

STANDARDS FOR THE CONSTRUCTION OF  
INDIVIDUAL SUBSURFACE  
SEWAGE DISPOSAL SYSTEMS



EFFECTIVE: JULY 1, 1973

<sup>1)</sup> NEW JERSEY, STATE

<sup>2)</sup> <sup>Dept</sup> DEPARTMENT OF ENVIRONMENTAL PROTECTION

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\*References are to the New Jersey Administration Code (N.J.A.C.)

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# STANDARDS FOR CONSTRUCTION OF SEWERAGE FACILITIES

## 7:9-2.1 Scope

Unless otherwise provided by rule or statute, the following shall constitute the rules of the Division of Water Resources and shall govern the design and installation of individual subsurface sewage disposal systems.

## 7:9-2.2 Construction

(a) These rules shall be liberally construed to permit the Department, the Division of Water Resources and its various agencies to discharge its statutory functions.

(b) The Commissioner or the Director of the Division of Water Resources may, upon notice to all parties, in the public interest, relax the application of these rules.

## 7:9-2.3 Practice where rules do not govern

(a) The Commissioner may rescind, amend or expand these rules from time to time, and such new rules shall be filed with the Secretary of State as provided by law.

(b) The Commissioner, the Director of the Division of Water Resources or any agency chief shall exercise his discretion in respect to any other matters not governed by these rules.

7:9-2.4 Definitions - The following words and terms, when used in these regulations, shall have the following meanings unless the context clearly indicates otherwise.

"Administrative Authority" - The board of health having jurisdiction.

"Alter" - The replacing or repairing of any portion of an existing individual sewage disposal system; and the terms "alteration" and "altering" shall be construed accordingly.

"Authorized Agent" - A licensed health officer, professional engineer, or sanitary inspector, plumbing inspector, or any other qualified and licensed person first-grade who is delegated to function within specified limits as the agent of the Administrative Authority.

"Approved" - Accepted or acceptable under applicable specifications stated or cited in these Standards, or accepted as suitable for the proposed use under procedures and powers of administration delegated in these Standards; and the word "approval" shall be construed accordingly.

"Building Sewer" - The pipe extending from the outer wall of the building, or as defined in the State Uniform Construction Code, to the septic tank or approved place of disposal other than a public sewer.

"Certification" - A written statement by the Administrative Authority certifying that the proposed sewerage facilities for the proposed realty improvement are in compliance with the provisions of Chapter 199, P.L. 1954 as revised, (N.J.S.A. 58:11-23 et seq.) and these Standards.

"Cesspool" - A covered pit with open-jointed lining into which untreated sewage is discharged, the liquid portion of which is disposed of by seepage or leaching into the surrounding porous soil, the solids or sludge being retained in the pit.

"Construct" - Building or installing a new individual sewage disposal system or enlarging an existing individual sewage disposal system.

"Critical Areas" - All those areas as defined in N.J.A.C. 7:9-10.1 et. seq.

"Department" - The New Jersey State Department of Environmental Protection.

"Disposal Area" - The entire area used for underground dispersion of the liquid portion of sewage. It may consist of a seepage pit or a disposal field (see definition) or a combination thereof.

"Disposal Bed" - That part of a disposal field for sanitary sewage comprising a shallow area from which the entire earth contents have been removed and the excavation partially filled with a satisfactory filtering material in which distribution lines have been laid and the entire area covered with top soil and a suitable vegetation growth.

"Disposal Field" - An area consisting of disposal trenches, a disposal bed, or a combination thereof used for dispersion of the liquid portion of sanitary sewage into the ground as close to the surface as feasible.

"Disposal Trench" - A shallow ditch with vertical sides and flat bottom partially filled with a satisfactory filtering material in which a single distribution line has been laid covered with top soil and a suitable vegetative cover.

"Distribution Box" - A water-tight structure which receives sanitary sewage effluent from a septic tank and distributes such sewage effluent in equal portions to two or more pipelines leading to the disposal area.

"Distribution Lines" - A series of open-jointed or perforated pipe used for the dispersion of sewage into disposal trenches or disposal beds.

"Dosing Tanks" - A water-tight receptacle located between a septic tank and a disposal area equipped with an automatic siphon device designed to discharge sewage intermittently in the distribution lines in amounts proportioned to the capacity of such lines and to provide adequate rest periods between such discharges.

"Dry Well" - A covered pit with open-jointed lining through which drainage from roofs, basement floors or areaways may seep or leach into the surrounding soil.

"Expansion Attic" - That part of a house left unfinished but designed to be finished as a bedroom or bedrooms by subsequent improvement and accessible by permanent stairways or designed so that stairways may be installed.

"g/d" - The abbreviated form for gallons per day: 24 hours.

"Grade" - The slope or fall of a pipeline or the ground surface. It may be expressed as fall or drop per foot, per 100 feet, or in per cent.

"Grease Trap" - A device in which the grease present in sewage is intercepted, congealed by cooling, and from which it may be skimmed from the surface of the liquid waste for disposal.

"House Sewer" - See "Building Sewer" of this Section.

"Impervious Formations" - Formations which consist of material having a percolation rate greater than 120 minutes per inch.

"Individual Sewage Disposal System" - A system for the disposal of sanitary sewage into the ground, which is so designed and constructed to treat sewage in a manner that will retain most of the settleable solids in a septic tank and to discharge the liquid portion to an adequate disposal field.

"Industrial Waste" - Liquid or solid wastes resulting from processes employed in industrial establishments.

"Invert" - The floor, bottom or lowest portion of the internal cross section of a closed conduit, used in these Standards with reference to the pipes or fittings conveying sewage.

"Locate" - The designation of the site or place of an individual sewage disposal system; and the term "location" shall be construed accordingly.

"Main Vent" - See "Vent Stack" of this section.

"Multiple Compartment Tanks" - Septic tanks containing more than one settling compartment or chamber in series.

"Percolating Area" - That portion of soil utilized in a disposal area as the effective disposal media for sewage.

"Person" - Includes corporation, companies, associations, societies, firms, partnerships and joint stock companies as well as individuals.

"Professional Engineer" - A person licensed to practice professional engineering in this state.

"Realty Improvement" - Any proposed new residence or other building (including condominiums, garden apartments, town houses, mobile homes, etc.) not served by an approved water supply and approved sewerage system, the useful occupancy of which will require the installation or erection of a water supply system or sewerage facilities. Each family unit in a proposed multiple family dwelling shall be construed to be a separate realty improvement.

"Sanitary Sewage" - Any liquid waste containing animal or vegetable matter in suspension or solution of the water-carried wastes resulting from the discharge of water closets, laundry tubs, washing machines, sinks, dishwashers, or any other source of water-carried waste of human origin or containing putrescible material.

"Sanitary Sewer" - A pipe which carries sewage and to which storm, surface and ground waters are not intentionally admitted.

"Scum" - A mass of sewage solids floating at the surface of sewage and buoyed up by entrained gas, grease or other substances.

"Seepage Pit" - A covered pit with open-jointed lining through which septic tank effluent or laundry waste may seep or leach into the surrounding soil.

"Septic Tank" - A water-tight receptacle which receives the discharge of sewage from a building sewer or part thereof, and is designed and constructed so as to permit settling of settleable solids from the liquid, digestion of the organic matter by detention, and discharge of the liquid portion into a disposal area.

"Siphon" - A hydraulically operated device designed to rapidly discharge the entire contents of a dosing tank between pre-determined hydraulic levels.

"Soils Map" - A map prepared by the U.S. Department of Agriculture/ Soil Conservation Service.

"Subdivision Amendment" - An amendment to the "Realty Improvement Sewerage and Facilities Act" which requires state certification for all subdivisions which are to be served by subsurface sewage disposal systems and/or private wells and consist of 50 or more realty improvements, prior to the granting of preliminary subdivision approval.

"Topographic Map" - A contour map, prepared by a state or federal agency, having a contour interval of 20 feet or less.

"Trap" - A fitting or device so designed and constructed as to provide, when properly vented, a liquid seal which will prevent the back passage of air without materially affecting the flow of sewage or wastewater through it.

"Unified Soil Classification System" - A system classifying soils according to particle size, distribution, plasticity, liquid limit, and organic matter content.

"Vent Stack" - A vertical vent pipe installed within a building for the purpose of providing circulation of air to and from any part of a building plumbing system.

"Water Course" - Any stream, body of water drained by a stream, or ditch that will permit drainage into any waters of the state.

"Waters of the State" - Include the ocean and its estuaries, all springs, streams and bodies of surface or ground water whether natural or artificial.

"Water Table" - The upper surface of ground water, or that level below which the soil is seasonally saturated with water.

"Wet Well and Pumping Equipment" - A water tight receptacle that receives sewage and, by means of appropriate equipment, lifts the sewage to the distribution box of a disposal system at a higher elevation.

7:9-2.5 Design - The design of an individual sewage disposal system shall take into consideration location with respect to wells or other sources of water supply, topography, existing individual sewage disposal systems on adjacent properties, water tables, soil characteristics, available area, expected volume of sewage and shall comply with these and other provisions of these Standards regarding design. All engineering data submitted must bear an engineer's seal and signature. Alterations to individual subsurface sewage disposal systems shall be acceptable to the Authorized Agent.

7:9-2.6 Volume of Sanitary Sewage - Each unit of the disposal system shall be designed to adequately treat the estimated volume of sanitary sewage to be discharged from the premises to be served. The volume of sewage flow shall be based on the estimated contributory population and the resultant expected daily quantities of sewages determined from the following table:

	<u>Source</u>	<u>Gallons per person per da.</u>
1.	Cottages	100
2.	Single family dwellings	100
3.	Multiple family dwellings	75
4.	Rooming houses	50
5.	Boarding houses *	75
	a. for each nonresident boarder	15
6.	Hotels *	50-75
7.	Motels and Tourist Cabins	50-75
8.	Mobile Home Parks	100
9.	Restaurants	
	a. Sanitary waste only, per patron	5
	b. Kitchen waste only, per patron	5
	c. Kitchen and sanitary wastes	10
10.	Camps *	
	a. Barracks Type	50
	b. Cottage Type	40
	c. Day camps (no meals served)	15
11.	Day Schools	
	a. No cafeteria or showers	10
	b. With cafeteria and no showers	15
	c. With cafeteria and showers	20
	d. Cafeteria, showers and laboratories	25
12.	Boarding Schools *	100
13.	Day Workers: Office, industrial, etc. (8 hr. shift)	25
14.	Hospitals (depending on type)	150-250
15.	Institutions other than hospitals	75-125
16.	Picnic Grounds and Comfort Stations	
	a. Toilet only	10
	b. Toilet and showers	15
17.	Swimming pools and bathhouses	10
18.	Club Houses *	
	a. With resident members	60
	b. For each nonresident member	25
19.	Nursing homes	150

- |   |  |
|---|--|
| 20. Campgrounds - where individual sewer hook-ups are available | 100 per site - (laundry extra, increased by 50 per cent) |
| 21. Stores, office buildings                                    | 0.125 gallons/square ft                                  |
| 22. Self-service laundries                                      | 50 gallons/wash  |

\* Includes kitchen wastes at 10 gallons per person per day. If laundry wastes are anticipated, estimated flows shall be increased by 50 per cent.

7:9-2.7 Type of System - The type of system to be installed shall be determined on the basis of location, topography, soil percolative capacity, and ground water elevation. The system shall consist of a septic tank discharging its effluent to a suitable subsurface disposal area as hereafter described, except as it may be modified in accordance with Section 2.10 (Alternate Design) of this Chapter. New cesspools shall not be permitted in the state.

7:9-2.8 Type of Wastes - The system shall be designed to receive all sanitary sewage from the building served unless otherwise approved by the Administrative Authority; Laundry wastes may be discharged into a seepage pit if approved by the Administrative Authority; Drainage from basement floors, footings or roofs shall not enter the individual sewage disposal system but may be discharged to a suitably located dry well. Industrial wastes shall not be discharged into individual sewage disposal systems without special approval of the Administrative Authority and the Department.

7:9-2.9 Limitations - When the volume of flow exceeds 8,000 gallons per day or other factors controlling the disposal area for a single installation are such that:

- (a) The total length of the distribution lines will be greater than 2,400 feet, or
- (b) The total percolating area of disposal beds will be more than 6,000 square feet, or
- (c) The total percolating area of seepage pits will be more than 3,600 square feet, then a sewage treatment plant approved by the Department pursuant to law shall be provided.

7:9-2.10 Alternate Design - Where a system as prescribed in Section 2.7 will not be constructed and where an alternate design is proposed, such design may be approved by the Administrative Authority subject to review and approval by the Department. Where an alternate design for a system other than that described in Section 2.7 is proposed, the applicant must submit the design to the local health department and the Department concurrently. This proposal must be accompanied by a written statement justifying such a design containing, as a minimum, the following information:

1. The reasons for proposing the alternate design.
2. Information regarding the proposed systems' reliability and capability to treat sewage wastes.
3. Other such information relied upon by the applicant in proposing the particular alternate design.

The Department may request additional information relative to the above. The Department shall approve or disapprove with regard to the technical adequacy of the proposal and its impact upon ground and surface waters, and shall concurrently notify the applicant and the local board of health of its decision. Technical standards will be developed by the Department for the review of applications for alternate designs, as data and information become available to it through research and field studies, and the application process pursuant to this Section.

7:9-2.11 Drainage - The individual disposal system shall be located in an area where no surface or subsurface water will accumulate. Provisions shall be made to minimize the flow of surface water over the area.

7:9-2.12 Grading - Individual sewage disposal systems shall not be installed until all rough grading of the premises adjacent to the site of the sewage disposal installation has been completed in a manner that will permit proper functioning of the sewage disposal system to be installed.

7:9-2.13 Backfilling - Backfill shall be earth similar to that found at the site and free of large stones, broken masonry, stumps or other waste construction material. Machinery used for the purpose of backfilling shall not be allowed within five feet of any part of the individual sewage disposal system.

7:9-2.14 Individual Service - The use of an individual sewage disposal system by more than one property, dwelling, commercial unit or other premises is prohibited unless such property, dwelling, commercial unit or other premises is constructed, designed and located in such a manner that it is most impractical or impossible to construct separate individual sewage disposal systems for the same pursuant to the provisions of these standards. Permission may be granted by the Administrative Authority for joint use of an individual sewage disposal system only if these facts are established to its satisfaction and assurances given that only one legal entity will be responsible for the maintenance and operation of said system.

7:9-2.15 Discharge of Effluents - Individual sewage disposal systems shall not be designed, constructed or located in a manner that will permit the discharge of an effluent onto the surface of the ground or into any water course.

7:9-2.16 Sanitary Sewer - Individual sewage disposal systems or other means of private sewage disposal shall not be approved where a sanitary sewer is available within 100 feet of a building.

7:9-2.17 Wells - Sanitary sewage or the effluent from any individual sewage disposal system shall not be discharged into any abandoned well or any well constructed for the purpose of sewage disposal.

7:9-2.18 Location generally - Location and installation of each individual sewage disposal system and every part thereof shall be such that with reasonable maintenance it will function in a satisfactory manner and will not create a nuisance or source of foulness nor discharge into any of the waters of the State. In determining a suitable location for the system, consideration shall be given to the size and shape of the lot, slope, natural and adjusted drainage, depth to ground water, potential pollution of existing and future water supplies and the possible expansion of the system.

7:9-2.19 Distances - The minimum distance for location of the various component parts of the disposal system shall comply with the following table:

MINIMUM DISTANCE

<u>Component</u>	<u>Well or Suction Line Feet (1)</u>	<u>Water Service Line (Pressure) Feet</u>	<u>Water Course (1)</u>	<u>Dwelling Feet</u>	<u>Property Line Feet</u>	<u>Disposal Field Feet</u>	<u>Seepage Pits Feet</u>
Building Sewer	50	5	-	-	-	-	-
Septic Tank	50	10	25	10 <sup>5</sup>	5	-	-
Distribution Box	50	10	25	10	5	-	-
Disposal Field	100 <sup>2</sup>	10	50	25 <sup>6</sup>	10	50 <sup>8</sup>	50
Seepage Pit	100 <sup>2</sup>	10	50	25 <sup>6</sup>	10	50 <sup>8</sup>	50 <sup>4</sup>
Dry Well	50	-	-	10 <sup>3</sup>	5	50	50
Cesspools <sup>7</sup>	150	25	50	20	15	15	15

- 1 Where coarse soil formations are encountered, the distance from any water supply or water course may be increased by the Administrative Authority.
- 2 This distance may be reduced to a minimum of 50 feet when approved by the Administrative Authority when the well is provided with an outside water-tight casing to a depth of 50 feet or more, or said casing extends to and is sealed into an impervious stratum separating the water-bearing stratum from the layer of soil used for sewage disposal.
- 3 May be reduced to 5 feet for slab portions of constructed dwelling.
- 4 Minimum distance must be equal to 3 times the diameter of the seepage pit with a minimum of 20 feet on any one property.
- 5 May be reduced to 5 feet with special approval of the Administrative Authority.
- 6 May be reduced to 15 feet for disposal field and 20 feet for seepage pit for slab portions of constructed dwelling.
- 7 Only for use regarding existing cesspools.
- 8 The distance applies to systems on adjacent lots but not to a split (dual) system on a single lot.

7:9-2.20 Soil - The disposal area shall be located and constructed in soil having adequate percolative capacity, as determined in accordance with the provisions of Sections 2.62 through 2.73 of this Chapter. The soil shall also provide proper support for each component of the system. In cases where fill becomes necessary, such fill shall be compacted or allowed to settle to the satisfaction of the Administrative Authority.

7:9-2.21 Flooding - No part of the sewage disposal system shall be constructed in ground subject to surface flooding or where seasonally high groundwater may interfere with satisfactory percolation of sewage.

7:9-2.22 Area Reserved for Sewage Disposal - The area to be used for sewage disposal shall be selected and maintained so that it is free from encroachments by driveways, accessory buildings, additions to the main building, and trees or shrubbery whose roots may cause clogging of any part of the system. The area of sewage disposal shall not be located under driveways, parking lots (paved or otherwise), accessory buildings, additions to main buildings, etc.

7:9-2.23 Drainage - The ground surface over and adjacent to disposal areas shall have sufficient slope to prevent the accumulation of surface or subsurface water.

7:9-2.24 Building Sewer - The building sewer shall be constructed in accordance with the provisions of the State Uniform Construction Code, adopted pursuant to the State Uniform Construction Code Act (N.J.S.A. 52:27D-119 et seq.).

7:9-2.25 Grease Traps - The use of grease traps shall be required for installations from which large quantities of grease can be expected to be discharged. They shall be installed in a separate line serving that part of the plumbing system into which the grease will be discharged. Traps so installed shall be located and constructed in a manner that will reduce the temperature of sewage to permit congealing or separation of grease. They shall also be located and constructed in a manner that will permit easy access for cleaning.

7:9-2.26 Capacities of Septic Tanks - Septic tanks shall have the following minimum capacities: (a) When serving single family dwelling units they shall have capacities as shown below. Expansion attics shall be considered as additional bedrooms.

Recommended Inside Dimensions

<u>No. of Bedrooms</u>	<u>Liquid Capacity of Tank Gallons</u>	<u>Length Ft-In</u>	<u>Width Ft-In</u>	<u>Liquid Depth Ft-In</u>	<u>Depth Total Ft-In</u>
3 or less	900	8-0	3-6	4-4	5-6
4	1000	8-0	4-6	4-4	5-6
each additional bedroom, add	250				

(b) When serving installations other than single family dwellings, capacities shall be 1 1/2 times (150 per cent) the daily flow determined from Section 2.6 of this Chapter or 1 1/2 times (150 per cent) the estimated flow approved by the Administrative Authority up to flows of 2,000 g/d, but in no case shall the capacity be less than 900 gallons. Septic tank volumes for flows between 2,000 g/d and 6,000 g/d may be equal to  $2,250 + 0.375 Q$  where Q is equal to the flow in gallons per day. Capacity of septic tanks for flows over 6,000 g/d shall be at least 3/4 (75 per cent) of the daily flow.

7:9-2.27 Garbage Disposal - Where domestic garbage grinder units are installed or contemplated the liquid capacity of the septic tank, exclusive of air space, shall be at least 50 percent greater than the requirements of Section 2.26 of this Chapter and so indicated on the application to the Administrative Authority.

7:9-2.28 Multiple Compartments - Where multiple compartment tanks are used; the following shall be required:

- (a) The total capacity of multiple compartment tanks shall not be less than 900 gallons. The first compartment shall have a liquid capacity of two-thirds (2/3) the required total tank capacity as determined from Section 2.26 of this Chapter.
- (b) Not more than two compartments shall be provided in tanks having liquid capacities from 900 gallons to 1,200 gallons.
- (c) Tanks having liquid capacities of over 1,200 gallons may be provided with more than two compartments.

7:9-2.29 Construction of Septic Tanks

- (a) Septic tanks shall be water-tight and constructed of sound and durable materials not subject to excessive corrosion, decay, frost damage or to cracking or buckling due to settlement or

backfilling. Covers shall be designed and constructed so as not to be damaged by any load which may be placed on them. Septic tanks constructed of any material which may be floated or shifted by water or ground cave-in shall be filled with water immediately after being set in their proper position.

- (b) Poured-in-place concrete tanks shall not be less than six inches in thickness.
- (c) The base of sectional prefabricated or block constructed tanks shall be cast in one piece and of sufficient size to extend beyond the outer side of the side and end walls of the tank. Such tanks shall not be placed or constructed until 48 hours after the base has been poured. The inside and outside walls of cinder or concrete block tanks shall be water-proofed in a manner acceptable to the Administrative Authority.

7:9-2.30 Foundations - Septic tanks shall be constructed on a foundation satisfactory to the Administrative Authority.

7:9-2.31 Materials for Septic Tanks - (a) Septic tanks may be constructed of the following:

- (1) Poured-in-place concrete.
- (2) Precast reinforced concrete.
- (3) Concrete block or equal.
- (4) Cinder block or equal.
- (5) Material approved by the Administrative Authority.

(b) Prefabricated metal tanks shall not be permitted.

7:9-2.32 Length - Rectangular tanks shall have an inside length of at least twice the inside width. The inside length shall not be less than six feet. All flow shall be directed lengthwise.

7:9-2.33 Diameter of Circular Tanks - Circular tanks shall have an inside diameter of not less than 52 inches.

7:9-2.34 Inlets and Outlets - (a) Inlet and outlet connections of each tanks or compartment shall be arranged so as to obtain effective retention of scum and sludge. Inlet baffles are required and shall be a pipe tee, not less than four inches in diameter with the bottom opening extending at least six inches below the surface of the liquid. The invert elevation of the inlet shall not be less than one inch above invert elevation of the tank outlet or the outlet of the first compartment.

(b) The inverts of the inlets and outlets of subsequent compartments may be at the same level.

- (c) Outlet connections of the tank and of each compartment thereof, shall be provided with a tee not less than four inches in diameter or a durable baffle equivalent in size. They shall be permanently fastened in place with the bottom opening extending at least twelve inches below the liquid level.
- (d) Inlet tees or baffles and outlet tees or baffles shall extend to not less than one inch below the inside top of the tank. The top of all tees or baffles shall be extended to comply with Section 2.37 and in no case shall be less than eight inches above the invert of the outlet.

7:9-2.35 Multiple Outlets - (a) Where the inside width of the septic tank exceeds five feet, multiple outlets constructed in the same manner as provided in Section 2.34 shall be installed as follows:

Inside Width of Tanks	Number of Outlets
5 to 7 feet	2
8 to 12 feet	3

- (b) Any change in the type of outlets shall be as approved by the Administrative Authority.

7:9-2.36 Scum Storage - The space between the liquid surface and the top of the scum retaining device on the outlet shall not be less than 15 per cent of the total required liquid capacity.

7:9-2.37 Access Openings - Each compartment shall be provided with an access opening. In single compartment tanks, the access opening or a clean-out plug shall be located over the inlet. In multiple compartment tanks, access openings shall be located over each inlet and outlet. Access openings shall be at least 16 inches square or 16 inches in diameter and shall be constructed in a manner that will prevent the entrance of surface water. When the top of the septic tank is more than 18 inches below finished grade the access openings shall be extended to between 18 inches and 12 inches below finished grade. A permanent marker shall be placed at the access opening at finished grade to indicate the location thereof.

7:9-2.38 Backfill - Backfill around septic tanks shall be made in thin layers thoroughly tamped in a manner that will not produce undue strain on the tank. Settlement or backfill may be done with the use of water, provided the material is thoroughly wetted from the bottom upwards and the tank is first filled with water to prevent floating.

7:9-2.39 Wet Well and Pumping Equipment - Where the available disposal area is at a location that will not allow gravity flow from the building to the septic tank and on through to the distribution box and disposal area, a wet well and pumping equipment shall be installed to facilitate pumping of the septic effluent to the disposal area. Such facilities shall be easily accessible for servicing and repair.

7:9-2.40 General Provisions for dosing tanks - Dosing tanks shall be provided where there are over 600 lineal feet of distribution lines, and shall be easily accessible for servicing and repairs.

7:9-2.41 Capacity of dosing tanks - Dosing tanks shall have sufficient capacity to distribute sewage equally to all parts of the distribution system at 2 to 3 hours intervals. Sufficient capacity shall be considered as equivalent to 75 per cent of the interior volume of the distribution lines. Where 4-inch distribution lines are used, a capacity of 1/2 gallon per lineal foot shall be provided.

7:9-2.42 Siphons - Siphons shall be automatic and shall be of an alternating type when the total length of distribution lines is over 1,200 feet. Alternating siphons shall discharge to separate disposal areas.

7:9-2.43 Construction - Dosing tank construction shall conform to the provisions of Section 2.29 of this Chapter.

7:9-2.44 Foundations - Dosing tank foundations shall conform to the provisions of Section 2.30 of this Chapter.

7:9-2.45 Materials - Materials used shall be in conformity with the provisions of Section 2.31 of this Chapter.

7:9-2.46 Ventilation - Dosing tanks shall be constructed in a manner that will permit venting the disposal area.

7:9-2.47 Inlets and Outlets - Inlets shall be above high water elevation and outlets shall conform with the requirements of the manufacturer of the siphon.

7:9-2.48 Access Openings - Each dosing tank or compartment thereof shall be provided with an access opening located so as to facilitate repair or adjustment of the siphon. Such openings shall conform to the provisions of Section 2.38 of this Chapter, except that the opening or openings shall be over the siphon or siphons.

7:9-2.49 Pump in Lieu of Dosing Tank - A wet well and a pump or ejector may be substituted for a dosing tank provided the

other requirements of sections 2.38 through 2.49 of this Chapter are complied with and the pump or ejector is designated to handle sewage. Duplicate equipment shall be provided where required by the Administrative Authority.

### Distribution Box

7:9-2.50 General provision for distribution box - A distribution box shall be installed between septic tanks and disposal fields or seepage pits. If only one seepage pit is used, no distribution box is required. If serial distribution is used, no distribution box is required.

7:9-2.51 Connecting Pipe - The pipe connecting the septic tank and distribution box shall conform to the following provisions:

- (a) Size - The connecting pipe shall be of such size to serve the connected fixtures, but in no case less than four inches.
- (b) Material - Connecting pipes shall be constructed of cast iron, vitrified tile cement, asbestos cement, or of a type approved in writing by the Administrative Authority.
- (c) Joints - All pipe joints in the connecting pipe shall be made water-tight and protected against damage by roots.
- (d) Foundations - The connecting pipe shall be laid on a firm foundation satisfactory to the Administrative Authority.
- (e) Grade - The connecting pipe shall have a minimum grade of not less than 1/4 inch per foot unless otherwise authorized by the Administrative Authority.
- (f) Alignment and Grade - The connecting pipe shall be laid in a continuous grade and, as nearly as possible, in a straight line. Drop manholes may be installed if found necessary. Horizontal bends, where required, shall not be greater than 45 degrees.
- (g) Depth - The depth of the invert of the connecting pipe shall be determined by the elevation of the disposal area.
- (h) The Standards of this Section shall apply for any connecting pipe used for serial distribution.

7:9-2.52 Construction of distribution boxes - Distribution boxes shall be water-tight and constructed of concrete or other durable material. They shall be designed to accommodate the necessary distribution lines leading therefrom and to provide equal distribution to such lines by means of baffles or other acceptable methods.

7:9-2.53 Access - Distribution boxes shall be provided with a means of access. In the case of small boxes, this may be a removable top. If the top of the distribution box is more than 18 inches below furnished grade, the access opening shall be extended to between 18 inches and 12 inches below finished grade.

7:9-2.54 Distribution Lines - Each distribution line shall be connected separately to the distribution box. The inverts of all outlet lines shall be rigidly set at the same level. The invert of the inlet shall be at least one inch above the invert of the outlet. Serial distribution shall be acceptable, upon approval of the Administrative Authority.

#### Disposal Areas

7:9-2.55 General provisions for disposal area - The disposal area to be provided shall be determined by the results of percolation tests performed in accordance with the provisions of Sections 2.59 through 2.61, type of soil available, drainage conditions or by other related data that may be required by the Administrative Authority in accordance with Sections 2.60 through 2.93 of this Chapter.

7:9-2.56 Type of Disposal Area Permitted - The disposal area shall consist of a disposal field constructed in accordance with Sections 2.62 through 2.73 or a seepage pit constructed in accordance with Sections 2.85 through 2.93 or a combination thereof.

7:9-2.57 Location - Disposal area shall be located as designated in Sections 2.18 through 2.23 of this Chapter.

7:9-2.58 Garbage Disposal - Where domestic garbage grinder units are installed or contemplated, the percolating area shall be at least 25 per cent greater than the area required by Sections 2.74 through 2.93 of this Chapter.

#### Determination of Soil Characteristics

7:9-2.59 General provision for determination of Soil Characteristics - The quality of soil available as percolation media shall be determined from the results of tests as herein prescribed, type of underlying soil, drainage conditions or by other related data that may be required by the Administrative Authority.

#### 7:9-2.60 Percolation Tests and Reports

(a) At least one percolation test shall be performed at the site of each disposal area. More than one test will be required where the soil structure may vary or large disposal areas are required. Preliminary tests for tracts involving more than one disposal system may be made in the amount of one per acre or as prescribed by the Administrative Authority. All percolation tests shall be performed under the supervision of a licensed professional engineer, licensed Health Officer, or first-grade sanitarian and witnessed by the Administrative Authority or its Authorized Agent. The Administrative Authority or its Authorized Agent may waive the right to observe the percolation tests. If the Administrative Authority or its Authorized Agent is unable to witness the tests within 15 days of written request from a professional engineer, Health Officer or sanitarian then certification from the engineer, Health Officer or sanitarian will suffice.

(b) Percolation tests shall not be made in test holes which have been allowed to remain open to the atmosphere for periods over three days or in frozen ground. Tests shall not be made in filled ground unless the soil has been compacted or allowed to settle to the satisfaction of the Administrative Authority.

(c) Percolation tests shall be performed in accordance with the following procedure: Step 1 - Prepare a test hole in the undisturbed soil at the depth intended to be used for disposal purposes, having horizontal dimensions of 8 inches to 12 inches. Means may be used to protect the soil in the test hole from becoming clogged with silt and clay particles. Establish a fixed point at the top of the hole from which all measurements shall be taken. Fill the hole with water and allow all of this water to drain into the soil. Step 2 - Fill the hole to a depth of approximately seven inches. At a five to thirty minute time interval, depending on the rate of fall, record the drop in water level in inches during the time interval selected. Immediately refill the hole to the original depth of approximately seven inches, and repeat the test using the same time interval and method. Repeat this procedure until the distance that the water has fallen in the time interval selected becomes approximately equal. (Steps 3 and 4 shall follow immediately) Step 3 - Remove any silt accumulation or debris remaining in the hole. Step 4 - Refill the hole to a depth of seven inches as quickly as possible and record the time required for only six inches of the water to seep away. This time divided by six will be the percolation rate in minutes per inch.

(d) Reports shall be furnished to the Administrative Authority indicating the results of each percolation test in minutes per inch (including unacceptable rates), the date of the test,

effect of recent rain or lack of rain, the apparent moisture of the soil prior to the test, the depth to groundwater when encountered, number of preliminary tests made to determine apparent saturation, the type or types of soil encountered, using the Unified Soil Classification System, or such other system as approved by the Department, together with the thickness of each layer and all other factors affecting percolation test results.

#### 7:9-2.61 Soil, Geology and Ground Water

Determinations - The Administrative Authority may require additional information relative to soil structure, geology and ground water elevations adjacent to or below the proposed disposal area, however, the following information shall be required in all cases:

- (1) The number of test borings or pits shall be as specified by the Administrative Authority, but not numbering less than one test boring or pit for each individual sewage disposal system proposed except for preliminary consideration of tracts wherein a number of such disposal systems are proposed, in which case at least one test shall be made for each five acres or fraction thereof.
- (2) The depth of test borings or pits shall be 10 feet or to bedrock when encountered. If seepage pits are proposed, test borings or test pits shall be to a depth of 8 feet below the bottom of the proposed seepage pits or to bedrock when encountered. Power augers may be used to advance or clean out test holes to sampling depths but may not be used to retrieve soil samples. Split-spoon samplers, plug samplers or other sampling devices may be used which retrieve a relatively undisturbed soil sample. Hand augers may be used to obtain soil samples so long as the test hole remains open and does not cave or slump. Soil sampling should be continuous.
- (3) Reports of the type, nature and depth of the soils found and depth to ground water when encountered shall be made and furnished to the Administrative Authority. Requests by the Administrative Authority for soil samples shall be made prior to the completion of the tests. Three options are open to the applicant for determining depth to seasonal high water table. First, if sole reliance is on the measurement of depth to groundwater (the actual physical measurement) then that test must be taken between January and April inclusive. Second, the applicant may use available maps and data from the Soil Conservation Service. Or third, as accurate an indication as possible of the seasonally high water table, determined using such groundwater measurements (taken at any season of the year) and/or soil tests as deemed appropriate by the engineer.
- (4) In the case of large installations such as commercial or industrial establishments and schools, the Administrative Authority shall require detailed information concerning soil, geology and ground water.

Minimum Construction Requirements for Disposal Fields

7:9-2.62 Minimum Construction Requirements for Disposal Fields - Disposal fields may consist of disposal trenches as described in Sections 2.74 through 2.78 or a disposal bed as described in Sections 2.79 through 2.84.

7:9-2.63 Standard for Disposal Field Construction - Disposal trenches shall be constructed in accordance with Sections 2.74 through 2.78 and disposal beds in accordance with Sections 2.79 through 2.84. Before placement of filter material all sidewall and bottom areas shall be scarified.

7:9-2.64 Filter Material - Filter material shall cover the distribution lines and extend the full width of the trench or bed, shall not be less than six inches deep beneath the bottom of the distribution line, and shall extend at least two inches above the top of the line and as further required in Section 2.77. The filter material shall be washed gravel, crushed stone, slag, or clean bank-run gravel ranging in size from 1/2 to 2 1/2 inches, free of fines, dust, ashes or clay. The filter material shall be covered with untreated paper or by a 2-inch layer of salt, hay or straw as the laying of the distribution lines progress. Use of waterproof paper for this purpose is prohibited.

7:9-2.65 Distribution Lines - Distribution lines shall be constructed true to line and grade with open joints or perforations, except that at least one tight joint at each bend or other fitting shall be provided to prevent slippage. Bell-and-spigot pipe shall be laid with 1/2-inch open joints at two-foot intervals and the bottom of each joint shall contain a minimum of cement mortar to maintain an even flow line. Agricultural tile shall be laid on grade boards securely nailed to stakes driven into the undisturbed earth forming the trench bottom. Openings between joints shall be 1/8 inch to 1/2 inch with the upper half of the joint covered with asphalt-treated paper not less than three inches wide. Perforated tile, bituminized-fibre or asbestos cement or equally adequate pipe may be used provided a sufficient number of clear openings extending through the entire thickness of the pipe are available to permit complete distribution of sewage into the disposal area. Any section of pipe laid with tight joints, except fittings as required above, shall not be considered in determining the percolating area.

7:9-2.66 Depth - Distribution lines shall not be laid at depths greater than 24 inches below finished grade unless authorized by the Administrative Authority. Where more suitable soil is located at greater than two feet below the ground surface, the bottom of the trench may be deepened to within four feet of the seasonal high water tables

or bedrock at 6 to 10 feet intervals into the aforesaid soil provided said excavations are filled with filter material as provided in Section 2.64. The top of distribution lines shall not be less than 9 inches below finished ground surface.

7:9-2.67 Excavation - Excavation for disposal beds or trenches may be made by machinery provided that the adjacent soil will not be compacted and the provisions of Section 2.12 are met. No excavating machinery shall be permitted in the excavation. When an excavation is carried below the required depth, it shall be brought up to the proper elevation with filter material as specified in Section 2.64.

7:9-2.68 Water Table - Disposal fields shall not be constructed in areas where the seasonally high ground water table and/or maximum tide level of the ground water table is less than four feet below the bottom of the trench or bed.

7:9-2.69 Impervious Formations - Disposal fields shall not be constructed over impervious ground formations where such formations are less than ten feet below the finished ground surface.

7:9-2.70 Bedrock - Reserved

7:9-2.71 Fill - Disposal fields shall not be built up by fill to more than two feet unless an adequate grading plan has been prepared by the applicant or his engineer and approved by the Administrative Authority or its Authorized Agent. When disposal fields are built up by fill to a depth of two feet or more the area of such fill shall extend at least 20 feet beyond the limits of the disposal field and the fill shall be of earth having a percolation value approximately equal to that of the ground over which the fill is placed. The percolation rates used for the design of a system in fill shall be the value found in the ground over which the fill is placed.

7:9-2.72 Sloping Ground - When distribution lines must be laid at different elevations in order to meet the slope requirements of Section 2.78, the change in elevations shall be accomplished by the use of distribution boxes as required by Sections 2.51 through 2.55 or by a vertical pipe and fittings of the same size as the distribution pipes provided the upper fitting is a "T" branch, with a plugged top terminating six to twelve inches below finished ground surface and the lower fitting is a 90 degree bend. Tight joints shall be used in all such fittings.

7:9-2.73 Backfill - Backfill over disposal trenches or beds shall not be tamped and no grading machinery shall be permitted to pass over the area. The surface may be rolled by a hand type roller for the purpose of completing a lawn.

Disposal Trenches

7:9-2.74 Percolating Area for Disposal Trenches - The percolating area of disposal trenches shall be considered as the total bottom area of the disposal trench system in square feet, except that any section of trench containing pipe laid with tight joints other than fittings as required in Section 2.65 shall not be considered in determining the percolating area.

7:9-2.75 Minimum Percolating Area: Individual Dwellings - The minimum required percolating area per bedroom shall be determined from the following table, provided that in no event shall the total bottom trench area be less than 150 square feet for each dwelling unit.

Percolation Rate Minutes Per Inch	Minimum Bottom Trench Area Square Feet Per Bedroom
5 min. or less	70*
6 to 10	95
11 to 15	120
16 to 20	145
21 to 25	170
26 to 30	190
31 to 35	215
36 to 40	240
41 to 45	265
46 to 50	290
51 to 55	315
56 to 60	340
over 60	not acceptable

\*where percolation rate is under 3 minutes per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.76 Minimum Percolating Area: Other Than Individual Dwellings - The percolating area shall be the same as that considered in Section 2.74. The minimum required percolating area shall be determined from the following table with the estimated daily sewage flow determined from Section 2.6, provided that in no event shall the total bottom trench area be less than 150 square feet.

Percolation Rate  
Minutes Per Inch

Minimum Bottom Trench Area  
Square Feet Per Gallon Per Day

5 min. or less	0.49*
6 to 10	0.64
11 to 15	0.80
16 to 20	0.96
21 to 25	1.12
26 to 30	1.28
31 to 35	1.44
36 to 40	1.60
41 to 45	1.75
46 to 50	1.95
51 to 55	2.15
56 to 60	3.35
over 60	not acceptable

\*where percolation rate is under 3 minutes per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.77 Size and Spacing - Size and minimum spacing requirements of disposal trenches shall conform to the following table:

### Minimum Disposal Trench Requirements

<u>Time Required for water to fall one inch (minutes)</u>	<u>Maximum Width of trench at Bottom</u>	<u>Depth of Stone Under Dist. Lines</u>	<u>Min. Dist. Between Dist. Lines</u>	<u>Req. Depth of Trench to Bottom-Inches</u>	<u>Area per ft. of Trench (Squar Feet) Percolatin</u>
less than 5 min.	18"	6"	6.0'	20 to 30	1.5
5 to 20	24"	8"	6.0'	22 to 32	2.0
21 to 40	30"	10"	7.5'	24 to 34	2.5
41 to 60	36"	12"	7.5'	26 to 36	3.0

\*where percolation rate is under 3 min. per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.78 Disposal Trench Construction - Disposal trenches shall be constructed in accordance with the following table:

Minimum lines per field	2
Maximum length per line	100 feet
Minimum diameter of distribution lines	4 inches
Preferred slope of distribution lines	2" to 4" in 100 feet
Maximum slope distribution lines	6" to 100 feet
Minimum width of trench bottom	18 inches
Minimum percolating area per dwelling	150 square feet

7:9-2.79 General provision for disposal beds - Disposal beds shall consist of an area in which the entire earth contents have been removed, filter material as required in Section 2.64 placed in the excavation, and distribution lines installed at a depth not greater than 24 inches below finished grade, or as provided in Section 2.66.

7:9-2.80 Percolating Area - The percolating area of disposal beds shall be considered as the total bottom area in square feet.

7:9-2.81 Minimum Percolating Area: Individual Dwellings - The minimum required percolating area per bedroom shall be determined from the following table, provided that in no event shall the total bottom area be less than 180 square feet for each dwelling unit.

<u>Percolating Rate</u> <u>Min. Per Inch</u>	<u>Minimum Area Square Feet</u> <u>Per Bedroom Per Day</u>
5 min. or less	88*
6 to 10	115
11 to 15	144
16 to 20	173
21 to 25	202
26 to 30	231
31 to 35	259
36 to 40	288
41 to 45	318
46 to 50	348
51 to 55	378
56 to 60	408
over 60	not acceptable

\*where percolation rate is under 3 minutes per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.82 Minimum Percolating Area: Other Than Individual Dwellings - The minimum required percolating area shall be determined from the following table with the estimated daily sewage flow determined from Section 2.6, provided that in no event shall the total bottom area be less than 180 square feet.

<u>Percolation Rate</u> <u>Minutes Per Inch</u>	<u>Minimum Bottom Area</u> <u>Square feet Per Gallon Per Day</u>
5 min. or less	0.58*
6 to 10	0.77
11 to 15	0.96
16 to 20	1.15
21 to 25	1.34
26 to 30	1.54
31 to 35	1.73
36 to 40	1.92
41 to 45	2.10
46 to 50	2.30
51 to 55	2.50
56 to 60	2.70
over 60	not acceptable

\*where percolation rate is under 3 minutes per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.83 Depth of Filtering Material - A minimum of 12 inches of filtering material shall be provided under the distribution lines.

7:9-2.84 Disposal Bed Construction - Disposal beds shall be constructed in accordance with the following table:

Minimum lines per field	2
Maximum length per line	100 feet
Minimum diameter of distribution lines	4 inches
Preferred slope of distribution lines	2" to 4" in 100 feet
Maximum slope distribution lines	6" in 100 feet
Maximum distance from edge of bed to nearest distribution line	3 feet
Minimum distance from edge of bed to nearest distribution line	1 foot
Maximum distance between distribution lines	4 feet
Minimum percolating area per dwelling	180 square feet

#### Seepage Pits

7:9-2.85 General provisions for seepage pits - Seepage pits shall be used only when preceded by a septic tank except as otherwise provided in Section 2.3. They may be permitted

in lieu of, or as a supplement to, a disposal field where conditions warrant their use. Because of the health hazard involved in the possible pollution of underground water supplies seepage pits shall not be constructed unless extreme care is exercised in the selection of location and depth.

7:9-2.86 Percolating Area - Percolating area shall be considered as the outside surface of the seepage pit lining calculated below the inlet exclusive of any hardpan, rock, clay or other impervious formations. The bottom area shall not be considered in making the calculation.

7:9-2.87 Minimum Percolating Area: Individual Dwellings - The minimum required percolating area shall be determined from the following table, provided that in no event shall the area be less than 110 square feet for each dwelling unit.

<u>Percolating Rate</u> <u>Minutes Per Inch</u>	<u>Minimum Area Square Feet</u> <u>Per Bedroom Per Day</u>
5 min. or less	55*
6 to 10	72
11 to 15	90
16 to 20	108
21 to 25	126
26 to 30	144
31 to 35	162
36 to 40	180
over 40	not acceptable

\*where percolation rate is under 3 minutes per inch, soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.88 Minimum Percolating Area: Other Than Individual Dwellings - The minimum required percolating area shall be determined from the following table with the estimated daily sewage flow determined from Section 2.6, provided that in no event shall the area be less than 110 square feet.

<u>Percolation Rate</u> <u>Minutes Per Inch</u>	<u>Minimum Area Sq. Ft.</u> <u>Per Gallon Per Day</u>
5 min. or less	0.37*
6 to 10	0.48
11 to 15	0.60
16 to 20	0.72
21 to 25	0.84
26 to 30	0.96
31 to 36	1.08
36 to 40	1.20
over 40	not acceptable

\*where percolation rate is under 3 minutes per inch soil log and other data must be thoroughly evaluated before approval can be given.

7:9-2.89 Construction - Seepage pits shall be constructed within an excavation affording adequate working space and shall be constructed of stone, brick, cinder or concrete block, or similar material laid dry with open joints where the permeable strata has been penetrated, except that if the seepage pit is not of circular construction or if the surrounding ground is subject to cave-in, all horizontal joints shall be mortared in such a manner as to prevent structural failure. All joints in impervious strata, and in all cases above the inlet shall be made water-tight. Before the placement of backfill all sidewall areas shall be scarified.

7:9-2.90 Backfill - (a) The space between the excavation and seepage pit wall shall be backfilled with at least 3 inches of coarse gravel or filter material prescribed in Section 2.64. Where cinder or concrete blocks are laid with core openings exposed, the space between the excavation and seepage pit wall shall be backfilled with at least 6 inches of 2 1/2-inches crushed stone or similar material. (b) Backfill above the permeable strata and inlet shall be thoroughly compacted by hand or mechanical tamping methods. The use of heavy machinery or water for this purpose is prohibited.

7:9-2.91 Covers - If the upper layers of masonry are not drawn in to provide a smaller diameter opening than the diameter of the pit, a reinforced concrete cover shall be provided. Access openings as specified in Section 2.38 shall be provided.

7:9-2.92 Bottom - The bottom of the pit shall be filled with coarse gravel to a depth of one foot unless the bottom is in a gravel or sand formation. The bottom shall not be less than four feet above the maximum ground water elevation.

7:9-2.93 Impervious Formations - The bottom of any seepage pit shall be at least eight feet above any impervious formation.

7:9-2.94 Cesspools - No new cesspools shall be constructed in the State of New Jersey after the effective date of these standards.

7:9-2.95 Basic Engineering Data Required for Certification - The application for certification for 10 or less realty improvements fronting an existing "Street," as defined in Section 7 of the Municipal Land Use Law, (N.J.S.A. 40:550-1 et. seq.) and not involving the building of any new streets, shall be made in writing, and upon a formal application form when provided by the board and contain the following data:

(1) A key map locating the property to be served, a sketch map showing the property to be served, location of the sewerage facilities proposed, the location and depth of percolation test holes, the location of any source of potable water supply and any drainage right-of-way, as defined in Section 4 of the Municipal Land Use Law, cited above, on the same or adjoining premises.

(2) The number of bedrooms, including expansion attics for single family dwellings or the estimated sewage flow for buildings other than single family dwellings.

(3) A description of the type of sewerage facilities proposed.

(4) Results of the percolation tests.

(5) Results of soil, geologic and ground water investigations.

(6) Depth to seasonally high ground water table at the proposed disposal bed.

(7) Lot corners or other permanent physical reference points, proposed disposal field sites, and percolation and boring locations shall be staked and so identified.

7:9-2.96 Additional Engineering Data Required - For realty improvements not falling within the classification covered in Section 2.95 the following additional engineering data shall be submitted:

1. A plan of the realty improvements showing the following:

- i. Lots with their dimensions.
- ii. Contours of original grades.
- iii. Proposed elevations of the final grading shown at lot corners or any contemplated change of slope.
- iv. Drainage right-of-way and any contemplated diversion thereof affecting the realty improvement.
- v. Storm sewers.
- vi. Location and depth, if available, of all private and public water supplies within 500 feet of the realty improvement if available.
- vii. Location of percolation test holes.
- viii. Location of test borings or pits, if required by the Administrative Authority.

2. Results of soil, geologic and ground water investigations.

7:9-2.97 Fifty or More Realty Improvements - Copies of all applications and the accompanying engineering data for certifications to cover 50 or more realty improvements shall be filed with or mailed to the Department by the applicant on the date the application is made to the Board of Health.

7:9-2.98 Validity of Prior Tests - Percolation test results, soil log test results, and tests to determine depth to ground water taken prior to the effective date of these regulations may be used as design criteria until January 1, 1981 for the installation of an individual sewage disposal system provided the following conditions are met:

1. such tests compiled with the regulations in effect at the time they were taken; 2. a system substantially complying with the provisions of these revised regulations is proposed; and 3. the experience of the Administrative Authority has indicated that disposal fields in the immediate area, being of similar nature and size and handling equal volumes of sewage and constructed in soils having similar characteristics have functioned satisfactorily (without having an adverse impact on surrounding water quality) for a reasonable period of time. Pollution of surrounding wells from sanitary sewage is prima facie evidence of disposal field malfunction.

Provided in the event of a rejection by the Administrative Authority the rejection shall be in writing and the reasons therefor and the data relied upon shall be stated in the rejection and a copy of the rejection shall be mailed to the applicant within 10 days of the rejection.