

Davis Inspection Services td

#146, 3132 – 26 St NE, Calgary AB, T1Y 6Z1
Office: (403) 275-3338 Fax (403) 275-9790
Tel/Fax 1-800-639-0912
www.davisinspections.ca

**PRIVATE SEWAGE TREATMENT SYSTEMS
Rocky View County**

**Please ensure the following information and/or documentation is on your
“Private Sewage Treatment System Permit” application.
This will help to expedite your review and consequent Permit Processing.**

System type: ?

- packaged treatment plant
- Chamber
- Pipe and gravel
- Sand filter
- Mound
- Open discharge

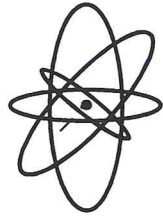
System Component Information

- Expected daily volume of effluent
- Number of bedrooms (dwelling units) include future development(s)
- Maximum number of occupants (commercial buildings)
- Depth of water table
- Holding tank size
- Septic tank working capacity
- Sewage lagoon capacity

System Layout Information

System diagram with dimensions and clearances

- System calculations
- Length of laterals
- Width and depth of trench
- Soil sample
- Basic pump specs
- Basic construction materials to be used. (Pipe tank etc.)



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Requirements, information & methods for Private Sewage Treatment Permit

Alberta Private Sewage Systems Standard of Practice 2009

In order to obtain a permit:

1. An application form must be completed with all the information requested. The permit must be signed and the fee must be paid in order to start the process.
2. Number of bedrooms in the unit is required.
3. Method of disposal.
4. Soil Classification- include report with application
5. Basic system drawing of septic system in relation to the buildings, well, property lines, water course etc.

SEPTIC TANK

Information required:

Minimum requirements to size a Septic Tank:

Residential:

Total number of Bedrooms whether occupied, for future development or may be used sometime in the future.

- a) Example: Main floor 3 bedrooms
Future or present basement 2 bedrooms
Total number of bedrooms = 5

***Note:** It is an advantage to install a larger septic tank than is required.

Reason: Effluent is treated better, before leaving the tank.
Provides extra cushion for heavy use times. Could extend periods between pumping.
Much easier for field etc. to provide final treatment and disposal extending field life.

FIELD INFORMATION

The size of a field is determined by:

- 1) Daily expected volume of effluent per 24 hr. period "ie. Number of bedrooms"
- 2) The capacity of the soil to treat and dispose of the effluent. (soil loading rate per sq. ft per 24 hr period)
- 3) The quality of effluent. Method of pre-treatment (packaged treatment plant, sand filter etc) can reduce field size requirements.
- 4) Method of effluent delivery and dispersal to weeping lateral trenches may also allow some field reduction.

Weeping Lateral Trenches:

- 1) Maximum 2 ft from top of ground to bottom of the excavated trench.
- 2) Trench maximum width 3ft.
- 3) There must be a minimum of 3 ft soil between trenches.
- 4) The area of the trench bottom is where sq ft of loading rate applies.

HOLDING TANKS

Must be 10 meters (33 feet) from any water source (including cisterns)

ALL SEPTIC AND HOLDING TANKS MUST HAVE ALARMS

FIELD LOCATION

Select an appropriate location of adequate size which will allow the following minimum distances from any part of a weeping Lateral Trench.

- a) 1.5 meters (5ft) from a property line.
- b) 15 meters (50ft) from a water source.
- c) 15 meters (50ft) from a water course.
- d) 9 meters (30ft) from basement, cellar or crawl space.
- e) 1 meter (3.25ft) from septic tank or treatment plan.

Dig or drill a hole to a depth of 8 ft from the surface, midway in the proposed treatment area.

This hole is to determine three factors:

- 1) if the sides of the hole at any depth is mottled (various color lines & seams) indicating a periodic or a seasonal high water table.
- 2) there may be water in the excavation hole indicating an area with a normal high water table.
- 3) to ensure there is no impervious layer, rock or sandstone or unsuitable soil (montmorillonite), or clay which will not allow the effluent to pass through.

Reason

The effluent must pass through 5ft of soil measured from the bottom of the weeping lateral trench to complete the purification process before it reaches any underground water or aquifer.

If any of the above conditions appear, the location may not be suitable for a disposal field location or may require an alternate disposal method.

SIZING A DISPOSAL FIELD

Acceptable method to determine the loading capacity of the soil in the field area. If the loading rate is too fast or too slow its location may not be suitable or may require some design changes.

- Soil samples taken at or just above 2ft trench bottom level can be sent to a laboratory for soil classification. About 1 pint of soil will be sufficient for proper testing and two samples if the soil varies in texture from clay to sand from one spot to the next.

Note: A minimum of two tests from a cross section of the proposed area is required.