

INSTRUCTIONS FOR CONDUCTING PERCOLATION TESTS

Percolation tests shall not be made in frozen ground or ground that has been filled in the preceding 12 months.

Number and Location of Percolation Tests. Select an area where the seepage field will be located. When digging the holes, avoid animal burrows, large root channels, etc. At least **3** separate percolation tests shall be performed at the site of **each** proposed disposal area. The percolation test holes shall be at least 50 feet apart. At least one hole shall be located at the lowest elevation of the proposed absorption field area.

Depth of Percolation Test Hole. Dig or bore the holes approximately 4 to 6 inches in diameter to the depth of the proposed absorption field (approximately 30 inches).

Preparation of Test Hole. Carefully pick or rake the bottom and sides of the hole with a knife blade or sharp pointed instrument to remove smeared or smoothed soil and to provide a natural soil interface into which water may percolate. Remove all loose material from the hole. Add 2 inches of coarse gravel to protect the bottom from scouring and sediment. A removable hardware cloth screen to line the lower part of the hole may be used to prevent sloughing of the hole sides during testing.

Presoaking. On the day prior to conducting the percolation test, carefully fill the hole with water and keep it full for at least 4 hours. The percolation test shall be conducted on the day following this presoaking at least 18 hours but not more than 30 hours after presoaking is completed. Cover the hole during this 18-30 hour waiting period. In sandy soils with greater than 70% sand and less than 15% clay (sand and loamy sand), after the 4 hour presoak, a percolation test may be attempted without the 18 hour waiting period. If the percolation test results are greater than 45 minutes for a 6 inch drop in water, the test must be repeated after the 18 hour waiting period. If the percolation test results are 45 minutes or less, the percolation rate can be used to size the system.

Testing Procedure. On the day of conducting the percolation test, carefully fill the hole with water to 12 inches above the gravel. Allow the water level to drop to a point 6 inches above the gravel. If the water does not fall from 12 inches to 6 inches the percolation test is terminated and alternate system is required. Measure the last 6 inch drop in water level at 30 minute intervals until all the water has seeped away. If the water is falling at a rate slower than 1 inch of water per hour, the percolation test is terminated and an alternate system is required. **Warning:** Under no conditions shall measurements be taken from water filled to the top of the hole or on water 12 inches deep in the hole. Such results are completely invalid and will not be accepted. Results from the last 6 inches of drop in water are the only results which will be accepted.

Recording of Results: Record results of all tests as the total minutes required for the last 6 inches of seepage on the worksheet on the back of this page. (If the last 6 inches of water has not seeped away at the end of 6 hours, the soil must be considered unsuitable for seepage field disposal). If there is more than a 30 minute difference between the highest 2 percolation tests, use the larger result or perform additional percolation tests.

PERCOLATION WORKSHEET

	TEST HOLE #1		TEST HOLE #2		TEST HOLE #3	
READING	TIME (in min.)	WATER LEVEL (in inches)	TIME (in min.)	WATER LEVEL (in inches)	TIME (in min.)	WATER LEVEL (in inches)
1	0		0		0	
2	30		30		30	
3	60		60		60	
4	90		90		90	
5	120		120		120	
6	150		150		150	
7	180		180		180	
8	240		240		240	
9	300		300		300	
10	360		360		360	

PERCOLATION RESULTS

Average of two
highest readings

Test Hole Number # _____ # _____ # _____ # _____ /# _____

Time required for last 6" of water to seep away _____

DEPTH OF LIMITING LAYER

Did you find wet or saturated soil at 5 feet or less? Yes _____ No _____ If so, at what depth? _____

Did you find rock formations or slowly permeable soil layers? Yes _____ No _____
If so, at what depth? _____

CERTIFICATION OF PERCOLATION TEST

I HEREBY CERTIFY THAT THE ABOVE PERCOLATION TEST AND OTHER LIMITING LAYER INFORMATION WAS CONDUCTED BY ME ACCORDING TO DIRECTIONS IN THE ILLINOIS PRIVATE SEWAGE DISPOSAL LICENSING CODE AND THAT THE RESULTS SUBMITTED IN THIS REPORT ARE TRUE AND ACCURATE.

Signature (Property Owner/Contractor)

Distribution of Results: The results of the percolation tests shall be given to the homeowner and shall be retained by the contractor for at least 5 years. The percolation test data report shall be returned to the Champaign Regional Office.