STATE OF VERMONT
AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STORMWATER DISCHARGE PERMIT

STORMWATER RUNOFF TO WATERS OF THE STATE

In compliance with provisions of 10 V.S.A. §1264 and the Stormwater Management Rule (Vermont Environmental Protection Rules, Chapter 18) and in accordance with "Terms and Conditions" hereinafter specified,

Green Mountain Power Corporation;
Moose Mountain Forestry, LLC;
Benjamin C. Wileman III;
Peter B. Mygatt;
Wind Blown Energy, LLC, Inc.
c/o Charle Pughe
Green Mountain Power Corporation
163 Acorn Lane
Colchester, VT 05446

and

Corrow[1]
c/o Gary Dubuque
5292 Noyestar Road
East Hardwick, VT 05836-9824

(Impervious Area: 27.47 Acres)

the permittee, is hereby granted permission to discharge stormwater runoff from impervious surfaces at the Kingdom Community Wind – Lowell Mountain Wind Farm project located at Vermont Route 100, Lowell, Vermont. Stormwater from the project discharges to the East Branch of the Mississquoi River (EBMR), to unnamed wetlands and unnamed tributaries of the EBMR, and to unnamed wetlands and unnamed tributaries of Ace Brook, Truland Brook, Seaver Branch, Shalney Branch, Rogers Branch, and McCleary Brook.

1. Expiration Date: Five years from issuance date of final permit. Note: This permit, unless revoked, modified or suspended, shall be valid until the designated expiration date not withstanding any intervening change in water quality, effluent, or treatment standards, or classification of the receiving waters including groundwater. However, any such changed standard or classification, and any applicable requirement in a total maximum daily load (TMDL) for the receiving water, shall be applied in determining whether or not to renew this permit, and in determining the conditions of a renewed permit.

[1] Corrow is owned by Nathan Corrow, Tucker Corrow, Douglas Corrow, Jeffery Brown and Gary Dubuque as tenants in common.

The permittee shall reapply for a renewed discharge permit at least ninety days prior to the expiration date of this permit.

2. Revocation: 10 V.S.A. §1267 provides as follows:

The Secretary may, after notice and opportunity for a public hearing, revoke, modify or suspend this permit if it is found that the permittee submitted false or inaccurate information in its application or has violated any requirement, restrictions, or condition of this permit, or if there is any change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. The Secretary shall impose conditions as the Secretary deems necessary for regulating the discharges of a permittee whose permit has been revoked, modified or suspended. Revocation shall be effective upon actual notice thereof to the permittee.

3. Operating Fees: This discharge is subject to operating fees under 3 V.S.A. §2822. The permittee shall submit the operating fees to the Agency in accordance with procedures provided by the Secretary.

4. Recording in Land Use Records: The permittee shall record a one-page notice of issuance of this discharge permit in the local land records within fourteen (14) days of issuance of this permit on the form provided by the Secretary, per §18-312 of Stormwater Management Rule. The permittee shall provide a copy of the recording to the Secretary within fourteen (14) days of the permittee's receipt of the copy of the recording from the local land records.

5. Transfer of Permit: This permit is not transferable without prior written approval of the Secretary. Provided all applicable fees under 3 V.S.A. §2822 have been paid, a permittee may submit a notice of transfer to the Secretary. The notice shall be submitted at least five (5) days prior to the proposed date of transfer. The notice shall state that the prospective permittee has adequate funding to comply with this permit. The permittee shall provide a copy of this permit to the new owner or tenant and inform him of the responsibility to make application for a permit which shall be issued in his name. Any failure to do so shall be considered a violation of this permit.

6. Right of Entry: The permittee shall allow the Secretary, or his or her authorized representatives, at reasonable times, upon presentation of credentials, to enter upon and inspect the permitted premises, and the stormwater collection, treatment and control system and to sample any discharge to determine compliance with this permit and to have access to and inspect and copy any records required to be kept pursuant to this permit.

7. Receiving Waters: East Branch of the Missisquoi River (EBMR), unnamed wetlands and unnamed tributaries of the EBMR, and to unnamed wetlands and unnamed tributaries of Ace Brook, Truland Brook, Seaver Branch, Shalney Branch, Rogers Branch, and McCleary Brook.

8. Manner of Discharge:

S/N 001: Stormwater runoff from gravel access road via sheet flow and grass lined swales to an Infiltration Basin A1, discharging to groundwater in the EMBR watershed, with overflow via stone level lip spreader, then by existing drainage patterns to EMBR.

SN002: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A3, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C8.

SN003: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to a combination Dry Pond / Level spreader A4, discharging via sheet flow and existing drainage patterns to Wetland 2009-C50.

SN004: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Wet Pond H, discharging via controlled outlet and pipes to a stabilized outfall, then by existing drainage patterns to an Unnamed Tributary to Stream 2010-SC-C100.

SN005: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A7, discharging via sheet flow and existing drainage patterns to Wetland 2009/2010-C-5.

SN006: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales, and piping to Level spreader A8, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to EBMR.

SN007: Stormwater runoff from gravel access road via sheet flow, grass or stone lined swales to Level spreader A9, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to EBMR.

SN008: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A10, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C49.

SN009: Stormwater runoff from gravel access road, buildings, and parking via sheet flow and grass or stone lined swales to Wet Pond G, discharging via controlled outlet and pipes to a stabilized outfall, then by existing drainage patterns to Stream 2009-TB-C3.

SN010: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreaders A11 and A12, discharging via sheet flow and existing drainage patterns to Wetland 2009-C46.

SN011: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A13, discharging via sheet flow and existing drainage patterns to Wetland 2009-48.

SN012: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A14, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary of Ace Brook.

SN013: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A15, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary of Ace Brook.

SN014: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A16, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary of Ace Brook.

SN015: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A17, discharging via sheet flow and existing drainage patterns to Stream 2009-TB-C9.

SN016: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A18, discharging via sheet flow and existing drainage patterns to Stream 2009-TB-C9.

SN017: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A19, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C9.

SN018: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A20, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C53.

SN019: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A21, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to 2009-SC-C53.

SN020: Stormwater runoff from gravel access road via sheet flow and grass or stone lined swales to Level spreader A22, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C10 to Ace Brook.

SN021: Stormwater runoff from gravel access road via sheet flow, grass or stone lined swales, and piping to Level spreader A23, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to Ace Brook

SN022: Stormwater runoff from gravel access road via sheet flow and stone lined swales to Level spreader A24, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to Ace Brook.

SN023: Stormwater runoff from gravel access road and gravel crane path via sheet flow, stone lined swales, and piping to Level spreader A25, discharging via sheet flow and existing drainage patterns to Stream 2009-TB/SC-C15.

SN024: Stormwater runoff from gravel crane path and crane pads via sheet flow, stone lined swales, and piping to Wet Pond F, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to an Unnamed Tributary to Shalney Branch.

SN025: Stormwater runoff from gravel crane path and crane pad via sheet flow, stone lined swales, and piping to Level spreader C7, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C18.

SN026: Stormwater runoff from gravel crane path and gravel crane pad via sheet flow and stone lined swales to Wet Pond I, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C17.

SN027: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Level spreader C5, discharging via sheet flow and existing drainage patterns to an Unnamed Tributary to Ace Brook.

SN028: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Level spreader C3, and a combination Dry Pond / Level spreader C4, discharging via sheet flow and existing drainage patterns to Wetland 2009-C19.

SN029: Stormwater runoff from gravel crane path and crane pads via sheet flow, stone lined swales, and piping to Wet Pond N, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-B5.

SN030: Stormwater runoff from gravel crane path via sheet flow and stone lined swales to Wet Pond A, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C27.

SN031: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Level spreader C1, discharging via sheet flow and existing drainage patterns to Wetland 2010-C2.

SN032: Stormwater runoff from gravel crane path and crane pads via sheet flow, stone lined swales, and piping to Wet Pond O, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-TB-SC-C25.

SN033: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond J, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-TB-SC-C15a.

SN034: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond B, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Wetland 2009-C24.

SN035: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond C, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C56a.

SN036: Stormwater runoff from gravel crane path and crane pads via sheet flow, stone lined swales, and piping to Wet Pond K, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C34.

SN037: Stormwater runoff from gravel access road via sheet flow, grass or stone lined swales, and piping to Level spreader A6, discharging via sheet flow and existing drainage patterns to Wetland 2009-B4.

SN038: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond D, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C65.

SN040: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond E, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Wetland 2009-C55. Also stormwater runoff from gravel crane path via sheet flow to Vegetated Buffer A discharging via sheet flow and then by existing drainage patterns to Wetland 2009-C55.

SN043: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Level spreader C16, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C60.

SN044: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond M, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C61. Also, stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to a combination Dry Pond / Level spreader C21, discharging via sheet flow and existing drainage patterns to Stream 2009-SC-C61.

SN046: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to a combination Dry Pond / Level spreader C19, discharging via sheet flow and existing drainage patterns to Unnamed Tributary to EBMR.

SN047: Stormwater runoff from gravel crane path and crane pads via sheet flow, stone lined swales, and piping to Wet Pond Q, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Stream 2009-SC-C41.

SN048: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Level spreader C20, discharging via sheet flow and existing drainage patterns to Unnamed Tributary of Seaver Branch.

S/N049: Stormwater runoff from gravel crane path and crane pads via sheet flow and stone lined swales to Wet Pond L, discharging via controlled outlet and pipes to a stabilized outfall then by existing drainage patterns to Wetland 2009-C14.

S/N050: Stormwater runoff from gravel crane path via sheet flow to Vegetated Buffer B, discharging via sheet flow and existing drainage patterns to Rogers Branch.

9. Wastes Permitted: Stormwater runoff from SN 001 through SN050 after treatment in an infiltration basin, grass channels, wet ponds, dry ponds, vegetated buffers, and via sheet flow in accordance with Disconnection of Non-Rooftop Runoff Credit and via disconnected sheet flow by level spreaders*.

*NOTE: The disconnected sheet flow by level spreader is permitted as a "new-design alternative system" in accordance with the requirements of Section 2.5.2. of the Vermont Stormwater Management Manual (VSMM). Monitoring of this design shall be conducted in

accordance with the *Operational Phase Stormwater Management Alternative Design and Performance Monitoring Plan*, prepared by VHB, Inc., dated 9/20/2010, and last revised 12/9/2010, and shall be conducted in accordance with #14 below and the Approved Project Design specified in #11. The design for disconnected sheet flow by level spreader is proposed to meet the Water Quality Treatment Standard and the Groundwater Recharge Treatment Standard per the requirements of the VSMM, Volume 1 for portions of the project area as specified in the approved project design.

10. Volumes Permitted and Frequency of Discharge: Such volumes and frequency as required by the discharge specified in #8 above.

11. Approved Project Design: This project shall be constructed and operated in accordance with the following site plans and details prepared by *Krebs & Lansing Consulting Engineers, Inc.* and all supporting information prepared by both *Krebs & Lansing Consulting Engineers, Inc.* and *Vanasse Hangen Brustlin (VHB), Inc.*, initial application dated 9/20/2010 with final revisions on August 10, 2011 (submittal date).

- Drawing Nos. INDEX, C-100, C-104, C-113, and C-135, all dated 02/01/2011, and all last revised 6/21/2011;
- Drawing Nos. C-101, C-102, C-103, C-105, C-106, C-107, C-108, C-109, C-110, C-112, C-114, C-115, C-116, C-117, C-118, C-119, C-120, C-121, C-122, C-123, C-124, C-125, C-128, C-129, and C-132, all dated0 2/01/2011, all last revised 6/01/2011;
- Drawing No. C-127, dated 02/01/2011, last revised 8/09/2011; and all supporting information.

By reference, all of the above noted plans are made a part of this permit.

12. Maintenance and Inspection Reporting Requirements:

a. The infiltration basin, wet ponds, dry ponds, grass channels, level spreaders, vegetated buffers, and related stormwater collection, treatment and control system shall be maintained in good operating condition at all times and **shall be inspected annually and cleaned as necessary to maintain design specifications**. **The inspections shall be conducted between the conclusion of spring snow melt and June 15th of each year**.

b. Any sediment removed from the stormwater collection, treatment, and control system shall be disposed of properly in accordance with state and federal statutes and regulations.

c. **By July 15 of each year the permittee shall submit a written report** to the Department of Environmental Conservation, Water Quality Division, Building 10 North, 103 South Main Street, Waterbury, Vermont 05671-0408. This report shall include, at a minimum:

i. for the first report, an inspection and designer's certification that the project was built in compliance with the Approved Project Design per #11 above;

ii. the dates and details of any cleaning and maintenance operations carried out in

the preceding year;

iii. a narrative summarizing the results of any inspections conducted in the preceding year and highlighting any stormwater related problems encountered, and all remedial steps taken in response;

d. Should any erosion problems occur, the permittee is required to immediately correct any such problems.

e. Any basins, grass channels, or related stormwater devices used during construction for erosion control shall be inspected and cleaned to design specifications immediately after construction has been completed.

13. Personnel and Training Requirements: Such personnel and training as necessary to fulfill the requirements of #12 above and #14 below.

14. Monitoring, Reporting and Alternative System Study Requirement:

The *Operational Phase Stormwater Management Alternative Design and Performance Monitoring* Plan, prepared by VHB, Inc., dated 9/20/2010, and last revised 12/9/2010, shall not commence until the new-design alternative treatment system has been in place for one full year from the date of construction completion. "Date of construction completion" shall be defined as the date of the first report submitted by the permittee that certifies the project has been built in compliance with the Approved Project Design as specified by the requirements of #11 and #12 above.

a. Within six (6) months of the close of the three (3) year monitoring period, the permittee will submit a written report to the Department of Environmental Conservation, Water Quality Division, Building 10 North, 103 South Main Street, Waterbury, Vermont 05671-0408. This report shall include at a minimum:

i. a narrative summarizing the alternative system study design and the monitoring protocol followed, a complete data set including all water quality monitoring data, site visit information, observations, and copies of all photographic and video documentation, including all applicable analytical sample results from a VT DEC certified laboratory;
ii. all precipitation data and weather information applicable to the study duration;
iii. all recorded flow measurements as required by the study;
iv. a flow weighted data analysis of the stormwater treatment pollutant removal efficiencies for total suspended solids (TSS) and total phosphorous (TP) as required by the study;
v. a narrative summarizing the study results.

b. Measurement of the effectiveness of the new-design alternative system in meeting performance standards, as defined below, is dependent upon either:
i. Water chemistry data results from samples of concentrated flow that represent inflow of runoff to the system and outflow of overflow from the system in comparison to one another; or

ii. Absence of concentrated flow from the system, thereby concluding that the system is providing pollutant retention to the degree necessary to meet applicable requirements of the VSMM.

c. Monitoring activities as they are referenced above are defined as:
   i. Photographic documentation, video documentation, and water quality sampling, when there is presence of concentrated flow (as described in #14.b.i. above); or
   ii. Only photographic and video documentation when there is absence of concentrated flow.

If the Agency determines that the proposed new-design alternative system does not meet the performance standards (removal of 80 percent of the average annual post development TSS load, and removal of 40 percent of the TP load), and the applicant is not able to modify the system to correct or address the deficiency to the satisfaction of the Agency within a reasonable period of time, but not to exceed 1 year, then the permit applicant shall immediately submit an application for a permit amendment, and upon approval of the amendment shall immediately implement acceptable stormwater treatment practices set forth in the Vermont Stormwater Management Manual and as allowable under the Stormwater Management Rule, as may be amended from time to time.

15. Other Requirements:

a. Treated stormwater runoff is the only waste authorized for discharge under the terms and conditions of this permit. The discharge of any hazardous materials or hazardous waste into the stormwater management system is prohibited.

b. The issuance of this permit does not relieve the permittee from the responsibility to obtain any other local, state or federal permits required by law.

16. Compliance with Anti-degradation and Water Quality Standards: The Secretary has determined that the permitted discharges satisfy Vermont's Anti-Degradation Policy described in the Department of Environmental Conservation's Interim Anti-Degradation Implementation Procedure, because the procedure allows a presumption of compliance for discharges that are in compliance with the Vermont Stormwater Management Manual and any additional best management practices that will be used to control the stormwater discharge as described in Section IX.D.1.d. of the Department's Interim Anti-Degradation Implementation Procedure. The Secretary has also determined that for such discharges that qualify for the presumption under IX.D.1.d, all existing uses of surface waters, and the level of water quality necessary to protect those existing uses will be maintained and protected. The Secretary has determined that if the permittee is in full compliance with all permit conditions, including approved plans, monitoring, reporting and recordkeeping conditions, and is fully implementing stormwater BMPs required by this permit, the permitted discharges will meet the requirements of the Vermont Stormwater Management Manual and qualify for the presumption described in Section IX.D.1.d. of the Department's Interim Anti-Degradation Implementation Procedure and will be presumed to comply with the Vermont Water Quality Standards, including but not limited to §1-03 (Anti-degradation Policy).

17. Appeals

Renewable Energy Projects – Right to Appeal to Public Service Board

If this decision relates to a renewable energy plant for which a certificate of public good is required under 30 V.S.A. §248, any appeal of this decision must be filed with the Vermont Public Service Board pursuant to 10 V.S.A. §8506. This section does not apply to a facility that is subject to 10 V.S.A. §1004 (dams before the Federal Energy Regulatory Commission), 10 V.S.A. §1006 (certification of hydroelectric projects) or 10 V.S.A. Chapter 43 (dams). 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. For further information, see the Public Service Board website at www.psb.vermont.gov. The address for the Public Service Board is 112 State Street, Montpelier, Vermont (Tel. # 802-828-2358).

18. Dated at Waterbury, VT this 19th day of August, 2011

David K. Mears, Commissioner
Department of Environmental Conservation

By _____
Padraic Monks, Program Manager
Stormwater Management Program