## Class 1 Sewage Systems

In Ontario, Class 1 sewage systems (also known as a septic systems) are those that are only used for disposal of human body waste, such as privies (i.e. outhouses), chemical toilets, incinerating toilets, re-circulating toilets, and a composting toilet system. This type of system must not be used for the disposal greywater, generated from plumbing fixtures like sinks, showers, and laundry. Class 1 sewage systems are typically used in addition to a Class 2 sewage system, which handles the greywater.

In Ontario, a Class 1 sewage system can be constructed without a permit, however there are still requirements set out in the Ontario Building Code that must be followed. These requirements are in place to protect the health and safety of users, as well as protect the environment from contamination.

## Construction Requirements

## Clearance Distances

Minimum horizontal clearance distances for Class 1 sewage systems are required by the Ontario Building Code to as outlined below. Note that your local municipality may have increased clearance distance requirements and if so, the greater distance must be followed. You should check with your local municipality prior to constructing a Class 1 sewage system.

| Land Feature | Distance (metres) - <br> for earth pit privies | Distance (metres) - <br> for vault privies |
| :--- | :---: | :---: |
| Well with watertight casing to a depth of at least 6 m | 15 | 10 |
| A spring used as a source of potable water or well without <br> a watertight casing to a depth of at least 6 m | 30 | 15 |
| A lake, river, pond, stream, reservoir, or a spring not used <br> as a source of potable water | 15 | 10 |
| A property line | 3 | 3 |

## General Requirements

- Strong, durable, weatherproof materials.
- The floor must be solid and supported by a sill (base) constructed of treated timber, masonry or other material of equal strength and durability.
- All inside walls should be flat and smooth so that they can be easily cleaned and sanitized.
- Seat(s) must have a cover and be supported by an enclosed bench/riser lined with an impervious material on all interior vertical surfaces.
- The door must be a "self-closing door"; spring-loaded hinges are an easy method to meet this requirement.
- One or more openings for ventilation are required, all of which must be screened.
- Ventilation duct that is screened at the top extending from the underside of the bench/riser to a point above the roof of the superstructure is also required.


## Earth Pit Privy

- The bottom of the pit must be 900 mm above the groundwater table ( 600 mm above bedrock).
- The bottom of the pit must be surrounded on all sides by not less than 600 mm of soil.
- The sides of the pit must be reinforced to prevent collapse.
- The soil around the base of the sides of the structure of the privy must be mounded to 150 mm above ground level.


## Vault Privy

- Structure for holding/storage of sanitary sewage must be watertight and made of material which can be easily cleaned.
- The soil around the base of the sides of the structure of the privy must be mounded to 150 mm above ground level.
- The surface of the ground must be graded so that surface water diverts away from the privy.


## General Tips

- Extra attention during construction can make a big difference in comfort during use, and can help prevent critters from joining you.
- A properly located, well lit, sufficiently vented, and easy to clean privy can serve all your needs without disrupting the environment, or the enjoyment of your property.
- A flat roof provides fewer corners for insect nests.
- The use of windows or a clear fiberglass roof will allow adequate lighting for safety and cleaning purposes
- Pick a location that meets the clearance distances required, but is exposed to prevailing winds which will aid in ventilation.


## Example Class 1 Sewage Systems



Pail Privy.

Pit Privy.


Vault Privy.


Chemical Toilet (Bucket Type).
Portable Chemical Toilet.

