

Options for On-Site Domestic Sewage Disposal on Farm Land

Introduction

Households in the Agriculture Land Reserve (ALR) are not usually served by municipal sewers and depend upon on-site sewage systems to treat and dispose of wastewater. There are three basic types of on-site sewage disposal systems

- conventional
- alternate and
- various systems under the *Code of Good Practice*:

In all cases an **application** and **permit** are necessary. No person can install, construct, alter or repair a sewage system without first obtaining a permit from the Ministry of Health.

Code of Good Practice

Many farmers live on large parcels of land that do not have the minimum soil requirements for conventional or alternate systems. In the past, these farmers did not have a viable option to build on-site sewage systems. In 1995 the *Health Act's Sewage Disposal Regulation* was amended to include a *Code of Good Practice* that applies to home owners with parcels of land that are 10 acres or more. This code sets standards on effluent quality and describes sampling requirements to prove the system is working as intended.

The owner's responsibilities for systems under this code are greater than the ones associated with conventional or alternate systems. For this reason farmers may seek approval for conventional or alternate systems before applying for another system under the *Code of Good Practice*.

• Conventional Systems

Conventional systems (See Figure 1) require a soil percolation of less than 30 minutes per inch and 48" of native permeable soil above the water table at all times during the year. In most low-lying areas this can prove to be impossible during the winter months.

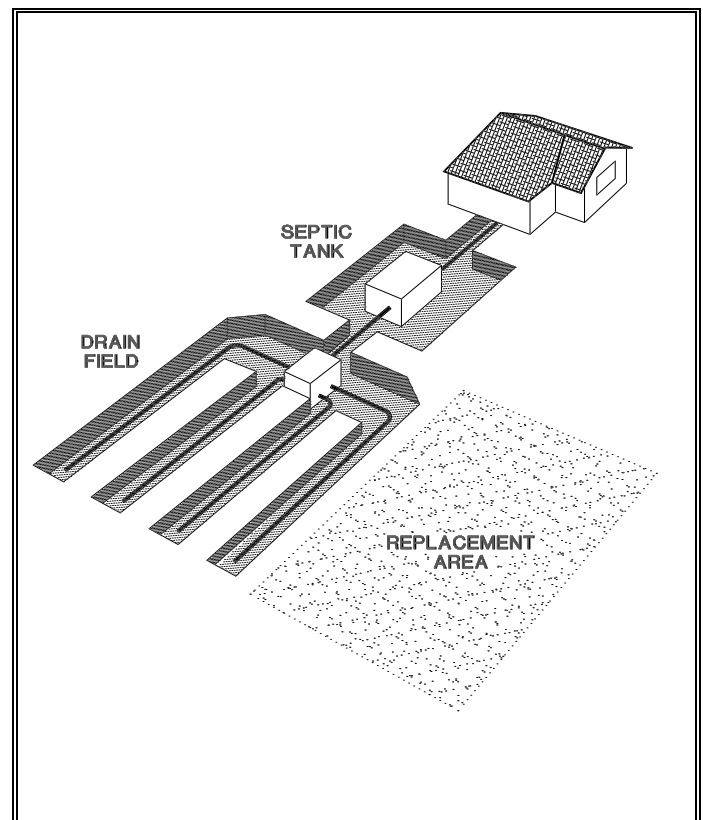


Figure 1 Conventional System

• Alternate Systems

If a conventional system is not appropriate an alternate system (See Figure 2) will be considered by health officials. The most common alternate system is the "raised fill system". Alternate systems require 18" permeable native soil on larger lots above the water table at all times during the year and a percolation rate of less than 30 minutes per inch. Agricultural drainage systems can be used to lower the local water table provided the drains are no closer than 50 feet from the base of the fill pad toe (20 feet for high side interceptor drains). In most cases a proper drainage system functioning year round should help you meet these requirements.

• Application Requirements for Other Systems

When it is determined that your parcel of land is unsuitable to both conventional and alternate systems you should apply under the *Code of Good Practice*. (See Figure 3.) Application requirements for the *Code of Good Practice* are:

1. Proof that the parcel of land is 10 acres or more, with no more than two residences on the parcel (principal and secondary).

1. Design plans of the proposed sewage disposal system.
2. Certification from a Professional Engineer (licensed to practice in British Columbia) stating that the proposed system meets the standards set in the *Code of Good Practice* (see Table 1).

The land owner is responsible to arrange for a certified laboratory to collect samples of the effluent and to certify it meets the *Code's* requirements. The sampling must be done 3, 6 and 12 months after the system starts working. After the first year samples are collected every 12 months. Results must be submitted to the local health unit as soon as results are available. Failure to submit samples as required or failure of the disposal system to meet effluent standards may require:

1. Remedial repairs.
2. Construction of a system that complies with standards.
3. Connection to a municipal sewer.

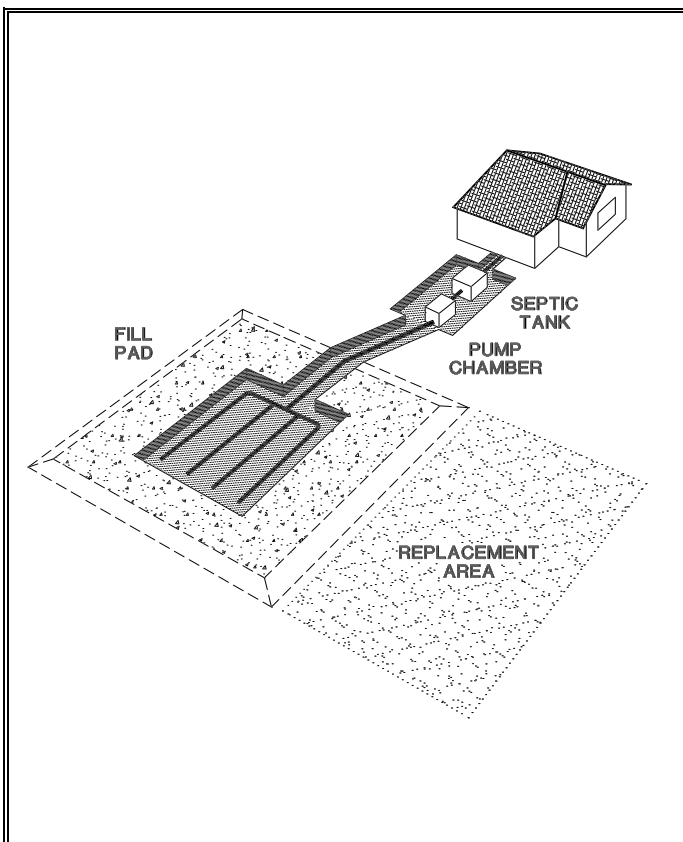


Figure 2 Alternate System

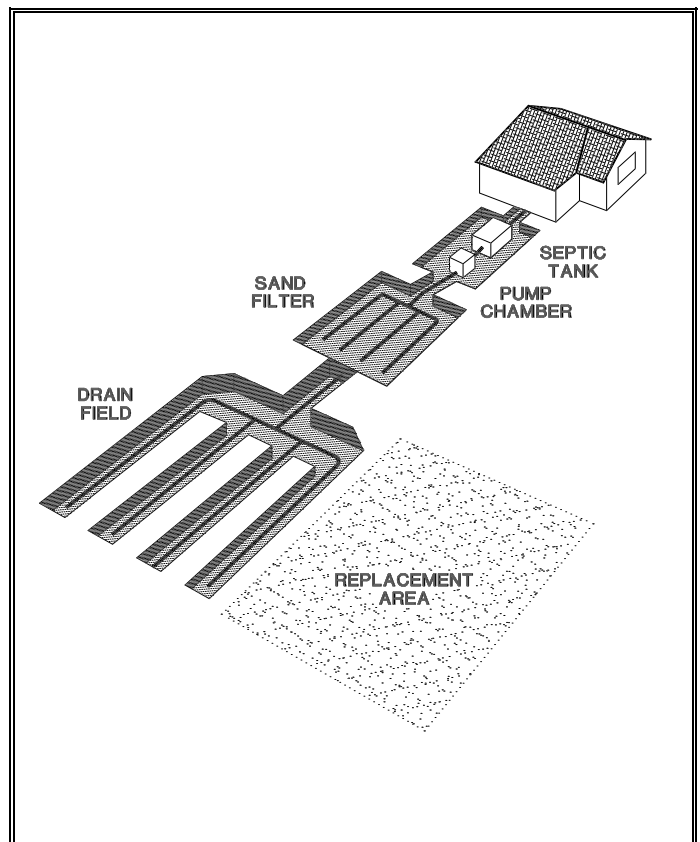


Figure 3 Typical Code of Good Practice System

Table 1**CODE OF GOOD PRACTICE STANDARDS**

Effluent Criteria	Standards
Fecal Coliforms (CFU)	≤ 400 CFU / 100 ml
Suspended Solids (SS)	≤ 10 mg / liter
Biochemical Oxygen Demand (BOD)	≤ 10 mg / liter
Nitrate	≤ 20 mg / liter
Separation Distances	
Property Line	≥ 30.50 m
Breakout Point	≥ 15.25 m
Highest Water Table	≥ 30 cm
Other minimum distances	As per schedule 2 and 3 of the Sewage Disposal regulation.

This is just a brief summary of the sewage disposal regulations and its relationship to on-site sewage disposal for the farming community. Additional information on the specific rules and regulations as well as a permit application package is available at your local health unit.

FOR FURTHER INFORMATION, CONTACT:

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