Fox Township On-lot Sewage Program

Many Pennsylvanians, particularly those living in rural areas, depend on septic systems (also called on-lot systems) to treat the sewage from their home. Properly functioning on-lot systems treat, distribute and dispose of sewage through a clean, economic and efficient process.

The Pennsylvania Sewage Facilities Act (Act 537 of 1966, as amended) requires local agencies to administer a permitting program for the installation of on-lot sewage disposal systems. The purpose of this permitting program is to establish uniform standards to prevent outbreaks of public health and environmental problems from substandard or malfunctioning on-lot systems.

Working With Your Local SEO

The Township administers the on-lot permit program. The certified Sewage Enforcement Officer (SEO) is the Township's employee responsible for reviewing and approving permit applications and being knowledgeable about on-lot systems. The SEO is trained by DEP and certified by the State Board for Certification of Sewage Enforcement Officers. The SEO is an employee of the local agency, not DEP.
The S.E.O. for Fox is Mr. Russ Braun and can be reached at (814) 781-3663 or (814) 929-5138.

On-Lot Sewage Permitting Process

A person desiring to build a home or camp within Fox Township must first obtain an on-lot Sewage Permit as well as a building permit. The property owner completes Part One of the Application for a Sewage Disposal System Permit and should then contact the Sewage Enforcement Officer (SEO) to determine if soils' testing is necessary. Soils testing is required on all lots where an application is made for a Permit, however if the lot is located in an approved subdivision, the soils testing may not be required. The SEO will make this determination. Applications for the Sewage Permit are available with the Township Secretary; the secretary may be reached at Fox Township Municipal Building, 116 Irishtown Road, Kersey, PA 15846 or phone (814) 885-8450 extension 4.

When soils' testing is required, the applicant should contact the Sewage Enforcement Officer and make arrangements for the necessary soils testing and a site evaluation. The SEO for the Township is: Russ Braun and can be reached at (814) 781-3663.

The SEO will examine a soil profile to identify any zone that would limit the treatment of sewage by the soil. This "limiting zone" may be caused by masses of loose rock, broken bedrock, or a seasonal or perched water table that periodically saturates the soil layers. In Pennsylvania, there must be at least 10" of suitable soil material from the soil surface to the limiting zone to qualify as acceptable for an alternate type of on-lot system. A limiting zone depth of 20" is required for the installation of a sandmound type of system, and a depth of 60" is required to install a conventional in-ground system.

The first step is the examination of a deep soil probe pit on the lot. <u>You will need to have a backhoe on site to dig these test pits</u>. It is best to dig these pits when the SEO is present so that several areas of the lot can be tested. Before any lot will be looked at, you must place a call to the Pa. One Call System at least 10 working days beforehand. The phone number is 1-800-242-1776. They will locate any underground utilities in the area. When this call is made a verification number will be given to you. The SEO may require this number before any property will be looked at.

The test pits are to be dug at a maximum depth of 7 feet and should be tapered on one side to allow the SEO to get in and out of the pit. The pits must be backfilled within 5 days to prevent any injuries.

The results of these soil test pits will determine the type of system, if any, that can be permitted on your lot. i.e. sandmound or in-ground. If the findings are favorable, the SEO will then do a percolation test at the location of the proposed sewage disposal area. Perc. testing can only be done.

Determined by the above soils testing, there are four basic conventional on-lot systems permitted for use on residential lots. They are:

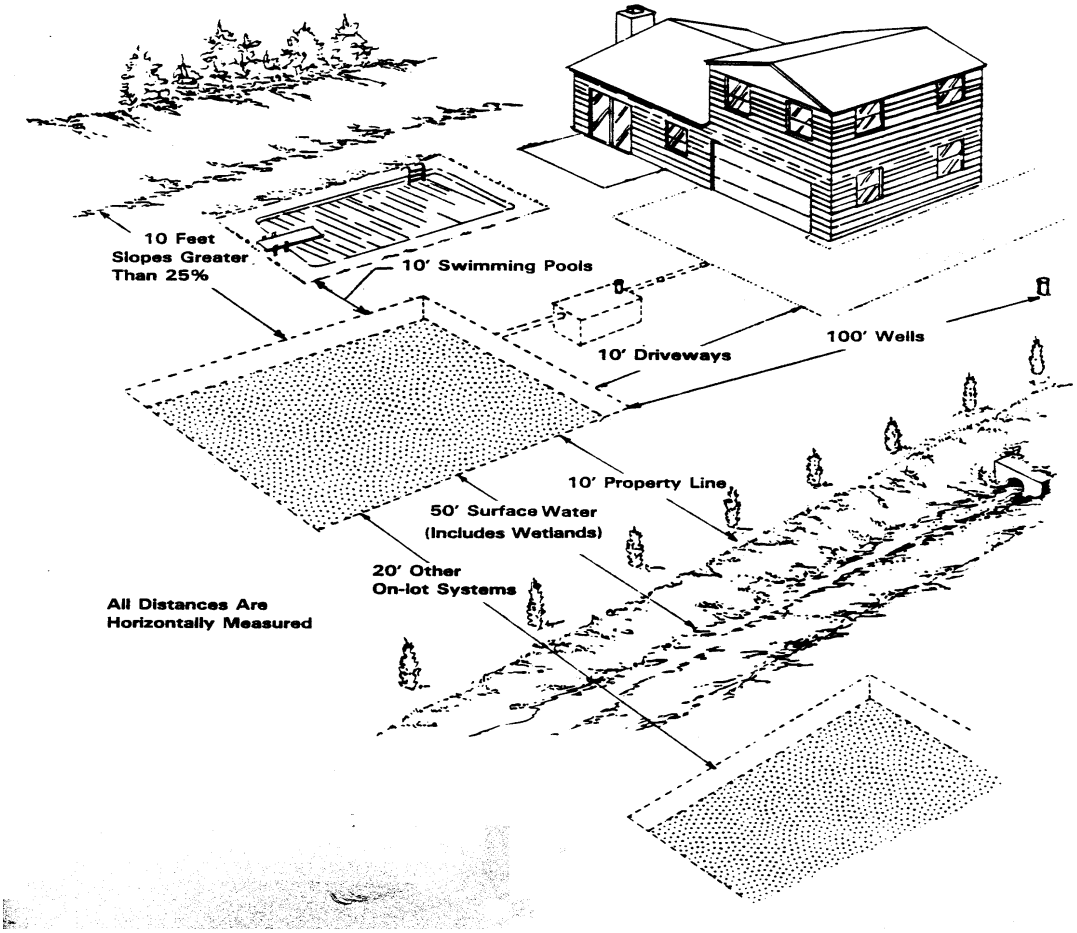
Depth of Suitable Soil	**Type of System Permitted**
Less than 10"	Unsuitable
10" to 20"	Alternate Systems
20" to 48"	Elevated Sandmounds
48" to 60"	At-Grade Seepage Beds (pressurized)
60" – Plus	Conventional Gravity Trenches and Beds

The type of system selected and permitted depends on site conditions and the type of soils on the lot.

As part of the site investigation, the SEO will determine if the proposed location of the system will meet isolation distances requirements. The system is required to be certain distances away (isolated) from natural and man-made features. This is done to assure long term operation of the system and to prevent ground or surface water pollution. To attain a suitable location, the SEO may need to locate the system on a specific part of your lot. These isolation distances are shown in Figure 1. Once the SEO has determined that slope restrictions and isolation distances can be met, soils testing may begin.

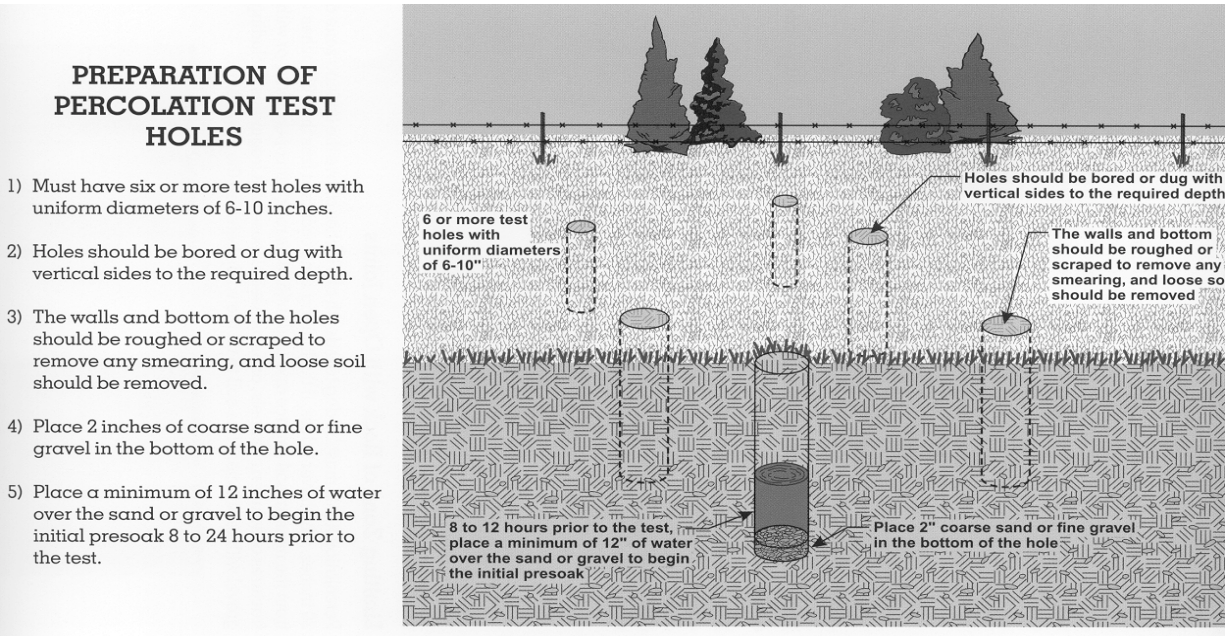
Figure 1

MINIMUM ISOLATION DISTANCES



THE PERC TEST:

You must dig 6 holes in this area at a predetermined depth that is based on the test pits dug earlier. The holes are to be dug using a posthole digger (6 to 10 inches in diameter) and 15 to 20 feet from each other. A minimum of 50 gallons of water and about 20 pounds of fine gravel or sand must be provided at the site. Failure to have the necessary materials at the site or if the site is not properly prepared so that a second visit to the site is required, will result in an additional fee of $50.00. The perc test is not permitted when the air temperature is below 40 F and if the ground is frozen or snow covered. Testing done under these conditions is less accurate.



After the soils testing is completed, you will then be notified by letter of the soil test results and sent a copy of Appendix, “A” which describes the soils testing. If your lot does not require soils testing, a copy of Appendix "A" that describes prior test results will be sent to you.

SYSTEM DESIGN:

If the site is denied, the SEO notifies the applicant and provides the opportunity to an appeal hearing.

If the site investigation, soil profile and percolation tests indicate that an acceptable area for the system exists, the SEO will advise the applicant that the site is suitable and that the applicant needs to have a septic system designed. The system designer, usually another SEO from a neighboring municipality, must consider the site condition, limiting zone, percolation test results, and the number of bedrooms proposed in the home when designing the system. Additionally certain sites require detailed engineering design or a may require a design by a registered professional engineer.

The next step will require you to obtain the services of an on-lot Septic System Designer (the reviewing SEO cannot design the system) who will design a septic system based on the results recorded on Appendix "A". You must also prepare a plot plan of your property. This plan is a hand drawn map on an 8' x 11" piece of paper. The following must be included on this sketch.

a) property lines with adjacent owners names
b) adjacent streets and roads
c) the location and dimensions, in feet, of:
   1) all existing and proposed buildings
   2) driveways
   3) septic tanks and dosing tanks
   4) all wells, springs and other surface water including wetlands
   5) all soil test pits and perc holes
   6) a reference to north
   7) the proposed absorption area (leech fields or sandmound)
   8) the direction of slope

After the design and plot plan are complete, they are submitted as part of the permit application to the SEO. Send two copies of the design and plot plan to the Sewage Enforcement Officer:

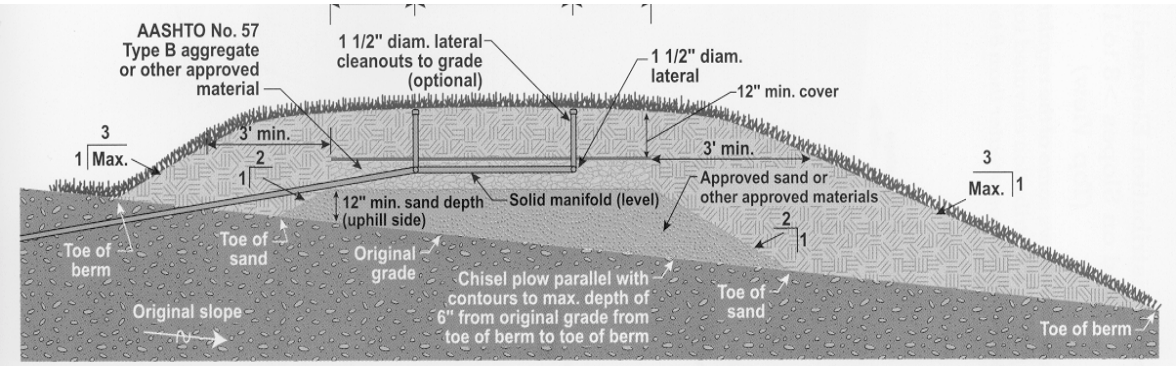
Rob Singer, PO BOX 184, Kersey, PA 15846

The SEO must approve or deny the permit within seven days of receiving a complete application. After a complete review of the design, a sewage permit will then be issued. **Once issued, the Permit is valid for three (3) years.**

The construction and installation of the system and the building to which it serves must be completed within 3 (three) years from the date the permit was issued. A new permit will be required if the permit expires.

PLEASE NOTE: During the construction of the septic system please make sure that the contractor keeps all equipment (trucks, backhoe, dozers) off of the soils where the system is to be built. Soil compaction at this stage will damage the soil structure and cause irreversible damage to the performance of the system.

Typical Elevated Sandmound:



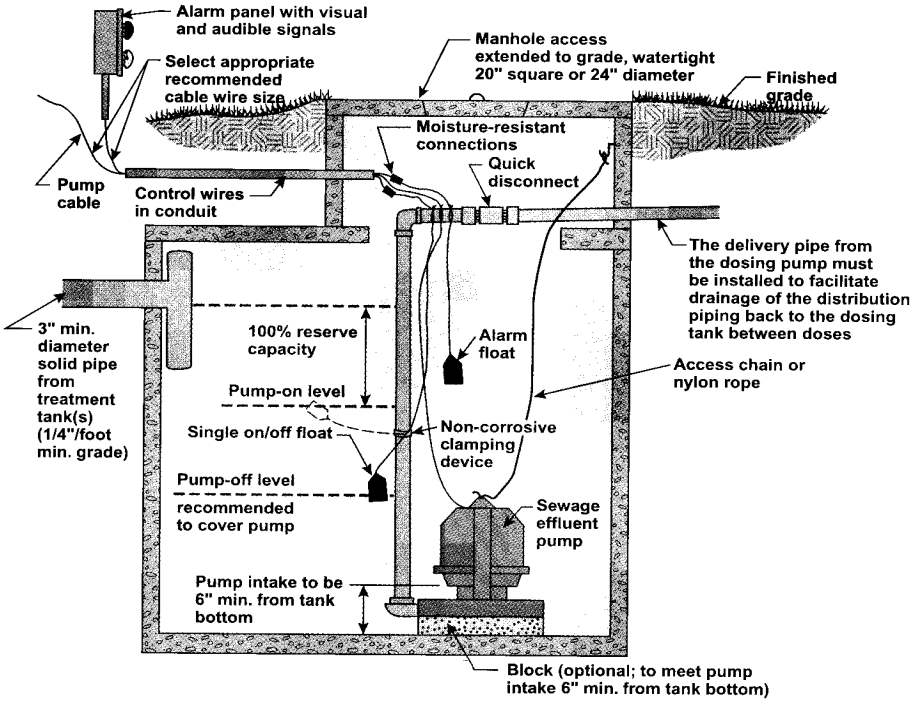
NOTES:
- All joints must be watertight.
- Top of aggregate, sand, manifold, and laterals must be level.
- Two inches of aggregate must be placed above laterals and 6 inches of aggregate below laterals.
- Aggregate length must be at least four times greater than the aggregate width.
- Bed must be installed on contours.

Choosing an Alternate System

In some cases, when a lot does not qualify for a regular on-lot disposal system, the lot owner may wish to consider an alternate system. There are several alternate methods DEP has approved over the years that may be appropriate. Keep in mind however; some lots just are not suitable for any type of disposal system due to inadequate soils, high water table, or other important factors. Also, these alternates systems are considered to be rather expensive.

PRESSURE DISTRIBUTION USING A PUMP

This illustration shows some of the regulatory requirements of a pressure distribution system that uses a pump.



NOTES:

- Dosing tank must have a minimum liquid capacity equal to or greater than two times the designed dose volume.
- Double on/off floats may be used in lieu of single on/off float.
- Quick disconnect must be located for ease of pump removal.
- Pump and alarm must be on separate breakers.

Observing the Installation

If approved, the SEO issues the permit and the applicant may begin installing the system and building the home. The SEO can oversee any step of the installation, but must inspect the completed system before it is covered.

Be sure to hire a reputable contractor because the best designed system can malfunction if not properly installed. Get written bids from potential contractors, ask for a list of references, and ask associations and your local SEO if they know these contractors. You, too, should be somewhat aware of the proper procedures and observe the contractor's activities. Ask your local SEO for information about proper installation procedures.

Once the on-lot system is installed, the homeowner is responsible for following proper operating and maintenance procedures to prevent malfunctions and ensure long-term use of the system.

Investigate Before You Invest

Planning to buy a vacant lot that needs to have an on-lot sewage disposal system installed? Be sure to investigate before you buy. Among other precautions, find out if:

- all state, county and local subdivision requirements, such as sewage planning, have been met and approved.
- all permit requirements, such as zoning and building, have been met.
- the lot you are considering qualifies for an on-lot sewage disposal system permit from the local sewage enforcement officer. (The buyer needs to be aware that a subdivision approval does not guarantee that each lot in the subdivision will qualify for a sewage permit. The buyer may want to require the seller to obtain a sewage permit first as a condition of the sale.)

If you have any questions or doubts about the required permits or subdivision approvals for the lot you are considering, contact the local government officials where the lot is located, including the local certified sewage enforcement officer.

Remember, what may look like the dream lot could lead to nightmares and, possibly, financial ruin. *So, investigate before you invest!*