

The following information is provided by Vriend Home Inspections Ltd after having done considerable research. There may be differing opinions on this subject. A thorough septic inspection is beyond the scope of a normal home inspection.

Septic Systems

Septic systems consist of two main components, the septic tank and the septic field.

Septic tanks are commonly made of concrete with some being made of polyethylene or fiberglass. Older tanks commonly have only one compartment and new tanks usually have two. The water and solid waste generated in the home enter the underground tank located at the exterior of the home. The solids may settle to the bottom of the tank or float at the top of the water level. The same amount of water that enters the tank will flow out into the septic field. The tank will generally have one or two hatches on the top for cleaning and inspection access. The outlet pipe in the tank will generally have a baffle or T-connection installed on it to help prevent solids and grease from going into the septic field. Septic tanks should generally be pumped out every 3-5 years depending on the size of the tank and the number of people living in the home, to remove solids from the tank. If solids are allowed to accumulate in the tank for an extended period of time, the solids may block the tank outlet but will generally contaminate the septic field, reducing its capacity and its ability to discharge the water.

The septic field should consist of a distribution box which may be any distance from the septic tank but will be at the start of the septic field. The distribution box will contain an inlet pipe bringing water from the septic tank and as many as five outlet pipes that should evenly distribute the water to the lines of the septic field. The lines are generally fifty or so feet long. The lines are placed in a bed of gravel or sandy soils that help to promote downward drainage and cleaning of the waste water.

A professional septic inspection would consist of opening the tank, inspecting the tank for cracks, sending a camera out of the tank to the distribution box looking for damage or restrictions of the outlet pipe and opening up the distribution box to determine possible contamination of the field. This is beyond the scope of a normal home inspection.

If one wishes to do an analysis of any potential problems, one should ask for the tank cleaning records and locate and open the distribution box. The distribution box should only contain signs of moisture or a little bit of water but should not contain any sludge or solids. Sludge could indicate contamination of the field and possible failure. The waste water stains in the distribution box should also be in the bottom half of the pipes going out into the field. Stains in the top half of the pipes would indicate blockages in the pipes and possible failure. Attempts can be made to 'flush' the field by a professional septic company.

In recent years engineered systems with numerous tanks, an air pump and a raised, designed field have been required where an existing septic field did not exist. These types of systems need to be professionally inspected every six months by a professional familiar with these types of systems. An inspection log should be available.

Hints for septic systems:

- Garburetors should not be used where septic systems exist as they add a lot of unnecessary solids to the tank, some of which cannot be digested by the bacteria found in a septic system.
- Bleach and harsh chemicals should be avoided in a septic system as they may kill the bacteria working in the septic system.
- Large vehicles should not be driven on the septic field as they may partially or completely crush the pipes.
- The septic field should be covered with grass and preferably not asphalt or concrete.

Any questions call us at 604-857-2413.