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January 14, 2014

Town of Charlotte
Planning and Zoning Department
Attn: Jeannine McCrumb
159 Ferry Road
Charlotte, Vermont 05445

Subject: Jeffrey R. and Tammy L. Hall, Two-Lot Subdivision and Boundary Line Adjustment, 875 and 993 Hinesburg Road, Charlotte, Vermont – Replacement Wastewater System Area Delineation and Wastewater System and Potable Water Supply Permit Application

Dear Jeannine:

Enclosed you will find two (2) copies of the Jeffrey R. and Tammy L. Hall full size Drawing No. 1, two (2) copies of the 11" x 17" Drawing No. 1, electronic copies of the design drawings in PDF format, and the required supporting documents (paper and electronic copies) for their two-lot subdivision and boundary line adjustment relative to their two (2) separate deeded parcels of land located at 875 and 993 Hinesburg Road in Charlotte. The current farm parcel is approximately 152.5 +/- acres in size and is improved with an existing 4-bedroom single-family residence (875 Hinesburg Road), a former cow barn and various agricultural buildings. The farmhouse is served by an in-ground wastewater system and is provided water by an on-site drilled water supply well. The existing in-ground system was reviewed on October 21 and December 3, 2013 and no evidence of failure (i.e. surfacing effluent) was noted in the vicinity of the existing system. Based on information provided by Mr. Jeffrey Hall, the in-ground wastewater disposal system that serves the farmhouse is located off the southwest corner of the former cow barn and is functioning (i.e. does not surface or back up). Jeffrey and Tammy Hall's current residential property is 10.12 +/- acres in size and is improved with a single-family residence that is served by an on-site wastewater disposal system and is provided water by a drilled well. Based on Subsection 1-304(a)11A Standard (ii) of the State of Vermont EPR effective September 29, 2007, since the Jeffrey and Tammy Hall 10.12 +/- acre parcel is to be increased in size via the proposed boundary line adjustment (discussed below), this parcel is considered exempt from Wastewater System and Potable Water Supply permitting requirements.

Jeffrey and Tammy Hall are applying for a Potable Water Supply and Wastewater Permit from the Town of Charlotte Planning and Zoning Office so the boundary line can be adjusted between the larger farm parcel and their existing 10.12 +/- acre residential parcel. As part of the project, Jeffrey and Tammy Hall are subdividing the existing farm parcel and will be creating a new parcel (Lot No. 2) that will be 2.84 +/- acres in size. Lot No. 2 will contain the 4-bedroom farmhouse, former dairy barn and various agricultural buildings.

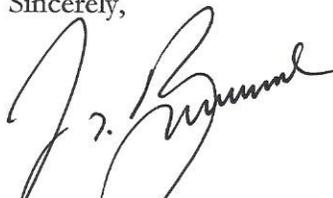
In accordance with the current State of Vermont EPR, a replacement area has been identified for the 4-bedroom farmhouse associated with Lot No. 2 and this area is suitable for a "best fix" replacement mound wastewater disposal system with an upslope curtain drain. In addition to identifying replacement wastewater area for Lot No. 2 and since the current well is located within 100 feet of the existing in-ground wastewater system, a replacement drilled well site has been identified for the farmhouse. In accordance with Subsection 1-304(a)11A Standard (ii) of the EPR effective September 29, 2007, since the 10.12+/- acre parcel (Jeff and Tammy's house lot) is being increased in size this parcel is exempt from State of Vermont wastewater system and potable water supply permitting requirements. Lot No. 1 (i.e. the remaining land) will be approximately 148.5+/- acres (based on the Button Survey Plat and Tax Maps) in size and is not currently developed with a residential structure. Therefore, deferral language is required to be written into the new warranty deed for Lot No. 1.

Included to facilitate your review of this permit application are the following:

1. Check made payable to the Town of Charlotte for the amount of two hundred and fifty dollars (\$250.00).
2. State of Vermont, Agency of Natural Resources, Potable Water Supply and Wastewater System Permit Application.
3. Adjoining Landowner Notification Forms No. 1 and No. 4.
4. Test Pit Logs.
5. Soil Boring Logs.
6. Lot No. 2 Replacement Mound System Sizing Basis of Design.
7. Full Size Design Drawing No. 1 dated January 14, 2014.
8. 11" x 17" Design Drawing No. 1 dated January 14, 2014.
9. Electronic Copies of the Design Drawings and Supporting Documents in PDF format.

Should you have any questions or comments relative to the information submitted herein, please do not hesitate to call me at (802) 453-2597.

Sincerely,



Jason S. Barnard
Licensed Designer #600-B

c: Jeffrey R. & Tammy L. Hall

Drinking Water & Groundwater Protection Division - Permit Application Wastewater System & Potable Water Supply



For Office Use Only:

| | | |
|----------------------|----------------------|------------------------------------|
| Application# | PIN# | Date Complete Application Received |
| <input type="text"/> | <input type="text"/> | <input type="text"/> |

Authority:

10 V.S.A. Chapter 64, the Environmental Protection Rules, Chapter 1, Wastewater System & Potable Water Supply Rules, and Chapter 21, Water Supply Rules, Appendix A. Part 11 - Small Scale Water Systems.

General Information:

The organization and/or content of this form may not be altered, however, the form is designed to expand to allow additional information to be entered. Changes in the organization and/or content of the form may result in an invalid application or permit.

In most cases a licensed designer will be required for your project and to help complete this application form. There are also line-by-line instructions available to assist with completing this form.

NOTE: We strongly suggest referring to the application instructions while completing this application form.

Part I Applicant (Landowner) & Project Contact Information

Section A - Applicant Details (if Landowner is an Individual or Individuals)

| | | | |
|--|-----------------------------|--|------------------------------|
| 1 Last Name Hall | | 2 First Name (and Middle Initial if appropriate) Jeffrey R. | |
| 3 Mailing Address Line 1 993 Hinesburg Road | | 4 Mailing Address Line 2 | |
| 5 Town/City Charlotte | 6 State/Province Vermont | 7 Country United States | 8 Zip/Postal Code 05445 |
| 9 Email Address | | | 10 Telephone 802-425-3599 |

Remove This Applicant

| | | | |
|--|-----------------------------|--|------------------------------|
| 1 Last Name Hall | | 2 First Name (and Middle Initial if appropriate) Tammy L. | |
| 3 Mailing Address Line 1 993 Hinesburg Road | | 4 Mailing Address Line 2 | |
| 5 Town/City Charlotte | 6 State/Province Vermont | 7 Country United States | 8 Zip/Postal Code 05445 |
| 9 Email Address | | | 10 Telephone 802-425-3599 |

Remove This Applicant

Add Another Applicant

Section B - Applicant Details (if Landowner is other than an Individual or Individuals, e.g. Corporations, Homeowner's Associations, etc.)

| | | | |
|--|------------------|----------------------------|--------------------------|
| 1 Registered Legal Entity or Organization Name | | | 2 Telephone |
| 3 Mailing Address Line 1 | | | 4 Mailing Address Line 2 |
| 5 Town/City | 6 State/Province | 7 Country United States | 8 Zip/Postal Code |

Certifying Official

The Certifying Official must be a person who has signatory authority for the legal entity or organization that is the Applicant.

| | | | |
|--|--|---|----------------------|
| 9 Certifying Official Last Name | | 10 Certifying Official First Name (and MI if appropriate) | |
| <input type="text"/> | | <input type="text"/> | |
| 11 Certifying Official Title | | | |
| <input type="text"/> | | | |
| 12 Certifying Official Email Address | | | 13 Telephone |
| <input type="text"/> | | | <input type="text"/> |
| <input type="button" value="Remove This Applicant"/> | | | |

Section C - Primary Contact Information (if other than Applicant)

| | | | |
|--------------------------|----------------------|--|----------------------|
| 1 Last Name | | 2 First Name (and Middle Initial if appropriate) | |
| <input type="text"/> | | <input type="text"/> | |
| 3 Mailing Address Line 1 | | 4 Mailing Address Line 2 | |
| <input type="text"/> | | <input type="text"/> | |
| 5 Town/City | 6 State/Province | 7 Country | 8 Zip/Postal Code |
| <input type="text"/> | <input type="text"/> | United States | <input type="text"/> |
| 9 Email Address | | | 10 Telephone |
| <input type="text"/> | | | <input type="text"/> |

Section D - Building/Business Owner Information

| | | | |
|--------------------------|----------------------|--|----------------------|
| 1 Last Name | | 2 First Name (and Middle Initial if appropriate) | |
| <input type="text"/> | | <input type="text"/> | |
| 3 Mailing Address Line 1 | | 4 Mailing Address Line 2 | |
| <input type="text"/> | | <input type="text"/> | |
| 5 Town/City | 6 State/Province | 7 Country | 8 Zip/Postal Code |
| <input type="text"/> | <input type="text"/> | United States | <input type="text"/> |
| 9 Email Address | | | 10 Telephone |
| <input type="text"/> | | | <input type="text"/> |

Part II Certifying Designer(s) Information

| | | | |
|--|-------------------------------|---|--------------------|
| 1 Designer Last Name | | 2 Designer First Name (and Middle Initial if appropriate) | |
| Barnard | | Jason S. | |
| 3 Designer License# | 4 Company Name | | |
| 430 | Jason Barnard Consulting, LLC | | |
| 5 Mailing Address Line 1 | | 6 Mailing Address Line 2 | |
| 4400 VT Route 17 | | <input type="text"/> | |
| 7 Town/City | 8 State/Province | 9 Country | 10 Zip/Postal Code |
| Starksboro | Vermont | United States | 05487 |
| 11 Email Address | | | 12 Telephone |
| jbsitotech@hotmail.com | | | 802-453-2597 |
| 13 Designer Role(s) (check all that apply) | | | |
| <input checked="" type="checkbox"/> Water Supply Designer <input checked="" type="checkbox"/> Wastewater Disposal System Designer | | | |
| <input type="button" value="Remove This Designer"/> | | | |

Add Another Designer

Part III Property Location Information

Section A - Property Location

1 Please provide the property Town and the property address or a brief description of the location.

| | |
|------------------|-----------------------------|
| (a) Town or City | (b) Street or Road Location |
| Charlotte | 875 Hinesburg Road |

Section B - Center of Property GPS Coordinates

1 Enter the approximate center of property coordinates using GPS set for NAD83 or as derived from a map (map must be based on NAD83).

| | |
|--|---|
| (a) Latitude (in decimal degrees to five decimal places, ex. 44.38181°) | (b) Longitude (in decimal degrees to five decimal places, ex. -72.31392 °) |
| N <input type="text" value="44.31679"/> ° | W (-) <input type="text" value="73.21719"/> ° |

Part IV Project Information

Section A - General Project Information & Questions

| | |
|---------------------------------|-----------------------------|
| 1 Project Name (if applicable) | 2 Total Acreage of Property |
| <input type="text"/> | 162.5 |
| 3 Business Name (if applicable) | |
| <input type="text"/> | |

4 Detailed Project Description

Jeffrey and Tammy Hall own an 152.5+/- acre parcel (farmhouse parcel) and a 10.12+/- acre parcel (Jeff and Tammy's house lot) located at 875 and 993 Hinesburg Road in Charlotte. The 152.5+/- acre parcel is improved with a 4-bedroom single-family residence and various agricultural buildings. The farmhouse is served by an in-ground wastewater system and is provided water by a drilled well. The 10.12+/- acre parcel is improved with a single-family residence that is served by an on-site wastewater system and is provided water by an on-site drilled well. Jeffrey and Tammy Hall propose to adjust the boundary line between the farm parcel and their house lot (i.e. the 10.12+/- acre parcel) and subdivide the farmhouse off the larger parcel. As a result, the 10.12+/- acre parcel will be increased to 11.28+/- acres, a new 2.84+/- acre parcel will be created that will contain the 4-bedroom farmhouse and various agricultural buildings and the remaining land (Lot No. 1) will be 148.5+/- acres in size. A replacement wastewater area has been identified for the farmhouse. Since the 10.12+/- acre parcel is being increased in size, it is exempt from permitting requirements.

5 (a) Were all existing buildings or structures, campgrounds, and their associated potable water supplies and wastewater systems substantially completed before January 1, 2007? Yes No

(b) Were all existing improved and unimproved lots in existence before January 1, 2007? Yes No

6 Does this application include subdividing the property? Yes No

7 Has anyone from the Drinking Water & Groundwater Protection Division's Regional Office been to the property?..... Yes No

If Yes, enter the staff person's name and the date of the visit.

| | |
|---|---|
| (a) Name of Staff Person | (b) Date of Visit (m/d/yyyy) |
| <input type="text" value="Spencer Harris"/> | <input type="text" value="10/21/2013"/> |

8 Will any construction occur within 50 feet of a wetland boundary, mapped or designated? Yes No

If Yes, contact the Wetlands Program of the Watershed Management Division at (802) 338-4835.

9 Will more than one acre be disturbed during the entire course of construction, including all lots and phases? Yes No

If Yes, contact the Stormwater Program of the Watershed Management Division at (802) 241-4320.

10 Will there be any stream crossings by roads, utilities, or other construction? Yes No

If Yes, contact the River Corridor Mgmt. Program of the Watershed Management Division at:
 Central & Northwest Vermont (802) 879-5631
 Southern Vermont (802) 786-5906
 Northeastern Vermont (802) 751-0129

11 Is the project located in a special flood hazard area as designated on the flood insurance maps prepared for a municipality by the Federal Emergency Management Agency? Yes No

If Yes, show the special flood hazard area limits on the site plan.

12 Act 250: Has the Applicant (Landowner) subdivided any other lots of any size within a five mile radius of this subdivision, or within the environmental district within the last five years? Yes No

If Yes, enter the town(s) and the associated number of lots in the table below:

| (a) Town | (b) Number of Lots |
|----------|--------------------|
| X | |

Add Another Town/Lot

13 Is there any prior Act 250 jurisdiction on the tract of land? Yes No

If Yes, enter the Act 250 permit number:
 (a) Act 250 Permit Number

Section B - Project Deed Reference

1 Please provide the Town, Parcel ID, Book, and Page reference for the current landowner's deed(s) to this property:

| (a) Town | (b) Parcel ID | (c) Book | (d) Page(s) |
|----------|---------------|-----------|-------------|
| X | Charlotte | M05B04L19 | 79 424-425 |

Add Another Deed Reference

Section C - Project Plan Reference

1 Please provide the following information for all water supply and wastewater disposal system plans being submitted.

| (a) Sheet# | (b) Title | (c) Plan Date | (d) Plan Revision Date |
|------------|-----------|--|------------------------|
| X | 1 | Overall Subdivision Plan and Site Plan | 1/14/2014 |

Add Another Plan Reference

Section D - Existing Project Lot/Building Details

Please provide the existing project details. This section is used to describe what is existing for the project. For example, if you are subdividing an undeveloped 21-acre parcel, you would list the existing parcel. If you are revising the boundary lines of two commercial lots in an industrial park, and constructing an addition to an existing building you would list the existing lot numbers, existing acres, existing buildings, existing uses, construction date(s), prior permits, and answer the compliance questions.

| 1 Lot# | 2 Lot Size (acres) | 3 Existing Use of the Lot |
|--------|--------------------|-----------------------------|
| 1 | 152.5 | Residential and Agriculture |

4 Provide the following information for each building on the lot:

| (a) Building ID | (b) Existing Use | (c) Date Construction of Building Substantially Complete | (d) Prior Permits | (e) In compliance with existing permits? | |
|-----------------|------------------|--|-------------------|--|---|
| X | Lot 1 House | Residential | Prior to 1950 | None | <input checked="" type="radio"/> Yes <input type="radio"/> No |

Add Another Building

Remove This Lot

Add Another Lot

Section E - Proposed Project Lot/BuildingDetails

This section is used to describe what you are proposing to do in this project. For example, if you were going to create 4 lots for construction of single family residences, you would list each lot, proposed acreage, proposed buildings, and proposed use.

| | | |
|--------|--------------------|---------------------------|
| 1 Lot# | 2 Lot Size (acres) | 3 Proposed Use of the Lot |
| 1 | 148.5 | Agriculture |

4 Is the lot being created as part of a subdivision? Yes No

5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? Yes No

6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules? §1-304(A)(2)

7 Provide the following information for each building on the lot:

| (a) Building ID | (b) If building is exempt, indicate exemption | (c) Construction or increased flow? | (d) Proposed Use |
|-----------------|---|-------------------------------------|------------------|
| X | | <input type="checkbox"/> | Agriculture |

| | | |
|--------|--------------------|-----------------------------|
| 1 Lot# | 2 Lot Size (acres) | 3 Proposed Use of the Lot |
| 2 | 2.84 | Residential and Agriculture |

4 Is the lot being created as part of a subdivision? Yes No

5 Are you requesting that the Blood, Marriage, or Civil Union special fee be applied to this lot? Yes No

6 If the lot is exempt, please indicate the specific exemption from the Wastewater System and Potable Water Supply Rules?

7 Provide the following information for each building on the lot:

| (a) Building ID | (b) If building is exempt, indicate exemption | (c) Construction or increased flow? | (d) Proposed Use |
|-----------------|---|-------------------------------------|-----------------------------|
| X | | <input type="checkbox"/> | Residential and Agriculture |

Part V Water Supply Information

Section A - Water Supply Screening Questions

1 Are you proposing a new water supply or water service line or changes to a permitted but not constructed water supply or water service line for this project? Yes No

2 Are you proposing changes to an existing water supply or water service for this project (including changes to location, design flows, or operational change)? Yes No

3 Is there an existing connection to a water supply or water service line for this project? Yes No

Complete Part V if you answered Yes to any of the above questions. A project with no existing or proposed water supply may skip to Part VI.

Section B - General Water Supply Questions

1 Does this project involve a failed water supply? Yes No

2 Will any of the proposed water sources serve 25 or more people or have 15 or more service connections? Yes No

If Yes, the applicant must contact the Drinking Water & Groundwater Protection Division at (802) 241-3400 for source, construction and an operating permit.

3 Are any of the existing or proposed water sources located within a special flood hazard area? Yes No

4 Are any of the existing or proposed water sources located within a floodway? Yes No

5 Are any of the proposed water sources located within 1 mile of a hazardous waste site as designated by the Waste Management Division and identified on the Agency mapping website? Yes No
 If Yes, please submit additional information on the site. The Waste Management Division can be reached at (802) 241-3888.

6 Does this project require an approval letter from the Drinking Water & Groundwater Protection Division for the construction of a public water system, municipal water line extension over 500 feet, or hydrants or sprinkler systems? Yes No
 If Yes, please submit a copy of the approval letter from the Drinking Water & Groundwater Protection Division.

7 Does the proposed or existing water supply(ies) use a water treatment device to obtain compliance with the quality requirements in the Water Supply Rule? Yes No
 If Yes, please submit additional information regarding the constituent(s) that exceeds the standards and plans, details, and specifications of the treatment device.

8 Is any portion of the proposed water supply located in or near a Water Source Protection Area as designated by the Drinking Water & Groundwater Protection Division? Yes No
 If in areas of known interference issues, contact the Drinking Water & Groundwater Protection Division at (802) 241-3400.

Section C - Individual Water Supply Details

Please provide the following information for each of the existing and proposed water supply(ies) serving a building or structure, or campground on the property.

| | |
|--|---|
| 1 Water Supply Name/Identifier Lot 2 Drilled Well | 2 Water Supply Owner (if not Applicant) |
| 3 Water Source Type Non-Public Drilled Bedrock Well | 4 Type of Change to Supply No Change |

5 Lots/Buildings Served by this Water Supply System

| (a) Lot# | (b) Building ID | (c) Type of Change to the Building's Supply | Design Flows (Gallons Per Day) | | | (g) Rule or Meter Based Flows |
|--|-----------------|---|--------------------------------|------------|-----------|-------------------------------|
| | | | (d) Existing | (e) Change | (f) Total | |
| X 2 | Lot 2 House | No Change | 490 | 0 | 490 | Rule-based |
| Add Another Lot/Building Served by this Supply | | | 6 | 7 | 8 | |
| | | | 490 | 0 | 490 | |

9 Is this water supply located off-lot? Yes No

10 Is this water supply shared? Yes No
 If the water supply is located off-lot or shared, submit a copy of the agreement to provide an easement prior to construction.

11 Is a variance being requested for this water supply? Yes No
 If Yes, please submit additional details related to the variance request.

Remove This Water Supply

Add Another Water Supply

Section D - Water Supply Design Flows Summary Table

1 If the project includes more than one water supply, please list each water supply system and provide the total water supply design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

| (a) Water Supply Name/Identifier | Design Flows (Gallons Per Day) | | |
|----------------------------------|--------------------------------|------------|-----------|
| | (b) Existing | (c) Change | (d) Total |
| X Lot 2 Drilled Well | 490 | 0 | 490 |
| Add Another Water Supply | 2 | 3 | 4 |
| | 490 | 0 | 490 |

Part VI Wastewater Disposal System Information

Section A - Wastewater Disposal System Screening Questions

- 1 Are you proposing a new or replacement wastewater disposal system, a new wastewater service line, or changes to a permitted but not constructed wastewater disposal system or wastewater service line for this project? Yes No
- 2 Are you proposing changes to an existing wastewater disposal system, replacement wastewater disposal system, replacement area, or wastewater service line for this project (including changes to location, design flows, or operational change)? Yes No
- 3 Is there an existing connection to a wastewater disposal system or wastewater service line for this project? Yes No

*Complete Part VI if you answered Yes to any of the above questions.
A project with no existing or proposed wastewater disposal systems may skip to Part VII.*

Section B - General Wastewater Disposal System Questions

- 1 Does this project involve a failed wastewater disposal system? Yes No
- 2 Do any of the systems require a curtain or dewatering drain as part of the design? Yes No
- 3 Is a hydrogeologic study required for this project? Yes No
- 4 For projects using soil-based wastewater systems having a total design flow that exceeds 1,000 gpd, is this project located in a Class A Watershed? Yes No NA
 If Yes, indicate the Class A Watershed in which the system(s) is located:
 (a) Class A Watershed Name
- 5 Are there any existing or proposed floor drains as part of this project? Yes No
 If Yes, indicate where the floor drains will discharge:
 (a) Floor Drain Discharge Point
- 6 If the project utilizes an Innovative/Alternative System or Product, has the applicant received a copy of the Drinking Water & Groundwater Protection Division's approval letter? Yes No NA
- 7 Is any portion of the proposed wastewater disposal system located in or near a Water Source Protection Area as designated by the Drinking Water & Groundwater Protection Division? Yes No
 If Yes, contact the Drinking Water & Groundwater Protection Division at (802) 241-3400.

Section C - Individual Wastewater Disposal System Details

Please provide the following information for each of the existing and proposed wastewater disposal systems serving a building or structure, or campground on the property.

| | |
|---|---|
| 1 Wastewater Disposal System Name/Identifier <input style="width: 95%; height: 20px;" type="text" value="Lot 2 Replacement Area"/> | 2 Wastewater Disposal System Owner (if not Applicant) <input style="width: 95%; height: 20px;" type="text"/> |
| 3 Wastewater Disposal System Type <input style="width: 95%; height: 20px;" type="text" value="Mound"/> | 4 Type of Change to System <input style="width: 95%; height: 20px;" type="text" value="Replacement Area Designation"/> |

5 Lots/Buildings Served by this Wastewater Disposal System

| | (a) Lot# | (b) Building ID | (c) Type of Change to the Building's System | Design Flows (Gallons Per Day) | | | | (h) Rule or Meter Based Flows |
|---|--|--|---|---|---|---|---|---|
| | | | | (d) Existing | (e) Change | (f) Infiltration | (g) Total | |
| X | <input style="width: 90%; height: 20px;" type="text" value="2"/> | <input style="width: 90%; height: 20px;" type="text" value="Lot 2 House"/> | <input style="width: 95%; height: 20px;" type="text" value="Replacement Area Designation"/> | 490 | 0 | 0 | 490 | <input style="width: 95%; height: 20px;" type="text" value="Rule-based"/> |
| <input style="width: 250px; height: 20px;" type="button" value="Add Another Lot/Building Served by this System"/> | | | | 6 | 7 | 8 | 9 | |
| | | | | <input style="width: 50px; height: 20px;" type="text" value="490"/> | <input style="width: 50px; height: 20px;" type="text" value="0"/> | <input style="width: 50px; height: 20px;" type="text" value="0"/> | <input style="width: 50px; height: 20px;" type="text" value="490"/> | |

- 10 Is this wastewater disposal system located off-lot? Yes No
 - 11 Is this wastewater disposal system shared? Yes No
- If the wastewater disposal system is located off-lot or shared, submit a copy of the agreement to provide an easement prior to initiation of construction.*

12 Is a variance being requested for this wastewater disposal system? Yes No
 If Yes, please submit additional details related to the variance request.

13 If this wastewater disposal system type is a connection to an Indirect Discharge System, please provide the Indirect Discharge System ID number.
 Indirect Discharge System ID Number

14 If this wastewater disposal system type is a connection to a municipal system, please select the town.
 Town

15 If this wastewater disposal system is a soil-based system, please select the design approach used.
 Design Approach Used

16 For soil-based systems, please check all that apply (Note: Store and dose does not apply to standard pump/pump chamber systems).
 Storage and Dose Filtrate Constructed Wetlands

17 If this is an Innovative/Alternative soil-based system, please select the system use type.
 Innovative/Alternative System Use Type

18 If this is an Innovative/Alternative soil-based system, please select the Innovative/Alternative system or product.
 Innovative/Alternative System or Product

Section D - Wastewater Disposal Systems Design Flows Summary Table

1 If the project includes more than one wastewater disposal system, please list each system on this page and provide the total wastewater disposal design flows for the project. **IMPORTANT:** Please don't include systems that were identified in this Part on Section C, Line 4 as a "Replacement Area Designation" in this summary table.

| (a) Wastewater Disposal System Name/Identifier | Design Flows (Gallons Per Day) | | | |
|--|--------------------------------|------------|------------------|-----------|
| | (b) Existing | (c) Change | (d) Infiltration | (e) Total |
| X Lot 2 Replacement Area | 490 | 0 | 0 | 490 |
| <input type="button" value="Add Another Wastewater System"/> | 2 490 | 3 0 | 4 0 | 5 490 |

Part VII Application Fees

1 Fee Amount

2 Fee Calculation Details

Part VIII Designer Certification & Copyright License

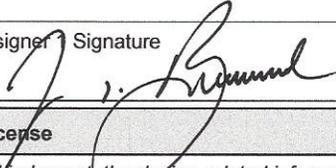
Section A - Certifying Designer 1 Certification & Copyright License

"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 made 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."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section A, Line 13.

- Water Supply Designer
- Wastewater Disposal System Designer

| | | |
|---------------------------------------|--|-----------------------------|
| 1 Designer 1 Name Jason S. Barnard | 2 Designer Signature  | 3 Signature Date 1.14.14 |
|---------------------------------------|--|-----------------------------|

Section B - Certifying Designer 2 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 made 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."

1 Check the design(s) you are certifying. This should be the same as the Designer Role(s) you selected in Part II, Section B, Line 13.

- Water Supply Designer
- Wastewater Disposal System Designer

| | | |
|-------------------|------------------------|------------------|
| 1 Designer 2 Name | 2 Designer 2 Signature | 3 Signature Date |
| | | |

Part IX Applicant(s) Signature & Acknowledgements

In order to insure compliance with the requirements of the regulations administered by the Department of Environmental Conservation, Drinking Water & 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.

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

"As landowner of the property for which I am requesting a permit from the Department of Environmental Conservation, I understand that by signing this application I am granting permission for the Department employees to enter the property, during normal working 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."

| | | | |
|----------|---|-----------------------|------------------|
| X | 2 Print Applicant Name Jeffrey R. Hall | 3 Applicant Signature | 4 Signature Date |
| X | 2 Print Applicant Name Tammy L. Hall | 3 Applicant Signature | 4 Signature Date |

Add Applicant Signature Block

ANR Form 4: Certification Statement for Notification of Overshadowed Property Owner(s) pursuant to the Wastewater System and Potable Water Supply Program

A person submitting an application to the Secretary for a Wastewater System and Potable Water Supply Permit where the proposed project has isolation distances (overshadowing) that extend onto property owned by persons other than the permit applicant shall submit the following certification with the application.

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.

I hereby certify that the individual(s) that own property that is overshadowed by my proposed project have been sent by certified mail a copy of the required notification form and the site plan(s) that accurately depicts all isolation distances. I also certify that I attached to this certification form a copy of all certified mail receipts for notifications that were sent to the affected property owners.

Signature _____

Name (Printed) Jeffrey R. Hall

Property Address or Property Tax ID # 875 Hinesburg Road, Charlotte, Vermont

Date of this certification _____

Please list all of the property owners who were sent a notification by certified mail.

Affected Property Owner(s) – (Please provide a second sheet using this format when there are more than three affected property owners)

Name Petdia III, LLC

Address 1905 Mount Philo Road, Charlotte VT 05445

ANR FORM 1

Notice of Overshadowing at the time of Filing an Application for a Wastewater System and Potable Water Supply Permit

To Petdia III, LLC (Overshadowed Landowner):

I am currently preparing an application for a State of Vermont Wastewater System and Potable Water Supply Permit. My project proposes a water supply and/or wastewater (septic) system designed to comply with the technical standards of the Wastewater System and Potable Water Supply Rules (Rules). The Rules include required isolation distances around the supply or system. These isolation distances are designed to prevent wastewater systems and water supplies from being built too close to each other in order to protect drinking water quality and human health.

The isolation distances for my proposed water supply and/or wastewater system extend onto your property. The extension of these isolation distances is often referred to as an “overshadowing” of property.

In 2010, the legislature determined that people who own property that will be “overshadowed” by the required isolation distance be notified of that fact. This form is being sent to you in order to provide that notice. Attached to this form is a copy of a plan that shows what I propose to build and the isolation distance(s) that extend onto your property.

Please consider the following facts to help you understand what this actually means to you:

1. Under the existing Rules, an evaluation of the horizontal relationship between existing wastewater systems and potable water supplies and newly proposed wastewater systems and potable water supplies is required during the review of any application. Therefore, the horizontal isolation distance between newly proposed wastewater systems and potable water supplies and the location of your current water supply and wastewater system will be evaluated and determined to comply with the Rules as part of the permit process.
2. A permit application review does not determine if the proposed water supply or wastewater system may affect or restrict potential future development of a water supply or wastewater system on your property. These possible restrictions exist because of the required isolation distances between potable water supplies and wastewater systems.
3. It is important to note that in many instances overshadowing may have no effect on the ability to develop adjoining properties. Whether there is actually any effect is a very site specific determination that depends on a number of factors. For example, the fact that an isolation distance from a wastewater system may prohibit where a well could be drilled may have no real effect because that portion of the neighboring property that is overshadowed by the wastewater system is too steep to be accessed by a well drilling rig. Another example is where a well isolation distance means that no wastewater system could be placed in a certain area but that area is a wetland that prevents the construction of a wastewater system.

ANR FORM 1
Notice of Overshadowing

4. When considering potential effects on your property, you should be aware that you may drill a well within the identified well isolation zone and you may build a wastewater systems in the identified septic isolation zones provided the well or wastewater system complies with the technical standards of the Rules. What may not be allowed without providing additional technical information is putting a wastewater system in a well isolation zone and putting a well in a wastewater system isolation zone.

5. The water supply and wastewater system isolation zones only restrict the construction of water supplies and wastewater systems. Construction of other things such as houses, garages, and driveways may be in the isolation zones as allowed by the Rules.

6. This notification requirement did not start until 2010 and the state permit program has been in place since 1969 so it is possible that there are already water supplies or wastewater systems that “overshadow” your property or that your own wastewater system and/or water supply “overshadows” your neighbor’s property.

7. The Legislature created the notification requirement so that neighbors have the opportunity to discuss the possible effects on future development and potentially resolve them before a well is drilled or a septic system is built. Therefore you are getting this notice before the permit application is filed so that you may consider having those discussions.

8. VERY IMPORTANT: Although the legislature has required notification to potentially affected landowners, the legislature did not give the Agency of Natural Resources the authority to deny a permit application based on isolation zones that may “overshadow” your property.

Please contact me if you have any questions.

Sincerely,

Name of Applicant Jeffrey R. and Tammy L. Hall

Address 993 Hinesburg Road, Charlotte, VT 05445

Phone Number (802) 425-3599

8/24/12 Last Revised 9/11/12 (To Comply with Act 145 and Act 117)

TEST PIT LOG

Client: Jeffrey R. and Tammy L. Hall Date: October 21, 2013 Location: 875 Hinesburg Road, Charlotte, Vermont

Project Description: Two-Lot Subdivision and Boundary Line Adjustment Replacement Wastewater Area Designation

Logged By: Jason Barnard, Licensed Designer #430-B Topographic Setting: Westerly Sloping Pasture

Current/Historic Land Use: Residential and Agricultural Slope: 5-8% Vegetation: Grass

Weather Conditions: 45° Mostly Sunny Method of Excavation: Rubber Tired Backhoe

| Test Pit # | Depth (inches) | Dominant Color | Soil Texture | Soil Structure | Consistency | Mottles | Comments |
|------------|----------------|----------------|---------------------|----------------------------------|-----------------|--------------------------------|--|
| 01 | 0-4" | Brown | Silt loam (topsoil) | Crumb to weak sub-angular blocky | Friable | No | Fairly well drained |
| | 4-12" | Brown | Silt loam | Weak sub-angular blocky | Friable | Fine, faint and few at 11" | Fairly well drained |
| | 12-20" | Brown | Clay loam | Weak sub-angular blocky | Friable to firm | Prominent, common and distinct | Poorly drained |
| | 20-36" | Gray | Silty clay | Massive, platy | Firm | Prominent, common and distinct | Poorly drained, no groundwater or ledge to 36" |
| | | | | | | | |

Client: Jeffrey R. and Tammy L. Hall Date: October 21, 2013 Location: 875 Hinesburg Road, Charlotte, Vermont

| Test Pit # | Depth (inches) | Dominant Color | Soil Texture | Soil Structure | Consistency | Mottles | Comments |
|------------|----------------|----------------|---------------------|----------------------------------|-------------|--------------------------------------|--|
| 02 | 0-3" | Brown | Clay loam (topsoil) | Crumb to weak sub-angular blocky | Friable | No | Fairly well drained |
| | 3-5" | Gray | Clay loam | Weak sub-angular blocky | Friable | No | Fairly well drained |
| | 5-13" | Tan-brown | Clay loam | Weak sub-angular blocky | Friable | Prominent, common and distinct at 8" | Poorly drained |
| | 13-36" | Gray | Silty clay | Massive, platy | Firm | Prominent, common and distinct | Poorly drained, no groundwater or ledge to 36" |
| | | | | | | | |
| 03 | 0-4" | Dark brown | Silt loam | Crumb to weak sub-angular blocky | Friable | No | Fairly well drained |
| | 4-10" | Gray | Clay loam | Sub-angular blocky | Friable | Prominent, common and distinct at 9" | Poorly drained |
| | 10-36" | Gray | Silty clay | Massive, platy | Firm | Prominent, common and distinct | Poorly drained, no groundwater or ledge to 36" |

Client: Jeffrey R. and Tammy L. Hall Date: October 21, 2013

Location: 875 Hinesburg Road, Charlotte, Vermont

| Test Pit # | Depth (inches) | Dominant Color | Soil Texture | Soil Structure | Consistency | Mottles | Comments |
|------------|----------------|----------------|--------------|----------------------------------|-------------|--------------------------------------|--|
| 04 | 0-4" | Dark brown | Silt loam | Crumb to weak sub-angular blocky | Friable | No | Fairly well drained |
| | 4-16" | Tan-brown | Clay | Sub-angular to angular blocky | Friable | Prominent, common and distinct at 6" | Poorly drained |
| | 16-36" | Brown to gray | Clay loam | Sub-angular blocky | Firm | Prominent, common and distinct | Poorly drained, no groundwater or ledge to 36" |
| | | | | | | | |

SOIL BORING LOG

Client: Jeffrey R. and Tammy L. Hall Date: December 3, 2013 Location: 875 Hinesburg Road, Charlotte, Vermont

Project Description: Two-Lot Subdivision and Boundary Line Adjustment Replacement Wastewater Area Designation

Logged By: Michael Jewell, Licensed Designer #600-B Topographic Setting: Level to Westerly Sloping Lawn

Current/Historic Land Use: Agriculture Slope: 5 - 7% Vegetation: Grass

Weather Conditions: 30° Cloudy Method of Excavation: 3 Inch Diameter Hand Auger

| Soil Boring # | Depth (inches) | Dominant Color | Soil Texture | Soil Structure | Consistency | Mottles | Comments |
|---------------|----------------|----------------|--------------------------------|-------------------|-------------|---|---|
| 01 | 0-10" | Dark Brown | Very fine sandy loam (topsoil) | Crumb | Friable | No | Well drained |
| | 10-16" | Brown | Silt loam | Crumb | Friable | Fine, faint and few at 12" | Fairly well drained |
| | 16-28" | Tan to gray | Clay | Massive | Firm | Prominent, common and distinct | Poorly drained, no groundwater, or ledge to 28" |
| | | | | | | | |
| 02 | 0-8" | Brown | Very fine sandy loam (topsoil) | Crumb | Friable | No | Well drained |
| | 8-18" | Orange-brown | Fine sandy loam (fill) | Crumb to granular | Friable | Fine, faint and few at 12", prominent, common and distinct at 16" | Fairly well drained |
| | 18-30" | Gray-brown | Clay | Massive | Firm | Prominent, common and distinct | Poorly drained, moist at 30", no ledge to 30" |

MOUND WASTEWATER DISPOSAL SYSTEM BASIS OF DESIGN

Jeffrey R. and Tammy L. Hall
Two-Lot Subdivision and Boundary Line Adjustment
875 Hinesburg Road, Charlotte, Vermont
January 14, 2014
Prepared By: Michael Jewell, Licensed Designer #600-B

Lot No. 2 "Best Fix" Replacement Mound Wastewater Disposal System Area

I. WASTEWATER FLOWS AND MOUND SYSTEM SIZING

A. WASTEWATER FLOWS (Q)

| | | | | | |
|---|----------|-----|---------------|------------|-----|
| 3 | Bedrooms | 140 | gpd/bedroom= | 420 | gpd |
| 1 | Bedrooms | 70 | gpd/bedroom= | 70 | gpd |
| | | | Total Flows = | 490 | gpd |

B. REQUIRED SEPTIC TANK

Required Septic Tank Capacity = **1,000 gallons** for a 4-bedroom single-family residence.

C. PERCOLATION RATE (PR)

Percolation rates are estimated to be between 10 min/inch and 60 min/inch based on Appendix 4-A of the State of Vermont EPR. Therefore, an application rate of 0.74 gallons per day (gpd) per square foot (sf) is used to determine the basal area

D. MOUND SYSTEM APPLICATION RATE (AR)

AR = Application rate for sizing the mound system leachfield area (LA)
Ra maximum = 1.0 gpd/sf for Mounds
Selected Ra = **1.0** gpd/sf

E. REQUIRED LEACHFIELD AREA (RLA)

RLA = Q / AR
RLA = 490 / 1.0
RLA = **490** sf

F. PROPOSED LEACHFIELD AREA (PLA)

PLA = LENGTH (L) x WIDTH (W) x NUMBER OF TRENCHES or BEDS (N)
L = 82 ft
W = 6 ft
N = 1 Absorption Bed
PLA = **492** sf
PLA > RLA therefore PLA is acceptable

G. MOUND SYSTEM BASAL AREA (BA)

G1. BASAL AREA APPLICATION RATE (BAAR)

BAAR = Application rate for sizing basal area (BA)
BAAR = 0.74 gpd/sf for PR < 60 min/inch
BAAR = 0.24 gpd/sf for 60 min/inch < PR < 120 min/inch
Selected BAAR = **0.74** gpd/sf

G2. REQUIRED BASAL AREA (RBA)

RBA = Q / BAAR
RBA = 490 / 0.74
RBA = **662** sf

G3. PROPOSED BASAL AREA (PBA)

PBA = Trench or Seepage Bed Length (L) x Distance from uphill side of the bed to downhill mound toe (MT).
L = 82 ft
MT = 20 ft
PBA = **1640** sf
PBA > RBA, therefore the PBA is acceptable

II. MOUND SYSTEM PRESSURE DISTRIBUTION DETAILS

In the event it is necessary to install the Lot No. 2 "best Fix" replacement mound, a complete design of the pressure distribution system and a permit amendment will be required before the system can be installed.