



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

FINAL DECISION AND CONDITIONS

July 26, 2016

Pamela G. Monroe, Administrator
New Hampshire Site Evaluation Committee
21 South Fruit Street, Suite 10
Concord, NH 03301

Re: Application of Antrim Wind Energy, LLC
Site Evaluation Committee Docket No. 2015-02

Dear Ms. Monroe:

This letter is to notify you that the NH Department of Environmental Services (DES) Water Division staff have completed their technical review of the application and have made a final decision on the parts of the application that relate to DES permitting or regulatory authority relative to an Alteration of Terrain permit, Subsurface permit, Wetland permit, and 401 Water Quality Certificate. DES recommends approval of the application with the conditions that are enclosed with this letter.

This concludes DES review of the project which we hope will assist the SEC to complete its project evaluation process and render a final decision. If you have any questions, please contact me at 271-2951 or email at: Rene.Pelletier@des.nh.gov

Sincerely,

Rene Pelletier, PG
Assistant Director
Water Division

cc: Michael J. Iacopino, Counsel NHSEC
ec: John B. Kenworth, Applicant
Dana Valteau, TRC
Thomas Burack, Commissioner, NHDES
Clark Freise, Asst. Commissioner, NHDES
Eugene Forbes, Water Division Director, NHDES
David Keddell, ACOE
Mark Kern, EPA

ANTRIM WIND PARK, NHSEC DOCKET #2015-02
ALTERATION OF TERRAIN BUREAU
JULY 26, 2016 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITIONS:

As part of the processing of this application, DES granted approval to waiving specific requirements of Rule Env-Wq 1504.09(b)(2)b. regarding site specific soil mapping, with the finding that granting the waiver would not have an adverse impact on the environment, public health, public safety, or abutting properties, and that granting the request is consistent with the intent and purpose of the rule waived.

(Approval includes permit conditions from the Watershed Management Bureau (WMB) to satisfy 401 Water Quality Certification concerns, and from the Drinking Water and Groundwater Bureau (DWGB) to satisfy concerns regarding ledge blasting and monitoring Best Management Practices. These conditions are based on the understanding that the NH Programmatic General Permit (PGP) issued by the U.S. Army Corps of Engineers applies to this project.)

PROJECT DESCRIPTION:

Construct an energy generation wind park that will include the construction of 9 wind turbines, a substation, 3.6 miles of gravel access roads with associated stormwater management facilities, an operations/maintenance building, and various crane pads. The total contiguous area of disturbance has been calculated to be 57.1 acres. In addition, approximately 45.8 acres of the disturbed areas will be restored and re-vegetated, including roadway shoulders, side slopes, and portions of the construction pads.

PROJECT SPECIFIC CONDITIONS:

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.
2. Revised plans shall be submitted for an amendment approval prior to any changes in construction details or sequences. The Department must be notified in writing within ten days of a change in ownership.
3. The Department must be notified in writing prior to the start of construction and upon completion of construction. Forms are available at:
<http://des.nh.gov/organization/divisions/water/aot/categories/forms.htm>.
4. The revised plans dated June 17, 2016 and supporting documentation in the file are a part of this approval.
5. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Site Evaluation Committee (SEC).
6. This permit does not relieve the Applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be obtained at:
<http://des.nh.gov/organization/divisions/water/stormwater/construction.htm>.
7. All stormwater practices shall be inspected and maintained in accordance with Env-Wq 1507.08 and the project's approved Inspection and Maintenance (I&M) Manual. All record

- keeping required by the I&M Manual shall be maintained by the identified responsible party, and be made available to the department upon request.
8. The smallest practical area shall be disturbed during construction activities.
 9. The permittee shall employ the services of an environmental monitor (“Monitor”). The Monitor shall be a Certified Professional in Erosion and Sediment Control or a Professional Engineer licensed in the State of New Hampshire and shall be employed to inspect the site from the start of alteration of terrain activities until the alteration of terrain activities are completed and the site is considered stable.
 10. During this period, the Monitor shall inspect the subject site at least once a week, and if possible, during any ½ inch or greater rain event (i.e. ½ inch of precipitation or more within a 24 hour period). If unable to be present during such a storm, the Monitor shall inspect the site within 24 hours of this event.
 11. The inspections shall be for the purposes of determining compliance with the permit. The Monitor shall submit a written report with photographs to the Department within 24 hours of the inspections. The reports shall describe, at a minimum, whether the project is being constructed in accordance with the approved sequence, shall identify any deviation from the conditions of this permit and the approved plans, and identify any other noted deficiencies.
 12. The Monitor shall provide technical assistance and recommendations to the Contractor on the appropriate Best Management Practices for Erosion and Sediment Controls required to meet the requirements of RSA 485-A:17 and all applicable DES permit conditions.
 13. Within 24 hours of each inspection, the Monitor shall submit a report with photographs to DES via email (to Craig Rennie at: craig.rennie@des.nh.gov and to Jennifer Drociak at: jennifer.drociak@des.nh.gov).
 14. Unless otherwise authorized by DES, the contractor shall keep a sufficient quantity of erosion control supplies on the site at all times during construction to facilitate an expeditious (i.e., within 24 hour) response to any construction related erosion issues on the site.
 15. For any blasting activities, the contractor shall follow the best management practices contained in Attachment A of the DES document *Rock Blasting and Water Quality Measures That Can Be Taken To Protect Water Quality and Mitigate Impacts*, which is available on the web at: <http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-10-12.pdf>
 16. Unless otherwise authorized by NHDES the Applicant shall prepare a turbidity sampling plan to confirm that measures to control erosion during construction are not causing or contributing to surface water quality violations. The turbidity sampling plan shall include the turbidity monitoring elements specified in the August, 14, 2013 NHDES Inter-Department Communication entitled “Guidance for SWPPPs, BMP Inspection and Maintenance, Turbidity and Sediment Monitoring for NHDOT Projects with 401 Water Quality Certifications” which includes guidance regarding sampling station number and locations, sampling frequency, sampling duration, size of storms that need to be sampled, how soon after the start of precipitation sampling should begin, quality assurance quality control provisions, and turbidity meter specifications. The plan shall be submitted to NHDES for approval at least 90 days prior to construction. The Applicant shall then implement the approved plan. Unless otherwise authorized by DES, the turbidity sampling results along with station ID, date, time, other field notes, and a description of corrective actions taken when violations of state surface water quality criteria for turbidity are found, shall be submitted to NHDES via electronic mail within 48 hours of collection.

07/26/16 DES FINAL DECISION CONTINUED:
NHSEC DOCKET #2015-02

17. Unless otherwise authorized by NHDES, the Applicant shall develop and submit a monitoring plan to NHDES Watershed Management Bureau for approval at least 90 days prior to construction. The purpose of the plan is to confirm that operation of the Activity is not causing or contributing to violations of state surface water quality standards and may include pre and post construction monitoring. The plan shall include the parameters to be sampled, the location, timing and frequency of sampling, sampling and laboratory protocols, quality assurance / quality control provisions as well as when data will be submitted to NHDES. The applicant shall consult with NHDES and submit the monitoring data in a format that can be automatically uploaded into the NHDES Environmental Database. Once approved by NHDES, the Applicant shall implement the sampling plan.
18. The Applicant shall prepare and submit a Spill Prevention, Control, and Countermeasures plan (SPCC) for the Activity in accordance with federal regulations (40 CFR part 112). The plan shall include a certification by a Professional Engineer licensed in the State of New Hampshire. The Applicant shall submit the plan to NHDES Watershed Management Bureau for review and approval at least 90 days prior to the installation of the first turbine. The SPCC Plan shall include, but not be limited to, operating procedures to prevent oil spills, control measures installed to prevent oil from entering surface waters, countermeasures to contain, clean up and mitigate the effects of an oil spill, and facility inspections. The Applicant shall then implement the approved plan and maintain records demonstrating compliance with the plan. Such records shall be made available to NHDES within 30 days of receiving a written request by NHDES.
19. The Applicant shall submit a plan to prevent water quality violations due to discharges of concrete wash water during construction. The Applicant shall submit the plan to the NHDES Watershed Management Bureau for review and approval at least 90 days prior to placement of any concrete within the Activity area. The Applicant shall then implement the approved plan.
20. Herbicide use associated with the Activity shall be minimized to the maximum extent possible and shall only be allowed on a limited, as-needed basis in the switchyard and substation areas to control vegetation that could otherwise disrupt operation of the Activity. Herbicides shall only be applied in strict accordance with the manufacturer's recommendations. Unless otherwise authorized by NHDES, the Applicant shall maintain records of herbicide use, including the name and brand of herbicide used, the date herbicides were applied, where they were applied, and the amount used. Such records shall be provided to NHDES within 30 days of receiving a request from NHDES.
21. Unless otherwise authorized by NHDES, fertilizers shall only be applied once on soils disturbed during construction to support the initial establishment of vegetation. Prior to fertilizer application, soils shall be tested to determine the minimum amounts of lime, nitrogen (N), phosphorus (P) and potassium (K) needed to support vegetation. Lime application rates, fertilizer selection (in terms of N ,P and K content) and fertilizer application rates shall be consistent with the soil test results. Fertilizers shall not contain any pesticides. Where possible, fertilizer with slow release nitrogen shall be used.
22. To the maximum extent possible, winter access for maintenance or other purposes shall be accomplished using tracked equipment (i.e., snowmobiles and snowcats). Plowing and/or sanding of roads (including use of sands containing chloride) for winter access shall be minimized to the maximum extent possible, and shall only be allowed when over-snow transport using tracked equipment is not feasible (i.e., such as for the unscheduled

07/26/16 DES FINAL DECISION CONTINUED:
NHSEC DOCKET #2015-02

maintenance of turbines that require large or heavy component replacement that cannot be transported over-snow). Unless otherwise authorized by NHDES, the Applicant shall maintain records of the dates when chloride was applied, the reason it was applied, and the estimated amount of chloride applied on each date. The Applicant shall submit such records to NHDES by May 1 of the first two years of operation and within 30 days of receiving a request from NHDES thereafter.

ANTRIM WIND PARK, NHSEC DOCKET #2015-02
SUBSURFACE SYSTEMS BUREAU
JULY 26, 2016 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITION:

PROJECT DESCRIPTION:

The applicant proposes to install an Individual Sewage Disposal System (Enviro-Septic) that will accommodate 300 gallons per day.

PROJECT SPECIFIC CONDITION:

1. All work shall be in accordance with the revised plan dated October 30, 2015, as received by DES on November 1, 2015.

ANTRIM WIND PARK, NHSEC DOCKET #2015-02
WETLANDS BUREAU
JULY 26, 2016 FINAL DECISION

RECOMMEND APPROVAL WITH THE FOLLOWING PERMIT CONDITIONS:

PROJECT DESCRIPTION:

Dredge and fill 9,121 square feet of palustrine wetlands, dredge and fill 156 square feet within an intermittent stream (impacting 156 linear feet), and temporarily impact 60 square feet within a perennial stream (impacting 15 linear feet) to construct an energy generation wind park that will include the construction of 9 wind turbines, a substation, 3.6 miles of gravel access roads, an operations/maintenance building, and various crane pads. In addition, the project includes a proposal to protect 908 acres of undeveloped forestland through the execution of 6 distinct conservation easements, which includes the summit of Willard Mountain.

PROJECT SPECIFIC CONDITIONS:

1. All work shall be in accordance with revised plans by TRC dated June 17, 2016, as received by the NH Department of Environmental Services (DES) on June 29, 2016.
2. Prior to construction, any plan revisions or changes in construction details or sequences shall be submitted to DES for review and approval.
3. Any further alteration of areas on this property that are within the jurisdiction of the DES Wetlands Bureau will require a new application and further permitting by the Bureau.
4. This permit is not valid unless an Alteration of Terrain permit or other method of compliance with RSA 485-A:17 and Env-Wq 1500 is achieved.
5. This permit is not valid unless a septic system construction approval or other method of compliance with RSA 485-A:29-44 and Env-Wq 1000 is achieved.
6. No construction activities shall occur on the project after expiration of the approval unless the approval has been extended by the New Hampshire Energy Facility Site Evaluation Committee (SEC).
7. Appropriate siltation/erosion/turbidity controls shall be in place prior to construction, shall be maintained during construction, and remain in place until the area is stabilized. Silt fence(s) must be removed once the area is stabilized.
8. Work shall be conducted in a manner so as to minimize turbidity and sedimentation to surface waters and wetlands.
9. Discharge from dewatering of work areas shall be to sediment basins that are: a) located in uplands; b) lined with hay bales or other acceptable sediment trapping liners; c) set back as far as possible from wetlands and surface waters, in all cases with a minimum of 20 feet of undisturbed vegetated buffer.
10. Dredged material shall be placed outside of the jurisdiction of the DES Wetlands Bureau.
11. Stream work shall be done during low flow conditions.
12. Culvert outlets shall be protected in accordance with the DES Best Management Practices for Urban Stormwater Runoff Manual (January 1996) and the Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire (August 1992).
13. Proper headwalls shall be constructed within seven days of culvert installation.

07/26/16 DES FINAL DECISION CONTINUED:
NHSEC DOCKET #2015-02

14. Within three days of final grading or temporary suspension of work in an area that is in or adjacent to wetlands or surface waters, all exposed soil areas shall be stabilized by seeding and mulching during the growing season, or if not within the growing season, by mulching with tackifiers on slopes less than 3:1 or netting and pinning on slopes steeper than 3:1.
15. Where construction activities occur between November 30 and May 1, all exposed soil areas shall be stabilized within 1 day of establishing the grade that is final or that otherwise will exist for more than 5 days. Stabilization shall include placing 3 inches of base course gravels, or loaming and mulching with tack or netting and pinning on slopes steeper than 3:1.
16. The contractor responsible for completion of the work shall utilize techniques described in the New Hampshire Stormwater Manual, Volume 3, Erosion and Sediment Controls During Construction (December 2008).
17. This project includes the conservation of six parcels for preservation which shall have deeds written for the conservation to run with the land, and both existing and future property owners shall be subject to the conservation restrictions.
18. The plans noting the six conservation parcels with a copy of the final deed language shall be recorded with the Registry of Deeds Office for each appropriate lot. A copy of the recording from the County Registry of Deeds Office shall be submitted to the DES Wetlands Bureau.
19. The six conservation areas shall be surveyed by a licensed surveyor, and marked by permanent monuments.
20. The Wetlands Bureau shall be notified of the placement of the easement monuments to coordinate on-site review of their location.
21. There shall be no removal of the existing vegetative undergrowth within the easement area and the placement of fill, construction of structures, and storage of vehicles or hazardous materials is prohibited.

ANTRIM WIND PARK, NHSEC DOCKET #2015-02
WATERSHED MANAGEMENT BUREAU - 401 WATER QUALITY CERTIFICATION
JULY 26, 2016 FINAL DECISION

401 WATER QUALITY CERTIFICATION CONDITIONS:

The proposed Activity involves the discharge of dredge or fill material into surface waters of the U.S. and, therefore, requires a federal Clean Water Act (CWA) Section 404 (33 U.S.C. 1344) permit from the U.S. Army Corps of Engineers (Corps). In accordance with Section 401 of the CWA (33 U.S.C. 1341) and New Hampshire (NH) statute RSA 485-A: 12, III, the Activity therefore requires a Section 401 Water Quality Certification from the NH Department of Environmental Services (NHDES).

On February 24, 2016, the Corps indicated that the Section 404 general permit (i.e., the New Hampshire Programmatic General Permit or PGP) applies to the proposed Activity. The Corps issues PGPs every five years; the last PGP was issued in 2012. A 401 Water Quality Certification (WQC # 2012-404P-002) for the current PGP was issued by NHDES on August 2, 2012. WQC # 2012-404P-002 is applicable to all activities covered by the PGP. Since the proposed Activity is covered by the PGP, the Applicant for the proposed Activity must comply with the conditions of WQC #2012-404P-002, which are provided below:

“E-1. Construction or operation of all projects included under the PGP shall meet NH surface water quality standards.

E-2. Applications for projects included under the PGP shall be subject to DES review to determine whether additional conditions or an individual 401 Certification application is necessary to ensure compliance with surface water quality standards.

E-3. If DES determines that surface water quality standards are being violated by the specific project or there is reasonable potential to expect that water quality standards will be violated if more project specific conditions are not included in the 401 Certification, DES may modify this 401 Certification for the specific project to include additional conditions to ensure compliance with surface water quality standards.

E-4. Construction on any specific project permitted under the PGP shall not commence until all other applicable permits and approvals have been granted, including those permits issued through DES Wetlands Bureau and, if necessary, DES Alteration of Terrain Program.

E-5. All applicable conditions in the NH PGP shall be followed.

E-6. DES reserves the right to inspect any project permitted under the PGP and the effects of the project on affected surface waters at any time to monitor compliance with the NH surface water quality standards.”

07/26/16 DES FINAL DECISION CONTINUED:
NHSEC DOCKET #2015-02

NHDES has reviewed the information provided by the Applicant and has determined that compliance with WQC #2012-404P-002 issued in 2012, and the conditions for the Alteration of Terrain and Wetlands permits, provides reasonable assurance that construction and operation of the Activity will not violate surface water quality standards¹.

¹ New Hampshire surface water quality standards are included in statute (RSA 485-A:8) and regulation (Env-Wq 1700).