



**APPLICATION FOR INDIVIDUAL SECTION
401 WATER QUALITY CERTIFICATION**

Vermont Water Pollution Control Permit Regulation 10 VSA. 1258(6) Section 13.11 (b)

For DEC Staff Use Only

Date of Receipt: _____ Permit number: _____

A. Pre-application Meeting: Have you had your meeting yet? The Department of Environmental Conservation strongly encourages applicants to schedule and attend a pre-application meeting with affected programs prior to submitting an application.

Yes, the meeting was held on (various) with DEC staff (see cover letter)

If you need to schedule a meeting, please call or email Matthew Probasco at 802-490-8013 Matthew.Probasco@vermont.gov.

B. Applicant Contact Information

1. **Name:** Tim Follensbee, Vermont Transco, LLC (VELCO)

2. **Mailing Address:** 366 Pinnacle Ridge Road

3. **Town:** Rutland

4. **State:** VT

5. **Zip:** 05701

6. **Phone:** 802-770-6423

7. **Email:** tfollensbee@velco.com

C. Representative: Consultant, engineer, or other representative that is responsible for filling out this application, if other than the applicant.

1. **Name:** Patti B. Kallfelz-Werts

2. **Mailing Address:** 40 IDX Drive Building 100, Suite 200

3. **Town:** South Burlington

4. **State:** VT

5. **Zip:** 05403

6. **Phone:** 802-497-6100

7. **Email:** pkallfelz-werts@vhb.com

D. Landowner: If the applicant is not the landowner, please provide a list of all landowners owning property that is part of the project site

1. **Name:** (same as applicant)

2. **Mailing Address:**

3. **Town:**

4. **State:**

5. **Zip:**

6. **Phone:**

7. **Email:**

E. 1. Resource Proposed for Alteration:

Wetlands Stream / Rivers Lake / Pond / Reservoir

Name of Resource(s) (Please use consistent ID#s throughout the application for identification of unnamed resources.)

Lake Champlain

E. 2. Type(s) of Proposed Alteration(s):

- Stream / River Crossing Utility Line or Linear Transportation Project
- Intake / Outfall Structure Stream or Wetland Restoration
- Wetland Fill / Excavation Dredging
- Launch Ramp Bank Stabilization
- Impoundment
- Other: _____

F. Project Details												
1. Project/Site Name: PV-20 Submarine Cable Replacement Project												
2. Address: 4A Champlain Landing (existing)		Please follow this link to the ANR Atlas Map										
3. Town/County: Grand Isle - Grand Isle	4. Longitude: -73.351474	5. Latitude: 44.696028										
6. Compass Directions & Road(s): Compass direction of the project in relation to the road(s) or nearest intersection. Name the road(s) that the project is located on <p>The existing and proposed VELCO Grand Isle Terminal Station are located east of Lake Champlain ("Lake"), west of VT Route 314, north of Champlain Landing, and south of Dreamland Court. The access road to the new Grand Isle Terminal Station will be located approximately 170 feet south of the intersection of Dreamland Courte (private road), and 935 feet north of the intersection of VT Route 314 and Champlain Landing (private road).</p>												
7. Geographic Features: Identify any distinguishing geographic features near project location site <p>The existing and proposed infrastructure are located within and adjacent to the east shore of Lake Champlain, west of Vermont Route 314 (see Site Location Map, Appendix 1a).</p>												
8. Project Description Summary: Give a short narrative summary describing what the project is <p>In summary, the proposed PV-20 Project will include the installation of four new oil-free electric transmission cables between Grand Isle, VT and Plattsburgh, NY. Construction of two new terminal stations (one in Grand Isle and one in Plattsburgh); removal of the seven existing electric transmission cables; decommissioning the two existing terminal stations; and the addition or relocation of overhead transmission line structures to connect to the overhead lines to the new terminal stations.</p>												
9. Project Description Details: Give a detailed narrative description of the project, including phasing and a list of specific project components <p>See: -PV-20 Cable Replacement Project - EPSC Plans (Appendix 1b); -PV-20 Submarine Cable Replacement Project - Select Details (Appendix 1b); and -Lake Encroachment Permit Application ("LEP Application") Narrative – Vermont Transco, LLC – PV-20 Submarine Cable Replacement Project (Section 2) (Appendix 1c)]</p>												
10. Project Purpose: <p>The purpose of the PV-20 Project is to replace and upgrade existing electrical transmission equipment, which is at or near the end of its expected useful service live, in order to maintain a vital electric transmission interconnection between Vermont and New York. See "PV-20 Alternatives Analysis", Block 23 Attachment of the Department of the Army Individual Section 404/ Section 10 Permit Application (Appendix 1d) for a detailed description of the Project purpose.</p>												
11. Project acres: <u>7.85 acre (land)</u>	12. Site slope percent: (Please provide the maximum slope percent. For linear projects, please provide the minimum and maximum slope percentage across the project) <u>4 (average) %</u>	13. Total disturbed area associated with the project: <u>4.47 acres</u>										
14. Physical description of project area: <p>[see Section 3 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix 1f)]</p>												
15. Soil K-Factor(s): <p>[see Appendix 4b of the General Permit 3-9020 Application - Moderate Risk (Appendix 1g)]</p>	16. Hydrologic Soil Group(s) <table border="0"> <tr> <td>Soil Map Symbol</td> <td>Hydrologic Soil Groups</td> </tr> <tr> <td>AaA</td> <td>C</td> </tr> <tr> <td>BcB</td> <td>D</td> </tr> <tr> <td>BdB</td> <td>D</td> </tr> <tr> <td>BdC</td> <td>D</td> </tr> </table>		Soil Map Symbol	Hydrologic Soil Groups	AaA	C	BcB	D	BdB	D	BdC	D
Soil Map Symbol	Hydrologic Soil Groups											
AaA	C											
BcB	D											
BdB	D											
BdC	D											

17. Receiving Waters: Identify all surface waters within the major basins (including streams/rivers, wetlands, and lakes) that drain from the project, beginning with waters within the proposed project area and progressing downstream. If the waterbody does not have a formal name, a descriptive name should be provided (e.g. unnamed tributary of the Mad River). (There are 17 major watershed basins defined by VTDEC in: http://www.vtwaterquality.org/mapp/htm/mp_assessment.htm)

Upper Lake Champlain Basin (Basin 5)

18. Watershed Area Summary from Project Area to Receiving Waters

Watershed(s)	Watershed Area (acres)	Disturbed Area (acres)	% Area Disturbed
Upper Lake Champlain Basin	348,000	4.47	0.001%

G. Cumulative Impacts: For help identifying environmental features regarding your property use the VTANR Natural Resources Atlas: <http://www.anr.state.vt.us/dec/maps.htm>.

1. Impervious surface: 4.6 surface % of property 14,375 sq. ft

2. Land Use: Describe current and prior uses of the project property, including activities such as logging and agriculture or other uses that may have impacted water quality.

[see PV-20 Natural Resources Report for a complete description of the land uses within the Project Study Area (Appendix If)]

3. Land Cover: Percent and type of change in land cover associated with the project relative to natural cover

The existing VELCO Grand Isle Terminal Station and overhead electric transmission line are located in open field and agricultural lands. Once the Project is completed, and the existing terminal station is decommissioned, the area will be graded and re-vegetated to match the surrounding, open field area. The proposed terminal station will be located in an adjacent open field to the north of the existing Grand Isle Terminal Station. Woody vegetation removal is limited to the removal of a small number of trees and shrubs for access road construction, within an existing hedgerow along the south edge of the field where the new terminal station will be constructed. Changes to the overhead transmission line are limited to relocating one existing structure, and installing one new structure within the existing line in open field area. The remaining Project components, both existing and proposed, are located underground. Vegetation removal along the Lake will not be required for Project construction. Therefore, there will be no change in land cover types as a result of the Project.

If the Agency finds that additional information on the current condition of the receiving water(s) beyond what is available is needed to adequately assess potential impacts from the proposed activity, the applicant will be required to supply that information.

H. Resource Descriptions:

1. Wetland Resources

a. Type of wetland(s): Describe the wetland(s) in the project area including the total number of wetlands in the area, the square footage of each wetland, the number of Class II and III wetlands (according to the Vermont Wetland Rules). If more than two wetlands will be affected by the project, fill out Wetland Resource Table 2, Appendix II

There are no wetlands located within or adjacent to the Project Study Area. The terrestrial Study Area was subject to a complete assessment for wetlands in fall 2013 and spring 2015 using the applicable methodologies described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (USACE 2011). A detailed description of the existing conditions of the Study Area, the methodologies used for assessment, and the results of the assessment is provided in the PV-20 Natural Resources Report (Appendix If).

b. Wetland Pre-Project Cumulative Impacts: Describe any known pre-project cumulative impacts to wetlands from land use, agriculture, forestry, development, etc.

There are no wetlands located within or immediately adjacent to the PV-20 Study Area. Review of the Vermont Agency of Natural Resources ("ANR") Natural Resources Atlas indicates that there were no mapped wetlands within or immediately adjacent to the PV-20 Project, therefore there is no evidence of previous wetland impacts (PV-20 Natural Resources Report in Appendix If).

c. Wetlands Impacted: Describe the proposed impacts to the wetlands and buffer area (include impacts from fill, clearing, temporary trenching, etc.)

There will be no impacts to wetlands or associated buffers as a result of the Project.

d. Wetland Impact Table: Fill out the Wetland Impact Table, Appendix III

e. Converted Wetlands: List the square footage of wetlands converted from one type of wetland to another. Example would be conversion of forested wetland to shrub wetland for power line right of way clearing. Submit table if needed as an appendix.
 There will be no wetlands impacted by the Project.

2. Stream/River Resources:

a. Streams/Rivers Impacted: Describe the perennial streams impacted by the project.
 There are no perennial streams located within or adjacent to the Project Study Area (see PV-20 Natural Resources Report in Appendix If). The Project includes activities within Lake Champlain. Descriptions of Lake Champlain Water Conditions are included below in Section 3 and various Appendices.

b. Stream/River Impact table: Fill out the following table with perennial streams impacted by the project, Appendix IV

c. Summary of Physical Impacts to Streams/Rivers

Proposed Stream Area Impacts						
Project Component	Permanent (s.f.)	Permanent (acres)	Temporary (s.f.)	Temporary (acres)	Total (s.f.)	Total (acres)

d. Stream/Rivers Pre-project Cumulative Impacts: Describe any known pre-project cumulative impacts to streams and rivers from land use and development, etc.
 There are no streams located within or immediately adjacent to the PV-20 Study Area. Review of the Vermont Agency of Natural Resources ("ANR") Natural Resources Atlas indicates that there were no streams previously mapped within or immediately adjacent to the PV-20 Project, therefore there is no evidence of previous stream impacts (PV-20 Natural Resources Report in Appendix If).

e. Impacts to the Geomorphic Condition and Geomorphic Sensitivity of the Stream: Describe using phase I & phase II stream geomorphic stream assessment protocols. Geomorphic condition means the degree of departure, if any, from the dimensions, pattern, and profile associated with the naturally stable channel that results from the unique set of natural stream processes or dynamic equilibrium conditions of a stream or river segment. Geomorphic sensitivity means the potential of a river, given its inherent characteristics and present geomorphic conditions, to be subject to a high rate of fluvial erosion and other river channel adjustments, including erosion, deposit of sediment, and flooding.
 There are no streams located within or immediately adjacent to the Project; there would be no impacts to streams as a result of the Project (see PV-20 Natural Resources Report in Appendix If).
 The Project includes activities within Lake Champlain, and descriptions of water conditions, as they relate to Lake Champlain, are included below in Section 3.

3. Physical, Chemical, & Biological Conditions.

a. Physical Water Conditions: Summarize the physical conditions of the waters the project impacts or discharges into, including, temperature regime, conductivity, pH, turbidity, suspended sediment, and substrate type. Document source of data, geo-referenced to sampling location. If data are from the Bio-monitoring Sites Layer or the DEC Watershed Data Portal on the VTANR Atlas <http://www.anr.state.vt.us/dec/maps.htm>, please reference specific station identification numbers. Data are also available at www.vtwaterquality.org/wqd_mgtplan/waterq_data.htm.
 -See Department of the Army Individual Section 404/ Section 10 Permit Application (Supplemental Narrative for descriptions of proposed physical impacts to Lake Champlain (Appendix Id and Appendix Ie).
 -See VT Transco, LLC, Lake Champlain Impact Analysis (summary table), and VELCO PV-20 Submarine Cable Replacement Project - Impact Exhibit (Appendix Ih).
 -See PV-20 Cable Replacement Project - Lake Encroachment Permit Application (Narrative Section 7, Appendix 4) for descriptions of physical water conditions (Appendix Ic).

b. Chemical Water Conditions: Summarize the chemical conditions of the waters the project impacts or discharges into, including, as available, total phosphorus and nitrogen, biochemical & chemical oxygen demand, hardness, metals, *E. coli*, and other data relevant to evaluation of the chemical condition of waters. If data are from the Bio-monitoring Sites Layer or the DEC Watershed Data Portal on the VTANR Atlas <http://www.anr.state.vt.us/dec/maps.htm>, please reference specific station identification numbers. Data are also available at www.vtwaterquality.org/wqd_mgmtplan/waterq_data.htm.

The Project does not propose to introduce new pollutant sources that would impact the chemical conditions of the Lake.

See PV-20 Cable Replacement Project - Lake Encroachment Permit Application (Narrative Sections 5 and 7, and Appendices 3 and 4) for descriptions of chemical water conditions (Appendix Ic).

c. Biological Water Conditions: Summarize the biological water conditions of the waters the project impacts or discharges into. If data are available, summarize biological condition in relation to DEC biological assessment endpoints as described by http://www.vtwaterquality.org/bass/hm/bs_biomon.htm. Document the occurrence or absence of aquatic rare, threatened, or endangered plant or animal species. If data are from the DEC Watershed Data Portal on the VTANR Atlas <http://www.anr.state.vt.us/dec/maps.htm>, please reference specific station identification numbers. Follow-up with the Fish & Wildlife Department's Natural Heritage Inventory (802-371-7333) if any such species are present.

See "Characterization of the Littoral Zone and Sediment-Depth Distribution of Aquatic Macroinvertebrates in the Vicinity of the PV-20 Submarine Transmission Line, Lake Champlain, Cumberland Head, NY and Grand Isle, VT" [Appendix 2 of the PV-20 Cable Replacement Project - VT Transco, LLC - Natural Resources Report (Appendix If)]; and

See PV-20 Cable Replacement Project - Lake Encroachment Permit Application (Narrative Section 7) for descriptions of biological water conditions (Appendix Ic).

4. Fish & Wildlife Resources

a. Fisheries Resource(s): Provide a description of the existing fish resources within the waters that the project impacts or discharges into.

See "Characterization of the Littoral Zone and Sediment-Depth Distribution of Aquatic Macroinvertebrates in the Vicinity of the PV-20 Submarine Transmission Line, Lake Champlain, Cumberland Head, NY and Grand Isle, VT" [Appendix 2 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix If)] for descriptions of fish resources.

Wildlife: For help identifying wildlife habitat, natural communities, and rare, threatened, or endangered species use the VTANR Natural Resources Atlas: <http://www.anr.state.vt.us/dec/maps.htm>

b. Habitat: Provide an assessment of wildlife habitat within the project area. This must include a description of the methods employed to identify, map, and assess the habitats. Include a map that depicts all the wildlife habitat resources of the area (e.g., deer wintering habitat, riparian habitat, floodplain forest natural communities, wetland types).

See Section 4 and Appendix 2 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix If) for descriptions of wildlife habitat.

c. Natural Communities: Provide an assessment of significant natural communities within the project area. This must include a description of the methods employed to identify, map and assess the communities. Include a map that depicts the natural communities.

See Section 4 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix If) for descriptions of natural communities.

d. Rare, Threatened, and Endangered Species: Provide a description of the anticipated and other possible impacts of the proposed project on the foregoing wildlife resources and how those will be avoided or minimized.

See Section 4 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix If) for descriptions of wildlife habitat.

e. Wildlife Affects & Minimization: Provide a description of the anticipated and other possible impacts of the proposed project on the foregoing wildlife resources and how those will be avoided or minimized.

See Section 4 and Appendix 2 of the PV-20 Cable Replacement Project - Vermont Transco, LLC - Natural Resources Report (Appendix If) for descriptions of potential affects to wildlife and habitat.

I. Additional Permits and Supporting Documents: Supporting Documents (Appendix I). Please list any additional Supporting Documents and attach to application labeled Appendix I. This should include, but not be limited to Memorandum of Understanding (MOU)'s with the Vermont Agency of Natural Resources (if applicable), applicable state and federal permits and permit applications, federal 404 permit application including alternatives analysis and mitigation package, site maps and plans, vegetation management plans, easement information, etc. Complete on an attached sheet if more room is needed. In the brief description column include page numbers for each appendix for quick reference. **Note, this section needs to be updated as supporting documents are updated.

Appendix	Document Title	Preparing Agent	Date of Last Revision	Brief Description
Appendix IA	(see List of Appendices, enclosed)			
Appendix IB				
Appendix IC				
Appendix ID				
Appendix IE				
Appendix IF				
Appendix IG				
Appendix IH				

J. Fee:

Pursuant to 3 V.S.A. § 2822(j)(30), use the following formula to calculate the certification fee: 1% of project cost with a minimum of \$200.00 and a maximum of \$ 20,000.00.

Project Cost: \$ 18,500,000 Permit Fee: \$ 20000 Exempt

K. Signature (Original Signature Required):

I certify under penalty of law that this document and all attachments were prepared at my request or under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person who manages the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I recognize that by signing this application, I am giving consent for the Commissioner of the Department, or a duly authorized representative, at reasonable times and upon presentation of credentials, to enter upon and inspect the subject property to verify information in and process the Section 401 application.

Signature:  Date: 04/22/2016

Print Name: Tim Follensbee II

Signor Contact Phone: 802-770-6423 Signor Contact email: tfollensbee@velco.com

Submit this form and application fee, payable to:
State of Vermont

Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522

Direct all correspondence or questions to 401 Permitting at: Matthew.Probasco@vermont.gov.

For additional information visit: www.watershedmanagement.vt.gov