

# So You Need A Septic System A Guide For First Time Home Builders

# Before you purchase land - Is the lot big enough?

The minimum size for an <b>un-serviced</b> lot	The minimum size for a semi-serviced lot
(water coming from a well on site) is	(municipal water but no sewer) is 1400m <sup>2</sup>
1860m <sup>2</sup> (20,021ft <sup>2</sup> ).	(15,069ft <sup>2</sup> ).

Despite popular belief, there are areas where septic systems simply cannot function in a safe manner. Reliable, safe waste disposal is a pillar of public health. Infections such as Hepatitis, Cholera and Typhoid Fever are common in places without proper waste water disposal and were once common here. Regulations covering the design and installation of septic systems are there for your protection.

# Is the land suitable for a septic system?

If possible, get permission from the land owner to enter the lot. Do a quick walkover and check for suitability:

- No lot will be approved without 30cm (1') of natural suitable soil onsite above bedrock or the water table.
- Are there ponds, rivers or streams near the lot that will cause problems? Surface water and dug wells require a 30m (100') setback from your septic system.
- How high is the water table/bedrock? To construct a septic system 1.8m of soil will be needed above the water table or bedrock. If this is not present then soil may have to be trucked in, at your expense. Look for marsh vegetation, wet soggy ground or rocky outcrops as a warning sign or possible barrier to construction. When shopping for real estate, it is advisable to avoid wet ground for many reasons.
- Does the land slope more than 30%? Steep slopes are not suitable for septic systems.
- Contact the Municipality (if applicable) to ensure that there are no issues preventing development in that area. (eg. Protected water shed area or zoning regulations)
- Contact your local Government Service Centre (GSC) or go to the website listed on the back of this sheet to get a list of approved designers in your area. These people are private individuals who are qualified to design systems for a fee. Select an approved designer and have them accompany you to the land you are interested in purchasing. Take your building plans and discuss where you would like to locate your building. You may have to change your plans based on the lot conditions!
- It would be best to have the lot assessed before you purchase it, so that you have an idea of what to expect. This is not always possible. However, you now have an informed, reasonable idea of what to expect during construction.

## The approval process

Once your Approved Designer has completed the evaluation process he/she will put together a submission package for government review. This includes all of the information required to get a *Certificate of Approval (CoA)*. If there are any faults or omitted information, the approval process will be put on hold until such time as the missing information is submitted or the plan is withdrawn. No systems are approved within municipalities without municipal approval attached.

Once your CoA is issued, you can go about construction. *Certificates* are valid for 2 years. When the system is installed, an inspection by an Environmental Health Officer (EHO) is required before the lot is backfilled. If the EHO verifies that the system is installed to the exact specifications of the approved, submitted design, then you can cover the system and begin using it. If not, then another inspection will be required by an EHO when the system is installed correctly.

You will receive a *Final Approval Certificate* from your local GSC office. Keep this in a safe place together with your copy of the septic system design. Your mortgage/insurance company may require a copy and if you sell your home you may need the certificates for the purchase/sale agreement. Also, septic systems require maintenance, so locating components without the design can be difficult and very destructive.

# **Waste Water Awareness**

### The Sanitation Regulations state:

**S4.3** A person shall not install or cause to be installed a sewage system or portion of a sewage system unless the person installing or causing the installation of that system has received a certificate of Approval from an inspector and, where required, approval has been obtained from all controlling agencies.

It is an offence under the Regulations to install an unapproved septic system on your lot. Inspectors will prosecute these offences when and where they are discovered, if immediate corrective action does not occur.

Object	Distance	Driveway 3m (10 ' ) Boundary
Building	6m / 20'	2300L (500gal.) Max Trench
Properties	3m / 10'	CSA Tank Disposal Field (100 ') Ends
Dug Wells	30m / 100'	Drilled Well 15m / 50 ' Dug Well 30m / 100 ' Minimum Sepration O Well
Drilled wells	16m / 50'	
Surface Water	30m / 100'	
Embankments	4.5m / 15'	
Water Service Lines	7.5m / 25'	
Driveways	3m / 10'	

#### Common Clearance Values to the Disposal Field:

## What soil testing will be required ?

To properly design a septic system, an approved designer will need to determine the percolation rates, soil types and depths for your lot. This will involve a minimum of 3 percolation test sites and one test pit 1.8m deep. This must be done in the exact planned location of the disposal field to ensure accuracy.

#### My designer wants more money to get the system approved, Why?

If you change your house plans after your designer completed the septic design, then a complete redesign of the system may be needed. This may include new testing and design work, which will increase costs. If your Approved Designer says the EHO wants amendments to the septic design and you have to pay for the extra work, then you should **contact the EHO** to determine the nature of the amendment. In many cases, an amendment is required by an EHO due to a fault in the submitted design which is the responsibility of the Approved Designer not the homeowner.

#### Where can I find out more?

If you have any questions about the septic design approval process, please do not hesitate to contact the Government Services Centre or Regional Health Authority nearest you. You can access the regulations, applications and guidance documents at:

- http://www.health.gov.nl.ca/health/publichealth/envhealth/privatesewage.html
- http://www.gs.gov.nl.ca/licenses/env\_health/septic/less.html



Department of Health and Community Services Department of Government Services Regional Health Authorities

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