Permit No. \_\_\_\_\_

# **City of Vineland Health Department**

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 1 – General Information

#### **Type of Permit Needed** (Check Applicable Category):

- \_\_\_\_ New Construction
- \_\_\_\_\_ New System (Existing Structure)
- \_\_\_\_\_ Repair \*<u>Malfunctioning System</u> (In-Kind Replacement)
- \_\_\_\_\_ Repair No Malfunction (In-Kind Replacement)
- \_\_\_\_\_ Alteration No Expansion or Change in Use
- \_\_\_\_\_ Alteration Expansion or Change in Use
- \_\_\_\_\_ Alteration \*<u>Malfunctioning System</u>
- \_\_\_\_\_ Deviation from Standards
- \_\_\_\_\_ System Abandonment

#### **Location of Project:**

Address		Block	_ Lot
Name of Applicant (Print):		Ph	
Applicant's Address:			
Type of Facility:			
Residential			
Commercial / Institutional S	pecify		

#### **<u>Type of Waste</u>**: Sanitary Sewage Only

#### \*Indicate the type of malfunction and its cause (check all that apply):

- \_\_\_\_ Ponding or breakout of sanitary sewage or effluent onto the surface of the ground
- \_\_\_\_ Seepage of sanitary sewage or effluent into portions of building below ground
- \_\_\_\_\_Back-up of sanitary sewage into the building served, which is not caused by a physical blockage of the internal plumbing
- \_\_\_\_\_ Any manner of leakage observed from components that are not designed to emit sanitary sewage or effluent
- \_\_\_\_ Direct discharges to ground water (no zone of treatment)
- \_\_\_\_ Contamination of nearby wells or surface water bodies by sanitary sewage or effluent

Describe the cause of the malfunction:

### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Page 2

#### Please $\checkmark$ if any of the following apply:

- \_\_\_\_ A privy, outhouse, latrine or pit toilet is present, a system must be installed
- \_\_\_\_\_A system must be upgraded as part of a real property transfer
- \_\_\_\_ A cesspool has been identified during a real property transfer and a conforming system must be installed
- \_\_\_\_ A malfunctioning cesspool has been identified and a conforming system must be installed

# Other Approvals/Certifications/Waivers/Exemptions required for this project (attach to application)

- \_\_\_\_ Pinelands Commission
- \_\_\_\_ Highlands Water Protection and Planning Act
- \_\_\_\_ U.S. Army Corps of Engineers
- \_\_\_\_ NJDEP-Bureau of Flood Plain Management
- \_\_\_\_ Other Specify \_\_\_\_\_

I hereby certify that the information furnished on Form 1 of this application is true. I am aware that false swearing is a crime in this State and subject to prosecution.

Signature of Applicant	Da	ite

# FOR AGENCY USE ONLY

Application Denied – Reason(s) for Denial / Citation of Rules attached
 Application Approved Subject to Approval by NJDEP

Application Approved	Expiration Date:	
Signature of Authorized Agent	Date	

Name and Title:

**City of Vineland Health Department** 640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form	2a – General Site Evaluation Data Block Lot
1	. Name of Site Evaluator (print):
2	. Business Address of
	Site Evaluator:
3	. Business Phone Number of Site Evaluator:
4	. Special Site Limitations Identified (Check appropriate Categories):
	Flood PlainsBedrock OutcropsWetlandsExcessively Stony
	Disturbed GroundSink HolesSand DunesSteep Slopes
	Other – Specify
5	. Soil Logs – Enter on Form 2b – Use one sheet for each soil log.
6	. Considerations Relating to Disturbed Ground:
	a) Type of Disturbance (Check appropriate categories):
	Filled AreaExcavated AreaRe-graded Area
	Subsurface DrainsOther – Specify
	b) Existing Ground Surface
	Elevation Relative to Ground Surface
	Method of Identification
	c) Suitability of Disturbed Ground
	Unsuitable: Objects Subject to Disintegration or Change in Volume
	Excessively Coarse
	Proctor Test performed% Standard Proctor Density =
7	. Hydraulic Head Test:
	a) Hydraulically Restrictive Horizon: Depth Top to Bottom
	b) Piezometer A: Depth to Bottom Depth of Water Level (24 hrs)
	c) Piezometer B: Depth to Bottom Depth of Water Level (24 hrs)
	d) Witnessed by
	SignatureDate
8	. Attachments (Check items included):
	Site Plan
	Key Map Showing Location of Site on U.S.G.S. Quadrangle or Other Accurate Map
	Key Map Showing Location of Site on U.S.D.A. Soil Survey Map
	Other – Specify
9	. I hereby certify that the information furnished on Form 2a of this application (and the
	attachments thereto) is true and accurate. I am aware that falsification of data is a violation
	of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as
	prescribed in N.J.A.C. 7:14-8.
	Signature of Soil Evaluator Date

Signature of Professional Engineer\_\_\_\_\_ \_ License #\_\_\_\_

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 2b – Soil Log and Interpretation Block\_\_\_\_\_ Lot\_\_\_\_ 1. Log Number\_\_\_\_\_ Method (Check One): \_\_Profile Pit \_\_Boring 2. Soil Log Depth \_\_\_\_\_ (inches) Top-Bottom\_\_\_\_ Munsel Color Name and Symbol; Estimated Textural Class: Estimated Volume % Coarse Fragment, If Present; Structure; Moist or Dry Consistence; Mottling - Abundance, Size and Contrast, If Present 3. Ground Water Observations: \_\_Seepage – Indicate Depth\_\_ \_\_\_Pit/Boring Flooded – Depth after\_\_\_\_ Hours\_\_\_ 4. Soil Limiting Zones (Check Appropriate Categories): \_\_Fractured Rock Substratum – Depth to Top\_\_\_\_\_ \_\_\_Massive Rock Substratum – Depth to Top\_\_\_\_ \_\_Excessively Coarse Horizon – Depth Top to Bottom\_\_\_\_\_ Excessively Coarse Substratum – Depth to Top\_\_\_\_ \_\_\_\_Hydraulically Restrictive Horizon – Depth Top to Bottom\_\_\_\_\_ \_\_\_\_Hydraulically Restrictive Substratum – Depth to Top\_\_\_\_\_\_ \_\_\_Perched Zone of Saturation – Depth Top to Bottom\_\_\_\_\_ \_\_\_Regional Zone of Saturation – Depth to Top\_\_\_\_\_ 5. Soil Suitability Classification: 6. I hereby certify that the information furnished on Form 2b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator	Date
Signature of Professional Engineer	License #

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 3a. Soil Permeability Data Block\_\_\_\_\_ Lot\_\_\_\_ Assign a number for each test and a letter for each test replicate. Show test data and calculations on Form 3b, 3c, 3d, 3e, 3f or 3g. Use one sheet for each separate test or test replicate.

1. Summary of Data – Enter data for each test replicate on a separate line.

Type of Test	Test (number)	Replicate (letter)	Depth (inches)	Result*

\*For tube permeameter, pit-bailing and piezometer tests report results in inches per hour. For soil permeability class rating give soil permeability class number. For percolation test report result in minutes per inch. For basin flooding test report result as positive if basin drains completely within 24 hours after second filling, negative otherwise.

- 2. Design Permeability/Percolation Rate: Specify Test Number
  - \_\_\_Average of Test Replicates
  - \_\_Single Replicate
  - \_\_Slowest of Replicates

Type of Limiting Zone Identified	Test Number

- 3. Attachments (Check items included):
  - \_\_Form 3b Tube Permeameter Test Data Number of Sheets\_\_\_
  - \_\_Form 3c Soil Permeability Class Rating Test Data Number of Sheets\_\_\_\_\_
  - \_\_Form 3d Percolation Test Data Number of Sheets\_\_\_\_\_
  - \_\_Form 3e Pit-Bailing Test Data Number of Sheets\_\_\_\_\_
  - \_\_Form 3f Piezometer Test Data Number of Sheets\_\_\_

\_\_Form 3g – Basin Flooding Test Data – Number of Sheets\_\_

4. I hereby certify that the information furnished on Form 3a of this application (and the attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Soil Evaluator	Date
-----------------------------	------

Signature of Professional Engineer License #

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

#### Form 3b. Tube Permeameter Test Data

- 1. Test Number\_\_\_\_\_ Replicate (Letter)\_\_\_\_\_ Date Collected\_\_\_\_\_
- 2. Material Tested: \_\_\_\_\_Fill \_\_\_\_Test in Native Soil Indicate Depth\_\_\_\_\_\_
- 3. Type of Sample: \_\_\_Undisturbed \_\_\_Disturbed
- Sample Dimensions: Inside Radius of Sample Tube, R, in cm\_\_\_\_\_ Length of Sample, L, in inches\_\_\_\_\_
- Bulk Density Determination (Disturbed Samples only): Sample Weight (Wt. Tube Containing Sample – Wt. of Empty Tube), grams\_\_\_\_\_\_ Sample Volume (L x 2.54cm./inch x 3.14R<sup>2</sup>), cc\_\_\_\_\_\_ Bulk Density (Sample Wt./Sample Volume), grams/cc)\_\_\_\_\_
- 6. Standpipe Used: \_\_No \_\_Yes Indicate Internal Radius, cm\_\_\_\_\_
- Height of Water Level Above Rim of Test Basin, in inches: At the Beginning of Each Test Interval, H<sub>1</sub>\_\_\_\_\_ At the End of Each Test Interval, H<sub>2</sub>\_\_\_\_\_
- 8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, t <sub>1</sub>	Time, End of Test, Interval, t <sub>2</sub>	Length of Test Interval, t, minutes

- 9. Calculation of Permeability: K, (in/hr) = 60 min/hr x r²/R² x L(in)/T(min) x In (H<sub>1</sub>/H<sub>2</sub>) = 60 min/hr x \_\_\_\_/ x \_\_\_/ x in (\_\_\_/\_\_) = \_\_\_\_\_
  10. Defects in the Sample (Check appropriate items): \_\_\_\_\_None \_\_\_Cracks \_\_Worm Channels \_\_\_Root Channels \_\_\_Soil/Tube Contact
  - \_\_\_\_\_Large Gravel \_\_Large Roots \_\_Dry Soil \_\_Smearing \_\_Compaction Other – Specify
- 11. I hereby certify that the information furnished on Form 3b of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator	Date	
Signature of Professional Engineer	License #	

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 3c. Soil Permeability Class Rating Data

- 1. Test Number\_\_\_\_\_ Replicate (Letter)\_\_\_\_\_
- 2. Sample Depth\_\_\_\_\_ Soil Pit/Boring Number\_\_\_\_\_ Date Collected\_\_\_\_\_\_
- Coarse Fragment Content: Total Weight of Sample, W.T., grams\_\_\_\_\_\_
   Weight of Material Retained on 2mm sieve, W.C.F., grams\_\_\_\_\_\_
   Wt. % of Coarse Fragment (W.C.F./W.T. x 100):\_\_\_\_\_\_
- 4. Oven Dry Weight (24 hrs., 105°C) of 40 Gram Air Dry Sample, grams, Wt\_\_\_\_\_
- 5. Hydrometer Calibration, Rc\_\_\_\_\_
- 6. Hydrometer calibration temperature (°F)\_\_\_\_\_
- Hydrometer Reading 40 seconds, grams, R1\_\_\_\_\_
   Temperature of Suspension, °F\_\_\_\_\_
- 8. Corrected Hydrometer Reading, grams, R1'\_\_\_\_\_
- 9. Hydrometer Reading 2 hours, grams, R2\_\_\_\_\_
  - Temperature of Suspension, °F\_\_\_\_\_
- 10. Corrected Hydrometer Reading, grams R2'\_\_\_\_\_
- 11. % sand = (Wt. R1')/Wt. x 100 = (\_\_\_\_\_\_ x 100 = \_\_\_\_\_ x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_x 100 = \_\_\_\_
- 12. % clay = R2'/Wt. x 100 = \_\_\_\_\_ x 100 = \_\_\_\_\_

#### 13. Sieve Analysis:

- a. Oven Dry Wt. (2 hrs., 105°C) Total Sand Fraction (Soil Retained in 0.047mm Sieve), grams\_\_\_\_\_
- b. Wt. of Fine Plus Very Fine Sand Fraction (Sand Passing 0.25mm Sieve), grams\_\_\_\_\_
- c. % Fine Plus Very Fine Sand (b/a)\_\_\_\_\_
- 14. Soil Morphology (Natural Soil Samples Only): Structure of Soil Horizon Tested\_\_\_\_\_
  - Consistence of Soil Horizon Tested: Dry\_\_\_\_ Moist\_\_\_\_
- 15. Soil Permeability Class Rating (Based upon average textural analysis of this replicate and other replicate samples)\_\_\_\_\_
- 16. I hereby certify that the information furnished on Form 3c of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Professional Engineer License #	

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.)/(856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

#### Form 3d. Percolation Test Data

1. Test Number\_\_\_\_\_ Replicate (Letter)\_\_\_\_\_ Date Tested\_\_\_\_\_

Depth\_\_\_\_\_\_

3. Pre-soak:

\_\_Sandy Textured Soil Only, Shortened Pre-soak -- Indicate Time Required for 12 Inches of

Water to Drain after Second Filling, Minutes\_\_\_\_\_

\_\_Four Hour Pre-soak Completed – Indicate Result:\_\_\_\_\_

- \_\_\_\_Test Hole Drained Within 16 to 24 Hours After Pre-Soak
- \_\_\_\_Test Hole Did Not Drain Within 24 Hours After Pre-soak
- 4. Rate of Fall Data:
  - a. Time Interval Selected, Minutes\_\_\_\_\_
  - b. Record the Drop in Water Level During Each Time Interval to the Nearest 1/10<sup>th</sup>-Inch on the Lines Below:

Depth of Water, Start of Interval (inches)	Depth of Water, End of Interval (inches)	Drop in Water Level (inches)

- 5. Percolation Rate:
  - a. Time, minutes, Required for a Six-inch Drop in Water Level\_\_\_\_\_
  - b. Percolation Rate = a/6 =\_\_\_\_/6 =\_\_\_\_min/in
- 6. I hereby certify that the information furnished on Form 3d of this application is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as prescribed in N.J.A.C. 7:14-8.

Signature of Site Evaluator	Date		
Signature of Professional Engineer	License #		

640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.) / (856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 4 – General Design Data		
Street Address	Block	Lot
1. Volume of Sanitary Sewage, gals/day		
Residential: No. of Dwelling Units	_ Total Number of	of Bedrooms
(Circle one) Ejector Pump: Yes / No Garbage Grinder: Y	Yes / No Expans	sion Attic: Yes / No
Commercial / Institutional – Indicate Type of Establishm	nent and Show Me	thod of Calculation.
2. Alterations or Repairs		
a) Reason for Alteration or Repair (check appropriate categor	ries)	
Expansion or Change in Use		
Upgrade Existing Facility		
Correct Malfunctioning System		
Other – Specify:		
b) Describe Nature of Alteration or Repair:		
3. System Components		
a) Grease Trap Capacity (gals) Show Calculation	ns Used	
b) Septic Tank Capacities (gals)		
First (single) Compartment Second Compartment	nt Third	Compartment
c) Effluent Distribution Method: Gravity Flow Grav	vity Dosing	Pressure Dosing
Dosing Device: Pump Siphon		
d) Dosing Tank Capacity (gals): Total Gals	_ Reserve Cap	acity
e) Laterals: Number Total Length	Pipe Size	Spacing
f) Connecting Pipe: Size Length	1	
g) Manifold: Size Length		
h) Disposal Field: Type of Installation: Design	Permeability (Perc	colation Rate):
Bed: Length Width	Area	
Trenches: Width Total l	Length	
i) Seepage Pits: Design Perc Rate Number of Pit	ts Total Per	c Area Provided
4. Attachments (check items included)		
General Plan of System Showing Location of All System	•	
Cross Sections of Each System Component Including Gre	ase Trap, Septic T	ank, Dosing Tank,
Disposal Field, Seepage Pits and Interceptor Drains		
Pump Performance Curve		
Soil Survey Map of Area		
General Area Location Map		
Other- Specify		
5. I hereby certify that the information furnished on Form 4 the net to be the second expression of the second expression		
thereto) is true and accurate. I am aware that falsification of Pollution Control Act (NJSA 58:10A-1 et seq.) and is subjec		
Tonution Control Act (NJSA 38.10A-1 et seq.) and is subjec	i to penantes as p	nescribeu in NJAC

#### 7:14-8.

### (Circle one)

Signature of NJ Licensed Professional Engineer (seal required) / Applicant / Septic Contractor

**City of Vineland Health Department** 640 E. Wood Street, Vineland, NJ 08360 (856) 794-4131 (ph.)/(856) 405-4608 (fax) www.vldhealth.org

#### Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal System

Form 5	. Design of Pressure Dosing System
1.	Configuration of Distribution Network:
	Type of Manifold:EndCentral
	Distribution Laterals: Number Length, ft Spacing, ft
	Hole Diameter, ins Hole Spacing, ins
	Diameter of Laterals, ins
2.	Lateral Discharge Rate:
	Design Pressure Head at Supply End of Laterals, Hp, ft
	Hole Discharge Rate, Q, gpm
	Number of Holes per Lateral, n
	Lateral Discharge Rate, (Q x n) gpm
3.	Manifold Length, ft Manifold Diameter, ins
4.	System Discharge Rate, gpm
5.	Dose Volume:
	Design Volume of Sewage, gal/day
	Design Permeability, in/hr or Percolation Rate, min/in
	Internal Volume of Distribution Network
	Dose Volume
ба.	Pump Selection:
	Diameter of Delivery Pipe Length of Delivery Pipe
	Friction Loss in Delivery Pipe, Hf, ft
	Elevation of Dosing Tank Low Water Level
	Elevation of Lateral Invert
	Elevation Head, He, ft
	Total Operating Head, Ht (Hp + Hf + He), ft
	Pump Model   Rated Horsepower
	Pump Discharge Rate at Total Operating Head, gpm
6b.	Siphon Elevation:
	Diameter of Delivery Pipe Length of Delivery Pipe
	Friction Loss in Delivery Pipe, Hf, ft
	Velocity Head, Hv, ft
	Total Operating Head, Ht (Hp + Hf + Hv), ft
	Elevation of Lateral Invert
	Elevation of Siphon Invert
7.	I hereby certify that the information furnished on Form 5 of this application (and
	attachments thereto) is true and accurate. I am aware that falsification of data is a violation of the Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.) and is subject to penalties as
	prescribed in N.J.A.C. 7:14-8.
	1