

## ACT 537: UNDERSTANDING HOLDING TANKS

Citizens, landowners, prospective homebuyers, and developers have many questions about the use of holding tanks for sewage disposal. This fact sheet discusses a few of the recurring concerns and questions about holding tanks.

### What is a holding tank?

As defined in the Department of Environmental Protection (DEP) regulation 25 Pa. Code §73.1, a holding tank is “a tank, whether permanent or temporary, to which sewage is conveyed by a water carrying system.” Further, it is “a watertight receptacle that receives and retains sewage and is designed and constructed to facilitate ultimate disposal of sewage at another site.” This section of DEP’s regulations, as well as others, is available on [The Pennsylvania Code](http://The Pennsylvania Code website) website.

### Is a holding tank the same as a septic tank?

No, they are not the same. Holding tanks (Figure 1) and septic tanks (Figure 2) are very different structures. Again referring to 25 Pa. Code §73.1, a septic tank is “a treatment tank that provides for anaerobic (oxygen-poor conditions) decomposition of sewage prior to its discharge to an absorption area.” This treatment function is the first of two major differences between a septic tank and a holding tank. Holding tanks do not treat sewage; they merely store sewage that will be treated at another location. The second difference is that septic tanks discharge partially treated sewage (called effluent) into the soil for final treatment through an outlet. Holding tanks have no such outlet.

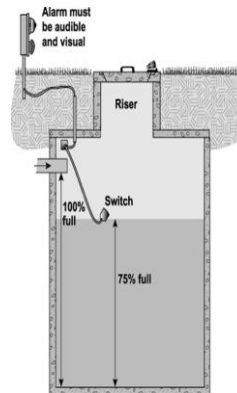


Figure 1. Holding Tank

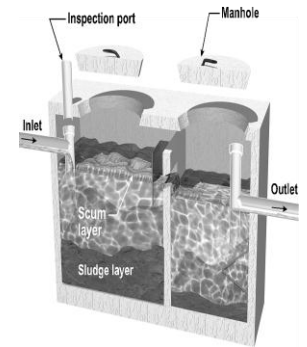


Figure 2. Septic Tank

### Are cesspools similar to either holding tanks or septic tanks?

Cesspools are not similar to either septic tanks or holding tanks. A cesspool is an outdated method of sewage disposal that is not permitted in modern regulations.

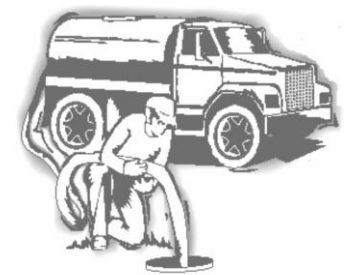
A cesspool may be described as an “igloo like” structure, built of loose (without mortar) rock or building blocks, that is buried underground. Cesspools are not watertight and allow the sewage entering them to drain into the surrounding area. Constructed from the late 19th to the mid-20th centuries, these aging facilities can become unstable and dangerous. Figure 3 depicts a collapsed cesspool that previously served a single-family residence. Unlike septic tanks, cesspools provide very little treatment to sewage before releasing it to the environment and unlike holding tanks, cesspools do not retain sewage for treatment elsewhere.



Figure 3. Collapsed Cesspool

### How is a holding tank cleaned?

The sewage in a holding tank must be periodically removed by a pump truck and taken to another permitted location for treatment. In Pennsylvania, the cost for this service varies with the volume of the tank, the difficulty in reaching the tank and the geographic location within the commonwealth. An informal survey, conducted in 2008, revealed the cost of pumping an average-sized tank ranged from \$150 to \$330 per service.



### How quickly does a holding tank fill up?

How quickly a holding tank fills up depends on the size of the tank and the volume of sewage generated. The minimum capacity of a holding tank is established by DEP regulation 25 Pa. Code §73.62 as “1,000 gallons or the

volume equal to the quantity of waste generated in three days, whichever is greater.” If a household generates 250 gallons per day (gpd) of sewage, a 1,000-gallon holding tank will overflow in four days.

### **How will I know when the holding tank is full?**

Holding tanks are required to have a warning device, with an audio and visual signal, that will indicate when the tank is filled to 75 percent of its capacity. This warning should provide sufficient time for the owner to have the holding tank pumped out prior to it overflowing or backing up into the structure.

### **Wouldn't it be expensive to pump out a holding tank every three days to prevent it from overflowing?**

Yes, it would become very expensive over time. On a three-day pump schedule, over the course of just one year, the tank would be pumped 122 times. At even the lowest figure of \$150 per pumping, it would cost \$18,300 to dispose of this sewage for only one year. When compared to public sewer rates of \$400 to \$600 per year, clearly a holding tank represents the most expensive method of sewage disposal. It is for this reason that DEP discourages their use.

### **If they are expensive to service, why would anyone use a holding tank?**

Holding tanks are most frequently installed to replace failed onlot sewage disposal systems that cannot be repaired in any other fashion. As such, holding tanks represent a “repair of last resort.” Under certain circumstances, holding tanks may also be used in new construction. Holding tanks may be used with minor restrictions, to serve new institutional or commercial facilities generating sewage flows of less than 800 gpd and with greater restrictions, as temporary service for new residential facilities pending extension of public sewer service. Restrictions for the use of holding tanks are found in 25 Pa. Code §71.63.

### **I want to build a hunting cabin with indoor plumbing or add indoor plumbing to my existing cabin. Since it will only be used a short time each year, can I use a holding tank?**

It is a fact that, over time and changing ownership, many seasonal facilities like hunting cabins and vacation cottages evolve into year-round residences. With this evolution in mind, even seasonal sites must demonstrate capability of supporting a sewage system able to serve a full time residence. Therefore, sufficient site suitability testing, such as percolation and soils probe tests, must be conducted to identify and protect a location suitable for the installation of an onlot sewage disposal system to service a structure with indoor plumbing. In this way, seasonal use cottages and even hunting cabins are prepared for long-term residential use. Modern regulations do not provide for long-term holding tank service to residential type structures. Even interim use of a holding tank for a cabin is allowed only if the municipality's official sewage facilities plan (Act 537 Official Plan) schedules a short-term replacement of the holding tank with a permanent long-term facility such as a public sewer line. Generally speaking, cabins without indoor plumbing rely on privies for sanitary facilities, while cabins with indoor plumbing utilize on-site septic systems, not holding tanks.

### **I am thinking about buying a cottage for seasonal use that currently has an old privy. With what I have just read about holding tanks, what should I be concerned with as I investigate this property?**

The greatest concern would be purchasing a property that has no future method of sewage disposal. The greatest protection against such a problem is to become informed about the property. Ask the seller about the sewage facilities planning status of the property. It should have received planning approval from the local municipality and DEP or predate this requirement (prior to May 15, 1972). Ask about sewage disposal permit status and site suitability testing. Ask for copies of any permits issued and for soil test reports. Discuss the property's potential for sewage disposal with the Sewage Enforcement Officer employed by the municipality where the property is located. Privy standards have changed over the years, and an examination of the privy's construction can reveal much information. Modern privies are built above a watertight vault, while substandard privies use a pit dug in the ground. The combination of a privy and a pressurized water system (within the structure) is not allowed in modern regulations and is a situation that should cause a prospective buyer to ask questions about waste disposal. Do not make the mistake of assuming that upgrading a privy to a holding tank is an available option. Pit privies are routinely upgraded to vault privies, not holding tanks. Conversion to holding tanks use is rarely an acceptable alternative.

For more information, visit [www.dep.pa.gov/About/Regional](http://www.dep.pa.gov/About/Regional).