

London Grove Township On-lot Management Program
Public Education Series #7:
Permitting On-Lot Sewage Systems

Anyone who intends to modify, repair, or install an on-lot sewage system must follow these general guidelines:

1. The lot owner or consultant for the owner applies for a permit through the Chester County Health Department (CCHD) Sewage Enforcement Officer (SEO). Each municipality in Chester County has an assigned SEO; you may contact the CCHD at:

Chester County Health Department

Government Services Center

601 Westtown Road, Suite 288

West Chester, PA 19380-0990

Phone: 610-344-6526

<http://dsf.chesco.org/health> (click on “sewage and water”)

2. If the work involves installation of an absorption area, the CCHD SEO or a consultant working with the CCHD SEO, in coordination with the property owner or consultant for the property owner, evaluates soil profile examinations (deep probe test) and percolation tests to determine site suitability;
3. The lot owner and/or consultant then completes the permit application by including an onlot system design based upon the results of the site suitability testing;
4. The CCHD SEO approves or denies the permit within seven days of receipt of a completed application, or identifies the application to be incomplete and requests the missing information; and
5. If approved, the CCHD SEO issues a permit for the installation of the system. If denied, the SEO notifies the applicant and provides opportunity for an appeal hearing. Please note that denials are unusual – the CCHD will usually work with a homeowner to resolve any concerns before denying a permit application.
6. The CCHD SEO typically oversees the system installation and conducts a final inspection prior to the system repair or installation being backfilled with soil (covered).

What is an SEO and what are his/her duties?

Certified Sewage Enforcement Officers (SEOs) working for the Chester County Health Department are empowered by the Department of Environmental Protection (DEP) with administering the on-lot sewage system permitting process. In Chester County this includes the evaluation of soil profiles (deep probes), oversight of percolation tests, review of system design, issuance of permits,

inspection of system installations, and malfunction investigations. SEOs are certified by passing a State administered examination and are subject to continuing education requirements as well.

What is DEP's role in the permitting process?

DEP can review, monitor, and assist the Chester County Health Department's administration of the permitting process, although most permitting activity is usually handled entirely by the CCHD.

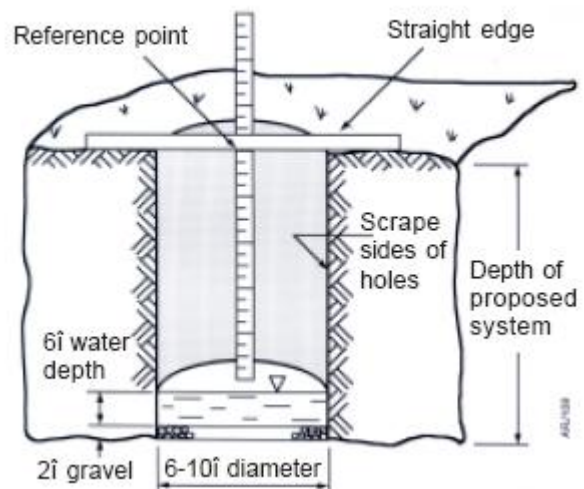
What is a deep probe test?

The first test in replacing an onlot system is typically a deep probe test, often called a "test pit". In this test, a backhoe pit is dug in order to determine the presence or absence of a "limiting zone". Limiting zones include, but are not limited to, a high water table and bedrock. This determination directly affects the location and type of septic system which may be allowed on the site, since Pennsylvania regulations require a certain amount of "good" soil between the bottom of any sewage system absorption area and any incidence of a water table or excessive rock. If sewage comes in contact with a water table, or rock with open fractures which could cause the sewage to move quickly downward to a water table, groundwater pollution can result.

What is a percolation test?

A percolation ("perc") test measures the rate at which water moves through soil. The test is to determine if the soil will allow water to drain quickly enough to support a properly working on-lot sewage system. The following is a summary of the process used to perform a percolation test:

1. A minimum of six holes are dug in the area of the proposed absorption field;
2. The soil is pre-soaked by pouring 12 inches of water in each hole 24 hours before the actual test to simulate saturated conditions;
3. The day of the test, a final pre-soak is conducted by pouring 6 inches of water in each hole for two periods of ½ hour each;
4. The actual test then begins with a series of measurements of water level drop done at 10 or 30 minute intervals, depending upon how quickly the water dropped during the final pre-soak. This test may take as long as four hours or as little as 40 minutes, depending upon the type of soil.



Typical Percolation Test Hole

There are many variations to on-lot sewage system design that may be appropriate for a particular property, depending on soil and site conditions. A few examples are:

1. Standard trench
2. Elevated sand mound
3. Seepage bed system
4. Individual residential spray irrigation system (IRSIS)
5. Subsurface sand filter

For more information on these variations, please contact your local CCHD SEO.

What if my lot conditions do not meet the requirements for a standard septic system?

Lot size, slope, and soil conditions can all affect how a new sewage system may be able to fit on your lot. If your particular lot conditions do not allow the installation of a standard septic system, some alternates may be available. The CCHD SEO or a qualified consultant can help find the best system for you depending on your specific site and soil conditions.

Where can I obtain more information on sewage-related questions?

For more information on onlot sewage disposal systems, contact the Chester County Health Department at the address above.

You may also visit DEP's Web site at <http://www.depweb.state.pa.us>, Keyword: "Wastewater", or contact the DEP office for our region at the address below.

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Southeast Regional Office
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Norristown, PA 19401
Main Telephone: 484-250-5900
24-Hour Emergency: 484-250-5900
Counties Serviced: Bucks, Chester, Delaware, Montgomery and Philadelphia