

## Information for Septic Permit

Date: \_\_\_\_\_

Owner(s): \_\_\_\_\_

Property Address: \_\_\_\_\_

New Construction                  Repair/Alteration                  Other: \_\_\_\_\_

1. Lot Dimensions: \_\_\_\_\_ Lot Area: \_\_\_\_\_

2. Use of Building: *Existing*: \_\_\_\_\_ After Construction: \_\_\_\_\_

3. Total No. of Dwelling Units in Building:          Existing: \_\_\_\_\_          After Construction: \_\_\_\_\_

4. Finished Floor Area of Building:                  Existing: \_\_\_\_\_          After Construction: \_\_\_\_\_

5. Number of Bedrooms:                                  Existing: \_\_\_\_\_          After Construction: \_\_\_\_\_

6. Fixture Units:    Existing: \_\_\_\_\_          After Construction: \_\_\_\_\_

7. Indicate Water Supply:          Dug Well          Drilled Well-Well I.D#: \_\_\_\_\_

Cistern          Communal

8. Indicate number of plumbing fixture units within building served by sewage system: \_\_\_\_\_

9. Total daily design sanitary sewage flow \_\_\_\_\_ litres/day

10. Site Evaluation

Prepared by: \_\_\_\_\_ Ph: \_\_\_\_\_ Email: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

Depth to Bedrock/Hardpan: \_\_\_\_\_ Depth to Zone of Soil Saturation: \_\_\_\_\_

Description of Native Soil: \_\_\_\_\_ Soil Permeability Test: \_\_\_\_\_

11. Description of sewage system: \_\_\_\_\_

12. Description for Means of Detection: \_\_\_\_\_

13. Description of Treatment Unit(s): \_\_\_\_\_

14. Description of Effluent Filter – Manufacturer and Model: \_\_\_\_\_

15. Description of Pump: \_\_\_\_\_

Head: \_\_\_\_\_ Run: \_\_\_\_\_ HP: \_\_\_\_\_

**\*Signed maintenance agreement with homeowner and manufacturer attached if Tertiary System.**

## Sewage System Calculations

TEST HOLES SHALL BE FIVE FEET DEEP, TO BEDROCK TABLE OR TO WASTEWATER TABLE

TEST HOLE – Subsurface conditions encountered	Rock & G.W.T.	Depth (m)	Soil Type	“T” Time
		-0-		
		-0.25-		
		-0.50-		
		-0.75-		
		-1.00-		
		-1.25-		
		-1.50-		

Q	=	Total Daily Sewage Flow in Litres
L	=	Length of Distribution Pipe in Metres
T	=	Percolation Time of Soil

SEPTIC TANK SIZE = Working Capacity of Septic Tank				
Size	=	Q X 2		
	=	___ X 2	=	Litres
Non-Residential	=	___ X 3	=	Litres
Note: In <b>NO</b> case shall the working capacity of the septic tank be less than 3,600 litres.				
Use of Existing Tank:	New C.S.A Standard:	Treatment Unit Other than Septic Tank:	Working Capacity:	
Yes      No	Yes      No	Yes      No	Litres	
Pump Required:	Comments:			
Yes      No				

**ABSORPTION TRENCHES = Length of Distribution Pipe (for systems with septic tank)**

L	=	$\frac{Q \times T}{200}$	OR	$\frac{Q \times T}{300}$	(If receiving effluent from a Level II,III or IV treatment unit)
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=	$\frac{\text{_____} \times \text{_____}}{\text{_____}} \div 200$	=	$\frac{\text{_____} \times \text{_____}}{\text{_____}} \div 300$	=	_____ Metres
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Note: The total length of distribution pipe shall not be less than 40 metres  
 Fill Material Loading Rate Area requirements (unsaturated suitable soil in area of bed and mantle)

$\frac{Q}{\text{As per loading rate in Table 8.7.3.1.}}$	=	_____	=	_____ Sq.Metres
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**FILTER BED = Size of Filter Medium Required**

If Q is 3,000 litres or less =	$Q \div 75$	=	_____ Sq. Metres
	÷		

If Q is more than 3,000 litres =	$Q \div 50$	=	_____ Sq. Metres
	÷		

If TERTIARY system is used =	$Q \div 100$	=	_____ Sq. Metres
	÷		

Base of Filter Medium – shall extend to a thickness of 250mm over the following area:

AREA	=	$\frac{Q \times T}{850}$		
		$\frac{X}{850}$	=	_____ Sq. Metres

**Note:** “T” is the Percolation Time of the underlying Native Soil  
 Fill Material Loading Rate Area requirements (unsaturated suitable soil in area of bed and mantle)

$\frac{Q}{\text{As per loading rate in Table 8.7.4.1.}}$	=	_____	=	_____ Sq. Metres
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TERTIARY DESIGN - Type A Dispersal Bed					
Proof of approved filter material must be provided prior to final inspection.					
If Q is 3,000 litres or less	L	$Q \div 75$	=		
If Q is 3,000 litres or more	L	$Q \div 50$	=		
Sand Area: Underlying Soil Percolation Time <15min:  $\frac{Q \times T}{850} \quad \frac{X}{850} =$			OR	Sand Area: Underlying Soil Percolation Time >15mins:  $\frac{Q \times T}{400} \quad \frac{X}{400} =$	
(May use lesser of stone area or above formula)				(Shall extend 15m min in direction of effluent flow)	

TERTIARY DESIGN - Type B Dispersal Bed					
Soil with Percolation Time T > 24min/cm	L	$Q \div 40$	=		
Soil with Percolation Time T < 24min/cm	L	$Q \div 50$	=		
Sand Area: Minimum Area calculated by using Table 2-8 of the BCMOH, "Sewerage System Standard Practice Manual" OR		A	$\frac{Q \times T}{400}$	=	

SHALLOW BURIED TRENCHES – Length of Distribution (L)					
In soil < 1 - < 20 minutes	L=	$\frac{Q}{75}$	=	_____	= _____ Metres
In soil 20 – 50 minutes	L=	$\frac{Q}{50}$	=	_____	= _____ Metres
In soil 50 - 125 minutes	L=	$\frac{Q}{30}$	=	_____	= _____ Metres
(Total Length of pipe shall not be less than 30 metres and "T" time of soil "T" time NOT to exceed 125 minutes)					

### Minimum Clearance Distance Measurements

Clearance Distances for Treatments		
Object	Minimum Clearance (m)	Actual Distance
Structure	1.5	
Well	15	
Lake	15	
Pond	15	
Reservoir	15	
River	15	
Spring	15	
Stream	15	
Property Line	3	

1. Include all applicable structures including neighbouring structures if required.
2. Include all applicable wells including neighbouring wells if required.

Clearance Distances for Distribution Piping		
Object	Minimum Clearance (m)	Actual Distance
Structure	5	
Well with a watertight casing to a depth of at least 6 m	15	
Any other well	30	
Lake	15	
Pond	15	
Reservoir	15	
River	15	
Spring not used as a source of potable water	15	
Stream	15	
Property Line	3	

1. Include all applicable structures including neighbouring structures if required.
2. Include all applicable wells including neighbouring wells if required.



Three Stages of Inspections Required:

- 1) Prior to construction, grading and scarifying before addition of fill.
- 2) Inspection of fill prior to backfilling (proof of approved fill material to be submitted).
- 3) Final grading – filter bed systems require topsoil on top and sides and bed to be sodded/seeded prior to issuance of Use Permit.

**ANY CHANGES TO APPROVED DESIGNS MUST BE REVIEWED AND APPROVED BY THE TOWNSHIP OF WAINFLEET PRIVATE SEWAGE SYSTEM REGULATING DEPARTMENT PRIOR TO CONSTRUCTION.**