any building
- 10 metres (33 ft.) from any water source or water course

Sub-surface treatment fields must be no less than:

- 1.5 metres (5 ft.) from any property line
- 5 metres (17 ft.) from any septic tank or packaged treatment plant
- 1 metre (3.25 ft.) from any building that does not have a permanent foundation
- 10 metres (33 ft.) from any basement, cellar or crawl space
- 5 metres (17 feet) from any building that has a permanent foundation but does not have a basement, cellar or crawl space
- 15 metres (50 ft.) from any water source or water course

Treatment mounds must be no less than:

- 3 metres (10 ft.) from any property line
- 3 metres (10 ft.) from a septic tank
- 10 metres (33 ft.) from any non-basement building
- 10 metres (33 ft.) from any basement or cellar
- 15 metres (50 ft.) from any water source or water course

YOUR SEWAGE SYSTEM'S LOCATION CONTINUED...

Open discharge systems must be no less than:

- 90 metres (300 ft.) from any property line
- 45 metres (150 ft.) from any building
- 50 metres (165 ft.) from any water source
- 45 metres (150 ft.) from any water course

A sewage lagoon serving a single family dwelling or duplex must be no less than:

- 30 metres (100 ft.) from any property line
- 45 metres (150 ft.) from any building
- 100 metres (330 ft.) from any water source
- 90 metres (300 ft.) from any water course

An LFH At-grade system must be no less than:

- 15 m (50 ft.) from any water source
 - 15 m (50 ft.) from any water course
 - 3 m (10 ft.) from any property line where ground slope is less than 1% or the system is located downslope of the property line when slope exceeds 1%
 - 6 m (20 ft.) from any property line that is located downslope of the system where the slope is 1% or more
 - 3 m (10 ft.) from the packaged sewage treatment plant
 - 10 m (33 ft.) from any building
- * all measurements are to be taken from the toe of the cover material where it intersects with the natural soil contour.

On properties that adjoin permanent bodies of water such as lakes, rivers, streams or creeks, the effluent disposal component of a private sewage system shall be located:

a) No less than 90 metres (300 ft.) from the shore of the body of water, or

b) Where a principal building is located between the system and a body of water, the distance may be reduced to the minimum distance requirements for that method of treatment and disposal.

INFORMATION TO SUBMIT WITH YOUR PERMIT APPLICATION

The permit applicant must provide the MD of Bonnyville Planning Department with detailed information on the design of the system in support of the permit application. The safety codes officer (inspector) will review the design and approve the permit **BEFORE** any work can start on the installation of the system.

If the system is concealed at the time of application (system was installed without a permit), pictures of the installation and squirt height test will need to be provided to ensure the system complies with the Alberta Private Sewage Standard of Practice.

The application requires a System Design Support Document that includes the following:

1. A detailed drawing shall be provided showing distances from the effluent component design to the following:

- a)** property lines
- b)** residence or building being served
- b)** water source
- c)** water course
- d)** septic or sewage holding tank
- e)** lagoons

Meeting the required setback distances of your chosen sewage system is **TOP PRIORITY**.

2. A site evaluation shall be done in accordance to the requirements of the current Alberta Private Sewage Standard of Practice.

3. The characteristics of each soil profile investigated shall be described using Canadian System of Soil Classification and include soil profile descriptions as set out in the current Alberta Private Sewage Standard of Practice.