VERMONT

Department of Environmental Conservation

Wastewater System & Potable Water Supply Permit Application

Wastewater System and Water Supply Component Details Worksheet

Component Information:

PLEASE READ: The purpose of this section is to provide supplementary information for system components when there are proposed changes to existing conditions or previous permits. In the case that the application includes site plans, the component names on this worksheet must match those on the site plans. If there is a prior permit, the component names must be labeled consistent with plans from the prior permit(s). It is ***required*** that, at a minimum, the following component types must be included for each application: final disposal; pre-treatment (if applicable); building unit(s); water treatment (if applicable); and water source. To add components after the third entry, click the green button labeled "Add Another Component". You may also insert components between components you've already added by clicking the "Insert Component Between" button. For large projects with many components, you may consider using the "Show/Hide Component Set Separator" button to separate sets (or groups) of connected components by naming each set. For additional instructions, please review the appendix to the application instructions: **http://dec.vermont.gov/sites/dec/files/dwgwp/wastewater/pdf/WWAppInstructionsRules.pdf**.

Component 1

Show/Hide Component Set Separator | Remove This Component

Component Group Type	(WW) Final Disposal	Component Type	In-ground

--Component 1 Details--

Component Name	Existing disposal system		
Lot # of Physical Location	1	Change Type	No Change
WW Design Flow	560	Changes	
I/A Dispersal Type			
Variance Requested	☐	Comments	
Design Approach (select all that apply, press Ctrl and Click to select multiple)	Alternative Toilets Constructed Wetlands Existing - Unknown Filtrate Flow equalization No discharge (other than holding tank) Performance based Prescriptive Store and dose Subsurface drip distribution Time dosing Wastewater strength		
Manufacturer			
Model Name			
Model Number			
As-Built Latitude	44.350748		
As-Built Longitude	73.214923		

Insert Component Between

Component 2

Show/Hide Component Set Separator | Remove This Component

Component Group Type	Building	Component Type	Building-Unit

--Component 2 Details--

Component Name	5 Bedroom Home		
Lot # of Physical Location	1	Change Type	No Change
WW Permitted Flow	560	Changes	
WS Permitted Flow	560		
Flow Basis	Rule	Comments	

Insert Component Between

Component 3

Show/Hide Component Set Separator | Remove This Component

Component Group Type	(WS) Source	Component Type	Potable

--Component 3 Details--

Component Name	Lot 1 Well		
Lot # of Physical Location	1	Change Type	Increased Flow (No Construction)
Source Type	Drilled/Driven Well	Changes	Increase to 770 gpd
WS Design Flow	560		
Allocation Approval	☐	Comments	
Construction Approval	☐		
Variance Requested	☐		
As-Built Latitude	44.350509		
As-Built Longitude	73.215030		

Insert Component Between

Component 4

Show/Hide Component Set Separator | Remove This Component

Component Group Type	(WW) Final Disposal	Component Type	Mound

--Component 4 Details--

Component Name	Lot 1 replacement mound		
Lot # of Physical Location	1	Change Type	Replacement of Failed System
WW Design Flow	770	Changes	
I/A Dispersal Type			
Variance Requested	☐	Comments	
Design Approach (select all that apply, press Ctrl and Click to select multiple)	Alternative Toilets Constructed Wetlands Existing - Unknown Filtrate Flow equalization No discharge (other than holding tank) Performance based Prescriptive Store and dose Subsurface drip distribution Time dosing Wastewater strength		
Manufacturer			
Model Name			
Model Number			
As-Built Latitude			
As-Built Longitude			

Insert Component Between

Component 5

Show/Hide Component Set Separator | Remove This Component

Component Group Type	(WW) Conveyance	Component Type	Pump Station

--Component 5 Details--

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Version 1.4 - Revised 6/10/2016

Component Name	Lot 1 pump station		
Lot # of Physical Location	1	Change Type	Replacement of Failed System
Municipal WW System		Changes	
		Comments	

Insert Component Between

Add Another Component

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Department of Environmental Conservation

Wastewater System & Potable Water Supply Permit Application

Consultant/Designer Signature Sheet

Instructions:

The Submission Number and Version of the online application form being signed **must** be entered in the field below.

Hand Signatures - This signature sheet can be downloaded, printed, signed by hand, and then scanned and uploaded to the **Signatures** section of the online application form.

Digital Signatures - This signature sheet can be signed using the certificate-based digital signature capability available in Adobe Acrobat/ Reader (or other PDF software with similar capability) and then uploaded to the **Signatures** section of the online application form. If this sheet contains one or more digital signatures, it **must** be uploaded in a format that does not compromise the ability to click on the applied signature and validate it. The digital signature applied must include the signer's full name, email address, and the date and time of signing. Because the Signature Sheet needs to be submitted in a format that allows the signatures to be validated, a Signature Sheet cannot contain both digital and hand signatures.

Note: If you digitally sign this sheet, please don't enter a date in the Signature Date field. The date and time must be included in the digital signature that is applied as described above.

ANR Online Submission Number & Version

ANR Online Submission Number and Version (for example: #20J-65KQ-R1ZF, version 1)

2GW-5SHJ-63AC, revision 1

Consultant(s)/Designer(s) Certification

Consultant/Designer Certification & Copyright License

"I hereby certify that in the exercise of my reasonable professional judgment, the design-related information submitted with this application is true and correct, and that the design included in this application for a permit complies with the Vermont Wastewater System and Potable Water Supply Rules and the Vermont Water Supply Rules.

As the individual who prepared this application, including all documents that are marked as copyrighted, I hereby grant a non-exclusive, limited license to the State to allow the documents to be available for public review and copying in order to properly implement and operate the permitting programs for Wastewater Systems and Potable Water Supplies, and for no other purposes. As a condition to this license, the State agrees that it will not make any changes to such documents, nor will the State delete any copyright notices on such documents."

Consultant/Designer Role	Print Consultant/Designer Name	Consultant/Designer Signature	Signature Date
WW Designer	Kevin R. LaRose		7/7/14

Department of Environmental Conservation

Wastewater System & Potable Water Supply Permit Application

ANR Form 5: Certification Statement for Wastewater System & Potable Water Supply Permits when there is no Required Notification of Overshadowed Property Owner(s)

A person submitting an application to the Secretary for a Wastewater System and Potable Water Supply Permit shall use this statement whenever overshadowing notification of affected landowners is not required (see guidance and instructions for examples).

Note: When the property subject to the permit application is owned by more than one person, only one of the landowners must sign this certification statement even though all landowners must sign the permit application itself.

Landowner Certification

I hereby certify that "overshadowing" notification is not required either because there is an exemption to the notification requirement or there are no landowners whose property may be affected by the proposed water and wastewater systems.

Landowner Signature	Donna Hudgin Print Landowner Name	Certification Date

1295 Lime Kiln Road, Charlotte
Property Address or Property Tax ID#

Department of Environmental Conservation

Wastewater System & Potable Water Supply Permit Application

Landowner Signature Sheet

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ANR Online Submission Number & Version

ANR Online Submission Number and Version (for example: #20J-65KQ-R1ZF, version 1)

2GW-5SHJ-63AC, revision 1

Signatures & Acknowledgements of Landowner(s)

This application must be signed by each Landowner listed on the property deed or by individuals with legal authority to sign on behalf of each Landowner. In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Drinking Water and Groundwater Protection Division, it may be necessary to visit the property. As this would involve a Department employee entering private property, we request your approval to do so.

If we do visit your property, do you have any special instructions?

Contact Designer PRIOR to site visit

"By signing this application, I certify that I am a landowner listed on the property deed or that I have the legal authority to sign on behalf of the landowner. I understand that by signing this application I am granting permission for the Department employees to enter the property, during normal business hours, to insure compliance of the property with the applicable rules of the Department.

I also understand that I am not allowed to commence any site work or construction on this project without written approval from the Department of Environmental Conservation.

If my project utilizes an Innovative/Alternative System or Product, I have received a copy of the Drinking Water & Groundwater Protection Division's approval letter and agree to abide by the conditions of the approval.

I also certify that to the best of my knowledge and belief the information submitted above is true, accurate and complete."

Print Landowner Name	Landowner Signature	Signature Date
Donna L Hudgin	Donna L Hudgin	July 7, 2016

Department of Environmental Conservation
Wastewater System & Potable Water Supply Permit Application

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Note: When the property subject to the permit application is owned by more than one person, only one of the landowners must sign this certification statement even though all landowners must sign the permit application itself.

Landowner Certification

I hereby certify that "overshadowing" notification is not required either because there is an exemption to the notification requirement or there are no landowners whose property may be affected by the proposed water and wastewater systems.

Donna S. Hudgin — Landowner Signature

Donna Hudgin — Print Landowner Name

July 7, 2016 — Certification Date

1295 Lime Kiln Road, Charlotte
Property Address or Property Tax ID#

LaRose Surveys, P.C.
Performance Based Calculations

Client: Hudgin
Site Address: Lime Kiln Road, Charlotte

Project#: 14077
Date: November 7, 2014

	SYSTEM
	replacement
Simplified Desktop Mounding Analysis	
Wastewater flow (gpd)	770
Slope (%)	15.0%
Soil texture	fine sandy loam
Linear loading rate factor (f)	18.7
Depth to seasonal high water table (in)	15
Depth to seasonal high water table (ft)	1.3
Max. soil thickness available for groundwater mounding (ft) (SHWT-0.5')	0.8
Linear loading rate (LLR)	14.0
Calculated minimum length of seepage bed (ft)	54.9
Calculated maximum width of seepage bed (ft)	14.0
Is calculated length to width ratio = or > 3:1?	Yes
Required sand thickness beneath seepage bed (ft)	2.5'
Proposed System Parameters	
Length of seepage bed (ft)	80
Width of seepage bed (ft)	10
Total seepage area (ft)	800
Linear loading rate factor (f)	18.7
Calculated induced groundwater mound thickness (ft)	0.51
Calculated linear loading rate (LLR)	9.63
Calculated depth to seasonal high groundwater & induced mound (ft)	0.74
Minimum sand thickness required beneath seepage bed (ft)	2.26
Confirm Design Parameters Comply with Simplified Mounding Analysis	
Proposed LLR </= Simplified LLR	Yes
Proposed seepage bed length >/= Simplified minimum bed length	Yes
Proposed seepage bed width </= Simplified maximum bed width	Yes
Calculated length to width ratio =/> 3:1	Yes
Depth to proposed induced groundwater mound >/= 0.5'	Yes
Thickness of "dry" soil from induced groundwater mound & seepage bed >/= 3'	Yes

LaRose Surveys, P.C.
Test Pit Evaluation

Client: Hudgin Project#: 14077 Date: October, 27, 2014 Site Address: 1295 Lime Kiln Road, Charlotte

Project Description: Failed septic

Logged By: Kevin LaRose Witnessed By: Spencer Harris

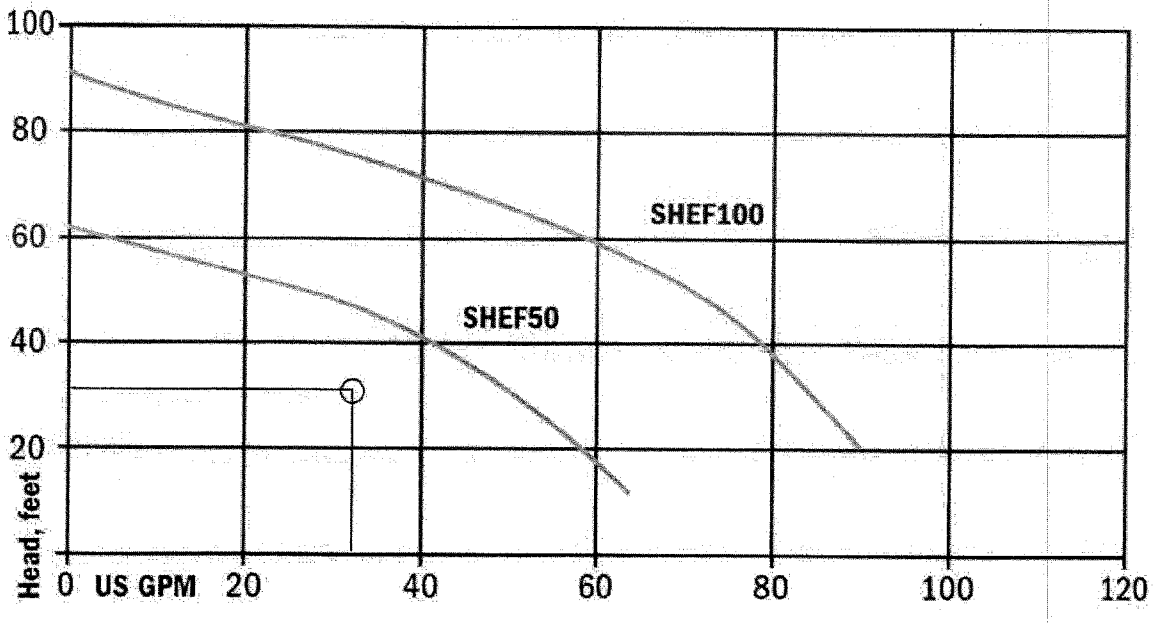
Topographical Description: sloping meadow Slope: 5-8% Vegetation: hardwoods, small brush

Weather: overcast 45 Method of Excavation: excavator Excavating Company: David Livingston

Test Pit #	Horizon	Depth (inches)	Texture	Color	Consistency	Structure	Redoximorphic Features	Comments
101		0-8"	very fine sandy loam	dark brown	loose	granular	none	roots
		8-14"	very fine sandy loam	brown	friable	ang blocky	none	roots
		14-37"	very fine sandy loam	light brown	friable	ang blocky	concentrations	
102		0-6"	very fine sandy loam	dark brown	loose	granular	none	
		6-17"	fine sandy loam	brown	friable	ang blocky	none	
		17-40"	fine sandy loam	light brown	friable	ang blocky	concentrations	few faint at 27"
103		0-12"	very fine sandy loam	dark brown	loose	granular	none	
		12-26"	very fine sandy loam	light brown	friable	ang blocky	common, dist.	
104		0-12"	very fine sandy loam	dark brown	loose	granular	none	
		12-28"	very fine sandy loam	gray brown	friable	blocky	common, dist.	
105		0-12"	very fine sandy loam	dark brown	loose	granular	none	
		12-28"	very fine sandy loam	gray brown	friable	blocky	common, dist.	
106		0-6"	very fine sandy loam	dark brown	loose	granular	none	
		6-12"	very fine sandy loam	brown	friable	subang blocky	none	
		12-27"	silty loam	gray brown	friable	subang blocky	concentrations	
107		0-6"	very fine sandy loam	dark brown	loose	granular	none	
		6-12"	very fine sandy loam	brown	friable	subang blocky	none	
		12-28"	silty loam	gray brown	friable	subang blocky	concentrations	
108		0-5"	very fine sandy loam	dark brown	loose	granular	none	
		5-15"	fine sandy loam	brown	friable	ang blocky	none	
		15-25"	fine sandy loam	light brown	friable	ang blocky	concentrations	few faint at 27"
109		0-6"	very fine sandy loam	dark brown	loose	granular	none	
		6-15"	fine sandy loam	brown	friable	ang blocky	none	
		15-29"	fine sandy loam	light brown	friable	ang blocky	concentrations	

14077 – Hudgin

Pump Curve



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Component Name	Lot 1 pump station		
Lot # of Physical Location	1	Change Type	Replacement of Failed System
Municipal WW System		Changes	
		Comments	

Insert Component Between

Add Another Component