

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

INDIVIDUAL WETLAND PERMIT

In the matter of:

Encore Renewable Energy
110 Main St., Suite 2E
Burlington VT 05401

Application for the construction of an access road and fence in support of a new 500 kW solar array with proposed impacts to 0 square feet of wetland and 2,316 square feet of buffer zone.

310 Route 110, Orange

File #: 2016-171
DEC ID #: BR10-0126

Date of Decision: January 4, 2017
Decision: **Approved**
Expiration Date: January 4, 2021

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 Vermont 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 its buffer zone must demonstrate that the proposed activity complies with the VWR and will have no undue adverse effects on protected functions and values. VWR § 9.5(a).

The Vermont Agency of Natural Resources (Agency) received an application dated October 17, 2016 from Encore Renewable Energy (permittee) seeking an individual Vermont Wetland Permit for a project involving activities in a wetland and associated buffer zone located in Orange, Vermont. The Agency gave notice of the application in accordance with the VWR. The Agency considered all comments received during the public comment period during review of the application and issuance of this permit.

DECISION AND PERMIT CONDITIONS

1. Based on the Findings contained in this permit below, the Secretary has determined that the proposed project will comply with 10 V.S.A. chapter 37 and the VWR and will have no undue adverse effect on protected functions and values of the wetlands. The permittee has demonstrated that the project will have no undue adverse effects on the protected functions and values of the significant wetlands and associated buffer zones, 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 #2016-171 and the supporting materials submitted with the permit application including site plans titled: “Vermont Wetland Permit Wetland Impact Exhibit”, VHB, August 26, 2016 and “ER Thurston Farm Solar East – Proposed Conditions Site Plan”, CEA, August 5, 2016. No material or substantial changes shall be made to the project without the prior written approval of the Vermont Wetlands Program. Project changes, including transfer of property ownership prior to commencement of a project, may require a permit amendment and additional public notice.
- B. The permittee shall record this permit in the land records of the Town of Orange 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. Prior to commencement of the approved project, the permittee shall notify the Vermont Wetlands Program digitally in writing of the date the project will commence.
- 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 VWR § 6. 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 is allowed with the exception of the proposed project area as approved by this permit.
- E. This permit expires five years from the date of issuance. If the permittee has not completed all construction activities covered by this permit before the expiration date and wishes to continue construction, the permittee must request a permit extension or apply for a new permit. 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. Pursuant to VWR § 9.1, projects may not be extended beyond ten years of the issuance date.
- F. Wetland boundary delineations 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. A continuous line of orange snow fence or flagging tape shall be installed along the limits of disturbance prior to the start of construction.
- I. If a stormwater construction permit is obtained for this project, the erosion prevention and control requirements of that permit shall be followed. At minimum, the permittee shall comply with the following: A continuous line of silt fence shall be properly installed by the permittee immediately upgradient of the snow fence or tape prior to any construction and shall be regularly maintained. Care shall be taken to ensure that

silt fence is installed on the contour and not in areas of concentrated flow such as stream channels or ditches. Sediment shall be cleaned out before and after any significant storm event or when sediment has reached less than half the height of the fence. Removed sediments shall be disposed of in a stable, upland area outside the 50-foot buffer zone at least 100 feet from waters of the state and stabilized immediately with seed and mulch at a minimum. All other disturbed soils shall be seeded and mulched within 48 hours of final grading. All sediment barriers and construction fencing shall be removed following the successful establishment of vegetation.

- J. 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. The permittee shall monitor the portion of the wetland in question annually during early July for five years following construction for the nuisance plant species purple loosestrife (*Lythrum salicaria*) and common reed (*Phragmites australis*). All nuisance plants found shall be pulled by hand and disposed of by burial or burning in a non-wetland location. If hand pulling is not feasible, a state approved invasive species control plan is required.
2. The Secretary 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 allow the Secretary or the Secretary's 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.
 5. The Agency 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.
 6. Within 15 days of the date of the decision, the permittee, any person entitled to notice under VWR § 9.2, 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 VWR § 9.6.

7. Any person with an interest in this matter may appeal this decision pursuant to 10 V.S.A. § 917. Pursuant to 10 V.S.A. chapter 220, any appeals of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. § 8506. Any appeal under this section must be filed with the Clerk of the Public Service Board within 30 days of the date of this decision; the appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. § 8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For further information, see the Rules and General Orders of the Public Service Board, available on line at www.psb.vermont.gov. The address for the Public Service Board is 112 State Street, Montpelier, Vermont, 05620-2701 (Tel. # 802-828-2358).

FINDINGS

1. The Agency received a complete application from Encore Renewable Energy for Vermont Wetland Permit on October 17, 2016.
2. The wetlands and adjacent 50-foot buffer zones are located on the east side of Route 110, east and south of 310 Route 110 in Orange.
3. Julie Follensbee, District Wetlands Ecologist, conducted a site visit to the subject property with Chelsea Martin of VHB on 10/22/2015. Julie Follensbee visited the site again with Carla Fenner of VHB, Derek Moretz of Encore and Karin McNeill and Brett Ladago of ANR on May 25, 2016.
4. Subject wetland 2015-2 is identified as a palustrine wetland on the Vermont Significant Wetlands Inventory maps and therefore is designated as a Class II wetland under VWR § 4.6.
5. Subject wetlands 2015-4 and 2015-5 meet the presumptions listed in VWR § 4.6, the wetland is of the same type and threshold size as those mapped on the VSWI maps or greater than 0.5 acres (VWR §4.6a), and the Secretary has determined based on an evaluation of the functions and values of the wetlands that they are significant wetlands and therefore are designated as Class II wetlands.
6. The wetland complexes and the subject wetlands in question are described in detail in the multiple wetland application table of the permit application and summarized in Table 1 below.

Table 1: Summary of Wetland Characteristics, Functions & Values Under the Vermont Wetland Rules for Each Subject Wetland Impacted by The Project.

Wetland Complex				Subject Wetland				
Wetland Complex ID	VWR Section 4.6 Presumptive Criteria ¹	Cover Types Present	Wetland Complex Functions and Values ²	Subject Wetland ID	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ⁴	Subject Wetland Functions and Values ²
2015-2	VSWI mapped	20% scrub-shrub and 80% emergent	5.1, 5.2, 5.10	2015-2	<i>PSS: Cornus sericea</i> <i>PEM: Carex crinita, Spiraea alba</i>	Cabot silt loam, Belgrade silt loam; Depleted Matrix (F3)	Saturation (A3); Drainage Patterns (B10), Saturation Visible on Aerial Imagery (C9)	5.1, 5.2, 5.10
2015-4	a	80% scrub-shrub and 20% emergent	5.1, 5.2	2015-4	<i>Phalaris arundinacea, Scirpus atrovirens, Lythrum salicaria</i>	Belgrade silt loam, Merrimac silt loam, Winooski very fine sandy loam; Depleted Matrix (F3)	Saturation (A3); Saturation Visible on Aerial Imagery (C9)	5.1, 5.2
2015-5	a	20% scrub-shrub and 80% emergent	5.1, 5.2, 5.10	2015-5	<i>PSS: Cornus sericea</i> <i>PEM: Phalaris arundinacea, Scirpus atrovirens, Solidago rugosa</i>	Belgrade silt loam, Merrimac silt loam, Winooski very fine sandy loam; Depleted Matrix (F3)	Saturation (A3); Oxidized Rhizospheres on Living Roots (C3)	5.1, 5.2, 5.10

¹ VWR §4.6 (a): wetland is of the same type and threshold size as those mapped on the VSWI maps; (b) wetland contains woody vegetation and is adjacent to a stream, river or open body of water, (c) the wetland contains dense, persistent non-woody vegetation and is adjacent to a stream, river or open body of water, (d) the wetland is a vernal pool that provides amphibian breeding habitat, (e) the wetland is a headwater wetland, (f) the wetland is adjacent to impaired waters and the impairment is related to wetland water quality functions, (g) the wetland contains a species that appears in the NNHP database as rare, threatened, endangered or uncommon; or is a natural community type that is rare or uncommon, (h) the wetland has been previously designated as a significant wetland, (i) it is within sixty (60) days after the landowner has received notice of a preliminary wetland determination pursuant to Section 8.1 of these rules.

² Defined in the VWR Section 5: §5.1-Water Storage for flood Water and Storm Runoff; §5.2-Surface and Ground Water Protection, §5.10 Erosion Control

³ ACOE Delineation Manual soil description

⁴ ACOE Delineation Manual description

7. The proposed project is described in detail in Sections 17 and 18 of the permit application. The project consists of the construction of an access road and fence in support of a new 500 kW solar array .
8. Proposed impacts to the subject wetlands and buffer zones, summarized in Section 19 and detailed within the multiple wetland table of the permit application, are as follows (Tables 2 and 3 below):

Table 2. Cumulative Impacts across all subject wetlands and buffers (sq. ft) for Project

Wetland Alteration:		Buffer Zone Alteration:	
Wetland Fill:	0 sq.ft.		
Temporary:	0 sq.ft.	Temporary:	0 sq.ft.
Other Permanent: :	0 sq.ft.	Permanent:	2316 sq.ft.
Total Wetland Impact	0 sq.ft.	Total Buffer Zone Impact:	2,316 sq.ft.

Table 3. Summary of Specific Subject Wetland Impact Descriptions and Impacts (sq. ft)

Wetland Complex ID	Subject Wetland ID	Subject Wetland Impact Description	Wetland Impacts (sq. ft)	Buffer impacts (sq. ft)
2015-2	2015-2	Proposed 16-foot-wide access drive to the solar array to provide construction and operational phase access will occur partially within the buffer.	0	1995
2015-4	2015-4	Proposed 16-foot-wide access drive to the solar array to provide construction and operational phase access will occur partially within the buffer.	0	314
2015-5	2015-5	Proposed perimeter fence for the solar array to consist of vertically driven fence posts will occur partially within the buffer.	0	7

9. The protected functions of the wetland complexes include the following: water storage for flood water and storm storage (VWR § 5.1), surface and groundwater protection (VWR § 5.2), and erosion control through binding and stabilizing the soil (VWR § 5.10). A summary of functions and values associated with the Class II subject wetlands is presented in Table 1 above.
10. The following functions of the wetland complexes are either not present or are present at such a minimal level as to not be protected functions: fish habitat (VWR § 5.3), wildlife habitat (VWR § 5.4), exemplary wetland natural community (VWR § 5.5), threatened and endangered species habitat (VWR § 5.6), education and research in natural science (VWR § 5.7), recreational value and economic benefits (VWR § 5.8), and open space and aesthetics (VWR § 5.9).
11. The wetland complexes are significant for the water storage for flood water and storm runoff function as demonstrated in Section 7 of the permit application. Based on the

factors described in Section 7.2 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.

12. The wetland complexes are significant for the surface and ground water protection function as described in Section 8 of the permit application. Based on the factors described in Section 8.2 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. The wetland complexes are significant for the erosion control function 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 impact to this function.
14. Under 10 V.S.A. § 913 and VWR § 9.5, the Secretary may authorize activities in a Class II wetland or in its buffer zone if the Secretary determines that it complies with the VWR and will have no undue adverse effect on the protected functions and values. Based on the permit application, the site visit(s) by Agency staff, and the foregoing findings and analysis, the Secretary has determined that the proposed project will have no undue adverse effects on the protected functions and values of the subject Class II wetlands.
15. Pursuant to VWR § 9.5(b), the permittee has demonstrated that the proposed activity in the subject wetland cannot practicably be located outside the wetland 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 adverse impacts on protected functions, as described in the application.

There are no direct wetland impacts from this project. The applicant has relocated the project access to avoid a wetland and stream crossings. The project is limited to existing agricultural fields.

16. No public comments were received during the public comment period.

Alyssa B. Schuren, Commissioner
Department of Environmental Conservation

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

Dated at Montpelier, Vermont
this fourth day of January, 2017