



## **POWTS Safety FAQs**

### **Caution: Onsite Treatment Systems Safety**

#### **Manhole Covers**

Be sure that the septic tank and its access ports have sound and secure covers that do not risk collapse and which cannot be removed by children.

The manhole in the cover of the septic tank is the large entrance (20" -24") through which the tank should be cleaned. The manhole may be buried below ground level, but should be close to the ground surface for easy access. It may be raised from the cover of the tank with concrete or plastic risers for easier access. It is usually located in at either end of the tank; older tanks may have the larger cover over the inlet end of the tank. Newer tanks should have a cover terminating above grade over the outlet end of the tank to accommodate the servicing of a filter located inside the tank. however, some manufacturers locate it closer to the inlet end of the tank. There may be more than one manhole, in which case they are usually located at the ends of the tank. Covers may be concrete, plastic, fiberglass, or steel. Insulation may be added in cold climates. Unless you are a service professional, never remove the manhole cover! It is heavy and creates a large, dangerous opening.

#### **Dangerous Overwhelming Gases**

When treating sewage, the tank contains very low levels of oxygen. Hydrogen sulfide, methane, carbon dioxide and other life-threatening gases are also present. The sewage treatment process uses many beneficial microorganisms, like bacteria, in the treatment process. However, the tank also contains harmful bacteria, viruses, and disease causing organisms. Liquid and solid contents of the septic system are capable of causing infectious diseases. Decomposing wastes in the septic tank produce toxic gases (such as methane) which can kill a human in a matter of minutes.

- Do not lean over or stick your head into the septic tank to examine its interior - you could fall in to the tank or become overcome by gases and fall into the tank, an event which is likely to be fatal.
- Never go into a septic tank to retrieve someone who has fallen in and was overcome by toxic gases without a self-contained breathing apparatus (SCBA). Call for emergency services immediately and put a fan at the top of the tank to blow in fresh air.
- Do not light a flame at or near the tank - methane gas is explosive. Do not smoke near septic tank openings.
- Never use electrical lights, appliances, or tools in or close to water or wet ground near the septic tank or drainfield. This can result in electrical shock or explosion.
- Contact a plumber or other qualified person if you smell 'sewer gases'. They can identify the source and correct it immediately. If the gas is very strong, evacuate the building until the problem is corrected and the gases are removed.
- Never go down into a septic tank or any other wastewater tank. Professionals who work on onsite wastewater treatment systems are specially trained and wear special equipment and gear for that purpose, including self-contained breathing apparatus.

## **Wastewater is unsanitary**

Be alert for unsanitary conditions such as surface effluent or sewage backups into buildings, events which risk serious viral and bacterial hazards and which indoors may require professional cleaning. Be alert for personal sanitation hazards when working around septic systems, such as open cuts or failure to wash properly after coming into contact with any part of a working onsite sewage system.

## **Rope off and mark dangerous sites**

If you think there are dangerous conditions, such as an unsafe tank cover, tank collapse, or a home-made septic tank or cesspool (which are at increased risk of sudden collapse) such areas should be roped off and clearly marked as dangerous to prevent access until proper evaluation and repairs can be made.

Old steel tanks, thin, rusting steel or rotting homemade wood tank covers, site-built tanks and cesspools, and recently - pumped tanks are at particular risk of collapse, with the chance of becoming buried. Beware of abandoned systems which may not have been filled in. Signs of collapse include depressions or “soil subsidence” anywhere on or around the property. Any suspect area should be roped-off and absolutely no one should walk over or even close to such a spot until it has been investigated by a professional. Don’t assume that an old house which is now connected to the public sewer didn’t previously have an onsite wastewater treatment system.