

Tips on Private Sewage Systems



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 that it operates properly. Faulty systems create health hazards and contaminate the 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

A permit is required before an installation can begin.

A “**certified contractor**” should be used to design and install the sewage treatment system. The contractor must provide you with an “**operations and maintenance manual**”.

The contractor must properly evaluate the site to determine its suitability. Part of this evaluation includes determining the soil texture (e.g. sandy loam – good; silty clay – poor), and may include a percolation test. A test pit must be dug to allow examination of the soil to determine if there is the required depth of suitable soil necessary to treat the effluent. The pit can show where saturated soils occur or if there are any limiting layers below the treatment zone that would effect the movement of the effluent.

In soils that are finer textured (silt or clayey) the system must be increased in size and becomes more complicated.

Soil conditions may not be conducive to the installation of a treatment field. A treatment mound or other type of system may be required.

Location! Location! Location!

There are required distances that the sewage treatment system must be set back from the various attributes of your site. This will affect the type of system your site can accommodate and its possible location.

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

- 1m (3.25 feet) from any property line;
- 1m (3.25 feet) from any building; and
- 9m (30 feet) from any water source/course.

Sub-surface treatment fields must be no less than:

- 1.5m (5 feet) from any property line;
- 1m (3.25 feet) from a septic tank or packaged sewage treatment plant;
- 1m (3.25 feet) from any non-basement building;
- 9m (30 feet) from any basement or cellar; and
- 15m (50 feet) from any water source/course.

Treatment mounds must be no less than:

- 3m (10 feet) from any property line;
- 3m (10 feet) from a septic tank;
- 3m (10 feet) from any non-basement building;
- 9m (30 feet) from a basement or cellar; and
- 15m (50 feet) from any water source/course.

Open discharge sewage systems must be no less than:

- 45m (150 feet) from a dwelling;
- 45m (150 feet) from any water source/course; and
- 90m (300 feet) from any and all boundary property lines.

A sewage lagoon serving a single family dwelling or duplex must be not less than:

- 30m (100 feet) from any property line;
- 45m (150 feet) from a dwelling; and
- 90m (300 feet) from any water source/course.

Note: On a property that adjoins a permanent body of water such as a lake, river, stream or creek, the effluent disposal component of a private sewage system shall be located not less than 90m (300 ft.) from the shore of the body of water. If a principal building is located between the system and the body of water, the 90m (300 ft.) may be reduced to the minimum distance requirements stated here for that type of treatment system.

Maintenance

Once the sewage treatment system is properly installed, routine maintenance and proper use will prevent most operational problems from occurring.

There is a popular misconception that a septic tank purifies sewage so that the resulting effluent is safe. This is false. It is the movement of the effluent through the soil that effectively treats it. Once treated, the effluent is then safe to enter the ground water.

Because many communicable diseases are transmitted in sewage, an effective and safe private sewage system is more than just a convenience: it's a necessity. It prevents the contamination of ground water and direct contact between the sewage and people, pets and animals.

Here are some important points to remember:

- Have your septic tank checked for sludge and scum accumulations that can reduce its effectiveness. As sludge accumulates, particles that should settle out in the septic tank don't settle out and are passed to the field causing it to become plugged. You may need to have the tank pumped out annually to remove the sludge. Hire a properly equipped professional sewage hauler and keep a record of the tank cleaning.
- Never enter a septic tank, as poisonous gas may have accumulated. Hire a professional to conduct tank maintenance.
- Do not allow vehicles or livestock on your disposal field at any time, and do not allow pathways across your disposal field. This will help prevent pipe breakage, soil compaction and excessive freezing due to continuous compaction during winter.

- Keep the treatment system area free of heavy growth. Cut grass and weeds short.
- Surface water runoff shall be directed away from the sewage system.
- If you have a water treatment system, it may affect your sewage treatment system. You should contact a Contractor or Safety Codes Officer for design assistance in this matter. The use of water softeners can cause problems due to their high salt content. The increased volume of water from the regeneration process may also overload the treatment system. The softener regeneration water is not contaminated, so it can be disposed to an area where surface discharge would be acceptable.
- The sewage system is designed to accommodate a certain volume of water. Too much water can overload the system. Ensure all plumbing fixtures are maintained to prevent water leakage. Toilets, for example, can contribute up to 200 gallons a day of additional water to a system if not maintained.
- Consider doing laundry over the week rather than establishing a laundry day. This will prevent overloading of the sewage treatment system on a single day.

Information

NOTE: To assist you in understanding the requirements for and the installation of Private Sewage Disposal Systems, you may refer to the latest printing of the Alberta Private Sewage Systems Standard of Practice 1999 and/or Handbook.

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For more information about private sewage systems, write or call a certified private sewage installer, your Inspection Agency Inspector, Municipal Plumbing Inspector, or Health Inspector.

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