London Grove Township On-lot Sewage Management Program Public Education Series #4: The Importance of Regular Pumping

All on-lot sewage systems require routine maintenance to keep working properly, protect the environment, and protect your bank account from preventable and expensive repairs.

The single most effective maintenance activity that can and should be performed on all on-lot sewage systems is the regular pumping of the treatment tank. This simple activity will remove the accumulated solids in the treatment tank, prevent solids from traveling out of the tank and damaging the drainfield, and allow the natural treatment processes in the tank to work as intended. Additional information regarding treatment tank pumping follows, to better explain why pumping your sewage system is usually a "win/win" situation for both the environment and your bank account.

How does regular tank pumping help?

The treatment tank treats the wastewater naturally by holding it in the tank long enough for solids and liquids to separate. The wastewater forms three layers inside the tank. Solids lighter than water (such as fats, oils, and greases) float to the top forming a layer of scum. Solids heavier than water settle at the bottom of the tank, forming a layer of sludge. This leaves a middle layer of partially clarified wastewater. The layers of sludge and scum remain in the septic tank where bacteria found naturally in the wastewater continue to break the solids down. The sludge and scum that cannot be broken down are retained in the tank and build up until it is pumped.

It is very important to remove these solids as they will eventually build up to the point that the tank no longer has enough liquid area to allow for adequate microbial activity or the settling out of solids and scum. Once this point is reached, suspended solids will pass through the tank to the drainfield, and the wastewater will not stay in the tank long enough for bacterial activity which helps break down some solids. Both of these consequences result in greater risk for groundwater contamination and premature failure of the drainfield. Since repairing or replacing a failing drainfield will cost significantly more money than regular treatment tank pumping, having your tank pumped regularly will save you money in the long run, and at the same time help protect the environment.

How often should I have my tank pumped?

The rate at which solids accumulate varies significantly based upon such things as how many people live in the house, whether or not a garbage disposal is used, and the size of the tank. The general guideline for determining when a pump-out should be conducted is whenever the solids and scum layers accumulate to 1/3 of the liquid depth of the tank. In lieu of constant monitoring of the depth of the solids, a maximum three year pumping interval has become the accepted standard in Pennsylvania, and is also the basis for London Grove Township's program. If you have a very large family, an undersized tank,

or use a garbage disposal, the 3 year interval may need to be decreased to a more frequent schedule to avoid excessive solids build-up.

What else should I consider when having my system pumped?

All sewage pumpers/haulers in Chester County are required to be licensed by the Chester County Health Department. As a condition of maintaining this license, they are also required to enter a record for each sewage system they pump into an electronic database maintained by the County. London Grove Township may use this database to help track system pumping, generally eliminating the need for you to send receipts to the Township to provide proof of pump-out. Keep receipts for all pumping though – if your pumper does not enter this information in the County database, or if London Grove chooses to not use the County database, you are ultimately responsible and will need a receipt as documentation. Always make sure the pumper you hire is licensed by the County and records your system's pumping in the County database.

A list of licensed pumpers can be found on the County's web site at https://apps.chesco.org/reports/rwservlet?cchd&REPORT=WL LWPS.rdf, or you may call the Health Department at (610) 344-6526 to obtain a copy.

There are several easy things a pumper can check while he's pumping your system which will help avoid problems in the future. Tank baffles should be inspected and, if necessary, repaired or replaced whenever a pump-out is conducted. The tank and tank lid should be checked for visible cracks or other structural defects, and repaired if needed. You should also ask your pumper to note the depth of your tank lid. Current regulations require that it be no more than 12 inches deep so that it's easy to get to for regular pumping. If yours is deeper than this, you may want to consider adding a "riser", or manhole extension, to save extra digging every three years. All these items require very little time or effort while the tank lid is opened and the tank is emptied out, and are required to be checked every time a tank is pumped out in London Grove Township.