

**VERMONT AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

INDIVIDUAL WETLAND PERMIT

In the matter of:

Vermont Gas Systems, Inc.
Attn: Jean-Marc Teixeira
85 Swift Street
South Burlington, VT 05403

Application for the construction of Phase 1 of the Addison Natural Gas Project, a construction of a natural gas transmission mainline, gate stations, distribution mainline, and local distribution network to extend natural gas services from Colchester to Middlebury and Vergennes with proposed impacts to 161,825 square feet of wetland and 255,412 square feet of buffer zone.

Located in portions of 12 towns in Chittenden and Addison County, including: Colchester, Essex, Williston, St. George, Hinesburg, Monkton, Ferrisburgh, Vergennes, Waltham, New Haven, Weybridge, and Middlebury.

File #: 2012-184
DEC ID #: WY14-0008

Date of Decision: June 9, 2014
Decision: **Issued**
Expiration Date: June 9, 2019

Any activity in a Class I or Class II wetland or its associated buffer zone is prohibited unless it is an allowed use under the Wetland Rules (VWR) or unless it receives a permit allowing such activity. 10 V.S.A. § 913. Applicants for an individual permit for a proposed activity in any Class I or Class II wetland or the buffer zones must demonstrate that the proposed activity complies with the Wetland Rules and will have no undue adverse impact on protected functions and values.

The Vermont Agency of Natural Resources (Agency) received an application dated December 20, 2012 with multiple revisions last dated February 11, 2014 from Vermont Gas Systems, Inc. (Permittee) seeking an individual Vermont Wetland Permit for a project involving activities in wetlands and associated buffer zones located in the towns of Colchester, Essex, Williston, St. George, Hinesburg, Monkton, Ferrisburgh, Vergennes, Waltham, New Haven, Weybridge, and Middlebury, Vermont. Public notice of the application was given in accordance with the VWR. Any comments received during the public comment period were considered during review of the application and issuance of this permit.

DECISION AND PERMIT CONDITIONS

1. Based on the findings contained in this permit, the permit application, and information obtained during a site visit by Agency staff, the Secretary finds that the proposed activities will comply with the Vermont Wetlands Statute, 10 V.S.A. § 901 et seq. and the VWR. The Permittee has demonstrated that the project will have no undue adverse effects on the protected functions and

values of the subject significant wetlands and associated buffer zones, and adjacent wetland complexes, provided the project is conducted in accordance with the following conditions:

- A. All activities in the wetlands and buffer zones shall be completed, operated and maintained as set forth in the permit application #2012-184 and the supporting materials listed in Section 13 of the permit application. No material or substantial changes shall be made to the project without the prior written approval of the Vermont Wetlands Program. Project changes may require a permit amendment and additional public notice.
- B. The Permittee shall record this permit name, number, and Vermont Wetlands Program contact information in the land records of the Towns of Colchester, Essex, Williston, St. George, Hinesburg, Monkton, Ferrisburgh, Vergennes, Waltham, New Haven, Weybridge, and Middlebury for all properties subject to the permit. Within 30 days of the date of issuance of this permit, the Permittee shall supply the Vermont Wetlands Program with a copy of the recording of this permit.
- C. The Permittee shall notify the Vermont Wetlands Program in writing or by email prior to the start of the approved project.
- D. **Prohibitions:** No additional activities are allowed in the wetlands and associated buffer zones without the approval of the Secretary unless such activities are allowed uses under the VWR. No draining, dredging, filling, grading or alterations of the water flow is allowed. No cutting, clearing or removal of vegetation within the wetlands and buffer zones are allowed with the exception of the proposed project area as approved by this permit.
- E. All construction activities in the wetlands and adjacent 50-foot buffer zones shall be completed within five years of the issuance date of this permit or this permit will expire. Any request for an extension must be received by the Agency at least 30 days prior to the end of the five year period in order to prevent the expiration of the permit. A request for extension may be considered a minor modification at the discretion of the Secretary. Projects may not be extended beyond ten years of the issuance date. VWR § 9.1.
- F. The wetland boundary delineations, excluding aerial photograph interpreted boundaries, are valid for five years. The delineations will need to be re-evaluated by a qualified wetland consultant if the project is not constructed during the five-year period and a request for an extension is submitted.
- G. Within 30 days of completion of the work approved by this permit, the Permittee shall supply the Vermont Wetlands Program with a letter certifying that the project was constructed in compliance with the conditions of this permit.
- H. All contractors' equipment shall be cleaned so as to contain no observable soil or vegetation prior to work in wetlands and buffer zones to prevent the spread of invasive species.
- I. No brush clearing or matting installation shall take place between March 1 and July 15th within wetland 2012-CM160/161 unless the Agency concurs that a springtime bird survey sufficiently determines the absence of bird species of concern.
- J. Where bedrock is encountered during construction of the project within Class II wetlands or buffers, a bentonite plug will be installed at the base of the trench, through the blasted segment of the wetland.
- K. Annual monitoring and control of non-native invasive plant species (NNIS) will be completed by September 1 of each required monitoring year. Monitoring and control

methods will be carried out as specified in the *VGS-ANGP-Phase I Vegetation Management Plan – Transmission Main Plan* dated September 16, 2013. Annual monitoring will begin the first full growing season following construction completion of the Project and shall continue for four additional years. Should annual monitoring show that no plants are present, or there is no risk posed to economic or resource value impacts during the first three years of monitoring, the Agency may release the Permittee from further monitoring obligations. The report will include: project background, monitoring methods, monitoring and control results, recommendations for future monitoring, threats and controls, a summary table of NNIS occurrences, NNIS occurrence mapping, and photographic documentation. Reports will be submitted in digital form to the VT ANR Natural Heritage Program's State Botanist and the Vermont Wetlands Program no later than January 31 directly following each monitoring year.

- L. Annual impact monitoring of rare plants will be completed by September 1 of each required monitoring year. Monitoring and control methods will be carried out as specified in the *VGS-ANGP-Phase I Vegetation Management Plan – Transmission Main Plan* dated September 16, 2013. Annual monitoring will begin the first full growing season following construction completion of the Project for three to six years. The report will include: project background, monitoring methods, monitoring and mitigation results, recommendations for future monitoring and mitigation, a summary table of rare plant impact monitoring locations, pre and post construction rare plant occurrence mapping, and photographic documentation. Reports will be submitted in digital form to the VT ANR Natural Heritage Program's State Botanist and the Vermont Wetlands Program no later than January 31 directly following each monitoring year.
 - M. An amendment to the permit will be necessary to accurately depict all wetland impacts. The Permittee must submit a report of wetland delineations conducted on condemned properties, including all appropriate rare plant species surveys, and the Vergennes distribution network before working on condemned lands or the Vergennes distribution network. If wetland or buffer boundaries or protected wetland functions and values are different from those reported in the original application, additional avoidance and minimization may be required to mitigate effects to functions and values to amend the permit.
2. The Agency maintains continuing jurisdiction over this project and may at any time order that remedial measures be taken if it appears that undue adverse impacts to the protected functions and values of the wetlands or buffers are occurring or will occur.
 3. This permit does not relieve the Permittee of the responsibility to comply with any other applicable federal, state, and local laws, regulations, and permits.
 4. The Permittee shall either prior to construction produce to the Agency documents that demonstrate the legal ownership or control over the land that is the subject of the permit, or certify that it has the legal ownership or control of the land that is the subject of the permit.
 5. The Permittee shall allow the Secretary or his/her representatives, at reasonable times and upon presentation of credentials, to enter upon and inspect the permitted property for the purpose of ascertaining compliance with this permit, the VWR, and the Vermont Water Quality Standards and to have access to and copy all records required to be prepared pursuant to this permit.
 6. The Agency, by issuing this permit, accepts no legal responsibility for any damage direct or indirect of whatever nature and by whomever suffered arising out of the approved project. This permit does not convey any property rights in either real or personal property, or any exclusive

privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations. This permit does not obviate the necessity of obtaining such federal, state or local permits or approvals as may be required by law. Nothing in this permit shall be construed to preclude the institution of legal action or relieve the Permittee from any responsibilities, liabilities or penalties to which the Permittee is or may be subject to under other laws.

7. Within 15 days of the date of the decision, the Permittee, any person entitled to notice under Section 9.2 of the VWR, or any person who filed written comments regarding the permit application may request in writing reconsideration of the decision by the Secretary in accordance with Section 9.6 of the VWR.
8. Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision.

FINDINGS

1. A complete application was received from Vermont Gas Systems, Inc. for a Vermont Individual Wetlands Permit spanning multiple wetlands on February 11, 2014.
2. The wetlands and adjacent 50-foot buffer zones are located throughout the length of the proposed gas pipeline. See Item 4 of the application for more details.
3. Alan Quackenbush, Wetlands Program Manager, conducted a site visit to the subject property with Wetlands Program Ecologists Nina Kalantari and Chelsea Martin of Vanasse Hangen Brustlin, Inc on October 4, 2012. Alan Quackenbush and Wetlands Program Ecologist Laura Lapierre visited the site with Adam Crary of Vanasse Hangen Brustlin, Inc. on June 30, 2013.
4. The subject wetlands are Class II wetlands because: (1) they are identified as palustrine wetlands on the Vermont Significant Wetlands Inventory maps and are therefore designated as Class II wetland under the VWR; or (2) they are contiguous to Class II wetlands; or (3) they meet the presumptions of Section 4.6, in which the Secretary has determined, based on an evaluation of the functions and values of the subject wetlands, that they are significant Class II wetlands. Refer to table 2 for individual wetland complex classifications.
5. The wetlands in question are described in detail in Section 7 and Section 8 of the permit application. An informative summary of all impacted Class II wetlands is located in Table 1 of this permit.
6. The proposed project is described in detail in Section 10 and 11 of the permit application. The proposed project is for the construction of a natural gas transmission mainline, gate stations, distribution mainline, and local distribution network to extend natural gas services from Colchester to Middlebury and Vergennes.
7. Impacts to the wetlands and buffer zones as proposed in Section 11 of the permit application are as follows:

Table 1: Summary of total impacts to Class II wetlands

Wetland Alteration:		Buffer Zone Alteration:	
Wetland Fill:	0 s.f.		
Temporary:	85,552 s.f.	Temporary:	112,079 s.f.
Permanent: :	76,273 s.f.	Permanent: :	6,875 s.f.
Total Wetland Impact	161,825 s.f.	Total Buffer Zone Impact:	118,954 s.f.

8. The Permittee will purchase 119,203 square feet of mitigation credits from the Vermont *in-lieu* fee program, administered by Ducks Unlimited, Inc. for Vermont, as compensation for unavoidable impacts which would result from Project construction.

9. The protected functions of the wetlands include the following: water storage for flood water and storm runoff (§5.1 of the VWR), surface and groundwater protection (§5.2), fish habitat (§5.3), wildlife and migratory bird habitat (§5.4), exemplary wetland natural community (§5.5), threatened and endangered species habitat (§5.6), education and research in natural science (§5.7), recreational value and economic benefits (§5.8), open space and aesthetics (§5.9), and erosion control through binding and stabilizing the soil (§5.10).

A summary of functions and values associated with the Class II wetlands is located in Table 2.

Table 2: Summary of wetland functions and values under the Vermont Wetland Rules for each wetland complex affected by the project.

Wetland Complex ID	Classification § 4.6 A-H	VWR § 5 Functional Criteria	Description
1a	a, d	1, 4	Hemlock Northern Hardwood Forested Swamp; landscape position depressional and terrene; groundwater overflow to the north; partially mowed to north and maintained clearing along existing gas pipeline ROW; 0.3 acres
1	a, d	1, 2, 10	Hemlock Northern Hardwood Forested Swamp & Open Field; landscape position depressional & terrene; groundwater outflow towards north; proximal to existing gas line and all season trail; 2.2 acres
2	a	1, 2	Hemlock Northern Hardwood Forested Swamp & Open Field; landscape position depressional & terrene; groundwater outflows to north; existing trail and proximal tree clearing; 5.6 acres
3	a,c	1, 2, 10	Hemlock Northern Hardwood Forested Swamp & Open Field; landscape position depressional & terrene; throughflowing of stream to the east; minimal maintained vegetation along the western boundary of wetland; 1.5 acres
4	a, c	1, 2, 3, 4, 10	Hemlock Northern Hardwood Forested Swamp & Open Field; landscape position riverine & lotic; throughflowing of Indian Brook and groundwater discharge to the north; maintained vegetation and network of trails proximal to feature; 113.5 acres
6	a,c	1, 2, 3, 4, 10	Hemlock Northern Hardwood Forested Swamp; landscape position riverine & lotic; throughflowing of Indian Brook; maintained vegetation along road and existing berm; network of trails and selective tree clearing; 20.3 acres
7	a	1, 2, 4	Hemlock Northern Hardwood Forested Swamp; landscape position depressional & terrene; outflow to east from groundwater discharge, drainage channels, and overland flow; maintained vegetation along road; network of trails and tree clearing; 7 acres
7a	b	1, 2, 3, 10	Hemlock Northern Hardwood Forested Swamp; landscape position riverine & lotic; outflow to east from groundwater discharge and surrounding steep banks; maintained vegetation along road; 0.1 acres
8	a	1, 2, 4	Hemlock Northern Hardwood Forested Swamp; landscape position depressional & terrene; outflow to east from groundwater discharge, drainage channels and overland flow; mowing along existing agricultural field and road to the west; 8.9 acres
9	a, d	1, 2, 3, 4, 5, 6, 10	Silver Maple Floodplain Forest; landscape position depressional & terrene; groundwater and stream outflow to north toward the Winooski River; mowing along edge of grazed field to the east and maintained vegetation clearing along railroad bed; 6.9 acres
10	a	1, 2	Northern Hardwood Forested Swamp; landscape position depressional & terrene; outflow to the north from groundwater discharge and overland flow; maintained vegetation from landfill; 2.1 acres
11	a,c	1, 2, 3, 4, 10	Hemlock Northern Hardwood Forested Swamp; landscape position depressional & terrene; outflow to the north from groundwater and stream flows; maintained vegetation from roadway and landfill; 1.3 acres
12	a	1, 2, 3, 4, 10	Hemlock Northern Hardwood Forested Swamp; landscape position depressional & terrene; groundwater outflow to the northwest; maintained vegetation along roadway; 1 acre
13	a	1, 2, 3, 4, 10	Hemlock Northern Hardwood Forested Swamp; landscape position depressional & terrene; groundwater outflow and overland flow to the northwest; maintained vegetation along roadway; 0.8 acres
14	a, d	1, 2, 4	Hemlock Northern Hardwood Forested Swamp; landscape position depressional, terrene; groundwater and overland flow to the northwest; maintained vegetation along roadway; 25.9 acres
15	a	1, 2, 10	Open Field and Scrub Shrub; landscape position depressional & terrene; groundwater discharge and overland flow to the south; maintained vegetation along cch; residential area; 2.5 acres

Table 2: continued

Wetland Complex ID	Classification § 4.6 A-H	VWR § 5 Functional Criteria	Description
16	a, c, g	1, 2, 4, 6, 10	Open Field and Scrub Shrub; landscape position depressional & terrene; groundwater discharge to the south; maintained vegetation along ccch; residential area; 8.7 acres
17	a	1, 4, 6	Open Field and Scrub Shrub; landscape position depressional & terrene; groundwater discharge and overland flow to the north; mow ing of fields and partial clearing; 6.2 acres
18	a	1, 2, 3, 4, 6, 10	Hemlock Northern Hardw ood Forested Sw amp; landscape position depressional & terrene; groundwater discharge and overland flow to the north; maintained vegetation and mow ing near i-89 right-of-w ay; 21.9 acres
19	a	1, 2	Emergent & Hemlock Northern Hardw ood Forested Sw amp; landscape position depressional & terrene; groundwater discharge to the north; maintained vegetation and existing access road w ithin existing overhead electric line; 2.6 acres
20	a	1, 2	Northern Hardw ood Forested Sw amp; landscape position depressional & terrene; groundwater discharge to the w est; maintained vegetation w ithin existing overhead electric line; 0.7 acres
21	a,c	1, 2, 3, 4, 10	Northern Hardw ood Forested Sw amp; landscape position riverine & lotic; Sucker Brook discharges to the east; maintained row clearing w ithin overhead utility line; 5.1 acres
22	a	1, 2	Open Field; landscape position depressional & terrene; groundwater discharge to the north; mow ed vegetation; drivew ay; 2.2 acres
23	a	1, 2	Open Field; landscape position depressional & terrene; overland flow discharge to the south; mow ed vegetation; 0.1 acres
24	a	1, 2	Emergent Wetland & Hemlock Northern Hardw ood Forested Sw amp; landscape position depressional & terrene; groundwater discharge; maintained vegetation w ithin existing overhead electric line; 1.9 acres
25	a, c	1, 2, 3, 4, 10	Emergent Wetland & Northern Hardw ood Forested Sw amp; landscape position depressional terrene; groundwater and stream flow tow ards the south; maintained vegetation clearing w ithin existing overhead electric line and golf course; 6.6 acres
26	a,c, d	1, 2, 4, 5, 6, 10	Emergent Wetland, Northern Hardw ood & Valley Clayplain Forested Sw amp; landscape position depressional & terrene; groundwater and streamflow tow ards the south ; maintained vegetation clearing w ithin existing overhead electric line and agricultural field; 167.7 acres
27	a,c	1, 2, 3, 4, 5, 6, 10	Emergent Wetland, Scrub Shrub and Northern Hardw ood Forested Sw amp; landscape position depressional & terrene; groundwater and overland flow to the south; maintained vegetation w ithin existing overhead utility line; 274 acres
28	a	1, 2	Open Field; landscape position depressional & terrene; groundwater and overland flow to the south; maintained vegetation w ithin existing overhead utility line and along baldw in road; 1 acres
29	a	1.0	Open Field; landscape position depressional & terrene; isolated feature; maintained and mow ed vegetation w ithin field; 0.5 acres
30	a	1, 2, 3, 4, 10	Emergent and Scrub-shrub Wetlands; landscape position depressional & terrene; groundwater discharge to the south; partially mow ed from agricultural use and maintained w egetation w ithin existing overhead electric line; 6.2 acres
31	a	1, 2, 3, 4, 5, 8, 10	Scrub-shrub and Northern Hardw ood Forested Sw amp ; landscape position depressional & terrene ; groundwater discharge and stream throughflow to the north tow ard lewis creek ; naturally vegetated; 416.4 acres
32	a,b,c, g	1, 2, 3, 4, 5, 6, 8, 9, 10	Northern White Cedar Sw amp, Open Field and Cattail Marsh; landscape position depressional terrene; groundwater discharge and stream throughflow to the south; naturally vegetated; partially mow ed fields; 320.7 acres

Table 2: continued			
Wetland Complex ID	Classification § 4.6 A-H	VWR § 5 Functional Criteria	Description
33	a, c	1, 2, 3, 4, 10	Open field & Northern Hardwood Forested Swamp; landscape position depressional & terrene; groundwater stream flow to the south; partially mowed from agriculture; 17.3 acres
34	a	1, 2	Open Field; landscape position depressional terrene; groundwater discharge drains toward the south; vegetation maintained from agricultural; 0.8 acres
35	a,g	1, 2, 4, 5, 6	Open Field, Red Maple and Green Ash Swamp; landscape position depressional & terrene; groundwater discharge drains toward the west; maintained clearing within utility row; 294.7 acres
38	a	1, 2	Northern Hardwood Forested Swamp; landscape position depressional & terrene; groundwater discharges to the west; maintained vegetation along existing overhead electric line; 7.2 acres
39	a, c	1, 2, 3, 4, 5, 10	Open Field & Hemlock North Hardwood Forested Swamp; depressional, terrene, riverine & lotic; stream provides throughflow to the west and overland flow to the north; maintained veg. along existing electric line, roadway, driveway and existing field; 9.8 acres
40	a, g	1, 2, 4, 6	Shrub swamp & Red Maple Black Ash Swamp; landscape position depressional & terrene; groundwater seeps and partially channelized flow outflows to the east; maintained vegetation along existing overhead electric line; 425.3 acres
41	a	1, 2	Northern Hardwood Forest & Open Field; landscape position depressional & terrene; groundwater seeps drain to the west; maintained vegetation along existing overhead electric line; 2.4 acres
42	a,c	1, 2, 3, 6, 10	Northern Hardwood Forested Swamp & Open Field; landscape position riverine & lotic; New Haven River throughflow to the west; maintained vegetation along existing overhead electric line and mowing along edge of field; 3.2 acres
43	a	1, 2, 4	Open Field; landscape position depressional & terrene; groundwater discharge to the south; maintained vegetation along Plank Road; 4.1 acres
44	a	1, 2, 3, 4, 8, 9, 10	Open Field; landscape position depressional & terrene; groundwater discharge to the south; maintained vegetation along Plank Road; 19.4 acres
45	a	1, 2, 4	Open field; landscape position depressional & terrene; groundwater discharge to the north; maintained vegetation along Plank Road and existing overhead electric line; 2.8 acres
46	a	1, 2, 4	Open Field; landscape position depressional & terrene; groundwater discharge to the north; maintained vegetation along Plank Road; 8.6 acres
47	a	1.0	Open Field; landscape position depressional & terrene; groundwater seeps and overflow from pond drains north; maintained vegetation along River Road; 0.1 acres
48	a	1, 2	Open Field; landscape position depressional & terrene; groundwater seeps and overland flow; partially cleared along Exchange Street; 0.4 acres
49	a	1, 2	Open Field; landscape position depressional & terrene; groundwater outflow to the south; maintained vegetation along Exchange Street and industrial area; 1.7 acres
50	a	1, 2	Open Field; landscape position depressional terrene; groundwater outflow to the south; maintained vegetation along Exchange Street and industrial area; 1.1 acres
51	a, b	1, 2, 10	Open Field; landscape position depressional & riverine; groundwater discharge to north and from channelized throughflow; existing trail and clearing along trail and mowing; 28.4524 acres

10. **Water Storage for Flood Water and Storm Runoff.** The wetlands are significant for the water storage for flood water and storm runoff function as demonstrated in Section 16 of the permit application. Based on the factors described in Section 16.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse effect to this function.
11. **Surface and Groundwater Protection.** The wetlands are significant for the surface and ground water protection function as described in Section 17 of the permit application. In addition to the Permittee's statements in its application, the Agency finds an additional 32 wetland complexes are significant for surface and groundwater protection, including numbers 1, 3, 4, 7, 7a, 8, 9, 11, 12, 13, 14, 15, 18, 20, 21, 22, 23, 24, 25, 26, 30, 31, 33, 34, 35, 39, 40, 41, 43, 47, and 49. Based on the factors described in Section 17.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse effect to this function.
12. **Fish Habitat.** The wetlands are significant for the fish habitat function as described in Section 18 of the permit application. In addition to the Permittee's statements in its application, the Agency finds 19 wetland complexes are significant fish habitat, including numbers 4, 7a, 9, 11, 12, 13, 16, 18, 21, 25, 26, 27, 30, 31, 32, 33, 36, 39, and 44. Based on the factors described in Section 18.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
13. **Wildlife and Migratory Bird Habitat.** The wetlands are significant for the wildlife and migratory bird habitat function as described in Section 19 of the permit application. In addition to the Permittee's statements in its application, the Agency finds 16 wetland complexes are significant wildlife habitat, including numbers 6, 11, 12, 13, 15, 16, 18, 21, 25, 30, 31, 32, 36, 40, 45, and 46. Based on the factors described in Section 19.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
14. **Exemplary Wetland Natural Community.** The wetlands are significant for the exemplary wetland natural community function as demonstrated in Section 20 of the permit application. In addition to the Permittee's statements in its application, the Agency finds an additional two wetland complexes are significant for the exemplary wetland natural community function. Complex 31 contains a Red-Maple-Black-Ash-Seepage-Swamp mapped by Vermont Fish and Wildlife. Complex 40 contains a Red-Maple-Northern White Cedar Swamp mapped by Vermont Fish and Wildlife. Neither community types were found within or near the proposed disturbance area. Based on the factors described in Section 20.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
15. **Rare, Threatened and Endangered Species.** The wetlands are significant for the rare, threatened and endangered species function as demonstrated in Section 21 of the permit application. In addition to the Permittee's statements in its application, the Agency finds an additional wetland complex is significant for rare, threatened and endangered species habitat function. Complex 27 contains a State threatened plant species. The threatened

plant population is located over 2,000 ft from the proposed activity and will not be impacted. Based on the factors described in Section 21.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.

16. **Education and Research in Natural Sciences.** The wetlands are significant for the education and research in natural sciences function as demonstrated in Section 22 of the permit application. In addition to the Permittee's statements in its application, the Agency finds two additional wetland complexes are significant for education and research value. Complex 31 is contiguous with Mallard Pond. Complex 32 is associated with a salamander crossing study where one crossing tunnel exists and two more tunnels are proposed. Wetland areas with educational and research value are over 2,000 ft from proposed activity and will not be significantly impacted. Based on the factors described in Section 22.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
17. **Recreational Value and Economic Benefits** The wetlands are significant for the recreational value and economic benefits function as demonstrated in Section 23 of the permit application. The Agency finds three wetland complexes are significantly valuable for recreation and economic benefits. Complexes 31, 32, and 44 are all excellent places for recreational bird watching. Recreational areas of wetland complexes 31 and 32 are not within areas of proposed project activity. Since the pipeline is being buried, there will be no significant impact to bird watching at wetland complex 44. Based on the factors described in Section 23.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
18. **Open Space and Aesthetics.** The wetlands are significant for the open space and aesthetics as demonstrated in Section 24 of the permit application. In addition to the Permittee's statements in its application, the Agency finds wetland complex 44 is significantly valuable for open space and aesthetics because it is readily accessible to the public and is a distinct feature in the surrounding landscape. The proposed pipeline will have no significant impact to the aesthetics of this wetland as the pipeline will be buried. Based on the factors described in Section 24.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
19. **Erosion Control.** The wetlands are significant for the erosion control function demonstrated in Section 25 of the permit application. In addition to the Permittee's statements in its application, ten additional wetland complexes are significant for erosion control including numbers 1, 9, 12, 13, 15, 18, 30, 31, 32, and 44. Based on the factors described in Section 25.2 of the application, as confirmed through a site visit by Agency staff, the proposed project will not result in an undue adverse impact to this function.
20. Under 10 V.S.A. §913 and Section 9 of the VWR, the Secretary may authorize activities in a significant wetlands or in the adjacent buffer zones if the Secretary determines that it complies with the Wetland Rules and will have no undue adverse effect on the protected functions and values. The Secretary has determined that the proposed project, as described in these findings and in the permit application, will have no undue adverse effects on

protected functions and values of the subject Class II wetlands or the adjacent wetland complex.

21. The Permittee has demonstrated the proposed activity in the subject wetlands cannot practicably be located outside the wetlands or on another site owned, controlled or available to satisfy the basic project purpose. All practicable measures have been taken in this proposal to avoid, minimize and promptly restore adverse impacts on protected functions, as described in the application. Minimization measures include but are not limited to the use of matting for construction access, the reduction of construction zone widths in certain wetland areas and the implementation of a vegetation management plan.
22. Many public comments were received during the two public comment periods. Comments are addressed in the attached responsiveness summary.

David K. Mears, Commissioner
Department of Environmental Conservation

by: _____
Laura Lapierre, Program Manager
Wetlands Program
Watershed Management Division

Dated at Montpelier, Vermont
this ninth day of June, 2014

DM/LL