

CITY OF VINELAND 640 EAST WOOD ST VINELAND, NJ 08360 HEALTHDEPARTMENT@VINELANDCITY.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 *Malfunctioning System (In-Kind Replacement)
- _____ Repair No Malfunction (In-Kind Replacement)
- _____ Alteration No Expansion or Change in Use
- Alteration Expansion or Change in Use
- Alteration *Malfunctioning System
- ____ 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	Specify			
<u>Type of Waste</u> : Sanitary Sewage Only				
*Indicate the type of malfunc	tion and its caus	e (check all that a	apply):	1

- ____ 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:



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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 _____

Date

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:			



Form 2	a – 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 Ground Sink Holes Sand Dunes Steep 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 Area Excavated Area Re-graded Area		
	Subsurface Drains Other – 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		
	Signature Date		
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 #_____



Form 2	b – Soil Log and Interpretation Block Lot			
1.	Log Number Method (Check One):Profile PitBoring			
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 #
Signature of Froiessional Engineer	



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 #_____



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
- 4. 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 3.14R²), 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, H1______ At the End of Each Test Interval, H2
- 8. Rate of Water Level Drop (Add additional lines if needed):

Time, Start of Test Interval, t ₁	Time, End of Test, Interval, t ₂	Length of Test Interval, t, minutes

- 9. Calculation of Permeability:
 - K, $(in/hr) = 60 \text{ min/hr x } r^2/R^2 \text{ x } L(in)/T(min) \text{ x In } (H_1/H_2) =$

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 #



Form 3c. Soil Permeability Class Rating Data

1.	Test Number	Replicate (Letter)			
2.	Sample Depth	Soil Pit/Boring Number	Date Collected		
3.	Coarse Fragment Cont	ent:			
	Total Weight of Samp	le, W.T., grams			
	Weight of Material Re	tained on 2mm sieve, W.C.F., gran	1S		
	Wt. % of Coarse Frag	ment (W.C.F./W.T. x 100):			
4.	Oven Dry Weight (24	hrs., 105°C) of 40 Gram Air Dry Sa	ample, grams, Wt		
5.	Hydrometer Calibratio	n, Rc			
6.	Hydrometer calibration	n temperature (°F)			
7.	Hydrometer Reading -	- 40 seconds, grams, R1			
	Temperature of Susper	nsion, °F			
8.	Corrected Hydrometer	Reading, grams, R1'			
9.	Hydrometer Reading -	- 2 hours, grams, R2			
	Temperature of Susper	nsion, °F			
10.	Corrected Hydrometer	Reading, grams R2'			
11.	11. % sand = (Wt. – R1')/Wt. x 100 = ()/ x 100 =				
12.	12. % clay = R2'/Wt. x 100 = x 100 =				
13.	Sieve Analysis:				
	a. Oven Dry Wt. (2 h	rrs., 105°C) Total Sand Fraction (So	oil 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.	14. Soil Morphology (Natural Soil Samples Only):				
	Structure of Soil Horizon Tested				
	Consistence of Soil Horizon Tested: Dry Moist				
15.	Soil Permeability Clas	s Rating (Based upon average textu	ral analysis of this replicate and other		
	replicate samples)				
16. I nereby certify that the information furnished on Form 3c of this application is true and					
	accurate. I am aware	that faisification of data is a viola	ation of the water Pollution Control		
	ACT (N.J.S.A. 58:10A	-1 et seq) and is subject to penalti	es as prescribed in N.J.A.C. 7:14-8.		

Signature of Site Evaluator	Date
Signature of Professional Engineer	License #



Form 3d. Percolation Test Data

- 1. Test Number_____ Replicate (Letter)_____ Date Tested_____
- 2. 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_____
 - Record the Drop in Water Level During Each Time Interval to the Nearest 1/10th-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 =____inin/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	Dat	te
Signature of Professional Engineer_	Lic	ense #



Application for a Permit to Construct/Alter/Repair an Individual Subsurface Sewage Disposal
System Form 4 General Design Data
Street Address Plack Lat
1 Volume of Sanitary Sewage, gals/day
Residential: No. of Dwelling Units Total Number of Bedrooms
(Circle one) Ejector Dump: Ves / No. Carbage Grinder: Ves / No. Evonosion Attic: Ves / No.
Commercial / Institutional Indicate Type of Establishment and Show Method of Calculation
2 Alterations or Repairs
a) Reason for Alteration or Repair (check appropriate categories)
Expansion of Change in Use
Correct Malfunctioning System
Other - Specify
b) Describe Nature of Alteration or Renair:
3 System Components
a) Grease Tran Canacity (gals) Show Calculations Used
b) Sentic Tank Canacities (gals)
First (single) Compartment Second Compartment Third Compartment
c) Effluent Distribution Method: Gravity Flow Gravity Dosing Pressure Dosing
Dosing Device: Pump Sinhon
d) Dosing Tank Capacity (gals): Total Gals Reserve Capacity
e) Laterals: Number Total Length Pipe Size Spacing
f) Connecting Pipe: Size Length
g) Manifold: Size Length
h) Disposal Field: Type of Installation: Design Permeability (Percolation Rate):
Bed: Length Width Area
Trenches: Width Total Length
i) Seepage Pits: Design Perc Rate Number of Pits Total Perc Area Provided
4. Attachments (check items included)
General Plan of System Showing Location of All System Components
Cross Sections of Each System Component Including Grease Trap, Septic Tank, 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 of this application (and attachments
thereto) is true and accurate. I am aware that falsification of data is a violation of the Water
ronution Control Act (NJSA 58:10A-1 et seq.) and is subject to penalties as prescribed in NJAC 7.14-8
(Circle one)
Signature of NJ Licensed Professional Engineer (seal required) / Applicant / Septic Contractor



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
6a.	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 therete) 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.