

INSPECTION SERVICES FOR THE CITY AND CAMROSE COUNTY

PERMIT NO.		

PRIVATE SEWAGE TREATMENT SYSTEM PERMIT							
Date:	Municipality		Roll #	Zone			
Permit Applicant:	vner Contractor						
Owner NameMailing Address							
City	ProvinceF	Postal Code	P	Phone			
Cell	Email			Fax			
Contractor/Firm NameMailing Address							
City	ProvinceF	Postal Code	P	Phone			
Cell	Email			Fax			
Project Location Street/Rural A	ddress						
LotBlock	Plan	Section	Township	RangeW4			
INSTALLATION DETAILS							
TYPE OF OCCUPANCY	TYPE OF WORK	INSTALL	ATION	TREATMENT DISPOSAL METHODS			
☐ Single Residential ☐ Commercial ☐ Industrial ☐ Offsite Manufactured Home ☐ Shop ☐ Accessory Building ☐ Other:	□ New □ Renovation □ Subdivision □ Other:	□ New □ Alteration Expected Volume or □ m³/day □ litres/day □ gallons/day (not to exceed 25 m³/day # of bedrooms: (residential including base development)	()	☐ Septic Tank ☐ Holding Tank ☐ Treatment Mound ☐ Treatment Field ☐ Open (Surface) Discharge ☐ Packaged Sewage Treatment Plant ☐ At-Grade ☐ Privy ☐ Other:			
FOIPP Notification: The personal information required by the City of Camrose application forms is collected under the authority of section 33(c) of the Alberta Freedom of Information and Protection of Privacy Act and will be protected under Part 2 of that Act and section 63 of the Safety Codes Act. It will be used for processing permit applications, issuing permits, safety codes compliance monitoring and verification. The name of the permit holder and nature of the permit may be included on reports provided to a municipality or made available to the public as required or allowed by legislation. Personal information may also be used by the city of Camrose to conduct ongoing evaluations of the services provided by its service providers to permit applications, permit holders and owners. Please direct any questions about this application to the City of Camrose FOIPP Coordinator at 780.672.4426.							
ertified Installer's Name (Print) Certified Installer's Signature Homeowner Signature (homeowner permit				lomeowner Signature (homeowner permit only)			
By signing this application I hereby certify that I own or will own and occupy this dwelling.							
	0	ffice Use Only					
Permit Fee	SCC Levy (\$4.50 or 4% of permit fee, max \$560.00)	,		Issuer's Name			
Travel Fee (Includes GST)	Total Cost			Issuer's Signature			
Credit Card No.:	Receipt No.	Receipt No.		Designation Number			
	Expiry:		Permit Issue Date				
	SCO Designation No.	SCO Designation No.		SCO Signature			

Private Sewage Treatment System

The following information will be required when submitting an application for a private sewage treatment system permit.

Site plan

Location of all buildings/proposed buildings and improvements Location of well/cistern and any sloughs or waterways, water courses and property lines.

Septic tank, sewage holding tanks or sewage effluent tanks shall not be located within

- a) 10 m (33 ft.) of a water source or water well,
- b) 10 m (33 ft.) of a water course,
- c) 1 m (3.25 ft.) of property line, and
- d) 1 m (3.25 ft.) of a building

Open Discharge

- 1) An open discharge system may be installed in a location that provides separation distances from the point of discharge of not less than
 - a) 50 m (165 ft.) to a water source includes water well, and or cistern
 - b) 100 m (330 ft.) from a licensed municipal water well
 - c) 45 m (150 ft.) to a water course except as required by Article 2.1.2.4.
 - d) 90 m (300 ft.) to a property line, and
 - e) 45 m (150 ft.) to a building.
- 2) The effluent discharge piping shall be buried to at least the point where the separation distances set out in Sentence (1) are met.

Treatment Fields

- 1) A treatment field, measured from any part of a weeping lateral trench, shall not be located within
 - a) 15 m (50 ft.) of a water source or water well,
 - b) 100 m (330 ft.) of a licensed municipal water well,
 - c) 15 m (50 ft.) of a water course, except as provide in Article 2.1.2.4,
 - d) 1.5 (5 ft.) of a property line,
 - e) 10 m (33 ft.) from a basement, cellar, or crawl space, ¹
 - f) 1 m (3.25 ft.) of a building that has a permanent foundation but does not have a basement, cellar or crawl space, and
 - g) 5 m (17 ft.) from a septic tank or package sewage treatment plant.
 - ¹ Note: Clause (1)(d) The 10m (33 ft.) requirement to a basement, cellar, crawl space is intended to protect excavations below grade from accumulating migrating effluent. A crawl space that is not below grade, or where the level of the ground surface at the soil based treatment area is below the level of the crawl space the separation required is 5 m (17 ft.) clearance, as it can be treated as a building without a basement.

Treatment Mounds

- 1) A treatment mound shall not be located within
 - a) 15 m (50 ft.) of a water source or water well,
 - b) 100 m (330 ft.) from a licensed municipal water well
 - c) 15 m (50 ft.) of a water course, except as provided in Article 2.1.2.4.
 - d) 3 m (10 ft.) of a property line,
 - e) 3 m (10 ft.) of a septic tank,
 - f) 10 m (33 ft.) of a basement, cellar or crawl space, and
 - g) 10 m (33 ft.) of a building that does not have a basement, cellar, or crawl space.

Private Sewage System Design Document Example/Template Holding Tank

PREFACE

This is an example Design Document for a holding tank system. It reflects the information needed to demonstrate the design considerations for the particular site and system required by the Private Sewage Standard of Practice 2009 (Standard) have been made. Considerations needed for a particular site may go beyond those used as an example in this document.

This example document can be used as a template by editing or adding critical information to suit the particular site and system.

While it is preferable to use a consistent format to facilitate quick review, other formats of the design document may be accepted by the Safety Codes Officer (SCO), if the document includes the required information that shows the necessary design considerations were made.

A design is required in support of a permit application. It includes drawings and supporting information as it applies to the specific site and design. This is the information a SCO will review to evaluate whether design considerations required by the Standard have been adequately made prior to issuing the permit.

Including the design in the operation and maintenance manual that must be provided to the owner, will simplify development of the operation and maintenance manual.

PRIVATE SEWAGE SYSTEM DESIGN - HOLDING TANK

Date:

Joe Smith Box 1, Somewhere, Alberta

Subject: Residential Wastewater Holding Tank System

Legal Description of Property:

SE Sec 9, Twp 71, Rge. 5, W of 6 Mer.

Lot 14; Blk 1; Plan 123450

Municipal Address:

19035 - Rge. Rd. 5

Introduction

This private sewage system is for a 4-bedroom single family dwelling. Based on the characteristics of the home identified during our assessment, the total peak wastewater flow per day is 461 Imperial gallons with average operating flow of 300 gallons per day.

The sewage system is restricted to a holding tank due to the soil conditions of the property. The municipality was contacted and they have no restrictions on the installation of holding tanks. This design applies and meets the requirements of the Alberta Private Sewage Systems Standard of Practice (Standard).

1 Wastewater Characteristics

1.1. Wastewater Peak flow

The development served is a 4-bedroom single-family dwelling. The total plumbing fixture unit load in this residence is 21 based on a building plans review. This requires 50 L/day (111mp. gal/day) be added to the peak daily flow. Fixture unit load is as follows:

- o Main bath = 6 fixture units
- o Bathroom with shower off master bedroom = 6 fixture units
- o Kitchen sink = 1.5 fixture units
- o Laundry stand pipe = 1.5 fixture units
- Bathroom in basement = 6 fixture units

O Bathroom in babonies	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total peak daily flow used in the design is:	2,090 L/day
450 lmp, gal + 11 lmp. gal = 461 lmp. gal	(461 lmp. gal/day)

1.2. Wastewater Strength

Not applicable to residential holding tank.

2 Site Evaluation Findings

2.1 Site Evaluation

The lot is 0.177 hectare (0.44 acres). The dimensions of the property are shown in the drawing attached in Appendix A. The adjacent lands are small lots within a residential subdivision. There are no water courses on or adjacent this 0.177 hectare property. The property has a 2% slope toward the north property line. Line locates confirmed there are no existing utilities or easements to be considered.

The site evaluation identified a water well on this property northeast of the house site and one water well on an adjacent lot to the north. No other significant setback constraints were noted. Pertinent features identified during the site evaluation and the required setback distances are identified on the site plan in Appendix A.

2.2 Soils Evaluation

No soil evaluation was carried out. The soil is known to be heavy clay and unsuitable.

3 Key Soil Characteristics Not applicable

4 Initial Treatment Component Design Details

Details of the initial treatment components are attached in Appendix C.

4.1 Holding Tank

The working capacity of the holding tank specified is 14,456L or 3,400 Imperial gallons. Specifications for the Model 3400H Holding Tank are shown in Appendix C. The sewage needs to be hauled to an approved site.

Burial depth of the holding tank at finished grading will be 4.5 ft above the top of the tank. The selected tank is rated for a maximum burial depth of 6 ft.–6 in. Insulation of the tank is not required as the burial depth exceeds 4 feet.

4.2 High Liquid Level Alarm

An Alarm Tech Inc. JB Series 1000B battery powered high level alarm is specified for this system. It shall be set to activate at 80 inches above the floor of the holding tank. This will provide approximately 477 Imp. gal of storage after the high level alarm signals, the equivalent of one day flow of sewage.

5 Initial operational set up parameters

The following activities need to be conducted to commission the system:

- Clean the Holding tank of any construction debris.
- Conduct test to ensure water tightness of all tank seals.
- Confirm the correct high level alarm setting.

6 Operation and Maintenance Manual

The Owner's Manual detailing the design, operation, and maintenance of the installed system will be provided to the owner in accordance with Article 2.1.2.8 of the Standard of Practice.

Attachments:

Appendix A -

Site Information [Site Plan]

Appendix B -

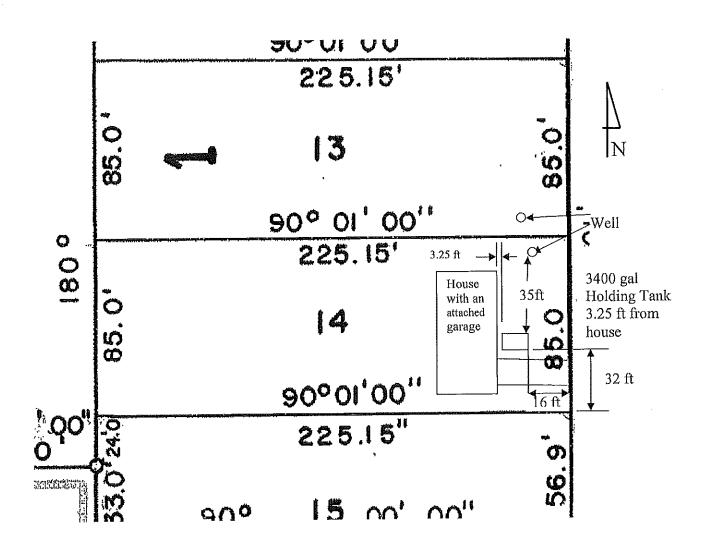
Manufacturer's and Design Specifications for

System Components

This design has been developed by (name of certified person and company name). This design meets the requirements of the Alberta Private Sewage Systems Standard of Practice 2009 unless specifically noted otherwise and in such case special approval is to be obtained prior to proceeding with installation of this design. (Carry on with any other qualifications or limitations that in your opinion as the designer/installer are needed.)

Signature and closing by the designer/Installer.

Appendix A Site Information



Appendix B
Manufacturer's and Design Specifications for System Components

