

Percolation Test Procedure

The San Joaquin County Environmental Health Department (EHD) has adopted the following procedure in order to evaluate and process percolation results uniformly, effectively and quickly.

Obtain Application for Percolation Test Permit:

- Fee is \$115 per test hole or \$575 for 5 or more test holes.
- Indicate the test hole location(s) on the permit application plot plan.
- Percolation Test Hole(s) shall not be located within 100 feet of any well or violation any other set-back requirements for a septic system.
- Call (209)468-3423 to schedule an inspection 48 hours in advance.

Preparation of Test Hole(s)

*Test Hole(s) dimensions:
Diameter = 4 inches to 12 inches
Depth (Consistent with leach field) = 36 - 42"*

- Scratch or score sides to remove any smeared soil surfaces.
- Remove loose material from hole.
- Add 2 inches of course sand or fine gravel.
- Saturation: Pre-soak Test Hole(s) 24 hours before test by adding water a minimum of 12 inches over gravel. The EHD is to be notified of start of Percolation Test.

Preparation of Test Hole(s) for Deep Perc Test:

*Test Hole Dimensions:
Diameter = 4 inches to 12 inches
Depth = 42 inches to 25 feet, Minimum 10 feet above water table.*

- Pre-soak Test Hole(s) by adding water 6" above selected stratum.
- Maximum water level allowed = 3 feet above selected stratum
- Red Zone area requires 25' deep test hole(s) or soil stratum that meets minimum percolation rate for pit testing.

PROCEDURE #1

If water **remains** in the test hole overnight

- Add clear water to approximately 6 inches over the gravel.
- From a fixed reference point, measure the drop in water level over a thirty (30) minute period.
- Calculate the percolation rate in minutes per inch.

PROCEDURE #2

If **NO** water remains in test hole overnight

- Add clear water to bring depth of water in the hole to approximately 6 inches over the gravel.
- From a fixed reference point, measure the drop in water level at thirty (30) minute intervals for four (4) hours, refilling 6 inches over the gravel as necessary.
- Use the smallest reading of the four (4) hour period to calculate percolation rate in minutes per inch.

PROCEDURE #3

Sandy soils (or other soils) in which the first 6 inches of water seeps away in less than thirty (30) minutes after the overnight saturation period

- Refill the hole to approximately 6 inches above the gravel.
- From a fixed reference point, take the readings 10 minutes apart over a one (1) hour period.
- Use the smallest reading change; calculate percolation rate in minutes per inch.

At the time of the percolation test inspection, Environmental Health Staff will:

- Review application and parcel map for location accuracy and verify appropriate procedure used.
- Inspect test hole construction and review raw field data recorded prior to arrival.
- Observe and document the readings during the final 30 minutes of the test on the EHD "Percolation Test Application."
- Correct any data on the application and sign the percolation record sheets.

Source: Manual of Septic Tank Practices, U.S. Dept. of H.E.W. (1967), as founded and modified for San Joaquin County.
San Joaquin County EHD Policy # 98-02.