

# PERC INFO/INSTRUCTIONS

## **NAC 444.790 Lot size. ([NRS 439.200](#), [444.650](#))**

1. A minimum area of 1 acre (43,560 square feet), including public streets and alleys or other public rights-of-way, lands or any portion thereof abutting on, running through or within a building site, is required for the installation of an individual sewage disposal system on a lot served by a well.

2. For a lot that is a part of a tentative map that is approved before January 1, 2000, a minimum area of 1/4 acre (10,890 square feet), including public streets or alleys or other public rights-of-way, lands or any portions thereof abutting on, running through or within a building site, is required for the installation of an individual sewage disposal system on a lot served by a community water supply.

3. For a lot that is part of a tentative map that is approved on or after January 1, 2000, a minimum area of 1/2 acre (21,780 square feet), including public streets or alleys or other public rights-of-way, lands or any portions thereof abutting on, running through or within a building site, is required for the installation of an individual sewage disposal system on a lot served by a community water supply.

[Bd. of Health, Individ. Sewage Disposal Systems Reg. Note, eff. 1962; A and numbered as §§ 7.1-7.3, 11-23-72] — (NAC A 10-22-93; R129-98, 3-25-99; R100-07, 10-31-2007)

## **NAC 444.792 Location. ([NRS 439.200](#), [444.650](#))**

1. Except as otherwise provided in this section, an individual sewage disposal system must be located on the same lot as the building or structure that the system serves. The administrative authority may approve the use of a part of an abutting lot to provide additional space for an individual sewage disposal system or any part thereof, if the owner of the individual sewage disposal system can show:

(a) Proper cause, including, without limitation, a legal right of the owner to use the abutting land as a result of a transfer of ownership of the abutting lot or an easement to use the abutting lot; and

(b) Use of the abutting lot for the individual sewage disposal system does not violate any other requirement of [NAC 444.750](#) to [444.8396](#), inclusive.

2. The minimum horizontal separations that must be maintained between the perimeter of the components of an individual sewage disposal system and the following features are:

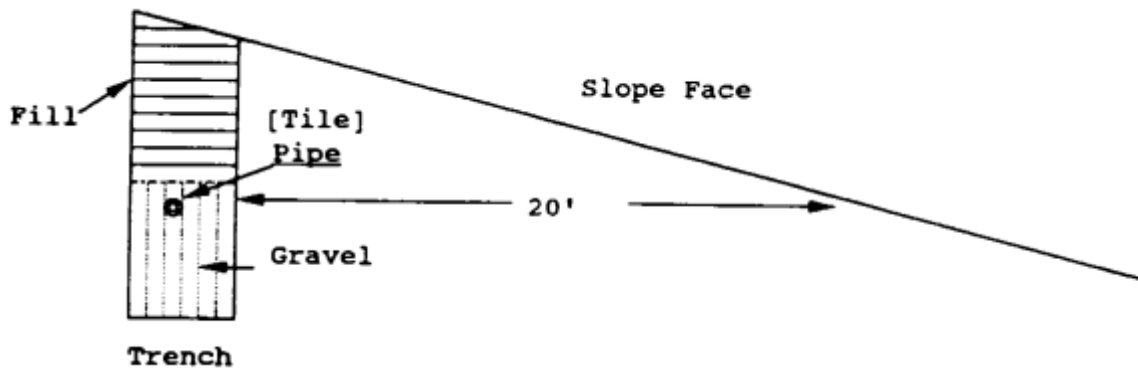
Minimum horizontal distance, in clear, required from:	Septic tank	Disposal field (shallow)
Building or structure	8'	8'
Property lines	10'	10'
Water supply wells (sealed to 50 feet)	100'	100'
Water supply wells (not sealed to 50 feet)	100'	150'
Public water supply wells	150'	150'
Streams or watercourses	100'	100'

Drainage channels	25'	25'
Large trees or shrubs	10'	10'
Disposal fields	5'	—
Community water main line	10'	25'
Individual water service line	10'	25'

[Bd. of Health, Indiv. Sewage Disposal Systems Reg. §§ 8.1-8.2.4 & Table 4, eff. 11-23-72 + Lot plan, eff. 1962; A and renumbered as Figure 1, 11-23-72] — (NAC A by R129-98, 3-25-99; R100-07, 10-31-2007)

**NAC 444.794 Slope requirements. ([NRS 439.200](#), [444.650](#))**

1. For lots with slopes in excess of 20 percent, soil absorption trenches must, at the level of the distribution pipe, be a minimum of 20 feet horizontally from the face of the slope or ground surface as shown in subsection 4.
2. Additional restrictions may be imposed where conditions relating to percolation and slope so indicate.
3. A stepped network of trenches utilizing relief lines which follows the contours of the slope may be used upon the approval of the health authority.
4. Diagram of a slope:



[Bd. of Health, Indiv. Sewage Disposal Systems Reg. §§ 9.1-9.3 + Figure 10, eff. 11-23-72] — (NAC A by R129-98, 3-25-99)

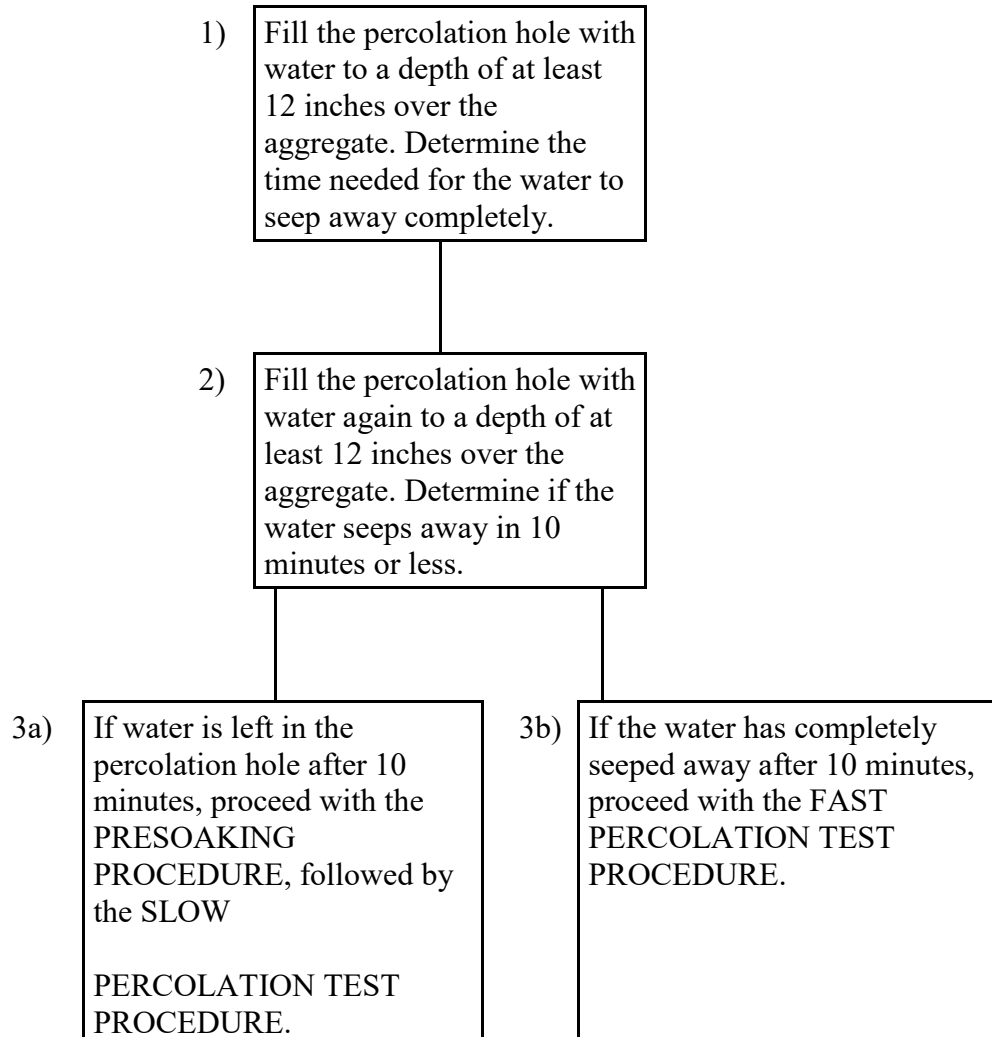
**NAC 444.796 Performance of percolation test by property owner; verification of certain data by engineer. ([NRS 439.200](#), [444.650](#))**

1. Data from percolation tests from a minimum of two test holes in the area of the proposed soil absorption system is required. The property owner shall perform a percolation test in accordance with [NAC 444.796](#) to [444.7968](#), inclusive.
2. The hole must be dug or bored to the proposed depth of the absorption trench. The hole must have vertical sides and have a horizontal dimension of 4 to 12 inches. The bottom and sides of the hole must be carefully scratched with a sharp-pointed instrument to expose the natural soil interface. All loose material must be removed from the bottom of the hole which must then be covered with 2 inches of coarse sand or gravel when necessary to prevent scouring. Any soil which has sloughed into the hole before or during the percolation test must be removed.
3. The health authority may require an engineer to verify data relating to the depth of the high groundwater and bedrock, or areas subject or susceptible to flooding, the ground slope, and the results of percolation tests. Verification of maximum high groundwater includes, without limitation, a morphological study of soil conditions with particular reference to soil color and sequence of horizons.
4. If the natural soil condition has been altered by filling or other attempts to improve wet areas, the health authority may require the verification by the engineer to include observation of high groundwater levels under saturated soil conditions.
5. If the natural soil condition has been altered by filling or other attempts to improve the percolation rate of the soil, the health authority may require the verification by the engineer to include a determination of whether the fill material is suitable for an individual sewage disposal system.

[Bd. of Health, Indiv. Sewage Disposal Systems Reg. §§ 1-4, eff. 1962; A and renumbered as §§ 10.1-10.2.2, 11-23-72] — (NAC A by R129-98, 3-25-99)

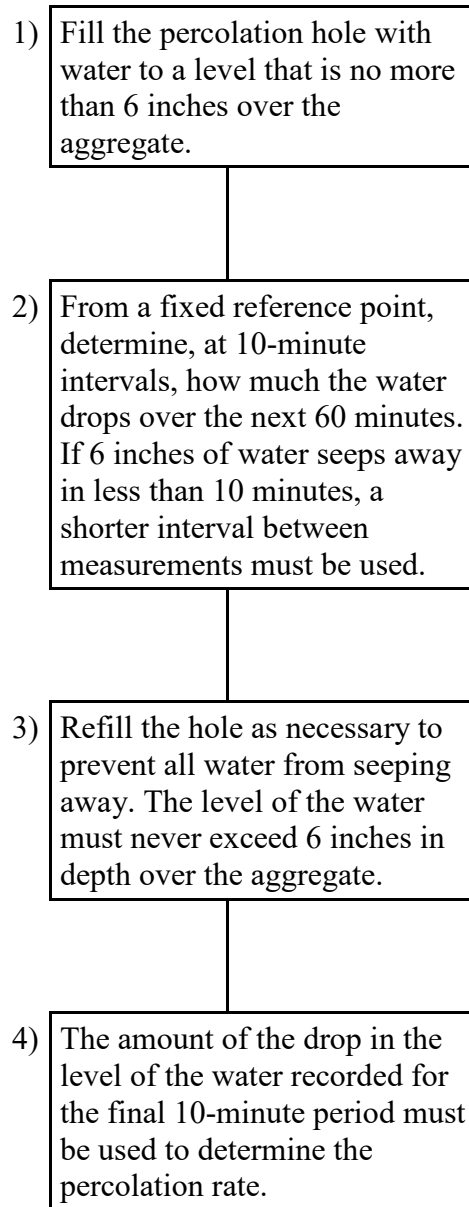
**NAC 444.7962 Determination of appropriate percolation test procedure. ([NRS 439.200](#), [444.650](#))**

In conducting a percolation test, the following flow chart must be used to determine which test procedure to follow:



(Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)

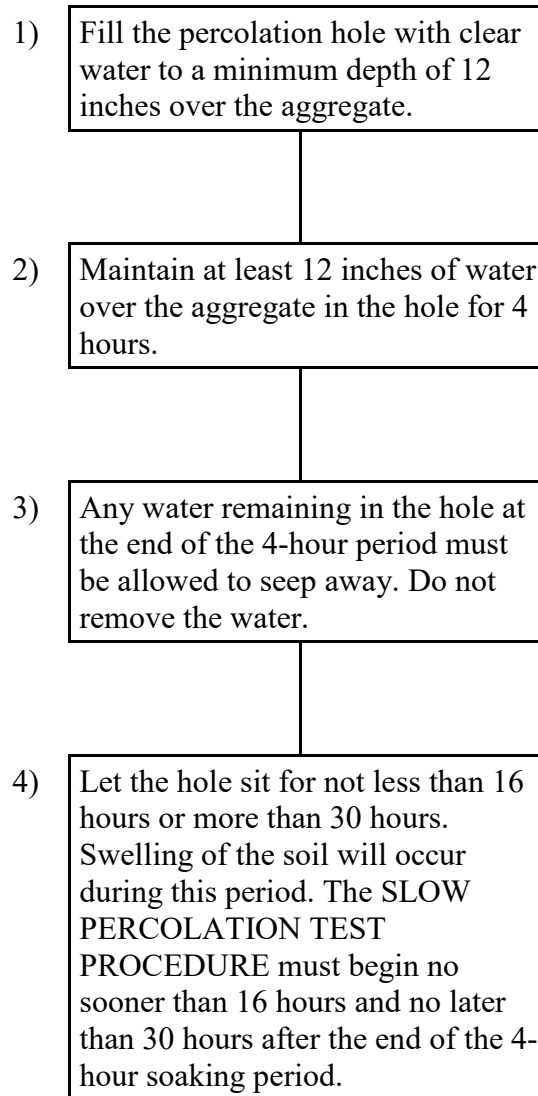
**NAC 444.7964 Fast percolation test procedure.** ([NRS 439.200](#), [444.650](#)) The following flow chart illustrates the fast percolation test procedure:



**NOTE:** The minimum time in which a fast percolation test may be completed is 1 hour. The level of the water must never exceed 6 inches over the aggregate during a fast percolation test.

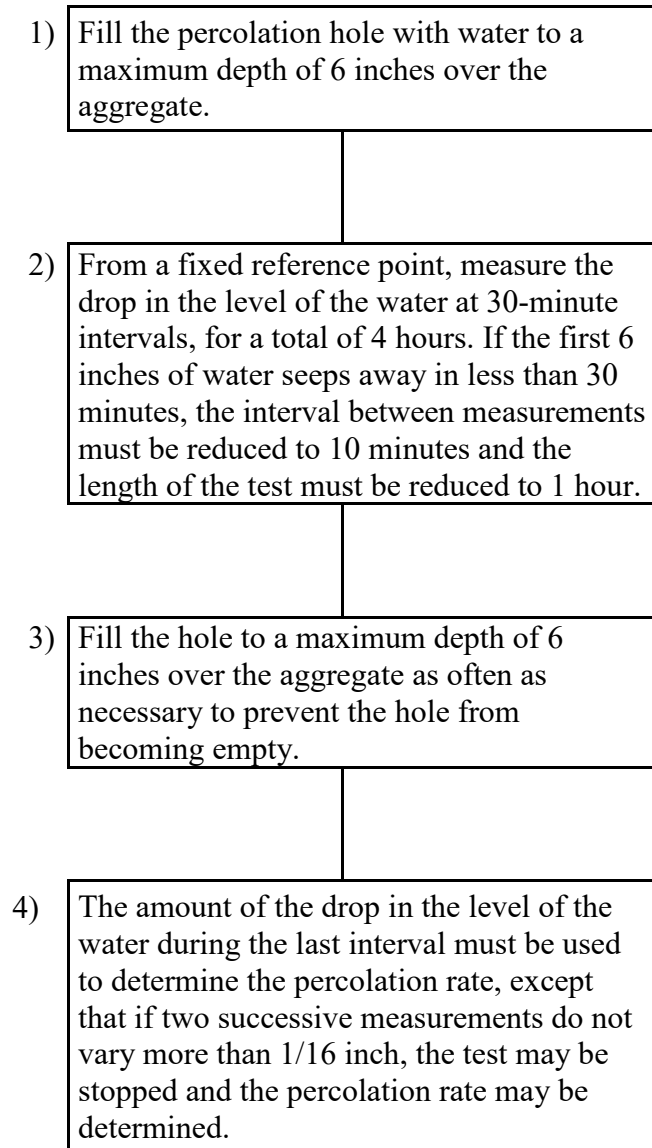
(Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)

**NAC 444.7966 Presoaking procedure for slow percolation test.** ([NRS 439.200](#), [444.650](#)) The following flow chart illustrates the presoaking procedure for a slow percolation test:



(Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)

**NAC 444.7968 Slow percolation test procedure.** ([NRS 439.200](#), [444.650](#)) The following flow chart illustrates the slow percolation test procedure:



(Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)

**NAC 444.797 Sample form for percolation test. ([NRS 439.200](#), [444.650](#))** The following is a sample form for a percolation test:

<b>Hole #</b> _____	<b>Percolation Rate:</b> _____ <b>Minutes/Inch</b>			
Depth From Native Ground Surface That Percolation Test Was Conducted:				
Presoak Start Time:			Presoak End Time:	
Number of Hours That Soil Was Presoaked:				
Notes:				
TIME	DEPTH TO WATER	INTERVAL	DROP OF WATER IN INCHES	MIN/INCH

NOTE: TWO PERCOLATION TESTS ARE REQUIRED FOR EACH ABSORPTION AREA. THE LAST READING IS TO BE USED TO DETERMINE THE PERCOLATION RATE.  
 (Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)





NOTE: EXCEPT AS OTHERWISE PROVIDED BY A SPECIFIC STATUTE OR REGULATION, A MINIMUM OF TWO TEST PITS MUST BE EXCAVATED AND THE DATE OF THOSE TESTS MUST BE LOGGED. THE SOIL PROFILE FROM THE TEST PITS AND THE PERCOLATION RESULTS MUST BE INCLUDED AS PART OF THE PLANS SUBMITTED FOR REVIEW. A SOIL PROFILE TO A DEPTH THAT IS AT LEAST 5 FEET BELOW THE BOTTOM OF THE ABSORPTION TRENCH MUST BE PROVIDED IN THE APPROPRIATE SPACE IN THE LOG FOR THE PROFILE OF THE SOIL.

(Added to NAC by Bd. of Health by R129-98, eff. 3-25-99)

**NAC 444.815 Plumbing accessory structure into system serving single-family dwelling. ([NRS 439.200](#), [444.650](#))**

1. An accessory structure may be allowed to plumb into an individual sewage disposal system that serves a single-family dwelling if:

- (a) The accessory structure is used in conjunction with the single-family dwelling; and
- (b) The septic tank has sufficient capacity to accommodate the total number of fixtures in the accessory structure and the single-family dwelling, as determined by the following table:

TYPE OF FIXTURE	FIXTURE UNITS
Bathtub	2
Bidet	2
Drinking fountain	1
Floor drain	2
Interceptor:	
For items such as grease, oil or solids	3
Laundry tub	2
Machine for washing clothes	2
Sewer connection for a recreational vehicle	6
Shower, single stall	2
Sink:	
Bar, private (1 1/2-inch or 38.1-millimeter minimum waste)	1
Bathroom (single)	1
Bathroom (double)	2
Kitchen, with or without dishwasher (2-inch or 50.8-millimeter minimum waste)	2
Service	3
Toilet	6
Urinal	2

2. For the purposes of this section, each fixture unit must be rated at 25 gallons.

(Added to NAC by Bd. of Health by R100-07, eff. 10-31-2007)