

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER
IN THE MATTER OF

EVERGREEN WINDPOWER, LLC
TOWN OF MARS HILL
Mars Hill, Aroostook County
WIND POWER FARM
L-21635-26-A-N (approval)
L-21635-TH-B-N (approval)

) SITE LOCATION OF DEVELOPMENT
) NATURAL RESOURCES PROTECTION
) FRESHWATER WETLAND ALTERATION
)
) WATER QUALITY CERTIFICATION
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 481 *et seq.* and 480-A *et seq.*, and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of EVERGREEN WINDPOWER, LLC / TOWN OF MARS HILL with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

I. PROJECT DESCRIPTION:

- A. Summary: The applicant proposes to construct a 35-turbine windpower farm along the ridge of Mars Hill Mountain, producing approximately 50 Megawatts (MW) of power. Six of the proposed turbine locations are located off the ridge of the mountain; they are located on a smaller plateau on the northern-western edge of the project area.

The General Electric (GE) wind turbines will each produce 1.5 MW. The turbines begin producing energy when the wind speed is approximately 6.7 to 8.9 miles per hour (mph) or 3 to 4 meters per second (mps) and shut down at 56 mph (25 mps). The turbine blades will rotate at approximately 10 to 22 rounds per minute. The maximum height of the turbine towers will be approximately 262 vertical feet (80 meters) and the maximum rotor diameter is 253 feet (77 meters). Some of the turbines will be shorter and have smaller blades, depending on their location. The combined maximum height of the turbine tower plus a rotor blade straight up will be approximately 389 feet (119 meters).

The wind farm's power will be directed to the local electric power grid at the nearest substation located approximately 3.4 miles from the site and owned by Maine Public Service. In addition to the turbines, the applicants will upgrade or construct 7.3 miles of roads, 5.5 miles of underground 34.5 kV collection lines, 0.9 miles of overhead 35 kV lines, a substation, a maintenance facility and a switching station. Overall the project will encompass 115.9 acres. Although the

applicant is proposing 35 possible wind turbine sites, only 33 turbines will be built.

The project will temporarily alter approximately 305,851 square feet of forested wetland for the overhead power lines to the substation, and result in 410 square feet of permanent wetland fill for powerline support structures.

The proposed project is shown on a set of plans submitted with the application, the first of which is entitled "Mars Hill Wind Farm Project Site Location Map, Figure 1-1," prepared by Devin Tarbell and Associates, Inc. undated.

The Department did not receive any requests for a public hearing or Board Jurisdiction.

- B. **Current Use of Site:** The majority of the site is currently undeveloped woodland and potato field. There are 7 communication towers along the ridge of the Mountain, the tallest being approximately 450-feet (150 meters) tall. The Big Rock Ski Area is located on the west side of the mountain, near the southern end. An existing road allows 4X4 access to the top of the mountain. There is a lean-to at the southern end of the ridge for camping. The International Appalachian Trail (IAT) crosses the mountain; however, this is not the only windpower farm that the IAT passes and the IAT organization expressed no opposition to the project.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated to be \$68,000,000. The applicant submitted a letter from Fortis Capitol Corporation, dated November 17, 2003, indicating that it is willing to provide financing for this project.

The Department finds that the applicant has demonstrated adequate financial capacity to comply with Department standards provided that prior to construction, the applicant provide the Department with a commitment letter from the financial institution that will be providing financing for the project.

3. TECHNICAL ABILITY:

The applicant provided resume information for key persons involved with the project and a list of projects successfully constructed by the applicant. The applicant also retained the services of Devine-Tarbell and Associates, Inc., a professional engineering firm, to assist in the design and engineering of the project.

The Department finds that the applicant has demonstrated adequate technical ability to comply with Department standards.

4. NOISE:

The applicant submitted a noise study completed by Resource Systems Engineering, Inc. (RSE). The report was based on noise specifications provided by the manufacturer of the wind turbines (GE).

RSE developed a sound level prediction model for the proposed wind farm using CADNA/A software to map area terrain in three dimensions, locate the proposed turbines, and calculate outdoor sound propagation to the surrounding area. Sound level estimates were calculated based on all 35 possible turbine locations operating simultaneously at 95% of rated power as defined by GE. The full load wind conditions existed at wind speeds at approximately 10 meters per second or 22.4 miles per hour (mph) at a height of approximately 10 meters above grade. The wind turbines begin producing electricity when the wind speeds are approximately 6.7 mph.

The predicted noise level at the edges of the property or at protected locations ranges from 5-55 dBA. There are 4 protected locations where the noise level would be above 45 dBA, but less than 50 dBA, which is approximately equivalent to the noise that songbirds produce. Figure 5-1 in section 5 of the application shows an aerial photo of the project area superimposed with predicted sound level contours.

The noise model was produced with the turbines under a full load, at wind speeds of approximately 22.4 miles per hour. The Site Law Rules establish a maximum wind speed of 12 mph for purposes of measuring pre- and post-development noise levels at protected locations. Ambient noise levels increase as wind speeds increase, thus limiting the applicants' ability to accurately assess the impact that the turbines will make at high wind speeds due to higher ambient wind noise. Despite this more restrictive noise model parameter, the applicant has demonstrated that the project meets the current noise standards at the protected locations by predicting that no more than 50 dBA will be produced at any time of the day at a wind speed of 22.4 mph.

Site Law Rules allow a variance from the noise standard provided certain criteria are met. M.R.S.A 38 chapter 375 (10)(F) states that "the Board recognizes that there are certain developments or activities associated with development for which noise control measures are not reasonably available. Therefore, the Board or Commissioner may grant a variance from any of the sound level limits contained in this rule upon (1) a showing by the applicant that he or she has made a comprehensive assessment of the available technologies for the development and that the sound level limits cannot practicably be met with any of these available technologies, and (2) a finding by the Board that the proposed development will not have an unreasonable impact on protected locations."

Given that ambient wind speeds at the project site exceed those typically considered under the Site Rules; that the applicant has address the noise generated by the wind turbines at 22.4 mph, close to twice the 12 mph wind speed mandated in Chapter 375,

and that those noise limits are less than 50 dBA, the Department finds that the applicants' project will not have an unreasonable adverse impact on protected locations and therefore grants a variance from the noise standards for the windpower farm.

5. SCENIC CHARACTER:

The project is located along the ridgeline of Mars Hill Mountain. The nearest public scenic area is Aroostook State Park. Aroostook State Park is located approximately 12 miles northwest of the proposed site, too far away to clearly see the turbines from a normal viewing height (on the ground) at the highest point in the park. The site is visible from Route 1. The applicant submitted a visual impact study in Section 6 of the application, which included computer generated photo simulations from multiple locations around the mountain.

Seven (7) communication towers currently exist at the site; at least one of which is approximately 450 feet tall, and at least 3 of which have bright white and red blinking lights as required by the Federal Aviation Administration (FAA). In addition, a large ski area is located on the southwest portion of the mountain. All lighting on the windpower turbines will be kept to the minimum required by the FAA. As the windpower turbines are located so as to follow the major landform the area, and are located in an area already intruded upon by communication towers and other human alterations, and is not readily visible from a public resource, they do not unduly interfere with the scenic character of the area.

Based on the project's location and design, the Department finds that the proposed project will not have an unreasonable adverse effect on the scenic character of the surrounding area.

6. WILDLIFE AND FISHERIES:

The Maine Department of Inland Fisheries & Wildlife (MDIFW) reviewed the proposed project. In its comments dated March 5, 2004 and April 24, 2004, MDIFW stated that it found no records of any essential or significant wildlife habitats. No fisheries concerns were identified.

MDIFW is concerned with the potential for avian deaths associated with the interaction of the birds and wind turbine rotor blades. They are also concerned that no pre-construction studies were conducted at this site. MDIFW did not provide any technical evidence for requiring studies or state that there were any specific wildlife populations that may be adversely affected by the project.

The applicant submitted an extensive literature search of pre- and post-construction studies, and has designed the wind farm in accordance with the "Interim Voluntary Guidelines for Siting Wind Projects" (U.S. Fish and Wildlife Service, 2003). Based on surveys conducted with local birders, Breeding Bird Survey Route #44052 and NEXRAD

(weather radar, National Weather Service) data for this area does not indicate any migration routes in the area.

Based on extensive discussions between MDIFW and the applicant, the applicant has agreed to begin bird-monitoring studies on Mars Hill upon securing financing for the project. Monitoring must include pre-construction observations made during construction, including any spring and fall migration periods. Monitoring must include using methods that provide information on bird numbers, altitudes and flight paths, such as radar and ceilometer techniques for night migrants, as appropriate. Analysis of data from the existing NEXRAD station in Houlton may be used to fulfill the radar portion of the work.

The applicant also has agreed to fund a post-construction monitoring study for a maximum of two years at a level of up to \$50,000 per year; the studies shall be specifically focused on assessing possible impacts of the project. Studies may include bird mortality searches or studies, computer modeling of impact probabilities, and assessment of best techniques for assessing impacts of windpower sites. Monitoring will distinguish impacts of the project from those caused by the existing telecommunications towers on the project site.

Prior to operation of the wind turbines, the final parameters of the monitoring study, which must be designed by the applicant in consultation with MDIFW, must be submitted to the Department for review and approval.

If post-construction monitoring demonstrates that the project is having an unreasonable adverse impact, as determined by the Department in consultation with MDIFW, the applicant must work with the Department and MDIFW to implement appropriate and practical measures for avoiding or minimizing continued impacts. Measures to be considered will take into account the most recent research findings concerning the causes of impacts. Measures that must be considered based on recent research findings include, but are not limited to, the following examples.

- A. **Modified Lighting.** According to IF&W, studies have shown that lighted structures pose a higher risk for bird impacts than unlighted structures. In the event that unreasonable adverse impacts are found to be occurring at Mars Hill Mountain as a result of the wind turbines, the applicant must consider alternative scenarios for aircraft warning lighting, such as reducing the number of turbines with lights or altering the arrangement of lights if not all turbines are lighted. If one or more turbines that have lighting are suspected to be causing the impacts, the applicant must request permission from the Federal Aviation Administration (FAA) to remove or change lights from the subject turbines.
- B. **Modified Operations.** If a turbine is found to be causing unreasonable adverse impacts, the applicant must consider suspending its operation for short periods of highest risk, provided there is good reason to expect that a non-operating turbine will

pose less risk than an operating turbine. For example, if impacts were occurring at night during certain periods of fall migration, the applicant must consider modifying the operation of the turbine during those high-risk nights.

- C. On-Site Habitat Management. The applicant must consider habitat management measures in the vicinity of the turbines to modify wildlife behavior and reduce the risk of impacts. Any such measures would be determined in consultation with MDIFW in response to specific concerns or impacts that are related to habitat factors. Examples include, but are not limited to, modifying the type or extent of vegetation cover, forest openings, perching and nesting sites, or cover for prey species.
- D. Habitat Protection. If measures to avoid or minimize impacts are not practicable, the applicant must consider compensatory mitigation measures such as protection or enhancement of wildlife habitat. The Department in consultation with MDIFW, would determine any such measures.

Actual measures to be taken will depend on the type and severity of impacts, cost benefit considerations, and practicality. Additional measures may be considered depending on future research findings.

Maine Audubon submitted comments on the project in letters dated March 10, 2004 and May 12, 2004. These comments reflect the same concerns voiced by MIF&W. These comments did not provide any technical evidence of impacts to wildlife or specify wildlife populations that would be adversely affected by the project as proposed.

The Department finds that the applicant has made adequate provision for the protection of wildlife and fisheries provided that the applicant monitors the site as proposed and implements any mitigation that may be necessary as described above.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS:

The Maine Historic Preservation Commission reviewed the proposed project and stated that it will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

The Maine Natural Areas Program database does not contain any records documenting the existence of rare or unique botanical features on the project site and, as discussed in Finding 6, MDIFW did not identify any unusual wildlife habitats located on the project site.

The Department finds that the proposed development will not have an adverse effect on the preservation of any historic sites or unusual natural areas either on or near the development site.

8. BUFFER STRIPS:

The applicant is proposing a vegetated stormwater buffer around the existing maintenance facility. The buffer is shown on a plan entitled "Substation Buffer Plan, Figure A," prepared by Devine-Tarbell Associates, dated February 11, 2004.

The Department finds that the applicant has made adequate provision for buffer strips.

9. SURFACE WATER QUALITY:

The proposed project is not located within the watershed of a lake or great pond. No discharges to surface waters are proposed other than stormwater.

Based on the project's location and the Department's Rules, Chapters 500 and 502, the applicant is not required to provide stormwater quality treatment.

The Department finds that the proposed project will not have an unreasonable adverse impact on surface water quality.

10. SOILS:

The applicant submitted a soil survey map and report based on the soils found at the project site. This report was prepared by a certified soils scientist and reviewed by staff from the Division of Environmental Assessment of the Bureau of Land and Water Quality (DEA). DEA also reviewed a Blasting Plan submitted by the applicant and outlining the proposed procedures for removing ledge. DEA requested the following modifications that have been agreed to the applicant:

- A. The applicant must adopt the air overpressure standards specified in Chapter 375, Section 10(C)(4)(c), which range from 129 to 123 dBA, depending on the number of blasts per day. The applicant proposed an air overpressure limit of 0.014 psi, which corresponds to 134 dbL. However, with proper confinement, DEA determined that the proposed blasting would meet the applicable standard.
- B. Ground vibration limits must be those provided in U.S.B.M. RI 8507, Appendix B, Figure B-1. Given the small charges and the distances to potential receptors, and with proper shot design, this standard will be met without affecting the project schedule.

The Department finds that, based on this report and Blasting Plan, and DEA's review the soils on the project site present no limitations to the proposed project that cannot be overcome through standard engineering practices provided that, prior to construction, the applicant submits the additional blasting information required by DEA to the Department for review.

11. STORMWATER MANAGEMENT:

The applicant proposes to utilize a stormwater management system consisting of buffers and ditch turnouts. The project is located on a mountaintop and has very little soil over bedrock. Due to the type of pre-development ground cover and the large subwatersheds, the post-development drainage is changed only slightly and the stormwater management plan predominately seeks to assure that the site is stable.

The stormwater system is based on estimates of pre- and post-development stormwater runoff flows obtained by using HydroCAD, which utilizes the methodology outlined in "Urban Hydrology for Small Watersheds," Technical Release #55, U.S.D.A., Soil Conservation Service and, retains stormwater from 24-hour storms of 2-, 10-, and 25-year frequency. The post-development peak flow from the site will not exceed the pre-development peak flow from the site and the peak flow of the receiving waters will not be increased as a result of stormwater runoff from the development site.

The stormwater management system proposed by the applicant was reviewed by, and revised in response to, comments from the Division of Watershed Management of the Bureau of Land and Water Quality (DWM).

Based on the system's design and DWM's review, the Department finds that the applicant has made adequate provision to ensure that the proposed project will meet the stormwater quantity standards for: (1) peak flow from the site and peak flow of the receiving waters; (2) grading or other construction activity; (3) channel limits and runoff areas; (4) maintenance; and (6) buffers.

12. MAINTENANCE OF COMMON FACILITIES:

The applicant will be responsible for the maintenance of all common facilities, including the road and stormwater management systems, in accordance with the terms of the Department's Stormwater Management Rules.

13. EROSION AND SEDIMENTATION CONTROL:

The applicant submitted an Erosion and Sedimentation Control Plan as Section 14 of the application. This plan and plan sheets containing erosion control details were reviewed by, and revised in response to, the comments of DWM. Erosion control details will be included on the final construction plans and the erosion control narrative will be included in the project specifications to be provided to the construction contractor. Given the size and nature of the project site, the applicant must require the site manager to submit reports to the Department in accordance with the Special Condition for Third Party Inspection Program, which is attached to this Order.

The Department finds that the applicant has made adequate provision to control erosion and sedimentation provided that the terms described in the Department's Special Condition for Third Party Inspection Program are met.

14. GROUNDWATER:

The project site is not located over a mapped sand and gravel aquifer. The proposed project does not propose any withdrawal from, or discharge to, the groundwater. The applicant will be storing maintenance amounts of petroleum products on site.

The Department finds that the proposed project will not have an unreasonable adverse effect on ground water quality provided that, prior to any storage of petroleum products on site, a SPCC plan must be submitted to the Department for review.

15. WATER SUPPLY:

When completed, the proposed project is anticipated to use 180 gallons of water per day. An individual well located at the maintenance facility will supply water for the development. The applicant submitted an assessment of groundwater supplies that are available on the project site. This assessment was prepared by a certified geologist and was reviewed by, and revised in response to, comments from DEA. No water will be supplied at the location of the wind turbines.

The Department finds that the applicant has made adequate provision for securing and maintaining a sufficient and healthful water supply.

16. WASTEWATER DISPOSAL:

When completed, the proposed project is anticipated to discharge 180 gallons of wastewater per day to an existing individual subsurface wastewater disposal system at the maintenance facility. The applicant submitted an HHE-200 form for the legally existing system which was reviewed by DEA. No wastewater facilities will be provided at the wind turbines.

Based on DEA's comments, the Department finds that the proposed wastewater disposal system will be built on suitable soil.

17. SOLID WASTE:

When completed, the proposed project is anticipated to generate 10 cubic yards of general office solid waste per year. All general solid wastes from the proposed project will be disposed of through Pine Tree Waste, which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine. The Town of Mars Hill has a pay-per-bag system of waste disposal; all trash disposal bags must be purchased at the Town Office prior to disposal.

Approximately 101 acres of forest will be cleared for the project; all marketable timber will be sold. All stumps not in the footprint of a turbine will be left in the ground. All other stumps and grubblings generated will be disposed of on site, either chipped or burned, with the remainder to be worked into the soil, in compliance with Solid Waste Management Regulations of the State of Maine.

The proposed project will generate approximately 50 to 100 cubic yards of construction debris and demolition debris. All construction and demolition debris generated will be disposed of at Pine Tree Waste, which is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine. All packaging material from the turbines will be recycled and returned to the manufacturer.

Based on the above information, the Department finds that the applicant has made adequate provision for solid waste disposal.

18. FLOODING:

The wind turbines are not located within the 100-year floodway of any river or stream.

The Department finds that the proposed project is unlikely to cause or increase flooding or cause an unreasonable flood hazard to any structure.

19. WETLAND IMPACTS:

The applicant proposes to permanently alter 410 square feet of forested freshwater wetland to place the support structures for the powerline to the substation. The applicant also proposed to clear tall vegetation in the right-of-way (ROW); this will alter 304,851 square feet of wetland vegetation. To the extent feasible, the applicant has followed the edges of roads or farm fields to limit the amount of wetland alteration. In addition, the powerline will clear span Prestile Stream, with at least a 25-foot buffer of undisturbed low vegetation; larger vegetation will be removed using hand-operated equipment. The support poles will be no closer than 75 feet from the stream.

The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require that the applicant to meet the following standards:

- a. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. Each application for a freshwater wetland alteration permit must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist. The applicant submitted an alternative analysis for the proposed project completed by Devine Tarbell and Associates, Inc and dated January 12, 2004. The applicant has avoided impacts to wetlands by following existing roads and edges of farm fields as much as possible.

b. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. Except for approximately 410 square feet, the applicant will only be altering the crown vegetative layers; minimal soil will be disturbed. The applicant also proposed to complete vegetation removal in wetland areas during frozen ground conditions or, if that is not feasible, by using hand operated equipment during the summer. Heavy machinery is necessary for pole placement; all disturbed areas will be restored to their natural state once the work is completed.

c. Compensation. Compensation is required to achieve the goal of no net loss of wetland functions and values. Because of the type of wetland alteration (i.e. alteration of vegetation height/vegetation type), no compensation is required as functions or values will be impacted minimally or not at all.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.

- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S.A. Section 480-P.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards provided that the applicant submits a final letter of commitment to the Department for review prior to construction.
- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities provided that the requirements imposed by the Department outlined in Finding 6 of the Order are implemented.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that the applicant complies with Special Condition for the reporting requirement described in the Special Condition for Third Party Inspection Program as outlined in Finding 13 of this Order.
- D. The proposed development meets the standards for storm water management in Section 420-D and the standard for erosion and sedimentation control in Section 420-C.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services.
- G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of EVERGREEN WINDPOWER, LLC/TOWN OF MARS HILL to construct the wind turbines as approved in Finding 1, SUBJECT TO THE FOLLOWING CONDITIONS and all applicable standards and regulations:

- I. The Standard Conditions of Approval, a copy attached.

2. In addition to any specific erosion control measures described in this or previous orders, the applicant shall take all necessary actions to ensure that their activities or those of their agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Prior to the start of construction, the applicant shall submit a final letter of financial commitment to the Department for review.
4. The applicant shall report to the Department as detailed in the Department's Special Condition for Third Party Inspection Program.
5. Prior the start of construction, the applicant shall conduct a pre-construction meeting. The applicant's representative, Department staff, the design engineer, the contractor, and the third-party inspector shall attend this on-site meeting.
6. Prior to operation, the final parameters of the monitoring study shall be submitted to the Department for review and approval as detailed in Finding 6 of this Order.
7. Within 15 months of the start of operation of the facility, the applicant shall submit the data and analysis from the first year of bird monitoring studies to the Department for review.
8. Within 28 months of the start of operation of the facility, the applicant shall submit the data and analysis from the second year of bird monitoring studies to the Department for review.
9. If post-construction monitoring demonstrates that the project resulted in an unreasonable adverse impact, as determined by the Department after consultation with MDIFW and the applicant, the applicant shall work with the Department and MDIFW to implement appropriate and practical measures for avoiding or minimizing continued impacts as outlined in Finding 6 of this Order.
10. Prior to construction, the applicant shall submit an updated blasting plan to the Department for review.

11. Prior to the storage of petroleum products on site including storage for construction purposes, the applicant shall submit a SPCC plan to the Department for review.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS 1st DAY OF JUNE, 2004.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

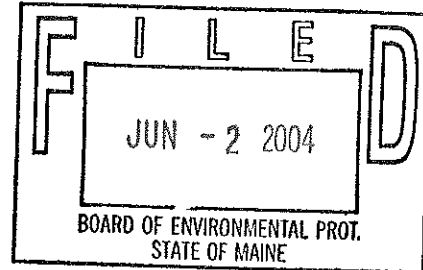
By: *Dawn R. Gallagher*
DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application January 12, 2004

Date of application acceptance January 22, 2004

Date filed with Board of Environmental Protection
RC/L21635AN/BN



NATURAL RESOURCE PROTECTION ACT (NRPA)
STANDARD CONDITIONS

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCE PROTECTION ACT, TITLE 38, M.R.S.A. SECTION 480-A ET.SEQ. UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other than specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Initiation of Activity Within Two Years. If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the applicant will be able to begin the activity within two years from the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- F. Reexamination After Five Years. If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- G. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- H. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- I. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

Revised (4/92)

DEP LW0428

SITE LOCATION OF DEVELOPMENT (SITE)
STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.
2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.
3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted **WITH CONDITIONS**, and indicates where copies of those conditions may be obtained.
5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.
7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.
8. A copy of this approval must be included in or attached to all contract bid specifications for the development.
9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

(2/81)/Revised November 1, 1979

THIRD-PARTY INSPECTION PROGRAM

1.0 THE PURPOSE OF THE THIRD-PARTY INSPECTION

As a condition of this permit, the Maine Department of Environmental Protection (MDEP) requires the permit applicant to retain the services of a third-party inspector to monitor compliance with MDEP permit conditions during construction. The objectives of this condition are as follows:

- 1) to ensure that all construction and stabilization activities comply with the permit conditions and the MDEP-approved drawings and specifications,
- 2) to ensure that field decisions regarding erosion control implementation, stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations, and
- 3) to ensure communication between the contractor and MDEP regarding any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan.

This document establishes the inspection program and outlines the responsibilities of the permit applicant, the MDEP, and the inspector.

2.0 SELECTING THE INSPECTOR

At least 30 days prior to starting any construction activity on the site, the applicant will submit the names of at least two inspector candidates to the MDEP. Each candidate must meet the minimum qualifications listed under section 3.0. The candidates may not be employees, partners, or contracted consultants involved with the permitting of the project or otherwise employed by the same company or agency. The MDEP will have 15 days from receiving the names to select one of the candidates as the inspector or to reject both candidates. If the MDEP rejects both candidates, then the MDEP shall state the particular reasons for the rejections. In this case, the applicant may either dispute the rejection to the Director of the Bureau of Land and Water Quality or start the selection process over by nominating two, new candidates.

3.0 THE INSPECTOR'S QUALIFICATIONS

Each inspector candidate nominated by the applicant shall have the following minimum qualifications:

- 1) a degree in an environmental science or civil engineering, or other demonstrated expertise,
- 2) a practical knowledge of erosion control practices and stormwater hydrology,
- 3) experience in management or supervision on large construction projects,
- 4) the ability to understand and articulate permit conditions to contractors concerning erosion control or stormwater management,
- 5) the ability to clearly document activities being inspected,
- 6) appropriate facilities and, if necessary, support staff to carry out the duties and responsibilities set forth in section 6.0 in a timely manner, and
- 7) no ownership or financial interest in the development other than that created by being retained as the third-party inspector.

Special Condition
for
Third Party Inspection Program

DEPLW98-10-B2001

January 2001

4.0 INITIATING THE INSPECTOR'S SERVICES

The applicant will not formally and finally engage for service any inspector under this permit condition prior to MDEP approval or waiver by omission under section 2.0. No clearing, grubbing, grading, filling, stockpiling, or other construction activity will take place on the development site until the applicant retains the MDEP-approved inspector for service.

5.0 TERMINATING THE INSPECTOR'S SERVICES

The applicant will not terminate the services of the MDEP-approved inspector at any time between commencing construction and completing final site stabilization without first getting written approval to do so from the MDEP.

6.0 THE INSPECTOR'S DUTIES AND RESPONSIBILITIES

The inspector's work shall consist of the duties and responsibilities outlined below.

- 1) Prior to construction, the inspector will become thoroughly familiar with the terms and conditions of the state-issued site permit, natural resources protection permit, or both.
- 2) Prior to construction, the inspector will become thoroughly familiar with the proposed construction schedule, including the timing for installing and removing erosion controls, the timing for constructing and stabilizing any basins or ponds, and the deadlines for completing stabilization of disturbed soils.
- 3) Prior to construction, the inspector will become thoroughly familiar with the project plans and specifications, including those for building detention basins, those for installing the erosion control measures to be used on the site, and those for temporarily or permanently stabilizing disturbed soils in a timely manner.
- 4) During construction, the inspector will monitor the contractor's installation and maintenance of the erosion control measures called for in the state permit(s) and any additional measures the inspector believes are necessary to prevent sediment discharge to off-site properties or natural resources. This direction will be based on the approved erosion control plan, field conditions at the time of construction, and the natural resources potentially impacted by construction activities.
- 5) During construction, the inspector will monitor the contractor's construction of the stormwater system, including the construction and stabilization of ditches, culverts, detention basins, water quality treatment measures, and storm sewers.
- 6) During construction, the inspector will monitor the contractor's installation of any stream or wetland crossings.
- 7) During construction, the inspector will monitor the contractor's final stabilization of the project site.
- 8) During construction, the inspector will keep logs recording any rain storms at the site, the contractor's activities on the site, discussions with the contractor(s), and possible violations of the permit conditions.
- 9) During construction, the inspector will inspect the project site at least once a week and before and after any significant rain event. The inspector will photograph all protected natural resources both before and after construction and will photograph all areas of non-compliance. All photographs will be identified with, at a minimum the date the photo was taken, the location and the name of the individual taking the photograph.
Note: the frequency of these inspections as contained in this condition can be varied to best address the particular project needs.

10) During construction, the inspector will prepare and submit weekly (*or other frequency*) inspection reports to the MDEP.

11) During construction, the inspector will notify the designated person at the MDEP immediately of any significant non-compliance issues.

7.0 INSPECTION REPORTS

The inspector will submit weekly written reports (*or at another designated frequency*), including photographs of potential violations, on a form provided by the Department to the designated person at the MDEP. Each report will be due at the MDEP by the Friday (*or other designated day*) following the inspection week (Monday through Sunday).

The weekly report will summarize construction activities and events on the site for the previous week as outlined below.

- 1) The report will state the name of the development, its permit number(s), and the start and end dates for the inspection week (Monday through Sunday).
- 2) The report will state the date(s) and time(s) when the inspector was on the site making inspections.
- 3) The report will state the date(s) and approximate duration(s) of any rainfall events on the site for the week.
- 4) The report will identify and describe any erosion problems that resulted in sediment leaving the property or sediment being discharged into a wetland, brook, stream, river, lake, or public storm sewer system. The report will describe the contractor's actions to repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.
- 5) The report will list the buildings, roads, parking lots, detention basins, stream crossings or other features open to construction for the week, including those features or areas actively worked and those left unworked (dormant).
- 6) For each area open to construction, the report will list the date of initial soil disturbance for the area.
- 7) For each area open to construction, the report will note which areas were actively worked that week and which were left dormant for the week. For those areas actively worked, the report will briefly state the work performed in the area that week and the progress toward final stabilization of the area -- e.g. "grubbing in progress", "grubbing complete", "rough grading in progress", "rough grading complete", "finish grading in progress", "finish grading complete", "permanent seeding completed", "area fully stable and temporary erosion controls removed", etc.
- 8) For each area open to construction, the report will list the erosion and sedimentation control measures installed, maintained, or removed during the week.
- 9) For each erosion control measure in-place, the report will note the condition of the measure and any maintenance performed to bring it to standard.