



Columbia County Department of Health

325 Columbia Street, Suite 100, Hudson, NY 12534
(518) 828-3358 Fax (518) 828-2666
www.columbiacountyny.com

APPLICATION FOR SINGLE LOT SEWAGE DISPOSAL DEVELOPMENT

APPLICANT NAME: _____ CURRENT OWNER: _____
MAILING ADDRESS: _____ MAILING ADDRESS: _____

(PHONE) HOME: _____ CONTRATOR: _____
WORK: _____ MAILING ADDRESS: _____

BUSINESS PHONE: _____
PARCEL DETAILED LOCATION: _____

TOWNSHIP _____ TAX MAP# _____ ACREAGE _____
NO. OF BEDROOM HOME PROPOSED _____ PROPOSED CONSTRUCTION DATE: _____

GENERAL PARCEL INFORMATION (CHECK ALL THAT APPLY)

- WOODED PARTIAL WOODED OPEN FIELD DRINKING WELL
 SURFACE WATER SWAMP DEC WETLAND FLOOD PLAIN
 STEEP SLOPE MODERATE SLOPE FLAT

PERCOLATION DATA

**** A minimum of TWO typical 24-30" tests and TWO shallow 18" tests must be completed** within the proposed absorption area and recorded on this application **Prior** to submission. See attached instructions (page 3) for explanation. **PLEASE PUT PERCOLATION TEST DATA ON DOH FORM 1327. WHICH IS ENCLOSED?**

Refer to instruction sheet for information regarding methods of construction of test holes and recommended number of preliminary test holes to be constructed.

I _____ the undersigned certify that the percolation tests were conducted by me or under my direction in accord with the above procedure. The data and test results are true and correct.

DATE: _____
SIGNATURE _____
LICENSE No. (P.E., R.A., L.S.) _____

**FEES ARE NON-REFUNDABLE
FEES ARE NOT PRO-RATED**

A submission fee of **\$500.00** made payable to the Columbia County Department of Health by cash, money order or certified check must accompany this application. Applications may only be submitted **April 1st through October 1st**. Site evaluations of parcels where applications have been submitted prior to the deadline will continue to November 1st weather permitting. Application and fee must be found complete before considered for a field appointment. **Incomplete applications will be returned. There can be no exceptions.** Depending upon workload, a field visit will be scheduled within 30 days of receipt of a properly completed application.

****Important**** After our Department has determined the type and size of the sewage disposal system for your parcel, you or your contractor must field mark the exact location of the tile field by securing four stakes (provided by you) in each corner of the approved area.

Approvals are valid for one year from the date the soil test was witnessed. In order for the approved location to be valid after one year, you must provide our Department with the CCDOH Requirement Letter, a survey map clearly marking the proposed site stamped by a licensed surveyor, and the proposed site must remain undisturbed.

Fees are non-refundable

Fees are not pro-rated

Design criteria used by the Health Department personnel will be in accordance with Appendix 75-A of the New York State Public Health Law.

Applicant Signature: _____

Date Submitted: _____

By signing, the applicant certifies that all information listed above is true and correct.

SOIL TEST REQUIREMENTS FOR SEWAGE DISPOSAL SYSTEMS

Two different types are required. Both must be conducted in the area of the proposed sewage disposal system. Soil tests should not be conducted in areas exceeding 10% slope, at the base of steep inclines, in well areas or with 25' below or 100' above proposed driveways.

- 1) SOIL PERCOLATION TEST – Must be performed by the applicant with results recorded on the application prior to submission to the Health Department. THE ATTACHED PERCOLATION TEST DATA FORM MUST BE COMPLETED, SIGNED AND RETURNED WITH THE APPLICATION. AT LEAST TWO PERCOLATION TESTS ARE REQUIRED AT THE SITE OF EACH PROPOSED SEWAGE SYSTEM.

SOIL PERCOLATION TEST INSTRUCTIONS

PROCEDURE: (also refer to Figure 3 attached).

- 1) At least two typical 24 to 30 inches in depth and two shallow 18 inches in depth percolation tests shall be performed within the proposed absorption area. At least one percolation test should be performed within the proposed absorption system expansion area.
- 2) Dig each hole with vertical sides approximately 12 inches in diameter. The sides of the percolation holes should be scraped to avoid smearing. Place washed aggregate in the lower two inches of each test hole to reduce scouring and silting action when water is poured into the hole.
- 3) Presoak the test holes by periodically filling the hole with water and allowing the water to seep away. This procedure should be performed for at least four hours and should be given one day before the test, except in clean coarse sand and gravel. After the water from the final presoaking has seeped away, remove any soil that has fallen from the sides of the hole.
- 4) Pour clean water into each test hole, with as little splashing as possible, to a depth of six inches above the bottom of the test hole.
- 5) Using the attached Percolation Test Data Worksheet (page 6), observe and record the time in minutes required for the water to drop from the six inch depth to the five inch depth for each hole.
- 6) Repeat steps (4) and (5) a minimum of three times until the time for the water to drop from six inches to five inches for two successive tests is approximately equal (i.e. 1 min. time drop differential for 1-30 minutes/inch. 2 min. for 31-60 min./inch). The longest time interval to drop one inch will be taken as the stabilized rate of percolation. Record the stabilized rate of percolation for each hole on the Percolation Data section of the application (page 1).
- 7) If different results are obtained for multiple holes in a proposed absorption area, the slowest stabilized rate shall be used for system design.

DEEP HOLE TESTS, 4 CORNER (SEE DIAGRAM BELOW)

The purpose of these test pits is to view the different types of soil strata present in the immediate area. These tests will also allow us to observe if any bedrock or groundwater problems exist that may affect the operation of a sewage disposal system. The deep holes can be completed after the application has been submitted and the applicant has been in contact with the Health Department. It is recommended that your sewage contractor dig the deep test pits at the time when DOH personnel meet with you at your site by appointment. In this way, other areas of your property can be explored if problems arise in your chosen area and deep test pits can be backfilled following inspection.

PROCEDURE

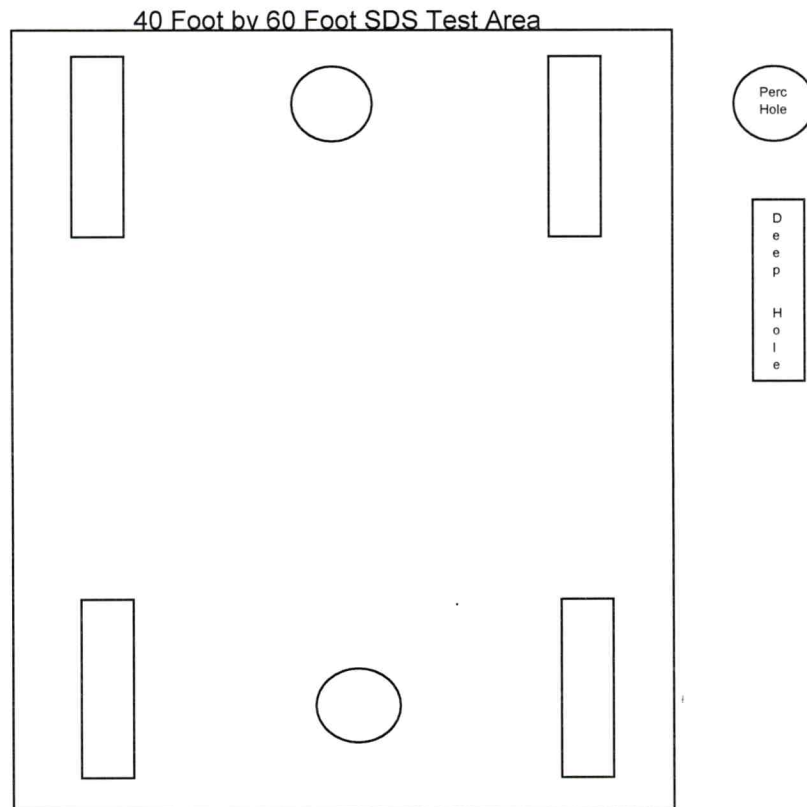
- 1) Dig 4 holes with vertical sides to bedrock, groundwater or a depth of six feet.
- 2) The width of the hole must be sufficient size to permit viewing the entire vertical face.

NOTE: No water or presoaking is required for the deep test holes.

FOUR CORNER TESTING

The deep hole testing should be done on each corner of an area, approximately 60 feet by 40 feet in which the sewage disposal system is proposed to be installed.

THE FOLLOWING DIAGRAMS ARE SELF-EXPLANATORY



For example, assume the following results were obtained from running a test (see “d” from page 1).

(EXAMPLE ONLY)

<u>RUN NO.</u>	<u>TIME IN MINUTES</u>
1.....	15
2.....	20
3.....	24
4.....	26
5.....	30
6.....	30

The stabilizer rate of percolation would then be taken as 30 minutes in this example.

SPECIAL NOTE:

- (f) If a perc rate stabilizes at 60min/inch or more, then the perc test must be repeated with a shallow hole not to exceed 18” deep and 8” in diameter.

.....

The percolation test is conducted to determine the rate at which the existing soil will absorb water. We must know the stabilizing percolation rate to determine the lineal feet of tile field required. To be satisfactory, the percolation rate must stabilize at a rate of less than 60 minutes per inch.

In instances where the percolation rate and/or the deep test pit is unsatisfactory, extensive testing in other areas on the property should be conducted or a professional engineer, proficient in sanitary engineering, should be engaged to design a more sophisticated type of system.

The above criteria pertain, **only** to the installation of septic tank, tile field systems. If seepage pits or other types of disposal system are proposed, you should contact our office for the testing procedures required.

IMPORTANT

The percolation testing **must** be completed by the individual prior to contacting the Health Department to witness the percolation test and the **results of the tests entered on Form 1327 and submitted with your application and filing fee.**

Applications for single lot sewage disposal system design may only be submitted during the period beginning **April 1st through October 1st**. To assure that time constraints will allow are personnel to visit your site **prior** to the onset of freezing temperatures and winter weather, all applications should be received in our office by **October 1st**. Applications dated later than October 1st will be accepted although there is no guarantee that we will be able to schedule a field visit during the current construction season.

Percolation Test Data
(see instructions on reverse side)

Development Site: _____ (T/V/C): _____ County: _____

Date: _____ Tests Conducted By: _____

Weather Conditions: _____

Test Hole No.	Test Hole Depth (inches)	Lot No.	Soil Profile Description and Groundwater Depth (if identified)	Presoaking Date & Time	Time	Percolation Test					
						1	2	3	4	5	6
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						
					End						
					Begin						
					Result						

Begin time, end time, and result in minutes for a water elevation change from 6" to 5" above the bottom of the test hole.

PERC STICK

APPROXIMATELY 12 INCH
SQUARE OR ROUND HOLE

Scrape sides.
Remove loose
Soil from bottom.

Depth of
Perc Hole
24-30 inches

START WATER DEPTH

Finished depth which is timed
and recorded on perc data sheet
repeat until times are consistent.

Following pre-soaking,
and after soil saturation,
measure time in minutes
for water level to drop
from top nailhead to
bottom nailhead.

NAILS

WATER LEVEL

CROSS
BOARD

After securing board,

place 2 inches of washed gravel
or crushed stone in test hole

Make certain bottom

of cross board rests on
bottom of test hole.



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Fill Bed Percolation Data (Shallow stabilized rates)

1. finish _____ 2. finish _____
start _____ start _____
time _____ time _____

Yards of Permeable # _____ yards
Fill Material used
To construct Bed
(5-30 min perc)

After final grading the fill bed will be top-soiled and seeded.

Signature of contractor or engineer _____

Date tests were performed _____

Property owner _____

Town _____

Tax Map# _____

Location _____

As construction season approaches, I would like to take the opportunity to remind you of several things with regard to alternate design type sewage disposal systems (commonly known as “fill systems”).

- 1) Appendix 75-A of Part 75 of Chapter 11 of 10 NYCRR establishes the standards for sewage disposal systems for individual households. “Fill systems” **must** be designed by either a New York State Licensed Design Professional or the Columbia County Department of Health Public Health Engineer which provides this service.
- 2) Alternative design systems are designed on site specific conditions, **but not all sites** are acceptable for “some kind of alternative design systems”. Once an alternative system has been designed for a lot, it **must** be built on the test site and the test site **must not** be disturbed by grading or topsoil removal unless specifically detailed in the sewage disposal design.
- 3) Before, a building permit is issued, the water supply location should be determined and the sewage disposal system should be designed. Planning for the sewage disposal system before constructing the house may save the owner much grief and money.