

Infiltrometer Percolation Test

- Infiltrometer cylinders are set into the soil at a specific depth based on the inspector's findings during the soil pit evaluation.
- Infiltrometers set at 12-18 inches test for a sand mound disposal system.
- Infiltrometers set at 19-30 inches test for a low pressure dosed at-grade disposal system.
 - Water is poured into the infiltrometer to a specified depth and using a scientific ruler called a "hook gauge", percolation rates are measured every 10 minutes for a minimum of 60 minutes.
- A passing evaluation is given when a soil pit analysis is determined to be satisfactory and the average of at least 3 infiltrometer tests demonstrates a percolation rate of 1 inch of drop in 5 to 60 minutes.



General Information

- Some soil types are listed as seasonal and can only be tested during the spring. This designation will be determined during the application review process.
- You are NOT GUARANTEED a passing result and fees will not be refunded for failed tests.
- The creation of a new lot of record requires a passing soil analysis/percolation test.
- For large acreage lots, a site map with two foot contour lines and soil type delineation may be required during the application review process.
- Testing commonly takes four hours per site.
- Sufficient water must be provided on-site for percolation testing, usually at least 5 gallons per infiltrometer test.
- Fee- \$200.00 per test
- Applications are available in person or online
- <http://www.alleganyhealthdept.com/envhealth/forms.htm>



Environmental Health Division
Allegany County Health Department
12501 Willowbrook Road
Cumberland, MD

Percolation Testing and Soil Analysis for On-site Sewage Disposal Systems



301-759-5040

Soil Evaluation Pit

- An analysis of the soil profile is a critical step in determining the suitability of an area to accept sewage effluent. This analysis, along with results from the percolation test, will determine which type of on-site sewage disposal system, if any, can be designed for your property.
- You must have a contractor on site during testing who is familiar with Maryland's soil testing procedures and requirements.



- Contractors must have a machine (backhoe, excavator, etc.) capable of digging test pits greater than 6 feet deep and 10 feet long.
- Soils in the ridge and valley province (most of Allegany County) are often of poor quality in terms of the ability to support an on-site septic system. This often results in failed tests, especially on smaller sized lots.

Requirements for a Passing Soil Evaluation

- Maryland law requires at least 24 inches of filterable soil to be present throughout the evaluation area.
- A site with 24-28 inches of soil and 3 passing infiltrometer tests is suitable for a sand mound disposal system.
- A site with 29-48 inches of soil and 3 passing infiltrometer tests is suitable for a low pressure dosed at-grade disposal system.
- The soil profile cannot exceed the minimum volume of rocks by size (50%) and weight (70%).



Requirements for a Passing Soil Evaluation

- The soil profile cannot show evidence of high or perched water table, including evidentiary color changes (ex. mottling)
- A distance of 100 feet must be maintained from any water body, spring, stream or water well system.
- A distance of 25 feet must be maintained from rock outcrops on the ground surface, drainage swales, flood plain soils and areas with slopes of greater than 25%.
- A distance of 10 feet must be maintained from any foundation.
- A minimum area of 10,000 square feet is required for disposal system and repair areas.
- If a site with greater than 48 inches of filterable soil is found and a traditional percolation (1' hole, 2' hole, 3' hole) yields an acceptable rate (1" in 5-30 minutes), a subsurface gravity distribution disposal system may be utilized.
- Sand mound and low pressure dosed at-grade systems cannot be built on slopes exceeding 12%.



**APPLICATION FOR SOIL EVALUATION AND
PERCOLATION TEST**

Applicants Name: _____ Phone: _____

Email Address: _____ Fax: _____

Mailing Address: _____

Property Owner Name (if different from applicant):
_____ Phone: _____

Driving Directions: _____

I HEREBY APPLY FOR A SOIL EVALUATION AND PERCOLATION TEST TO BE CONDUCTED BY THE ALLEGANY COUNTY HEALTH DEPARTMENT. I ALSO UNDERSTAND THAT THERE IS NO GUARANTEE OF A PASSING RESULT AND THAT THE TYPE OF SEPTIC SYSTEM SPECIFIED IS A FUNCTION OF THE PERCOLATION TEST FINDING AND THE NUMBER OF BEDROOMS AS DECLARED ON THE ALLEGANY COUNTY LAND USE PERMIT APPLICATION.

THE ISSUANCE OF A SEPTIC SYSTEM PERMIT IS AN INTERIM PERMIT AS SET FORTH IN COMAR 26.03.01 WHICH REQUIRES THAT, SHOULD PUBLIC WATER AND/OR PUBLIC SEWER BECOME AVAILABLE, YOU WILL BE REQUIRED TO CONNECT. THIS DOCUMENT IS ALSO TRANSFERRED TO ANY NEW PROPERTY OWNER IN THE EVENT OF ANY TRANSFER OR SALE.

PERCOLATION TESTS AND SOIL EVALUATIONS WILL BE PERFORMED IN THE ORDER THAT THEY ARE RECEIVED AND SCHEDULED. A CHARGE FOR THE SOIL EVALUATION AND PERCOLATION TEST WILL BE MADE FOR EACH 10,000 SQUARE FOOT "SEPTIC AREA" TESTED. THE APPLICANT MAY BE REQUIRED TO PROVIDE ADDITIONAL PROPERTY DOCUMENTS TO SUPPORT THE SITE EVALUATION IN THE FORM OF TOPOGRAPHIC MAPS, PRELIMINARY PLATS OR DRAWINGS THAT IDENTIFY SLOPES 0-12%, 13-25%, AND >25%, AS WELL AS ANY ADJACENT PROPERTY WELLS AND SEPTIC SYSTEMS WITHIN 200 FEET OF PROPERTY LINES AS DETERMINED BY THE ALLEGANY COUNTY HEALTH DEPARTMENT.

PAYMENT OF \$200.00 PER 10,000 SQ FT TEST MUST ACCOMPANY EACH APPLICATION AND DOES NOT GUARANTEE A PASSING RESULT. I HEREBY AGREE TO THE TERMS AND REQUIREMENTS LISTED ABOVE:

SIGNATURE: _____ **DATE:** _____

*****LOWER PORTION TO BE FILLED OUT BY HEALTH DEPARTMENT*****

Assigned to: _____ Test Date: _____ SOIL TYPE: _____ WET SEASON TEST: YES / NO

PROPERTY NOTES OR REQUIREMENTS FOR TEST:

