

FOCA
Annual General Meeting
Nov. 22/08

Who is OOWA?

The Ontario Onsite Wastewater Association (OOWA) established in 1999 is dedicated to providing education, information and resources to a large network of onsite wastewater professionals as well as the general public.

OOWA is at the front line of development to support tertiary onsite systems as a viable permanent wastewater servicing option to protect our water resources

Review Basics

Common Systems

Operation & Maintenance

Septic Failures

Treatment Technologies

Septic Systems 101

**It is estimated there are approx.
1 million septic systems in the province**

**Fewer than 30% are serviced by onsite
professionals**

**The discharge is estimated to be billions
of litres per year into the environment**

Class 1 - Outhouse



Includes a structure designed to receive and dispose of human waste in a pit in the earth

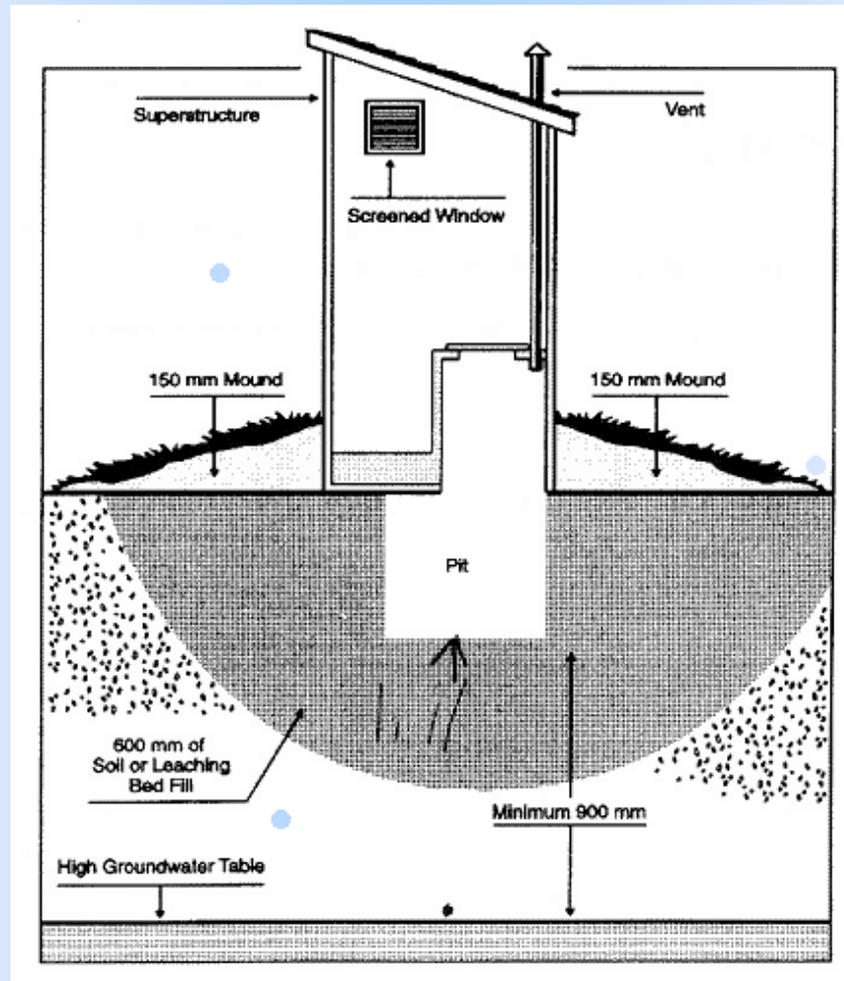
Earth Pit Privy

The bottom of the earth pit privy (outhouse) must be constructed so the bottom of the pit is at least 900mm above the ground water table, or bed rock

The sides of the pit must be reinforced and surrounded on all sides and bottom by not less than 600 mm of soil or leaching bed fill

The soil around the superstructure, must be raised or mounded to a height of 150mm (6") above the ground

Earth Pit Privy



Chemical Toilets

Watertight, impervious pails or tanks that contain chemical solutions immediately beneath the seat or urinal

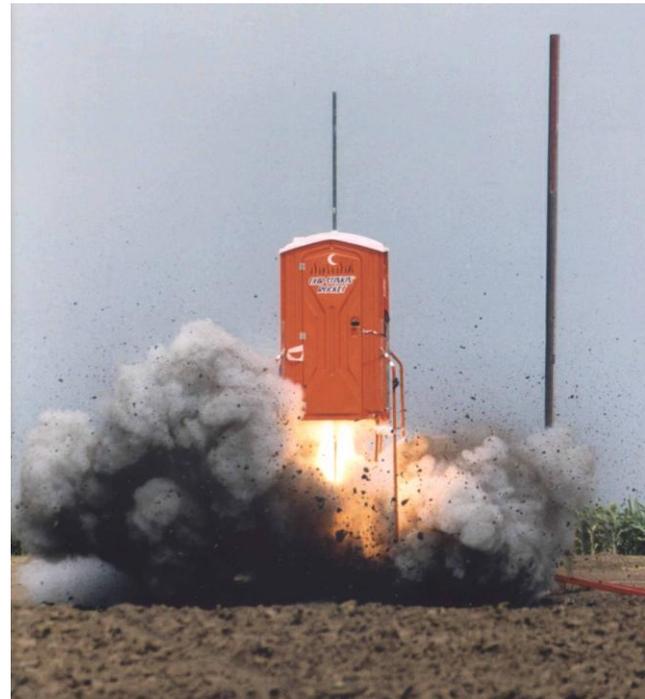
Chemicals disinfect the waste instead of simply storing it in a hole, or piping it away.

Great to rent for family events to alleviate the load on your septic



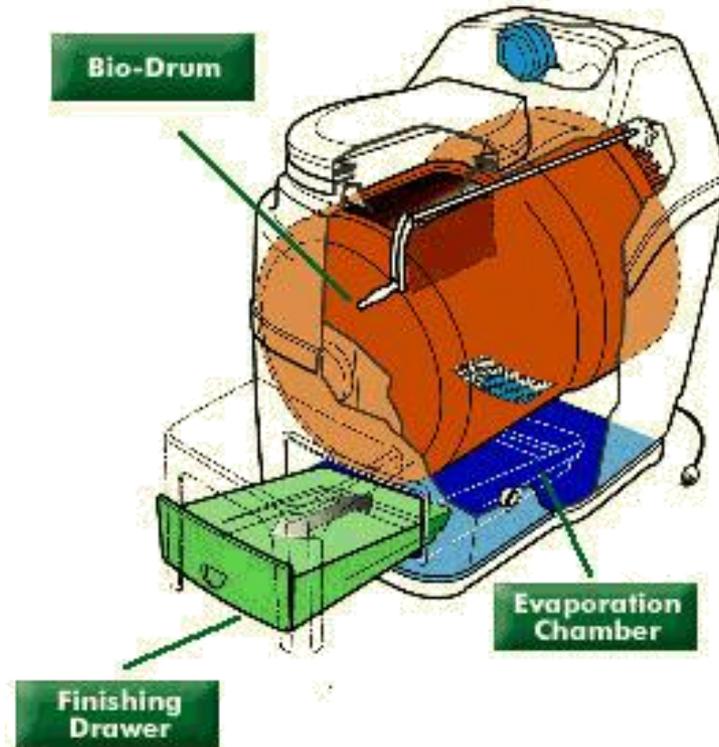
Chemical Toilets

Not recommended
for Canada
Day Celebrations



Composting Toilets

Designed to permit destruction of human waste by composting process but should not drain directly on the ground surface



Septic Permits

Septic system permits are required for any new installation or major repair to an existing septic system.

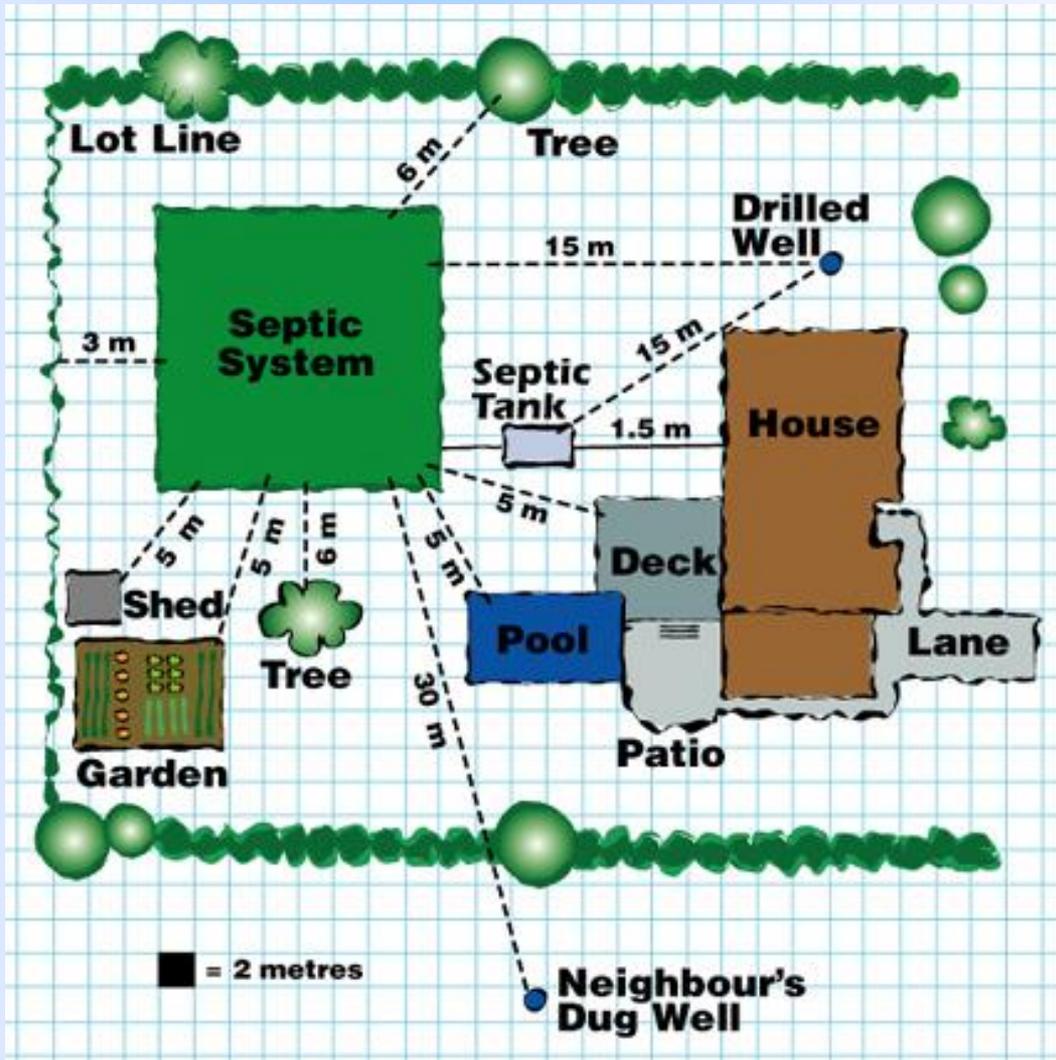
Repairs - replacing tank or replacing bed

Sizing Requirements

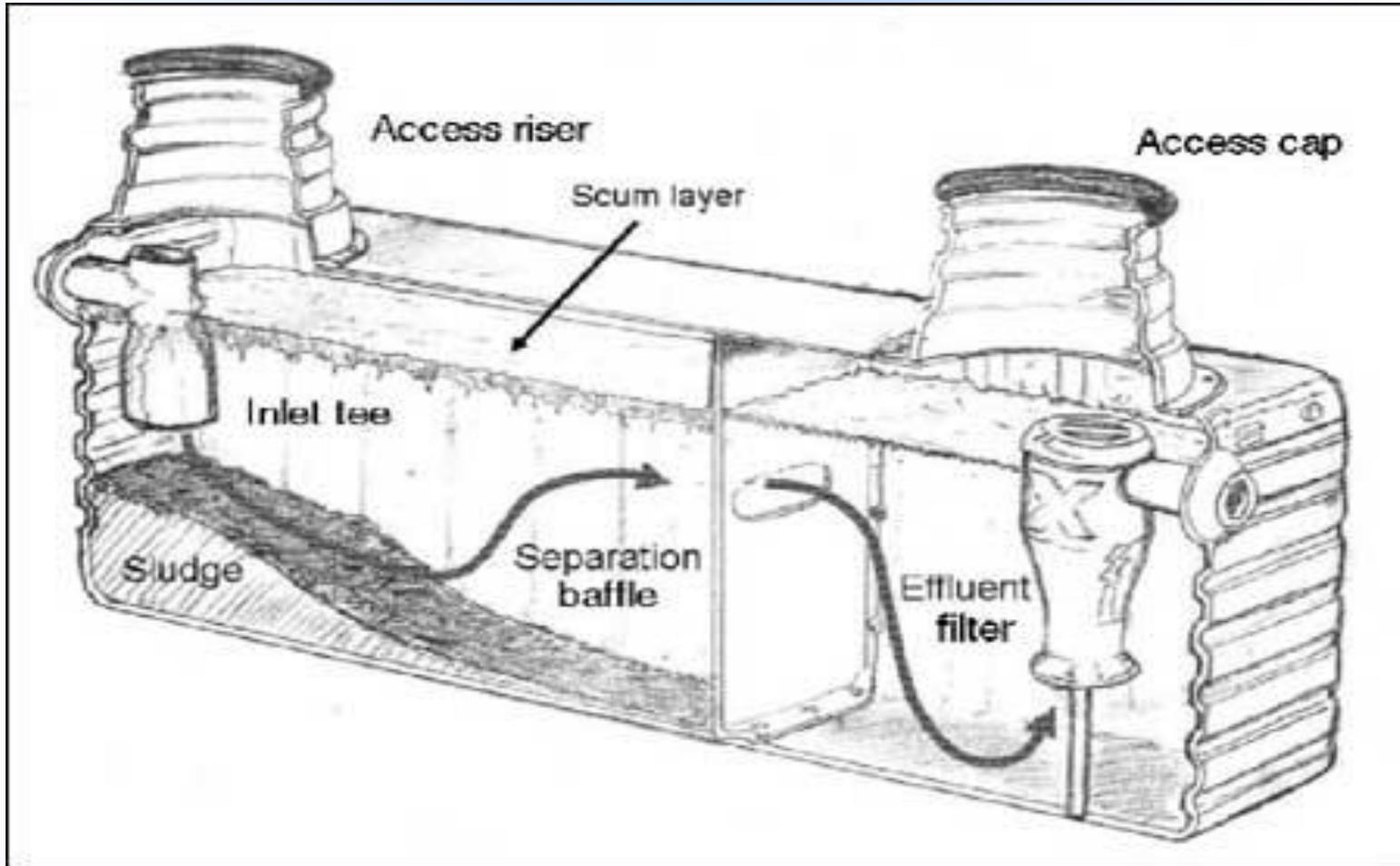
Septic systems are part of the Ontario Building Code and the system size is based on the following factors.

- * total square footage**
- * total plumbing fixtures**
- * total bedrooms**

Set Backs



Septic Tank



Septic Tank

Functions

Separates solids from liquid

Allows friendly bacteria to decompose organic solids

Stores solids until removed by pumping

Delivers liquid to soil treatment area

Septic Tank

Never enter the septic tank

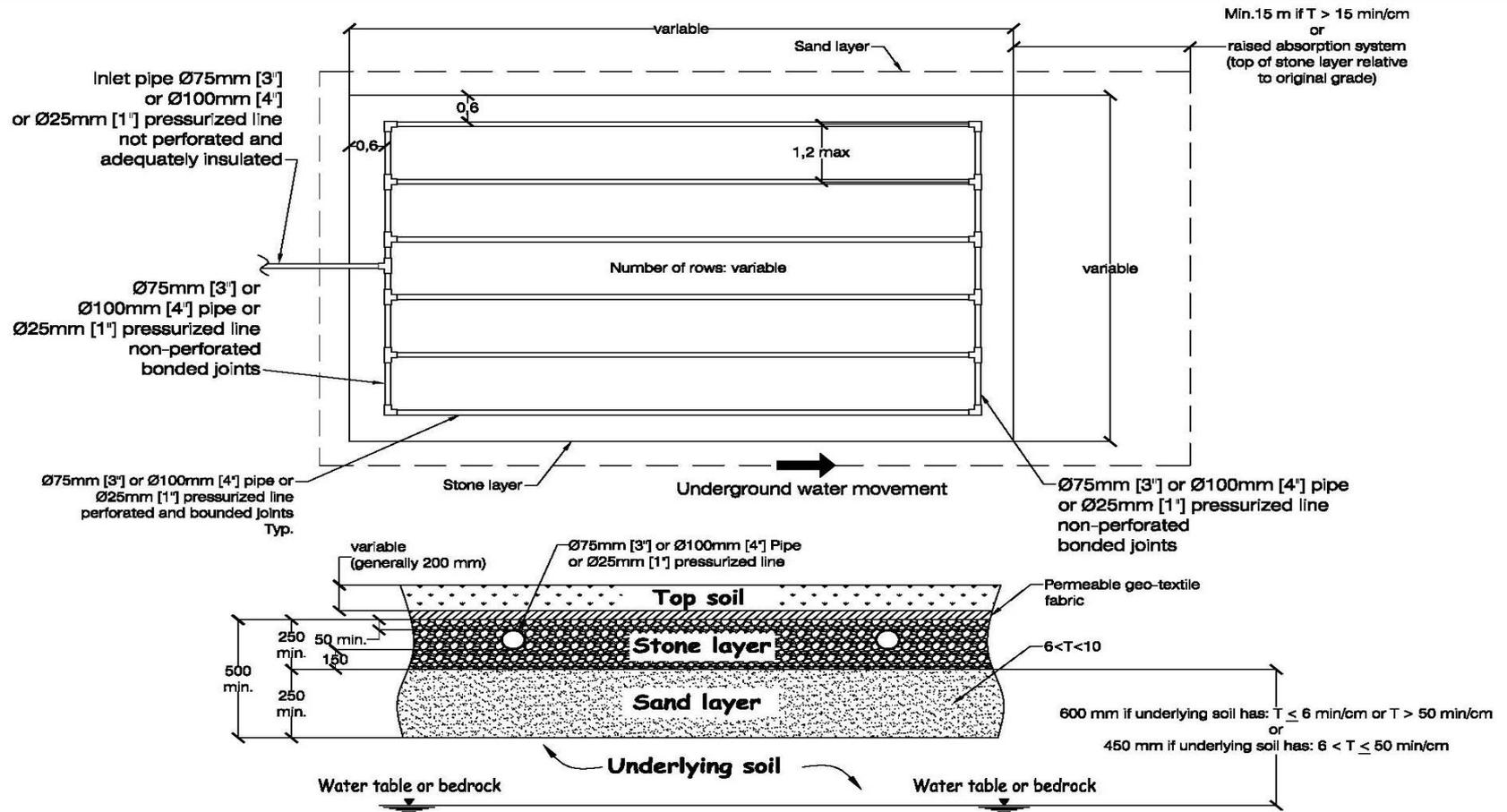
Pump solids from tank on a regular basis

Have baffles inspected at time of cleaning

Install risers to manhole access

Identify whether your tank has an effluent filter, and service as necessary

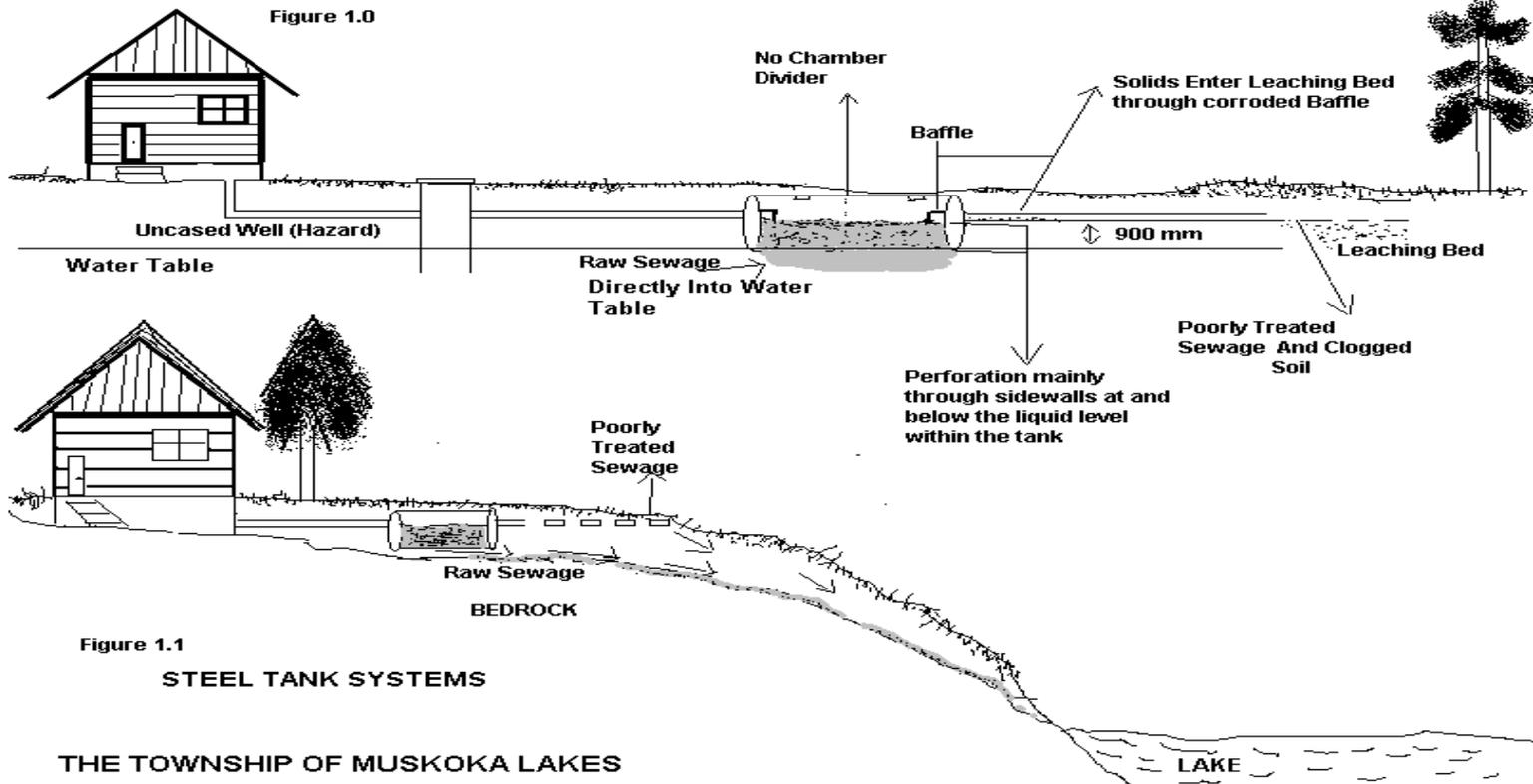
Conventional System



Septic Systems

Unabsorbed pathogens can move into the shallow groundwater and can infiltrate into deeper aquifers, discharging into lakes and streams, where the public can come into contact with disease causing organisms.

Septic Systems



Concerns

Majority are unmanaged or monitored

Owners are responsible for their systems to ensure they are working properly

If it fails it is the owners responsibility

Most inspection studies show a high percentage of failures 30 – 60%

Concerns

What we need to replace this



Concerns

So we don't get this.....



Septic Do's

Know where your system is located both the tank and the area bed.

Know what is going into the system

Conserve Water

Spread out the flow use, laundry, showers, dishwashers

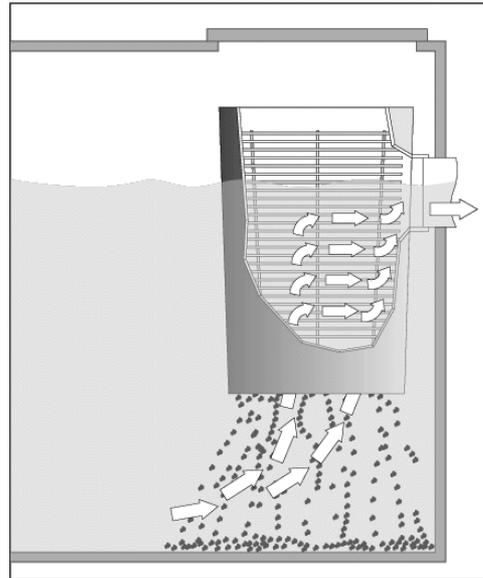
Divert downspouts from the system

Consider system upgrades

Install an effluent filter in the tank

Install tank risers where required

Septic Do's



Septic Do's

Pump out the tank – 2-5 years – 1/3 of solids and flush the toilet after pumping

Have the system inspected

Repair if required & obtain a permit

Hire a licensed septic contractor –ask for their BCIN #

Check the OOWA web site for contractors & information you can download

Make sure you have a copy of your permit – available at local permit office

Septic Don'ts

- Don't pour paint down your drain
- Don't use chlorine toilet pucks
- Eliminate anti bacterial cleaners
- Don't use detergents with bleach
- Don't do cold water washing
- Divert downspouts away from the tank & bed
- No sump pumps into tank
- No water softeners into tank
- No decks built over the tank

Septic Don'ts

Never enter the tank

Separate grease when cooking

No Garburators - compost food waste

No parking on the bed area

No driveways over the bed area

No ice rinks over the bed area

Don't change the use of your home/cottage without considering the impact on the septic system

Problem Indicators

Slow drains

Sewage back up

Odour in the vicinity of the area bed

Wet & soggy areas in the bed area

Striping of lawn or patchy growth

Leaking in the area bed

In Case of Failure

Call a licensed septic installer
Rope off the area from kids & pets
Systems do not self repair



Technology to
Protect and Save
our Water Resources

Treatment Systems

Extended life span of area bed
Regular maintenance requirements & effluent testing.
Manufacturer's responsibility to maintain installation & ongoing service database.
Ongoing innovations and improvements
Assists in protecting our water resources
Can increase the equity of your property

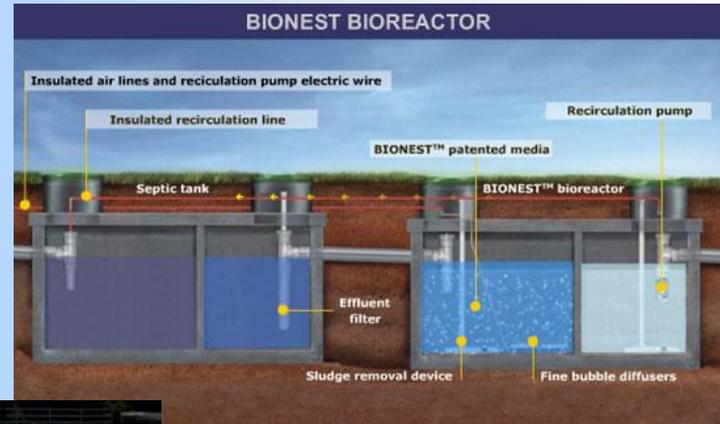
Treatment Systems

Provincial Approval under the
OBC – Ontario Building Code
Rigorous testing protocols required to
obtain approval from NSF and BNQ.
Treats the effluent from the septic tank
prior to entering the ground water
Some systems allow for more flexible
designs
Options to conventional systems
Increased use across the province

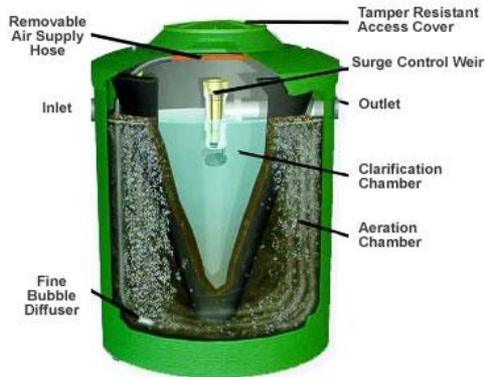
Treatment Systems

Filter Based Systems	Aerobic Systems	Suspended Biomass Systems
Advantex Ecoflo – Peat Puraflo - Peat Waterloo Biofilter	Aquarobic Clearstream Nayadic Norweco Whitewater	RH20 FAST BIONEST
Stone & Pipe Replacement	Infiltrator Chambers EZFlow	EnviroSeptic Hancor Chambers

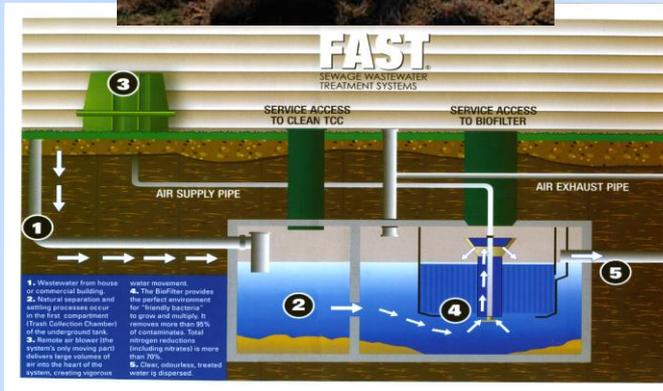
Treatment Systems



ClearStream Treatment Unit

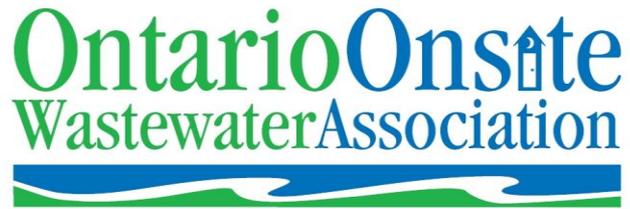


U.S. Patent Numbers: 5,221,470 / 5,785,854 / 5,770,081



Seminars available

**Interested in having this
information presented
to your
cottage association?**



Contact info

www.oowa.org

Denis Orendt

tel: 905-372-2722

dorendt@yahoo.ca

Thank you

Water is our most precious resource.

We can live without oil or gas



But we cannot survive without clean water