Maine Department of Human Services SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION Division of Health Engineering, Station 10 (207) 287-5672 FAX (207) 287-4172 >> Caution: Permit Required - Attach in Space Below << PROPERTY LOCATION City, Town, or Plantation **PORTLAND** 11 CAMPBELL RD Street or Road box Paffyld Subdivision, Lot # OWNER/APPLICANT INFORMATION Name (last, first, MI) X Owner SURCHARGE \$10.00 X Applicant **EMILY** NICHOLS, Mailing Address 11 CAMPBELL RD. of x Owner PORTLAND, MAINE 04103 x Applicant Municipal Tax Map # 268 B Lot # _/ 415-2485 Daytime Tel. # Caution: Inspection Required Owner or Applicant Statement I have inspected the installation authorized above and found it to be in compliance I state that the information submitted is correct to the best of my with the Subsurface Wastewater Disposal Rules Application. knowledge and understand that any faislfication is reason for the (1st) Date Approved Department and/or Local Plumbing Inspector to deny a Permit. 7/16/04 (2nd) Date Approved Local Plumbing Inspector Signature Signature of Owner or Applicant PERMIT INFORMATION DISPOSAL SYSTEM COMPONENT(S) THIS APPLICATION REQUIRES TYPE OF APPLICATION 1. X Complete Non-engineered System 1. No Rule Variance 2. Primitive System (graywater & alternative tollet) 1. First Time System 2. First Time System Variance 3. Alternative Tollet, specify: 2. X Replacement System a. Local Plumbing Inspector Approval 4. Non-engineered Treatment Tank (only) Type Replaced: UNKNOWN b. State & Local Plumbing Inspector Approval Year Installed: UNKNOWN 5. Holding Tank, capacity: __ gallons 3. X Replacement System Variance 6. Non-engineered Disposal Field (only) 3. Expanded System a. X Local Plumbing Inspector Approval 7. Separated Laundry System a. Minor Expansion b. State & Local Plumbing Inspector Approval 8. Complete Engineered System (2000 gpd or more) b. Major Expansion 4. Experimental System 9. Engineered Treatment Tank (only) 4. Experimental System 5. Seasonal Conversion Approval Engineered Disposal Field (only) 11. Pre-treatment, specify: DISPOSAL SYSTEM TO SERVE SIZE OF PROPERTY 12. Miscellaneous components 1. X Single Family Dwelling Unit, No. of Bedrooms: 2 sq. ft. TYPE OF WATER SUPPLY 0.17 +/-X acres 2. Multiple Family Dwelling, No. of Units: 1. ☐ Drilled Well 2. ☐ Dug Well 3. ☐ Private SHORELAND ZONING 3. Other: 4. X Public 5. Other: SPECIFY X No ☐ Yes DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3) **DESIGN FLOW** GARBAGE DISPOSAL UNIT DISPOSAL FIELD TYPE & SIZE TREATMENT TANK 270 gallons-per-day (gpd) 1. X No 2. Tyes 3. Maybe 1. Stone Bed 2. Stone Trench 1. X Concrete (EXISTING) BASED ON: >> If yes/maybe, specify one below: 3. X Proprietary Device a. X Requiar 1. X Table 501.1 (dwelling unit(s) a. Multi-Compartment Tank a. Cluster array c. X Linear 2. Table 501.2 (other facilities) b. D Low Profile b. Tanks In Series SHOW CALCULATIONS b. Regular load d. H-20 Load 2. The Plastic or concrete c. Increase InTank Capacity - for other facilities --4. Other: _ 3. Other: sg. ft. X lin. ft. d. Filter on Tank Outlet CAPACITY: 1000 SIZE: 150 gallons **EFFLUENT/EJECTOR PUMP** DISPOSAL FIELD SIZING SOIL DATA & DESIGN CLASS 1. Small -- 2.0 sq. ft./gpd 1. X Not Regulred PROFILE CONDITION DESIGN 2. May Be Required 2. X Medium - 2.6 sq. ft./gpd 5 В 3. ☐ Required >> Specify dose for

3. ☐ Medium-Large - 3.3 sq. ft./gpd at Observation Hole # TB-1 3. Section 503.0 (meter readings) engineered & experimental systems 4. Large - 4.1 sq. ft./gpd Depth >56 " Elevation >-105"ERP ATTACH WATER-METER DATA gallons DOSE: 5. Extra Large -- 5.0 sq. ft./gpd OF MOST LIMITING SOIL FACTOR

SITTE EVALUATION STATEMENT

I certify that on 7/8/041 completed a site evaluation on this property and state that the data reported herein are accurate and that	(the proposed system
Certify that on 7/8/041-completed a site evaluation on this property and state that the data reported the control of the contr	
100 tary 11 tar 511 11 11 11 11 11 11 11 11 11 11 11 11	
1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

is in compliance with the 345

SE# Site Evakuator Signatu

(207)795-6009 Michael Beyling Telephone# Site Evaluator Name Printed

7/8/04

Date mdeyling@summitenv.com

Page 1 of 3 HHE-200 Rev. 8/01 E-Mall Address

Maine Department of Human Services SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION Division of Health Engineering, Station 10 FAX (207) 287-4172 (207) 287-5672 Owner or Applicant Name Street, Road, Subdivision Town, City, Plantation **NICHOLS** 11 CAMPBELL RD **PORTLAND** SITE LOCATION MAP SITEPLAN (Attach map from Maine Atlas for First Time Bystem Variance) Scale: SEE ATTACHED SEE ATTACHED SOIL PROFILE DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above) Observation Hole # _ Test Pit ☐ Test Pit ◀ Boring Observation Hole# TB-1 Depth of organic horizon above mineral soil Depth of organic horizon above mineral soil Mottling Color Consistency Texture Mottling Color Texture Consistency D Đ NONE **EVIDENT** SANDY LOAM BROWN FRIABLE Depth below mineral soil surface (inches) LOOSE 12 12 18 18 24 24 BROWN **GRANULAR** 30 MED 30 TO MASSIVE COARSE 36 SAND 36 TAN 42 42

Muhael Von Ling.
Site Evaluator Signature

Classificat

Condition

Slope

0-3

Percent

Limiting

Factor

<u>>56_ "</u>

Depth

☐ Groundwate

□RESTRICT

□ Bedrock

48

Soll

Profile

_____345_____ SE #

Soil

Profile

____7/8/04__ Date

Slope

Percent

Classification

Condition

Limiting Factor

Depth

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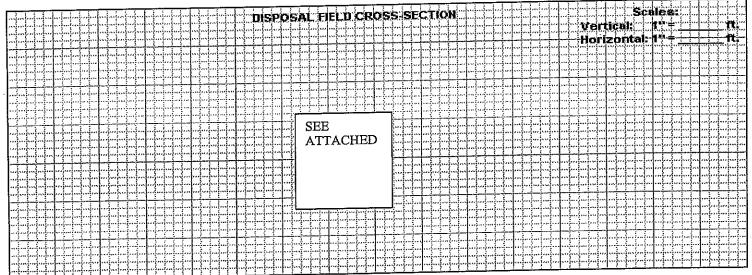
Groundwater

☐ Bedrock

Restrictive Layer

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION Maine Department of Human Services Division of Health Engineering, Station 10 (207) 287-5672 FAX (207) 287-4172 Street, Road, Subdivision Owner or Applicant Name

Town, City, Plantation **NICHOLS** 11 CAMPBELL RD PORTLAND SUBSURFACE WASTEWATER DISPOSAL PLAN Scale: 1" SEE ATTACHED **ELEVATION REFERENCE POINT** CONSTRUCTION ELEVATIONS BACKFILL REQUIREMENTS Location & Description:18" PINE TREE Finished Grade Elevation -49" ERP Depth of Backfill (upslope)SEE DRAWINGS W/ NAIL AND ORANGE PAINT LINE -67" ERP Depth of Backfill (downslope)SEE DRAWINGS Top of proprietary device Reference Elevation is: -85" ERP Bottom of Disposal Field DEPTHS AT CROSS-SECTION (shown below) DISPOSAL FIELD CROSS SECTION vertical:



Site Evaluator Signature SE# Date HHE-200 Rev. 6/01

Muland Angland 345 7/8/04 Page 3 of 3

EVERGREEN UU

REPLACEMENT SYSTEM VARIANCE REQUEST

THE LIMITATIONS OF THE REPLACEMENT SYSTEM VARIANCE REQUEST.

This form shall be attached to an application (HHE-200) for the proposed replacement system which requires a variance to the Rules. The LPI shall review the Replacement System Variance Request an HHE-200 and may approve the Request if all of the following requirements can be shall review the Replacement System Variance Request an HHE-200 and may approve the Request if all of the following requirements can be shall review the Replacement System Variance(e) requested fell within the limits of LPI's authority.

The proposed design meets the definition of a Replacement System as defined in the Rules (Sec. 2006)

There will be no change in use of the structure except as authorized for minor expansions outside the shoraland zone of major 2. There will be no change in use of the structure except as authorized for minor expansions outside the shoraland zone of the waterbodies/courses.

The replacement system is determined by the Site Evaluator and LPI to be the most practical method to treat and dispose of the wastewater.

NERALINFORMATION	Town of PORTLAND Date Permit Issued Tel. No.: 415-2485 PLUASIS
NERAL INFORMATION	Date Permit Issued
mit No.	Tel. No.: 415-2485 PLUASIO
perty Owner's Name: EMILY NICHOLS	15 04103
stem's Location: 11 CAMPBELL RD, PORTLAND, MAN	Date Permit Issued
operty Owner's Address: SAME	MA
different from above)	
an you are to sent of the sent of the property	osed replacement system is needed, complete the replacement system. This variance les is required for the proposed replacement system. This variance
lumbing Inspector and make any corrections required by the	the Rules. Should the proposed system malfunction, I release a sonable and proper manner, and I will promptly notify the Local Rules. By signing the variance request form, I acknowledge to the property to perform such duties as may be necessary to 2/16/04 DATE
LOCAL PLUMBING INSPECTOR I. M. C. C. A. F. C. W. G. S. knowledge that it cannot be installed in compliance with the Rules. Application, and my on-site investigation, I (chack and complete elf. Application, and my on-site investigation, I (chack and complete elf. a. (approve, disapprove) the variance request based on my autonomous control of the complete elf. Application, and my on-site investigation, I (chack and complete elf. a. (approve, disapprove) the variance request based on my autonomous Section below and	the property to perform such duties as may be necessary to the property to perform such duties as may be necessary to the property and have determined to the best of my as a result of my review of the Replacement Variance Request, the there a or b): there a or b): thority to grant this variance. Note: If the LPI does not give his approval return to the applicant. approval authority as LPI. (Vecommend. department of the performance) the shall state his reasons in

placement System Variance Req	quest LIMIT OF LP/S						VARIANCE REQUESTED TO:	
placement cystem.			APPROVAL A	UTHORITY			and discount of the last of th	
VARIANCE CATEGORY								inches
PILS				to 7"			inches	
	Ground Water Table			to 7"			inches	
Il Profile	Restrictive Layer			to 12'			Disposal	Septic
il Condition	Dadmok			Saptie Tanks			Fields	Tank
IM HHE-200 SETBACK DISTANCES (in feet)	Disposal Fields			(total design flow)			Fidios	
SETBACK DISTANCES (III 17-7	(tot Less than	a design flo 1000 to	Over 2000	Less than	1000 to 2000 gpd	Over 2000 gpd	۳o	To
	1000 gpd	2000 gpd	gpd	1000 gpd	100 ft [a]	100 ft [a]		ļ
From	300 ft [8]	300 ft [a]	300 ft (a)	100 ft [a]	TAD IL POT			
ells with water usage of 2000 or ore god or public water supply	Sun it fol	440 11 214				100 down		<u> </u>
ote the or harmony and and a			30D down	100 down	100 dawn			
els	100 down	200 down	to 150 ft	to 50 ft [b]	to 50 ft	to 50 ft		4
wners wells	to 60 ft	to 100 ft	300 down	100 down	100 down	100 down		1
C. L. L. Malle	100 down	200 down	to 180 ft	to 50 ft [b]	to 75 ft [b]	to 75 ft [b]		
leighbor's wells	[d] # 08 ct	to 120 ft	[b]			70 # f=1		
<u>.i.</u>		(b)	25 ft [a]	10 ft [a]	10 ft [B]	10 ft [a]		
Z. L augusty line	10 ft (a)	20 ft [a]			100 down	100 down		1
Vater supply line	100 down	200 down	300 down	100 dawn	to 50 ft	to 50 ft		ļ
Vater course, major - for	to 60 ft	to 120 ft	to 180 ft	to 50 ft	W 44 x			
aniacements only, see table accur	(0.001)			- 4-	5D down	50 down to		
or malor expansions	50 down	100 down	150 down	50 down to 25 ft	to 25 ft	25 ft		
Water course, minor	to 25 ft	to 50 ft	to 75 ft	25 down to	25 down	25 down to		l
	25 down	50 down	75 down	12 ft	to 12 ft	12 ft		
Oralnage ditches	to 12 ft	to 25 ft	to 35 ft	12 11				
dee of fill extension - Coastal		25 ft [d]	25 ft [d]	25 ft [5]	25 ft [d]	25 ft [d]		
wellands special Trasification	25 ft [d]	20 10 (0)		1	}		ì	
wetlands, great ponds, rivers,				N/A	N/A	N/A		
streems	10 ft	16 ft	26 ft.			20 down to	6	
Slopes greater than 3:1	45 days	30 down	40 down	B down to 5	14 down to 7 ft	10 ft	Pur	
No full basement [e.g. slab, frost	15 down	to 15 ft	to 20 ft	<u> </u>	14 down	20 down to		
uell columis	20 down	30 down	40 down	8 down to 5	to 7 ft	10 11		
Full basement [below grade	to 10 ft	to 15 ft	to 20 ft		15 dawn	20 down to	4	
foundation]	10 down	18 down	20 down	of nwap of	to 7 (L (c)	10 ft [c]	G## \$ \$\$	
Property lines	to 5 ft [c]	to 9 ft [c]	to 10 ft [c]	4ft [0]	25 ft	25 ft		· .
		25 ft	25 ft	25 ft	40 11	-	1	1
Burial sites or graveyards, measured from the down toe of the fill							A SEASON L	
from the down toe of the till extension OTHER 1. Replacement system with no prec						LANGE BURNE	water subr	λy. 🌂
	A STATE OF THE STA	化。2008年2月1	addisent the built	idina constrain	S SIR SET	AICEC DA L'ADUA		

Footnotes: [a.] Single-family well setbacks may be reduced as prescribed in Section 701.2.

[b.] This distance may be reduced to 25 feet, if the septic or holding tank is tasted in the plumbing inspector's presence and shown to be

[c.] Additional setbacks may be needed to prevent fill material extensions from encrosching onto abutting property.

(d.) Additional setbacks may be needed to prevent fit material extensions from encrosoning onto abutting property.

[d.] Additional setbacks may be required by local Shoreland zoning.

[e.] Natural Resource Protection Act requires a 25 feet setback, on slopes of less than 20%, from the edge of soil disturbance and 100 feet on slopes greater than 20%. See Chapter 15.

[K.] May not be any closer to paidbox and than the edge of soil than the edge of soil than the edge of soil disturbance and 100 feet on the edge o If: May not be any closer to neighbors well than the existing disposal field or septio tank unless written permission is granted by the neighbor.

This setback may be reduced for single family houses with Department approval. See Section 702.3.

In The fill evidencies what reach the eviding around before the disposal field or septio tank unless written permission is granted by the neighbor.

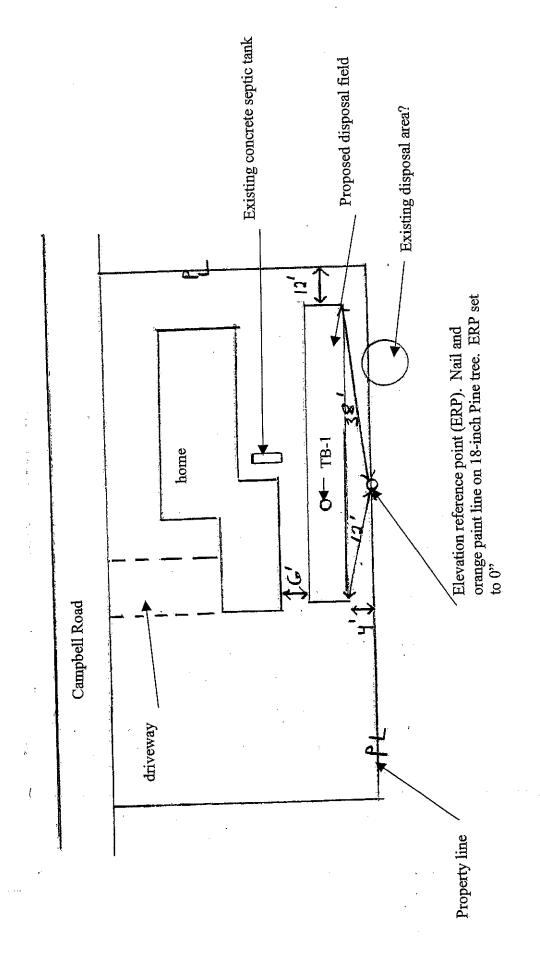
[g.] The fill extension shall reach the existing ground before the 3:1 slope or within 100 feet of the disposal field. [h.] See Section 1402.10 for special procedures when these minimum setbacks cannot be achieved.

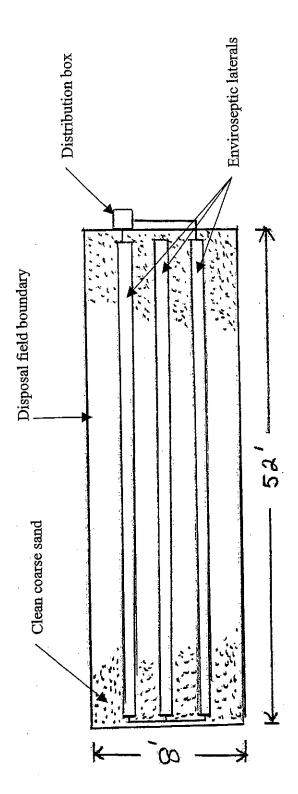
ALUATOR'S SIGNATURE

The Department has reviewed the variance (s) and (vidoes does not) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

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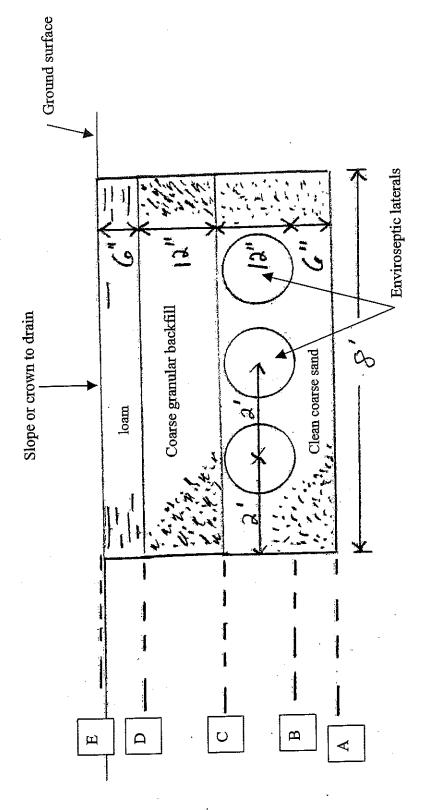






Disposal field is 52 X 8 feet in size and utilizes 3 rows of enviroseptic piping. Enviroseptic rows are separated by 2 feet (center to center) and 1 foot to endwall. Connect rows as shown. Connect to distribution box with 4-inch solid PVC. See construction notes and cross section for elevations and material specifications.

CROSS SECTION



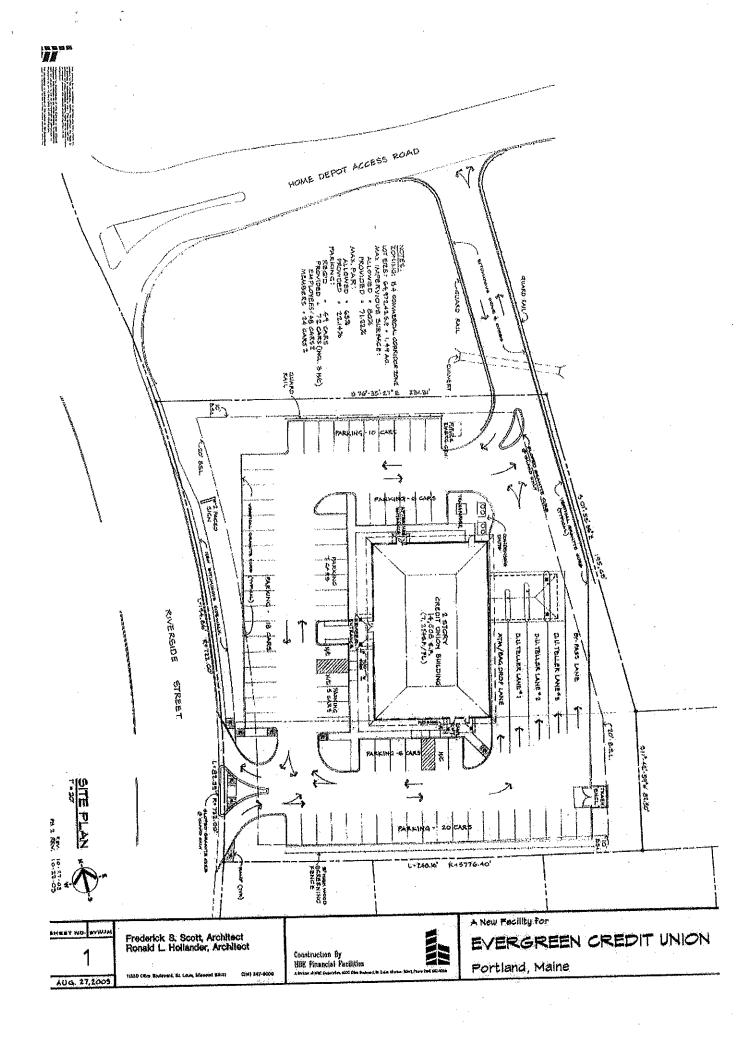
A = Base of disposal bed (-85" ERP)
B = Bottom of enviroseptic pipe (-79" ERP)
C = Top of enviroseptic pipe (-67" ERP)
D = Top of backfill (-55" ERP)
E = Finish grade (-49" ERP)

CONSTRUCTION NOTES

- 1) The disposal field is 8' X 52' in size and utilizes Enviro-Septic Piping in three rows of 50'. The field corners are staked at the Site.
- 2) The elevation reference point (ERP) is a nail and orange paint line on a 18-inch diameter Pine tree adjacent to the field. The ERP is set at 0". Disposal field elevations are shown on the cross sections. Enviro-Septic laterals shall be maintained level and backfill thickness shall be maintained as shown on the drawings. The contractor shall verify all elevation measurements prior and during construction. A vent is optional for a gravity drained system, but is recommended for optimal disposal field performance.
- 3) The disposal bed shall consist of 12" diameter Enviro-Septic laterals in three rows of 50 feet. Laterals will be connected to the distribution box with 4-inch solid PVC pipe. A 2.0-feet spacing (center to center) shall be maintained between rows and disposal field side-walls and a 1.0 foot end to end-wall spacing. The Enviro-Septic laterals shall be placed on a 6-inch base of clean coarse sand (less than 5% silt or clay size particles). The sand shall be placed between laterals and between laterals and the sidewall. Sand shall extend over the top of the Enviro-Septic laterals.
- 4) Backfill used over the Enviro-Septic laterals, to achieve grade or for use in fill extension areas shall be a coarse granular backfill with no more than 5% silt and clay sized particles. No stones larger than 3" in diameter shall be present in the backfill. See drawings for backfill areas.
- 5) Vegetation and loam shall be removed from the disposal field and fill extension footprint prior to constructing the field. Compaction of the disposal field area shall be avoided. If compaction occurs due to equipment moving across the field, the bottom of the disposal bed shall be scarified to provide a non-compacted transition zone between the disposal bed base and underlying material.
- 6) A 6-inch layer of loam shall be placed over the backfill.
- 7) Final grades shall be such that surface water (precipitation) will drain away from the disposal area. Upon completion, the area shall be seeded and mulched.

RECOMMENDATIONS FOR WASTEWATER DISPOSAL SYSTEM (SEPTIC SYSTEMS) USE AND MAINTENANCE

- Avoid disposing of harsh chemicals and disinfectants into the septic system.
 Septic systems require a healthy bacteria population to treat wastewater.
 Chemicals and disinfectants can kill bacteria within the system and over time, result in poor system performance.
- 2) Bacteria in a leach field perform best in aerobic environments. Make sure plumbing fixtures are in good condition and not leaking. Leaky faucets, toilets, shower heads, etc. can flood a system and result in a reduction or loss of aerobic conditions and adversely affect bacteria populations. [A pint of water a minute over the course of a day is equivalent to the design flow for a 2 bedroom home.]
- 3) Have your septic tank pumped every 3-5 years to remove sludge that builds up in the tank. Sludge build-up is a normal part of septic tank performance. However, if a tank is not cleaned periodically, excess sludge will eventually buildup and could migrate to the leach field, or new wastewater will not have sufficient volume in the tank to allow solids to settle.
- 4) If a large volume of laundry is done on a regular basis, consider installing a separate laundry disposal system to manage the laundry waste water. Laundry loads generate a high volume of water. In addition, bleach and additives can be detrimental to bacteria. Similarly, consider a separate laundry system if large volumes of water conditioner backwash is cycled into the septic system.
- 5) Garbage disposals grind food into small particles that are sometimes difficult to "settle out" in a septic tank. Solids that remain suspended may migrate to the leach field. If a garbage disposal is used, an over-sized septic tank or septic tank filter is required.
- 6) A properly designed, used and maintained septic system does not require any additives to stimulate bacteria or remove sludge. A properly functioning system is maintained in a natural equilibrium. Use of additives may create conditions that result in large changes in this "equilibrium". If you suspect or observe evidence of system failure, have your system inspected prior to using any additives.



JOHN ELIAS BALDACCI

GOVERNOR

STATE OF MAINE DEPARTMENT OF HUMAN SERVICES BUREAU OF HEALTH, DIVISION OF HEALTH ENGINEERING

161 CAPITOL STREET
11 STATE HOUSE STATION

AUGUSTA, MAINE 04333-0011

July 30, 2004

JOHN R. NICHOLAS

COMMISSIONER

Emily Nichols 11 Campbell Road Portland, ME 04103

SUBJECT:

Approval, Replacement System Variance Request, Nichols property, Portland

Dear Ms. Nichols:

The Division has reviewed a replacement system variance request for the subject property. The state variance requested is to install the system with a setback distance reduction from a slab or a frost wall to the disposal field of six feet and a setback distance reduction from a property line to the disposal field of four feet. As we understand the situation, the variance request has been submitted because topography and existing development limit the potential system location. The system design prepared by Michael Deyling, SE, dated 07/08/2004 is otherwise found to be in compliance with the Maine Subsurface Wastewater Disposal Rules.

We approve the requested variance with the following requirements:

- 1. A permit for system installation is to be obtained from the Local Plumbing Inspector in advance of the start of system construction.
- 2. The system is to be installed in accordance with the submitted and approved system design. Should alterations to the design be required at the time of construction, the site evaluator is to be notified prior to making any changes.
- 3. The contractor is to scarify the soils under the fill extensions to create a transitional zone more compatible with the disposal field area.

By accepting this approval and the associated plumbing permit, the owner agrees to comply fully with the conditions of approval and the Subsurface Wastewater Rules.

Because installation and owner maintenance has a significant effect on the working order of onsite sewage disposal systems, including their components, the Division makes no representation or guarantee as to the efficiency and/or operation of the system.

Should you or others have any questions, please feel free to contact me at 287-5687.

Sincerely,

Jennifer E. Sanborn, Environmental Specialist II Wastewater and Plumbing Control Program

Division of Health Engineering

e-mail: Jennifer.E.Sanborn@maine.gov

/jes

xc:

File

Michael Nugent, LPI Michael Deyling, SE Evergreen Credit Union

PHONE: (207) 287-5338

TTY: Deaf/Hard of Hearing (207) 287-5550

FAX: Admin./Plumbing/Eating & Lodging: (207) 287-3165

Drinking Water: (207) 287-4172

Radiation Control: (207) 287-3059



July 29, 2004

Maine Department of Human Services Attn: Jennifer Sanborn Division pf Health Engineering, Station 10 Augusta, ME 04333

Re: Setback Variance for 11 Campbell Road

Dear Ms. Sanborn,

In the process of excavating for Evergreen Credit Union's new main office at 225 Riverside Street, we found the 11 Campbell Road's wastewater disposal system to be largely on our property. Evergreen has agreed to partner with the homeowner, Emily Nichols, to move and replace the existing system.

The attached proposed design places the system within four feet of our property line and therefore we respectfully request a variance to the setback requirement.

Should you need additional information, please do not hesitate to contact me. Also, could you please fax your response since time is of the essence for this project.

Sincerely,

Tucker Cole President

854-5822, ext. 327

854-4771, fax

tcole@evergreen creditunion.org